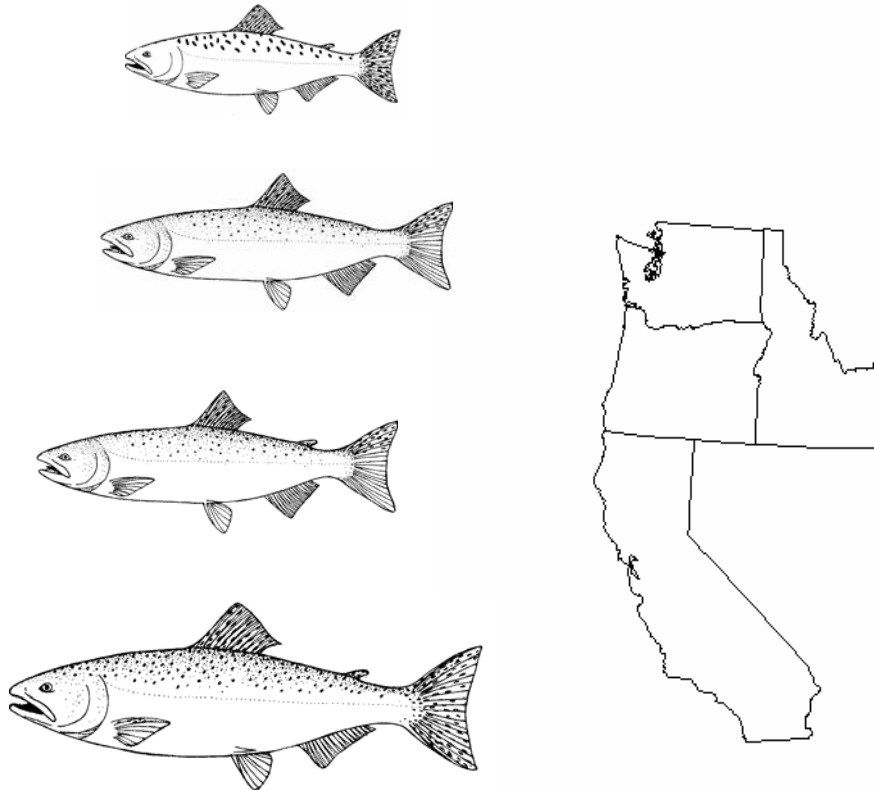


PRESEASON REPORT I

STOCK ABUNDANCE ANALYSIS FOR 2007 OCEAN SALMON FISHERIES



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

FEBRUARY 2007

ACKNOWLEDGMENTS

SALMON TECHNICAL TEAM

MR. DELL SIMMONS, CHAIR

National Marine Fisheries Service, Lacey, Washington

MR. ALLEN GROVER, VICE CHAIR

California Department of Fish and Game, Santa Rosa, California

MR. CRAIG FOSTER

Oregon Department of Fish and Wildlife, Clackamas, Oregon

DR. ROBERT KOPE

National Marine Fisheries Service, Seattle, Washington

MR. KEITH LUTZ

Northwest Indian Fisheries Commission, Olympia, Washington

MR. DOUG MILWARD

Washington Department of Fish and Wildlife, Olympia, Washington

MR. MICHAEL MOHR

National Marine Fisheries Service, Santa Cruz, California

MR. HENRY YUEN

U.S. Fish and Wildlife Service

PACIFIC FISHERY MANAGEMENT COUNCIL STAFF

MR. CHUCK TRACY

MS. RENEE DORVAL

MS. CARRIE COMPTON

MS. KIM MERYDITH

The Salmon Technical Team and the Council staff express their thanks for the expert assistance provided by Ms. Wendy Beeghley and Ms. Cindy LeFleur, Washington Department of Fish and Wildlife; Mr. Eric Schindler, Oregon Department of Fish and Wildlife; Ms. Melodie Palmer-Zwahlen, California Department of Fish and Game; Ms. Sandy Zeiner, Northwest Indian Fisheries Commission; and numerous other agency and tribal personnel in completing this report.

This document may be cited in the following manner:

Pacific Fishery Management Council. 2007. *Preseason Report I: Stock Abundance Analysis for 2007 Ocean Salmon Fisheries*. (Document prepared for the Council and its advisory entities.) Pacific Fishery Management Council, 7700 NE Ambassador Place, Suite 101, Portland, Oregon 97220-1384.

A report of the Pacific Fishery Management Council pursuant to National Oceanic and Atmospheric Administration Award Number NA05NMF4410008.



TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES	iii
LIST OF FIGURES	iv
LIST OF ACRONYMS AND ABBREVIATIONS.....	v
INTRODUCTION	1
SALMON TECHNICAL TEAM CONCERNS	1
Evaluation of Fishery Impacts On Recently Listed Lower Columbia River Coho.....	1
Changes to Canadian Fishery Patterns.....	1
Klamath River Coded Wire Tags.....	2
CHAPTER I - Abundance Projections.....	3
CHAPTER II - CHINOOK SALMON aSSESSMENT	11
CHINOOK STOCKS SOUTH OF CAPE FALCON	11
SACRAMENTO RIVER FALL CHINOOK SALMON.....	11
Predictor Description	11
KLAMATH RIVER FALL CHINOOK	12
Predictor Description	12
Predictor Performance	12
2007 Stock Status.....	12
Evaluation of 2006 Regulations on 2007 Stock Abundance.....	12
OTHER CALIFORNIA COASTAL CHINOOK STOCKS	13
OREGON COASTAL CHINOOK STOCKS.....	13
North Migrating Chinook	13
South/Local Migrating Chinook	14
Evaluation of 2006 Regulations on 2007 Stock Abundance.....	15
CHINOOK STOCKS NORTH OF CAPE FALCON	15
Columbia River Fall Chinook.....	15
Predictor Description and Past Performance	15
2007 Stock Status.....	16
Evaluation of 2006 Regulations on 2007 Stock Abundance.....	17
Washington Coastal Chinook.....	17
Predictor Description and Past Performance	17
2007 Stock Status.....	17
Puget Sound Chinook	17
2006 Stock Status.....	17
Evaluation of 2006 Regulations on 2007 Stock Abundance.....	18
CHAPTER III - COHO SALMON ASSESMENT	35
COLUMBIA RIVER AND OREGON/CALIFORNIA COASTAL COHO	35
(OREGON PRODUCTION INDEX AREA)	35
Public Hatchery Coho	35
Predictor Description	35
Predictor Performance	36
2007 Stock Status.....	36

TABLE OF CONTENTS (continued)

	<u>Page</u>
Lower Columbia River Natural.....	36
Predictor Description	36
2007 Stock Status.....	36
Oregon Coastal Natural Coho.....	37
Predictor Description	37
Predictor Performance	38
2007 Stock Status.....	38
Private Hatchery Coho.....	38
Salmon Trout Enhancement Hatchery Coho Smolt Program	38
Predictor Description	38
Predictor Performance	38
2007 Stock Status.....	38
Oregon Production Index Area Summary of 2007 Stock Status.....	38
WASHINGTON COASTAL AND PUGET SOUND COHO STOCKS	38
Predictor Description and Past Performance	38
2007 Stock Status.....	39
Washington Coastal Coho.....	39
Puget Sound	41
SELECTIVE FISHERY CONSIDERATIONS	43
EVALUATION OF 2006 REGULATIONS ON 2007 STOCK ABUNDANCE.....	43
Oregon Production Index Area	43
North of the Oregon Production Index Area.....	43
 CHAPTER IV - FRASER RIVER AND PUGET SOUND PINK SALMON ASSESSMENTS.....	 55
 APPENDIX A SUMMARY OF COUNCIL STOCK MANAGEMENT GOALS	 57
 APPENDIX B OREGON PRODUCTION INDEX DATA	 73
 APPENDIX C SALMON HARVEST ALLOCATION SCHEDULES	 79

LIST OF TABLES

	<u>Page</u>
TABLE I-1. Preseason adult Chinook salmon stock forecasts in thousands of fish	4
TABLE I-2. Preseason adult coho salmon stock forecasts in thousands of fish	6
TABLE I-3. Achievement of conservation objectives for natural stocks listed in Table 3-1 of the Pacific Coast Salmon Plan	8
TABLE II-1. Indices of annual abundance and ocean fishery impacts on California Central Valley chinook in thousands of fish	19
TABLE II-2. Comparisons of preseason forecast and postseason estimates for the CVI in thousands of fish	20
TABLE II-3. Klamath River fall chinook ocean abundance (thousands), harvest rate, and river run size estimates (thousands) by age	21
TABLE II-4. Comparisons of preseason forecast and postseason estimates for ocean abundance of adult Klamath River fall Chinook	22
TABLE II-5. Summary of management objectives and predictor performance for Klamath River fall Chinook	24
TABLE II-6. Harvest levels and rates of age-3 and age-4 Klamath River fall Chinook	25
TABLE II-7. Rogue River fall Chinook inriver run and ocean population indices	27
TABLE II-8. Predicted and postseason returns of Columbia River adult fall Chinook in thousands of fish	28
TABLE II-9. Comparison of preseason and postseason forecasts of Puget Sound run size for summer/fall Chinook	31
TABLE III-1. Preliminary 1996-2007 preseason and postseason coho stock Stratified Random Sampling abundance estimates for Oregon production index area stocks in thousands of fish	45
TABLE III-2. Oregon production index (OPI) area coho harvest impacts, spawning, abundance, and exploitation rate estimates by SRS accounting in thousands of fish	47
TABLE III-3. Preseason and postseason estimates of ocean escapements for selected Washington coastal adult natural coho stocks in thousands of fish	48
TABLE III-4. Preseason and postseason estimates of ocean escapements for selected Puget Sound adult natural coho stocks in thousands of fish	49
TABLE III-5. Mass marking of 2004 brood coho available to 2007 Council fisheries	50
TABLE III-6. Projected coho mark rates for 2007 fisheries under base period fishing patterns (% marked)	51
TABLE III-7. Estimated ocean escapements for critical natural and Columbia River hatchery coho stocks (thousands of fish) based on preliminary 2007 preseason abundance forecasts and 2006 Council regulations	52
TABLE III-8. Comparison of Oregon coastal natural (OCN) and Rogue/Klamath (RK) coho harvest mortality and exploitation rates by fishery under Council-adopted 2006 regulations and preliminary 2007 preseason abundance estimates	53
TABLE III-9. Maximum allowable fishery impact rate for OCN coho under Amendment 13 matrix (Appendix A, Table A-2) and the OCN work group matrix (Appendix A, Table A-3) based on parent escapement levels by stock component and marine survival category	54
TABLE IV-1. Estimated annual run sizes (odd-numbered years 1977-2007) for Fraser River and Puget Sound pink salmon in millions of fish	55

LIST OF FIGURES

	<u>Page</u>
FIGURE II-1. Regression estimator for CVI based on previous year's river return of age-two Central Valley Chinook, 1990-2006	33
FIGURE II-2. Spawning escapements of adult Sacramento River fall Chinook, 1970-2006, and the goal range for the stock of 122,000 to 180,000 adult fish	33
FIGURE II-3. Regression estimators for Klamath River fall chinook ocean abundance (September 1) based on that year's river return of same cohort	34

LIST OF ACRONYMS AND ABBREVIATIONS

BY	brood year
CDFG	California Department of Fish and Game
CoTC	Coho Technical Committee (of the PSC)
Council	Pacific Fishery Management Council
CRFMP	Columbia River Fishery Management Plan
CVI	Central Valley Index
CWT	coded-wire tag
EEZ	exclusive economic zone (from 3-200 miles from shore)
ESA	Endangered Species Act
ESU	evolutionarily significant unit
FMP	fishery management plan
FRAM	Fishery Regulatory Assessment Model
ISBM	individual stock-based management
Jack CR	Columbia River jacks
Jack OC	Oregon coastal and Klamath River Basin jacks
KMZ	Klamath management zone (ocean zone between Humbug Mountain and Horse Mountain where management emphasis is on Klamath River fall Chinook)
KOHM	Klamath Ocean Harvest Model
KRFC	Klamath River fall Chinook
LCN	lower Columbia River natural (coho)
LRB	lower Columbia River bright (Chinook)
LRH	lower Columbia River hatchery (tule fall Chinook returning to hatcheries below Bonneville Dam)
LRW	lower Columbia River wild (bright fall Chinook spawning naturally in tributaries below Bonneville Dam)
MCB	mid-Columbia River brights (bright hatchery fall Chinook released below McNary Dam)
MOC	mid-Oregon coast
MSY	maximum sustainable yield
NA	not available
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOC	north Oregon coast
OCN	Oregon coastal natural (coho)
OCNL	Oregon coastal natural lake
OCNR	Oregon coastal natural river
ODFW	Oregon Department of Fish and Wildlife
OPI	Oregon Production Index (coho salmon stock index south of Leadbetter Point)
OPIH	Oregon Production Index public hatchery
PRIH	Private hatchery
PSC	Pacific Salmon Commission
PST	Pacific Salmon Treaty
RER	rebuilding exploitation rate
RK	Rogue/Klamath (coho)
RMP	Resource Management Plan (for exemption from ESA section 9 take prohibitions under limit 6 of the 4(d) rule)
SAB	Select Area brights
SCH	Spring Creek Hatchery (tule fall Chinook returning to Spring Creek Hatchery)
SRS	Stratified Random Sampling
STEP	Salmon Trout Enhancement Program

LIST OF ACRONYMS AND ABBREVIATIONS (continued)

STT	Salmon Technical Team (formerly the Salmon Plan Development Team)
URB	upper river brights (naturally spawning bright fall Chinook normally migrating past McNary Dam)
VSI	visual stock identification
WCVI	West Coast Vancouver Island
WDFW	Washington Department of Fish and Wildlife

INTRODUCTION

This is the second report in an annual series of four reports prepared by the Salmon Technical Team (STT) of the Pacific Fishery Management Council (Council) to document and help guide salmon fishery management off the coasts of Washington, Oregon, and California. This report will be formally reviewed at the Council's March meeting. The third and fourth reports in this series will be developed at the close of the March and April Council meetings, respectively, to analyze the impacts of the Council's proposed and final ocean salmon fishery management recommendations for 2007.

This report provides 2007 salmon stock abundance projections, and an analysis of the impacts of 2006 regulations, or regulatory procedures, on the projected 2007 abundance. This analysis is analogous to that of a no-action alternative in a National Environmental Policy Act (NEPA) analysis, and is intended to give perspective in developing 2007 management measures. The report focuses on Chinook, coho, and pink salmon stocks that have been important in determining Council fisheries in recent years, and on stocks listed under the Endangered Species Act (ESA) with established National Marine Fisheries Service (NMFS) ESA consultation standards.

Chapter I provides a summary of stock abundance projections. Chapters II and III provide detailed stock-by-stock analyses of abundance, a description of prediction methodologies, and accuracy of past abundance predictions for Chinook and coho salmon, respectively. Chapter IV summarizes abundance information for pink salmon. Three appendices provide supplementary information as follows: Appendix A provides a summary of Council stock management goals; Appendix B contains pertinent data for Oregon production index (OPI) area coho; Appendix C contains the Council's current harvest allocation schedules.

In 2002, the Pacific Salmon Commission (PSC) reached agreement on a management regime that constrains total fishery exploitation rates on key management units of naturally spawning coho salmon originating in Southern British Columbia, Puget Sound, and the Washington Coast. The agreement calls for the PSC Coho Technical Committee (CoTC) to develop a regional coho fishery planning model for application beginning in 2005. The CoTC has agreed to use Coho Fishery Regulation Assessment Model (FRAM) as the core for an initial version of the regional coho fishery planning model to provide a consistent basis for fishery planning processes in the United States and Canada.

SALMON TECHNICAL TEAM CONCERNS

Evaluation of Fishery Impacts On Recently Listed Lower Columbia River Coho

Lower Columbia River natural (LCN) coho were listed in 2005 as threatened under the Endangered Species Act. There is considerable uncertainty regarding the distribution of these stocks. Only a small number of coded-wire tag (CWT) studies were conducted from the Clackamas River and the degree to which these data might be representative of the entire stock complex is unknown. Coho FRAM evaluates impacts on two different hatchery stocks from the Columbia River, late and early. These stocks have different ocean distribution patterns with the late stock having a more northerly distribution pattern. The STT is investigating alternative methods to evaluate impacts on the LCN coho stock complex.

Changes to Canadian Fishery Patterns

The Chinook fishery planning tools employed by the PSC and the Council are based on CWT recovery data from the late 1970's to early 1980's. During this period, the predominant West Coast Vancouver Island (WCVI) troll harvest of Chinook occurred from May through September. In recent years, Canada has conducted its Chinook troll fishery off the WCVI in a much different pattern so as to minimize impacts on stocks of domestic conservation concern, particularly WCVI fall Chinook and Interior Fraser

(including Thompson River) coho. Changes include the use of a smaller size limit (55 cm), taking the vast majority of Chinook harvest from October to June, and dynamic inseason management to minimize impacts on WCVI Chinook and Thompson River coho based on results of DNA sampling. The quality of impact projections of the WCVI troll fishery using existing Chinook models becomes more uncertain as the magnitude of the harvest taken under these new fishing patterns increases. The STT intends beginning this year to modify the Pacific Salmon Commission Chinook model to better reflect the catch composition of the WCVI troll fishery in recent years. The reliability of these model estimates will be strongly influenced by the accuracy of the assumptions used about the temporal distribution of the WCVI troll catch in 2007. However, methods to modify the Chinook FRAM to account for these fishing pattern changes have not yet been developed. The STT continues to work toward development of appropriate methods for use with Chinook FRAM.

Klamath River Coded Wire Tags

During the 2006 data compilation and the 2007 preseason data analysis process, it was discovered that CWT data from the tribal net fisheries in the Klamath Basin were being coded in two different ways based on available RMIS fishery codes. Prior to 2003, the recoveries were reported to the KRTAT as the total catch for the year by CWT code with fishery designation '31' (described as Aboriginal Gill Net Fisheries according to the RMIS Manual Version 4.0.) Beginning in 2003, the KRTAT began collecting individual CWT recoveries and their associated catch-sample data from all projects in the Klamath Basin. The hope was that in the future the KRTAT would find the time to format these data according to the RMIS file structure requirements and then upload them to the RMIS server. However, the individual CWT data collected from the tribal net fisheries were submitted with fishery designation '56' (Tribal Subsistence Fisheries) rather than '31', which is the code expected by the cohort reconstruction programs.

The effect of this coding inconsistency was that tribal net CWT recoveries from 2003–2005 were not attributed to the CWT release groups in the cohort reconstructions. This led to underestimation of the CWT release groups' ocean escapement, and as a result, overestimation of the CWT release groups' ocean harvest rates during these years, especially for the 2004 fishing season. This issue has now been addressed, and the corrected 2003–2005 postseason age-4 ocean harvest rates on Klamath River fall Chinook are 0.21, 0.34, and 0.20, respectively (STT 2007, Pre I, Table II-3). These rates were previously reported as 0.23, 0.51, and 0.24 (STT 2006, Pre I, Table II-3).

The STT recommends that all within-basin Klamath River CWT recoveries be reported to the RMIS system, reviewed by the reporting agency for accuracy, and verified by the RMIS system administrators. This is the standard protocol in place for the reporting of ocean fisheries CWT recoveries, and should also apply to the within-basin Klamath River recoveries. The STT also strongly recommend that the Klamath River CWT recoveries be carefully reviewed prior to their being posted on the RMIS system, so that errors are eliminated and that enough time is allowed to insure that these data are accurate and complete.

CHAPTER I - ABUNDANCE PROJECTIONS

Abundance expectations in 2007 are summarized for key Chinook and coho salmon stocks in Tables I-1 and I-2, respectively. Information on pink salmon abundance, which is only significant in odd-numbered years, is contained in Chapter IV. Council Salmon Fishery Management Plan (FMP) management goals are presented in Table I-3 and Appendix A, Table A-1.

In addition to the key stocks with abundance projections listed in Tables I-1 and I-2, Council management decisions for the 2007 ocean salmon fishing seasons may be constrained by other stocks, such as those listed under the ESA or subject to the PSC agreement, which may not have abundance projections made, or do not have abundance projections available in time for inclusion in this report. These include the following ESU's: Sacramento River Winter, Central Valley Spring, California Coastal, Lower Columbia River, and Snake River Fall Chinook; and Central California and Southern Oregon/Northern California coho, as well as Interior Fraser (including Thompson River) coho.

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

TABLE 1-1. Preseason adult chinook salmon stock forecasts in thousands of fish. (Page 1 of 2)											
Production Source and Stock or Stock Group		1999	2000	2001	2002	2003	2004	2005	2006	2007	Methodology for 2007 Prediction and Source
California Central Valley (Index)											
Sacramento and San Joaquin Basins, Fall, Late Fall, Spring, and Winter Run		847.7	790.4	649.4	825.4	1,108.1	831.8	1,678.3	632.5	499.9	Linear regression analysis of river age-2 jacks on CVI of the following year. CDFG.
Klamath River (Ocean Abundance)											
Fall Run		165.6	389.9	435.5	362.5	310.2	216.3	239.8	110.0	546.2	Linear regression analysis of age-specific ocean abundance estimates on river runs of same cohort. KRTAT.
Oregon Coast											
North and South/Local Migrating		Preseason Estimates not Made								None.	
Columbia River (Ocean Escapement)											
Upriver Spring		24.6	134.0	364.6	333.7	145.4	360.7	254.1 ^{ai}	88.4	78.5	Age-specific linear regressions of cohort returns in previous run years. WDFW staff.
Willamette Spring		46.0	59.9	61.0	73.8	109.8	109.4	116.9	46.5	52.0	Age-specific linear regressions of cohort returns in previous run years. ODFW staff.
Sandy Spring		4.3	3.8	4.0	4.3	4.8	5.2	7.4	8.2	7.9	Recent year average. ODFW staff.
Cowlitz Spring		2.1	2.0	1.0	3.1	4.9	15.9	12.7	3.0	6.4	Age-specific linear regressions of cohort returns in previous run years. WDFW staff.
Kalama Spring		0.3	1.4	1.0	1.6	3.6	6.0	4.5	1.5	4.0	Age-specific linear regressions of cohort returns in previous run years. WDFW staff.
Lewis Spring		1.5	2.6	2.8	2.0	3.1	5.4	7.6	1.8	5.9	Age-specific linear regressions of cohort returns in previous run years. WDFW staff.
Upriver Summer		16.5	33.3	24.5	77.7	87.6	102.8	62.4 ^{ai}	49.0	45.6	Age-specific average cohort ratios/cohort regressions. Columbia River TAC.
URB Fall		147.5	171.1	127.2	281.0	280.4	292.2	352.2	253.9	182.4	Age-specific average cohort ratios/cohort regressions. Columbia River TAC.
SCH Fall		65.8	21.9	56.6	144.4	96.9	138.0	114.1	50.0	21.8	Age-specific average cohort ratios/cohort regressions. Columbia River TAC.
LRW Fall		2.6	3.5	16.7	18.7	24.6	24.1	20.2	16.6	10.1	Age-specific average cohort ratios/cohort regressions. Columbia River TAC.
LRH Fall		34.8	23.7	32.2	137.6	115.9	77.1	74.1	55.8	54.9	Age-specific average cohort ratios/cohort regressions. Columbia River TAC.
MCB Fall		38.3	50.6	43.5	96.2	104.8	90.4	89.4	88.3	68.0	Age-specific average cohort ratios/cohort regressions. Columbia River TAC.
Washington Coast (Ocean Escapement)											
Willapa Bay Natural		4.2	4.2	4.3	3.7	2.4	4.1	3.2	2.0	2.0	Mean return per spawner by age class adjusted for 2006 return year performance. WDFW staff.
Hatchery		15.5	18.9	17.8	18.8	14.2	14.7	17.4	29.8	29.8	Mean return per release by age class adjusted for 2006 return year performance. WDFW staff.
Other Coastal Stocks		Not Available								WDFW and Tribes.	

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

TABLE 1. Puget Sound adult chinook salmon stock forecasts in thousands of fish. (Page 2 of 2)											
Production Source and Stock or Stock Group		1999	2000	2001	2002	2003	2004	2005	2006	2007	Methodology for 2007 Prediction and Source
Puget Sound^{d/}											
Nooksack/Samish	Hatchery	27.0	19.0	34.9	52.8	45.8	34.2	19.5	16.9	18.8	Brood release times average return-at-age/release. Last two years' R/S to fingerling release (5 year avg.).
East Sound Bay	Hatchery	2.3	5.0	1.6	1.6	1.6	0.8	0.4	0.4	0.4	Brood release times average return at age (2003-2006)
Skagit	Natural	7.6	7.3	9.1	13.8	13.7 ^{c/}	20.4 ^{c/}	23.4 ^{c/}	24.1	15.0	Age specific average cohort rates. 2000-2004 BY for average at age return.
Hatchery		0.0	0.0	0.0	0.0	0.0	0.5	0.7	0.6	1.1	Product of average brood age return rate and appropriate year smolt releases.
Stillaguamish	Natural	1.5	2.0 ^{d/}	1.7 ^{d/}	2.0 ^{d/}	2.0 ^{d/}	3.3 ^{d/}	2.0 ^{d/}	1.6 ^{d/}	1.9 ^{d/}	Supplemental fish forecast based on observed survival rates for tagged fish (1993-1997). Natural-origin based on recruits per spawner for brood year forecast (2002-2005). Forecast is then supplemental plus natural origin.
Snohomish	Natural	5.6	6.0	5.8 ^{d/}	6.7 ^{d/}	5.5 ^{d/}	15.7 ^{d/}	14.2 ^{d/}	8.7 ^{d/}	12.3 ^{d/}	Average total recruitment based on TRT A and P tables. For Skykomish used BYs 1994-1998 applied to 2001-2004 BY age returns.
	Hatchery	7.8	6.2	4.1	6.8 ^{d/}	9.4 ^{d/}	10.1 ^{d/}	9.9 ^{d/}	9.6 ^{d/}	8.7 ^{d/}	Yearlings based on CWT groups for Wallace Hatchery (BYs 1987 and 1992-1996). Fingerlings based on survival estimate from Tulalip Hatchery (BYs 2002-2005).
Tulalip	Hatchery	4.5	5.0	5.5	5.8 ^{d/}	6.0 ^{d/}	7.6 ^{d/}	9.2 ^{d/}	10.0 ^{d/}	8.1 ^{d/}	CWT survival rates (1986-1991) multiplied by release numbers for brood years 2002-2005.
South Puget Sound	Natural	19.6	17.5	16.2	16.9	19.6	17.5	17.7	21.3	17.0	Puyallup-based predicted return at age calculated for return years 1993-2005, multiplied by average difference between forecasts and run sizes from 1999 to 2006. For Nisqually, recent 5-year average (2001-2005).
	Hatchery	59.4	77.5	73.7	90.8	86.6	86.5	83.1	85.8	92.1	Average return at age multiplied by cohort release for Green and 10E. Average of two different methods for Carr Inlet, (1) 1980-2005 mean return/smolt released multiplied by 2002 brood smolts released, and (2) 1980-2005 mean return/pound released multiplied by 2003 brood pounds released.
Hood Canal	Natural	14.0	19.2	2.7	2.9 ^{c/}	3.6 ^{c/}	2.4 ^{c/}	3.1 ^{c/}	2.5 ^{c/}	3.8 ^{c/}	Forecast is the product of brood 2003 fingerling lbs released from WDFW facilities in 2004, multiplied by the average of post-season estimated terminal area return rates (total terminal run / hatchery fingerling lbs released 3 yrs previous) for the last four return years (2003-2006).
	Hatchery			22.6	21.1 ^{c/}	30.2 ^{c/}	27.2 ^{c/}	27.5 ^{c/}	27.7 ^{c/}	43.6 ^{c/}	Natural fish based on the Hood Canal terminal run reconstruction-based relative contribution of the individual Hood Canal management units in the 2003-2006 return years.
Strait of Juan de Fuca	Natural	0.9	1.1	3.5	3.6 ^{c/}	3.4 ^{c/}	3.6 ^{c/}	4.2 ^{c/}	4.2 ^{c/}	4.4 ^{c/}	Four year average 2003-2006 of terminal run size. Elwha estimate is a combination of hatchery and wild fish.
	Hatchery	1.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

a/ Beginning in 2005, the upriver spring/summer designation was changed, with stream type Snake Basin summer fish being combined with the spring stock.

b/ Forecast is Puget Sound run size available to U.S. net fisheries. Does not include fish caught in troll and recreational fisheries.

c/ Terminal run forecast.

d/ Expected spawning escapement without fishing.

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

Production Source and Stock or Stock Group		1999	2000	2001	2002	2003	2004	2005	2006	2007	Methodology for 2007 Prediction and Source
OPI Area (Total Abundance)		620.6	727.9	1,758.7	434.1	984.6	777.9	542.9	460.2	849.2	Sum of stock component estimates.
(California and Oregon Coasts and Columbia River)											
OPI Public	Hatchery	559.2	671.4	1,707.6	361.7	863.1	623.9	389.9	398.8	593.6	Multiple linear regression of OPI public hatchery jacks to adults adjusted for Columbia River delayed smolt release; 1970-2006 SRS accounting database. Public hatchery prediction is partitioned into Columbia River early and late, and coastal stocks based on the percent of jacks observed and recent year average stock specific maturation rates.
Columbia River Early		325.5	326.3	1,036.5	161.6	440.0	313.6	284.6	245.8	424.9	
Columbia River Late		140.9	278.0	491.8	143.5	377.9	274.7	78.0	113.8	139.5	
Coastal N. of Cape Blanco		59.4	48.5	127.3	36.6	29.3	16.6	11.5	8.6	7.0	
Coastal S. of Cape Blanco		33.4	18.6	52.0	20.0	15.9	19.0	15.8	30.6	22.2	
Lower Columbia River	Natural	NA	NA	NA	NA	NA	NA	NA	NA	21.5	A combination of methods were used for 2007 based on recent year returns, smolt production, and survival. See text in Chapter III for details.
Oregon Coast (OCN)	Natural	60.7	55.9	50.1	71.8	117.9	150.9	152.0	60.8	255.4	For river production, relates ocean recruits (SRS accounting) to upwelling and sea surface temperature; data base 1970-2006. Most recent three-year average abundance for lake production.
STEP	Hatchery	0.7	0.6	1.0	0.6	3.6	3.1	1.0	0.6	0.2	Smolt production from 2004 brood year with 2003 brood year observed smolt to adult survival rate.
Washington Coast											A variety of methods were used for 2007, primarily based on smolt production and survival. See text in Chapter III for details.
Willapa	Natural	8.3	9.9	21.6	21.6	31.8	36.7	35.9	30.3	24.4	
	Hatchery	40.5	19.6	36.1	40.4	57.5	55.0	56.4	37.7	37.2	
Grays Harbor	Natural	57.7	47.8	51.3	55.4	58.0	117.9	91.1	67.3	59.4	
	Hatchery	30.4	75.8	67.1	56.8	64.0	67.8	54.4	52.4	74.0	
Quinalt	Natural	7.3	4.4	8.7	29.4	47.7	50.5	44.9	28.8	18.6	
	Hatchery	8.2	7.4	10.8	12.3	20.6	18.2	33.6	34.5	22.7	
Queets	Natural	4.3	2.7	12.0	12.5	24.0	18.5	17.1	8.3	13.6	
	Hatchery	13.8	11.8	10.0	16.0	24.9	17.1	17.4	11.9	19.1	
	Supplemental ^{b/}	3.0	0.8	NA	2.0	1.3	2.5	2.4	-	-	
				(Flood)							
Hoh	Natural	3.2	3.5	8.5	8.5	12.5	8.1	7.6	6.4	5.4	
Quillayute Fall	Natural	14.5	8.7	23.0	22.3	24.9	21.2	18.6	14.6	10.8	
	Hatchery	9.4	13.9	15.3	15.0	15.2	20.9	22.1	10.4	18.1	

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

Production Source and Stock or Stock Group		1999	2000	2001	2002	2003	2004	2005	2006	2007	Methodology for 2007 Prediction and Source	
Quillayute Summer	Natural	1.2	1.6	0.6	1.2	1.8	1.1	0.8	1.1	1.0	A variety of methods were used for 2007, primarily based on smolt production and survival. See text in Chapter III and Joint WDFW and tribal annual reports on Puget Sound Coho Salmon Forecast Methodology for details.	
	Hatchery	3.5	5.4	5.3	4.9	5.4	6.1	6.1	4.0	6.4		
North Coast Independent Tributaries	Natural	3.4	5.1	8.1	6.4	14.8	12.7	8.5	8.1	3.2		
	Hatchery	5.8	11.7	8.1	8.1	11.0	4.3	5.6	3.2	4.1		
WA Coast Total	Natural	99.9	83.7	133.8	157.3	215.5	266.7	224.5	164.9	136.4		
	Hatchery	114.6	146.4	152.7	155.5	199.9	191.9	198.0	154.1	181.6		
Puget Sound												
Strait of Juan de Fuca	Natural	14.7	13.5	21.4	21.2	20.1	35.7	20.7	26.1	29.9		
	Hatchery	37.7	13.6	14.4	14.0 ^{a/}	24.0 ^{a/}	28.7 ^{a/}	26.5 ^{a/}	20.5	18.4		
Nooksack-Samish	Natural	13.8	14.9	12.4	22.0	16.4	27.5	17.0	18.3	5.2		
	Hatchery	95.0	65.5	44.4	105.4	66.2	75.5	89.5	81.1	53.1		
Skagit	Natural	75.7	30.2	87.2	98.5	116.6	155.8	61.8	106.6	26.8		
	Hatchery	10.9	10.3	10.1	14.1	10.4	22.8	9.1	22.5	8.9		
Stillaguamish	Natural	35.7	17.7	24.4	19.7	37.8	38.0	56.7	45.0	69.2		
	Hatchery	-	-	-	-	1.3	0.5	0.2	1.2	0.0		
Snohomish	Natural	141.6	53.0	129.6	123.1	203.0	192.1	241.6	139.5	98.9		
	Hatchery	87.8	62.1	60.9	60.3	35.4	48.3	59.1	96.4	25.7		
South Sound	Natural	19.4	11.7	29.5	40.4	103.6	61.3	45.7	45.3	18.2		
	Hatchery	372.1	121.8	172.6	222.5	315.6	288.4	222.2	256.1	181.7		
Hood Canal	Natural	65.1	61.0	62.0	34.9	32.4	98.7	98.4	59.4	42.4		
	Hatchery	96.8	38.5	33.5	31.3 ^{a/}	48.0 ^{a/}	43.1 ^{a/}	60.6 ^{a/}	57.9	54.8		
Puget Sound Total	Natural	366.0	202.0	366.5	359.8	529.9	609.2	541.9	440.2	290.6		
	Hatchery	700.3	311.8	335.9	447.6	501.0	507.3	465.2	535.7	342.6		

a/ Strait of Juan de Fuca and Hood Canal Hatchery numbers in 2002-2005 include natural coho from secondary (hatchery) management zones.

b/ Program ended in 2005.

TABLE I-3. Achievement of conservation objectives for natural stocks listed in Table 3-1 of the Pacific Coast Salmon Plan. Bolded numbers indicate a failure to meet the conservation objective. Stocks listed under the Endangered Species Act are not included. (Page 1 of 2)

Stock and Conservation Objective (thousands of spawners; spawners per mile; impact or replacement rate)	Observed or Projected Conservation Achievement (postseason estimates of thousands of spawners or spawners per mile; preseason or postseason impact or replacement rate)										Overfishing Criteria		
	CHINOOK	1999	2000	2001	2002	2003	2004	2005	2006 ^{a/}	2007 ^{b/}	Alert ^{c/}	Concern ^{d/}	Exception ^{e/}
Sacramento River Fall 122.0 - 180.0 adult spawners		395.9	416.8	546.1	775.5	521.6	283.6	394.0	270.2	331.2	No	No	No
Klamath River Fall - < 66%-67% avg. spawner reduction rate but no less than 35.0 adult natural spawners annually		18.5	82.7	77.8	65.6	87.6	24.1	26.8	30.4	65.3	No	Yes	No
Southern, Central and Northern Oregon Coast Spring and Fall No less than 60 adult spawners/mile ^{f/}		124.0	85.0	203.0	268.0	297.0	211.0	118.0	81.0	>60	No	No	No
Upper Columbia River Bright Fall 43.5 adults over McNary Dam Council area base period impacts <4%		78.4	66.4	110.5	141.7	180.0	170.6	135.5	90.9	>43.5	No	No	Exp. Rate
Columbia River Summer Chinook 80.0 to 90.0 adults over Bonneville Dam Council area base period impacts <2%		26.2	30.6	76.2	127.4	114.8	NA	NA	NA	NA	NA	NA	NA
In 2004 state and tribal co-managers changed the stock definition from Chinook passing Bonneville Dam after May 31 to Chinook passing Bonneville Dam after June 14, and the goal changed to 29,000 at the river mouth		20.1	22.3	53.2	96.3	83.0	67.1	61.2	57.2	>29.0	No	No	Exp. Rate
Grays Harbor Fall - 14.6 adult spawners (MSY)		10.4	9.3	9.5	11.3	19.4	29.3	19.2	NA ^{g/}	NA ^{g/}	No	No	Exp. Rate
Grays Harbor Spring - 1.4 adult spawners		1.3	2.9	2.9	2.6	1.9	5.0	2.1	2.4	NA ^{g/}	No	No	Exp. Rate
Queets Fall - no less than 2.5 adult spawners (MSY)		1.9	3.6	2.9	1.9	5.0	3.5	3.1	NA ^{g/}	NA ^{g/}	No	No	Exp. Rate
Queets Spring/Summer - no less than 0.7 adult spawners		0.4	0.3	0.6	0.7	0.2	0.6	0.3	0.3	NA ^{g/}	Limited ^{g/}	No	Exp. Rate
Hoh Fall - no less than 1.2 adult spawners (MSY)		1.9	1.7	2.6	4.4	1.6	3.2	4.2	1.3	NA ^{g/}	No	No	Exp. Rate
Hoh Spring/Summer - no less than 0.9 adult spawners		0.9	0.5	1.2	2.5	1.2	1.8	1.2	0.9	NA ^{g/}	No	No	Exp. Rate
Quillayute Fall - no less than 3.0 adult spawners (MSY)		3.3	3.7	5.1	6.1	7.4	3.8	6.4	6.3	NA ^{g/}	No	No	Exp. Rate
Quillayute Spring/Summer - 1.2 adult spawners (MSY)		0.7	1.0	1.2	1.0	1.2	1.1	0.9	0.6	NA ^{g/}	Limited ^{g/}	No	Exp. Rate

TABLE I-3. Achievement of conservation objectives for natural stocks listed in Table 3-1 of the Pacific Coast Salmon Plan. Bolded numbers indicate a failure to meet the conservation objective. Stocks listed under the Endangered Species Act are not included. (Page 2 of 2)

Stock and Conservation Objective (thousands of spawners; spawners per mile; impact or replacement rate)	Observed or Projected Conservation Achievement (postseason estimates of thousands of spawners or spawners per mile; preseason or postseason impact or replacement rate)										Overfishing Criteria		
	COHO	1999	2000	2001	2002	2003	2004	2005	2006 ^{a/}	2007 ^{b/}	Alert ^{c/}	Concern ^{d/}	Exception ^{e/}
Oregon Coast (OCN) - Total exploitation rate set annually; 15% in 2006, 20% in 2007.		9%	7%	NA	NA	NA	NA	NA	6.8%	6.2%	No	No	No
Grays Harbor - 35.4 adult spawners (MSP)		33.3	38.1	79.1	108.0	83.9	60.7	44.1	NA	>35.4	No	No	No
Queets - 5.8 to 14.5 adult spawners (MSY range) Includes supplemental adults		5.3	8.6	24.9	13.7	8.6	8.7	6.5	NA	>5.8	No	No	No
Hoh - 2.0 to 5.0 adult spawners (MSY range)		4.6	6.8	10.8	9.0	6.3	4.7	4.7	2.0	>2.0	No	No	No
Quillayute Fall - 6.3 to 15.8 adult spawners (MSY range)		9.4	13.3	18.9	23.0	14.8	13.4	11.5	5.0	>6.3	No	No	No
Western Strait of Juan de Fuca - 11.9 adult spawners		8.0	16.9	34.3	20.6	12.4	12.0	>11.9	>11.9	>11.9	No	No	No
Eastern Strait of Juan de Fuca - 0.95 adult spawners		1.4	2.1	2.6	2.5	2.9	8.50	>0.95	>0.95	>0.95	No	No	No
Hood Canal - 21.5 adult spawners (MSP)		16.6	27.3	94.7	69.3	170.3	146.1	38.1	>21.5	>21.5	No	No	No
Skagit - 30.0 adult spawners (MSP)		27.3	62.9	87.0	56.0	69.2	139.2	34.7	>30.0	>30.0	No	No	No
Stillaguamish - 17.0 adult spawners (MSP)		7.0	28.3	73.6	27.3	45.7	59.2	25.8	>17.0	>17.0	No	No	No
Snohomish - 70.0 adult spawners (MSP)		61.3	94.2	261.8	161.6	182.7	252.8	109.0	>70.0	>70.0	No	No	No

a/ Preliminary data.

b/ Preliminary approximations based on preseason abundance projections and last year's regulations or season structures.

c/ Conservation Alert - triggered during the annual preseason process if a natural stock or stock complex, listed in Table 3-1 of the salmon FMP, is projected to fall short of its conservation objective (MSY, MSY proxy, MSP, or floor in the case of some harvest rate objectives [e.g., 35,000 natural Klamath River fall Chinook spawners]).

Actions for Stocks that are not Exceptions - The Council will close salmon fisheries within its jurisdiction which impact the stocks, except in the case of Washington coastal and Puget Sound salmon stocks and fisheries managed under U.S. District Court orders. In these cases, the Council may allow fisheries which meet annual spawner targets developed through relevant U.S. v. Washington, Hoh v. Baldrige, and subsequent U.S. District Court ordered processes and plans, that may vary from the MSY or MSP conservation objectives. For all natural stocks that meet the conservation alert criteria, the Council will notify pertinent fishery and habitat managers, advising that the stock may be temporarily depressed or approaching an overfishing concern (depending on its recent conservation status), and request state and tribal fishery managers identify the probable causes, if known. If the stock has not met its conservation objective in the previous two years, the Council will request state and tribal managers to do a formal assessment of the primary factors leading to the shortfalls and report to the Council no later than the March meeting prior to the next salmon season.

d/ Overfishing concern - triggered if, in three consecutive years, the postseason estimates indicate a natural stock, listed in Table 3-1 of the salmon FMP, has fallen short of its conservation objective (MSY, MSP, or spawner floor as noted for some harvest rate objectives).

Actions required for Stocks that are not Exceptions - Within one year, the STT to recommend and the Council to adopt management measures to end the overfishing concern and recover the stock in as short a time as possible, preferably within ten years or less. The HC to provide recommendations for habitat restoration and enhancement measures within a suitable time frame.

e/ Exception -application of the conservation alert and overfishing criteria and subsequent Council actions do not apply for (1) hatchery stocks, (2) natural stocks with a cumulative adult equivalent exploitation rate of less than 5% in ocean fisheries under Council jurisdiction during the FRAM base periods, and (3) stocks listed under the ESA.

Conservation Alert and Overfishing Concern Actions for Natural Stocks that are Exceptions (those with exploitation rates limited to less than 5% in base period Council-area ocean fisheries) - Use the expertise of STT and HC to confirm negligible impacts of proposed Council fisheries, identify factors which have led to the decline or low abundance (e.g., fishery impacts outside Council jurisdiction, or degradation or loss of essential fish habitat) and monitor abundance trends and total harvest impact levels. Council action will focus on advocating measures to improve stock productivity, such as reduced interceptions in non-Council managed fisheries, and improvements in spawning and rearing habitat, fish passage, flows, and other factors affecting overall stock survival.

f/ Based on the sum of south/local and north migrating spawners per mile weighted by the total number of miles surveyed for each of the two components (2.2 miles for south/local and 7.5 miles for northern stocks).

g/ Preseason forecasts are not available for Washington coastal Chinook stocks.

CHAPTER II - CHINOOK SALMON ASSESSMENT

CHINOOK STOCKS SOUTH OF CAPE FALCON

SACRAMENTO RIVER FALL CHINOOK SALMON

Predictor Description

The Council's Salmon FMP sets the escapement goal for Sacramento River fall Chinook as a range from 122,000 to 180,000 adults. This stock comprises approximately 90% of the escapement of all Chinook stocks that return to Central Valley streams and hatcheries. The Central Valley Index (CVI), which provides an annual index of abundance for the combined Central Valley Chinook stocks, is the sum of ocean fishery Chinook harvests in the area south of Point Arena plus the Central Valley adult Chinook spawning escapement (Table II-1). The CVI harvest index is the ocean harvest landed south of Point Arena divided by the CVI, and has varied significantly since it was first calculated in 1970 (Table II-1). From 1970–1986 it tracked ocean harvest and ranged from 0.50–0.73. From 1987–1995 it held steady at 0.70–0.79, while ocean harvest ebbed to a low in 1992. From 1996–2006 it again tracked ocean harvest in a generally declining pattern, reaching its second lowest level on record in 2006. The CVI harvest index was 0.27 in 2006.

Prior to 1989 the STT based its projection of the CVI on recent CVI levels (with general consideration given for brood year natural escapements), hatchery releases, and the previous year jack returns. Between 1989 and 1991, several predictors of the CVI were evaluated, including weight and number of juveniles in hatchery releases and previous year jack returns. Since 1991, the STT has used a linear regression of the CVI on the previous year's Central Valley age-2 return to forecast the CVI (Figure II-1).

Predictor Performance

For the 1985–2005 period, the CVI preseason forecast ranged from 0.49 to 1.96 times its postseason value (Table II-2). The 2006 CVI preseason forecast of 632,500 fish was about 50% greater than (1.45 times) its postseason estimate of 435,400 fish (Table II-2).

2007 Stock Status

A total of 14,500 age-2 Chinook are estimated to have returned to the Central Valley in 2006, which is the lowest level on record and similar to the low levels observed in 1990 and 1991. The resulting 2007 CVI forecast is 499,900 adult Chinook (Figure II-1), which is 0.79 times the 2006 preseason forecast and is the lowest CVI forecast since 1992.

Evaluation of 2006 Regulations on 2007 Stock Abundance

A repeat of 2006 regulations is expected to result in a CVI harvest index similar to last year (0.27). Applying the complement of this fraction (1-0.27) to the 2007 CVI forecast of 499,900 fish and multiplying that quantity by the typical proportion of Central Valley adult Chinook spawners that are Sacramento River fall run fish (0.91, five-year average), yields a 2007 adult escapement forecast of 331,200 Sacramento River fall Chinook, which is well above the upper end of the escapement goal range (Figure II-2).

KLAMATH RIVER FALL CHINOOK

Predictor Description

For Klamath River fall Chinook, linear regressions are used to relate September 1 (preseason) ocean abundance estimates of age-3, age-4, and age-5 fish to that year's river run size estimates of age-2, age-3, and age-4 fish, respectively (Table II-3). Historical abundance estimates were derived from a cohort analysis of CWT information (brood years 1979-2002). The y-intercept of the regressions is constrained to zero, which gives the biologically reasonable expectation that a river run size of zero predicts an ocean abundance remainder of zero for the same cohort. The abundance of age-2 fish is not forecasted because no precursor to age-2 fish of that brood is available. Ocean fisheries harvest small numbers of age-2 Klamath River fall Chinook.

Predictor Performance

Since 1985, the preseason ocean abundance forecasts for age-3 fish have ranged from 0.33 to 2.71 times the postseason estimates; for age-4 fish from 0.47 to 2.6 times the postseason estimates; and for the adult stock as a whole from 0.34 to 2.03 times the postseason estimates (Table II-4). The September 1, 2005 age-3 forecast (44,100) was 0.50 times its postseason estimate (87,700); the lowest level observed since 1992. The age-4 forecast (63,700) was 0.92 times its postseason estimate (68,900); and the age-5 forecast (2,200) was 0.41 times its postseason estimate (5,300) (Table II-4).

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

The Council's FMP conservation objective for Klamath River fall Chinook (Amendment 9) permits a natural spawner reduction rate via fisheries of no more than 0.67, with a minimum escapement of 35,000 natural spawning adults. The plan allows for any ocean and river harvest allocation that meets the spawner reduction rate constraint provided it also meets the minimum escapement goal. The regulations adopted in 2006 were expected to result in 21,100 natural spawning adults and an age-4 ocean harvest rate of 11.5%. Postseason estimates of these quantities were 30,400 natural spawning adults and, an age-4 ocean harvest rate of 11.1% (Table II-6).

2007 Stock Status

The forecast September 1, 2006 (preseason) ocean abundance of Klamath River fall Chinook salmon is 515,400 age-3 fish; the highest forecast on record. In contrast, the age-4 forecast of 26,100 is the lowest forecast on record. The age-5 forecast is 4,700 fish. Last year's preseason forecast was 44,100 age-3, 63,700 age-4, and 2,200 age-5 fish.

Late-season ocean fisheries in 2006 (September-November) were estimated to have harvested 195 age-3, 317 age-4, and 408 age-5 Klamath River fall Chinook. This harvest will be deducted from the ocean fishery's allocation in determining the 2007 allowable ocean harvest.

Evaluation of 2006 Regulations on 2007 Stock Abundance

A repeat of 2006 fishery regulations, including a river recreational harvest allocation of 0% (of the nontribal adult harvest) and a tribal allocation of 50% (of the overall adult harvest), would be expected to result in 65,300 natural area adult spawners and an age-4 ocean harvest rate of 4.7%.

If the ocean fisheries (recreational and commercial) were closed from January through August 2007 between Cape Falcon and Point Sur, and the Klamath River fisheries (tribal and recreational) were closed in 2007, the expected number of natural area adult spawners would be 73,400, with an expected age-4 ocean harvest rate of 1.2% (due to ocean harvest that already occurred in the September through November 2006 period).

OTHER CALIFORNIA COASTAL CHINOOK STOCKS

Other California coastal streams that support fall Chinook stocks, which contribute to ocean fisheries off Oregon and California, include the Smith, Little, Mad, Eel, and Mattole rivers, and Redwood Creek. Except for the Smith River, these stocks are included in the California coastal Chinook ESU, which is listed as threatened under the ESA. Current information is insufficient to forecast the ocean abundance of these stocks, however, the NMFS ESA consultation standard restricts the Klamath River fall Chinook age-4 ocean harvest rate to no more than 16.0% to limit impacts on these stocks. As indicated in the previous section, the postseason estimate of this rate for 2006 is 11.1%, remarkably close to the preseason forecast of 11.5%. If the ocean fishery was closed from January through August 2007 between Cape Falcon and Point Sur, the expected age-4 ocean harvest rate for 2007 would be 1.2% (due to ocean harvest that already occurred in the September through November 2006 period).

OREGON COASTAL CHINOOK STOCKS

Oregon coastal Chinook stocks are categorized into two major subgroups based on ocean migration patterns. Although their ocean harvest distributions overlap somewhat, they have been labeled as either north or south/local migrating.

North Migrating Chinook

North migrating Chinook stocks include stocks north of and including the Elk River, with the exception of Umpqua River spring Chinook. Based on CWT analysis, the populations from ten major North Oregon Coast (NOC) river systems from the Nehalem through the Siuslaw Rivers are harvested primarily in ocean fisheries off British Columbia, Canada and Southeast Alaska, and to a much lesser degree in Council area and terminal area (state waters) fisheries off Washington and Oregon. CWT analysis indicates populations from five major mid-Oregon Coast (MOC) systems, from the Coos through the Elk Rivers, are harvested primarily in ocean fisheries off British Columbia, Canada, Washington, and Oregon with minor contributions to California fisheries.

Predictor Description and 2007 Stock Status

Quantitative abundance predictions are not made for these stocks for use in annual development of Council area fishery regulations. Qualitative expectations of abundance are based on parental year spawner escapements and hatchery indicator stock data used in the PSC management process.

Natural spawner escapement is assessed yearly from the Nehalem through Coquille rivers. Peak spawning counts of adults are obtained from standard index areas on these rivers and monitored to assess stock trends (*Review of 2006 Ocean Salmon Fisheries*, Chapter II, Table II-4 and Figure II-3). Natural fall Chinook stocks from both the NOC and MOC dominate production from this subgroup. Also present in lesser numbers are naturally-produced spring Chinook stocks from several rivers, and hatchery fall and/or spring Chinook released in the Trask, Nestucca, Salmon, Alsea, and Elk Rivers.

North Oregon Coast

Since 1986, the Salmon River Hatchery production has been CWT'd for use primarily as an indicator stock for the NOC stock component. Because these fish are harvested in fisheries north of the Council management area, the STT has not reviewed the procedure by which this indicator stock is used in

estimating annual stock status. The annual spawner counts have been decreasing since 2002 despite excellent parental escapements indices in 2001 to 2004 (*Review of 2006 Ocean Salmon Fisheries*, Appendix B, Table B-11). If this trend continues, the 2007 NOC stock abundance is expected to be less than the 2006 abundance.

Mid-Oregon Coast

Since 1992, the Elk River Hatchery production has been CWT'd for use as an indicator stock for the MOC stock component. Age specific ocean abundance forecasts for 2007 are not currently available. The STT has not undertaken a review of the methods used by Oregon Department of Fish and Wildlife (ODFW) staff in preparing these abundance forecasts.

The annual spawner counts have been decreasing since 2004 despite excellent parental escapements indices in 2001 to 2004 (*Review of 2006 Ocean Salmon Fisheries*, Appendix B, Table B-11). If this trend continues, the 2007 MOC stock abundance is expected to be less than the 2006 abundance.

Based on the density index of total spawners, the generalized expectation for NOC and MOC stocks in 2007 is below recent years average abundance. However, the density of adults observed since 1985 has met or exceeded the goal of 60-90 spawners per mile, a primary indicator that these stocks are generally healthy (*Review of 2006 Ocean Salmon Fisheries*, Appendix B, Table B-11).

South/Local Migrating Chinook

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

Predictor Description and 2007 Stock Status

Quantitative abundance predictions are not made for these stocks, although an abundance index for Rogue River fall Chinook has been developed. General trends in stock abundance for southern Oregon coastal Chinook stocks are assessed through escapement indices (*Review of 2006 Ocean Salmon Fisheries*, Chapter II, Table II-4 and Figure II-3).

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

Umpqua River and Rogue River Spring Chinook

Umpqua and Rogue rivers spring Chinook contribute to ocean fisheries primarily as age-3 fish. Mature Chinook enter the rivers primarily during April and May and generally prior to annual ocean fisheries. Quantitative abundance predictions are not made for these stocks.

Rogue River Fall Chinook

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

Annual predictions of Rogue River fall Chinook abundance indices are used for ocean impact modeling in the Klamath Ocean Harvest Model (KOHM). Postseason ocean population indexes (ages 3-5), estimated by run reconstruction methods and based on carcass recoveries on eight standard spawning surveys, are available for 1977-2002. A linear regression relationship was developed using all of these years in which the Huntley Park total estimates in year i were a predictor variable for the ocean population index total in year $i + 1$. Using this relationship, the 2007 ocean population index total was forecast based on the 2006 Huntley Park total estimate. This ocean population index total was then allocated into individual indexes for ages-3 through age-5 fish based on the average annual proportions-by-age of the ocean population index estimates from 1991-2002. The ocean population index data set was truncated at 1991 because significant harvest restrictions that could affect age structure began that year. The Huntley Park escapement estimate in 2006 (18,100) has only been lower in 1990 (10,200) and 1991 (7,700). The 2007 forecast ocean abundance of Rogue River fall Chinook salmon is 8,000 (Table II-7). This adult estimate is comprised of 5,200 age-3, 2,400 age-4, and 400 age-5 fish. The ocean population index total has been lower only in 1991 (7,300), 1992 (7,400), 1996 (5,300), 1997 (7,100), 1999 (4,700), and 2006 (3,800).

Other Stocks

Information is insufficient to forecast the abundance of fall Chinook from other smaller rivers south of the Elk River. These stocks are minor contributors to general season mixed stock ocean fisheries.

Evaluation of 2006 Regulations on 2007 Stock Abundance

Given the 2006 regulations and the projected 2007 Oregon coastal Chinook stock abundances, which are expected to be lower than recent year averages, the aggregate Oregon coastal Chinook goal of 150,000 to 200,000 naturally spawning adults is expected to be met.

CHINOOK STOCKS NORTH OF CAPE FALCON

Columbia River Fall Chinook

Predictor Description and Past Performance

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

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

The 2007 return of each fall Chinook stock group is estimated using relationships between successive age groups within a cohort. The database for these relationships was constructed by combining age-specific estimates of escapement and inriver fishery catches for years since 1964 (except for MCB, which started in 1980). Typically, only the more recent broods are used in the current predictions. Fall Chinook stock identification in the Columbia River mixed stock fisheries is determined by sampling catch and escapement for such factors as CWT recovery and visual stock identification (VSI). Age composition estimates are based on CWT data and scale reading of fishery and escapement samples, where available. These stock and age data for Columbia River fall Chinook are the basis for the return data presented in the *Review of 2006 Ocean Salmon Fisheries* (Appendix B, Tables B-15 through B-20). The 2006 returns for the five fall Chinook stocks listed in this report may differ somewhat from those provided in the *Review of 2006 Ocean Salmon Fisheries*, since ocean escapement estimates may have been updated after that report was printed.

Performance of the preliminary inriver run size estimation methodology can be assessed, in part, by examining the differences between preseason and postseason estimates (Table II-8). The recent 10-year average March preliminary preseason estimates as a percentage of the postseason estimates for the URB, LRW, LRH, SCH, and MCB stock estimates are 0.96, 0.88, 0.77, 0.96, and 0.95 respectively. The only March preliminary preseason estimate to show a consistent bias was LRH, which has been under predicted the past 13 years. The other four stocks have been both over and under predicted.

Ocean escapement estimates developed for the March Council meeting do not take into account variations in marine harvest. The STT combines the initial inriver run size (ocean escapement) with expected Council area fishery harvest levels and stock distribution patterns to produce adjusted ocean escapement estimates based on the proposed ocean fishing regulations (Table II-8). These revised estimates are available at the end of the Council preseason planning process in April and should provide a more accurate prediction of ocean escapement.

2007 Stock Status

The preliminary forecast for 2007 URB fall Chinook ocean escapement is 182,400 adults. If the forecast is realized, it would be about 79% of last year's return and about 77% of the recent 10-year average of 237,550.

No preseason forecast for 2007 ocean escapement of ESA-listed Snake River wild fall Chinook is currently available. However, the Columbia River TAC is expected to develop a run size estimate for this stock prior to the April Council meeting.

Ocean escapement of LRW fall Chinook in 2007 is forecast at 10,100 adults. If the forecast is realized, it would be about 56% of last year's return and about 64% of the recent 10-year average return of 15,690.

The preliminary forecast for 2007 ocean escapement of LRH fall Chinook is for a return of 54,900 adults, which would be 94% of last year's return and 67% of the recent 10-year average of 82,090.

Ocean escapement of SCH fall Chinook in 2007 is forecast at 21,800 adults. If the forecast is realized, it would be about 78% of last year's return and about 25% of the recent 10-year average of 88,100.

The preliminary forecast for the 2007 ocean escapement of MCB fall Chinook is 68,000 adults. If the forecast is realized, it would be about 85% of last year's return and about 83% of the recent 10-year average of 81,550.

Evaluation of 2006 Regulations on 2007 Stock Abundance

Applying 2006 regulations to the projected 2007 abundance of Columbia River fall Chinook would result in ocean escapements of all five major stock units meeting spawning escapement goals. Compared to 2006, ocean escapement in 2007 is expected to be lower for all stocks.

Washington Coastal Chinook

Predictor Description and Past Performance

Council fisheries have only minor impacts on Washington coastal Chinook stocks, and except for Willapa Bay Chinook, forecast data is unavailable at the time this report is published; therefore, preseason abundance estimates are not presented. However, abundance estimates are provided for Washington Coastal stocks in subsequent preseason fishery impact assessment reports prepared by the STT.

2007 Stock Status

The 2007 Willapa Bay hatchery fall Chinook ocean escapement abundance forecast is 29,846, which is the same as the 2006 prediction of 29,565. The 2007 natural fall Chinook ocean escapement forecast is 2,012, up slightly from last year's 1,880 prediction.

Puget Sound Chinook

Run-size expectations for various Puget Sound stock management units are listed in Table I-1. A comparison of preseason and postseason forecasts for recent years is detailed in Table II-9. The STT has not undertaken a review of the methods employed by state and tribal staffs in preparing these abundance forecasts. Methodologies for estimates are described in the annual Puget Sound management reports (starting in 1993, reports are available by Puget Sound management unit, not by individual species). Forecasts for Puget Sound stocks generally assume production is dominated by age-4 adults. Puget Sound Chinook were listed as threatened under the ESA in March 1999. Southern U.S. fisheries that impact Puget Sound Chinook are constrained by terms of a Resource Management Plan (RMP), and are exempted from ESA Section 9 take prohibitions under Limit 6 of the 4(d) rule.

2006 Stock Status

Spring Chinook

Spring Chinook originating in Puget Sound are expected to remain depressed. Runs in the Nooksack, Skagit, White, and Dungeness rivers are of particular concern.

Summer/Fall Chinook

Preliminary information for Puget Sound summer/fall stocks indicates the total 2007 return will be 227,300, slightly higher than the 2006 preseason forecast of 213,400. The 2007 natural Chinook return forecast of 54,000 is lower than the 2006 forecast of 62,400. Changes in the abundance of individual stocks from various production areas are detailed in Table I-1.

Natural stocks from Puget Sound have experienced improved survival in recent years, but not to the extent that it can be labeled as a trend. While recent returns are slightly below the previous four year average, they are still well above those observed from 1999 to 2001. Fishery management for Puget Sound Chinook has changed from an escapement goal basis to the use of stock specific exploitation rates and "critical abundance thresholds." This new approach is evaluated on an annual basis through the RMP.

Evaluation of 2006 Regulations on 2007 Stock Abundance

Council fisheries north of Cape Falcon have only a minor impact on most stocks that originate in Washington coastal and Puget Sound rivers. These stocks have northerly marine distribution patterns and are therefore impacted primarily by Canadian and Alaskan fisheries. An evaluation of 2006 Council area regulations on projected 2007 abundance would not provide a useful comparison of ocean escapement.

TABLE II-1. Indices of annual abundance and ocean fishery impacts on California Central Valley Chinook in thousands of fish.
(Page 1 of 1)

Year	Ocean Chinook Landings South of Pt. Arena			Hatchery and Natural Escapements of Central Valley Adults			CVI Abundance (Ocean Landings + Escapement)		CVI Harvest Index (%) ^{b/}
	Troll	Sport	Total	Fall	Other ^{a/}	Total			
1970	226.8	111.1	337.9	186.3	55.6 ^{c/}	241.9	579.8		58
1971	150.7	166.3	317.0	196.2	65.4	261.6	578.6		55
1972	229.8	187.6	417.4	104.6	47.6	152.3	569.7		73
1973	422.5	180.9	603.4	225.4	34.0	259.4	862.8		70
1974	282.7	141.6	424.3	207.3	42.3	249.6	673.9		63
1975	234.4	92.7	327.1	162.3	56.5	218.9	546.0		60
1976	237.9	68.6	306.4	172.0	45.6	217.7	524.1		58
1977	263.8	76.6	340.4	165.6	43.0	208.6	549.1		62
1978	291.0	65.9	356.9	129.8	19.9	149.7	506.6		70
1979	234.1	108.5	342.6	171.9	10.9	182.9	525.5		65
1980	294.3	77.1	371.4	148.4	34.0	182.4	553.8		67
1981	289.9	73.8	363.7	196.9	21.8	218.7	582.4		62
1982	426.1	122.5	548.6	182.4	38.9	221.3	769.9		71
1983	178.2	53.0	231.2	129.9	14.4	144.3	375.4		62
1984	221.7	78.7	300.3	205.8	16.9	222.7	523.0		57
1985	212.3	121.8	334.1	312.7	20.7	333.4	667.4		50
1986	502.5	114.8	617.3	262.9	41.3	304.1	921.4		67
1987	446.8	152.8	599.7	202.8	21.6	224.4	824.1		73
1988	830.5	130.4	960.9	244.9	26.6	271.5	1,232.4		78
1989	363.8	130.9	494.7	155.0	18.0	173.0	667.7		74
1990	336.2	112.6	448.8	105.7	14.0	119.7	568.6		79
1991	254.6	62.1	316.7	118.3	16.4	134.6	451.3		70
1992	160.3	66.7	227.0	82.6	4.2	86.8	313.8		72
1993	259.7	99.3	359.0	139.6	6.0	145.7	504.6		71
1994	290.4	165.8	456.2	169.5	6.6	176.0	632.2		72
1995	670.6	354.6	1,025.2	302.2	16.5	318.6	1,343.8		76
1996	348.8	129.3	478.1	307.6	12.9	320.5	798.6		60
1997	482.2	208.4	690.6	368.0	46.6	414.6	1,105.2		62
1998	221.6	114.4	336.0	254.2	55.8	310.0	646.0		52
1999	259.7	76.4	336.1	408.9	21.4	430.3	766.4		44
2000	447.6	146.4	594.0	459.9	34.9	494.8	1,088.8		55
2001	172.6	59.9	232.5	575.6	74.0	649.5	882.0		26
2002	312.9	134.7	447.6	804.4	40.1	844.5	1,292.0		35
2003	239.0	69.7	308.7	541.7	46.3	588.0	896.7		34
2004	362.9	175.1	538.0	296.7	34.9	331.6	869.6		62
2005	287.9	103.5	391.5	415.3	47.7	463.0	854.4		46
2006 ^{d/}	58.0	60.2	118.3	279.9	37.3	317.1	435.4		27

a/ Spring run of the current calendar year and late fall and winter runs of the following calendar year.

b/ Ocean harvest landed south of Pt. Arena as a percent of the CVI.

c/ Percent of adults in 1970 spring run assumed the same as 1971 (72%, 5,500 total).

d/ Preliminary.

e/ Late-fall and winter run contributions not yet available; most recent five-year average escapements used for these components

TABLE II-2. Comparisons of preseason forecast and postseason estimates for the CVI in thousands of fish. (Page 1 of 1)

Year	Preseason Forecast	Postseason Estimate	Pre/Postseason
1985	524.8	667.4	0.79
1986	546.5	921.4	0.59
1987	592.9	824.1	0.72
1988	707.1	1,232.4	0.57
1989	625-885	667.7	0.94-1.33
1990	500-900	568.6	0.88-1.58
1991	466.0	451.3	1.03
1992	452.0	313.8	1.44
1993	501.0	504.6	0.99
1994	503.0	632.2	0.80
1995	654.0	1,343.8	0.49
1996	533.0	798.6	0.67
1997	849.0	1,105.2	0.77
1998	1,051.0	646.0	1.63
1999	847.7	766.4	1.11
2000	790.4	1,088.8	0.73
2001	649.4	882.0	0.74
2002	825.4	1,292.0	0.64
2003	1,108.1	896.7	1.24
2004	831.8	869.6	0.96
2005	1,678.3	854.4	1.96
2006	632.5	435.4	1.45
2007	499.9	-	-

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

Year (t)	Ocean Abundance Sept. 1 (t-1)			Annual Ocean Harvest Rate Sept. 1 (t-1) - Aug. 31 (t)		Klamath Basin River Run (t)				
	Age-3	Age-4	Total	Age-3	Age-4	Age-2	Age-3	Age-4	Age-5	Total Adults
1981	493.2	57.0	550.2	0.21	0.53	28.2	64.1	14.4	1.8	80.3
1982	566.2	133.4	699.6	0.30	0.52	39.4	30.1	33.9	2.6	66.6
1983	317.1	116.3	433.4	0.19	0.60	3.8	35.9	20.7	0.9	57.5
1984	157.0	83.7	240.7	0.08	0.38	8.3	21.7	24.4	1.1	47.2
1985	375.2	56.7	431.9	0.11	0.24	69.4	32.9	25.7	5.8	64.4
1986	1,308.3	141.1	1,449.4	0.18	0.46	44.6	162.9	29.8	2.3	195.0
1987	782.8	343.5	1,126.2	0.16	0.43	19.1	89.7	112.6	6.8	209.1
1988	758.4	236.1	994.5	0.20	0.39	24.1	101.2	86.5	3.9	191.6
1989	367.9	178.1	545.9	0.15	0.36	9.1	50.4	69.6	4.3	124.3
1990	176.7	103.3	280.0	0.30	0.55	4.4	11.6	22.9	1.3	35.9
1991	69.6	37.3	106.9	0.03	0.18	1.8	10.0	21.6	1.1	32.7
1992	39.6	28.3	67.9	0.02	0.07	13.7	6.9	18.8	1.0	26.7
1993	168.8	15.1	183.9	0.05	0.16	7.6	48.3	8.2	0.7	57.2
1994	120.3	41.8	162.1	0.03	0.09	14.4	37.0	26.0	1.0	64.0
1995	784.0	28.8	812.8	0.04	0.14	22.8	201.9	18.3	2.6	222.8
1996	190.9	225.8	416.7	0.05	0.16	9.5	38.8	136.7	0.3	175.8
1997	140.7	63.0	203.7	0.01	0.06	8.0	35.0	44.2	4.6	83.7
1998	154.6	45.0	199.7	0.00	0.09	4.6	59.2	29.7	1.7	90.6
1999	129.7	30.3	159.9	0.01	0.09	19.2	29.2	20.5	1.3	51.0
2000	618.6	44.4	663.1	0.06	0.10	10.2	187.1	30.5	0.5	218.1
2001	357.9	134.3	492.1	0.03	0.09	11.3	99.1	88.2	0.2	187.4
2002	515.2	99.8	615.1	0.02	0.16	9.2	94.6	62.5	3.7	160.8
2003	398.8	193.0	591.8	0.08	0.21	3.8	94.3	96.8	0.9	191.9
2004	160.6	105.2	265.9	0.12	0.34	9.7	33.2	40.7	5.3	79.2
2005	201.5 ^{a/}	38.4	239.9	0.02 ^{a/}	0.20	2.3	43.8	17.5	3.9	65.2
2006	87.7 ^{b/}	68.9 ^{a/}	156.6	NA ^{c/}	0.11 ^{a/}	27.1	18.6	41.8	1.3	61.6

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

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

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

TABLE II-4. Comparisons of preseason forecast and postseason estimates for ocean abundance of adult Klamath River fall Chinook. (Page 1 of 2)

	Preseason Forecast ^{a/}	Postseason Estimate	
Year (t)	Sept. 1 (t-1)	Sept. 1 (t-1)	Pre/Postseason
Age-3			
1985	113,000	276,000	0.41
1986	426,000 ^{b/}	1,308,302	0.33
1987	511,800	782,756	0.65
1988	370,800	758,432	0.49
1989	450,600	367,855	1.22
1990	479,000	176,732	2.71
1991	176,200	69,591	2.53
1992	50,000	39,620	1.26
1993	294,400	168,817	1.74
1994	138,000	120,284	1.15
1995	269,000	783,966	0.34
1996	479,800	190,892	2.51
1997	224,600	140,736	1.60
1998	176,000	154,644	1.14
1999	84,800	129,659	0.65
2000	349,600	618,648	0.57
2001	187,200	357,878	0.52
2002	209,000	515,219	0.41
2003	171,300	398,810	0.43
2004	72,100	160,628	0.45
2005 ^{c\}	185,700	201,518	0.92
2006 ^{c\}	44,100	87,677	0.50
2007	515,400	-	-
Age-4			
1985	56,875	57,500	0.99
1986	66,250	141,116	0.47
1987	206,125	343,452	0.60
1988	186,375	236,079	0.79
1989	215,500	178,061	1.21
1990	50,125	103,282	0.49
1991	44,625	37,294	1.20
1992	44,750	28,253	1.58
1993	39,125	15,084	2.59
1994	86,125	41,812	2.06
1995	47,000	28,816	1.63
1996	268,500	225,805	1.19
1997	53,875	62,991	0.86
1998	46,000	45,023	1.02
1999	78,750	30,253	2.60
2000	38,875	44,450	0.87
2001	247,000	134,259	1.84
2002	143,800	99,846	1.44
2003	132,400	193,010	0.69
2004	134,500	105,227	1.28
2005	48,900	38,424	1.27
2006 ^{c\}	63,700	68,913	0.92
2007	26,100	-	-

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

	Preseason Forecast ^{a/}	Postseason Estimate	
Year (t)	Sept. 1 (t-1)	Sept. 1 (t-1)	Pre/Postseason
Age-5			
1985	NA	11,227	NA
1986	NA	5,878	NA
1987	5,250	19,521	0.27
1988	13,250	14,719	0.90
1989	10,125	9,655	1.05
1990	7,625	7,803	0.98
1991	1,500	2,785	0.54
1992	1,250	1,448	0.86
1993	1,125	1,766	0.64
1994	500	1,467	0.34
1995	2,000	3,815	0.52
1996	1,125	789	1.43
1997	7,875	8,888	0.89
1998	3,250	2,398	1.36
1999	2,000	2,113	0.95
2000	1,375	860	1.60
2001	1,250	258	4.84
2002	9,700	7,000	1.39
2003	6,500	1,923	3.38
2004	9,700	17,247	0.56
2005	5,200	6,915	0.75
2006	2,200	5,321	0.41
2007	4,700	-	-
Total Adults			
1985	169,875	344,727	0.49
1986	492,250	1,455,296	0.34
1987	723,175	1,145,729	0.63
1988	570,425	1,009,230	0.57
1989	676,225	555,571	1.22
1990	536,750	287,817	1.86
1991	222,325	109,670	2.03
1992	96,000	69,321	1.38
1993	334,650	185,667	1.80
1994	224,625	163,563	1.37
1995	318,000	816,597	0.39
1996	749,425	417,486	1.80
1997	286,350	212,615	1.35
1998	225,250	202,065	1.11
1999	165,550	162,025	1.02
2000	389,850	663,958	0.59
2001	435,450	492,395	0.88
2002	362,500	622,065	0.58
2003	310,200	593,743	0.52
2004	216,300	283,102	0.76
2005 ^{c\}	239,800	246,857	0.97
2006 ^{c\}	110,000	161,911	0.68
2007	546,200	-	-

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

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

c/ Preliminary.

TABLE II-5. Summary of management objectives and predictor performance for Klamath River fall Chinook. (Page 1 of 1)

Year(t)	Preseason Ocean Abundance Forecast ^{a/}		Postseason Ocean Abundance Estimate		Preseason Age-4 Harvest Rate Forecast ^{b/}		Postseason Age-4 Harvest Rate Estimate ^{c/}		Preseason Adult Harvest Forecast		Postseason Adult Harvest Estimate	
	Sept. 1 (t-1)		Sept. 1 (t-1)									
	Age-3	Age-4	Age-3	Age-4	Ocean	River	Ocean	River	Ocean	River	Ocean	River
1986	426,000	66,250	1,308,302	141,116	0.28	0.50	0.46	0.67	72,000	37,700	304,778	46,154
1987	511,800	206,125	782,756	343,452	0.28	0.53	0.43	0.44	121,200	78,200	277,656	73,265
1988	370,800	186,375	758,432	236,079	0.31	0.53	0.39	0.52	114,100	65,400	255,056	73,854
1989	450,600	215,500	367,855	178,061	0.30	0.49	0.36	0.70	128,100	67,600	125,291	54,340
1990	479,000	50,125	176,732	103,282	0.30	0.49	0.55	0.36	85,100	31,200	114,650	11,459
1991	176,200	44,625	69,591	37,294	0.13	0.28	0.18	0.45	16,700	12,800	9,901	13,581
1992	50,000	44,750	39,620	28,253	0.06	0.15	0.07	0.27	4,200	4,200	3,149	6,787
1993	294,400	39,125	168,817	15,084	0.12	0.43	0.16	0.49	20,100	22,500	11,382	12,808
1994	138,000	86,125	120,284	41,812	0.07	0.20	0.09	0.29	10,400	14,300	8,913	13,524
1995	269,000	47,000	783,966	28,816	0.07	0.32	0.14	0.19	13,500	18,500	32,232	21,637
1996	479,800	268,500	190,892	225,805	0.17	0.66	0.16	0.39	88,400	129,100	45,124	69,241
1997	224,600	53,875	140,736	62,991	0.10	0.43	0.06	0.26	17,600	26,500	8,680	17,764
1998	176,000	46,000	154,644	45,023	0.07	0.29	0.09	0.30	10,200	14,800	5,023	17,897
1999	84,800	78,750	129,659	30,253	0.10	0.28	0.09	0.45	12,300	18,100	5,113	16,942
2000	349,600	38,875	618,648	44,450	0.11	0.53	0.10	0.25	24,000	32,400	42,387	35,066
2001	187,200	247,000	357,878	134,259	0.14	0.61	0.09	0.29	45,600	105,300	21,840	50,780
2002	209,000	143,800	515,219	99,846	0.13	0.57	0.16	0.26	30,000	70,900	29,552	35,069
2003	171,300	132,400	398,810	193,010	0.16	0.50	0.21	0.28	30,600	52,200	71,025	39,715
2004	72,100	134,500	160,628	105,227	0.15	0.38	0.34	0.48	26,500	35,800	64,291	29,807
2005	185,700	48,900	201,518	38,424	0.08	0.16	0.20	0.19	7,100	9,600	13,878	10,001
2006 ^{d/}	44,100	63,700	87,677	68,913	0.11	0.23	0.11	0.19	10,000	10,000	11,749	10,348
2007	515,400	26,100	-	-	-	-	-	-	-	-	-	-

a/ Original preseason forecasts for years 1986-2001 were for May 1 (t); converted to Sept. 1 (t-1) forecasts by dividing the May 1 (t) number by the assumed Sept. 1 (t-1) through May 1 (t) survival rate assumed in those years: 0.5 age-3, 0.8 age-4, 0.8 age-5.

b/ Ocean harvest rate forecast is the fraction of the predicted ocean abundance expected to be harvested Sept. 1 (t-1) through August 31(t). River harvest rate forecast is the fraction of the predicted river run expected to be harvested in river fisheries. Original ocean harvest rate forecasts for year (t), 1986-2001, were based on a May 1 (t) ocean abundance denominator; converted to Sept. 1 (t-1) abundance denominator by multiplying former values by 0.8 (the assumed age-4 survival rate between Sept. 1 (t-1) and May 1 (t) in those years).

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

d/ Postseason estimates are preliminary.

TABLE II-6. Harvest levels and rates of age-3 and age-4 Klamath River fall Chinook. (Page 1 of 2)

TABLE 11-6. Harvest levels and rates of age 3 and age 4 Kamath River fall Chinook. (Page 1 of 2)										
Year (t)	Ocean Fisheries (Sept. 1 (t-1) - Aug. 31 (t))						River Fisheries (t)			
	KMZ			North of	South of	Ocean	Net	Sport	Total	
	Troll	Sport	Subtotal	KMZ	KMZ	Subtotal				Total
HARVEST (numbers of fish)										
Age-3										
1986	35,713	4,887	40,600	74,074	123,211	197,285	237,885	8,100	18,100	26,200
1987	17,251	5,088	22,339	42,920	56,426	99,346	121,685	11,400	11,400	22,800
1988	16,033	5,173	21,206	24,367	108,219	132,586	153,792	12,500	15,600	28,100
1989	6,411	11,711	18,122	15,283	23,578	38,861	56,983	2,700	900	3,600
1990	81	4,372	4,453	36,709	11,046	47,755	52,208	1,300	1,400	2,700
1991	0	1,024	1,024	344	811	1,155	2,179	2,123	1,277	3,400
1992	0	0	0	975	0	975	975	970	251	1,221
1993	0	823	823	835	6,437	7,272	8,095	5,426	2,917	8,343
1994	43	606	649	0	3,398	3,398	4,047	4,543	965	5,508
1995	0	999	999	12,206	14,802	27,008	28,007	11,840	5,536	17,376
1996	0	0	0	0	9,244	9,244	9,244	12,363	3,661	16,024
1997	0	233	233	622	1,218	1,840	2,073	2,166	2,736	4,902
1998	0	6	6	297	466	763	769	2,231	5,781	8,012
1999	63	180	243	1,266	434	1,700	1,943	4,981	1,748	6,729
2000	405	3,288	3,693	8,745	25,249	33,994	37,687	22,458	4,893	27,351
2001	113	105	218	2,771	6,100	8,871	9,089	17,885	7,294	25,179
2002	220	785	1,005	1,625	9,925	11,550	12,555	11,734	6,258	17,992
2003	171	675	846	2,014	27,142	29,156	30,002	6,996	5,061	12,057
2004	404	974	1,378	9,935	7,361	17,296	18,674	4,679	2,051	6,730
2005 ^{a/}	0	633	633	955	2,849	3,804	4,437	4,394	1,641	6,035
2006 ^{a/}	0	429	429	31	154	185	614	2,389	13	2,402
Age-4										
1986	7,761	1,115	8,876	23,453	31,981	55,434	64,310	17,000	2,900	19,900
1987	21,784	4,439	26,223	71,305	48,940	120,245	146,468	41,000	8,500	49,500
1988	11,895	3,605	15,500	27,012	50,394	77,406	92,906	38,600	6,200	44,800
1989	6,075	9,758	15,833	32,504	16,646	49,150	64,983	41,000	7,700	48,700
1990	3,970	2,892	6,862	39,435	10,522	49,957	56,819	6,000	2,200	8,200
1991	0	1,004	1,004	1,518	4,148	5,666	6,670	7,593	2,016	9,609
1992	171	55	226	1,785	12	1,797	2,023	4,360	723	5,083
1993	0	0	0	852	1,621	2,473	2,473	3,786	243	4,029
1994	0	1,126	1,126	1,170	1,502	2,672	3,798	6,666	818	7,484
1995	0	243	243	1,885	1,777	3,662	3,905	2,957	480	3,437
1996	774	3,468	4,242	10,349	20,763	31,112	35,354	43,959	9,080	53,039
1997	3	173	176	464	3,002	3,466	3,642	8,734	2,586	11,320
1998	0	105	105	4,075	0	4,075	4,180	7,164	1,822	8,986
1999	15	378	393	1,655	691	2,346	2,739	8,789	494	9,283
2000	118	897	1,015	2,490	1,079	3,569	4,584	6,733	756	7,489
2001	1,316	1,609	2,925	5,847	3,939	9,786	12,711	20,759	4,819	25,578
2002	1,944	830	2,774	3,278	9,447	12,725	15,499	11,929	4,063	15,992
2003	836	920	1,756	8,172	30,066	38,238	39,994	22,754	4,592	27,346
2004	1,420	1,213	2,633	11,647	21,924	33,571	36,204	17,623	1,751	19,374
2005	248	319	567	5,387	1,920	7,307	7,874	3,048	304	3,352
2006 ^{a/}	271	812	1,083	5,444	1,104	6,548	7,631	7,571	42	7,613

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

TABLE 11-6. Harvest levels and rates of age-3 and age-4 Kumiai Riverian Chinook. (Page 2 of 2)										
Year (t)	Ocean Fisheries (Sept. 1 (t-1) - Aug. 31 (t))						Ocean Total	River Fisheries (t)		
	KMZ		North of South of	KMZ	Subtotal	Net		Sport	Total	
	Troll	Sport								Subtotal
HARVEST RATE										
Age-3										
1986	0.03	0.00	0.03	0.06	0.09	0.15	0.18	0.05	0.11	0.16
1987	0.02	0.01	0.03	0.05	0.07	0.13	0.16	0.13	0.13	0.25
1988	0.02	0.01	0.03	0.03	0.14	0.17	0.20	0.12	0.15	0.28
1989	0.02	0.03	0.05	0.04	0.06	0.11	0.15	0.05	0.02	0.07
1990	0.00	0.02	0.03	0.21	0.06	0.27	0.30	0.11	0.12	0.23
1991	0.00	0.01	0.01	0.00	0.01	0.02	0.03	0.21	0.13	0.34
1992	0.00	0.00	0.00	0.02	0.00	0.02	0.02	0.14	0.04	0.18
1993	0.00	0.00	0.00	0.00	0.04	0.04	0.05	0.11	0.06	0.17
1994	0.00	0.01	0.01	0.00	0.03	0.03	0.03	0.12	0.03	0.15
1995	0.00	0.00	0.00	0.02	0.02	0.03	0.04	0.06	0.03	0.09
1996	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.32	0.09	0.41
1997	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.06	0.08	0.14
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.10	0.14
1999	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.17	0.06	0.23
2000	0.00	0.01	0.01	0.01	0.04	0.05	0.06	0.12	0.03	0.15
2001	0.00	0.00	0.00	0.01	0.02	0.02	0.03	0.18	0.07	0.25
2002	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.12	0.07	0.19
2003	0.00	0.00	0.00	0.01	0.07	0.07	0.08	0.07	0.05	0.13
2004	0.00	0.01	0.01	0.06	0.05	0.11	0.12	0.14	0.06	0.20
2005 ^{a/}	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.10	0.04	0.14
2006 ^{a/}	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.13	0.00	0.13
Age-4										
1986	0.05	0.01	0.06	0.17	0.23	0.39	0.46	0.57	0.10	0.67
1987	0.06	0.01	0.08	0.21	0.14	0.35	0.43	0.36	0.08	0.44
1988	0.05	0.02	0.07	0.11	0.21	0.33	0.39	0.45	0.07	0.52
1989	0.03	0.05	0.09	0.18	0.09	0.28	0.36	0.59	0.11	0.70
1990	0.04	0.03	0.07	0.38	0.10	0.48	0.55	0.26	0.10	0.36
1991	0.00	0.03	0.03	0.04	0.11	0.15	0.18	0.35	0.09	0.45
1992	0.01	0.00	0.01	0.06	0.00	0.06	0.07	0.23	0.04	0.27
1993	0.00	0.00	0.00	0.06	0.11	0.16	0.16	0.46	0.03	0.49
1994	0.00	0.03	0.03	0.03	0.04	0.06	0.09	0.26	0.03	0.29
1995	0.00	0.01	0.01	0.07	0.06	0.13	0.14	0.16	0.03	0.19
1996	0.00	0.02	0.02	0.05	0.09	0.14	0.16	0.32	0.07	0.39
1997	0.00	0.00	0.00	0.01	0.05	0.06	0.06	0.20	0.06	0.26
1998	0.00	0.00	0.00	0.09	0.00	0.09	0.09	0.24	0.06	0.30
1999	0.00	0.01	0.01	0.05	0.02	0.08	0.09	0.43	0.02	0.45
2000	0.00	0.02	0.02	0.06	0.02	0.08	0.10	0.22	0.02	0.25
2001	0.01	0.01	0.02	0.04	0.03	0.07	0.09	0.24	0.05	0.29
2002	0.02	0.01	0.03	0.03	0.09	0.13	0.16	0.19	0.06	0.26
2003	0.00	0.00	0.01	0.04	0.16	0.20	0.21	0.24	0.05	0.28
2004	0.01	0.01	0.03	0.11	0.21	0.32	0.34	0.43	0.04	0.48
2005	0.01	0.01	0.01	0.14	0.05	0.19	0.20	0.17	0.02	0.19
2006 ^{a/}	0.00	0.01	0.02	0.08	0.02	0.10	0.11	0.18	0.00	0.18

a/ Preliminary.

TABLE II-7. Rogue River fall Chinook inriver run and ocean population indices. (Page 1 of 1)

Return Year	Inriver Run Index in Thousands of Fish ^{a/}					Ocean Impact Rate by Age ^{b/}		Ocean Population Index in Thousands of Fish ^{c/}			
	Age-2	Age-3	Age-4	Age-5	Total ^{d/}	Age-3	Age-4-5	Age-3	Age-4	Age-5	Total
1977	2.4	1.0	0.3	0.0	3.7	0.23	0.55	9.7	1.4	0.1	11.2
1978	1.0	6.1	2.3	0.1	9.5	0.23	0.55	37.7	5.2	0.2	43.1
1979	0.2	1.0	6.5	0.0	7.7	0.23	0.55	7.5	18.2	0.1	25.8
1980	0.4	0.2	0.9	0.6	2.1	0.23	0.55	4.9	3.8	1.4	10.1
1981	1.1	3.3	1.0	0.3	5.7	0.21	0.53	8.8	2.8	0.6	12.2
1982	0.7	1.3	1.3	0.1	3.4	0.30	0.52	9.8	2.9	0.3	13.0
1983	0.3	1.1	1.5	0.0	2.9	0.19	0.60	8.6	4.4	0.1	13.1
1984	0.4	1.2	1.8	0.1	3.5	0.08	0.38	9.8	4.7	0.2	14.7
1985	2.5	1.3	3.5	0.6	7.9	0.11	0.25	9.5	6.2	0.9	16.6
1986	3.1	12.5	2.3	0.5	18.4	0.18	0.46	72.0	5.8	0.9	78.7
1987	2.6	7.8	18.1	0.4	28.9	0.16	0.43	80.5	37.2	0.6	118.3
1988	1.4	4.8	25.2	1.5	32.9	0.20	0.39	17.2	47.9	2.5	67.6
1989	0.5	1.3	4.0	2.0	7.8	0.15	0.36	8.4	7.1	3.2	18.7
1990	0.0	0.3	1.4	0.2	1.9	0.30	0.55	6.0	4.7	0.5	11.2
1991	0.2	0.4	1.9	0.5	3.0	0.03	0.18	3.5	3.2	0.6	7.3
1992	0.5	0.3	1.5	0.5	2.8	0.02	0.07	4.3	2.4	0.6	7.4
1993	0.3	3.5	1.5	0.5	5.8	0.05	0.16	16.0	3.2	0.6	19.8
1994	0.5	0.8	5.8	0.9	8.0	0.03	0.09	3.0	9.4	0.9	13.3
1995	0.2	0.6	1.4	2.0	4.2	0.04	0.13	4.1	1.7	2.3	8.3
1996	0.1	0.4	1.8	0.1	2.4	0.05	0.16	2.4	2.7	0.1	5.3
1997	0.1	0.3	1.0	0.3	1.7	0.01	0.06	5.2	1.5	0.3	7.1
1998	0.0	0.5	2.8	0.3	3.6	0.00	0.09	3.8	3.9	0.3	8.1
1999	0.2	0.3	1.6	0.5	2.6	0.01	0.09	1.5	2.7	0.6	4.7
2000	0.2	2.0	0.8	0.6	3.6	0.06	0.10	9.9	0.9	0.6	11.4
2001	0.8	2.3	4.2	0.0	7.3	0.03	0.09	13.9	5.9	0.0	19.8
2002	0.9	4.0	7.1	0.8	12.7	0.02	0.15	36.1	9.0	0.9	46.0
2003	0.9	2.3	12.0	0.4	15.6	0.08	0.21	14.1 ^{e/}	25.1 ^{e/}	0.5	40.0
2004	0.4	0.6	4.9	2.9	8.8	0.11	0.54	18.1 ^{e/}	7.7 ^{e/}	1.8	27.6
2005 ^{f/}	NA	NA	NA	NA	NA	NA	NA	7.2 ^{e/}	2.1 ^{e/}	0.9	10.2 ^{g/}
2006 ^{f/}	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 ^{g/}
2007	-	-	-	-	-	-	-	5.2 ^{e/}	2.4 ^{e/}	0.4	8.0 ^{g/}

a/ Index based on carcass counts in spawning survey index areas. Carcass counts in 1978, 1979, and 1980 adjusted for prespawning mortality. Age composition developed from carcass scale sampling.

b/ Exploitation rates since 1981 are based on Klamath River fall Chinook cohort analysis, 1977-1980 based on 1981-1983 average.

c/ Based on cohort reconstruction methods. Index values for 2004 predicted from regression equations; postseason estimates are not available.

d/ Excludes age-6 fish.

e/ Preliminary, complete cohort not available, mean maturity rate used to derive estimate.

f/ Spawning surveys were not conducted in 2005 and 2006.

g/ Preseason forecast.

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

Year	March Preseason Forecast ^{a/}	April STT Modeled Forecast ^{b/}	Postseason Return	March Pre/Postseason	April Pre/Postseason
URB					
1984	90.10	93.00	131.40	0.69	0.71
1985	159.10	159.10	196.40	0.81	0.81
1986	285.90	286.10	281.60	1.02	1.02
1987	436.40	436.40	420.70	1.04	1.04
1988	450.70	446.50	339.90	1.33	1.31
1989	234.00	231.80	261.30	0.90	0.89
1990	127.20	126.90	153.60	0.83	0.83
1991	88.80	88.90	103.30	0.86	0.86
1992	68.40	66.30	81.00	0.84	0.82
1993	84.50	82.70	102.90	0.82	0.80
1994	85.40	94.70	132.80	0.64	0.71
1995	103.70	125.00	106.50	0.97	1.17
1996	88.90	94.20	143.20	0.62	0.66
1997	166.40	158.00	161.70	1.03	0.98
1998	150.80	141.80	142.30	1.06	1.00
1999	147.50	102.10	166.10	0.89	0.61
2000	171.10	208.20	155.70	1.10	1.34
2001	127.20	132.70	232.60	0.55	0.57
2002	281.00	273.80	276.90	1.01	0.99
2003	280.40	253.20	373.20	0.75	0.68
2004	292.20	287.00	367.90	0.79	0.78
2005	352.20	354.60	268.70	1.31	1.32
2006	253.90	249.10	230.40	1.10	1.08
2007	182.40	-	-	-	-
LRW					
1984	16.70	NA	13.30	1.26	NA
1985	12.90	NA	13.30	0.97	NA
1986	15.70	NA	24.50	0.64	NA
1987	29.20	NA	37.90	0.77	NA
1988	43.30	42.10	41.70	1.04	1.01
1989	27.30	26.90	38.60	0.71	0.70
1990	23.70	23.40	20.30	1.17	1.15
1991	12.70	12.70	19.80	0.64	0.64
1992	17.40	16.70	12.50	1.39	1.34
1993	12.50	11.90	13.30	0.94	0.89
1994	14.70	13.20	12.20	1.20	1.08
1995	12.40	11.50	16.00	0.78	0.72
1996	8.80	8.10	14.60	0.60	0.55
1997	7.50	7.20	12.30	0.61	0.59
1998	8.10	7.00	7.30	1.11	0.96
1999	2.60	2.50	3.30	0.79	0.76
2000	3.50	2.70	10.20	0.34	0.26
2001	16.70	18.50	15.70	1.06	1.18
2002	18.70	18.30	24.90	0.75	0.73
2003	24.60	23.40	26.00	0.95	0.90
2004	24.10	24.20	22.30	1.08	1.09
2005	20.20	21.40	16.80	1.20	1.27
2006	16.60	16.60	18.10	0.92	0.92
2007	10.10	-	-	-	-

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

Year	March Preseason Forecast ^{a/}	April STT Modeled Forecast ^{b/}	Postseason Return	March Pre/Postseason	April Pre/Postseason
LRH					
1984	70.40	89.00	102.40	0.69	0.87
1985	81.50	86.70	111.00	0.73	0.78
1986	171.60	173.90	154.80	1.11	1.12
1987	294.90	298.70	344.10	0.86	0.87
1988	267.70	246.50	309.90	0.86	0.80
1989	104.90	97.50	130.90	0.80	0.74
1990	68.50	65.50	60.00	1.14	1.09
1991	71.40	73.10	62.70	1.14	1.17
1992	113.20	121.50	62.60	1.81	1.94
1993	79.30	77.70	52.30	1.52	1.49
1994	36.10	46.50	53.60	0.67	0.87
1995	35.80	42.40	46.40	0.77	0.91
1996	37.70	48.30	75.50	0.50	0.64
1997	54.20	68.70	57.40	0.94	1.20
1998	19.20	22.50	45.30	0.42	0.50
1999	34.80	38.20	40.00	0.87	0.96
2000	23.70	26.40	27.00	0.88	0.98
2001	32.20	30.50	94.30	0.34	0.32
2002	137.60	133.00	156.40	0.88	0.85
2003	115.90	116.90	155.00	0.75	0.75
2004	77.10	79.00	108.90	0.71	0.73
2005	74.10	78.44	78.30	0.95	1.00
2006	55.80	57.50	58.30	0.96	0.99
2007	54.90	-	-	-	-
SCH					
1984	21.30	27.00	47.50	0.45	0.57
1985	34.90	37.10	33.20	1.05	1.12
1986	16.00	16.20	16.60	0.96	0.98
1987	9.10	9.20	9.10	1.00	1.01
1988	6.50	5.90	12.00	0.54	0.49
1989	29.50	23.00	26.80	1.10	0.86
1990	27.30	23.70	18.90	1.44	1.25
1991	56.30	61.40	52.40	1.07	1.17
1992	40.90	41.30	29.50	1.39	1.40
1993	19.90	18.20	16.80	1.18	1.08
1994	20.20	28.90	18.50	1.09	1.56
1995	17.50	22.50	33.80	0.52	0.67
1996	27.60	35.40	33.10	0.83	1.07
1997	21.90	25.70	27.40	0.80	0.94
1998	14.20	14.20	20.20	0.70	0.70
1999	65.80	61.00	50.20	1.31	1.22
2000	21.90	26.90	20.50	1.07	1.31
2001	56.60	61.90	125.00	0.45	0.50
2002	144.40	136.00	160.80	0.90	0.85
2003	96.90	101.90	180.60	0.54	0.56
2004	138.00	150.00	175.30	0.79	0.86
2005	114.10	115.79	93.10	1.23	1.24
2006	50.00	51.80	27.90	1.79	1.86
2007	21.80	-	-	-	-

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

Year	March Preseason Forecast ^{a/}	April STT Modeled Forecast ^{b/}	Postseason Return	March Pre/Postseason	April Pre/Postseason
MCB					
1990	69.50	69.30	58.90	1.18	1.18
1991	48.40	48.50	35.40	1.37	1.37
1992	42.50	40.70	31.10	1.37	1.31
1993	33.00	32.30	27.50	1.20	1.17
1994	23.90	26.70	33.70	0.71	0.79
1995	25.00	30.00	34.20	0.73	0.88
1996	40.80	43.20	59.70	0.68	0.72
1997	72.10	61.90	59.00	1.22	1.05
1998	47.80	44.90	36.80	1.30	1.22
1999	38.30	27.70	50.70	0.76	0.55
2000	50.60	61.60	36.80	1.38	1.67
2001	43.50	45.30	76.40	0.57	0.59
2002	96.20	91.80	108.40	0.89	0.85
2003	104.80	94.60	150.20	0.70	0.63
2004	90.40	88.80	117.60	0.77	0.76
2005	89.40	89.73	98.00	0.91	0.92
2006	88.30	86.60	80.40	1.10	1.08
2007	68.00	-	-	-	-

a/ March preseason forecasts are ocean escapements based on terminal run size and stock-specific cohort relationships affected by the historical "normal" ocean fisheries during the brood year data base time period (generally 1979-2001).

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

TABLE II-9. Comparison of preseason and postseason forecasts of Puget Sound run size for summer/fall Chinook.^{a/} (Page 1 of 2)

Year	Preseason Forecast	Postseason Return	Pre/Postseason	Preseason Forecast	Postseason Return	Pre/Postseason	Preseason Forecast	Postseason Return	Pre/Postseason	Preseason Forecast	Postseason Return	Pre/Postseason
Nooksack-Samish Hatchery and Natural				East Sound Bay Hatchery			Skagit Hatchery			Skagit Natural		
1993	50.4	32.9	1.53	3.2	3.8	0.84	1.0	1.4	0.71	14.0	7.0	2.00
1994	46.6	28.1	1.66	3.2	0.8	4.00	1.3	4.3	0.30	8.4	6.6	1.27
1995	38.5	22.2	1.73	3.5	0.2	17.50	1.6	3.3	0.48	5.0	9.6	0.52
1996	27.0	29.4	0.92	1.7	0.7	2.43	1.0	1.2	0.83	7.1	12.2	0.58
1997	34.0	34.2	0.99	1.2	1.2	1.00	0.1	0.0	-	6.4	6.2	1.03
1998	28.0	29.5	0.95	0.5	0.3	1.67	0.0	0.1	-	6.6	14.9	0.44
1999	27.0	40.9	0.66	2.3	0.3	7.67	0.0	0.0	-	7.6	5.2	1.46
2000	19.0	33.5	0.57	5.0	0.1	50.00	0.0	0.2	-	7.3	17.2	0.42
2001	34.9	63.9	0.55	1.6	0.1	16.00	0.0	0.1	-	9.1	14.0	0.65
2002	52.8	53.4	0.99	1.6	0.7	2.29	0.0	0.0	-	13.8	19.9	0.69
2003	45.8	30.3	1.51	1.6	0.2	8.00	0.0	0.2	-	13.7	9.9	1.38
2004	34.2	17.2	1.83	0.8	0.0	NA	0.5	0.0	-	20.3	24.4	0.83
2005	14.5	13.6 ^{b/}	1.07	0.4	>50 ^{b/}	13.30	0.7	0.2 ^{b/}	3.50	23.4	23.7 ^{b/}	0.99
2006	16.9	NA	NA	0.4	NA	NA	0.6	NA	NA	24.1	NA	NA
2007	18.8	-	-	0.4	-	-	1.1	-	-	15.0	-	-
Stillaguamish Natural				Snohomish Hatchery			Snohomish Natural			Tulalip Hatchery		
1993	NA	1.3	NA	1.6	2.7	0.59	4.9	5.7	0.86	2.8	1.4	2.00
1994	NA	1.3	NA	1.8	5.4	0.33	4.5	5.0	0.90	2.8	1.9	1.47
1995	1.8	1.4	1.29	2.2	6.0	0.37	4.3	5.9	0.73	2.3	4.1	0.56
1996	1.3	2.3	0.57	6.7	9.2	0.73	4.2	8.0	0.53	2.7	4.0	0.68
1997	1.6	1.2	1.33	7.7	2.7	2.85	5.2	4.4	1.18	4.0	8.6	0.47
1998	1.6	1.5	1.07	6.5	1.1	5.91	5.6	6.4	0.88	2.5	7.2	0.35
1999	1.5	1.1	1.36	7.8	1.6	4.88	5.6	4.8	1.17	4.5	15.2	0.30
2000	2.0	1.7	1.18	6.2	1.5	4.13	6.0	6.1	0.98	5.0	8.4	0.60
2001	1.7	1.4	1.21	4.1	0.7	5.86	5.8	8.4	0.69	5.5	5.1	1.08
2002	2.0	1.6	1.25	6.8	2.6	2.62	6.7	7.3	0.92	5.8	4.4	1.32
2003	2.0	1.0	2.00	9.4	0.2	47.00	5.5	5.6	0.98	6.0	7.5	0.80
2004	2.2	1.5	1.47	10.1	6.2	1.63	15.7	17.1	0.92	7.6	5.8	1.31
2005	2.0	1.0 ^{b/}	2.00	9.9	3.7 ^{b/}	2.68	14.2	4.5 ^{b/}	3.16	9.2	7.4 ^{b/}	1.24
2006	1.6	NA	NA	9.6	NA	NA	8.7	NA	NA	10.0	NA	NA
2007	1.5	-	-	8.7	-	-	12.3	-	-	8.1	-	-

TABLE II-9. Comparison of preseason and postseason forecasts of Puget Sound run size for summer/fall Chinook.^{a/} (Page 2 of 2)

Year	Preseason Forecast	Postseason Return	Pre/Postseason	Preseason Forecast	Postseason Return	Pre/Postseason	Preseason Forecast	Postseason Return	Pre/Postseason	Preseason Forecast	Postseason Return	Pre/Postseason
South Puget Sound Hatchery				South Puget Sound Natural			Strait of Juan de Fuca Hatchery			Strait of Juan de Fuca Natural		
1993	61.8	36.8	1.68	26.5	19.8	1.34	0.7	0.2	3.50	3.1	2.4	1.29
1994	52.7	48.9	1.08	18.0	29.9	0.60	3.9	1.6	2.44	1.0	0.5	2.00
1995	49.6	74.5	0.67	21.7	34.5	0.63	3.0	0.1	30.00	0.9	2.7	0.33
1996	51.9	58.3	0.89	19.0	35.8	0.53	2.8	0.2	14.00	0.9	3.1	0.29
1997	65.1	46.5	1.40	18.2	20.6	0.88	2.2	0.3	7.33	0.8	3.5	0.23
1998	67.8	54.5	1.24	21.8	27.7	0.79	1.7	1.7	1.00	0.9	1.9	0.47
1999	59.4	83.6	0.71	19.6	17.0	1.15	1.9	0.7	2.71	0.9	2.7	0.33
2000	77.5	55.8	1.39	17.5	13.9	1.26	2.0	1.2	1.67	1.1	1.7	0.65
2001	73.7	96.4	0.76	16.2	20.2	0.80	0.0	1.7	-	3.5	2.0	1.75
2002	90.8	85.0	1.07	16.9	21.5	0.79	0.0	0.0	-	3.6	3.7	0.97
2003	86.6	75.9	1.14	19.6	15.3	1.28	0.0	0.0	-	3.4	4.7	0.72
2004	86.5	74.6	1.16	17.5	28.5	0.61	0.0	1.4	NA	3.5	4.1	0.85
2005	83.1	87.2 ^{b/}	0.95	17.7	38.8 ^{b/}	0.46	0.0	1.4 ^{b/}	NA	4.2	2.1 ^{b/}	2.00
2006	85.8	NA	NA	21.3	NA	NA	0.0	NA	NA	4.2	NA	NA
2007	83.0	-	-	17.0	-	-	0.0	-	-	4.4	-	-
Hood Canal Hatchery and Natural												
1993												
1994	11.7	4.8	2.44									
1995	11.5	3.8	3.03									
1996	3.9	9.4	0.41									
1997	9.0	8.2	1.10									
1998	2.7	7.9	0.34									
1999	6.7	16.3	0.41									
2000	14.0	29.6	0.47									
2001	19.2	21.3	0.90									
2002	25.3	19.3	1.31									
2003	24.0	31.5	0.76									
2004	29.6	34.5	0.86									
2005	30.5	22.5 ^{b/}	1.36									
2006	30.2	NA	NA									
2007	47.5	-	-									

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

b/ Preliminary.

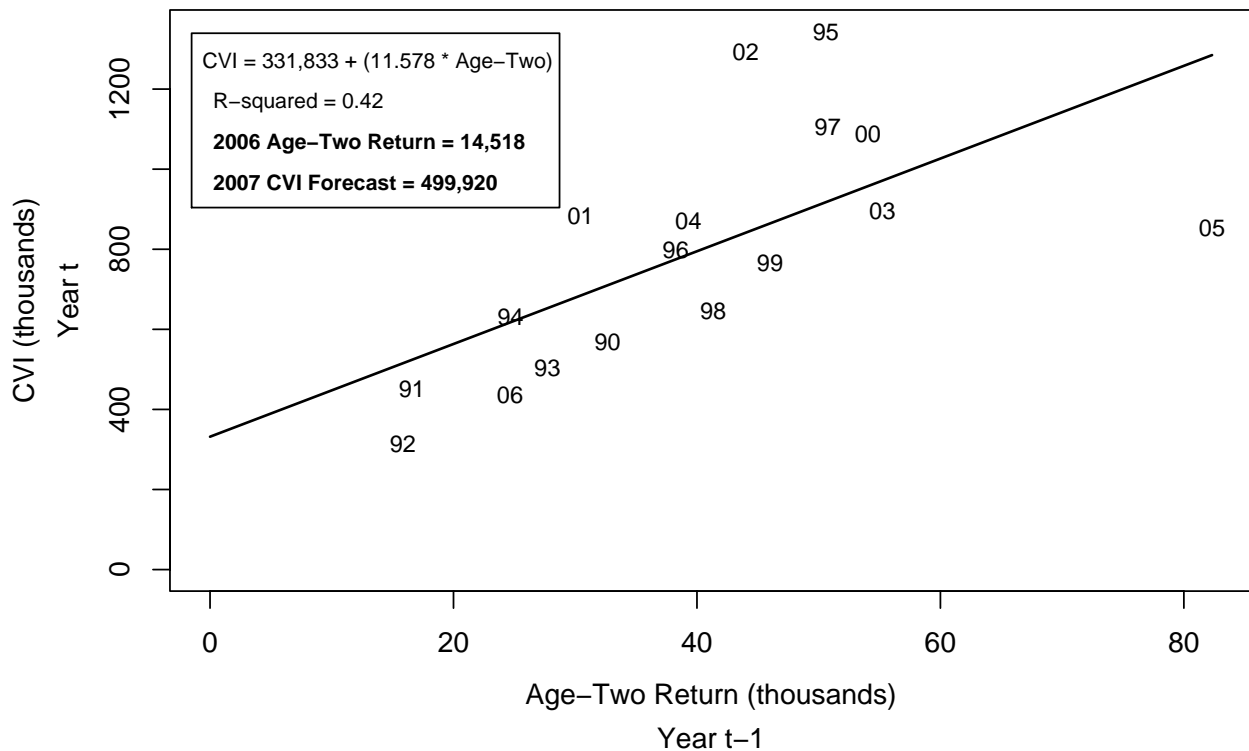


FIGURE II-1. Regression estimator for CVI based on previous year's river return of age-two Central Valley Chinook, 1990-2006. Years shown are CVI year. Numbers in plot denote calendar year t.

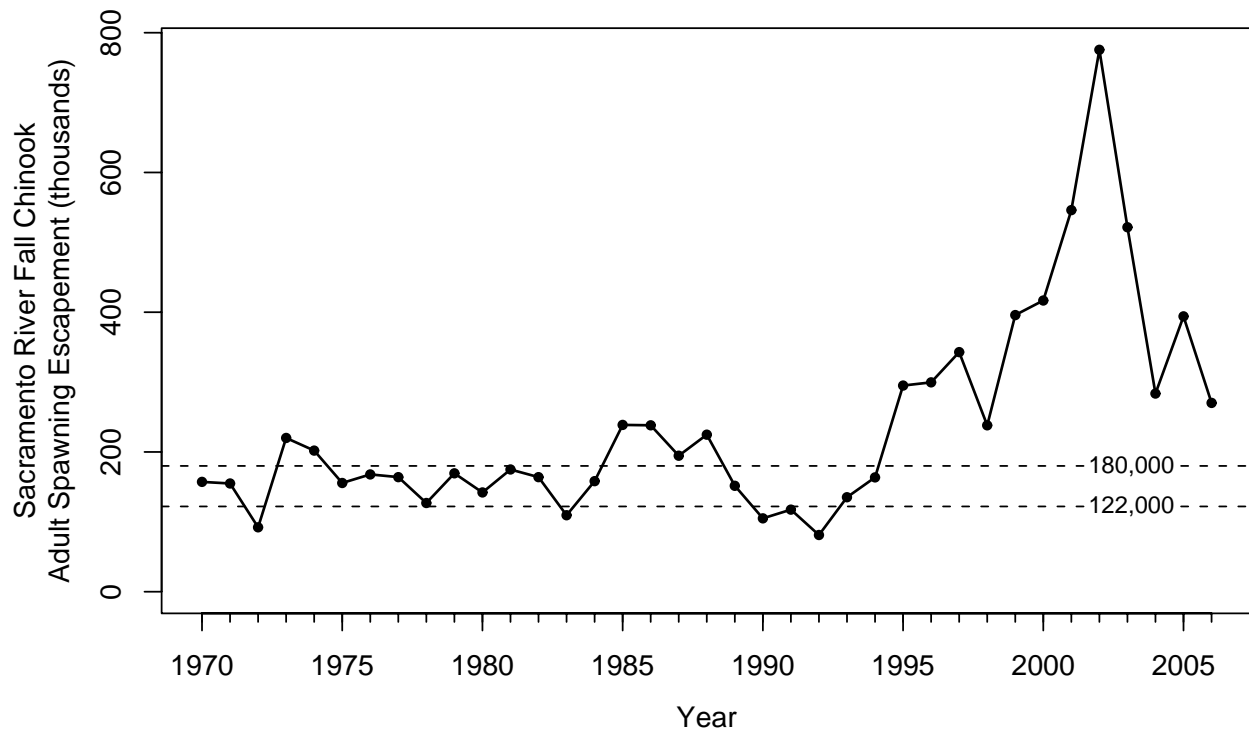


FIGURE II-2. Spawning escapements of adult Sacramento River fall Chinook, 1970-2006, and the goal range for the stock of 122,000 to 180,000 adult fish.

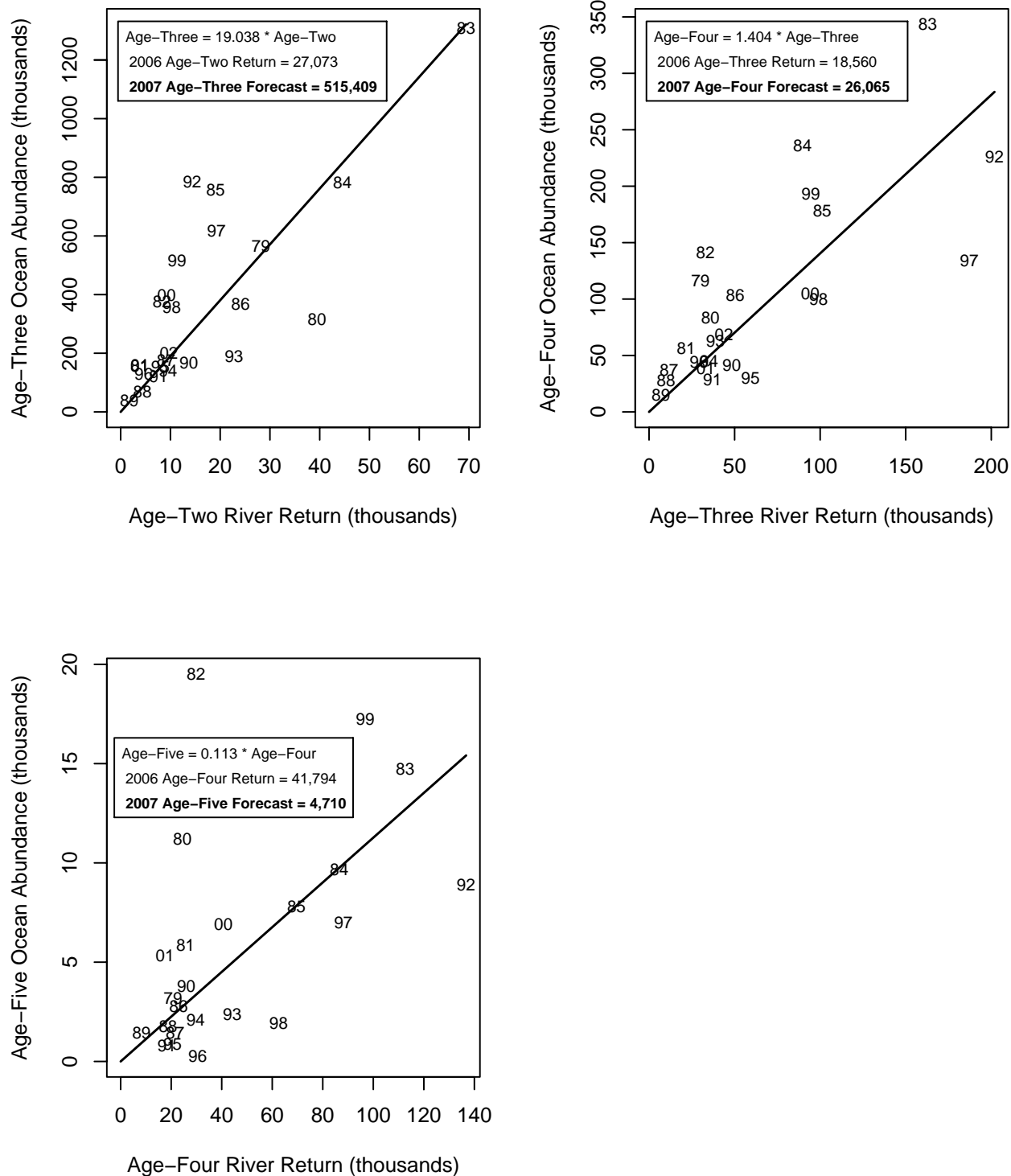


FIGURE II-3. Regression estimators for Klamath River fall Chinook ocean abundance (September 1) based on that year's river return of same cohort. Numbers in plots denote brood years.

CHAPTER III - COHO SALMON ASSESMENT

COLUMBIA RIVER AND OREGON/CALIFORNIA COASTAL COHO

(OREGON PRODUCTION INDEX AREA)

The majority of coho harvested in the OPI area originate from stocks produced in rivers located within the OPI area (Leadbetter Point, Washington, to the U.S./Mexico border). These stocks include hatchery and natural production from the Columbia River, Oregon Coast, and northern California, and are divided into the following components: (1) public hatchery (OPIH), (2) Oregon coastal natural river (OCNR), (3) Oregon coastal natural lake (OCNL), (4) hatchery smolt production from the Oregon coastal Salmon Trout Enhancement Program (STEP), and (5) natural and hatchery stocks south of cape Blanco, Oregon, which include the Rogue, Klamath, and Northern California coastal stocks.

A stratified random sampling (SRS) study implemented in 1990 indicated an overestimation of annual OCN spawner escapement, which had previously been based on index surveys. Because the stock composition of the OPI area ocean impacts is based on the proportions of the OPI ocean escapements, a reduction in OCN spawner escapement indicated traditional OCN abundances were overestimated, while traditional abundance estimates for other OPI area stocks were underestimated. Starting in 1992, the Council adopted an abundance adjustment procedure for use in assessing fishery impacts. This procedural change, based on improved estimates of OCN spawner escapements, adjusted traditional index abundances of the other OPI area stocks. To achieve targeted exploitation rates and spawner escapement goals, the various OPI area stock abundance index predictions were scaled in the Coho FRAM to reflect the results of the ongoing OCN spawner study and are referred to as SRS abundances. In 1998, after eight years of SRS abundance estimates, the historic OPI data set was rescaled to reflect the revised OCN abundance estimates.

Beginning in 1999, with the availability of a long-term data set in SRS values, all five OPI area stock abundances were projected in SRS accounting. Direct comparisons of 2006 abundance forecasts with recent year SRS abundance projections, both preseason and postseason, are reported in Table III-1. All fishery impacts and escapements from the coho FRAM are reported in SRS values.

Public Hatchery Coho

OPI area public hatchery coho smolt production occurs primarily in Columbia River facilities and net pens. Several facilities located in Oregon coastal rivers and in the Klamath River Basin, California, collectively produce fewer coho. OPI area smolt releases since 1960 are reported by geographic area in Appendix B, Table B-1.

Predictor Description

Since 1988, the OPIH stock predictor was a multiple linear regression with the following variables: Columbia River jacks (Jack CR), Oregon coastal and Klamath River Basin jacks (Jack OC), and a correction term for delayed smolts released from Columbia River hatcheries (Jack CR * [SmD/SmCR]) to predict public hatchery stock abundance.

The OPIH stock predictor is partitioned into Columbia River early and late stocks and coastal stocks north and south of Cape Blanco, Oregon, based on the proportion of the 2006 jack returns to each area adjusted for stock specific maturation rates. The northern OPIH coastal stock is comprised of hatchery production from the central Oregon Coast. The southern OPIH coastal stock is comprised of hatchery

production from the Rogue River basin in southern Oregon and the Klamath and Trinity basins in northern California.

For the 2007 abundance prediction, the data base includes 1970-2006 recruits, excluding 1983 when *El Niño* impacted adult returns. It also includes 1969-2005 jack returns, excluding 1982, also due to *El Niño* influence. The model is:

$$\text{OPIH}(t) = a + b * \text{Jack CR}(t-1) + c * \text{Jack OC}(t-1) + d * (\text{Jack CR}(t-1) * [\text{SmD}(t-1) / \text{SmCR}(t-1)])$$

Where:

$$\begin{aligned} a &= -113.124535 \\ b &= 19.377573 \\ c &= 17.021234 \\ d &= 32.165210 \\ \text{adjusted } r^2 &= 0.96 \end{aligned}$$

The OPIH stock data set and a definition of the above terms are presented in Appendix B, Table B-2.

Predictor Performance

Recent year OPIH stock preseason abundance predictions, partitioned by production area and as a total, are compared with postseason estimates in Table III-1. The 2006 preseason abundance prediction of 398,800 OPIH coho was 91% of the preliminary postseason estimate of 440,600 coho.

Since 1983, the OPIH predictor has often performed poorly, due principally to high interannual variability in the jack to adult ratios.

2007 Stock Status

Using the appropriate values from Appendix B, Table B-2, the OPIH abundance prediction for 2007 is 593,600 coho, 149% of the 2006 prediction and 135% of the preliminary 2006 postseason estimate.

Lower Columbia River Natural

Predictor Description

The 2007 prediction for the Clackamas and Sandy Rivers is based on the recent 5-year average. A forecast for other Oregon lower Columbia River populations is an average of recent years abundances. The total Oregon lower Columbia wild coho forecast to terminal areas of 5,500 was expanded by the recent 2-year OPI harvest rate to produce an ocean abundance estimate of 6,100.

The 2007 prediction for the Washington lower Columbia wild coho populations are derived by combining estimates of natural smolt production based on watershed area and a predicted 2004 brood year marine survival rate. The 2007 adult ocean abundance forecast is 15,400 coho.

2007 Stock Status

The 2007 prediction for LCN coho is 21,500 coho (Table III-1). This ocean abundance estimate includes both Oregon and Washington lower Columbia River components.

Oregon Coastal Natural Coho

The OCN stock is composed of natural production north of Cape Blanco, Oregon from OCNR and OCNL systems, which are predicted independently.

Predictor Description

Oregon Coastal Natural Rivers

From 1988-1993, the abundance of OCNR index coho was predicted using a modified Ricker spawner-recruit model. The predictor related OCNR recruits to the parent brood stock size incorporating an adjustment for ocean survival based on OPI hatchery smolt to jack survival the previous year. Due to a tendency to over-predict abundances, the database in the predictor was shortened from 1970-1991 to 1980-1991 starting with 1992 predictions.

Because of concern that the adopted OCNR model did not adequately incorporate environmental variability, an alternative model was used to predict the 1994 and 1995 index abundances. The model used ocean upwelling, sea surface temperatures, and year to predict OCNR index coho abundance. The year term was included in the model to reflect an observed decline in stock productivity.

For 1996-1998, the environmental based model without the year component was used in predicting OCNR stock abundances. In addition, the predictions were in SRS rather than traditional index accounting. The OCNR environmental variables are annual deviation from the mean April-June Bakun upwelling index at 42° N. latitude (UpAnom), and annual deviation from the mean January sea surface temperature at Charleston, Oregon (JanAnom).

For 1999-2002, the environmental-based model with the year component included was used to predict OCNR stock abundances.

Since 2003, the same environmental-based model without the year component that was used for 1996-1998 was used in predicting OCNR abundance. The model is:

$$\ln(\text{Recruits}(t)) = a + b * \text{UpAnom}(t-1) + c * \text{JanAnom}(t)$$

Where:

$$a = 4.750724$$

$$b = 0.007594$$

$$c = -0.330032$$

$$\text{adjusted } r^2 = 0.32$$

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

Oregon Coastal Natural Lakes

Since 1988, the abundance of OCNL index coho has been predicted using the most recent three-year average adult stock abundance. OCNL coho production occurs from three lake systems (Tenmile, Siltcoos, and Tahkenitch). Production from these systems has declined substantially from the levels observed during 1950-1973, but has been steadily increasing in recent years. The 2006 abundance was estimated to be 23,600.

Predictor Performance

Recent-year OCN stock preseason SRS abundance predictions are compared to postseason estimates in Table III-1. Since 2000 the OCN predictor has under estimated abundance except for 2005. The 2006 preseason abundance prediction of 60,800 OCN coho was 52% of the preliminary postseason estimate of 116,400 coho.

2007 Stock Status

The 2007 preseason prediction for OCN (river and lake systems combined) is 255,400 coho, 420% of the 2006 preseason prediction and 219% of the 2006 postseason estimate (Table III-1). The 2007 preseason SRS prediction for OCNR and OCNL components are 236,900 and 18,500 coho, respectively.

Private Hatchery Coho

There have been no Oregon coastal PRIH coho smolt releases since 1990. Thus, there is no PRIH recruitment in 2007.

Salmon Trout Enhancement Hatchery Coho Smolt Program

Predictor Description

From 1988 to 2006, preseason abundance predictions for Oregon coastal STEP index coho smolt production facilities have been based on the Council-approved procedure. This procedure involved multiplying the average smolt to adult survival rate by the ratio of the current OPI jack survival to the previous year's OPI jack survival.

The 2007 prediction used the observed 2002-2003 brood smolt-to-adult survival rate applied to the 2004 brood smolt production.

Predictor Performance

Recent-year STEP preseason abundance predictions are compared to postseason estimates in Table III-1. The 2006 preliminary postseason estimate of 100 coho was 17% of the preseason abundance prediction.

2007 Stock Status

The 2007 preseason STEP index abundance prediction is 200 coho (Table III-1). The 2007 prediction is below the 2006 preseason prediction of 600 coho.

Oregon Production Index Area Summary of 2007 Stock Status

The 2007 combined OPI area stock abundance is predicted to be 849,200 coho, which is 185% of the 2006 preseason prediction of 460,200 coho and 152% of the 2006 preliminary postseason estimate of 557,100 coho. The 2007 OPI area predictions are compared to historical abundances in Table III-2.

WASHINGTON COASTAL AND PUGET SOUND COHO STOCKS

Predictor Description and Past Performance

A variety of preseason abundance estimators currently are employed for Washington coastal and Puget Sound coho stocks (Table I-2). These estimators are used to forecast preseason abundance of adult ocean recruits.

The performance of preseason abundance forecasts (adult ocean recruits) cannot be evaluated at this time because postseason run reconstructions for U.S. and Canadian coho production units have not been completed. A comparison of expected preseason and postseason ocean escapements for Washington coastal and Puget Sound stocks in recent years is presented in Tables III-3 and III-4. Postseason estimates of 2006 ocean escapements for some of these stocks are not available at this time. The comparison of preseason and postseason estimates of ocean escapement reflects annual errors in abundance estimates, deviations in ocean fisheries from preseason expectations, and variations in ocean distributions of stocks as described in the introduction. Fishery impact levels anticipated preseason may be substantially different than those that actually occur.

2007 Stock Status

Washington Coastal Coho

Willapa Bay

The 2007 Willapa Bay hatchery coho abundance forecast is 37,228 ocean recruits compared to a 2006 preseason forecast of 37,662. The hatchery forecast is based on the regression of 1998-2006 average hatchery terminal return on the 1997-2005 jack returns, multiplied by 2006 hatchery jack returns. The natural coho forecast is 24,404 ocean recruits, based on the 2006 hatchery jack returns multiplied by the regression of wild terminal returns in 1998, 1999, 2000, 2004, and 2006 on the previous year's ($n-1$) hatchery jack returns.

Grays Harbor

Preseason abundance forecasts are made for natural fish throughout the system and for hatchery fish returning to three freshwater rearing complexes and three saltwater net-pen sites. The forecasts include returns expected from numerous volunteer production projects. The abundance forecast for Grays Harbor natural stock coho for 2007 is 59,370 ocean age-3 recruits. The forecast for hatchery stock ocean abundance is 74,029 ocean age-3 recruits.

The natural coho forecast represents the mean postseason estimate of Grays Harbor natural coho from the 2004 and 2005 return years. Bingham Creek wild tagged jack survival in 2006 and ocean condition indexes indicated a return to more normal ocean survival conditions for the 2007 return as compared to the previous year. The estimate was limited to use of those two recent years because of continued uncertainty, a lower than expected 2006 return, and a rapid change in the ocean condition indexes. The hatchery forecast is made using a combined on-station smolt release of 2,236,300 (Bingham Creek, Satsop Springs, and Humtpulips Hatcheries) and off-station releases of 486,000 (Grays Harbor and Lower Chehalis net-pens, and other lower and upper Chehalis River rearing and release sites). It is based on a smolt to ocean adult survival rate of 2.83%, the mean estimate of the survival rate of just the on-station releases from 1999 to 2005 return years. Net-pen and off-station release groups were assigned a smolt to ocean adult survival rate ½ of the on-station releases. The estimates were apportioned to release location by the number of smolts released at each location multiplied by the survival rate according to the above two categories -- (on-station (2.83%) or off-station and net-pen (1.42%)).

Quinault River

The 2007 forecast for Quinault natural coho is 18,600 ocean recruits, a 36% decrease from the 2006 forecast of 28,800. This forecast is based on the mean estimate of recent ocean return for return years 2000, 2001, 2003, 2004, and 2005 resulting from the recent Quinault Department of Fisheries work to re-develop the Quinault coho run reconstruction estimates.

The Quinault hatchery coho forecast is 22,735 ocean recruits, a 34% decrease from the 2006 forecast of 34,459. This return is from a smolt release of 649,000, and is based on a survival rate of 3.5%, which lies between the recent five year mean rate for Queets River hatchery rates and somewhat higher rates indicated from recent Quinault Department of Fisheries work to re-develop the Quinault River coho run reconstruction estimates.

Queets River

The 2007 Queets natural coho forecast is 13,551 ocean recruits, an increase of 62% compared to the 2006 forecast level of 8,342. This forecast represents the estimated smolt production (245,294) multiplied by an expected survival rate of 5.5% and represents a return to normal performance exhibited the past few years before the poor 2006 return. The estimate of 13,551 is based on a new method that takes into account the brood year spawning escapement, freshwater residence year air and water temperature indices, and a smolt migration year sea level pressure index.

The 2007 Queets hatchery (Salmon River) coho forecast is 19,138 ocean recruits, an increase of 62% compared to the 2006 forecast level of 11,857. This forecast is based on a smolt release of 686,220 multiplied by the 1998-2002 brood year average observed marine survival rate (2.8%). Approximately 12% of the fish released from the Salmon River facility were marked with an adipose fin clip.

Hoh River

The Hoh River natural coho forecast is 5,406 ocean recruits, a decrease of 15% compared to the 2006 forecast of 6,388. This forecast is based on estimated smolt production per square mile of watershed from the Clearwater tributary to the Queets River (350.4 smolts/square mile), multiplied by the size of the Hoh watershed (299 square miles), for a total of 104,776 smolts. The total wild smolt production prediction was then multiplied by an expected survival rate of 5.2% (based on the closer fit of the marine survival data model for Queets wild coho to the Pacific Decadal Oscillation ocean environmental indicator and the Bingham Creek wild jack return model).

No hatchery production is projected for the Hoh system for 2007.

Quillayute River

The Quillayute River summer natural and hatchery coho forecasts for 2007 are 1,029 and 6,396 ocean recruits, respectively. The natural component run size is based on the estimated total summer coho smolt production (20,570) and a projected ocean survival rate of 5.0%, which was derived from averaging several different marine survival models that incorporate environmental influences on adult survival and/or jack return rates. The hatchery component run forecast was based on a projected marine survival rate of 3.0%, which was derived from review of the relative performance of hatchery vs. wild coho in recent years, multiplied by a release of 213,200 smolts. Approximately 100% of the fish were marked with an adipose fin clip. The 2007 forecast abundance of natural summer coho is 3% lower than the 2006 forecast, while the hatchery forecast is 61% higher than the 2006 forecast level.

The Quillayute River fall natural and hatchery coho forecasts are 10,823 and 18,126 ocean recruits, respectively. The 2007 forecast abundance of natural Quillayute fall coho is 26% lower, and the hatchery forecast 74% higher, than their respective 2006 forecast levels. The forecast for the natural component is based on the estimated total fall coho smolt production (216,464) multiplied by an expected marine survival rate of 5.0%, which was derived from averaging several different marine survival models that incorporated environmental influences on adult survival and/or jack return rates. The basin total coho smolt production estimate (summer and fall stocks) was derived by multiplying the 1987, 1988, and 1990 out-migration year average smolt production for the Quillayute system (306,000) by a scalar (0.77) which

represents the ratio between the 2004 estimated smolt production for the Clearwater and the 1987, 1988, and 1990 smolt out-migration year average. Smolt production was apportioned according to brood year natural spawning escapements of summer and fall coho, to yield the smolt estimates for each natural population. The fall hatchery production forecast was based on the same prediction of marine survival of (3.0%) used for the summer hatchery coho forecast, multiplied by the number of smolts released. Approximately 87% of the hatchery fish were marked with an adipose fin clip.

North Washington Coast Independent Tributaries

Production from several smaller rivers and streams along the North Washington Coast (Waatch River, Sooes River, Ozette River, Goodman Creek, Mosquito Creek, Cedar Creek, Kalaloch Creek, Raft River, Camp Creek, Duck Creek, Moclips River, Joe Creek, Copalis River, Conner Creek), which flow directly into the Pacific Ocean, is forecast as an aggregate. Generally, stock assessment programs on these systems are minimal. The 2007 forecast of natural coho production for these independent streams is 3,175, based on a prediction of 300 smolts per square mile of watershed drainage, 424 square miles of watershed, and an expected marine survival rate of 2.5%. The marine survival projection was derived from jack-to-adult return information collected at the WDFW Bingham Creek research station.

The hatchery forecast of 4,148 is based on the 1999-2002 average brood year marine survivals (3%) from the Makah National Fish Hatchery, multiplied by the 2004 brood year release (181,256) from the Makah National Fish Hatchery. Approximately 75% of the 2004 brood year release was marked with an adipose fin clip.

Puget Sound

The 2007 total hatchery and natural coho ocean recruit forecast for the Puget Sound region of 633,153 is 35% below the 2006 forecast of 975,874. The hatchery coho forecast of 342,529 is 36% below the 2006 forecast of 535,627, and the natural coho forecast of 290,624 is 31% below the 2006 forecast of 421,947.

Puget Sound hatchery forecasts for 2007 were generally the product of 2004 brood year (BY) smolt releases from each facility, and a predicted marine survival rate for each program. Marine survival rates were typically based on recent year average survival rates derived from CWT recovery information and/or run reconstructions. Forecasts for natural Puget Sound coho stocks were generally derived by measured or predicted smolt production from each major watershed or region, multiplied by stock-specific marine survival rate predictions based on jack return models, recruits/smolt or adult models, or other information.

Strait of Juan de Fuca

The 2007 forecasts for Strait of Juan de Fuca natural and hatchery coho ocean recruits are 29,928 and 18,418, respectively. The natural coho forecast was derived by multiplying the estimated 2004 brood natural smolt production for the region by a predicted ocean age-3 marine survival rate of 7.4%. The hatchery forecasts were based on applying hatchery-specific ocean age-3 recruitment rate predictions (2.0% for Dungeness, 0.7% for Elwha) to the 2004 BY smolt releases for each hatchery. The recruitment rate predictions were based on recent year averages of cohort reconstruction-based recruits/smolt for the aggregate natural stock, and each hatchery production unit.

Nooksack-Samish

The 2007 forecasts for Nooksack-Samish natural and hatchery coho ocean recruits are 5,200 and 53,060, respectively. The natural coho forecast is the product of projected natural smolt production from each stream basin in the region, multiplied by a marine survival rate expectation of 2.5%. The natural coho marine survival rate prediction is based on the average Baker River (Skagit basin) indicator stock CWT-based recruits/smolt rate, adjusted against the Big Beef Creek jack-based marine survival prediction. The

hatchery forecasts are based on the 2000-2002 BY average recruits/smolt rate for Kendall Creek Hatchery (2.1%), applied to the 2004 BY smolt releases for each facility in the region.

Skagit

The 2007 forecasts for Skagit River natural and hatchery coho ocean recruits are 26,799 and 8,873 (8,086 from in-river hatchery production, 787 from Oak Harbor net-pens), respectively. The natural coho forecast is the product of measured smolt production from the Skagit basin multiplied by a marine survival rate expectation of 3.7%. The natural coho marine survival rate is based on the average of the 2002 and 2003 Baker River indicator stock CWT- based recruits/smolt rate. This value was felt by the co-managers to approximate the expected survival trend for this population. The hatchery forecasts are based on a marine survival rate of 2.6% applied to the 2004 BY smolt releases. The value was derived by using the ratio of the recent year survival rates for the Baker River wild indicator population and Cascade Hatchery population (2001-2002 BY) to scale the expected marine survival for the Skagit wild population to an expected survival rate for the hatchery populations.

Stillaguamish

The 2007 forecast for Stillaguamish River natural coho ocean recruits is 69,200. The natural coho forecast is based upon an adult/recruit spawner production model, which contains a recruitment rate adjustment variable based on the deviation pattern in Wallace River Hatchery and South Fork Skykomish River natural coho recruits/smolt rates.

Snohomish

The 2007 forecast for Snohomish River natural coho ocean recruits is 98,900. The Snohomish regional hatchery coho forecast is 25,658; 6,074 for Skykomish River/Wallace River Hatchery facility releases, 18,731 for the Tulalip Bay facility, and 853 for the Edmonds net-pen project. The natural coho forecast used the measured smolt production for the river basin multiplied by a survival rate expectation of 7.2%. The hatchery forecasts are based on a marine survival rate of 3.6% applied to the 2004 BY smolt releases. The value was derived by using the ratio of the recent year survival rates for the Baker River wild indicator population (2000-02 BY) and Cascade Hatchery population to scale the expected marine survival for the Snohomish wild population to an expected survival rate for the hatchery populations in the region.

South Sound

The 2007 forecasts for South Sound region natural and hatchery coho ocean recruits are 18,248 and 181,741, respectively. The natural coho forecast is the product of projected smolt production from each of the stream basins in the region multiplied by marine survival rate expectation of 3.5% for natural coho in the region. The marine survival prediction was based upon review of the Big Beef Creek and Deschutes River indicator stock survival data trends, and review of hatchery and natural fish survival rate information from around the region. The hatchery coho forecasts are based on the 2000-2002 BY average CWT based recruits/smolt rate for each facility, applied to the 2004 BY smolt releases. The expected survival rates range from 4.9% for central Puget Sound hatchery programs, to 0.7% - 3.3% in the deep South Sound region.

Hood Canal

The 2007 forecasts for Hood Canal region natural and hatchery coho ocean recruits are 42,350 and 54,779, respectively. The natural coho forecast is based on a regression of Big Beef Creek jacks versus Hood Canal natural coho run sizes. The hatchery coho forecasts are based on the 1994-2002 BY average cohort reconstruction-based recruits/smolt rates for each facility, applied to the 2004 BY smolt releases.

A moving average of the most recent 3 year marine survival rate is typically used for forecasting hatchery coho production in this region, but concerns regarding the most recent 3 years (2000-02 BY) being higher than what likely occurred in 2006, and generally higher than expected to occur in 2007, resulted in a decision by the co-managers to use a longer term marine survival average for 2007 forecasting.

SELECTIVE FISHERY CONSIDERATIONS

As the region has moved forward with mass marking of hatchery coho salmon stocks, selective fishing options have become an important consideration for fishery managers. Table III-5 summarizes estimates of mass mark rates for coho stocks from Southern British Columbia, Canada to the Oregon Coast, based on preseason abundance forecasts. Agencies have released coho mass marked with adipose clips from the 2004 brood, making these fish available to 2007 fisheries (Table III-6).

EVALUATION OF 2006 REGULATIONS ON 2007 STOCK ABUNDANCE

Escapements and fishery impacts were estimated using coho FRAM. Abundance forecasts for 2007 were updated for Washington and Oregon stocks, but forecasts for Canadian stocks are unchanged from those employed for 2006 planning. Updated forecasts for Canadian stocks are expected to become available in March 2007. To provide information on the effect of changes in abundance forecasts, the final 2006 pre-season regulatory package for ocean and inside fisheries was applied to 2007 projections of abundance.

Oregon Production Index Area

Ocean fisheries were modeled with 2006 Council regulations and 2006 expectations for non-Council area fisheries. Under this scenario, expected exploitation rates are 6.2% on OCN coho and 2.9% on Rogue/Klamath hatchery coho. Expected spawner escapement is 239,999 for OCN coho (Tables III-7 and III-8). For Columbia River hatchery coho stocks, the predicted ocean exploitation rate (excluding Buoy 10) is 16% on the Columbia River early stock and 32% on the Columbia River late stock. Predicted ocean escapements into the Columbia River in 2007 under this exercise show that under 2006 ocean regulations, Columbia River early and late coho are expected to meet hatchery egg take goals.

Based on parent escapement levels and observed OPI smolt-to-jack survival for 2004 brood OPI smolts, the total allowable OCN coho exploitation rate for 2007 fisheries is no greater than 20% under FMP Amendment 13 and no greater than 20% under the matrix developed by the OCN work group. (Table III-9; Appendix A, Tables A-2 and A-3). The total allowable Rogue/Klamath hatchery coho marine exploitation rate is 13.0% (NMFS ESA consultation standard).

Lower Columbia River natural (LCN) coho were listed as Endangered under the Oregon state ESA in 1999 and have been managed under a state Recovery Plan harvest rate matrix since 2001 using Oregon coast hatchery stocks as a surrogate in FRAM. LCN coho were listed as threatened under the federal ESA in 2005. In 2006 NMFS allowed a 15.0% exploitation rate in Council managed and inmainstem Columbia River fisheries combined using unmarked Columbia River hatchery stocks as the proxy. The 15.0% exploitation rate was split by managers to allow 5.0% for in-river fisheries and 10.0% for Council managed ocean fisheries. Under 2006 fishery regulations and 2007 abundances the exploitation rate is predicted to be 7.0% for Council managed ocean fisheries as compared to last years cap of 10%.

North of the Oregon Production Index Area

Ocean escapement expectations in relation to management goals for selected naturally-spawning coho stocks, given 2007 preseason abundance forecasts and 2006 preseason projections for fishing patterns, are presented in Table III-7. 2007 forecasts for Canadian coho stocks are not available, but are assumed to be at 2006 levels for this analysis. More detailed fishery management goals for Council area coho stocks are listed in Appendix A, Table A-1.

Under 2006 regulations, 2007 ocean escapements for natural coho stocks north of the OPI index area are expected to be at levels that would permit attainment of FMP escapement goals for all U.S. stocks. In addition, all annual management objectives for stocks subject to the PSC agreement would be met except Skagit River coho. The Skagit River coho exploitation rate is predicted to be 51% (the Council area portion of this is 3.0%) under this exercise and the allowable rate for 2007 is 35%. The exploitation rate by U.S. fisheries south of the Canadian border on Interior Fraser coho is projected to be 10.2%, exceeding the anticipated 10.0% allowable exploitation rate under the 2002 PST Coho Agreement. The Council area fisheries portion is 3.5%.

Coho bycatch during Puget Sound fisheries directed at chum and sockeye salmon will also be a consideration for preseason planning.

TABLE III-1. Preliminary 1996-2007 preseason and postseason coho stock Stratified Random Sampling abundance estimates for Oregon production index area stocks in thousands of fish. (Page 1 of 2)

Stock	Year	Preseason	Postseason	Preseason/Postseason ^{a/}
Oregon Production Index Area Hatchery Total	1996	309.2	182.6	1.69
	1997	376.1	215.3	1.75
	1998	118.4	203.6	0.58
	1999	559.2	319.6	1.75
	2000	671.4	677.1	0.99
	2001	1,707.6	1,395.5	1.22
	2002	361.7	660.1	0.55
	2003	863.1	952.5	0.91
	2004	623.9	634.6	0.98
	2005	389.9	443.1	0.88
	2006	398.8	440.6	0.91
	2007	593.6	-	-
Columbia River Early	1996	142.2	98.0	1.45
	1997	206.9	129.8	1.59
	1998	63.8	126.4	0.50
	1999	325.5	174.9	1.86
	2000	326.3	378.0	0.86
	2001	1,036.5	815.9	1.27
	2002	161.6	324.7	0.50
	2003	440.0	645.7	0.68
	2004	313.6	389.0	0.81
	2005	284.6	282.7	1.01
	2006	245.8	251.4	0.98
	2007	424.9	-	-
Columbia River Late	1996	114.4	30.8	3.71
	1997	86.5	53.7	1.61
	1998	24.9	47.3	0.53
	1999	140.9	120.7	1.17
	2000	278.0	260.1	1.07
	2001	491.8	488.3	1.01
	2002	143.5	271.8	0.53
	2003	377.9	248.0	1.52
	2004	274.7	203.0	1.35
	2005	78.0	111.6	0.70
	2006	113.8	156.3	0.73
	2007	139.5	-	-
Oregon Coastal North of Cape Blanco	1996	38.5	28.0	1.38
	1997	60.4	19.0	3.18
	1998	21.6	19.7	1.10
	1999	59.4	14.4	4.13
	2000	48.5	23.4	2.07
	2001	127.3	46.9	2.71
	2002	36.6	41.6	0.88
	2003	29.3	34.5	0.85
	2004	16.6	21.7	0.77
	2005	11.5	10.7	1.07
	2006	8.6	7.9	1.09
	2007	7.0	-	-

TABLE III-1. Preliminary 1996-2007 preseason and postseason coho stock Stratified Random Sampling abundance estimates for Oregon production index area stocks in thousands of fish. (Page 2 of 2)

Stock	Year	Preseason	Postseason	Preseason/Postseason
Oregon and California Coastal South of Cape Blanco				
	1996	14.2	25.8	0.55
	1997	22.3	12.8	1.74
	1998	8.1	10.2	0.79
	1999	33.4	9.6	3.48
	2000	18.6	15.6	1.19
	2001	52.0	46.0	1.13
	2002	20.0	22.0	0.91
	2003	15.9	24.3	0.65
	2004	19.0	29.9	0.64
	2005	15.8	38.1	0.41
	2006	30.6	25.0	1.22
	2007	22.2	-	-
Columbia River Natural	2007	21.5	-	-
Oregon Coastal Natural				
	1996	63.2	86.1	0.73
	1997	86.4	27.8	3.11
	1998	47.2	29.2	1.62
	1999	60.7	51.9	1.17
	2000	55.9	69.0	0.81
	2001	50.1	163.2	0.31
	2002	71.8	304.5	0.24
	2003	117.9	278.8	0.42
	2004	150.9	197.0	0.77
	2005	152.0	150.1	1.01
	2006	60.8	116.4	0.52
	2007	255.4	-	-
Salmon Trout Enhancement Program				
	1996	0.4	1.2	0.33
	1997	1.3	0.3	4.33
	1998	0.2	0.3	0.67
	1999	0.7	0.4	1.75
	2000	0.6	0.5	1.20
	2001	1.0	1.4	0.71
	2002	0.6	3.0	0.20
	2003	3.6	3.6	1.00
	2004	3.1	1.0	3.10
	2005	1.0	0.4	2.50
	2006	0.6	0.1	6.00
	2007	0.2	-	-

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

TABLE III-2. Oregon production index (OPI) area coho harvest impacts, spawning, abundance, and exploitation rate estimates by SRS accounting in thousands of fish.^{a/} (Page 1 of 1)

Year or Avg.	Oregon and California Coastal Returns							Ocean	OCN Exploitation
	Ocean Fisheries ^{b/}		Hatcheries and Freshwater		Private Hatcheries		Columbia River Returns	Exploitation Rate Based on OPI	Rate Based on Postseason
	Troll	Sport	Harvest ^{c/}	OCN Spaw ners			Abundance	Abundance ^{d/}	FRAM ^{e/}
1970-1975	1,629.6	558.4	45.8	55.2	-	460.4	2,749.3	0.80	-
1976-1980	1,253.6	555.0	31.2	31.1	26.1	263.3	2,155.1	0.8	-
1981	830.9	339.9	34.1	32.6	117.8	170.2	1,525.5	0.81	-
1982	740.9	300.4	37.1	76.2	184.7	453.1	1,792.4	0.62	-
1983	429.6	275.0	18.2	22.8	133.9	111.2	990.7	0.79	-
1984	95.8	174.2	51.2	74.5	115.4	425.9	937.0	0.32	-
1985	166.4	280.4	45.4	73.9	332.0	367.2	1,265.3	0.43	-
1986	643.5	320.6	81.8	70.0	453.7	1,549.1	3,118.7	0.34	-
1987	469.1	296.2	45.3	30.1	119.3	316.6	1,276.6	0.60	-
1988	844.7	297.2	62.4	56.8	116.1	670.8	2,048.0	0.56	-
1989	646.9	425.5	62.3	46.4	46.9	712.8	1,940.8	0.55	-
1990	277.6	357.1	30.6	20.9	35.6	196.7	918.5	0.69	-
1991	450.6	469.9	84.0	36.4	35.1	954.3	2,030.3	0.45	-
1992	67.5	256.5	53.8	40.6	-	217.7	636.1	0.51	-
1993	13.2	140.8	41.5	54.5	-	114.2	364.2	0.42	-
1994	2.7	3.0	30.8	43.3	-	169.1	248.9	0.02	0.07
1995	5.4	43.5	40.0	52.5	-	75.2	216.6	0.23	0.12
1996	7.0	31.8	48.9	73.0	-	104.6	265.3	0.15	0.08
1997	5.5	22.4	27.9	22.7	-	145.3	223.8	0.13	0.12
1998	3.5	12.8	30.5	30.9	-	164.5	242.0	0.07	0.08
1999	3.6	36.5	24.4	47.4	-	273.6	389.7	0.12	0.09
2000	25.9	74.6	38.5	66.8	-	549.6	756.0	0.13	0.07
2001	38.1	216.8	86.5	167.7	-	1,108.1	1,617.0	0.16	0.07
2002	14.9	118.7	59.5	253.5	-	511.6	958.3	0.14	0.12
2003	28.8	252.4	50.7	222.4	-	683.7	1,265.8	0.22	0.14
2004	26.2	159.4	42.1	168.7	-	446.0	841.6	0.22	0.15
2005	10.5	58.2	44.9	133.2	-	346.8	593.6	0.12	0.11
2006 ^{f/}	4.5	47.5	34.8	109.4	-	384.1	528.4	0.08	0.07

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

b/ Includes estimated nonretention mortality: troll fishery hook-and-release mortality for 1982-2006 and drop-off mortality for all years; sport fishery hook-and-release mortality for 1994-2006 and drop-off mortality for all years.

c/ Includes returns from Salmon-Trout Enhancement Program (STEP) smolt releases.

d/ Ocean fishery impacts on private hatchery stock and returns to private hatcheries are excluded in calculating the OPI area stock aggregate ocean exploitation rate index.

e/ 2001, 2002, 2003, 2004, and 2005 based on preseason FRAM estimate.

f/ Preliminary.

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

Year	Preseason Forecast	Postseason Return	Pre/Postseason	Preseason Forecast	Postseason Return	Pre/Postseason	Preseason Forecast	Postseason Return	Pre/Postseason	Preseason Forecast	Postseason Return	Pre/Postseason
	Quillayute River Fall			Hoh River			Queets River			Grays Harbor^{a/}		
1984	7.0	11.0	0.64	2.7	7.7	0.35	5.2	9.7	0.54	28.7	103.8	0.28
1985	19.2	15.8	1.22	6.6	5.2	1.27	11.3	6.0	1.88	56.4	25.1	2.25
1986	6.1	17.1	0.36	3.9	6.4	0.61	5.2	5.8	0.90	51.6	33.3	1.55
1987	11.7	23.8	0.49	5.5	7.2	0.76	9.0	8.9	1.01	103.3	55.7	1.85
1988	10.4	9.1	1.14	2.0	2.6	0.77	4.7	4.5	1.04	26.4	58.0	0.46
1989	14.5	11.1	1.31	5.7	5.4	1.06	6.2	5.4	1.15	43.0	60.9	0.71
1990	15.2	9.5	1.60	5.1	4.5	1.13	5.9	7.1	0.83	48.3	57.3	0.84
1991	8.8	10.6	0.83	3.4	5.4	0.63	7.9	8.6	0.92	138.0	108.7	1.27
1992	12.5	13.6	0.92	4.9	5.0	0.98	5.6	7.0	0.80	48.4	40.9	1.18
1993	7.6	4.7	1.62	4.8	1.9	2.53	6.5	5.4	1.20	84.7	37.3	2.27
1994	7.0	6.4	1.09	3.0	1.4	2.14	3.6	1.2	3.00	31.3	11.8	2.65
1995	8.5	14.3	0.59	4.4	5.4	0.81	7.2	7.3	0.99	64.4	58.9	1.09
1996	9.2	14.6	0.63	3.0	5.8	0.52	5.4	10.7	0.50	82.7	82.4	1.00
1997	5.1	5.0	1.02	1.6	1.4	1.14	2.4	2.0	1.20	14.8	18.9	0.78
1998	7.4	17.0	0.44	3.2	5.2	0.62	4.5	4.6	0.98	27.1	41.2	0.66
1999	12.8	19.5	0.66	2.8	6.3	0.44	3.7	5.0	0.74	50.3	38.9	1.29
2000	8.2	17.7	0.46	3.3	8.8	0.38	2.5	8.3	0.30	44.2	40.8	1.08
2001	20.6	36.7	0.56	7.6	14.8	0.51	10.6	27.8	0.38	46.6	73.5	0.63
2002	18.5	34.7	0.53	6.9	11.2	0.62	10.2	16.1	0.63	50.3	117.2	0.43
2003	21.2	25.2	0.84	10.4	8.1	1.28	19.6	11.2	1.75	52.3	107.9	0.48
2004	17.7	25.1	0.71	6.6	6.3	1.05	14.7	11.1	1.32	101.1	93.1	1.09
2005	16.1	22.1	0.73	6.4	8.2	0.78	14.1	9.8	1.44	78.5	49.8	1.58
2006	13.0	11.5	1.13	5.6	3.1	1.81	7.1	NA	NA	60.3	NA	NA
2007 ^{b/}	10.8	-	-	5.4	-	-	13.6	-	-	59.4	-	-

a/ The source for postseason return estimates is Washington Department of Fish and Wildlife.

b/ Preliminary.

TABLE III-4. Preseason and postseason estimates of ocean escapements for selected Puget Sound adult natural coho stocks in thousands of fish.^{a/} (Page 1 of 1)

Year	Preseason Forecast	Postseason Return	Pre/Postseason	Preseason Forecast	Postseason Return	Pre/Postseason	Preseason Forecast	Postseason Return	Pre/Postseason
	Skagit River			Stilliguamish River			Hood Canal		
1984	29.6	37.2	0.80	NA	26.9	NA	NA	57.5	NA
1985	26.1	31.3	0.83	NA	34.4	NA	NA	38.5	NA
1986	43.5	73.4	0.59	37.0	49.9	0.74	NA	82.2	NA
1987	33.0	41.2	0.80	29.7	46.3	0.64	NA	71.7	NA
1988	29.6	29.9	0.99	24.5	35.4	0.69	18.2	15.5	1.17
1989	31.2	27.6	1.13	24.5	13.5	1.81	36.8	25.5	1.44
1990	37.6	25.9	1.45	30.8	34.1	0.90	43.9	14.2	3.09
1991	40.8	11.8	3.46	32.9	11.3	2.91	17.6	15.3	1.15
1992	35.7	9.5	3.76	18.7	18.0	1.04	10.1	19.9	0.51
1993	28.1	14.5	1.94	24.5	10.6	2.31	39.5	16.7	2.37
1994	17.9	30.5	0.59	10.2	30.3	0.34	13.5	57.0	0.24
1995	30.0	16.2	1.85	32.7	20.4	1.60	19.3	41.1	0.47
1996	26.7	8.7	3.07	29.8	12.2	2.44	15.4	37.3	0.41
1997	34.2	40.2	0.85	15.7	13.8	1.14	38.1	99.8	0.38
1998	41.1	85.9	0.48	37.7	30.7	1.23	87.3	122.4	0.71
1999	53.4	37.2	1.44	27.3	7.5	3.64	45.2	18.6	2.43
2000	24.7	71.6	0.35	15.0	32.5	0.46	50.4	40.7	1.24
2001	46.9	115.6	0.41	18.1	80.6	0.22	40.6	104.6	0.39
2002	79.9	61.0 ^{b/}	1.31	14.5	30.4 ^{b/}	0.48	25.6	85.4 ^{b/}	0.30
2003	97.9	87.8 ^{b/}	1.12	27.7	49.8 ^{b/}	0.56	25.8	196.5 ^{b/}	0.13
2004	130.9	171.8 ^{b/}	0.76	26.6	65.8 ^{b/}	0.40	79.7	220.7 ^{b/}	0.36
2005	48.4	34.7 ^{b/}	1.39	41.8	25.8 ^{b/}	1.62	79.6	38.1 ^{b/}	2.09
2006 ^{b/}	106.6	NA	NA	45.0	NA	NA	59.4	NA	NA

a/ Preseason and postseason numbers represent terminal run sizes from 1997 to present.

b/ Preliminary.

TABLE III-5. Mass marking of 2004 brood coho available to 2007 Council fisheries. The mark used is an adipose fin clip.
(Page 1 of 1)

Region	Ocean Recruits		Percent Mass
	Wild	Hatchery	Marked
PUGET SOUND STOCKS:			
Nooksack-Samish and 7/7A Independent	5,200	53,061	81.9%
Skagit	26,799	8,873	21.8%
Stillaguamish	69,200	0	0.0%
Snohomish	98,900	25,658	14.7%
South Puget Sound Normal	18,248	173,933	86.3%
South Puget Sound Delayed	0	7,808	99.2%
Hood Canal	42,350	54,405	48.1%
Strait of Juan de Fuca and Area 9	29,928	14,529	28.4%
Puget Sound Total	290,625	338,267	48.7%
WASHINGTON COASTAL STOCKS:			
North Coast Independent Tributaries	3,175	4,148	42.5%
Quillayute Summer	1,029	6,396	86.1%
Quillayute Fall	10,823	18,126	54.7%
Hoh	5,406	0	0.0%
Queets	13,551	19,138	7.0%
Quinault	18,600	22,735	46.7%
Grays Harbor	59,370	74,030	53.5%
Willapa Bay	24,404	37,228	57.0%
Washington Coastal Total	136,358	181,801	48.2%
COLUMBIA RIVER STOCKS:			
Columbia River Early	NA	424,900	78.3% ^{a/}
Columbia River Late	NA	139,500	82.7% ^{a/}
Columbia River Total	NA	448,028	76.5% ^{a/}
OREGON COASTAL	60,800	39,800	39.6%
SOUTHERN BRITISH COLUMBIA STOCKS^{b/}:			
Georgia Strait Mainland	43,098	20,044	22.9%
Georgia Strait Vancouver Island	64,749	1,701	1.4%
Johnstone Strait	30,228	7,269	9.7%
Southwest Vancouver Island	21,767	49,640	43.8%
Northwest Vancouver Island	176,545	18,295	0.1%
Lower Fraser River	5,601	89,665	65.9%
Interior Fraser River	18,232	854	0.5%
Southern British Columbia Total	360,220	187,468	20.7%

a/ Columbia River estimate of percent mass marked do not include wild production.

b/ For this assessment, the percent mass marked was assumed to be the same as in 2006.

TABLE III-6. Projected coho mark rates for 2007 fisheries under base period fishing patterns (% marked). (Page 1 of 1)

Area	Fishery	June	July	August	Sept
Canada					
Johnstone Strait	Recreational	-	17%	17%	-
West Coast Vancouver Island	Recreational	56%	19%	14%	12%
North Georgia Strait	Recreational	34%	34%	34%	28%
South Georgia Strait	Recreational	37%	38%	31%	31%
Juan de Fuca Strait	Recreational	44%	42%	45%	45%
Johnstone Strait	Troll	44%	31%	19%	26%
NW Vancouver Island	Troll	23%	21%	27%	31%
SW Vancouver Island	Troll	44%	39%	44%	47%
Georgia Strait	Troll	45%	44%	45%	38%
Puget Sound					
Strait of Juan de Fuca (Area 5)	Recreational	55%	49%	46%	46%
Strait of Juan de Fuca (Area 6)	Recreational	48%	45%	52%	45%
San Juan Island (Area 7)	Recreational	43%	48%	47%	38%
North Puget Sound (Areas 6 & 7A)	Net	-	38%	40%	45%
Council Area					
Neah Bay (Area 4/4B)	Recreational	40%	55%	51%	56%
LaPush (Area 3)	Recreational	61%	55%	64%	33%
Westport (Area 2)	Recreational	65%	64%	65%	68%
Columbia River (Area 1)	Recreational	75%	72%	72%	74%
Tillamook	Recreational	62%	59%	54%	40%
New port	Recreational	59%	57%	52%	36%
Coos Bay	Recreational	49%	48%	36%	19%
Brookings	Recreational	45%	33%	30%	11%
Neah Bay (Area 4/4B)	Troll	52%	50%	53%	55%
LaPush (Area 3)	Troll	49%	57%	54%	53%
Westport (Area 2)	Troll	43%	54%	65%	58%
Columbia River (Area 1)	Troll	64%	64%	65%	70%
Tillamook	Troll	60%	58%	60%	56%
New port	Troll	59%	57%	52%	52%
Coos Bay	Troll	47%	48%	38%	30%
Brookings	Troll	38%	41%	43%	28%
Columbia River					
Buoy 10	Recreational	-	-	-	74%

TABLE III-7. Estimated ocean escapements for critical natural and Columbia River hatchery coho stocks (thousands of fish) based on preliminary 2007 preseason abundance forecasts and 2006 Council regulations.^{a/} (Page 1 of 1)

	Ocean Escapement Estimates Under 2006 Regulations ^{b/}		
	2007 Preseason	2006 Preseason	2007 Spawning
Stock	Abundance	Abundance	Escapement Goal ^{c/}
Natural Coho Stocks			
Skagit	18.8	87.8	30.0 ^{d/}
Stillaguamish	50.2	32.7	17.0 ^{d/}
Snohomish	66.4	98.0	70.0 ^{d/}
Hood Canal	29.8	46.4	21.5 ^{d/}
Strait of Juan de Fuca	26.9	23.5	12.8 ^{d/}
Quillayute Fall	9.7	13.0	6.3 - 15.8
Hoh	4.7	5.6	2.0 - 5.0
Queets	11.5	7.1	5.8 - 14.5
Grays Harbor	53.4	60.3	35.4
LCN	20.0 (7.0%)	NA (9.9%)	Exploitation Rate ≤15.0%
OCN	240.0 (6.2%)	52.2 (9.6%)	Exploitation Rate ≤20.0%
R/K	NA (2.9%)	NA (5.2%)	Exploitation Rate ≤13.0%
Hatchery Coho Stocks			
Columbia Early	343.6	182.7	18.6
Columbia Late	93.4	64.7	11.9

a/ Quota levels include harvest and hooking mortality estimates used in planning the Council's 2006 ocean fisheries and a coho catch for the Canadian troll fishery off the West Coast of Vancouver Island (WCVI).

b/ 2006 preseason regulations include the following coho quota fisheries: Treaty Indian troll - 37,500 non-selective; non-Indian troll - 6,800 selective; recreational north of Cape Falcon - 73,200 selective; recreational Cape Falcon to OR/CA border - 20,000 selective. Ocean escapement is generally the estimated number of coho escaping ocean fisheries and entering freshwater. For Puget Sound stocks, ocean escapement is the estimated number of coho entering Area 4B which are available for U.S. net fisheries in Puget Sound and spawning escapement after impacts associated with the Canadian and Puget Sound troll and recreational fisheries have been deducted. For the OCN coho stock, this value represents the estimated spawner escapement in SRS accounting. For Columbia River hatchery and LCN stocks, ocean escapement represents the number of coho after the Buoy 10 fishery; the LCN exploitation rate shown is the PPMC ocean fisheries exploitation rate, which had an ER forecast of 10% and an ESA limit of 15% including in river fisheries.

c/ Goals represent Salmon FMP conservation objectives, ESA consultation standards, or hatchery escapement needs. Spawning escapement goals are not directly comparable to ocean escapement because the latter occur before inside fisheries.

d/ Annual management goals will be determined by the state and tribal co-managers during the preseason planning process, and will be expressed in terms of total mortality exploitation rate constraints.

TABLE III-8. Comparison of Lower Columbia natural (LCN), Oregon coastal natural (OCN), and Rogue/Klamath (RK) coho harvest mortality and exploitation rates by fishery under Council-adopted 2006 regulations and preliminary 2007 preseason abundance estimates. (Page 1 of 1)

Fishery	Harvest Mortality and Exploitation Rate					
	LCN		OCN		RK	
	Number	Percentage	Number	Percentage	Number	Percentage
SOUTHEAST ALASKA	0	0.0%	0	0.0%	0	0.0%
BRITISH COLUMBIA	26	0.1%	847	0.3%	30	0.2%
PUGET SOUND/STRAITS	38	0.2%	301	0.1%	0	0.0%
NORTH OF CAPE FALCON						
Recreational	657	3.1%	1,835	0.7%	3	0.0%
Treaty Indian Troll	381	1.8%	1,571	0.6%	0	0.0%
Non-Indian Troll	115	0.5%	572	0.2%	0	0.0%
SOUTH OF CAPE FALCON						
Recreational:	276	1.3%				
Cape Falcon to Humbug Mt.			3,956	1.5%	18	0.1%
Humbug Mt. to Horse Mt. (KMZ)			828	0.3%	115	0.7%
Fort Bragg			815	0.3%	120	0.7%
South of Pt. Arena			957	0.4%	104	0.6%
Troll:	65	0.3%				
Cape Falcon to Humbug Mt.			485	0.1%	1	0.0%
Humbug Mt. to Horse Mt. (KMZ)			0	0.0%	0	0.0%
Fort Bragg			15	0.0%	1	0.0%
South of Pt. Arena			681	0.3%	46	0.3%
BUOY 10	111	0.5%	226	0.1%	0	0.0%
ESTUARY/FRESHWATER	NA	NA	2,875	1.1%	34	0.2%
TOTAL	1,669	7.9%	15,964	6.2%	472	2.9%

TABLE III-9. Maximum allowable fishery impact rate for OCN coho under Amendment 13 matrix (Appendix A, Table A-2) and the OCN work group matrix (Appendix A, Table A-3) based on parent escapement levels by stock component and marine survival category.^{a/} (Page 1 of 1)

Based on parent occupation totals by stock component and marine survival category. (Page 1 of 1)												
Estimated OCN Coho Spawners by Stock Component						Hatchery	Amendment 13 Matrix			OCN Work Group Matrix ^{b/}		
	Parent					Jack	Marine	Parental	Maximum	Marine	Parental	Maximum
Fishery	Spaw ner		North-	South-		Survival	Survival	Spaw ner	Allow able	Survival	Spaw ner	Allow able
Year (t)	Year (t-3)	Northern	Central	Central	Southern	Rate (t-1)	Category	Category	Impacts	Category	Category	Impacts
1998	1995	3,800	13,600	35,000	3,800	0.04%	Low	Very Low	≤10-13%	Extremely Low	Very Low	-
1999	1996	3,300	18,100	51,500	4,600	0.10%	Med	Very Low	≤15%	Low	Critical	-
2000	1997	2,100	2,800	17,700	8,300	0.12%	Med	Very Low	≤15%	Low	Critical	-
2001	1998	2,600	3,300	25,200	2,300	0.27%	Med	Very Low	≤15%	Medium	Critical	0-8%
2002	1999	8,800	11,400	27,100	1,400	0.09%	Med	Low	≤15%	Low	Low	≤15%
2003	2000	17,900	14,300	34,700	11,000	0.20%	Med	Low	≤15%	Med	Low	≤15%
2004	2001	33,400	25,200	109,000	12,200	0.15%	Med	Low	≤15%	Med	Low	≤15%
2005	2002	52,500	99,500	99,600	7,800	0.11%	Med	High	≤20%	Low	High	≤15%
2006	2003	59,600	66,600	96,200	6,800	0.10%	Med	High	≤20%	Low	High	≤15%
2007	2004	33,100	40,400	92,700	24,500	0.17%	Med	Med	≤20%	Med	Med	≤20%
2008	2005	14,800	42,200	76,000	10,300	-	-	Med	-	-	Med	-
2009	2006	22,600	16,100	67,000	3,900	-	-	Med	-	-	Low	-

a/ Under the NMFS ESA consultation standards, the southern stock component is managed for a total allowable Marine Exploitation rate of 13%, as represented by Rogue/Klamath hatchery stocks, which is separate from these OCN coho impact rates.

b/ Developed by the OCN work group as a result of the 2000 Review of Amendment 13.

CHAPTER IV - FRASER RIVER AND PUGET SOUND PINK SALMON ASSESSMENTS

Two major runs comprise the pink salmon population available to Council fisheries during odd-numbered years: the Fraser River (British Columbia) run, which is more abundant, and the Puget Sound run. The 2007 run size forecast for Fraser pinks is 19.6 million fish, above the forecast of 16.3 million in 2005. Timing of the 2005 and 2003 Fraser pink runs were earlier than normal. The 2007 Puget Sound pink salmon run size forecast is 3.34 million; with 3.3 million natural and 3,800 hatchery fish.

Table IV-1 provides a summary of recent run sizes.

TABLE IV-1. Estimated annual run sizes (odd-numbered years 1977-2007) for Fraser River and Puget Sound pink salmon in millions of fish. (Page 1 of 1)

Year	Puget Sound	Fraser River ^{a/}
1977	0.88	8.21
1979	1.32	14.40
1981	0.50	18.69
1983	1.01	15.35
1985	1.76	19.10
1987	1.57	7.17
1989	1.93	16.63
1991	1.09	22.33
1993	1.06	17.01
1995	2.11	12.88
1997	0.44	8.20
1999	0.95	3.59
2001 ^{b/}	3.50	21.19
2003 ^{b/}	2.30	26.00
2005 ^{b/}	1.23	7.30
2007 Forecast	3.34	19.60

a/ Total run size.

b/ Preliminary.

APPENDIX A

SUMMARY OF COUNCIL STOCK MANAGEMENT GOALS

LIST OF TABLES

	<u>Page</u>
TABLE A-1. Conservation objectives and management information for salmon stocks of significance to ocean salmon fisheries	59
TABLE A-2. Allowable fishery impact rate criteria for OCN coho stock components under the Salmon Fishery Management Plan Amendment 13.....	71
TABLE A-3. Fishery impact rate criteria for OCN coho stock components based on the harvest matrix resulting from the OCN work group 2000 review of Amendment 13.....	72

TABLE A-1. **Conservation objectives** and management information for salmon stocks of significance to ocean salmon fisheries. Abundance information is based on recent year information. (Page 1 of 12).

Stock	Conservation Objective (to be met annually, unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Other Management Information
--- CHINOOK ---			
CALIFORNIA CENTRAL VALLEY - All fall, late-fall, winter, and spring stocks of the Sacramento and San Joaquin Rivers and their tributaries. Management of this stock complex is based primarily on Sacramento River fall Chinook, which includes a large hatchery component and natural Sacramento River winter Chinook, which are listed as endangered. The San Joaquin system has been severely degraded by water development projects and pollution. Natural populations of spring Chinook there have been extirpated, and remaining spawning areas are utilized primarily by fall Chinook, which have comprised <10% of the total Central Valley fall run.			
Sacramento River Fall	122,000-180,000 natural and hatchery adult spawners (MSY proxy adopted 1984). This objective is intended to provide adequate escapement of natural and hatchery production for Sacramento and San Joaquin fall and late-fall stocks based on habitat conditions and average run-sizes as follows: Sacramento River 1953-1960; San Joaquin River 1972-1977 (ASETF 1979; PFMC 1984; SRFCRT 1994). The objective is less than the estimated basin capacity of 240,000 spawners (Hallock 1977), but greater than the 118,000 spawners for maximum production estimated on a basin by basin basis before Oroville and Nimbus Dams (Reisenbichler 1986).	Yes.	Contributes to ocean fisheries off California, southern and central Oregon, Washington, and British Columbia. Council management actions on this stock are directed at fisheries south of Pt. Arena; impacts on this stock between Pt. Arena and Horse Mt. are incidental to management measures directed at Klamath River fall Chinook.
Sacramento River Spring Threatened (1999)	Listed as threatened under ESA. NMFS ESA consultation standard/recovery plan. Present level of ocean fishery impacts limited by measures constraining harvest on Sacramento River winter and Klamath River fall Chinook.	Indirectly. MSY criteria undefined. Assessment of ocean distribution and fishery impacts needed for ESA determination and to aid management.	Contributes to ocean fisheries off California, but also known to occur off Oregon. Ocean fishery impacts primarily incidental to harvest of Sacramento River fall Chinook and may be lower due to differences in run timing. Stock has been affected by man-caused loss and deterioration of freshwater habitat.
Sacramento River Winter Endangered (1994)	Listed as endangered under ESA. NMFS ESA consultation standard specifies duration and timing of commercial and recreational fisheries south of Pt. Arena.	No. NMFS ESA consultation standard provides interim rebuilding program.	Believed to contribute predominantly to ocean fisheries south of Pt. Arena. Ocean fishery impacts incidental to harvest of Sacramento River fall Chinook.
NORTHERN CALIFORNIA COAST - All fall and spring stocks of California streams north of the entrance to San Francisco Bay. Management of this stock complex is based primarily on meeting spawning escapements for natural fall Chinook. Limited data is available except for the Klamath River. An assessment and monitoring program is under consideration by CDFG for stocks originating from the Smith, Eel, Mattole, and Mad Rivers, which might provide a more thorough management basis for the future. There are significant water diversion problems in several drainages. In the Klamath River Basin, there is significant hatchery production of fall Chinook, and less so of spring Chinook, resulting primarily from mitigation programs for dams constructed in both Upper Klamath and Trinity Rivers.			
Eel, Mattole, Mad, and Smith Rivers (Fall and Spring) Eel, Mattole, and Mad River stocks - Threatened (1999)	Eel, Mattole, and Mad River stocks listed as threatened under ESA. Data insufficient to define MSY criteria. Indices of spawning abundance limited to one tributary of the Mad River and two tributaries of the Eel River. NMFS ESA consultation standard/recovery plan for Eel, Mattole, and Mad River stocks requires that the projected ocean harvest rates on age-4 Klamath River fall Chinook not exceed 16.0%.	Indirectly. Data insufficient to define MSY criteria. CDFG developing an assessment and monitoring program.	Very limited management data available. Believed to occur in ocean fisheries off northern California and southern Oregon. Ocean fishery impacts incidental to fisheries for Sacramento and Klamath Rivers fall Chinook. No preseason or postseason abundance estimates available.

TABLE A-1. **Conservation objectives** and management information for salmon stocks of significance to ocean salmon fisheries. Abundance information is based on recent year information. (Page 2 of 12).

Stock	Conservation Objective (to be met annually, unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Other Management Information
--- CHINOOK ---			
Klamath River Fall (Klamath and Trinity Rivers)	33% to 34% of potential adult natural spawners, but no fewer than 35,000 naturally spawning adults in any one year. Brood escapement rate must average 33% to 34% over the long-term, but an individual brood may vary from this range to achieve the required tribal/nontribal annual allocation. Objective designed to allow a wide range of spawner escapements from which to develop an MSY objective or proxy while protecting the stock during prolonged periods of reduced productivity. Adopted 1988 based on Hubbell and Boydstun (1985); KRTT (1986); PFMCI (1988); minor technical modifications in 1989 and 1996 (Table I-1). Natural spawners to maximize recruitment are estimated at 41,000 to 106,000 adults (Hubbell and Boydstun 1985).	Yes. A conservation alert or overfishing concern will be based on a failure to meet the 35,000 floor.	Contributes primarily to ocean fisheries from Humboldt Mt., Oregon to Horse Mt., California (the KMZ) and to Klamath River tribal and recreational fisheries. Coastwide impacts are considered in meeting allocation requirements for Indian tribes with federally recognized fishing rights and the inland fishery. Specific management measures for this stock generally are implemented from Pt. Sur, California to Cape Falcon, Oregon.
Klamath River Spring (Klamath and Trinity Rivers)	Undefined. Productive potential believed to be protected by fishery management objective for Klamath River fall Chinook, which includes an inside allocation to tribal and sport fisheries.	Indirectly. MSY criteria undefined.	Little information available on ocean distribution. Believed to occur in ocean fisheries off northern California and southern Oregon (based on Trinity River Hatchery fish).
OREGON COAST - All fall and spring stocks from Oregon streams south of the Columbia River. No preseason abundance estimates available. Management based primarily on an aggregate objective of 150,000 to 200,000 natural adult spawners (attainment of objective based on a postseason estimate of 60 to 90 natural adult spawners per mile in nine standard index streams). This objective is based on optimal escapement estimates for individual coastal rivers at habitat capacity (Thompson 1977). Lower end of the objective range is nearly twice the estimated MSY spawning escapement of 79,000 fall Chinook adults based on stock recruit analysis (McGie 1982). Significant hatchery production also exists within the coastal streams. Far-north migrating, naturally spawning stocks are also subject to the 1999 Chinook agreement of the Pacific Salmon Commission and may be subject to exploitation rate constraints in U.S. fisheries south of the Canada/Washington border.			
Southern Oregon (Aggregate of fall and spring stocks in all streams south of Elk River; Rogue River fall stock is used to indicate relative abundance and ocean contribution rates)	Unspecified portion of an aggregate 150,000 to 200,000 natural adult spawners for Oregon coast (Thompson 1977 and McGie 1982). ODFW developing specific conservation objectives for spring and fall stocks that may be implemented without plan amendment upon approval by the Council.	Yes, based on postseason estimates of <60 natural adult spawners per mile. Conservation also ensured by the objective for Klamath River fall Chinook, which includes a large inside allocation component that reduces ocean fishery exploitation rate in areas inhabited by these fish.	Medium abundance. Data limited except for Rogue River fall stock. Stocks migrate southerly or remain local, and fall Chinook contribute to ocean fisheries off northern California and Oregon, less so for spring stocks.
Central and Northern Oregon (Aggregate of fall and spring stocks in all streams from the Elk River to just south of the Columbia River)	Unspecified portion of an aggregate 150,000 to 200,000 natural adult spawners for Oregon coast (Thompson 1977 and McGie 1982). ODFW developing specific conservation objectives for spring and fall stocks that may be implemented without plan amendment upon approval by the Council.	Yes, based on postseason estimates of <60 natural adult spawners per mile.	Variable between high and medium abundance. Stocks migrate northward and contribute to ocean fisheries off British Columbia and southeast Alaska, and to a lesser degree, off Washington and Oregon. Nehalem, Siletz, and Siuslaw stocks are subject to the PSC ISBM harvest limitations.

TABLE A-1. Conservation objectives and management information for salmon stocks of significance to ocean salmon fisheries. Abundance information is based on recent year information. (Page 3 of 12).

Stock	Conservation Objective (to be met annually, unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Other Management Information
--- CHINOOK ---			
COLUMBIA RIVER BASIN - All pertinent fall, summer, and spring stocks of the Columbia River and its tributaries. Stocks within this complex are noted by area of origin: lower river (below Bonneville Dam), mid-river (Bonneville to McNary Dams), and upper river (above McNary Dam). Spawner escapement goals for these stocks are set through procedures of the U.S. District Court in <i>U.S. v. Oregon</i> and subsequent court orders. These goals are set forth in the Columbia River Fishery Management Plan and are recognized in the Council's conservation objectives. Annual inside fishery management planning activities are conducted within the Columbia River Compact and other state and tribal management forums. The Columbia River Compact, initially established by Oregon and Washington to jointly administer commercial fisheries within the Columbia River, takes into account the impacts from other state and tribal fisheries (e.g., recreational, ceremonial, subsistence, etc.) authorized under <i>U.S. v. Oregon</i> . The majority of ocean Chinook harvest north of Cape Falcon is provided by Columbia River salmon stocks, primarily hatchery production of tule fall Chinook from the Bonneville Pool (Spring Creek) and lower river hatcheries, smaller numbers of upper river bright hatchery and natural fall Chinook, and some lower river hatchery spring Chinook (Cowlitz). Hatchery objectives are based on long-range production programs and/or mitigation requirements associated with displaced natural stocks. Threatened Snake River fall Chinook, which suffer from severe dam passage mortalities and extreme loss of freshwater habitat, are of prime concern in limiting ocean exploitation rates in all ocean fisheries north of Pigeon Pt., California. These limits act to provide considerable protection to other weak natural stocks subject to ocean fishery impacts. Naturally spawning stocks are also subject to the 1999 Chinook agreement of the Pacific Salmon Commission and may be subject to exploitation rate constraints in U.S. fisheries south of the Canada/Washington border.			
North Lewis River Fall Threatened (1999)	NMFS ESA consultation standard/recovery plan (not established at time of printing). Mclsaac (1990) stock-recruit analysis supports MSY objective of 5,700 natural adult spawners.	No. Listed stock. NMFS ESA consultation standard provides interim rebuilding program. Base period Council-area ocean fishery impacts around 7%.	Medium abundance. Present in ocean fisheries north of Cape Falcon to SE Alaska. Subject to the PSC ISBM harvest limitations.
Lower River Hatchery Fall	15,400 adults to meet egg-take goal or as determined by management entities. 49.0% total RER for ESA listed lower Columbia River natural tule fall Chinook estimated from Cowlitz Hatchery fall Chinook.	No (hatchery exception).	Medium abundance. Major contributor to ocean fisheries north of Cape Falcon to central British Columbia.
Lower River Hatchery (Spring)	2,700 adults to meet Cowlitz, Kalama, and Lewis Rivers broodstock needs.	No (hatchery exception).	Medium to low abundance. Present in ocean fisheries north of Cape Falcon to southeast Alaska.
Upper Willamette (Spring) Threatened (1999)	NMFS ESA consultation standard/recovery plan (ODFW FMEP). Willamette River Management Plan provides an MSY proxy of 30,000 to 45,000 hatchery and natural adults over Willamette River falls, depending on run size.	No. Listed stock. NMFS ESA consultation standard provides interim rebuilding program. Base period Council-area ocean fishery exploitation rate of <1% prevents effective Council fishery management and rebuilding.	Present in fisheries north of Cape Falcon to southeast Alaska.
Mid-Columbia Bright Hatchery (Fall)	None for ocean fishery management.	No (hatchery exception).	High abundance. Contributor to ocean fisheries off Washington, British Columbia, and southeast Alaska. Primarily produced at Bonneville Hatchery.
Spring Creek Hatchery (Fall)	7,000 adults to meet hatchery egg-take goal.	No (hatchery exception).	Medium to high abundance. Significant contributor to ocean fisheries north of Cape Falcon to southern British Columbia.

TABLE A-1. Conservation objectives and management information for salmon stocks of significance to ocean salmon fisheries. Abundance information is based on recent year information. (Page 4 of 12).

Stock	Conservation Objective (to be met annually, unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Other Management Information
--- CHINOOK ---			
COLUMBIA RIVER BASIN (continued)			
Klickitat, Deschutes, John Day, and Yakima Rivers (Spring)	Hold ocean fishery impacts at or below base period (<1%) and recognize CRFMP objective - MSY proxy of 115,000 adults above Bonneville Dam, including upper and mid-Columbia and Snake River stocks (state and tribal management entities considering separate conservation objectives for these stocks).	Limited. Base period Council-area ocean fishery exploitation rate of <1% prevents effective Council fishery management and rebuilding. Major habitat restoration addressing water withdrawals and dam passage and blockages is necessary for rebuilding.	Medium abundance. No significance to ocean fisheries, infrequent occurrence in fisheries north of Cape Falcon to Alaska.
Snake River Fall Threatened (1992)	NMFS ESA consultation/recovery standard. Since 1995, Council has met a standard of limiting its fisheries so that the total exploitation rate on age-3 and age-4 Lyons Ferry Hatchery fall Chinook (representing Snake River fall Chinook) for all ocean fisheries (including Canada) has been ≤70.0% of the 1988-1993 average adult equivalent exploitation rate. Prior to listing, managed within objectives for upper Columbia River bright fall Chinook.	No. Listed stock. MSY criteria undefined. NMFS ESA consultation standard provides interim rebuilding program. Recovering historic abundance unlikely, as dams block former primary spawning area.	Present in ocean fisheries from central California to southeast Alaska with greatest contribution to Canadian fisheries. Primary impacts in Council fisheries north of Cape Falcon, but also extending to Pigeon Pt., California.
Snake River Spring/Summer Threatened (1992)	Not applicable for ocean fisheries.	No. Listed stock. Base period Council-area ocean fishery impacts rare (unmeasurable). Dam passage mortality must be reduced to allow stock recovery.	Depressed, recent upward trend. Rare occurrence in ocean fisheries from Washington to southeast Alaska.
Upper River Bright (Fall)	40,000 natural bright adults above McNary Dam (MSY proxy) adopted in 1984 based on CRFMP. The management goal was increased to 45,000 by Columbia River managers between 1986 and 1993. Since 1994, inriver fisheries management was based on a NMFS ESA consultation standard exploitation rate to protect Snake River wild fall Chinook.	Limited. Base period Council-area ocean fishery exploitation rate <4% prevents effective Council fishery management and rebuilding.	High abundance. Significant contributor to ocean fisheries off Canada, and to a lesser extent, Washington and Oregon. Primary impact area north of Cape Falcon. Subject to the PSC ISBM harvest limitations.
Upper River Summer	Hold ocean fishery impacts at or below base period (<2%); recognize <i>U.S. v. Oregon</i> objective - MSY proxy of 29,300 adults destined to for areas above Priest Rapids Dam to River Mouth (excludes Snake River stocks).	Limited. Base period Council-area ocean fishery exploitation rate <2% prevents effective Council fishery management and rebuilding. Dam passage mortalities must be reduced to allow rebuilding.	Long-term depressed abundance, significant upward trend in the last few years. Present in ocean fisheries north of Cape Falcon to southeast Alaska. Subject to the PSC ISBM harvest limitations.
Upper Columbia River Spring Endangered (1999)	None applicable to ocean fisheries. Ensure ocean fishery impacts remain rare and recognize CRFMP objective - MSY proxy of 115,000 adults above Bonneville Dam, including upper and mid-Columbia and Snake River stocks (state/tribal management entities considering separate objectives for these stocks).	No. Listed stock. Base period Council-area ocean fishery impacts rare (not measurable), making Council management and rebuilding ineffective. Reduce dam passage mortalities to allow rebuilding.	Long-term depressed abundance, recent upward trend. Captive broodstock programs started in 1997. No significance to ocean fisheries. Rare occurrence in ocean fisheries north of Cape Falcon to Canada.

TABLE A-1. Conservation objectives and management information for salmon stocks of significance to ocean salmon fisheries. Abundance information is based on recent year information. (Page 5 of 12).

Stock	Conservation Objective (to be met annually, unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Other Management Information
--- CHINOOK ---			
WASHINGTON COAST - All pertinent fall, summer and spring stocks from coastal streams north of the Columbia River through the western Strait of Juan de Fuca (west of the Elwha River). This stock complex consists of several natural stocks, generally of small to medium sized populations, and some hatchery production (Willapa Bay and the Quinault River). Stocks in this complex tend to range further north than most Columbia River stocks and, while present in fisheries from Cape Falcon to southeast Alaska, are not significantly impacted by Council-area ocean fisheries. Preseason abundance estimates are generally not available for Council management. These stocks qualify as exceptions to the Council's overfishing criteria, due to very low fishery impacts. Spawning escapement goals for stocks managed within this complex, established in U.S. District Court by WDFW and the treaty tribes, are recognized in the Council's conservation objectives below. Objectives for Grays Harbor and the north coast river systems have been established pursuant to the U.S. District Court order in <u>Hoh v. Baldrige</u> . However, annual natural spawning escapement targets may vary from the conservation objectives below if agreed to by WDFW and the treaty tribes under the provisions of <u>Hoh v. Baldrige</u> and subsequent U.S. District Court orders. After agreement is reached on the annual targets, ocean fishery escapement objectives are established for each river, or region of origin, which include provisions for treaty allocation and inside, non-Indian fishery needs. Naturally spawning stocks are also subject to the 1999 Chinook agreement of the Pacific Salmon Commission and may be subject to exploitation rate constraints in U.S. fisheries south of the Canada/Washington border.			
Willapa Bay Fall (Natural)	No FMP objective. WDFW goal of 4,400 natural spawners.	Limited (exploitation rate exception).	
Willapa Bay Fall (Hatchery)	9,800 adult return to hatchery.	No (hatchery exception).	
Grays Harbor Fall	14,600 natural adult spawners--MSP based on full seeding of spawning and rearing habitat (WDF 1979). 1,400 natural adult spawners.	Limited (exploitation rate exception).	Subject to the PSC ISBM harvest limitations.
Grays Spring		Limited (exploitation rate exception).	
Quinault Fall	Hatchery production.	No (hatchery exception).	
Queets Fall	Manage terminal fisheries for 40% harvest rate, but no less than 2,500 natural adult spawners, the MSY level estimated by Cooney (1984).	Limited (exploitation rate exception).	Subject to the PSC ISBM harvest limitations.
Queets Spring/Summer	Manage terminal fisheries for 30% harvest rate, but no less than 700 natural adult spawners.	Limited (exploitation rate exception).	
Hoh Fall	Manage terminal fisheries for 40% harvest rate, but no less than 1,200 natural adult spawners, the MSY level estimated by Cooney (1984).	Limited (exploitation rate exception).	Subject to the PSC ISBM harvest limitations.
Hoh Spring/Summer	Manage terminal fisheries for 31% harvest rate, but no less than 900 natural adult spawners.	Limited (exploitation rate exception).	
Quillayute Fall	Manage terminal fisheries for 40% harvest rate, but no less than 3,000 natural adult spawners, the MSY level estimated by Cooney (1984).	Limited (exploitation rate exception).	Subject to the PSC ISBM harvest limitations.
Quillayute Spring/Summer	1,200 natural adult spawners for summer component (MSY).	Limited (exploitation rate exception).	
Hoko Summer/Fall (Western Strait of Juan de Fuca)	850 natural adult spawners, the MSP level estimated by Ames and Phinney (1977). May include adults used for supplementation program.	Limited (exploitation rate exception).	Subject to the PSC ISBM harvest limitations.

TABLE A-1. **Conservation objectives** and management information for salmon stocks of significance to ocean salmon fisheries. Abundance information is based on recent year information. (Page 6 of 12).

Stock	Conservation Objective (to be met annually, unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Other Management Information
--- CHINOOK ---			
PUGET SOUND - All fall, summer, and spring stocks originating from U.S. tributaries to Puget Sound and the eastern Strait of Juan de Fuca (east of Salt Creek). This stock complex consists of numerous natural Chinook stocks of small to medium sized populations and significant hatchery production. Puget Sound stocks contribute to fisheries off British Columbia and are present into southeast Alaska, but are impacted to a minor degree by Council-area ocean fisheries. Base period, Council-area ocean fishery exploitation rates (adult equivalent) of 2% or less are below a management threshold which allows effective Council management of these stocks and they qualify as exceptions to the Council's overfishing criteria. The naturally spawning stocks within this complex are listed as threatened under the ESA. Naturally spawning stocks are also subject to the 1999 Chinook agreement of the Pacific Salmon Commission and may be subject to exploitation rate constraints in U.S. fisheries south of the Canada/Washington border. Management objectives for hatchery stocks are based on hatchery escapement needs. Fisheries in Puget Sound conducted under a Resource Management Plan (RMP) are exempted from ESA Section 9 take prohibitions under Limit 6 of the 4(d) rule. This RMP will expire on May 1 of this year. A new RMP is currently under review by NOAA Fisheries but this review will not be completed prior to the March Council meeting.			
Eastern Strait of Juan de Fuca Summer/Fall Threatened (1999)	NMFS ESA consultation standard is expressed in terms of Recovery Exploitation Rate (RER). Guidance will be provided prior to the March Council meeting.	Limited (exploitation rate exception).	
Skokomish Summer/Fall (Hood Canal) Threatened (1999)	NMFS ESA consultation standard. Guidance will be provided prior to the March Council meeting.	Limited (exploitation rate exception).	
Nooksack Spring (early) Threatened (1999)	NMFS ESA consultation standard is expressed in terms of Recovery Exploitation Rate (RER). Guidance will be provided prior to the March Council meeting.	Limited (exploitation rate exception).	Subject to the PSC ISBM harvest limitations.
Skagit Summer/Fall Threatened (1999)	NMFS ESA consultation standard is expressed in terms of Recovery Exploitation Rate (RER). Guidance will be provided prior to the March Council meeting.	Limited (exploitation rate exception).	Subject to the PSC ISBM harvest limitations.
Skagit Spring Threatened (1999)	NMFS ESA consultation standard is expressed in terms of Recovery Exploitation Rate (RER). Guidance will be provided prior to the March Council meeting.	Limited (exploitation rate exception).	Subject to the PSC ISBM harvest limitations.
Stillaguamish Summer/Fall Threatened (1999)	NMFS ESA consultation standard is expressed in terms of Recovery Exploitation Rate (RER). Guidance will be provided prior to the March Council meeting.	Limited (exploitation rate exception).	Subject to the PSC ISBM harvest limitations.
Snohomish Summer/Fall Threatened (1999)	NMFS ESA consultation standard is expressed in terms of Recovery Exploitation Rate (RER). Guidance will be provided prior to the March Council meeting.	Limited (exploitation rate exception).	Subject to the PSC ISBM harvest limitations.
Cedar River Summer/Fall (Lake Washington) Threatened (1999)	NMFS ESA consultation standard is expressed in terms of Recovery Exploitation Rate (RER). The preliminary 2004 consultation standard is an RER constraint total mortality in all fisheries not to exceed 31%.	Limited (exploitation rate exception).	Subject to the PSC ISBM harvest limitations.

TABLE A-1. **Conservation objectives** and management information for salmon stocks of significance to ocean salmon fisheries. Abundance information is based on recent year information. (Page 7 of 12).

Stock	Conservation Objective (to be met annually, unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Other Management Information
PUGET SOUND (continued)			
White River Spring Threatened (1999)	NMFS ESA consultation standard is expressed in terms of Recovery Exploitation Rate (RER). Guidance will be provided prior to the March Council meeting.	Limited (exploitation rate exception).	
Puyallup Summer/Fall Threatened (1999)	NMFS ESA consultation standard is expressed in terms of Recovery Exploitation Rate (RER). Guidance will be provided prior to the March Council meeting.	Limited (exploitation rate exception).	
Green River Summer/Fall Threatened (1999)	NMFS ESA consultation standard. Guidance will be provided prior to the March Council meeting.	Limited (exploitation rate exception).	Subject to the PSC ISBM harvest limitations.
Nisqually River Summer/Fall (South Puget Sound) Threatened (1999)	NMFS ESA consultation standard. Guidance will be provided prior to the March Council meeting.	Limited (exploitation rate exception).	
Mid Hood Canal Fall Threatened (1999)	NMFS ESA consultation standard is expressed in terms of Recovery Exploitation Rate (RER). Guidance will be provided prior to the March Council meeting.	Limited (exploitation rate exception).	
SOUTHERN BRITISH COLUMBIA - Fall and spring stocks of British Columbia coastal streams and the Fraser River. Management based primarily on natural and hatchery fall Chinook. Base period, Council-area ocean fishery exploitation rates (adult equivalent) on the coastal stocks of 1% or less are below a management threshold which allows effective Council management of these stocks, and they qualify as exceptions to the Council's overfishing criteria.			
Coastal Stocks	Undefined for Council fisheries. Manage consistent with the Pacific Salmon Treaty.	No. Under Canadian authority and would also be an exploitation rate exception.	Medium abundance. Major contributors to ocean fisheries off British Columbia; significant contributors north into southeast Alaska and present off northern Washington.
Fraser River	Undefined for Council fisheries. Manage consistent with the Pacific Salmon Treaty.	No. Under Canadian authority.	Medium abundance. Major contributors to ocean fisheries off British Columbia; contributors off northern Washington; and present north into southeast Alaska. Harrison River stock subject to the PSC ISBM harvest limitations.

TABLE A-1. Conservation objectives and management information for salmon stocks of significance to ocean salmon fisheries. Abundance information is based on recent year information. (Page 8 of 12).

Stock	Conservation Objective (to be met annually, unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Other Management Information
--- COHO ---			
OREGON PRODUCTION INDEX AREA - All Washington, Oregon, and California natural and hatchery coho stocks from streams south of Leadbetter Pt. Significant production from Columbia River and Oregon coastal hatcheries provide harvest in ocean fisheries throughout the Council management area. Ocean fisheries are usually limited primarily to meet natural escapement objectives. Treaty Indian obligations, non-Indian harvest opportunity, and hatchery requirements must also be factored in for the Columbia River stocks. Natural components have been severely depressed for several years due to a combination of previously high fishery impacts, major losses or degradation of freshwater habitat, and long-term marine conditions unfavorable to coho survival.			
Central California Coast Threatened (1996)	NMFS ESA consultation standard/recovery plan. Since 1998, no retention of coho in commercial and recreational fisheries off California in conjunction with total marine fishery impacts of no more than 13% on Rogue/Klamath hatchery coho (surrogate stock). Objective undefined prior to listing.	No. Listed stock, MSY criteria undefined. NMFS ESA consultation standard provides interim protection of productive capacity. Recovery limited by deterioration of significant portions of freshwater habitat, distribution at southern edge of coho range, and ongoing unfavorable marine conditions.	Very minor component of OPI area fisheries, limited potential for significant contribution to ocean and inland fisheries. Current impacts incidental in ocean fisheries off California. Development of monitoring and assessment program considered for Ten Mile River, Noyo River, Gualala River, Lagunitas Creek, and Scott Creek. Rogue/Klamath coho are believed to have a similar, but more northerly distribution.
Northern California Threatened (1997)	NMFS ESA consultation standard/recovery plan. Since 1998, total marine fishery impacts limited to no more than 13.0% on Rogue/Klamath hatchery coho (surrogate stock) and no retention of coho in California ocean fisheries. Objective undefined prior to listing.	No. Listed stock, MSY criteria undefined. NMFS ESA consultation standard provides interim protection of productive capacity. Recovery may last more than 10 years even with no fishery impacts, due to loss or deterioration of significant portions of freshwater habitat and ongoing unfavorable marine conditions.	Depressed and listed. Very minor natural component of OPI area fisheries, potential for minor contribution to ocean fisheries off California and southern Oregon, and inland California fisheries. Current impacts incidental in ocean and inland fisheries (total non-retention south of Cape Falcon since 1994). CDFG considering monitoring to provide data for the Smith, Trinity, Eel, Mattole, and Klamath Rivers.
Oregon Coastal Natural Comprised of Southern, South-Central, North-Central, and Northern Oregon stocks.	An allowable marine and freshwater exploitation rate of no more than 13% to 35%, depending on parent escapement and ocean survival trends, based on Amendment 13 of the Salmon FMP, or no more than 8% to 45% based on the OCN workgroup review of Amendment 13.	Yes. Based on exceeding the annual allowable total marine and freshwater exploitation rate..	Recent increases in abundance. Major natural component of OPI area and freshwater fisheries in Oregon coastal streams. Current impacts are primarily incidental in ocean fisheries under a total nonretention regulation south of Cape Falcon since 1994.

TABLE A-1. Conservation objectives and management information for salmon stocks of significance to ocean salmon fisheries. Abundance information is based on recent year information. (Page 9 of 12).

Stock	Conservation Objective (to be met annually, unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Other Management Information
--- COHO ---			
OREGON PRODUCTION INDEX (continued)			
Columbia River Late (Hatchery)	Hatchery rack return goal of 17,200 adults.	No (hatchery exception).	Major component of ocean fisheries north of Cape Falcon. When abundant, significant contributors to ocean fisheries off Oregon north into Canada and Columbia River fisheries.
Columbia River Early (Hatchery)	Hatchery rack return goal of 18,800 adults.	No (hatchery exception).	Major component of OPI area fisheries. When abundant, significant contributors to ocean fisheries off California and north to Leadbetter Pt., Washington and to Columbia River fisheries. Current ocean fishery impacts from very limited retention fisheries north of Cape Falcon and incidental hook-and-release mortality in fisheries south of Cape Falcon.
Columbia River (Natural) Threatened, 2005	NMFS ESA consultation standard/recovery plan. Since 2006 total fishery impacts limited to no more than 15.0% in Council area and mainstem Columbia River fisheries.	No. Listed stock. NMFS ESA consultation standard provides interim rebuilding program.	Extinct above the Dalles Dam, small populations in Clackamas, and Sandy rivers in Oregon, and Cedar Creek (Lewis River) Washington. Lower river coho are also listed under the Oregon State ESA.
WASHINGTON COASTAL - All pertinent natural and hatchery stocks originating in Washington coastal streams north of the Columbia River through the western Strait of Juan de Fuca (West of the Elwha River). Management goals for Grays Harbor and Olympic Peninsula coho stocks include achieving natural spawning escapement objectives and treaty allocation requirements, although Grays Harbor also contains a significant amount of hatchery production. The conservation objectives for these stocks are based on MSY spawner escapements established pursuant to the U.S. District Court order in <u>Hoh v. Baldrige</u> . Annual natural spawning escapement targets and total escapement objectives are established by the WDFW and treaty tribes under the provisions of <u>U.S. v. Washington</u> and subsequent U.S. District Court orders. After agreement to annual targets is reached by the parties in this litigation, ocean fishery escapement objectives are established for each river, or region of origin, which include provisions for providing treaty allocation requirements and inside, non-Indian fishery needs. The conservation objectives for the Queets, Hoh, and Quillayute Rivers were developed as ranges intended to bracket the current best estimates of MSY escapement. The range of each objective reflects the degree of uncertainty inherent by using the high estimate of recruits-per-spawner and low estimate of carrying capacity for the lower bound and the low estimate of recruits-per-spawner with the high estimate of smolt carrying capacity for the upper end of the range. The ranges were subsequently adjusted upward for risk aversion and again for habitat considerations by 26% to 184% (Lestelle <i>et al.</i> 1984). These stocks are also subject to provisions of the 2002 PSC Coho Management Plan, which requires the United States and Canada to constrain total fishery exploitation rates to levels associated with the categorical status (low, moderate, and abundant) and target exploitation rates of the key management units as determined by domestic managers. Ceilings on exploitation rates by intercepting fisheries are established through formulas specified in the PSC Management Plan. However, the salmon FMP management objectives determine the criteria for triggering a conservation alert or an overfishing concern; annual management objectives established pursuant to U.S. District Court orders and the PSC Coho Management Plan do not.			
Willapa Bay (Hatchery)	Meet WDFW program objectives.	No (hatchery exception).	Contributes to ocean fisheries off northern Oregon north into Canada. Significant contributor to inside non-Indian commercial net and recreational fisheries. WDFW critically reviewing current management to determine if objectives for natural stocks are warranted.
Grays Harbor	35,400 natural adult spawners (MSP based on WDF [1979]) or annual target agreed to by WDFW and the Quinault Indian Nation.	Yes. Conservation alert or overfishing concern based on fewer than 35,400 natural spawners.	Ocean distribution from Oregon to northern British Columbia. Harvested by treaty Indian, non-Indian commercial, and recreational fisheries in Grays Harbor and tributary rivers.

TABLE A-1. **Conservation objectives** and management information for salmon stocks of significance to ocean salmon fisheries. Abundance information is based on recent year information. (Page 10 of 12).

Stock	Conservation Objective (to be met annually, unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Other Management Information
--- COHO ---			
WASHINGTON COAST (continued)			
Queets	MSY range of 5,800 to 14,500 natural adult spawners (Lestelle <i>et al.</i> 1984) or annual target agreed to by WDFW and the Quinault Indian Nation.	Yes. Conservation alert or overfishing concern based on fewer than 5,800 natural spawners.	Ocean distribution from south-central Oregon to northwest Vancouver Island off British Columbia. Harvested by treaty Indian gillnet and non-treaty recreational fisheries inriver. Coho supplementation project conducted since the late 1970s.
Hoh	MSY range of 2,000 to 5,000 natural adult spawners (Lestelle <i>et al.</i> 1984) or annual target agreed to by WDFW and Hoh Tribe.	Yes. Conservation alert or overfishing concern based on fewer than 2,000 natural spawners.	Ocean distribution from south-central Oregon to northwest Vancouver Island off British Columbia. Harvested by treaty Indian gillnet and non-treaty recreational fisheries inriver.
Quillayute Fall	MSY range of 6,300 to 15,800 natural adult spawners (Lestelle <i>et al.</i> 1984) or annual target agreed to by WDFW and the Quillayute Tribe.	Yes. Conservation alert or overfishing concern based on fewer than 6,300 natural spawners.	Ocean distribution from south-central Oregon to northwest Vancouver Island off British Columbia. Harvested by treaty Indian gillnet and non-treaty recreational fisheries inriver.
Quillayute Summer (Hatchery)	Meet hatchery program objectives.	No (hatchery exception).	Early river entry timing. Contributor to ocean fisheries off Washington north into British Columbia; present south to central Oregon.
Western Strait of Juan de Fuca (Sekiu, Hoko, Clallam, Pysht, East and West, and Lyre Rivers and miscellaneous streams west of the Elwha River)	11,900 natural adult spawners PSC 2007 annual management objective: 40% (low status) exploitation rate.	Yes. Overfishing concern based on fewer than 11,900 natural spawners.	Little information on ocean distribution.

TABLE A-1. Conservation objectives and management information for salmon stocks of significance to ocean salmon fisheries. Abundance information is based on recent year information. (Page 11 of 12).

Stock	Conservation Objective (to be met annually, unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Other Management Information
---COHO---			
PUGET SOUND - All pertinent natural and hatchery stocks originating from U.S. tributaries to Puget Sound and the eastern Strait of Juan de Fuca (east of Salt Creek). The Puget Sound Salmon Management Plan defines management objectives and long-term goals for these stocks as developed by representatives from federal, state, and tribal agencies. Conservation objectives for specific stocks are currently based on either MSP principles for stocks managed primarily for natural production or upon hatchery escapement needs for stocks managed for artificial production. Puget Sound management procedures are outlined in a "Memorandum Adopting Salmon Management Plan" (<u>U.S. v. Washington</u> , 626 F. Supp. 1405 [1985]). The original conservation objectives were developed by a State/Tribal Management Plan Development Team following the Boldt Decision with the goal for natural spawning stocks defined as "the adult spawning population that will, on the average, maximize biomass of juvenile outmigrants subsequent to incubation and freshwater rearing under average environmental conditions." The methodology used to develop the objectives was based on assessment of the quantity and quality of rearing habitat and the number of adult spawners required to fully seed the habitat (Zillges 1977). Some objectives have subsequently been modified in 1983 by the U.S. District Court Fisheries Advisory Board (Clark 1983 and PSSSRG 1997) and later determinations of the WDFW/Tribal Technical Committee. These natural stocks are also subject to provisions of the 2002 PSC Coho Management Plan, which requires the United States and Canada to constrain total fishery exploitation rates to levels associated with the categorical status (low, moderate, and abundant) and target exploitation rates of the key management units as determined by domestic managers. Ceilings on exploitation rates by intercepting fisheries are established through formulas specified in the PSC Management Plan. However, the salmon FMP management objectives determine the criteria for triggering a conservation alert or an overfishing concern; annual management objectives established pursuant to U.S. District Court orders and the PSC Coho Management Plan do not.			
Eastern Strait of Juan de Fuca (Streams east of Salt Creek through Chimacum Creek))	950 natural adult spawners PSC 2007 annual management objective: 40% (low status) exploitation rate.	Yes. Overfishing concern based on fewer than 950 natural spawners.	Little information on ocean distribution.
Hood Canal	21,500 natural adult spawners PSC 2007 annual management objective: 65% (normal status) total exploitation rate.	Yes. Overfishing concern based on fewer than 21,500 natural spawners.	Ocean distribution from Cape Falcon, Oregon to British Columbia.
Skagit	30,000 natural adult spawners PSC 2007 annual management objective: 35% (low status) exploitation rate.	Yes. Overfishing concern based on fewer than 30,000 natural spawners.	Ocean distribution from Cape Falcon, Oregon to British Columbia.
Stillaguamish	17,000 natural adult spawners PSC 2007 annual management objective: 50% (normal status) total exploitation rate.	Yes. Overfishing concern based on fewer than 17,000 natural spawners.	Ocean distribution from Cape Falcon, Oregon to British Columbia.
Snohomish	70,000 natural adult spawners PSC 2007 annual management objective: 60% (normal status) total exploitation rate.	Yes. Overfishing concern based on fewer than 70,000 natural spawners.	Ocean distribution from Cape Falcon, Oregon to British Columbia.
South Puget Sound (Hatchery)	Hatchery rack return goal of 52,000 adults. Natural production goals under development.	No (hatchery exception).	Ocean distribution from Cape Falcon, Oregon to British Columbia.

TABLE A-1. **Conservation objectives** and management information for salmon stocks of significance to ocean salmon fisheries. Abundance information is based on recent year information. (Page 12 of 12).

Stock	Conservation Objective (to be met annually, unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Other Management Information
--- COHO ---			
SOUTHERN BRITISH COLUMBIA COAST - Stocks of southern British Columbia coastal streams (including Vancouver Island) and the Fraser River.			
Coastal Stocks	Manage Council fisheries that impact Canadian stocks consistent with provisions of the Pacific Salmon Treaty.	No. Not under Council management authority.	Contributes to ocean fisheries off British Columbia, north into southeast Alaska and present off northern Washington.
Fraser River	Manage Council fisheries that impact Canadian stocks consistent with provisions of the Pacific Salmon Treaty. For 2006, southern U.S. fisheries total exploitation rate of $\leq 10.0\%$.	No. Not under Council management authority.	Contributes to ocean fisheries off British Columbia and Washington, and to Strait of Juan de Fuca and Puget Sound fisheries.
--- PINK (odd-numbered years) ---			
The Fraser River Panel of the PSC manages fisheries for pink salmon in the Fraser River Panel Area (U.S.) north of 48° N latitude to meet Fraser River natural spawning escapement and U.S./Canada allocation requirements. The Council manages pink salmon harvests in that portion of the EEZ, which is not in the Fraser River Panel Area (U.S.) waters consistent with Fraser River Panel management intent. Pink salmon management objectives must address meeting natural spawning escapement objectives, allowing ocean pink harvest within fixed constraints of coho and Chinook harvest ceilings and providing for treaty allocation requirements.			
Puget Sound	900,000 natural spawners or consistent with provisions of the Pacific Salmon Treaty (Fraser River Panel).	No. Minor impacts in Council fisheries and not under Council management authority.	Contributes to ocean fisheries off British Columbia and in Puget Sound. Present south into Oregon. Rare off California.
Fraser River	Manage Council fisheries that impact Canadian stocks consistent with provisions of the Pacific Salmon Treaty (Fraser River Panel).	No. Minor impacts in Council fisheries and not under Council management authority.	Contributes to ocean fisheries off British Columbia; present into southeast Alaska and off Washington and northern Oregon. Rare off California.

TABLE A-2. **Allowable fishery impact rate criteria for OCN coho stock components under the Salmon Fishery Management Plan Amendment 13.** (Page 1 of 1)

Amendment 10 (Page 1 of 7)

		MARINE SURVIVAL INDEX (based on return of jacks per hatchery smolt)				
		Low (<0.0009)	Medium (0.0009 to 0.0034)	High (>0.0034)		
		Allowable Total Fishery Impact Rate				
PARENT SPAWNER STATUS						
High:	Parent spawners achieved Level #2 rebuilding criteria; grandparent spawners achieved Level #1	≤15%	≤30% ^{a/}	≤35% ^{a/}		
Medium:	Parent spawners achieved Level #1 or greater rebuilding criteria	≤15%	≤20% ^{a/}	≤25% ^{a/}		
Low:	Parent spawners less than Level #1 rebuilding criteria	≤15%	≤15%	≤15%		
		≤10-13% ^{b/}				
OCN Coho Spawners by Stock Component						
Rebuilding Criteria		Northern	North-Central	South-Central	Southern	Total
Full Seeding at Low Marine Survival:		21,700	55,000	50,000	5,400	132,100
Level #2 (75% of full seeding):		16,400	41,300	37,500	4,100	99,300
Level #1 (50% of full seeding):		10,900	27,500	25,000	2,700	66,100
38% of Level #1 (19% of full seeding):		4,100	10,500	9,500	1,000	25,100
Stock Component (Boundaries)		Full Seeding of Major Basins at Low Marine Survival (Number of Adult Spawners)				
Northern: (Necanicum River to Neskowin Creek)		Nehalem	Tillamook	Nestucca	Ocean Tribs.	
		17,500	2,000	1,800	400	
North-Central: (Salmon River to Siuslaw River)		Siletz	Yaquina	Alsea	Siuslaw	Ocean Tribs.
		4,300	7,100	15,100	22,800	5,700
South-Central: (Siltcoos River to Sixes River)		Umpqua	Coos	Coquille	Coastal Lakes	
		29,400	7,200	5,400	8,000	
Southern: (Elk River to Winchuck River)		Rogue				
		5,400				

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

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

APPENDIX B

OREGON PRODUCTION INDEX DATA

LIST OF TABLES

	<u>Page</u>
TABLE B-1. Millions of coho smolts released annually into the OPI area by geographic area and rearing agency	75
TABLE B-2. Data set used in predicting 2007 Oregon production index hatchery (OPIH) adult coho with Stratified Random Sampling accounting. Adults and jacks shown in thousands of fish and smolts in millions of fish	76
TABLE B-3. Estimated coho salmon natural spawner abundance (SRS accounting) in Oregon coastal basins for each OCN coho management component	77
TABLE B-4. Data set used in predicting 2007 Oregon coastal natural river (OCNR) coho ocean recruits with Stratified Random Sampling (SRS) accounting	78

TABLE B-1. Millions of coho smolts^{a/} released annually into the OPI area by geographic area and rearing agency. (Page 1 of 1)

Year or Average	Columbia River						Oregon Coast				
	Oregon	Washington			Federal	Total	ODFW ^{b/}	Private		California	Total OPI
		Early	Late	Combined				Yearlings	Total		
1960-1965	5.6	-	-	6.1	4.5	16.2	2.0	-	2.0	0.4	18.6
1966-1970	6.0	10.2	4.9	15.1	6.5	27.6	2.9	0.0	2.9	1.3	31.8
1971-1975	6.8	10.7	6.8	17.5	4.5	28.8	3.9	0.0	3.9	1.2	33.9
1976-1980	8.0	7.3	10.1	17.4	4.7	30.1	3.8	1.4	5.2	0.7	36.0
1981-1985	7.1	4.3	14.4	18.7	3.2	29.0	3.9	3.3	7.2	0.7	36.9
1986-1990	7.3	3.1	15.6	18.7	4.1	30.1	5.2	1.9	7.1	1.4	38.6
1991	10.4	3.7	15.3	19.0	5.9	35.3	5.3	-	5.3	1.5	42.1
1992	11.5	4.3	14.3	18.6	2.7	32.8	6.2	-	6.2	0.7	39.7
1993	11.1	4.3	14.8	19.1	4.1	34.3	4.3	-	4.3	0.8	39.4
1994	9.1	2.5	12.0	14.5	3.0	26.6	5.2	-	5.2	0.6	32.4
1995	7.1	3.4	12.9	16.3	1.7	25.1	3.7	-	3.7	0.7	29.5
1996	8.4	3.4	12.9	16.3	3.4	28.1	3.3	-	3.3	0.3	31.7
1997	6.1	3.2	7.8	11.0	3.9	21.0	2.9	-	2.9	0.7	24.6
1998	6.1	5.8	11.4	17.2	3.6	26.9	1.7	-	1.7	0.6	29.2
1999	7.6	4.0	11.5	15.5	4.8	27.9	1.0	-	1.0	0.7	29.6
2000	7.8	6.2	10.8	17.0	5.9	30.7	0.9	-	0.9	0.6	32.2
2001	7.6	4.2	9.7	13.9	3.7	25.2	0.9	-	0.9	0.6	26.7
2002	7.5	3.3	8.6	11.9	4.3	23.7	1.0	-	1.0	0.6	25.3
2003	8.2	3.3	8.7	12.0	3.1	23.3	0.8	-	0.8	0.5	24.6
2004	6.7	3.0	8.8	11.8	3.6	22.1	0.8	-	0.8	0.6	23.5
2005	6.1	2.5	9.1	11.6	2.8	20.5	0.8	-	0.8	0.6	21.9
2006 ^{c/}	6.1	2.8	9.0	11.7	2.6	20.4	0.8	-	0.8	0.6	21.8

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

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

c/ Preliminary.

TABLE B-2. Data set used in predicting 2007 Oregon production index hatchery (OPIH) adult coho with Stratified Random Sampling accounting. Adults and jacks shown in thousands of fish and smolts in millions of fish. (Page 1 of 1)

Year	Adult OPIH ^{a/}	Columbia River Jacks ^{b/}	Oregon Coast/ California Jacks ^{c/}	Columbia River Smolts ^{d/}	Columbia River Delayed Smolts ^{e/}
1970	2,765.1	148.6	13.6	27.6	0.0
1971	3,365.0	172.8	6.6	24.0	0.0
1972	1,924.8	100.8	2.9	28.3	0.0
1973	1,817.0	85.7	5.7	29.9	1.8
1974	3,071.1	132.1	12.1	28.5	2.9
1975	1,652.8	75.1	1.1	27.8	1.8
1976	3,885.3	146.2	25.3	29.0	2.0
1977	987.5	46.2	7.5	28.9	0.2
1978	1,824.1	99.2	4.0	31.4	0.0
1979	1,476.7	64.1	8.4	32.6	5.0
1980	1,224.0	51.6	6.0	28.9	6.7
1981	1,064.5	40.6	8.1	28.1	5.6
1982	1,266.8	55.0	6.3	32.4	6.8
1983 ^{f/}	599.2	61.0	7.2	27.7	5.0
1984	691.3	28.1	3.6	27.0	5.1
1985	717.5	18.2	7.8	29.2	9.1
1986	2,435.8	64.6	12.9	28.8	12.2
1987	887.2	24.2	8.7	32.9	9.0
1988	1,669.3	72.3	12.9	28.8	7.7
1989	1,720.2	55.0	5.8	29.5	7.2
1990	718.4	37.1	9.6	29.6	8.5
1991	1,874.8	60.8	7.9	30.3	7.1
1992	543.6	19.9	5.7	35.3	6.0
1993	261.7	19.6	7.5	32.8	5.5
1994	202.3	3.9	1.3	34.4	6.0
1995	147.6	9.1	2.7	26.6	3.1
1996	177.8	14.1	3.2	25.2	4.2
1997	197.6	15.8	4.6	28.0	3.4
1998	205.2	6.8	3.0	21.0	2.5
1999	335.1	22.9	5.9	26.8	3.0
2000	671.6	31.2	3.5	27.9	4.1
2001	1,415.3	71.1	15.7	30.6	2.0
2002	658.9	18.9	6.3	25.3	1.4
2003	944.8	42.2	8.2	23.7	0.3
2004	622.6	29.4	6.0	23.2	2.0
2005	389.9	21.2	4.7	22.0	0.8
2006	440.6	20.9	5.4	20.6	0.4
2007	593.6 ^{g/}	34.0	2.5	20.4	0.1

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

b/ Jack CR = Columbia River jack returns corrected for small adults.

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

d/ Sm CR = Columbia River smolt release from the previous year expected to return as adults in the year listed.

e/ Sm D = Columbia River delayed smolt releases from the previous year expected to return as adults in the year listed.

f/ Data not used in subsequent predictions due to El Niño impacts.

g/ Preseason predicted adults.

TABLE B-3. Estimated coho salmon natural spawner abundance (SRS accounting) in Oregon coastal basins for each OCN coho management component. Estimates adjusted for visual observation bias by multiplying observed count by 1.33. (Page 1 of 1)

Component and Basin ^{a/}	Miles	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1992-2006 Avg.
NORTHERN																	
Nehalem	386	1,268	2,265	2,007	1,463	1,057	1,173	1,190	3,713	14,285	22,310	20,903	33,059	21,479	8,756	10,822	9,717
Tillamook	249	261	860	652	289	661	388	271	2,175	1,983	1,883	15,715	14,584	2,290	1,984	8,399	3,493
Nestucca	167	684	401	313	1,811	519	271	169	2,201	1,171	3,940	13,003	8,929	6,152	904	2,403	2,858
Ind. Tribs.	97	209	983	485	319	1,043	314	946	728	474	5,247	2,912	3,068	3,142	3,160	939	1,601
TOTAL	899	2,422	4,508	3,457	3,882	3,280	2,146	2,576	8,842	17,913	33,380	52,515	59,563	33,063	14,768	22,563	17,659
NORTH CENTRAL																	
Siletz	118	2,447	400	1,200	607	763	336	394	706	3,553	1,437	2,252	9,736	6,399	4,554	4,299	2,606
Yaquina	109	633	549	2,448	5,668	5,127	384	365	2,588	647	3,039	23,981	13,254	4,989	4,134	3,860	4,778
Alsea	221	7,029	1,071	1,279	681	1,637	680	213	2,050	2,465	3,339	6,170	8,957	6,005	9,423	1,888	3,526
Siuslaw	514	3,440	4,428	3,205	6,089	7,625	668	1,089	2,724	6,767	11,024	57,129	29,257	8,443	16,886	5,582	10,957
Ind. Tribs.	201	1,821	1,331	1,683	560	2,975	774	1,222	3,691	817	5,636	10,371	7,664	14,558	7,187	516	4,105
TOTAL	1,163	15,370	7,779	9,815	13,605	18,127	2,842	3,283	11,442	14,261	25,239	99,506	66,550	40,393	42,185	16,145	25,769
SOUTH CENTRAL																	
Umpqua	1,083	2,152	9,311	4,485	11,349	9,749	2,233	8,426	6,466	10,395	32,751	33,176	26,615	27,639	34,898	17,747	15,826
Coos	208	16,545	15,284	14,685	10,351	12,128	1,127	3,167	4,945	5,386	43,301	35,688	29,559	24,116	17,827	10,168	16,285
Coquille	331	2,115	7,384	5,035	2,116	16,169	5,720	2,466	3,001	6,130	13,310	8,610	23,909	22,276	9,308	16,903	9,630
Coastal Lakes	-	1,986	10,145	5,841	11,216	13,493	8,603	11,107	12,710	12,747	19,669	22,097	16,091	18,687	13,939	22,225	13,370
TOTAL	1,622	22,798	42,124	30,046	35,032	51,539	17,683	25,166	27,122	34,658	109,031	99,571	96,174	92,718	75,972	67,043	55,112
SOUTH																	
Rogue ^{b/}	-	2,208	361	5,439	3,761	4,622	8,282	2,316	1,438	10,966	12,213	7,800	6,754	24,481	10,293	3,937	6,991
COASTWIDE	-	42,798	54,772	48,757	56,280	77,568	30,953	33,341	48,844	77,798	179,863	259,392	229,041	190,655	143,218	109,688	105,531

a/ The sum of the individual basins may not equal the aggregate totals, due to the use of independent estimates at different geographic scales.

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

TABLE B-4. Data set used in predicting 2007 Oregon coastal natural river (OCNR) coho ocean recruits with Stratified Random Sampling (SRS) accounting. Recruits shown in thousands of fish. (Page 1 of 1)

Year	Recruits to Ocean		JanAnom ^{a/}	UpAnom (t-1) ^{b/}
	SRS	Ln SRS		
1970	183.1	5.21003	0.307	-16.92
1971	416.3	6.03141	-1.293	30.08
1972	185.5	5.22305	-1.393	10.08
1973	235.0	5.45959	-0.493	23.08
1974	196.4	5.28015	-0.693	47.08
1975	208.4	5.33946	-0.493	48.08
1976	451.7	6.11302	-0.893	65.08
1977	161.2	5.08265	-0.193	32.08
1978	111.6	4.71492	1.207	17.08
1979	188.8	5.24069	-1.193	-2.92
1980	108.3	4.68491	0.507	17.08
1981	174.5	5.16192	1.607	-1.92
1982	185.7	5.22413	-0.093	-8.92
1983	96.0	4.56435	1.007	14.08
1984	94.7	4.55071	0.607	-24.92
1985	124.9	4.82751	0.007	-24.92
1986	97.9	4.58395	0.107	-24.92
1987	70.1	4.24992	0.507	-39.92
1988	124.4	4.82350	-0.093	-21.92
1989	103.8	4.64247	-0.493	-43.92
1990	60.4	4.10099	-0.007	-21.92
1991	68.8	4.23120	-0.893	-37.92
1992	86.9	4.46476	0.107	43.08
1993	81.1	4.39568	-0.593	7.08
1994	40.6	3.70377	1.107	-50.92
1995	47.6	3.86283	0.707	-3.92
1996	65.5	4.18205	1.807	-1.92
1997	16.3	2.79117	0.907	9.08
1998	21.7	3.07731	2.407	-24.92
1999	37.8	3.63231	-0.393	18.08
2000	58.9	4.07584	0.107	84.08
2001	161.4	5.08389	0.707	9.08
2002	266.5	5.58537	0.207	65.08
2003	249.4	5.51906	1.107	54.08
2004	175.2	5.16593	0.407	53.08
2005	134.4	4.90082	0.317	3.08
2006	116.4	4.75703	1.607	-34.92
2007	236.9 ^{c/}	4.75072	-1.223	16.08

a/ JanAnom = The annual deviation from mean (1969-1996) January sea surface temperature (degrees Centigrade) at Charleston, Oregon.

b/ UpAnom = Annual deviation from mean (1946-1996) April-June Bakun upwelling index at 42° N latitude.

c/ Preseason adult prediction.

APPENDIX C
SALMON HARVEST ALLOCATION SCHEDULES

TABLE OF CONTENTS

	<u>Page</u>
HARVEST ALLOCATION -- SECTION 5.3 OF THE PACIFIC COAST SALMON PLAN.....	81
5.3 ALLOCATION.....	81
5.3.1 Commercial (Non-Tribal) and Recreational Fisheries North of Cape Falcon	81
5.3.1.1 Goal, Objectives, and Priorities.....	81
5.3.1.2 Allocation Schedule Between Gear Types	82
5.3.1.3 Recreational Subarea Allocations	83
5.3.2 Commercial and Recreational Fisheries South of Cape Falcon.....	85
SELECTIVE FISHERY GUIDELINES -- SECTION 6.5 OF THE PACIFIC COAST SALMON	
PLAN	88
6.5 SEASONS AND QUOTAS.....	88
6.5.3 Species-Specific and Other Selective Fisheries	88
6.5.3.1 Guidelines.....	88
6.5.3.2 Selective Fisheries Which May Change Allocation Percentages North	
of Cape Falcon	88

HARVEST ALLOCATION -- SECTION 5.3 OF THE PACIFIC COAST SALMON PLAN

5.3 ALLOCATION

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

Magnuson-Stevens Act, National Standard 4

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

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

5.3.1.1 Goal, Objectives, and Priorities

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

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

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

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

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

- Provide coho to the recreational fishery for a late June through early September all-species season. Provide Chinook to allow (1) access to coho and, if possible, (2) a minimal Chinook-only fishery prior to the all-species season. Adjust days per week and/or institute area restrictions to stabilize season duration.
- Provide Chinook to the troll fishery for a May and early June Chinook season and provide coho to (1) meet coho hooking mortality in June where needed and (2) access a pink salmon fishery in odd years. Attempt to ensure that part of the Chinook season will occur after June 1.

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

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

5.3.1.2 Allocation Schedule Between Gear Types

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

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

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

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

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

1. Preseason species trades (Chinook and coho) which vary from the allocation schedule may be made by the Council based upon the recommendation of the pertinent recreational and commercial SAS representatives north of Cape Falcon. The Council will compare the socioeconomic impacts of any such recommendation to those of the standard allocation schedule before adopting the allocation which best meets FMP management objectives.

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

5.3.1.3 Recreational Subarea Allocations

Coho

The north of Cape Falcon preseason recreational TAC of coho will be distributed to provide 50% to the area north of Leadbetter Point and 50% to the area south of Leadbetter Point. The distribution of the

allocation north of Leadbetter point will vary, depending on the existence and magnitude of an inside fishery in Area 4B which is served by Neah Bay.

In years with no Area 4B fishery, the distribution of coho north of Leadbetter Point (50% of the total recreational TAC) will be divided to provide 74% to the area between Leadbetter Point and the Queets River (Westport), 5.2% to the area between Queets River and Cape Flattery (La Push), and 20.8% to the area north of the Queets River (Neah Bay). In years when there is an Area 4B (Neah Bay) fishery under state management, the allocation percentages north of Leadbetter Point will be modified to maintain more equitable fishing opportunity among the ports by decreasing the ocean harvest share for Neah Bay. This will be accomplished by adding 25% of the numerical value of the Area 4B fishery to the recreational TAC north of Leadbetter Point prior to calculating the shares for Westport and La Push. The increase to Westport and La Push will be subtracted from the Neah Bay ocean share to maintain the same total harvest allocation north of Leadbetter Point. Table 5-2 displays the resulting percentage allocation of the total recreational coho catch north of Cape Falcon among the four recreational port areas (each port area allocation will be rounded to the nearest hundred fish, with the largest quotas rounded downward if necessary to sum to the TAC).

TABLE 5-2. Percentage allocation of total allowable coho harvest among the four recreational port areas north of Cape Falcon.

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

Example distributions of the recreational coho TAC north of Leadbetter Point would be as follows:

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

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

Chinook

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

Inseason management actions may be taken by NMFS Regional Director to assure that the primary objective of the Chinook harvest guidelines for each of the three recreational subareas north of Cape Falcon are met. Such actions might include: closure from 0 to 3, or 0 to 6, or 3 to 200, or 5 to 200 nautical miles from shore; closure from a point extending due west from Tatoosh Island for 5 miles, then south to a point due west of Umatilla Reef Buoy, then due east to shore; closure from North Head at the

Columbia River mouth north to Leadbetter Point; change species which may be landed; or other actions as prescribed in the annual regulations.

5.3.2 Commercial and Recreational Fisheries South of Cape Falcon

The allocation of allowable ocean harvest of coho salmon south of Cape Falcon has been developed to provide a more stable recreational season and increased economic benefits of the ocean salmon fisheries at varying stock abundance levels. When coupled with various recreational harvest reduction measures or the timely transfer of unused recreational allocation to the commercial fishery, the allocation schedule is designed to help secure recreational seasons extending at least from Memorial Day through Labor Day, assist in maintaining commercial markets even at relatively low stock sizes, and fully utilize available harvest. Total ocean catch of coho south of Cape Falcon will be treated as a quota to be allocated between troll and recreational fisheries as provided in Table 5-3.

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

TABLE 5-3. Allocation of allowable ocean harvest of coho salmon (thousands of fish) south of Cape Falcon.^{a/}

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

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

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

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

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

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

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

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

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

1. abundance of contributing stocks
2. allocation considerations of concern to the Council
3. relative abundance in the fishery between Chinook and coho
4. escapement goals
5. maximizing harvest potential

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

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

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

In addition,

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

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

SELECTIVE FISHERY GUIDELINES – SECTION 6.5 OF THE PACIFIC COAST SALMON PLAN

6.5 SEASONS AND QUOTAS

* * * * *

6.5.3 Species-Specific and Other Selective Fisheries

6.5.3.1 Guidelines

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

Harvestable fish of the target species are available.

Harvest impacts on incidental species will not exceed allowable levels determined in the management plan.

Proven, documented, selective gear exists (if not, only an experimental fishery should be considered).

Significant wastage of incidental species will not occur or a written economic analysis demonstrates the landed value of the target species exceeds the potential landed value of the wasted species.

The species specific or ratio fishery will occur in an acceptable time and area where wastage can be minimized and target stocks are maximally available.

Implementation of selective fisheries for marked or hatchery fish must be in accordance with U.S. v. Washington stipulation and order concerning co-management and mass marking (Case No. 9213, Subproceeding No. 96-3) and any subsequent stipulations or orders of the U.S. District Court, and consistent with international objectives under the Pacific Salmon Treaty (e.g., to ensure the integrity of the coded-wire tag program).

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

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

Selective fisheries will first be considered during the months of August and/or September. However, the Council may consider selective fisheries at other times, depending on year to year circumstances identified in the preceding paragraph.

The total impacts within each port area or gear group on the critical natural stocks of management concern are not greater than those under the original allocation without the selective fisheries. Other allocation objectives (i.e., treaty Indian, or ocean and inside allocations) are satisfied during negotiations in the North of Cape Falcon Forum.

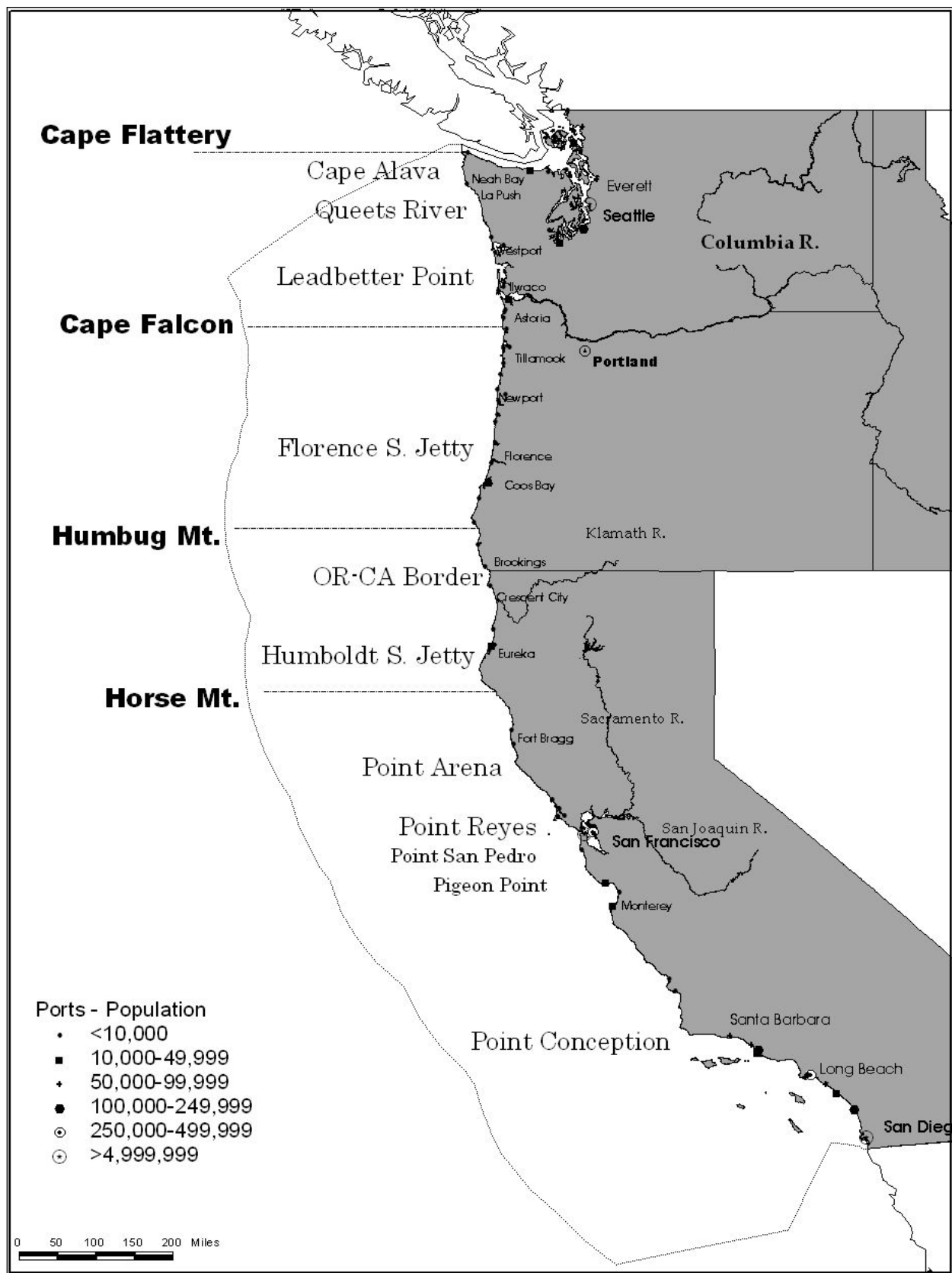
The selective fishery is assessed against the guidelines in Section 6.5.3.1.

Selective fishery proposals need to be made in a timely manner in order to allow sufficient time for analysis and public comment on the proposal before the Council finalizes its fishery recommendations.

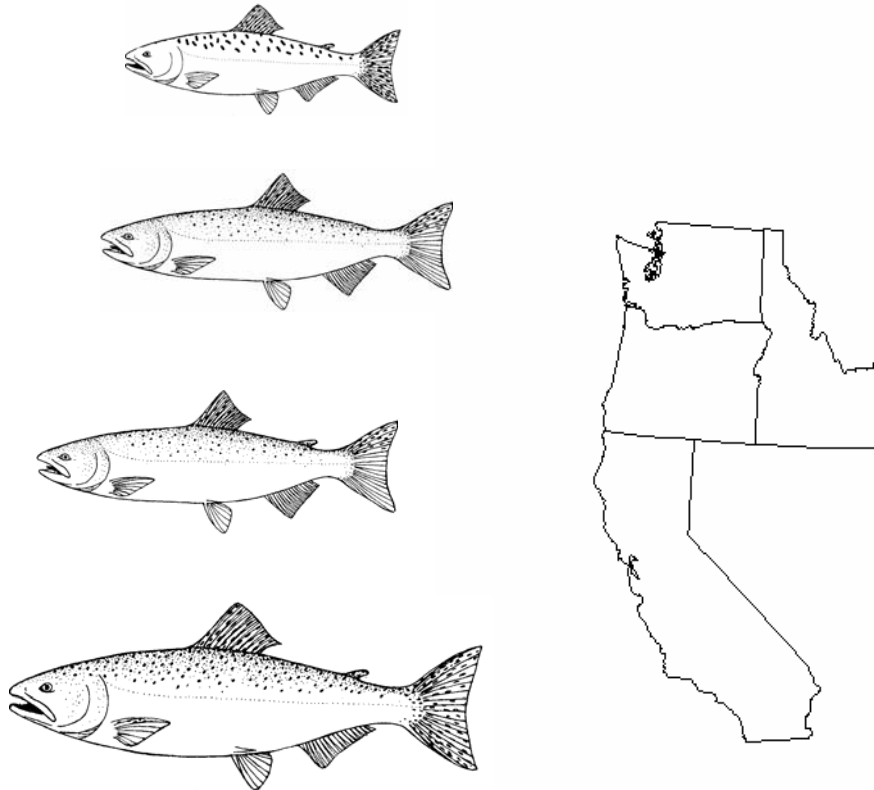
If the Council chooses to deviate from the specified port and/or gear allocations, the process for establishing a selective fishery would be as follows:

Allocate the TAC among the gear groups and port areas according to the basic FMP allocation process described in Section 5.3.1 without the selective fishery.

Each gear group or port area may utilize the critical natural stock impacts allocated to its portion of the TAC to access additional harvestable, marked fish, over and above the harvest share established in step one, within the limits of the management constraints listed in the preceding paragraph.



REVIEW OF 2006 OCEAN SALMON FISHERIES



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

www.pcouncil.org

FEBRUARY 2007

ACKNOWLEDGMENTS

SALMON TECHNICAL TEAM

MR. DELL SIMMONS, CHAIR

National Marine Fisheries Service, Lacey, Washington

MR. ALLEN GROVER, VICE CHAIR

California Department of Fish and Game, Santa Rosa, California

MR. CRAIG FOSTER

Oregon Department of Fish and Wildlife, Clackamas, Oregon

DR. ROBERT KOPE

National Marine Fisheries Service, Seattle, Washington

MR. DOUG MILWARD

Washington Department of Fish and Wildlife, Olympia, Washington

MR. MICHAEL MOHR

National Marine Fisheries Service, Santa Cruz, California

MR. KEITH LUTZ

Northwest Indian Fisheries Commission, Olympia, Washington

MR. HENRY YUEN

U.S. Fish and Wildlife Service

PACIFIC FISHERY MANAGEMENT COUNCIL STAFF

MR. CHUCK TRACY

MR. JAMES SEGER

MS. RENEE DORVAL

MS. CARRIE COMPTON

MS. KIM MERYDITH

MS. SARA STAUFFER

The Salmon Technical Team and the Council staff express their thanks for the expert assistance provided by Ms. Wendy Beeghley and Ms. Cindy LeFleur, Washington Department of Fish and Wildlife; Dr. Harry Upton, Oregon Department of Fish and Wildlife; Ms. Melodie Palmer-Zwahlen, California Department of Fish and Game; Ms. Sandy Zeiner, Northwest Indian Fisheries Commission; and numerous other agency and tribal personnel in completing this report.

This document may be cited in the following manner:

Pacific Fishery Management Council. 2007. *Review of 2006 Ocean Salmon Fisheries*. (Document prepared for the Council and its advisory entities.) Pacific Fishery Management Council, 7700 NE Ambassador Place, Suite 101, Portland, Oregon 97220-1384.



A report of the Pacific Fishery Management Council pursuant to National Oceanic and Atmospheric Administration Award Number NA05NMF4410008.

TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES	iv
LIST OF FIGURES	vi
LIST OF ACRONYMS AND ABBREVIATIONS	vii
INTRODUCTION	1
COMMON TABLE CONVENTIONS	2
CHAPTER I	3
COASTWIDE OCEAN FISHING SUMMARY	3
COUNCIL-AREA REGULATIONS AND LANDINGS	3
REGULATORY OBJECTIVES BY MANAGEMENT AREA	3
Horse Mountain to U.S./Mexico Border	3
Chinook Fisheries	3
Coho Fisheries	4
Humbug Mountain to Horse Mountain	5
Chinook Fisheries	5
Coho Fisheries	5
Cape Falcon to Humbug Mountain	5
Chinook Fisheries	5
Coho Fisheries	6
U.S./Canada Border to Cape Falcon	7
Chinook Fisheries	7
Coho Fisheries	7
SELECTIVE FISHERIES AND SALMON BYCATCH	8
Selective Chinook Fisheries	8
Selective Coho Fisheries	8
PACIFIC SALMON COMMISSION	8
Chinook Fisheries	8
Coho Fisheries	10
CHAPTER II	31
CHINOOK SALMON MANAGEMENT	31
CENTRAL VALLEY CHINOOK STOCKS	31
Management Objectives	31
Inside Harvest	31
Escapement and Management Performance	32
NORTHERN CALIFORNIA COAST CHINOOK STOCKS	33
Management Objectives	33
Inside Harvest	33
Escapement and Management Performance	33
OREGON COAST CHINOOK STOCKS	34
Management Objectives	34
Inside Harvest	35
Escapement and Management Performance	35

TABLE OF CONTENTS (continued)

	<u>Page</u>
COLUMBIA RIVER BASIN CHINOOK STOCKS.....	36
Management Objectives.....	36
Inside Harvest	36
Escapement and Management Performance	37
WASHINGTON COASTAL CHINOOK STOCKS	37
Management Objectives.....	37
PUGET SOUND CHINOOK STOCKS	42
Management Objectives.....	42
Inside Harvest	42
Escapement and Management Performance	43
COASTWIDE GOAL ASSESSMENT SUMMARY	43
 CHAPTER III	 55
COHO SALMON MANAGEMENT.....	55
OREGON PRODUCTION INDEX AREA COHO STOCKS	55
Management Objectives.....	55
WASHINGTON COASTAL COHO STOCKS	57
Management Objectives.....	57
PUGET SOUND COHO STOCKS	61
Management Objectives.....	61
Inside Harvest	61
Escapement and Management Performance	62
COASTWIDE GOAL ASSESSMENT SUMMARY	62
 CHAPTER IV	 71
SOCIOECONOMIC ASSESSMENT OF THE 2006 OCEAN SALMON FISHERIES.....	71
ALLOCATION OF THE SALMON RESOURCE	71
COMMERCIAL SALMON FISHERIES.....	72
West Coast Non-Indian Commercial Ocean Fishery	72
West Coast Treaty Indian Commercial Ocean Fishery	74
Columbia River Commercial Fishery	74
Other Inside Commercial Fisheries.....	74
CEREMONIAL AND SUBSISTENCE SALMON FISHERIES.....	75
RECREATIONAL SALMON FISHERIES	75
Ocean	75
Buoy 10 and Area 4B Add-On Fisheries	76
SALMON FISHERY INCOME IMPACTS AND COMMUNITY DEPENDENCE	77
West Coast Ocean Fishery Income Impacts.....	77
Selected Inside Fisheries	78
 APPENDIX A	
HISTORICAL RECORD OF OCEAN SALMON FISHERY EFFORT AND LANDINGS	109
 APPENDIX B	
HISTORICAL RECORD OF ESCAPEMENTS TO INLAND FISHERIES AND SPAWNING AREAS	 189

TABLE OF CONTENTS (continued)

	<u>Page</u>
APPENDIX C	
HISTORICAL RECORD OF OCEAN SALMON FISHERY REGULATIONS AND A CHRONOLOGY OF 2006 EVENTS	247
APPENDIX D	
HISTORICAL ECONOMIC DATA	281

LIST OF TABLES

	<u>Page</u>
TABLE I-1. Summary of actual ocean non-Indian commercial troll salmon fishing regulations for 2006.....	12
TABLE I-2. Summary of actual treaty Indian commercial ocean and Area 4B troll salmon seasons for 2006.....	16
TABLE I-3. Summary of actual ocean recreational salmon fishing regulations for 2006.....	17
TABLE I-4. Council area commercial and recreational ocean salmon fishing effort and landings by state.....	20
TABLE I-5. Council area commercial and recreational ocean salmon fishing effort and landings by management area.....	24
TABLE I-6. Coho and Chinook harvest quotas and guidelines for 2006 Council managed fisheries compared with actual harvest by management area and fishery	25
TABLE I-7. Estimated incidental mortality of Chinook and coho in 2006 ocean salmon fisheries	26
TABLE I-8. Summary of 2006 recreational and commercial fisheries selective for marked hatchery coho.....	27
TABLE I-9. Washington Area 5 and 6 preliminary recreational salmon catch estimates during the Chinook mark selective fishery July 1 - August 21, 2006.....	28
TABLE I-10. Chinook catch by Southeast Alaska marine fisheries in thousands of fish.....	28
TABLE I-11. Chinook and coho catches by Canadian marine fisheries in thousands of fish.....	29
TABLE I-12. Summary of 2006 West Coast Vancouver Island salmon fisheries	30
TABLE I-14. Summary of 2006 coho catch and release in B.C.recreational fisheries.....	30
TABLE II-1. Sacramento River natural and hatchery adult fall Chinook escapements in numbers of fish.	44
TABLE II-2. Klamath River adult inriver fall Chinook run size, spawning escapement, recreational catch, Indian gillnet harvest, and non-landed fishing mortalities in numbers of fish and percent of the total inriver run size.	45
TABLE II-3. Oregon coastal spring and fall Chinook hatchery return and harvest in estuary and freshwater fisheries.....	46
TABLE II-4. Spawner indices for naturally produced Oregon coastal fall Chinook and south migrating/localized spring Chinook	47
Table II-5. Performance of Chinook salmon stocks in relation to 2006 conservation objectives.....	48
TABLE III-1. Estimated returns to Oregon coastal streams and lakes in thousands of adult coho (SRS spawner accounting)	63
TABLE III-2. Estimated weekly effort (in angler trips) and catches of Chinook and coho in the 2006 Buoy 10 recreational fisheries.....	64
TABLE III-3. Oregon production index (OPI) area coho harvest impacts, spawning, abundance, and exploitation rate estimates by SRS accounting in thousands of fish.....	65
TABLE III-4. OCN adult coho salmon conservation objective, fishery impacts, and spawner escapement, based on stratified random survey (SRS) methodology	66
TABLE III-5. Performance of coho salmon stocks in relation to 2006 conservation objectives (preliminary data)	67
TABLE IV-1. Average monthly exvessel troll salmon price in dollars per dressed pound for California, Oregon, and Washington in 2006	79
TABLE IV-2. Troll Chinook and coho landed in California, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (2006) dollars	80
TABLE IV-3. Troll Chinook and coho landed in Oregon, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (2006) dollars.....	81
TABLE IV-4. Non-Indian troll Chinook and coho landed in Washington, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (2006) dollars	82

LIST OF TABLES

	<u>Page</u>
TABLE IV-5. Non-Indian troll pink salmon landed in Oregon and Washington, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (2006) dollars.....	83
TABLE IV-6. Pounds of salmon landed by the commercial troll ocean fishery for major California port areas.....	84
TABLE IV-7. Pounds of salmon landed by the commercial troll ocean fishery for major Oregon port areas.....	85
TABLE IV-8. Pounds of salmon landed by the non-Indian commercial troll ocean fishery for major Washington port areas	86
TABLE IV-9. Exvessel values (expressed in 2006 dollars) of inriver commercial harvest of Columbia River salmon	87
TABLE IV-10. California, Oregon, and Washington ocean recreational salmon effort in thousands of angler trips and catch in thousands of fish by boat type.....	88
TABLE IV-11. Estimates of California recreational ocean salmon angler trips (thousands) by port area and boat type.....	90
TABLE IV-12. Estimates of Oregon recreational ocean salmon angler trips (thousands) by port area and boat type.....	91
TABLE IV-13. Estimates of Washington recreational ocean salmon angler trips (thousands) by port area and boat type.....	92
TABLE IV-14. Oregon and Washington recreational salmon, bottomfish, and sturgeon angler trips (thousands) by ocean port area and boat type for the area north of Cape Falcon	93
TABLE IV-15. Buoy 10 and Area 4B add-on recreational salmon angler trips and catch by boat type ...	96
TABLE IV-16. Estimates of California coastal community and state personal income impacts in thousands of real (2006) dollars of the troll and recreational ocean salmon fishery for major port areas	98
TABLE IV-17. Estimates of Oregon coastal community and state personal income impacts in thousands of real (2006) dollars of the troll and recreational ocean salmon fishery for major port areas.....	99
TABLE IV-18. Estimates of Washington coastal community and state personal income impacts in thousands of real (2006) dollars of the troll and recreational ocean salmon fishery for major port areas	100
TABLE IV-19. Local personal income impacts in real (2006) dollars of the inriver commercial salmon fishery on Oregon and Washington Columbia River communities.....	101
TABLE IV-20. Local personal income impacts in real (2006) dollars of the Buoy 10 recreational fishery in Oregon and Washington and the Area 4B add-on fishery in Washington.....	102

LIST OF FIGURES

	<u>Page</u>
Figure II-1. Sacramento River adult fall Chinook spawning escapements, 1970-2006	50
Figure II-2. Klamath River adult fall Chinook returns and spawning escapements, 1978-2006.	51
Figure II-3. Spawner indices for naturally produced Oregon coastal fall Chinook.	52
Figure II-4. Escapement indices for naturally produced Oregon coastal south/local migrating spring Chinook, 1942-2006.	53
Figure II-5. Columbia River mouth adult returns of the five major fall Chinook stock groups, 1976-2006	54
Figure III-1. Oregon Production Index (OPI) area coho abundance estimates by stratified random surveys (SRS) accounting methods (1970-2006).	69
Figure III-2. Oregon coastal natural (OCN) adult coho spawners per habitat mile by coastal region based on SRS accounting methods, 1990-2006.....	70
Figure IV-1. West Coast ocean non-Indian commercial Chinook and coho harvest.....	103
Figure IV-2. West Coast ocean recreational Chinook and coho harvest	104
Figure IV-3. West Coast non-Indian ocean commercial salmon annual exvessel prices (2006 dollars).....	105
Figure IV-4. Exvessel value of West Coast non-Indian ocean commercial Chinook and coho landings by state of landing (2006 dollars).....	106
Figure IV-5. Total recreational ocean salmon trips for California, Oregon, and Washington, with proportion of charter trips shown above each bar.....	107

LIST OF ACRONYMS AND ABBREVIATIONS

AABM	aggregate abundance-based management
ADFG	Alaska Department of Fish and Game
AEQ	adult equivalents
CCC	central California coast (coho)
CDFG	California Department of Fish and Game
Council	Pacific Fishery Management Council
CVI	Central Valley Index
CWT	coded-wire tag
EEZ	exclusive economic zone (from 3-200 miles from shore)
ESA	Endangered Species Act
ESU	evolutionarily significant unit
FEAM	Fishery Economic Assessment Model
FMP	fishery management plan
FRAM	Fisheries Regulatory Assessment Model
ISBM	individual stock-based management
KMZ	Klamath management zone (ocean zone between Humbug Mountain and Horse Mountain where management emphasis is on KRFC)
KRFC	KRFC
LCR	Lower Columbia River (natural coho)
LRH	lower Columbia River hatchery (tule fall Chinook returning to hatcheries below Bonneville Dam)
LRW	lower Columbia River wild (bright fall Chinook spawning naturally in tributaries below Bonneville Dam)
MCB	mid-Columbia River brights (bright hatchery fall Chinook released below McNary Dam)
MOC	mid-Oregon coast
MSY	maximum sustainable yield
NA	not available
NMFS	National Marine Fisheries Service
NOC	north Oregon coast
ODFW	Oregon Department of Fish and Wildlife
OCN	Oregon coastal natural (coho)
OPI	Oregon Production Index (coho salmon stock index south of Leadbetter Point)
PacFIN	Pacific Coast Fisheries Information Network
PSC	Pacific Salmon Commission
PST	Pacific Salmon Treaty
RER	rebuilding exploitation rate
RK	Rogue/Klamath (coho)
SCH	Spring Creek Hatchery (tule fall Chinook returning to Spring Creek Hatchery)
SEAK	Southeast Alaska
SONCC	southern Oregon/northern California coastal (coho)
SRFI	Snake River Fall Index
SRS	Stratified Random Sampling
STEP	Salmon Trout Enhancement Program
STT	Salmon Technical Team (formerly the Salmon Plan Development Team)
URB	upper river brights (naturally spawning fall Chinook normally migrating past McNary Dam)
USFWS	U.S. Fish and Wildlife Service
WCVI	West Coast Vancouver Island
WDFW	Washington Department of Fish and Wildlife

INTRODUCTION

The Salmon Technical Team (STT) and staff of the Pacific Fishery Management Council (Council) have prepared this postseason review of the 2006 ocean salmon fisheries off the coasts of Washington, Oregon, and California to help assess Council salmon management and to provide a detailed description of the affected environment for inclusion in a National Environmental Policy Act (NEPA) analysis of the 2007 management measures, if necessary. The STT and Council staff will provide three additional reports prior to the beginning of the ocean salmon season to help guide the Council's selection of annual fishery management measures. The reports will provide estimates of stock abundance and analyze the impacts of the Council's proposed and adopted management recommendations and will serve as analyses for alternatives in the NEPA analysis.

West Coast fisheries in Council-managed waters (ocean fisheries between the U.S./Canada border and the U.S./Mexico border from 3 to 200 nautical miles offshore) are directed toward and harvest primarily Chinook or king salmon, *Oncorhynchus tshawytscha*, and coho or silver salmon, *Oncorhynchus kisutch*. Small numbers of pink salmon, *Oncorhynchus gorbuscha*, also are harvested, especially in odd numbered years. There are no directed fisheries for other Pacific salmon species, and they occur rarely in Council-managed harvests.

The Council's annual review of ocean fisheries provides a summary of important biological and socioeconomic data from which to assess the impacts of past management actions, determine how well management objectives are being met, and improve regulations for the future. The Council will formally review this report at its March meeting prior to the development of management options for the approaching fishing season.

Chapter I summarizes ocean salmon fishery regulations and landings within the Council management area and management actions and landings under the jurisdiction of the Pacific Salmon Commission (PSC). Appendix A tables detail historical harvest data by state and by management area.

For Chinook and coho salmon, respectively, Chapters II and III assess, where possible, the achievement of pertinent management objectives by salmon stock (including those listed under the Endangered Species Act [ESA]), outline regulations to achieve the objectives, and summarize inside fisheries catch and spawner escapement data. Detailed information for other salmon species is not included, since Council fisheries have very minor impacts on pink salmon escapements and no measurable impacts on sockeye or chum salmon or steelhead trout.

Socioeconomic impacts of the fisheries are discussed in Chapter IV. Appendices B through D provide historical data on inland landings and escapements, ocean regulations, and fishery-related socioeconomics.

The annual review of ocean salmon fisheries is drafted as early as landings and escapement information is available. The most recent entries are noted as preliminary and later updated when the data become final. If updated information or error corrections that could substantially affect the development of management measures for the upcoming season are available, an errata sheet will be included as an appendix in one of the subsequent STT preseason planning documents.

COMMON TABLE CONVENTIONS

All 2006 data provided in this report are preliminary. The following conventions apply to all tables in this report:

1. Due to rounding, the total values may not equal the sum of individual values.
2. A single dash indicates there are no data appropriate for a particular table cell, or in the case of fishing effort or landings, that the season was closed.
3. A double dash indicates no records are available, for example, a fishery may not have been sampled due to low and sporadic effort.
4. "NA" indicates data are not available at the time of publication, but are likely to be available at a future date.

CHAPTER I

COASTWIDE OCEAN FISHING SUMMARY

Chapter I contains or references tables summarizing the current and historical ocean salmon fishing regulations and harvest data. In addition, this chapter provides a brief summary of the Council's regulatory objectives, by management area, for the most recent fishing year, reports on the results of the Council's selective fisheries for marked hatchery coho, and bycatch mortality of wild salmon. The final section in the chapter provides a brief summary of management information and harvests under the authority of the PSC.

COUNCIL-AREA REGULATIONS AND LANDINGS

Summaries of the 2006 regulations for non-Indian commercial troll, treaty Indian commercial troll, and recreational ocean salmon fishing in both the exclusive economic zone (EEZ) (3 to 200 nautical miles from shore) and state territorial waters (0 to 3 nautical miles from shore) are provided in Tables I-1, I-2, and I-3, respectively. Historical summaries of regulations for each of the three West Coast states and for treaty Indian troll fisheries are provided in Appendix C, Tables C-1 through C-7. Table C-9 provides a summary of inseason regulatory actions and events during the 2006 season.

Catch, quota, and fishing effort statistics are presented in the following series of tables:

Table I-4: Council area commercial and recreational ocean salmon fishing effort and landings of Chinook, coho, and pink salmon by state of landing.

Table I-5: Council area commercial and recreational ocean salmon fishing effort and landings of Chinook, coho, and pink salmon by management area.

Table I-6: The 2006 coho and Chinook quotas for each fishery compared with actual harvests.

Appendix A Tables A-1 through A-19: Historical monthly ocean salmon harvest data by state and port area.

Tables A-20 through A-28: Historical monthly ocean salmon harvest data by management area.

Appendix B Tables B-1 through B-43: Historical inside harvest and escapement data.

Appendix C Table C-8: Historical record of annual preseason catch quotas for the area north of Cape Falcon, as well as the stocks that were critical for ocean salmon management actions.

REGULATORY OBJECTIVES BY MANAGEMENT AREA

The sections below provide a brief outline of the regulatory objectives that shaped the 2006 ocean salmon fisheries by management area and species. Further details of the conservation and allocation objectives by salmon stock and an assessment of performance are provided in Chapters II and III for Chinook and coho, respectively.

Horse Mountain to U.S./Mexico Border

Chinook Fisheries

Chinook fisheries management in this area is guided by conservation objectives for Klamath River fall Chinook (KRFC) and Sacramento River fall Chinook, Oregon Coastal Natural (OCN) coho, and by ESA

consultation standards for California Coastal Chinook, Sacramento River winter Chinook, and Southern Oregon/Northern California Coastal (SONCC) coho. The Council structured Chinook salmon fisheries south of Horse Mountain (near Shelter Cove, California) to meet the following objectives (in order of most to least constraining):

1. A Klamath basin natural area spawning escapement of no less than 21,000 fall Chinook adults, along with the allocation objective of 50% of the allowable adult harvest for Federally-recognized tribal subsistence and commercial fisheries. This objective resulted from NMFS advice to the Council in response to the projected shortfall in the spawning escapement floor requirement for KRFC (KRFC), even with complete closure of all salmon fisheries impacting KRFC.
2. The Sacramento River winter Chinook ESA consultation standard requiring that the recreational season between Point Arena and Pigeon Point shall open no earlier than the first Saturday in April and close no later than the second Sunday in November; the recreational season between Pigeon Point and the U.S./Mexico Border shall open no earlier than the first Saturday in April and close no later than the first Sunday in October. The minimum size limit shall be at least 20 inches total length. Commercial seasons between Point Arena and the U.S./Mexico border shall open no earlier than May 1 and close no later than September 30, with the exception of an October season conducted Monday through Friday between Point Reyes and Point San Pedro, which shall end no later than October 15. The minimum size limit shall be at least 26 inches total length.
3. The California Coastal Chinook ESA consultation standard requirement for an age-4 ocean harvest rate on KRFC of no greater than 16.0%.
4. The OCN coho maximum allowable exploitation rate (marine and freshwater combined) of 15.0% recommended in the 2006 NMFS ESA guidance letter, which was based on the exploitation rate matrix recommended by the OCN coho work group that was adopted by the Council as expert biological advice in November 2000.
5. The SONCC coho ESA consultation standard requirement of no greater than a 13.0% marine exploitation rate on Rogue/Klamath (RK) hatchery coho.
6. The Sacramento River fall Chinook escapement goal of 122,000 to 180,000 hatchery and natural adults.

Objectives 1 and 2 listed above were the constraining factors for 2006 Chinook fisheries management in this area. Under the adopted regulations, total harvest south of Horse Mountain was projected to be 227,900 Chinook, the coastwide ocean harvest rate on age-4 KRFC was projected to be 11.5% (for fisheries from September 1, 2005 through August 31, 2006), and 21,100 KRFC adults were projected to spawn in natural areas.

Coho Fisheries

Coho fisheries management in this area was guided by the ESA consultation standard for Central California Coast (CCC) coho, which prohibits retention of coho in this area. No projection of non-retention fishery impacts on CCC coho was available; projected non-retention exploitation rates on OCN and Rogue/Klamath (RK) coho in this area were 2.0% and 3.3%, respectively. Retention of coho has been prohibited south of Horse Mountain since 1996. Coho are managed as a unit south of Cape Falcon, and details of the Council's management objectives shaping the 2006 fisheries are presented more fully in the Cape Falcon to Humbug Mountain section.

Humbug Mountain to Horse Mountain

The area between Humbug Mountain (near Port Orford, Oregon) and Horse Mountain (near Shelter Cove, California) is referred to as the Klamath Management Zone (KMZ). Fishery management in this area was guided by conservation and allocation objectives for KRFC, and by NMFS ESA consultation standards for California Coastal Chinook, OCN coho, SONCC coho, and CCC coho.

Chinook Fisheries

The Council structured Chinook salmon fisheries in the KMZ to meet the following objectives (in order of most to least constraining):

1. A Klamath basin natural area spawning escapement of no less than 21,000 fall Chinook adults, along with the allocation objective of 50% of the allowable adult harvest for federally-recognized tribal subsistence and commercial fisheries. This objective resulted from NMFS advice to the Council in response to the projected shortfall in the spawning escapement floor requirement for KRFC, even with complete closure of all salmon fisheries impacting KRFC.
2. The California Coastal Chinook ESA consultation standard requirement for an age-4 ocean harvest rate on KRFC of no greater than 16.0%.
3. The OCN coho maximum allowable exploitation rate (marine and freshwater combined) of 15.0% recommended in the 2006 NMFS ESA guidance letter, which was based on the exploitation rate matrix recommended by the OCN coho work group that was adopted by the Council as expert biological advice in November 2000.
4. The SONCC coho ESA consultation standard requirement of no greater than a 13.0% marine exploitation rate on Rogue/Klamath (RK) hatchery coho.

Objective 1 listed above was the constraining factor on 2006 Chinook fisheries management in the KMZ. Under the adopted regulations, total harvest in the KMZ was projected to be 7,300 Chinook, the coastwide ocean harvest rate on age-4 KRFC was projected to be 11.5% (for fisheries from September 1, 2005 through August 31, 2006), and 21,100 KRFC adults were projected to spawn in natural areas.

Coho Fisheries

Coho fisheries management in this area was guided by the ESA consultation standards for OCN, SONCC, and CCC coho, which prohibit retention of coho south of the Oregon/California border. No projection of non-retention fishery impacts on CCC coho was available; projected non-retention exploitation rates on OCN and RK coho in this area were 0.5% and 1.1%, respectively. The 2006 Oregon recreational coho selective fishery was conducted from Cape Falcon to the Oregon/California border with an overall quota of 20,000 fish. Coho are managed as a unit south of Cape Falcon, and details of the Council's management objectives shaping the 2006 fisheries are presented more fully in the Cape Falcon to Humbug Mountain section.

Cape Falcon to Humbug Mountain

Chinook Fisheries

The Council structured Chinook salmon fisheries between Cape Falcon (near Manzanita, Oregon) and Humbug Mountain (near Port Orford, Oregon) to meet the following objectives (in order of most to least constraining):

4. A Klamath basin natural area spawning escapement of no less than 21,000 fall Chinook adults, along with the allocation objective of 50% of the allowable adult harvest for federally-recognized tribal subsistence and commercial fisheries. This objective resulted from NMFS advice to the Council in response to the projected shortfall in the spawning escapement floor requirement for KRFC, even with complete closure of all salmon fisheries impacting KRFC.
5. The California Coastal Chinook ESA consultation standard requirement for an age-4 ocean harvest rate on KRFC of no greater than 16.0%.
6. Impact limits on ESA-listed LCR natural tule (Coweeman) fall Chinook of no greater than 49.0%.

Objective 1 listed above was the constraining factor for Chinook fisheries management in this area. Under the adopted regulations, the STT projected a total harvest of 59,300 Chinook in this area, a KRFC spawning escapement of 21,000 natural adults, a coastwide ocean fishery harvest rate of 11.5% on age-4 KRFC, and a 47.2% total exploitation rate on LCR natural tules.

Due primarily to low KRFC abundance, very restrictive ocean troll salmon seasons for Federally regulated waters were adopted by the Council, including for the first time a complete commercial closure for all areas between Florence, Oregon and the Oregon/California border. To provide some opportunity for the Oregon troll fleet, ODFW established several new fall ocean terminal fishery areas for State regulated waters, inside 3 nm (Table I-1). The overall strategy was to focus fisheries on healthy Oregon coastal fall Chinook, minimize impacts of mixed stock fisheries to KRFC, Oregon coastal coho, and other stocks of concern, while insuring minimum escapement and in-river fisheries goals were satisfied.

Coho Fisheries

The Council structured 2006 coho salmon fisheries between Cape Falcon and Oregon/California border to conform to the recommendations of the OCN Coho Work Group and the 2006 NMFS ESA guidance letter. Based on parent escapement levels and observed OPI smolt-to-jack survival for 2003 brood OPI smolts, the total allowable OCN coho exploitation rate for 2006 fisheries is no greater than 20.0% under Amendment 13 of the Council's Salmon FMP, but no greater than 15.0% under the matrix developed by the OCN Work Group. In addition, the LCR natural coho maximum allowable exploitation rate (marine and freshwater combined) was 15.0% as recommended in the 2006 NMFS ESA guidance letter. Ocean fisheries were managed for a maximum marine exploitation rate of 10.0%, with the remaining 5% allotted to freshwater fisheries. To meet the OCN Coho Work Group recommendations and the NMFS ESA guidance, the Council adopted seasons for which the STT projected:

1. A coastwide marine exploitation rate for LCR natural coho of 9.9%.
2. A coastwide marine and freshwater exploitation rate for OCN coho of 9.6%.

The Council's marine exploitation rate for OCN and LCR natural coho assumed a 14% hook-and-release mortality rate in recreational fisheries and a 26% rate in commercial troll fisheries off Oregon and Washington.

Under the adopted regulations, the STT projected harvest impacts and non-retention mortality resulting from recreational fisheries south of Cape Falcon to be equivalent to exploitation rates of 5.1% for OCN coho stocks and 2.2% for LCR natural coho. Retention of coho in commercial troll fisheries in this area was prohibited. Nonretention mortality on coho resulting from commercial Chinook fisheries south of Cape Falcon was projected to be equivalent to exploitation rates of 0.9% for OCN coho and 0.5% for LCR natural coho.

U.S./Canada Border to Cape Falcon

Chinook Fisheries

Management objectives for Chinook fisheries in this area were to comply with NMFS ESA consultation standards established for ESA-listed stocks, meet treaty Indian sharing obligations, and to the extent possible, provide for viable ocean and inriver fisheries while meeting natural stock escapement objectives and hatchery fall Chinook brood stock needs. Lower Columbia River hatchery and Spring Creek Hatchery fall Chinook have historically been the major contributors to ocean fishery catches in the Council area north of Cape Falcon. Consultation Standards for ESA-listed stocks, especially Snake River Fall Chinook and Columbia Lower River natural tules, constrained ocean fisheries in this area.

The Council structured Chinook salmon fisheries between Cape Falcon, Oregon and the U.S./Canada Border to meet the following objectives (in order of most to least constraining):

1. A 49.0% total (ocean and inriver) exploitation rate on the naturally spawning tule portion of the threatened lower Columbia River Chinook ESU (NMFS ESA consultation standard).
2. At least a 30.0% reduction in the total ocean age-3 and age-4 adult equivalent (AEQ) exploitation rate from the 1988-1993 average on threatened Snake River fall Chinook (NMFS ESA consultation standard).
3. For select Chinook stocks of concern to the Pacific Salmon Commission, keep the Individual Stock Based Management (ISBM) index at or below 60.0% of the 1979-1982 average.

The Council adopted 2006 harvest quotas of 34,000 Chinook for commercial non-Indian troll, 42,200 Chinook for treaty Indian troll, and 31,000 Chinook for the recreational fisheries.

Coho Fisheries

Fisheries between Cape Falcon, Oregon and the U.S./Canada Border were constrained by management objectives and treaty Indian sharing obligations for individual stock management units, treaty Indian/non-Indian and ocean/inriver sharing agreements, stocks listed under the ESA, and requirements of the Pacific Salmon Treaty (PST). The Council structured coho salmon fisheries to meet the following objectives (in order of most to least constraining):

1. A coastwide marine exploitation rate of no more than 10% and a total exploitation rate of no more than 15% on lower Columbia River natural coho as recommended in the 2006 NMFS ESA guidance letter.
2. A total exploitation rate on Interior Fraser coho of no more than 10.0% in accordance with the provisions of the southern coho management plan adopted by the PSC in February, 2002.
3. A combined marine and freshwater exploitation rate of no more than 15.0%, based on the exploitation rate matrix recommended by the OCN coho work group and adopted by the Council as expert biological advice in November 2000.
4. Meet inside/outside and treaty Indian/non-Indian allocation objectives.
5. Meet FMP objectives for allocation of impacts between commercial and recreational ocean fisheries, and among port areas for the recreational fishery.

The Council adopted a mark-selective recreational fishery quota of 73,200 coho, with the requirement that all retained coho must be marked with healed adipose fin clip (Table I-3). The Council adopted commercial harvest quotas of 6,800 marked coho for the non-Indian commercial troll mark-selective fishery (Table I-1) and 37,500 coho for the treaty Indian troll fishery (Table I-2), which was not mark-selective. Total allowable harvest set preseason for the non-Indian commercial and recreational fisheries for coho in 2006 was 80,000, compared to 145,000 in 2005. For the treaty Indian fishery the overall quota of 37,500 coho was down from 50,000 coho in 2005.

SELECTIVE FISHERIES AND SALMON BYCATCH

Estimated incidental Chinook and coho mortalities are reported in Table I-7. Unless otherwise noted, Chinook mortality estimates from north of Cape Falcon and coho mortality estimates coastwide were based on preseason projections scaled by the ratio of observed to projected catch; Chinook mortality estimates south of Cape Falcon are based on expansion of dockside sampling data. Under the Sustainable Fisheries Act, incidental mortality in commercial fisheries constitutes bycatch mortality, but incidental mortality resulting from the non-retention recreational fisheries does not.

Selective Chinook Fisheries

In 2006, recreational fisheries in the Strait of Juan de Fuca operated under mark-selective retention restrictions for both Chinook and coho in Area 5 and the portion of Area 6 west of Port Angeles from July 1 through August 21, and for coho only (no Chinook retention) through September 30. Catch and release estimates, derived from creel census programs conducted in Area 5 from July 1 through September 30 and in Area 6 from July 1 through August 21, are presented in Table I-9.

Selective Coho Fisheries

Recreational fisheries selective for marked coho were planned for the area between Cape Falcon and the Oregon/California border, the four ocean subareas north of Cape Falcon, and the inside fisheries at Buoy 10, Area 4b, and the Strait of Juan de Fuca (Areas 5 and 6). The Area 4B fishery did not occur because the Neah Bay recreational ocean coho quota was not met. Non-Indian commercial fisheries selective for marked coho were planned for the area between the U.S./Canada border and Cape Falcon. Preseason and inseason assessments of mark rates, catches, numbers of coho released, and incidental (bycatch) mortality are summarized in Table I-8. Fisheries were sampled by on-water observers and dockside interviews. The mark rate in all the ocean fisheries was lower than predicted.

PACIFIC SALMON COMMISSION

The Pacific Salmon Commission (PSC) was established to implement the 1985 Pacific Salmon Treaty (PST) between the United States and Canada. Because many of the stocks under the jurisdiction of the Council are significantly affected by management actions taken in Canadian and Alaskan waters, considerable interaction between the Council and the PSC can be expected at both the policy and technical levels. Actual catches for PSC fisheries of the most relevance to the Council are summarized in Tables I-10 and I-11. Note that these catch statistics do not correspond to provisions of the PST for compliance with aggregate abundance-based management (see below); nor do they reflect incidental mortality losses associated with the regulation of these fisheries, except as noted.

Chinook Fisheries

Northern British Columbia (B.C.) and Southeast Alaska (SEAK) fisheries affect far-north migrating Chinook stocks from Washington, Oregon, and Idaho. These include Washington coastal stocks; Columbia and Snake River bright fall, spring, and summer stocks; and far-north migrating Oregon coastal Chinook stocks.

The West Coast Vancouver Island (WCVI) troll and Georgia Strait troll and recreational fisheries affect far-north migrating stocks to a lesser degree, but have a major impact on more southerly distributed Columbia River tule and Puget Sound stocks.

In June 1999, the United States and Canada reached agreement on a framework for Chinook fishing regimes for 1999 through 2008. Under this agreement, SEAK (all gear), northern B.C. (troll and recreational), and WCVI (troll and outside recreational) fisheries were regulated under aggregate abundance-based management (AABM) regimes. These fishery regimes had catch ceilings derived from indices for total aggregate abundance of stocks contributing to specific components of the fisheries and target fishery harvest rates. For example, the allowable catch for WCVI troll and outside sport fisheries were determined by the abundance index estimated for the WCVI troll fishery. The allowable catch for the WCVI AABM fisheries was designed to reduce harvest rates for the combined troll and outside sport fisheries by approximately 35% from levels observed during 1985 through 1996. The United States and Canada are developing management regimes for AABM fisheries that are based on total mortality rather than landed catch.

For fisheries not driven by AABM regimes, including Council area fisheries, the 1999 agreement established conservation obligations to reduce harvest rates on depressed Chinook stocks (those not meeting escapement goals) by 36.5% for Canadian fisheries and 40% for United States fisheries, relative to levels observed during 1979 through 1982. This individual stock based management (ISBM) obligation was taken into account during Council and inside fisheries preseason management planning processes.

In 2006, AABM fisheries were conducted in accordance with the obligations set forth in the June 1999 PST agreement. SEAK fisheries were constrained by an all-gear catch ceiling of 346,800 "treaty" Chinook in 2006. "Treaty" Chinook are those fish that are counted against the AABM catch ceiling; they represent total catch minus terminal exclusions (fish taken in terminal net fisheries where escapement goals are achieved) and hatchery add-ons (fish attributed to production from Alaskan hatchery facilities in excess of levels observed prior to the 1985 PST). The 2006 total catch of Chinook by SEAK fisheries was 431,667, while the catch of "treaty" Chinook was 350,578.

The allowable 2006 catch for the North Coast B.C. AABM fisheries (northern B.C. troll plus Queen Charlotte Islands sport) was 223,200 Chinook. The actual catch was estimated at 222,900 (158,400 troll plus 64,500 sport).

Canada's principal management objective for the 2006 WCVI Chinook troll fishery was to address concerns for Strait of Georgia Chinook, spring run upper Fraser River Chinook, WCVI Chinook stocks, and Interior Fraser (Upper Fraser and Thompson) coho. The total allowable catch by WCVI AABM fisheries under the 1999 PST Agreement was 160,400 while the reported catch was 146,883; 103,978 troll, 5,000 First Nations, and 37,905 recreational (Table I-11).

A total of 18 openings were conducted for the WCVI troll fishery (Table I-12). Areas 123 and 124 were closed from mid-March to Mid-April to protect Fraser spring stocks and lower Georgia Strait Chinook. The May fishery was operated as a quota fishery of 10,000 Chinook to protect lower Georgia Strait Chinook. However, only 7,078 were landed in May compared to 26,700 caught during May, 2005. To protect Interior Fraser coho, coho non-retention was in effect during the entire spring/summer period. In addition, troll fisheries were closed from late June until late August. In September, troll fisheries were restricted to outside areas (5 nautical miles from surfline). All coho fishing was mark selective, including the use of single barbless hooks. Revival tanks were also used for coho prior to release.

The WCVI outside sport fishery (the area where non-local stocks predominate) operated under a 45 cm (17.7 inches) total length minimum size limit, and harvested 37,509 fish, a significant decrease from the 2005 estimated catch of 53,928 Chinook. The accounting period for the 2005 WCVI fishery was October 1, 2005 through September 30, 2006.

Catch estimates for all Canadian ISBM fisheries in Northern B.C. were incomplete; the reported Chinook catch in 2006 was 16,900 by commercial gillnets. Approximately 9,400 Chinook were caught by anglers from lodges in Rivers Inlet, Hakai Pass, and Bella Bella. Surveys of private angler catch were not conducted, but were believed to be less than the lodge catch. Tidal sport catches near the mainland coast of Northern BC were estimated only between August 1 and September 15, 2006. The total tidal sport catch was unknown but was believed by Canada to be above the 8,000 fish catch reported for 2002. No freshwater creel surveys were conducted on the North B.C. coast in 2004-2006 (2003 catch estimate was 6,280). Catches by First Nations exceeded 16,500 Chinook for the North Coast and 4,000 for the Central Coast (200 tidal).

Canadian ISBM commercial fisheries in Southern B.C. in 2006 harvested a total of 195,009 Chinook; (120,284 sport, 50,961 First Nations, and 24,164 commercial).

No direct management measures for Chinook salmon within the Council management area were specified under the 1999 PST agreement, except for the ISBM commitment. The Council's ocean fisheries and inside fisheries conducted by the state and tribal managers were designed to minimize impacts on spawning escapements of depressed stocks and preseason estimates of impacts were in compliance with terms of the PST agreement. Information necessary to evaluate the postseason impacts of Council area fisheries was not available.

Coho Fisheries

On February 14, 2002, the PSC adopted a management plan for coho salmon originating in Washington and southern B.C. river systems. The plan is directed at the conservation of key management units, four from southern B.C. (Interior Fraser, Lower Fraser, Strait of Georgia Mainland, 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). Under the plan, the United States and Canada were required to constrain total fishery exploitation rates to levels associated with the categorical status (low, moderate, and abundant) and target exploitation rates of the key management units as determined by domestic managers. Ceilings on exploitation rates by intercepting fisheries were established through formulas specified in the plan. The plan was transmitted to the governments of the United States and Canada with the expectation it would be conveyed to domestic managers for implementation.

In 2006, Canada's coho management objective was to constrain the exploitation rate by its fisheries on Thompson coho (a component of the Interior Fraser management unit) to a ceiling of 3%. Unmarked coho were released in all Southern B.C. commercial and sport fisheries where Thompson coho were known to be prevalent. Estimated release mortality rates for legal size coho by gear type were: Seine 25%; Northern Gillnet 70%; Southern Gillnet 60%; Troll 26%; and Sport 10% (Canadian Stock Assessment Secretariat, Research Document 99/128). Only terminal area fisheries along the WCVI and small portions of upper Johnstone Strait and the Queen Charlotte Islands were permitted to retain coho with intact adipose fins. Selective fishing techniques, such as barbless hooks for trollers, seine bunt restrictions, and mandatory use of revival tanks, were required. In areas where coho abundance was anticipated to be high, test fishing was conducted prior to openings. The WCVI troll fishery allowed retention of adipose fin clipped coho in September. A total of 4,809 coho were retained by commercial fisheries in 2006 (2,423 troll, 2,386 net). Coho kept and released by marine commercial fisheries in Southern B.C. are summarized in Table I-13.

For recreational fisheries, mark-selective coho retention was permitted in mixed stock areas, and barbless hooks were required. Mark-selective fisheries were implemented in most of Southern B.C. (Johnstone Strait, Strait of Georgia, Juan de Fuca Strait, and WCVI). The estimated total retained catch of coho in Southern B.C. marine recreational fisheries in 2006 was 23,309. Coho kept and released by marine recreational fisheries in Southern B.C. are summarized in Table I-14.

First Nations fisheries in Southern B.C. were estimated to have harvested 2,330 coho.

In 2006, the "low" status of Interior Fraser coho required the total exploitation rate on this stock by southern U.S. fisheries not to exceed 10.0%. This requirement constrained both Council and inside fisheries. The pre-season expectation was that the total southern U.S. fishery exploitation rate on Interior Fraser coho would be 9.2%.

TABLE I-1. Summary of actual ocean non-Indian commercial troll salmon fishing regulations for 2006. (Page 1 of 4)

Area and Season	Salmon Species	Actual Quota (Guideline*)		Special Restrictions ^{a/}
		Chinook	Coho	
U.S./Canada border to Cape Falcon, OR				
May 1-2, 6-9, 13-16, 20-23, 27-30, June 3-6, 10-13, 27-30 (30 days)	All except coho	22,450	-	Per vessel per open period landing and possession limit of: 75 Chinook May 1-2; 80 Chinook May 6-9, 13-16, 20-23, 27-30, June 3-6, and 10-13; 20 Chinook June 27-30. Cape Flattery and Columbia Control Zones closed. Vessels must land 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 north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels 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.
July 15-18, 22-25; July 29-Aug 1; Aug 5-7, 12-14, 19-22, 26-29; Sept. 2-5, 8-15 (38 days)	All salmon except no chum retention north of Cape Alava, WA in August	11,550	6,800	Open Saturday through Tuesday through to August 1, and Saturday through Monday thereafter. Landing and possession limit of 35 Chinook and 35 coho per vessel for the July 15-18 and 22-25 open periods; 60 Chinook and 35 coho landing and possession limit for the July 29-August 1 open period; 60 Chinook and 40 coho landing and possession limit for the August 5-7 and 12-14 open periods; 80 Chinook and 40 coho landing and possession limit for the August 19-22, 26-29, and September 2-5 open periods; 160 Chinook and 40 coho landing and possession limit for the September 8-15 open period. All retained coho must have a healed adipose fin clip. Cape Flattery and Columbia Control Zones closed. Vessels must land 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 north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels 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.

TABLE I-1. Summary of actual ocean non-Indian commercial troll salmon fishing regulations for 2006. (Page 2 of 4)

Area and Season	Salmon Species	Actual Quota (Guideline*)		Special Restrictions ^{ai}
		Chinook	Coho	
Cape Falcon to Florence south jetty, OR June 4-7, 11-14, 18-21, 25-28; July 9-11, 16-18, 23-25; Aug. 1-3 September 17-30; October 17-31 (57 days)	All except coho	None	-	Landing and possession limit of 75 Chinook per vessel per calendar week in June, July and August open periods; landing and possession limit of 50 Chinook per vessel per calendar week in September and October open periods. Chinook 28 inch total length minimum size limit. All vessels fishing in the area must land their fish in the State of Oregon.
Cape Falcon to Pyramid Rock (off Tillamook and Nehalem Bays) Sept. 1-16, Oct. 1-16 (32 days)	Chinook only	2,000	-	Open 0-3 nautical miles. Chinook 28 inch minimum size limit. 50 Chinook per vessel per calendar week. Landings restricted to Nehalem or Garibaldi.
Twin Rocks to Pyramid Rock (off Tillamook Bay) November 1-15 (15 days)	Chinook only	None	-	Open 0-3 nautical miles. Chinook 28 inch minimum size limit.
Cape Kiwanda to Neskowin Creek (off Nestucca R.) Sept. 1-16, Oct. 1-16 (32 days)	Chinook only	1,000	-	Open 0-3 nautical miles. Chinook 28 inch minimum size limit. 50 Chinook per vessel per calendar week. Landings restricted to Pacific City or Garibaldi.
Yaquina Head to 44°33'00" (off Yaquina R.) Sept. 1-16, Oct. 1-16 (32 days)	Chinook only	1,000	-	Open 0-3 nautical miles. Chinook 28 inch minimum size limit. 50 Chinook per vessel per calendar week. Landings restricted to Newport or Depoe Bay.
44°29'00" to 44°23'00" (off Alsea R.) Sept. 1-16, Oct. 1-16 (32 days)	Chinook only	2,000	-	Open 0-3 nautical miles. Chinook 28 inch minimum size limit. 50 Chinook per vessel per calendar week. Landings restricted to Newport or Depoe Bay.

TABLE I-1. Summary of actual ocean non-Indian commercial troll salmon fishing regulations for 2006. (Page 3 of 4)

Area and Season	Salmon Species	Actual Quota (Guideline*)		Special Restrictions ^{ai}
		Chinook	Coho	
Florence south jetty to Humbug Mt., OR				
Closed	-	-	-	-
Heceta Head to 44°00'00" (off Siuslaw R.) Sept. 1-16, Oct. 1-16 (32 days)	Chinook only	2,000	-	Open 0-3 nautical miles. Chinook 28 inch minimum size limit. 50 Chinook per vessel per calendar week. Landings restricted to Newport, Florence, Coos Bay, or Winchester Bay.
Tahkenitch Creek to 43°37'00" (off Umpqua R.) Sept. 1-30 (30 days)	Chinook only	1,000	-	Open inside 30 fathom curve. Chinook 28 inch minimum size limit. 50 Chinook per vessel per calendar week. Landings restricted to Coos Bay or Winchester Bay.
43°31'00" to Cape Arago (off Coos R.) Sept. 1-Oct. 16 (46 days)	Chinook only	1,500	-	Open inside 30 fathom curve. Chinook 28 inch minimum size limit. 50 Chinook per vessel per calendar week. Landings restricted to Coos Bay.
Nesika Reef to Cape Sebastian (off Rogue R.) Sept. 1-15 (15 days)	Chinook only	750	-	Open 0-3 nautical miles. Chinook 28 inch minimum size limit. 50 Chinook per vessel per calendar week. Landings restricted to Port Orford, Gold Beach, or Brookings.
Cape Blanco to Humbug Mt., OR (off Elk R.) September 15-December 15 (92 days)	Chinook only	None	-	Open 0-3 nautical miles. Chinook 28 inch minimum size limit. Landings restricted to Port Orford.
Humbug Mt. to OR/CA border				
Closed	-	-	-	-
Twin Rocks to OR/CA border (off Chetco R.) Oct. 13-Nov. 3 (22 days)	Chinook only	1,000	-	Open 0-3 nautical miles. Chinook 28 inch minimum size limit. Landings restricted to the Port of Brookings. Daily possession and landing limit of 25 Chinook.

TABLE I-1. Summary of actual ocean non-Indian commercial troll salmon fishing regulations for 2006. (Page 4 of 4)

Area and Season	Salmon Species	Actual Quota (Guideline*)		Special Restrictions ^{a/}
		Chinook	Coho	
OR/CA border to Humboldt south jetty, CA Closed	-	-	-	-
Horse Mt. to Pt. Arena September 1-5 (5 days)	All except coho	4,000	-	Landing and possession limit of 30 Chinook per vessel per day; fish must be landed in the area. Chinook minimum size limit of 27 inches total length.
Pt. Arena to Pigeon Pt. July 26 through August 31; September 1-30 (67 days)	All except coho	None 20,000	- -	July and August landing and possession limit of 75 Chinook per vessel per week; fish must be landed south of Horse Mtn.; Chinook minimum size limit 28 inches total length. In September no landing limit, but fish must be landed within the area or in adjacent area that was closed for at least 96 hrs; Chinook minimum size limit 27 inches total length.
Pt. Reyes to Pt. San Pedro October 2-6, 9-13 (10 days)	All except coho	None	-	Fish must be landed between Pt. Arena and Pigeon Pt.; Chinook minimum size limit of 26 inches total length.
Pigeon Pt. to Pt. Sur May 1-31; July 26 through September 30 (98 days)	All except coho	None	-	May, July, and August landing and possession limit of 75 Chinook per vessel per week; fish must be landed south of Pt. Arena. In September no landing limit, but fish must be landed south of Pigeon Pt. or in adjacent area that was closed for at least 96 hrs. Chinook minimum size limit 27 inches total length in May and September; 28 inches in July and August.
Pt. Sur to U.S./Mexico Border May 1 through September 30 (153 days)	All except coho	None	-	Fish must be landed south of Pigeon Pt. Chinook minimum size limit 27 inches total length in May, June, and September; 28 inches in July and August.

a/ Single-point, single-shank barbless hooks required in all open areas coastwide. In California, when fishing with bait and angling by any other means than trolling, single-point, single-shank barbless circle hooks with no offset must be used. No more than 4 spreads per line off Oregon south of Cape Falcon. No more than 6 lines per boat allowed off California. Unless otherwise noted, minimum size limits (total length): Chinook - 28 inches north of Cape Falcon; 26 inches south of Cape Falcon; coho - 16 inches.

TABLE I-2. Summary of actual treaty Indian commercial ocean and Area 4B troll salmon seasons for 2006. (Page 1 of 1)

TABLE 1-2: Summary of actual treaty Indian commercial ocean and Area 4B troll salmon seasons for 2000. (Page 1 of 1)					
Tribe and Area	Salmon Species	Seasons ^{a/}		Minimum Size Limit (Inches)	
		Dates	Days	Chinook	Coho
Quinault					
Areas 2-3	Chinook Only	May 1-June 30	61	24	-
	All	July 1- Sept. 15	77	24	16
Hoh					
Areas 2-3	Chinook Only	May 1-June 30	61	24	-
	All	July 1- Sept. 15	77	24	16
Quileute					
Area 3	Chinook Only	May 1-June 30	61	24	-
	All	July 1-Sept. 15; Sept. 16-Oct. 15	107	24	16
Makah					
Areas 3N, 4, and 4A	Chinook Only	May 1-June 30	61	24	-
	All	July 1- Sept. 15	77	24	16
Area 4B	Chinook Only	May 1-June 30	61	24	-
	All	Jan. 1-April 15; July 1-Sept. 15; Nov. 1-Dec. 31	243	24 ^{b/}	16
S'Klallam					
Area 4B	Chinook Only	May 1-June 30	61	24	-
	All ^{c/}	Jan. 1-Apr. 15; July 1-Dec. 31	289	24 ^{b/}	16

a/ The overall quotas for these fisheries during the May 1-Sept. 15 ocean salmon management period were 42,200 Chinook and 37,500 coho. These quotas include troll catches by the S'Klallam and Makah tribes in Washington State Statistical Area 4B from May 1-Sept. 15. The overall Chinook quota was divided pre-season to provide 22,700 Chinook for the May 1-June 30 Chinook-directed season and 19,500 Chinook for the July 1-Sept. 15 all-salmon season. Transfer of any unused Chinook quota from the May-June season to the July-Sept. season was not allowed. Barbless hooks were required in all ocean fisheries.

b/ Minimum length limit 22 inches prior to May 1 and after October 31.

c/ Retention of steelhead prohibited; retention of chum prohibited prior to September 30.

TABLE I-3. Summary of actual ocean recreational salmon fishing regulations for 2006. (Page 1 of 3)

TABLE 1-3. Summary of actual ocean recreational salmon fishing regulations for 2000. (Page 1 of 3)				
Area and Season	Salmon Species	Actual Quota (*Guideline)		Daily Limit and Special Restrictions ^{b/}
		Chinook	Coho ^{aw}	
U.S./Canada Border to Cape Alava, WA (Neah Bay subarea)				
Tues.-Sat. June 30 through August 10; Seven days per week Aug. 11 through September 17 (68 days)	All Salmon	The Chinook quota for	7,058	2 salmon daily; only one Chinook June 30-Aug. 10; no chum retention Aug. 1 - Sept. 17. No Chinook retention east of Bonilla-Tatoosh line Aug. 1 - Sept. 17.
Cape Alava to Queets River, WA (LaPush subarea)				
Tues.-Sat. June 30 through August 10; Seven days per week Aug. 11 through September 17 (68 days)	All Salmon	all subareas between	3,029 ^{c/}	2 salmon daily; only one Chinook June 30-August 10.
North of 47°50'00" N lat. and south of 48°00'00" N lat. 7 days per week Sept. 23-Oct.8 (16 days)	All Salmon	the U.S./Canada border and	50	2 salmon daily.
Queets River to Leadbetter Pt., WA (Westport subarea)				
Sun.-Thurs. July 3-Aug. 10; 7 days per week Aug. 11-Sept. 17 (68 days)	All Salmon	Cape Falcon, Oregon combined	25,603 ^{c/}	2 salmon daily; only one Chinook June 30-August 10.
Leadbetter Pt. to Cape Falcon, OR (Columbia River subarea)				
Sun.-Thurs. July 3-Aug. 10; 7 days per week Aug. 11-Sept. 30 (80 days)	All salmon	was 31,000	36,600	2 salmon daily; only one Chinook June 30-August 10. Closed south of Tillamook Head August 1-25
Cape Falcon to Humbug Mt., Oregon				
Mar. 15-June 16; Aug. 1-31; Sept. 7-Oct. 31 (180 days)	All except coho	None	-	2 salmon daily. Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open. ^{d/}
Twin Rocks to Pyramid Rock (off Tillamook Bay inside 3 nm)				
Mar. 15-June 16 (94 days)	Chinook only	None	-	Barbed hooks allowed. 2 adult and 5 jack salmon daily. Inside area from Twin Rocks to Green Buoy to Pyramid Rock, all retained Chinook must have a healed adipose fin clip.
Aug. 1-31; Sept. 7-Nov. 15 (101 days)	Chinook only	None	-	Barbed hooks allowed. 2 adult and 5 jack salmon daily; no more than 4 adults in 7 consecutive days. 10 Chinook annual limit.
June 17-Jul. 31; Sept. 1-6 (51 days)	All salmon	None	See coho quota below	Barbless hooks required. 2 salmon daily. Area inside Twin Rocks to Green Buoy to Pyramid Rock: all retained Chinook must have a healed adipose fin clip.

TABLE I-3. Summary of actual ocean recreational salmon fishing regulations for 2006. (Page 2 of 3)

Area and Season	Salmon Species	Actual Quota (*Guideline)		Daily Limit and Special Restrictions ^{b/}
		Chinook	Coho ^{a/}	
Cape Blanco to Humbug Mt., Oregon (off Elk River inside 3 nm)				
Nov. 1-Dec. 15 (45 days)	Chinook only	None	-	2 salmon daily.
Cape Falcon to Humbug Mt. June 17-Jul. 31; Sept. 1-6 (51 days)	All salmon	None	20,000	2 salmon daily. Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open. ^{d/}
Humbug Mt. to OR/CA Border June 17-July 4; Sept. 1-6 (24 days)	All salmon	None	combined area quota	
Humbug Mt., OR to Horse Mt., CA Except as provided above in the Cape Falcon to OR/CA border selective coho fishery May 15-July 4; Sept 1-6 (57 days)	All except coho	None	-	2 salmon daily. Chinook minimum size limit of 24 inches total length. Klamath Control Zone closed.
Twin Rocks, Oregon to OR/CA border (off Chetco River inside 3 nm)				
Oct. 1-12 (12 days)	Chinook only	None	-	1 salmon daily; no more than 4 fish per season. Chinook minimum size limit of 20 inches total length.
Horse Mt. to Pt. Arena, California Feb. 18-May 31; June 1-4, 7-11, 14-18, 21-25, 28-30; July 1-9, 15-16, 22-23, 26-31; Aug. 1-Nov. 12 (247 days)	All except coho	None	-	2 salmon daily.
Pt. Arena to Pigeon Pt. Apr. 1-June 11; June 14-July 9; July 12-Nov. 12 (222 days)	All except coho	None	-	2 salmon daily. April 1-30 open only inside 3 nm.
Pigeon Pt. to Pt. Sur Apr. 1-Sept. 24 (177 days)	All except coho	None	-	2 salmon daily. April 1-30 open only inside 3 nm.
Pt. Sur to U.S./Mexico Border Apr. 1-Sept. 24 (177 days)	All except coho	None	-	2 salmon daily.

TABLE I-3. Summary of actual ocean recreational salmon fishing regulations for 2006. (Page 3 of 3)

a/ All coho fisheries and quotas are mark selective are for fish with a healed adipose fin clip.

b/ No more than one rod and single-point, single-shank barbless hooks required north of Pt. Conception, CA. No more than 2 single-point, single-shank barbless hooks when fishing for salmon or fishing from a boat with salmon on board between Pt. Conception and Cape Falcon, OR. If angling by any other means than trolling between Pt. Conception and Horse Mt., CA, no more than 2 single-point, single-shank, barbless circle hooks shall be used. The distance between the 2 hooks must not exceed 5 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). Unless otherwise noted: minimum size limits are (1) 24 inches for Chinook and 16 inches for coho north of Cape Falcon, and (2) 20 inches for Chinook and 16 inches for coho south of Cape Falcon.

c/ The coho quota from the Queets River to Leadbetter point recreational fishery was changed inseason from 27,603 to 25,603 and the coho quota in the Cape Alava to Queets River recreational fishery was increased from 1,889 to 3,029 in order to extend the latter fishery into September and maintain impacts on Interior Fraser coho at or below preseason expectations.

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.

TABLE I-4. Council area commercial and recreational ocean salmon fishing effort and landings by state. Data are provisional, pending further review of data compilation methods. A double dash (" - ") indicates no records are available. Fewer than 50 pounds may be shown as zero. (Page 1 of 4)

COMMERCIAL TROLL								RECREATIONAL					
Year or Average	Effort (boat days fished)	Catch						Effort (salmon angler trips)	Catch (numbers of fish)				Salmon Per Angler Trip
		Numbers of Fish			Thousands of Pounds (Dressed Weight)				Chinook	Coho	Pink	Total	
		Chinook	Coho	Pink	Chinook	Coho	Pink						
WASHINGTON ^{a/}													
1966-70	- -	172,500	717,200	96,200	1,810	4,557	432	401,900	152,600	427,700	14,600	594,900	1.5
1971-75	56,200	275,400	870,300	31,600	2,926	4,801	147	482,900	210,400	567,400	6,100	783,900	1.6
1976-80	43,787	188,610	717,302	412,880	2,364	3,675	789	429,809	114,092	511,827	23,544	649,463	1.5
1981-85 ^{b/}	12,782	71,326	217,754	140,486	776	1,059	358	163,344	54,662	172,399	5,915	232,976	1.4
1986-90	6,078	71,534	137,942	20,552	719	610	49	119,412	26,075	165,058	1,919	193,051	1.6
1991	6,020	50,676	131,124	45,762	483	634	161	127,180	12,669	207,693	2,214	222,576	1.8
1992	5,492	66,704	93,268	0	678	335	0	108,900	18,427	123,555	0	141,982	1.3
1993	4,899	55,038	72,663	4,195	563	336	20	128,770	13,018	125,955	2,416	141,389	1.1
1994	101	4,570	-	0	53	-	0	-	-	-	-	-	-
1995	324	9,768	56,816	31,118	85	255	137	54,944	509	68,252	2,821	71,582	1.3
1996	693	12,310	36,066	0	0	216	0	43,250	177	51,433	0	51,610	1.2
1997	751	20,579	15,824	2,322	81	94	2	29,699	3,969	26,762	1,410	32,141	1.1
1998	277	20,615	8,154	0	228	43	0	19,653	2,187	20,706	0	22,893	1.2
1999	1,011	44,908	37,214	759	418	138	5	50,774	9,887	40,125	2,188	52,200	1.0
2000	563	17,907	27,442	0	191	141	0	48,919	8,478	68,199	0	76,677	1.6
2001	1,280	50,072	66,707	511	518	376	10	126,402	22,974	168,062	3,918	194,954	1.5
2002	1,564	93,665	17,602	0	1,135	101	0	95,167	57,821	74,134	0	131,955	1.4
2003	1,914	91,374	19,899	1,279	1,258	116	2	124,867	34,183	139,096	13,407	186,686	1.5
2004	1,812	85,107	75,390	0	1,156	469	0	112,704	24,907	112,936	0	137,843	1.2
2005 ^{c/}	2,034	77,041	25,439	1,036	994	161	1	90,595	36,369	51,770	3,257	91,395	1.0
2006 ^{c/}	2,239	46,799	32,955	0	222	10	0	65,263	10,667	36,087	8	46,762	0.7

TABLE I-4. Council area commercial and recreational ocean salmon fishing effort and landings by state. Data are provisional, pending further review of data compilation methods. A double dash ("-") indicates no records are available. Fewer than 50 pounds may be shown as zero. (Page 2 of 4)

Year or Average	Effort (boat days fished)	COMMERCIAL TROLL						RECREATIONAL					Salmon Per Angler Trip
		Catch						Effort (salmon angler trips)	Catch (numbers of fish)				
		Numbers of Fish			Thousands of Pounds (Dressed Weight)				Chinook	Coho	Pink	Total	
		Chinook	Coho	Pink	Chinook	Coho	Pink						
OREGON ^{d/}													
1966-70	--	122,000	804,500	--	1,159	5,358	--	--	--	--	--	--	--
1971-75	47,400	208,500	979,000	--	2,128	6,015	--	--	--	--	--	--	--
1976-80	55,885	232,632	741,694	--	2,406	4,251	139	387,743	39,974	289,189	--	329,163	0.8
1981-85	25,496	145,503	301,499	2,100	1,432	1,537	117	233,544	33,085	165,393	2,700	201,178	0.9
1986-90	38,154	394,927	397,243	4,300	3,731	1,957	21	241,161	35,713	218,637	500	254,849	1.1
1991	14,848	74,447	306,795	1,800	695	1,411	8	190,058	14,416	259,119	300	273,835	1.4
1992	9,153	109,740	49,638	0	1,013	207	0	165,317	12,573	185,845	0	198,418	1.2
1993	9,467	81,517	1,667	0	761	9	0	79,612	6,420	58,108	0	64,528	0.8
1994	3,761	25,230	-	0	287	-	0	26,897	6,037	17	0	6,054	0.2
1995	7,852	213,789	-	100	1,941	-	0	35,850	6,726	11,917	0	18,643	0.5
1996	8,391	175,209	8	0	1,925	-	0	43,962	11,210	7,200	0	18,410	0.4
1997	7,810	149,759	-	0	1,540	-	0	30,148	7,678	5,972	0	13,650	0.5
1998	7,171	124,211	-	0	1,398	-	0	25,954	4,086	2,301	0	6,387	0.2
1999	5,083	62,533	-	100	721	-	0	49,419	7,721	13,636	0	21,357	0.4
2000	7,480	135,903	12,258	0	1,481	71	0	78,563	25,460	33,188	0	58,648	0.7
2001	11,148	274,963	9,333	300	2,899	52	1	120,461	27,200	94,346	0	121,546	1.0
2002	11,701	304,189	1,515	0	3,489	11	0	107,641	47,480	36,537	0	84,017	0.8
2003	12,418	329,678	6,441	0	3,639	43	0	144,423	40,654	113,659	0	154,313	1.1
2004	13,204	252,709	8,839	0	2,850	70	0	145,702	56,433	71,835	0	128,268	0.9
2005	11,623	251,295	2,618	3	2,671	20	0	75,999	27,945	13,706	0	41,651	0.5
2006 ^{c/}	4,527	34,964	1,414	0	486	13	0	62,295	11,588	15,577	0	27,165	0.4

TABLE I-4. Council area commercial and recreational ocean salmon fishing effort and landings by state. Data are provisional, pending further review of data compilation methods. A double dash ("-") indicates no records are available. Fewer than 50 pounds may be shown as zero. (Page 3 of 4)

Year or Average	COMMERCIAL TROLL							RECREATIONAL					Salmon Per Angler Trip
	Effort (boat days fished)	Catch						Effort (salmon angler trips)	Catch (numbers of fish)				
		Numbers of Fish			Thousands of Pounds (Dressed Weight)				Chinook	Coho	Pink	Total	
		Chinook	Coho	Pink	Chinook	Coho	Pink						
CALIFORNIA ^{e/}													
1966-70	- -	486,300	319,700	7,400	4,925	2,352	37	189,800	120,800	33,200	0	154,000	0.8
1971-75	45,200	562,700	361,800	4,700	5,743	2,211	22	247,400	169,600	48,300	0	217,900	0.9
1976-80	81,300	618,637	210,303	500	5,867	1,184	3	163,469	92,422	31,158	0	123,580	0.8
1981-85	59,765	462,652	58,726	2,400	4,454	345	14	146,950	109,097	19,866	0	128,963	0.9
1986-90	58,511	794,703	46,780	300	8,097	262	2	240,667	166,395	40,388	0	206,783	0.9
1991	35,300	294,900	82,500	0	3,238	459	0	196,630	80,833	69,263	0	150,096	0.8
1992	20,300	160,300	2,450	0	1,632	11	0	127,867	73,577	11,521	0	85,098	0.7
1993	25,900	279,553	-	0	2,537	-	0	174,887	110,024	29,753	0	139,777	0.8
1994	21,200	295,574	-	0	3,103	-	0	202,091	189,815	516	0	190,331	0.9
1995	25,800	679,312	-	0	6,634	-	0	378,504	397,231	940	0	398,171	1.1
1996	21,161	380,851	-	0	4,113	-	0	225,305	164,032	644	0	164,676	0.7
1997	18,956	487,415	-	0	5,248	-	0	234,369	228,968	486	0	229,454	1.0
1998	14,564	226,936	-	0	1,847	-	0	151,824	122,013	103	0	122,116	0.8
1999	16,361	264,452	-	0	3,846	-	0	147,055	87,845	608	0	88,453	0.6
2000	20,453	480,352	-	0	5,131	-	0	214,375	185,851	419	0	186,270	0.9
2001	13,841	193,086	-	0	2,409	-	0	165,135	98,783	1,329	0	100,112	0.6
2002	17,403	391,655	-	0	5,008	-	0	210,052	182,044	828	0	182,872	0.9
2003	15,941	491,894	-	0	6,392	-	0	134,627	94,674	613	0	95,287	0.7
2004	21,733	502,110	-	0	6,230	-	0	218,743	221,114	1,424	0	222,538	1.0
2005	17,018	340,862	-	0	4,347	-	0	172,080	143,257	699	0	143,956	0.8
2006 ^{c/}	8,156	68,808	-	0	1,030	-	0	120,361	89,479	1,438	0	90,917	0.8

TABLE I-4. Council area commercial and recreational ocean salmon fishing effort and landings by state. Data are provisional, pending further review of data compilation methods. A double dash ("-") indicates no records are available. Fewer than 50 pounds may be shown as zero. (Page 4 of 4)

Year or Average	COMMERCIAL TROLL							RECREATIONAL					Salmon Per Angler Trip
	Effort (boat days fished)	Catch						Effort (salmon angler trips)	Catch (numbers of fish)				
		Numbers of Fish			Thousands of Pounds (Dressed Weight)				Chinook	Coho	Pink	Total	
		Chinook	Coho	Pink	Chinook	Coho	Pink						
COUNCIL AREA ^{a/d/}													
1966-70	--	780,800	1,841,400	103,600	7,893	12,267	468	591,700	273,400	460,900	14,600	748,900	1.3
1971-75	148,800	1,046,600	2,211,100	36,300	10,796	13,028	170	730,300	380,000	615,700	6,100	1,001,800	1.4
1976-80	180,972	1,039,879	1,669,299	413,380	10,637	9,110	930	981,020	246,488	832,173	23,544	1,102,206	1.1
1981-85 ^{b/}	98,043	679,481	577,980	144,986	6,662	2,941	489	543,838	196,845	357,658	8,615	563,117	1.0
1986-90	102,743	1,261,163	581,965	25,152	12,547	2,830	71	601,240	228,183	424,082	2,419	654,684	1.1
1991	56,168	420,023	520,419	47,562	4,416	2,505	168	513,868	107,918	536,075	2,514	646,507	1.3
1992	34,945	336,744	145,356	0	3,323	553	0	402,084	104,577	320,921	0	425,498	1.1
1993	40,266	416,108	74,330	4,195	3,861	345	20	383,269	129,462	213,816	2,416	345,694	0.9
1994	25,062	325,374	0	0	3,443	0	0	228,988	195,852	533	0	196,385	0.9
1995	33,976	902,869	56,816	31,218	8,659	255	137	469,298	404,466	81,109	2,821	488,396	1.0
1996	30,245	568,370	36,074	0	6,039	216	0	312,517	175,419	59,277	0	234,696	0.8
1997	27,517	657,753	15,824	2,322	6,869	94	2	294,216	240,615	33,220	1,410	275,245	0.9
1998	22,012	371,762	8,154	0	3,473	43	0	197,431	128,286	23,110	0	151,396	0.8
1999	22,455	371,893	37,214	859	4,984	138	5	247,248	105,453	54,369	2,188	162,010	0.7
2000	28,496	634,162	39,700	0	6,803	212	0	341,857	219,789	101,806	0	321,595	0.9
2001	26,269	518,121	76,040	811	5,826	428	11	411,998	148,957	263,737	3,918	416,612	1.0
2002	30,668	789,509	19,117	0	9,631	112	0	412,860	287,345	111,499	0	398,844	1.0
2003	30,273	912,946	26,340	1,279	11,289	159	2	403,917	169,511	253,368	13,407	436,286	1.1
2004	36,749	839,926	84,229	0	10,236	539	0	477,149	302,454	186,195	0	488,649	1.0
2005 ^{c/}	30,675	669,198	28,057	1,039	8,012	181	1	338,674	207,571	66,175	3,257	277,002	0.8
2006 ^{c/}	14,922	150,571	34,369	0	1,737	23	0	247,919	111,734	53,102	8	164,844	0.7

a/ For Washington, commercial effort and landings include: (1) treaty Indian fisheries (ocean and Area 4B only from May 1-Sept. 30) beginning in 1972; (2) prior to 1978, catch off British Columbia landed in Washington; (3) catch off Alaska landed in Washington; and (4) catch off Oregon and California beginning in 1976. Treaty Indian effort is in deliveries. Beginning in 1989, recreational angler trips and catch include state-managed, late-season Area 4B fishery when open(see Table IV-15).

b/ Recreational effort and catch includes Washington-based effort and catch from Oregon state waters (July 26-Aug. 1) and Strait of Juan de Fuca after WDFW and NMFS ocean closures in 1982.

c/ Preliminary.

d/ Oregon commercial troll landings include small numbers of salmon caught in Alaska (prior to 1990), Washington, and California. Oregon recreational effort data are total angler trips prior to 1979 and salmon trips beginning in 1979. Significantly reduced salmon per angler trip in 1994-1998 reflects regulations requiring nonretention of coho in the recreational fishery south of Cape Falcon.

e/ California commercial effort and landings include salmon caught off Oregon and landed in California, which were minor and infrequent until 2004, when 200 days fished and 25,300 Chinook were included.

TABLE I-5. Council area commercial and recreational ocean salmon fishing effort and landings by management area. (Page 1 of 1)

COMMERCIAL TROLL					RECREATIONAL					
Year	Effort ^{a/}	Catch (numbers of fish)			Effort (salmon angler	Catch (numbers of fish)			Salmon Per Total	Angler Trip
	(boat days	Chinook	Coho	Pink		Chinook	Coho	Pink		
----- U.S./CANADA BORDER TO CAPE FALCON -----										
Treaty Indian (U.S./Canada Border to Leadbetter Point) ^{b/} :										
1998	138	14,686	8,154	0	-	-	-	-	-	-
1999	282	27,452	33,364	1,567	-	-	-	-	-	-
2000	142	7,638	22,175	0	-	-	-	-	-	-
2001	516	28,843	58,595	2,626	-	-	-	-	-	-
2002	226	39,846	17,422	0	-	-	-	-	-	-
2003	216	35,172	10,942	237	-	-	-	-	-	-
2004	431	49,735	62,097	0	-	-	-	-	-	-
2005 ^{c/}	596	41,975	23,997	237	-	-	-	-	-	-
2006 ^{c/}	801	30,030	31,690	0	-	-	-	-	-	-
Non-Indian:										
1998	139	5,929	-	0	21,767	2,292	22,877	13	25,182	1.2
1999	730	17,471	3,850	53	58,191	10,821	47,669	2,194	60,684	1.0
2000	692	12,514	17,525	0	57,362	9,242	81,925	18	91,185	1.6
2001	1,006	25,320	17,445	56	149,643	25,592	207,251	3,921	236,764	1.6
2002	1,768	66,616	1,695	0	107,218	60,575	88,537	0	149,112	1.4
2003	2,111	66,586	15,398	255	144,093	36,513	168,867	13,400	218,780	1.5
2004	1,728	38,490	22,132	24	131,297	27,090	135,434	32	162,556	1.2
2005 ^{c/}	1,954	45,151	4,060	11	103,857	40,004	61,736	3,257	104,996	1.0
2006 ^{c/}	2,419	27,258	2,679	NA	73,505	11,176	41,498	8	52,682	0.7
----- CAPE FALCON TO HUMBURG MOUNTAIN -----										
1998	6,963	123,468	-	1	9,743	2,019	93	0	2,112	0.2
1999	4,834	61,156	-	55	26,217	3,340	6,046	0	9,386	0.4
2000	6,935	130,192	-	3	48,113	12,878	19,401	0	32,279	0.7
2001	10,435	267,273	-	344	71,119	17,374	55,088	0	72,462	1.0
2002	10,843	284,589	-	0	75,868	34,792	22,026	0	56,818	0.7
2003	11,477	314,222	-	25	110,450	32,876	83,837	0	116,713	1.1
2004	12,339	241,107	-	0	108,800	47,413	48,062	0	95,475	0.9
2005	10,858	238,944	-	0	50,159	18,603	3,630	0	22,233	0.4
2006 ^{c/}	3,363	23,737	-	0	43,429	9,287	9,485	0	18,772	0.4
----- HUMBURG MOUNTAIN TO HORSE MOUNTAIN TO (KMZ) -----										
1998	372	3,244	-	0	24,129	4,875	100	0	4,975	0.2
1999	484	3,862	-	0	33,612	9,638	177	0	9,815	0.3
2000	416	5,493	-	0	42,329	25,292	257	0	25,549	0.6
2001	786	9,122	-	0	50,794	20,032	255	0	20,287	0.4
2002	1,033	20,270	-	0	41,265	26,065	403	0	26,468	0.6
2003	659	9,116	-	0	30,524	14,200	188	0	14,388	0.5
2004	1,042	40,399	-	0	43,906	29,681	1,835	0	31,516	0.7
2005	573	9,320	-	0	29,907	23,251	261	0	23,512	0.8
2006 ^{c/}	183	738	-	0	26,805	18,012	924	0	18,936	0.7
----- HORSE MOUNTAIN TO U.S./MEXICO BORDER -----										
1998	14,400	224,435	-	0	141,792	119,100	40	0	119,140	0.8
1999	16,125	261,952	-	0	129,228	81,654	477	0	82,131	0.6
2000	20,311	478,325	-	0	194,053	172,377	223	0	172,600	0.9
2001	13,526	187,563	-	7	140,442	85,959	1,143	0	87,102	0.6
2002	16,798	378,188	-	0	188,509	165,913	533	0	166,446	0.9
2003	15,810	487,850	-	0	118,850	85,922	476	0	86,398	0.7
2004	21,209	470,195	-	0	193,146	198,270	864	0	199,134	1.0
2005	16,694	333,808	-	0	154,751	125,713	548	0	126,261	0.8
2006 ^{c/}	8,156	68,808	-	0	104,180	73,259	1,195	0	74,454	0.7

a/ Treaty Indian troll effort in number of deliveries.

b/ May through September only.

c/ Preliminary.

TABLE I-6. Coho and Chinook harvest quotas and guidelines (*) for 2006 Council managed fisheries compared with actual harvest by management area and fishery. (Page 1 of 1)

Fishery Governed by Quota or Guideline	Chinook			Coho		
	Quota or Guideline ^{a/}	Catch	Catch/Quota	Quota	Catch	Catch/Quota
NORTH OF CAPE FALCON						
TREATY INDIAN COMMERCIAL TROLL						
U.S./Canada Border to Cape Falcon (May-June)	22,700	11,357	0.50	-	-	-
U.S./Canada Border to Cape Falcon (July-Sept.)	19,500	18,673	0.96	37,500	31,690	0.85
Subtotal Treaty Indian Commercial Troll	42,200	30,030	0.71	37,500	31,690	0.85
NON-INDIAN COMMERCIAL TROLL						
U.S./Canada Border to Cape Falcon (May-June)	22,450 *	20,728	0.92	-	-	-
U.S./Canada Border to Cape Falcon (July-Sept.)	11,550 *	6,530	0.57	6,800	2,679	0.39
Subtotal Non-Indian Commercial Troll	34,000	27,258	0.80	6,800	2,679	0.39
RECREATIONAL (selective coho fisheries)						
U.S./Canada Border to Cape Alava (July-Sept.)	3,200 *	1,417	0.44	7,058	6,023	0.85
Cape Alava to Queets River (July-Oct.)	1,400 *	1,670	1.19	3,079	1,884	0.61
Queets River to Leadbetter Pt. (June-Sept.)	18,100 *	5,815	0.32	25,603	8,779	0.34
Leadbetter Pt. to Cape Falcon (July-Sept.)	8,300 *	2,274	0.27	36,600	24,812	0.68
Subtotal Recreational	31,000	11,176	0.36	72,340	41,498	0.57
TOTAL NORTH OF CAPE FALCON	107,200	68,464	0.64	116,640	75,867	0.65
SOUTH OF CAPE FALCON						
COMMERCIAL TROLL (all except coho)						
Horse Mt. To Point Arena (Sept.)	4,000	10,761	2.69	-	-	-
Pt. Arenat to Pigeon Pt. (Sept.)	20,000	11,664	0.58	-	-	-
Subtotal Troll	24,000	22,425	0.93	-	-	-
RECREATIONAL						
Cape Falcon to OR/CA Border (June, July, Sept.)	-	-	-	20,000	10,102	0.51
TOTAL SOUTH OF CAPE FALCON	24,000	22,425	0.93	20,000	10,102	0.51
GRAND TOTAL COUNCIL AREA	131,200	90,889	0.69	136,640	85,969	0.63

a/ Guidelines for Chinook fisheries are marked with an asterisk (*).

TABLE I-7. Estimated incidental mortality of Chinook and coho in 2006 ocean salmon fisheries. Observed incidental mortality was calculated by scaling preseason projections of incidental mortality by the ratio of observed to projected catch. (Page 1 of 1)

Area and Fishery	2006 Catch Projection	2006 Bycatch Mortality ^{a/} Projection	2006 Bycatch Projection ^{b/}	Observed in 2006	
				Catch	Bycatch Mortality
OCEAN FISHERIES ^{c/} :					
CHINOOK (thousands of fish)					
NORTH OF CAPE FALCON					
Treaty Indian Commercial Troll	42.2	6.2	13.3	30.0	4.0 ^{d/}
Non-Indian Commercial Troll	34.0	9.9	26.8	27.3	11.9 ^{d/}
Recreational	31.0	4.2	14.1	11.2	1.5
CAPE FALCON TO HUMBUG MT.					
Commercial Troll	45.1	5.8	14.3	23.7	3.0
Recreational	14.2	2.2	9.0	9.3	1.4
HUMBUG MT. TO HORSE MT.					
Commercial Troll	0.0	0.0	0.0	0.7	0.1 ^{d/}
Recreational	7.3	1.1	4.7	18.0	2.3 ^{d/}
SOUTH OF HORSE MT.					
Commercial	140.7	18.2	44.7	68.8	12.3 ^{d/}
Recreational	87.2	13.6	45.2	73.3	9.2 ^{d/}
TOTAL OCEAN FISHERIES					
Commercial Troll	262.0	40.0	99.1	150.5	31.4
Recreational	139.7	21.1	73.0	111.8	14.4
INSIDE FISHERIES:					
Buoy 10	NA	NA	NA	1.7	NA
COHO (thousands of fish)					
NORTH OF CAPE FALCON					
Treaty Indian Commercial Troll	37.5	2.6	8.5	31.7	2.2
Non-Indian Commercial Troll	6.8	6.2	20.0	2.7	2.4
Recreational	73.2	14.7	77.1	41.5	8.3
SOUTH OF CAPE FALCON					
Commercial Troll	-	3.4	10.9	-	NA
Recreational	20.0	11.2	59.1	11.6	6.5
TOTAL OCEAN FISHERIES					
Commercial Troll	44.3	12.2	39.4	34.4	4.6
Recreational	93.2	25.9	136.2	53.1	14.8
INSIDE FISHERIES:					
Area 4B	3.0	1.1	5.6	-	-
Buoy 10	8.3	1.6	8.3	3.7	0.7

a/ The bycatch mortality reported in this table consists of drop-off mortality (includes predation on hooked fish) plus hook-and-release mortality (HRM) 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 HRM rates used for both Chinook and coho are:

Commercial: 26%.
Recreational, north of Pt. Arena: 14%.

Recreational, south of Pt. Arena: 20% (based on the expected proportion of fish that will be caught using mooching versus trolling gear; the HRMs for these gear types are 42.2% and 14%, respectively).

b/ Bycatch calculated as drop off mortality plus fish released.

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

d/ Based on observed sublegal encounter rates.

TABLE I-8. Summary of 2006 recreational and commercial fisheries selective for marked hatchery coho (preliminary data). (Page 1 of 1)

TABLE 10. Summary of 2000 recreational and commercial fisheries selective for marked hatchery coho (preliminary data). (Page 1 of 1)										
Area	Anticipated Mark Rate	Observed Mark Rate	Preseason Quota	Anticipated Nonretention Mortality ^{a/}	Landed Coho Catch			Unmarked Coho Released ^{b/}	Estimated Nonretention Mortality ^{a/}	Effort ^{c/}
					Total	Marked	Unmarked			
Recreational										
Ocean Fisheries										
Neah Bay	45%	40%	10,058 ^{d/}	3,223	6,023	5,862	161	8,980	1,954	13,409
La Push	49%	43%	1,939	612	1,884	1,852	32	2,535	566	4,143
Westport	57%	55%	27,603	6,056	8,779	8,675	104	7,325	1,809	24,541
Columbia River	69%	65%	36,600	5,819	24,812	24,679	133	13,194	3,727	31,270
North of Cape Falcon Total	NA	NA	76,200	15,710	41,498	41,069	429	32,034	8,056	73,363
Cape Falcon to OR/CA Border	58%	52%	20,000	7,420	10,102	10,007	95	9,325	2,255	31,345
Ocean Fisheries Total	NA	NA	96,200	23,130	51,600	51,076	524	41,359	10,312	104,708
Inside Fisheries										
Strait of Juan de Fuca ^{e/}	38%	39%	30,192 ^{f/}	12	9,492	9,444	48	14,846	3,279	50,229
Buoy 10	69%	70%	8,300 ^{f/}	1,579	3,687	3,624	63	1,614	483	
Inside Fisheries Total	NA	NA	38,492	1,591	13,179	13,068	111	16,460	3,761	50,229
Commercial										
Neah Bay	43%	37%	-	547	241	240	1	405	137	107
La Push	44%	30%	-	1152	766	766	0	1,827	605	379
Westport	53%	NA	-	2749	184	184	0	163	60	78
Columbia River	60%	NA	-	1760	1,488	1,488	0	992	382	181
Commercial Total	NA	NA	6,800	6,208	2,679	2,678	1	3,386	1,183	745
Grand Total	NA	NA	141,492	30,929	67,458	66,822	636	61,205	15,256	NA

a/ Hook-and-release plus drop-off mortality of unmarked fish.

b/ Calculated from observed mark rates where available; where unavailable, anticipated mark rates are used. La Push, Cape Falcon-OR/CA border and Buoy 10 recreational fishery observed mark rates based on dockside sampling.

c/ Recreational effort measured in angler trips, commercial effort measured in days fished.

d/ Includes 7,058 ocean quota and 3,000 Area 4B quota.

e/ Includes Area 5 (July 1 - September 30, 2006) selective fishery only.

f/ Expected catch, not a quota.

TABLE I-9. Washington Area 5 and 6 preliminary recreational salmon catch estimates during the Chinook mark selective fishery July 1 - August 21, 2006.

Fishery	Boats	Anglers	Catch			Total	Release		
			Chinook	Coho	Pink		Chinook	Coho	Pink
Area 5: 7/1 - 8/21	9,982	23,754	3,331	1,041	0	4,372	8,987	2,367	0
Area 6: 7/1 - 8/21	1,707	3,076	349	0	0	349	334	0	0
Total	11,689	26,830	3,680	1,041	0	4,721	9,321	2,367	0

Area 5 Preliminary Recreational Salmon Catch Estimate, 2006

Area 5: 7/1 - 9/30	20,796	50,229	3,461	9,444	0	12,905	15,919	35,351	0
--------------------	--------	--------	-------	-------	---	--------	--------	--------	---

TABLE I-10. Chinook catch by Southeast Alaska marine fisheries in thousands of fish.

Year	Total Catches			Treaty Chinook			Additional Catch	
	Troll	Net	Sport	Troll	Net	Sport	Terminal Exclusion ^{a/}	Hatchery Add-On ^{b/}
1985	215.8	33.9	24.9	211.9	33.3	23.0	0.0	6.2
1986	237.7	22.1	22.6	231.6	20.6	19.0	0.0	11.1
1987	242.6	15.5	24.3	231.1	14.0	20.3	0.0	17.1
1988	231.4	21.8	26.2	217.1	17.4	22.3	0.0	22.5
1989	235.7	24.2	31.1	224.2	18.5	26.8	0.0	21.5
1990	287.9	27.7	51.2	263.5	16.1	41.4	0.0	45.9
1991	264.1	34.9	60.5	231.8	21.0	45.1	0.0	61.5
1992	183.8	32.1	42.9	162.6	24.0	35.3	0.0	36.8
1993	226.9	28.0	49.2	212.4	16.2	42.7	0.0	32.9
1994	186.3	35.7	42.4	177.1	22.6	35.5	0.0	29.2
1995	138.1	48.0	49.7	115.1	26.4	35.5	0.0	58.8
1996	141.5	37.3	57.5	107.6	8.4	39.0	8.7	71.6
1997	246.4	25.1	71.5	221.9	11.4	53.3	9.8	46.5
1998	192.1	23.5	55.0	183.5	13.4	46.3	2.4	25.0
1999	146.2	32.7	72.1	132.7	12.9	53.2	4.5	47.7
2000	158.7	41.4	63.2	134.0	11.1	41.4	2.5	74.3
2001	153.3	40.2	72.3	128.7	13.5	44.7	1.5	77.3
2002	325.3	31.7	69.5	298.1	13.5	45.5	1.2	68.2
2003	330.7	39.4	69.4	307.4	23.5	49.2	2.1	57.2
2004	354.7	64.0	87.5	321.9	40.4	66.4	5.4	72.0
2005	338.4	73.1	84.3	303.1	21.5	62.1	45.0	64.1
2006 ^{c/}	282.3	72.6	76.8	263.3	23.8	63.5	33.8	47.3

a/ Catch in terminal net fisheries. These catches are not subject to PST limitations.

b/ Catch of increased production of Alaska hatchery fish. These catches are not subject to PST limitations.

c/ Preliminary.

TABLE I-11. Chinook and coho catches by Canadian marine fisheries in thousands of fish. (Page 1 of 1)

Year or Avg.	Northern B.C.		Central B.C.		North- Central B.C.	WCVI				Strait of Georgia				Juan de Fuca		
	Troll	Net	Troll	Net	Sport	NW Troll	SW Troll	Net	Outside	Troll	Net ^{a/}	Sport		Troll	Net	Sport
									Sport			North	South			
CHINOOK																
1986-1990	168.9	28.1	41.6	14.1	17.8	110.3	215.9	17.8	28.6	39.1	35.8	68.1	34.7	0.1	11.5	30.6
1991	194.0	40.9	29.8	15.9	23.7	74.8	128.1	60.8	42.5	33.6	30.5	75.3	21.2	0.0	8.9	19.0
1992	142.3	35.7	47.8	18.3	32.5	216.5	130.2	9.5	44.1	40.0	18.7	75.1	20.4	0.0	10.0	21.1
1993	161.7	33.9	23.4	10.6	34.7	167.8	106.9	28.7	63.1	37.5	31.7	79.0	25.9	0.0	2.3	14.0
1994	164.6	22.0	19.0	14.4	36.4	71.0	75.0	2.4	50.6	15.1	23.1	45.1	11.4	0.0	8.9	14.4
1995	56.9	18.1	5.8	11.0	27.2	28.8	52.2	0.5	28.2	0.1	7.2	38.0	9.7	0.0	0.6	14.4
1996	0.0	28.9	0.0	6.8	7.0	0.0	0.0	0.0	10.0	0.0	10.0	55.2	15.3	0.0	0.4	19.0
1997	83.5	20.4	12.4	3.6	36.3	25.9	26.6	0.5	11.0	2.3	29.2	35.3	7.5	0.0	0.3	17.1
1998	116.4	7.1	2.2	5.4	44.4	7.2	3.1	1.6	4.2	1.1	6.8	10.1	4.3	0.0	0.1	9.7
1999	56.5	10.1	2.1	4.3	52.2	21.3	34.7	1.0	31.1	0.2	4.1	26.4	12.1	0.0	0.1	14.8
2000	9.8	22.3	0.0	3.2	38.1	28.7	34.7	0.1	38.0	0.5	5.8	17.3	4.6	1.0	0.1	11.0
2001	13.1	25.4	0.0	6.5	49.1	23.9	53.6	0.0	40.2	0.5	4.5	21.5	9.6	0.0	0.0	23.5
2002	103.0	14.9	0.5	4.7	62.4	43.0	90.8	0.5	32.1	0.6	9.6	43.7	9.1	0.0	0.0	24.1
2003	137.4	14.7	0.0	2.8	62.7	58.0	93.8	9.1	24.0	0.7	12.6	14.0	6.4	0.0	0.3	26.6
2004	137.4	16.2	0.0	6.3	84.7	85.4	88.7	12.5	42.5	0.6	12.5	10.2	3.8	0.0	0.0	40.9
2005	174.8	6.9	0.0	6.3	77.8	110.0	38.8	23.6	53.9	0.0	5.6	10.4	1.9	0.0	0.2	30.5
2006 ^{b/}	158.4	11.7	0.0	5.2	81.9	53.9	55.3	24.0	37.9	0.0	5.9	12.0	2.7	0.0	0.0	39.4
COHO																
1986-1990	716.3	139.9	275.2	132.2	28.0	600.0	1,277.9	14.2	19.1	178.4	109.2	512.9	106.0	0.7	194.4	66.2
1991	982.3	196.2	105.7	47.6	43.1	664.6	1,225.3	5.2	49.8	11.6	77.5	35.0	11.5	0.0	180.4	110.6
1992	516.3	122.1	237.8	67.6	40.5	935.5	736.3	9.7	37.5	137.3	81.7	358.5	117.3	0.0	106.0	119.7
1993	337.2	134.5	72.6	37.8	31.2	422.0	531.8	3.5	13.7	276.0	65.6	552.1	177.7	0.0	6.2	108.9
1994	740.0	174.5	57.6	94.1	58.9	207.7	1,044.1	4.7	16.4	50.8	38.3	148.0	28.2	0.0	131.0	118.6
1995	295.4	111.1	18.7	28.1	37.3	276.9	1,068.5	1.4	41.2	0.0	17.9	11.2	3.5	0.0	36.7	71.5
1996	424.9	122.2	12.2	29.5	59.1	235.9	552.7	1.0	25.1	0.0	5.5	26.7	7.1	0.7	4.2	94.0
1997	158.6	28.6	8.2	12.0	37.1	0.0	0.0	0.0	29.1	0.0	5.9	2.6	2.8	0.0	0.4	99.5
1998	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.5	0.0	0.0	0.1
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.0	0.0	0.0	0.1
2000	0.0	1.7	0.0	0.1	NA	0.0	0.0	0.0	1.3	0.0	0.0	1.1	3.0	0.0	0.0	0.6
2001	1.1	9.9	0.0	2.7	NA	0.0	0.0	0.0	6.1	0.0	0.0	9.3	1.7	0.0	0.0	0.2
2002	118.9	1.2	8.5	0.0	49.3	0.0	0.0	1.0	4.9	0.0	0.0	3.1	1.5	0.0	0.0	3.8
2003	195.0	6.9	18.9	3.5	NA	0.0	0.1	5.4	13.4	0.0	0.0	1.1	7.5	0.0	0.0	11.8
2004	225.5	24.2	31.7	47.3	27.0	0.1	0.0	2.9	20.3	0.0	0.2	1.4	1.6	0.0	0.0	11.1
2005 ^{b/}	260.3	48.5	49.5	52.5	NA	0.6	1.4	4.0	12.4	0.0	0.0	0.7	0.7	0.0	0.0	8.8
2006 ^{b/}	NA	NA	NA	NA	NA	1.2	1.2	2.2	33.7	0.0	0.0	2.7	0.9	0.0	0.0	2.9

a/ Includes Johnstone strait nets, net fisheries in Strait of Georgia, and Fraser seine.

b/ Preliminary.

TABLE I-12. Summary of 2006 West Coast Vancouver Island salmon fisheries.

Areas Open	Majority of Catch	Fishing Period	Chinook Catch
123-127	123	10/3-11/05	12,198
123-127	123	11/7-8/05	2,156
23/123-27/127	123	12/5-8/05	1,689
23/123-27/127	126	1/9-21/06	1,468
23/123-27/127	126	2/8-11/06	5,154
23-27,125-127	126	3/10-13,16-31/06	7,883
25-26,125-127	126	4/1-15/06	7,725
25-26,124-127	126	4/16-19/06	166
23/123-27/127	123	4/20-30/06	12,670
23/123-27/127	123	5/105/06	7,078
123-127	123	6/9-11/06	411
123-127	123	6/15-18/06	16,955
125-127	127	6/19-22/06	3,441
125-127	125	8/25-31/06	886
125-127	126	9/3/2006	2,590
125-127	125	9/7-13/06	9,996
123-127	123	9/14-16/06	8,765
125-127	126	9/17-30/06	2,747
Total			103,978

TABLE I-13. Summary of 2006 coho catch and release in B.C. commercial fisheries.

Gear/Area	Coho Kept	Coho Released
Northern Troll	NA	NA
Northern Net	NA	NA
North Central Troll	NA	NA
South Central Troll	NA	NA
Central Net	NA	NA
Johnstone Strait Net	187	6727
Strait of Georgia Net	0	67
Strait of Georgia Troll	24	1674
Fraser Gill Net	13	341
Northw est Vancouver Island Troll	1,183	5,209
Southw est Vancouver Island Troll	1,215	5,350
Northw est Vancouver Island Net	1,260	6
Southw est Vancouver Island Net	924	2,026

TABLE I-14. Summary of 2006 coho catch and release in B.C. recreational fisheries.

Area	Kept	Released
Juan de Fuca Strait	2,945	5,446
Northern Strait of Georgia	312	2,490
Southern Strait of Georgia	935	948
Johnstone Strait	2,283	2,314
WCVI ^{a/}	33,728	58,080

a/ Includes impacts of mark-selective fisheries in which the retained catch was 23,309 and the number of coho released was 40,275.

CHAPTER II

CHINOOK SALMON MANAGEMENT

CENTRAL VALLEY CHINOOK STOCKS

Central Valley Chinook stocks include fall, late-fall, winter, and spring stocks of the Sacramento and San Joaquin rivers and their tributaries. Two of these stocks were listed under the ESA: (1) Sacramento River winter Chinook, listed as endangered in January 1994; and (2) Central Valley spring Chinook, listed as threatened in September 1999.

Management Objectives

The following conservation objectives guided Council management of Central Valley Chinook salmon stocks in the 2006 fisheries: (1) for fall Chinook in the Sacramento River system, an escapement goal of 122,000 to 180,000 hatchery and natural adults; and (2) for Sacramento River winter and Central Valley spring Chinook, the ESA consultation standard concerning the duration and timing of the commercial and recreational fisheries south of Point Arena.

Regulations to Achieve Objectives

Harvest impacts on Central Valley Chinook were a primary management concern in fisheries south of Point Arena, California. For 2006, no specific restrictions were required for ocean salmon fisheries to meet the conservation objective for Sacramento River fall Chinook. Under the 2006 regulations, the projected escapement to the Sacramento River was 368,000 fall Chinook adults, exceeding the upper end of the conservation objective range.

To meet the Sacramento River winter and Central Valley spring Chinook ESA consultation standard (Chapter I, Regulatory Objectives by Management Area, Horse Mountain to U.S./Mexico Border, Chinook Fisheries, 2.), the recreational seasons south of Point Arena opened April 1 with final closure dates of November 12 north of Pigeon Point and September 24 south of Pigeon Point, with a minimum size limit of 20 inches total length. The commercial seasons from Point Arena to Pigeon Point opened July 26 and south of Pigeon Point opened May 1, with a final closure date of September 30, except for the October 2-6 and 9-13 opening between Point Reyes and Point San Pedro. The commercial minimum size limit varied by month and area from 26 inches to 28 inches total length.

Inside Harvest

Although no catch estimate was made for the 2006 season, recreational harvest regulations continued to allow extensive harvest of fall Chinook. A comprehensive angler survey of the Sacramento River system, conducted from 1990 through 1994, showed that recreational catch averaged 25% of the river run. An additional survey conducted from 1998 through 2000 showed similar results. Since 1990, regulations have closed the mainstem Sacramento River to retention of salmon from January 15 to July 15, a period when winter Chinook adults are thought to be most abundant. Beginning in 2004, the retention closure was enacted earlier, on January 1 from the Carquinez Bridge to Red Bluff, in response to recovery of winter Chinook CWT's in the sport fishery. In response to the low escapements in the Stanislaus, Toulumne, and Merced rivers during the last decade, the majority of the San Joaquin River has been closed to recreational salmon fishing.

Escapement and Management Performance

Sacramento River Fall Chinook

In 2006, a total of 270,224 natural and hatchery fall Chinook adults were estimated to have returned to the Sacramento River basin for spawning. This value is approximately 73% of the preseason expectation of 368,000, but, with an in-river harvest rate of 25%, still exceeds the Council's conservation escapement objective of 122,000 to 180,000 adults. Fall Chinook returns to Sacramento River hatcheries totaled 76,715 adults. Available data indicate hatchery-produced fish constitute a majority of the Sacramento River naturally spawning fall Chinook population. Table II-1 and Figure II-1 display historical natural and hatchery fall spawner escapements. For a more detailed breakdown of the historical escapements, see Appendix B, Tables B-1 and B-2.

Sacramento River Winter and Spring Chinook

Historical spawner escapements for Sacramento River winter and spring Chinook salmon are presented in Appendix B, Table B-3.

Spawner escapement of endangered winter Chinook salmon in 2006 was estimated to be 7,513 jacks and adults (expanded counts from Red Bluff Diversion Dam). It should be noted that a time series of spawner escapement estimates based on carcass surveys also exists for the run from 1996 to the present. Expansion of the carcass survey data has yielded, in most cases, higher estimates of spawning escapement than have expansions of dam counts. While the carcass survey estimates have the potential to reduce the large uncertainty associated with the dam expansion estimates, a review of the most appropriate methodology for estimating the spawning escapement from the carcass survey data has not been completed. The carcass survey estimates of run size (jacks and adults) over the 2000–2006 period have ranged from 0.8–3.2 times those derived from the Red Bluff Diversion Dam counts, with the 2006 carcass survey estimate of 17,303 being the highest to date. Ocean fishery impacts on the returning cohort of winter Chinook spawners in 2006 were incurred primarily during the 2005 season and in the early 2006 recreational season south of Point Arena, California.

Returns of spring Chinook to the Sacramento River totaled approximately 12,567 fish (jacks and adults), of which approximately 10,615 fish returned to the upper river (above the mouth of the Feather River). The method used to estimate the spring Chinook return to the Feather River Hatchery was modified in 2005. In previous years, the estimate was equal to the number of Chinook that entered the hatchery during the early period of Chinook spawning. In 2005 and 2006, prior to the spring run spawning period, fish that entered the hatchery were tagged and returned to the river; the number of tagged fish that re-entered the hatchery during the spring run spawning period was used as the estimate of spring Chinook escapement in the Feather River. The fish that were tagged at the hatchery and returned to the river but did not re-enter the hatchery during the spawning period were counted in the natural fall run survey and reported as Feather River fall Chinook. The natural area surveys in the Feather River are not currently capable of separating the spring and fall runs.

San Joaquin River Fall Chinook

San Joaquin River spawning areas are used primarily by fall Chinook. The estimated San Joaquin River fall Chinook spawning escapement in 2006 totaled 7,918 jacks and adults in natural areas and 4,266 jacks and adults to hatcheries (Appendix B, Tables B-1 and B-2 provide historical spawner escapements). Salmon production in the San Joaquin River is determined largely by spring outflows three years earlier. Since 1986, spawner returns to the San Joaquin River have constituted less than 10% of the total Central Valley escapement for fall run Chinook.

NORTHERN CALIFORNIA COAST CHINOOK STOCKS

Northern California stocks include fall and spring stocks north of the entrance to San Francisco Bay. Primary river systems in this area are (from north to south) the Smith, Klamath, Mad, Eel, Mattole, and Russian rivers. Coastal Chinook stocks south of the Klamath River were listed as threatened under the ESA in September 1999.

Management Objectives

The KRFC conservation objective provided primary guidance for Council management of northern California Chinook salmon stocks in the 2006 fisheries. KRFC were managed in accordance with a harvest rate plan (Amendment 9) calling for a minimum adult natural spawner escapement rate of 33%, with a minimum spawner escapement (floor) of 35,000 adults in natural areas. However, for 2006, the spawner floor requirement was projected to be unattainable even with complete closure of all salmon fisheries impacting KRFC. In response, NMFS advised the Council to structure 2006 fisheries to result in a natural area spawning escapement of no less than 21,000 adults. The available harvest was to be shared equally between non-tribal and tribal fisheries (tribes with Federally-recognized fishing rights), and an equitable sharing arrangement was to be negotiated among the non-tribal fisheries. KRFC also provide the basis for the NMFS ESA consultation standard for California coastal Chinook, which limits the ocean harvest rate on age-4 KRFC to no more than 16.0%.

Regulations to Achieve Objectives

To achieve the management objectives for KRFC, the adopted regulations were designed to result in: (1) a Klamath River run of 47,600 fall Chinook adults resulting in a spawner escapement of 21,100 fish in natural areas, taking into account a projected river harvest impact of 11,200 adults and returns to basin hatcheries; (2) 50% (10,000) of the allowable adult harvest for tribal subsistence and commercial fisheries; (3) 0% (0) of the non-tribal harvest to the Klamath River recreational fishery; and (4) 8.8% (900) of the ocean harvest to the KMZ recreational fishery. These harvest allocations were expected to result in a 44%/56% California/Oregon sharing of KRFC ocean troll harvest. The age-4 ocean harvest rate resulting from the above configuration was expected to be 11.5%.

Inside Harvest

Yurok and Hoopa tribes shared a federally reserved right of 50% (10,000) of the available harvest surplus of adult Klamath fall Chinook. The river recreational fishery was closed in 2006 to adult retention. A jack-only fishery was expected to result in an incidental hook-and-release mortality of 300 fall Chinook adults. Tribal adult fall Chinook landings totaled 10,285 (103% of the quota), and it was estimated that the recreational fishery retained 62 adult fish. River harvest estimates for streams outside the Klamath River Basin are not available.

Escapement and Management Performance

Threatened California North Coast Chinook

Historical indices of spawner abundance, or actual spawning escapement estimates, for Chinook salmon in California coastal streams outside of the Klamath River Basin are limited to cursory, nonsystematic surveys of one tributary of the Mad River and two tributaries of the Eel River (Appendix B, Table B-7).

The 2006 preseason forecast of the KRFC age-4 ocean harvest rate was 11.5% (the ESA consultation standard for California Coastal Chinook was no more than 16.0%). The postseason evaluation of the 2006 age-4 ocean harvest rate was not available in time for this report.

Klamath River Fall Chinook

The 2006 preliminary postseason river run size estimate for KRFC was 61,630 adults compared to the preseason predicted ocean escapement (river run size) of 47,600 adults. The escapement to natural spawning areas was 30,422 adults, which was more than the preseason prediction of 21,100 adults. This was the third consecutive year of failing to meet the minimum spawner floor conservation objective for the stock. The estimated number of hatchery returns was 19,522 adults. Table II-2, Figure II 2, and Appendix B Table B-4 present historical harvest and escapement data for KRFC.

Spawning escapement to the upper Klamath River tributaries (Salmon, Scott, and Shasta Rivers), where spawning was only minimally affected by hatchery strays, totaled 5,074 adults. The Shasta River has historically been the most important Chinook salmon spawning stream in the upper Klamath River, supporting a spawning escapement of 30,700 adults as recently as 1964, and 63,700 in 1935. The escapement in 2006 was 789 adults (Appendix B, Table B-6). The coded-wire tag (CWT) data necessary to evaluate whether the Council's harvest allocations were met were not available.

OREGON COAST CHINOOK STOCKS

Oregon coast Chinook stocks include all fall and spring stocks from Oregon streams south of the Columbia River. These stocks are categorized into two major subgroups based on ocean migration patterns. Although ocean harvest distributions overlap somewhat, they are categorized as either north or south/local migrating. North migrating Chinook stocks include stocks north of and including the Elk River, with the exception of Umpqua River spring Chinook. South/local migrating Chinook stocks include Rogue River spring and fall Chinook, Umpqua River spring Chinook, and fall Chinook from smaller rivers south of the Elk River.

Based on CWT analysis, the populations from ten major north Oregon coast (NOC) river systems from the Nehalem through the Siuslaw Rivers are harvested primarily in PSC ocean fisheries off B.C. and SEAK, and to a much lesser degree, in Council area fisheries off Washington and Oregon, and terminal area fisheries. Analysis of CWTs indicates the population from five major mid-Oregon coast (MOC) systems from the Coos through the Elk Rivers are harvested primarily in ocean fisheries off B.C., Washington, and Oregon, with minor catches in California fisheries. South/local stocks are important contributors to ocean fisheries off Oregon and northern California. Another central Oregon stock, Umpqua River spring Chinook, contributes primarily to ocean fisheries off Oregon and California, and to a lesser degree, off Washington, B.C., and southeastern Alaska.

Management Objectives

The conservation objective for Oregon coast salmon was an aggregate of 150,000 to 200,000 natural adult spawners as indicated by peak spawner counts of 60 to 90 fish per mile in standard index surveys. Preseason abundance estimates were not developed for this stock, and it has not been of critical management concern. Constraints for OCN coho, California coastal Chinook, and KRFC management objectives generally result in reduced ocean fishery impacts on Oregon south/local migrating Chinook stocks. Humbug Mountain to Cape Falcon Chinook fisheries have a minor impact on most of the stocks originating from the north Oregon coast, which have a northerly marine distribution pattern.

Regulations to Achieve Objectives

The areas of primary management concern for ocean fisheries impacting Oregon coast Chinook vary between the north and south/local migrating stocks, although there is some overlap. Preseason abundance estimates were not available for Oregon coast Chinook, however, based on postseason abundance indicators, Council-area fisheries impacts on this stock have not significantly affected objective achievement in recent years. Under the 2006 regulations, the STT expected the aggregate conservation

objective for this stock to be met with the constraints required for north California coast Chinook and OCN coho.

For the Oregon State-waters terminal area fisheries a wide range of regulations were adopted, including fisheries spanning between two to three watersheds, various north-south boundary areas, and 30 fathom restrictions in deep water areas for the Coos and Umpqua rivers. Weekly landing limit regulations and minimum size limits were matched to regulations for Federal waters north of Florence, and quotas for terminal area fisheries were adopted.

Inside Harvest

Inside recreational harvest of fall and spring Chinook occurred in most Oregon coastal estuaries and rivers. Complete estimates of the 2006 recreational Chinook harvest in freshwater areas were not available. Historical estimates of the recreational harvest of fall and spring Chinook, derived from Oregon Department of Fish and Wildlife (ODFW) salmon and steelhead angler catch record cards are reported in Table II-3.

Escapement and Management Performance

Actual escapement was not estimated for this stock aggregate. Achievement of an aggregate 150,000 to 200,000 naturally spawning adults was assessed through indices (e.g., stream surveys, dam counts, etc.). The escapement goal was equivalent to peak spawner index counts of 60 to 90 adults per mile in nine index streams and includes both spring and fall Chinook. Peak spawner index counts were based on traditional non-random surveys. ODFW is developing alternate methodologies for establishing escapement goals for several fall Chinook PSC indicator stocks. Escapement goals and assessment for these stocks will likely change upon completion of this process.

The overall quota for the nine terminal area fisheries with quotas was 12,250. The final catch estimate for those fisheries was 2,132 Chinook.

North Migrating Chinook

An index of adult spawners (peak count per index mile) in nine standard streams was used to measure natural spawner escapement trends for north migrating fall Chinook. Data have been collected since about 1950 for most systems. Overall peak Chinook adult index spawner counts in 2006 were preliminarily estimated at 81 adults per mile, within the goal range of 60 to 90 adults per mile (Table II-4, Figure II-3).

South/Local Migrating Chinook

Standard fall Chinook spawning index escapement data for the smaller southern Oregon coastal rivers (south of the Elk River) are available for the Winchuck, Chetco, and Pistol Rivers (Appendix B, Table B-8). Rogue River carcass counts were used as an indicator of trends in escapement for naturally produced fall Chinook, but these surveys were not conducted in 2006 (Table II-4). In addition, two trend indicators of escapement for naturally produced spring Chinook were utilized: (1) Rogue River counts at Gold Ray Dam, and (2) Umpqua River counts at Winchester Dam (Table II-4). Escapement based on these indicators has been stable or increasing since the early 1990s but were below the recent five-year returns in 2006 (Figures II-3 and II-4). The aggregate Oregon coast goal of 150,000 to 200,000 naturally spawning Chinook adults was probably exceeded in 2006.

Coastal Hatchery Chinook

Preliminary estimates of total fall and spring Chinook returns to Oregon coastal hatcheries in 2006 were 2,300 and 7,400 adults, respectively (Table II-3). Hatchery egg-take goals were expected to be met at all stations.

COLUMBIA RIVER BASIN CHINOOK STOCKS

Columbia River Basin Chinook salmon stocks include fall, summer, and spring stocks. NMFS has listed five Chinook ESUs within the Columbia Basin under the ESA, (1) Snake River fall listed as threatened April 1992; (2) Snake River spring/summer listed as threatened April 1992; (3) upper Columbia River spring listed as endangered March 1999; (4) lower Columbia River listed as threatened March 1999; and (5) upper Willamette River spring listed as threatened March 1999.

The assessment below covers five major stock groups of Columbia River Basin fall Chinook: lower river hatchery (LRH) tule stock and lower river wild (LRW) bright stock, both of which are part of the ESA-listed lower Columbia River Chinook ESU; Spring Creek Hatchery (SCH) tule stock; upriver bright (URB) stock, which includes the ESA-listed Snake River fall Chinook ESU; and mid-Columbia bright (MCB) hatchery stock. Management details for Columbia River spring and summer Chinook stocks are not discussed, since Council-managed ocean salmon fisheries have very limited impacts on these stocks (less than a 2% exploitation rate in base-period fisheries). Appendix B, Tables B-12 through B-19, contain historical harvest and escapement data for fall, summer, and spring stocks. Appendix B, Table B-20 summarizes catch information for all three races of Chinook in the Columbia Basin. Additional information on these stocks can be found in the *Joint Staff Report: stock status and fisheries for spring Chinook, summer Chinook, sockeye, steelhead, and other species and miscellaneous regulations* and the *Joint Staff Report concerning the fall in-river commercial harvest of Columbia River fall Chinook, summer steelhead, coho salmon chum salmon, and sturgeon*, published annually by the joint staffs of ODFW and Washington Department of Fish and Wildlife (WDFW).

Management Objectives

Council-area fisheries north of Cape Falcon in 2006 were managed to access SCH stocks while meeting the NMFS ESA consultation standards for the ESA-listed lower Columbia River Chinook ESU and Snake River fall Chinook ESU. The standard for the ESA-listed lower Columbia River Chinook ESU was a total (ocean plus inriver) AEQ exploitation rate on ESA-listed natural tules of no more than 49.0%. For preseason modeling, the estimated total exploitation rate on Coweeman natural tules was used as a surrogate for the rate on all naturally spawning tules. The standard for the Snake River fall Chinook ESU was no less than a 30.0% reduction in the Snake River Fall Index (SRFI) from the 1988 through 1993 base period exploitation rate for all ocean fisheries combined.

Inside Harvest

In recent years, fall Chinook in Columbia River fisheries have been managed under the guidance of annual management agreements among the U.S. versus Oregon parties. The Columbia River Fishery Management Plan expired on December 31, 1998. In 2006, the fall fisheries were managed for a 30.0% reduction in the inriver harvest rate of Snake River wild fall Chinook relative to the 1988 through 1993 base period, as represented by a 31.29% harvest rate of the aggregate URB return. Fisheries were also constrained to keep the total estimated AEQ exploitation rate on naturally spawning Coweeman River tules at or below 49.0%.

Harvestable surplus was projected for all major fall stocks in 2006, however, the postseason fall Chinook run reconstruction was not completed in time for this report. The preliminary catch estimate for the non-Indian commercial gillnet fisheries was 32,100 Chinook, which included 4,100 Chinook in Select Area

(terminal) fisheries. The preliminary catch estimate for the treaty Indian fishery was 83,000 Chinook. The preliminary catch estimate for the recreational fisheries included 1,700 fall Chinook in the Buoy 10 fishery, 13,200 in the mainstem fishery below Bonneville Dam, and 600 in the Hanford Reach fishery above McNary dam (Appendix B, Table B-20).

Escapement and Management Performance

All Columbia River fall Chinook were projected to meet their FMP objectives (Table II-5). Appendix B, Tables B-12 through B-20 contain more detailed historical escapement data for most Columbia River fall, summer, and spring stocks.

The postseason fall Chinook run reconstruction was not completed in time for this report; however preliminary estimates of river mouth returns based on inseason run updates were: 57,500 LRH; 16,600 LRW; 35,600 SCH; 225,900 URB; and 73,400 MCB. The total ocean escapement of the five stocks was 421,400 fall Chinook. Figure II-5 shows the river mouth return of these stock groups from 1976-2006.

Columbia River mainstem fisheries for fall Chinook in 2006 were managed for at least a 30.0% harvest rate reduction from the 1988 to 1993 average harvest rate on URB fall Chinook to protect ESA-threatened Snake River wild fall Chinook. This goal was achieved, with a preliminary URB harvest rate estimate of 28.7%, or a 35.0% reduction from the 1988 through 1993 base-period average URB harvest rate (44.7%).

No specific escapement goal was established for the ESA-threatened Snake River wild fall Chinook stock. Because nearly all spawning of this stock occurs upstream from Lower Granite Dam, establishing a spawning escapement goal at Lower Granite Dam would be appropriate. In the *Proposed Recovery Plan for Snake River Salmon*, NMFS has proposed a delisting goal for Snake River fall Chinook that provides for an eight-year (approximately two generation) geometric mean of at least 2,500 natural spawners in the mainstem Snake River annually; the eight-year mean through 2005 was 1,924. The total adult fall Chinook count at Lower Granite Dam in 2006 was 8,048, down from 11,170 in 2005. A significant portion of recent year years returns were from supplementation programs. An estimate of wild Snake River fall Chinook escapement in 2006 was not available for this report. Historical estimates of the number of adult wild Snake River fall Chinook counted at Lower Granite Dam are provided in Appendix B, Table B-18.

WASHINGTON COASTAL CHINOOK STOCKS

Washington coastal Chinook stocks include all fall, summer, and spring stocks from coastal streams north of the Columbia River through the western Strait of Juan de Fuca (west of the Elwha River, inclusive). This complex consists of several natural stocks, generally of small to medium-sized populations, and some hatchery production (primarily Willapa Bay and Quinault River). Coastal stocks are not impacted significantly by Council fisheries.

Management Objectives

Spawning escapement goals for natural stocks managed within this complex, established in U.S. District Court by WDFW and the treaty Indian tribes, were recognized in the Council's FMP conservation objectives. Objectives for Grays Harbor and the North Coast river systems were established pursuant to the U.S. District Court order in *Hoh versus Baldrige*. However, annual natural spawning escapement targets may vary from the FMP conservation objectives if agreed to by WDFW and the treaty Indian tribes under the provisions of *Hoh versus Baldrige* and subsequent U.S. District Court orders. After agreement is reached on the annual targets, ocean fishery escapement objectives are established for each river, or region of origin, which include provisions for treaty Indian allocation and inside non-Indian fishery needs.

Regulations to Achieve Objectives

Stocks in this complex tend to range farther north than most Columbia River stocks and, while present in fisheries from Cape Falcon to southeast Alaska, tend to have limited impacts in Council-area ocean fisheries. Preseason abundance estimates were generally not available for Council management. Base period Council-area ocean fishery AEQ exploitation rates of 5% or less were below a management threshold that allows effective Council management of these stocks, and therefore they qualified as exceptions to the Council's overfishing criteria.

Willapa Bay Chinook

Inside Harvest

Run size, harvest, and escapement data for Willapa Bay fall Chinook are presented in Appendix B, Table B-23.

No Chinook directed non-Indian gillnet fishery was conducted during July and the first half of August 2006. This fishery is commonly referred to as the "summer dip-in" fishery; it occurs irregularly because historically it was dependent on Columbia River tule abundance, which are now an ESA listed stock. This fishery was generally assumed to harvest Columbia River tule stocks in a mix similar to adjacent ocean area catches; however, in light of recent catch composition information (>70% local Willapa Bay and Grays Harbor origin stock) this assumption has been questioned.

The 2006 preseason forecast of Chinook returning to Willapa Bay was 31,445 fish (1,880 natural and 29,565 hatchery). Concerned by the low forecast abundance of local Willapa Chinook, the one-day update fishery that typically occurs in late August was eliminated in order to maximize harvest of hatchery coho. Chinook harvest in coho and chum targeted gillnet fisheries during 2006 totaled 12,334 fish based on preliminary data. Recreational fisheries in the marine waters of Willapa Bay were open August 1, 2006 through August 15, 2006 with no more than two adults allowed to be harvested daily and August 16, 2006 through January 31, 2007 with no more than three adults allowed to be harvested daily, of which only two could be Chinook. Recreational salmon fisheries in tributaries to Willapa Bay varied in duration but were generally open August 1, 2006 through January 31, 2007 with two adult Chinook allowed to daily. Single-point, barbless hooks were required in all areas. Recreational harvest estimates were not available for 2006.

Escapement and Management Performance

During 2005, Chinook returning to hatcheries in the Willapa Bay watershed totaled 18,425 fish. Based on current hatchery production, this return was sufficient to achieve the goal of 9,800 total Chinook escapement to Willapa Bay hatchery facilities. An escapement estimate was unavailable for 2006.

The WDFW escapement goal for naturally spawning Chinook in Willapa Bay was 4,350 adults. An estimate of the 2006 natural spawning escapement was not available, (the 2005 natural escapement was 1,804 Chinook).

Grays Harbor Chinook

Inside Harvest

Run size, harvest, and escapement data for Grays Harbor Chinook are presented in Appendix B, Table B-25.

Net fisheries were conducted by the Quinault Indian Nation and the Chehalis Tribe targeting spring Chinook. The Quinault Indian Nation harvested five spring Chinook in 2006. No catch estimate was

available for the Chehalis Tribe. A recreational season was conducted on the Chehalis River, but catch estimates were not available.

No summer non-Indian gillnet fishery directed at non-local Chinook stocks occurred in 2006. Retention of fall Chinook was not allowed during the coho-directed non-Indian gillnet fishery in 2006; no Chinook were harvested during the non-Indian chum-directed fishery. In the non-Indian recreational fishery, retention of adult Chinook was not allowed in Marine Area 2-2 (September 16 through September 30 and October 16 through November 30), the lower Chehalis River downstream of the bridge crossing at the town of Porter (October 1 through November 30), and in the Humptulips River downstream of the Highway 101 bridge crossing (October 1 through October 15 and November 1 through November 30). Recreational fisheries were closed to Chinook retention beginning December 1, 2006. Recreational harvest estimates were not available. The Quinault Indian Nation gillnet fishery harvested a total of 3,751 fall Chinook. The Quinault Indian Nation fall gillnet fishery operated separately scheduled net fisheries: one in the lower Humptulips River and adjacent Area 2C of Grays Harbor and; the second one in the lower Chehalis River and adjacent areas of Grays Harbor, areas 2A and 2A-1. An additional fishing restriction in the Chehalis River, 2A, 2A-1 fishery was set by limiting fishing to east of Stearns Bluff in order to further limit catches of Chinook destined to Grays Harbor tributaries other than the Chehalis River. The Humptulips area treaty gillnet fishery caught 2,063 fall Chinook while the Chehalis River treaty gillnet fishery caught 1,688 fall Chinook. Both catches exceeded pre-season expected catch levels.

Escapement and Management Performance

Chehalis River spring Chinook are of natural origin and managed for an escapement goal of 1,400 adults. The 2006 terminal run forecast for spring Chinook was 2,317 adult fish; final 2005 and 2006 escapement estimates were 2,129 and 2,481, respectively.

Grays Harbor fall Chinook are managed for a natural spawning escapement goal of 14,600 adults. The 2006 Grays Harbor fall Chinook forecast was 16,639 wild and 3,781 hatchery adults; an escapement estimate for 2006 was not available. There is no management goal for Grays Harbor fall Chinook hatchery production.

Quinault River Chinook

Inside Harvest

Historical terminal gillnet harvest data for Quinault River Chinook stocks are presented in Appendix B, Table B-27.

A run of natural spawning spring/summer Chinook enters the river from April through July. The spring/summer Chinook run is typically small and any harvest is taken incidentally during fisheries directed at sockeye and steelhead. A total of 16 spring/summer Chinook were harvested in 2006.

The 2006 harvest of Quinault River fall Chinook was mostly hatchery origin fish taken in September and October. The treaty Indian net catch totaled 7,044 fall Chinook.

Escapement and Management Performance

Quinault fall Chinook were managed for hatchery production. The 2006 fall Chinook spawning escapement estimate was not available. Hatchery egg-take goals for fall Chinook were obtained at the tribal facilities. In addition, fall Chinook eggs to supplement hatchery rack returns at the U.S. Fish and Wildlife Service (USFWS) Quinault National Fish Hatchery were taken at the tribal facility.

Queets River Chinook

Inside Harvest

Historical terminal run size, catch, and escapement data for Queets River spring/summer and fall Chinook are presented in Appendix B-29 and B-30, respectively.

The treaty Indian gillnet harvest of spring/summer Chinook was limited to incidental catch in a June 29-30 subsistence fishery. Incidental harvest was six Chinook during the one-day steelhead fishery. The non-Indian inriver recreational fishery was closed.

Fall Chinook were harvested from September through early November by the treaty Indian gillnet fishery. The fishery started September 3 and followed a schedule set in a preseason management agreement between the Quinault Indian Nation and WDFW, targeting hatchery and wild coho during September through early October, and hatchery and wild Chinook from mid-October through early November. The treaty Indian gillnet fishery harvested 1,079 fall Chinook in the commercial fishery. Recreational fisheries operated with standard bag limits and schedules in the Queets, Clearwater, and Salmon Rivers. A catch estimate for this fishery was not available.

Escapement and Management Performance

The preliminary 2006 spawning escapement estimate for Queets River spring/summer Chinook was 330 adults, approximately 53% below the floor escapement goal of 700.

A preliminary estimate of 2,611 fall Chinook spawned naturally in the Queets system. An estimated 2,498 were produced naturally and 1,013 were “indicator” Chinook, which had wild parents for broodstock but were reared in the hatchery prior to release. Total fall Chinook escapement exceeded the minimum floor escapement goal of 2,500.

Hoh River Chinook

Inside Harvest

Historical terminal run size, catch, and escapement data for Hoh River spring/summer and fall Chinook are presented in Appendix B, Tables B-32 and B-33, respectively.

The spring/summer Chinook preseason abundance forecast was for a wild run size of 1,369. The Hoh Tribe and WDFW agreed upon terminal fisheries expected to harvest 31% of the terminal wild run size as well as dip-in hatchery Chinook from the Quillayute River system. Natural escapement was expected preseason to be approximately 945 wild Chinook. The tribal fishery operated at two days per week from week 19 (week of May 1) to week 21 (week of May 15) and one day per week from week 22 (week of May 22) to week 35 (week of August 21). Tribal regulations in 2006 required a minimum of 8 inch stretch mesh from week 19 to week 21 in order to target Chinook. The fishery took 613 Chinook, including an estimated 37 taken during separately scheduled ceremonial and subsistence fishing. Results of mark sampling indicated that 512 of these were of hatchery origin. Scale samples remain to be analyzed. The recreational fishery operated from May 17 through August 31, Wednesdays through Sundays, with a bag limit of one adult per day from the mouth up to Willoughby Creek. A preliminary estimate of 109 Chinook were taken in the sport fishery, of which 64 were wild.

Hoh River fisheries for fall Chinook were based on an expected terminal run size of 3,988 adults, allowing for a harvest rate of 40%. The spawning escapement was expected to be 2,393 adults. The tribal fishery targeted 25.75% of the terminal run. In order to develop an alternative mesh size limit model for future applications, 2006 regulations required 6 inch maximum stretch mesh from weeks 43 to

46, the same as the 2004 and 2005 season regulations. The tribal gillnet fishery was scheduled for three days per week from weeks 36 (week of August 28) through 48 (week of November 20), except for two days per week during week 42. The tribal fishery caught approximately 571 Chinook. Results of mark sampling indicated that 552 of these were of wild origin. Coded-wire tag samples remain to be analyzed. The non-Indian recreational fishery extended from September 1 through November 30, with the area below Willoughby Creek open and a daily-bag-limit of six salmon, two of which could be adults. The portion of the river between Willoughby Creek and Morgan's Crossing opened October 16 to reduce impacts on spawning spring/summer Chinook in that reach. The river above Morgan's Crossing was not open for recreational salmon fishing. A catch estimate was not available for the recreational fishery.

Escapement and Management Performance

Based on the tribal gillnet catch and expected harvest rate, the spring/summer Chinook run appears lower than the preseason terminal run size forecasted. Catch analysis indicates that the spawning estimate for Hoh spring/summer Chinook was 904 adults, just making the 900 fish escapement floor for this stock. Spawning ground data was not finalized; however, preliminary cumulative Chinook redd counts indicate escapement will be slightly higher than the projected escapement based on catch and expected tribal harvest rate.

Based on the tribal gillnet catch and expected harvest rate, the fall Chinook terminal run size appears to be below the level anticipated preseason. The preliminary spawning escapement estimate for Hoh fall Chinook was 1,325, above the 1,200 fish escapement floor established for this stock. No spawning ground data was available for producing a stratified escapement based on Chinook redd counts.

Quillayute River Chinook

Inside Harvest

Historical terminal run size, catch, and escapement data for Quillayute River spring, summer, and fall Chinook are presented in Appendix B, Tables B-35 and B-36 respectively. Spring and summer Chinook were currently managed separately, but data for both were combined in Table B-35. All hatchery origin fish were considered to be spring Chinook, and all natural spawners and tribal broodstock collections were considered to be summer Chinook.

The recreational and tribal fisheries for spring and summer Chinook were established by preseason agreement between WDFW and the Quileute Tribe. The total tribal catch for 2006 was 632 spring and 56 summer Chinook, and included ceremonial and subsistence use. Estimates of 2006 recreational spring and summer Chinook harvest were not available.

The total 2006 Quileute Tribal harvest of fall Chinook was 2,020, and included ceremonial and subsistence use. An estimate of the recreational catch was not available.

As in past years, WDFW required release of unmarked Chinook during July and August to reduce impacts of the recreational fishery on the natural summer Chinook stock. The fall recreational fishery from September through November proceeded with normal bag limits and schedule. The Quileute Tribe did not have a closure in their fishery this year, but as in past years, reduced their fishery to 29 hours per week during July and August to reduce impacts to summer Chinook.

Escapement and Management Performance

The management agreement called for an escapement goal of 200 hatchery spring Chinook. The actual rack return was 1,032, which exceeded hatchery requirements.

The summer Chinook run was managed to achieve an escapement of 1,200 (adults, jacks, and broodstock collection combined). The preliminary estimated natural spawning summer Chinook escapement of 600 was under the escapement goal.

Terminal area fisheries on fall Chinook were managed for a target 40% harvest rate, with a minimum escapement level of 3,000 adults. The preliminary escapement estimate of 6,336 fall Chinook exceeded the minimum escapement goal.

PUGET SOUND CHINOOK STOCKS

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

Management Objectives

The stocks within this complex and their respective FMP conservation objectives were established in U.S. District Court by WDFW and the treaty Indian tribes. The conservation objectives for stocks managed primarily for natural production were developed by a State/Tribal Management Plan Development Team following the Boldt Decision, and were based on "the adult spawning population that will, on the average, maximize biomass of juvenile outmigrants subsequent to incubation and freshwater rearing under average environmental conditions." The objectives were estimated for the average spawning escapement during periods thought to represent spawner abundances that provided maximum production. The objectives for stocks managed for artificial production are based on hatchery escapement needs. Annual management targets (expected hatchery returns plus natural escapement) for specific rivers or regions of origin may vary from the FMP conservation objectives by following fixed procedures established in U.S. District Court as outlined in "Memorandum Adopting Salmon Management Plan" (*U.S. versus Washington*, 626 F. Supp. 1405 [1985]).

NMFS has developed rebuilding exploitation rate (RER) standards for some ESA-listed Puget Sound stocks (Table II-5). Predicted total exploitation rates were compared to these standards and used by NMFS in setting ESA consultation standards for the combined Council/Puget Sound salmon fisheries. Puget Sound stocks were managed pursuant to the provisions of a WDFW/Tribal management plan approved under a 4(d) rule promulgated by NMFS.

Regulations to Achieve Objectives

Puget Sound stocks contribute to fisheries off B.C., are present to a lesser degree off southeast Alaska, and are impacted to a minor degree by Council-area ocean fisheries. Base period Council-area ocean fishery AEQ exploitation rates of 5% or less were below a management threshold which allowed effective Council management of these stocks, and they qualify as exceptions to the Council's overfishing criteria.

Inside Harvest

Commercial inside fishery harvest of Puget Sound Chinook was managed on the basis of six regional stock management units or, in some cases, component stocks within management units: Strait of Juan de Fuca, Nooksack-Samish, Skagit, Stillaguamish-Snohomish, South Puget Sound, and Hood Canal. Harvest was regulated according to the natural spawning escapement goal or hatchery program escapement goal for that unit. Commercial net and troll harvest (treaty Indian and non-Indian) is presented in Appendix B, Table B-38. These catches included some fish of non-Puget Sound origin. The total commercial harvest in Puget Sound in 2006 was 147,694 Chinook, compared to 92,307 Chinook caught in 2005. The non-Indian net catch was 13,090 Chinook, compared to 6,236 Chinook caught in

2005. The treaty Indian net and troll harvest was 134,604 Chinook, compared to 86,071 Chinook caught in 2005.

Recreational Chinook catches in the Puget Sound recreational fishery for years from 1971 through 2005 are presented in Appendix B, Table B-39. Catch estimates for the 2006 Puget Sound recreational fishery were not available.

Escapement and Management Performance

Puget Sound Chinook management goals for fishery planning processes in 2006 were expressed in terms of constraints on total fishery exploitation rates. Information to evaluate performance against these constraints is not yet available.

Historical hatchery and natural run component escapements and net catches for summer/fall Chinook for each Puget Sound region of origin are presented in Appendix B, Table B-40. Historical spring Chinook escapement data are presented in Appendix B, Table B-43.

All Puget Sound spring Chinook hatchery escapement goals were met. Preliminary data suggest most Puget Sound hatcheries met their summer/fall Chinook goals.

Naturally spawning Puget Sound spring and summer/fall Chinook remained depressed in 2006. Preliminary data suggest no Puget Sound spring Chinook natural stocks met their escapement goals. Preliminary information on 2006 natural spawning escapements for summer/fall Chinook stocks indicate escapement goals were met in some areas, but not in Stillaguamish, Snohomish, Cedar, Green, Dosewallips, Duckabush and Hamma Hamma rivers. In many natural spawning areas hatchery Chinook comprise a large component of the natural spawning population.

COASTWIDE GOAL ASSESSMENT SUMMARY

Information to assess conservation objectives was unavailable for Columbia River natural (Coweeman) tule, Snake River wild fall Chinook, Grays Harbor natural fall Chinook, and all Puget Sound natural Chinook stocks. Conservation objectives for all other Council managed Chinook stocks were met except natural spawning escapement for Klamath River fall, Queets spring/summer, and Quillayute spring/summer Chinook.

A summary of 2006 performance for Chinook salmon stocks in relation to Council conservation objectives is presented in Table II-5.

TABLE II-1. Sacramento River natural and hatchery adult fall Chinook escapements in numbers of fish. (Page 1 of 1)

Year	Upper River ^{a/}			Lower River			Total		Grand Total
	Hatchery	Natural ^{b/}	Subtotal	Hatchery	Natural ^{b/}	Subtotal	Hatchery	Natural ^{b/}	
1970	3,010	61,159	64,168	10,266	82,718	92,984	13,275	143,877	157,152
1971	1,728	67,586	69,314	11,011	74,556	85,567	12,739	142,143	154,882
1972	1,259	36,485	37,744	6,766	47,647	54,413	8,025	84,131	92,156
1973	1,679	48,948	50,627	18,010	151,422	169,433	19,689	200,371	220,060
1974	1,984	66,304	68,288	11,799	121,930	133,729	13,783	188,234	202,017
1975	3,289	72,986	76,275	10,781	68,564	79,346	14,071	141,550	155,621
1976	3,017	80,262	83,279	8,612	75,975	84,586	11,628	156,237	167,865
1977	6,083	60,966	67,049	14,896	82,065	96,961	20,978	143,032	164,010
1978	2,717	66,991	69,708	9,937	47,303	57,240	12,654	114,295	126,948
1979	6,407	81,332	87,739	9,405	72,299	81,704	15,812	153,632	169,444
1980	10,271	45,504	55,775	14,645	71,608	86,253	24,916	117,113	142,028
1981	5,883	51,832	57,714	25,047	92,129	117,177	30,930	143,961	174,891
1982	17,117	39,694	56,811	14,548	92,600	107,148	31,666	132,293	163,959
1983	6,112	41,969	48,082	12,474	48,831	61,305	18,586	90,800	109,386
1984	19,594	51,771	71,365	19,131	67,733 ^{c/}	86,865	38,725	119,505	158,230
1985	15,869	103,698	119,566	13,385	105,753	119,138	29,254	209,450	238,704
1986	11,283	113,875	125,158	10,565	102,434	112,999	21,847	216,310	238,157
1987	9,981	76,861	86,842	9,851	97,930	107,782	19,833	174,791	194,623
1988	12,594	128,725	141,319	14,177	69,228	83,405	26,771	197,953	224,724
1989	10,212	67,296	77,508	14,730	59,387	74,117	24,942	126,683	151,625
1990	13,464	50,226	63,690	8,283	32,973	41,256	21,747	83,199	104,946
1991	10,031	35,258	45,289	15,999	56,144	72,143	26,030	91,402	117,432
1992	6,257	31,734	37,990	15,431	27,723	43,154	21,688	59,457	81,145
1993	7,056	55,144	62,200	17,570	55,412	72,982	24,626	110,556	135,182
1994	11,585	66,383	77,967	19,017	66,647	85,664	30,601	133,030	163,631
1995	24,810	112,234	137,044	16,738	141,252	157,990	41,548	253,486	295,034
1996	18,848	131,267 ^{d/}	150,116	13,670	135,803	149,474	32,519	267,071	299,589
1997	44,590	167,354	211,943	18,686	112,246	130,932	63,276	279,600	342,875
1998	42,400	60,713 ^{d/}	103,112	27,516	107,431	134,947	69,915	168,144	238,060
1999	23,194	256,629	279,823	19,029	97,089	116,118	42,224	353,718	395,942
2000	20,793	152,923	173,716	26,782	216,291	243,073	47,575	369,214	416,789
2001	23,710	130,440	154,150	33,689	358,217	391,906	57,399	488,657	546,056
2002	61,946	481,924 ^{e/}	543,870	23,747	207,883	231,630	85,693	689,806	775,499
2003	82,708	164,802	247,510	25,490	248,636	274,126	108,198	413,438	521,636
2004	51,557	70,557	122,114	28,510	132,930	161,440	80,067	203,487	283,554
2005	142,135	96,716	238,851	41,166	113,990	155,156	183,301	210,706	394,007
2006 ^{f/}	56,962	86,312	143,274	19,753	107,197	126,950	76,715	193,509	270,224

a/ Above the Feather River; 1971-1985 estimates include Tehama-Colusa Spawning Channel.

b/ Fish spawning in natural areas are the result of hatchery and natural production; estimates generally based on carcass surveys.

c/ Does not include estimated Bear River escapement, approximately 300 adult fish.

d/ Includes Butte Creek, for which a fall spawner survey was conducted in 1996 and 1998.

e/ Estimation methodology was changed due to an extremely high Battle Creek escapement in 2002.

f/ Preliminary.

TABLE II-2. Klamath River adult inriver fall Chinook run size, spawning escapement, recreational catch, Indian gillnet harvest, and non-landed fishing mortalities in numbers of fish and percent of the total inriver run size. (Page 1 of 1)

Year	Spaw ning Escapement		Inriver Recreational Catch		Indian Net Catch		Non-landed Fishing Mortality		Inriver Run Size
	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers
1978	71,471	77%	1,694	2%	18,200	20%	1,618	2%	92,983
1979	34,273	67%	2,141	4%	13,650	27%	1,231	2%	51,295
1980	27,994	61%	4,496	10%	12,013	26%	1,137	2%	45,640
1981	38,282	48%	5,983	7%	33,033	41%	2,994	4%	80,292
1982	42,362	64%	8,339	13%	14,482	22%	1,429	2%	66,612
1983	44,649	78%	4,235	7%	7,890	14%	772	1%	57,546
1984	23,560	50%	3,340	7%	18,670	40%	1,691	4%	47,261
1985	48,211	75%	3,582	6%	11,566	18%	1,079	2%	64,438
1986	146,251	75%	21,027	11%	25,127	13%	2,614	1%	195,019
1987	130,840	63%	20,169	10%	53,096	25%	5,029	2%	209,134
1988	112,844	59%	22,203	12%	51,651	27%	4,944	3%	191,642
1989	65,859	53%	8,775	7%	45,565	37%	4,141	3%	124,340
1990	23,663	66%	3,553	10%	7,906	22%	760	2%	35,882
1991	18,133	56%	3,383	10%	10,198	31%	956	3%	32,670
1992	19,388	73%	1,002	4%	5,785	22%	523	2%	26,698
1993	43,501	76%	3,172	6%	9,636	17%	903	2%	57,212
1994	49,405	77%	1,832	3%	11,692	18%	1,054	2%	63,983
1995	199,653	90%	6,081	3%	15,557	7%	1,477	1%	222,768
1996	101,359	58%	12,766	7%	56,476	32%	5,172	3%	175,773
1997	64,806	77%	5,676	7%	12,087	14%	1,167	1%	83,736
1998	71,707	79%	7,710	9%	10,187	11%	1,043	1%	90,647
1999	32,784	64%	2,282	4%	14,660	29%	1,322	3%	51,048
2000	180,339	83%	5,650	3%	29,415	13%	2,673	1%	218,077
2001	132,946	71%	12,134	6%	38,645	21%	3,608	2%	187,333
2002	92,818	58%	10,495	7%	24,574	15%	2,351	1%	160,788 ^{a/}
2003	149,424	78%	9,680	5%	30,034	16%	2,810	1%	191,948
2004	47,060	59%	4,003	5%	25,803	33%	2,325	3%	79,191
2005 ^{b/}	54,488	84%	1,985	3%	8,016	12%	738	1%	65,227
2006 ^{b/}	49,944	81%	62	0%	10,285	17%	1,338	2%	61,629

a/ Inriver run size includes a USFWS estimate of 30,550 fish (19% of the run) that died prior to spawning in September 2002.

b/ Preliminary.

TABLE II-3. Oregon coastal spring and fall Chinook hatchery return and harvest in estuary and freshwater fisheries. (Page 1 of 1)

Year	Return to Facilities			Estuary and Freshwater Harvest ^{b/}	
	Public Hatchery ^{a/}		Private	Spring	Fall
	Spring	Fall	All		
THOUSANDS OF CHINOOK					
1976	2.9	0.5	-	13.5	24.3
1977	2.4	4.2	-	13.8	35.6
1978	4.4	1.6	-	13.1	43.4
1979	7.0	2.0	0.4	16.4	31.2
1980	7.9	1.8	3.4	11.9	22.7
1981	2.5	1.8	5.1	11.2	30.0
1982	4.1	2.3	12.1	11.6	25.1
1983	3.9	4.0	6.1	4.9	21.5
1984	5.6	3.3	6.3	4.1	29.0
1985	8.7	3.5	34.6	9.0	29.5
1986	30.6	5.8	70.8	17.3	36.5
1987	22.8	7.1	38.7	20.2	54.8
1988	22.0	6.4	25.0	28.9	61.4
1989	32.7	4.3	14.7	23.7	53.9
1990	6.3	3.4	7.8	15.5	39.9
1991	5.4	3.1	4.1	11.1	47.7
1992	2.7	4.4	-	8.0	44.7
1993	10.6	2.8	-	16.4	54.7
1994	4.8	3.0	-	9.2	46.7
1995	55.0	3.3	-	31.1	62.0
1996	26.7	3.6	-	25.6	66.0
1997	29.1	2.0	-	14.7	43.1
1998	11.0	2.6	-	8.2	37.3
1999	18.1	3.3	-	8.2	35.2
2000	24.5	3.1	-	11.4	40.5
2001	26.8	5.7	-	18.6	66.3
2002	24.7	2.9	-	30.8	75.1
2003	17.2	3.9	-	29.3	82.5
2004	19.7	2.6	-	NA	NA
2005	11.7	2.6	-	NA	NA
2006 ^{c/}	7.4	2.3	-	NA	NA

a/ Adults only.

b/ Freshwater harvests are derived from ODFW salmon/steelhead angler catch record card information and represent fish larger than 24 inches (i.e., adults). Includes both hatchery and natural fish.

c/ Preliminary.

TABLE II-4. Spawner indices for naturally produced Oregon coastal fall Chinook and south migrating/localized spring Chinook.^{a/}
(Page 1 of 1)

Year	Fall Chinook Spaw ner Indices		South/local Migrating Spring Chinook Spaw ner Indices	
	North Migrating Peak Count Adults Per Mile	Rogue River	Rogue River	
		(South/local migrating) Adult Carcass Counts	Gold Ray Dam Counts	Umpqua River Winchester Dam Counts
1976	49	-	20	6
1977	71	1,356	15	7
1978	73	9,174	40	5
1979	81	8,272	29	6
1980	89	2,221	24	6
1981	82	5,228	13	5
1982	90	2,812	23	7
1983	42	2,737	10	3
1984	98	3,267	8	5
1985	132	5,486	28	8
1986	109	17,177	40	8
1987	121	25,918	37	8
1988	214	31,613	39	8
1989	137	7,408	8	8
1990	121	1,868	18	6
1991	150	2,799	9	2
1992	138	2,366	2	3
1993	63	5,447	13	4
1994	125	7,366	4	3
1995	101	3,958	21	6
1996	147	2,448	10	4
1997	105	1,643	10	3
1998	98	3,601	4	4
1999	124	2,493	6	3
2000	85	3,366	3	3
2001	203	6,380	9	6
2002	268	11,836	7	7
2003	297	14,620	19	8
2004	211	5,326 ^{b/}	13	5
2005 ^{c/}	118	d/	6	4
2006 ^{c/}	81	d/	5	3

a/ North migrating peak counts are taken on nine miles of standard index surveys over nine river systems (see Appendix B, Table B-11 for individual system counts). Complete carcass counts are listed in Appendix B, Table B-10. Complete counts for Gold Ray and Winchester dams are listed in Appendix B, Table B-9.

b/ In 2004 one of the standard survey sections was not sampled. In the previous two years this section accounted for 33% of the total adult carcass counts.

c/ Preliminary.

d/ Surveys were not conducted.

Table II-5. Performance of Chinook salmon stocks in relation to 2006 conservation objectives (preliminary data). (Page 1 of 2)

System and Stock	2006 FMP Conservation Objective	Achievement
Sacramento River Chinook		
Fall	122,000-180,000 natural and hatchery adults.	241,194 adult fall Chinook, 134% of the upper end of the escapement goal range.
Winter (Endangered)	NMFS ESA consultation standard defines specific limits on management measures to protect Sacramento River winter and spring Chinook.	Commercial and recreational seasons south of Point Arena conformed with the consultation standard.
Spring (Threatened)	Same objective as for winter Chinook.	Objective met-see winter Chinook achievement.
California North Coast Chinook		
Klamath River Fall	Inriver run size expectation of 47,600 adults to provide an expected escapement of 21,100 natural adult spawners. ^{a/}	Run size 61,300 adults, 129% of expectation; 30,400 natural area spawners, 144% of forecast and 87% of conservation objective.
California Coastal (Threatened)	No greater than 16.0% ocean harvest rate on age-4 Klamath River fall Chinook.	Preseason projection of 11.5%; no postseason estimate is currently available.
Oregon Coast Chinook		
North and South/Local Migrating Stocks	150,000-200,000 natural adult spawners (equivalent to peak spawner index counts of 60-90 adults per mile).	81 natural adult spawners per mile, within the aggregate stock index range.
Columbia River Basin Fall Chinook		
LRW (Component of threatened lower Columbia River Chinook ESU)	MSY objective of 5,700 natural North Lewis River adult spawners (no specific NMFS ESA guidance for	Preliminary projections indicate that the escapement objective will be met.
Lower Columbia natural tules (Component of threatened lower Columbia River Chinook ESU)	Total (ocean plus inriver) AEQ exploitation rate on ESA-listed Coweeman River natural tules of no more than 49.0%	Preseason projection of less than 49%. No postseason estimate is currently available.
LRH	14,100 adult hatchery spawners.	Preliminary projection of 19,500 adult hatchery spawners, 138% of goal.
SCH	7,000 adult hatchery spawners.	9,300 adult hatchery spawners, 133% of target.
MCB	No FMP objective; target of 7,750 hatchery adults.	Based on inseason projections, escapement will meet hatchery needs.
URB	40-45,000 natural and hatchery adults above McNary Dam, plus meet treaty Indian obligations. <i>U.S. v. Oregon</i> parties agreed to a target of 45,000 adults between 1991 and 1993, and 46,000 after 1993.	90,900 natural and hatchery adults over McNary Dam, 197% of MSY target in FMP.

Table II-5. Performance of Chinook salmon stocks in relation to 2006 conservation objectives (preliminary data). (Page 2 of 2)

System and Stock	2006 FMP Conservation Objective	Achievement		
Columbia River Basin Fall Chinook (continued)				
Snake River Fall Chinook (Threatened; component of URB)	SRFI ≤0.700 for all ocean fisheries combined (i.e., no less than a 30.0% reduction from the 1988-1993 base period exploitation rate).	Preseason SRFI projection of 0.643. No postseason estimate is currently available.		
Washington Coastal Chinook				
Fall	Natural spawner escapement objectives as provided in state-tribal agreements; meet hatchery egg-take goals and meet treaty Indian obligations.	Based on preliminary estimates, escapement objectives were met for Willapa and Quinalt hatchery, and Queets, Hoh, and Quillayute natural stocks. Estimates were not available for Willapa Bay and Grays Harbor natural stocks.		
Spring/Summer	Natural spawner escapement objectives as provided in state-tribal agreements; meet hatchery egg-take goals and meet treaty Indian obligations.	Based on preliminary estimates, escapement objectives met for Grays Harbor spring natural and Hoh spring/summer natural; not met for Queets spring/summer natural and Quillayute summer natural.		
Puget Sound Chinook				
(Threatened)	Minor part of Washington ocean harvest; Council ocean management not directed at these stocks. Adult equivalent exploitation rate standard developed for some stocks:	Postseason estimates not available. Preseason predictions of adult equivalent exploitation rates and spawner objectives were:		
	<u>Exploitation Rate</u>	<u>Spawner Esc.</u>	<u>Exploitation Rate</u>	<u>Spawner Esc.</u>
· Nooksack spring	· 4% So U.S.	-	3.6%	
· Skagit summer/fall	· 50% Total	-	30.3%	
· Skagit spring	· 38% Total	-	18.4%	
· Stillaguamish summer/fall	· 15% So U.S.	-	12.2%	
· Snohomish summer/fall	· 15% So U.S.	-	14.7%	
· Lake Wash. summer/fall	· 15% pre-term SUS	-	10.4%	
· White River spring	· 20% pre-term SUS	-	19.7%	
· Green River summer/fall	· 15% pre-term SUS	5,800	10.4%	13,527
· Puyallup summer/fall	· 50% Total		50.0%	
· Nisqually summer/fall	· NA	1,100	-	1,752
· Skokomish summer/fall	· 15% pre-term SUS	1,200	9.0%	1,230
· Mid-Hood Canal fall	· 10.4% pre-term SU.	-	8.9%	
· Dungeness spring	· 10% So US	-	2.1%	
· Elwha summer/fall	· 10% So US	-	2.2%	

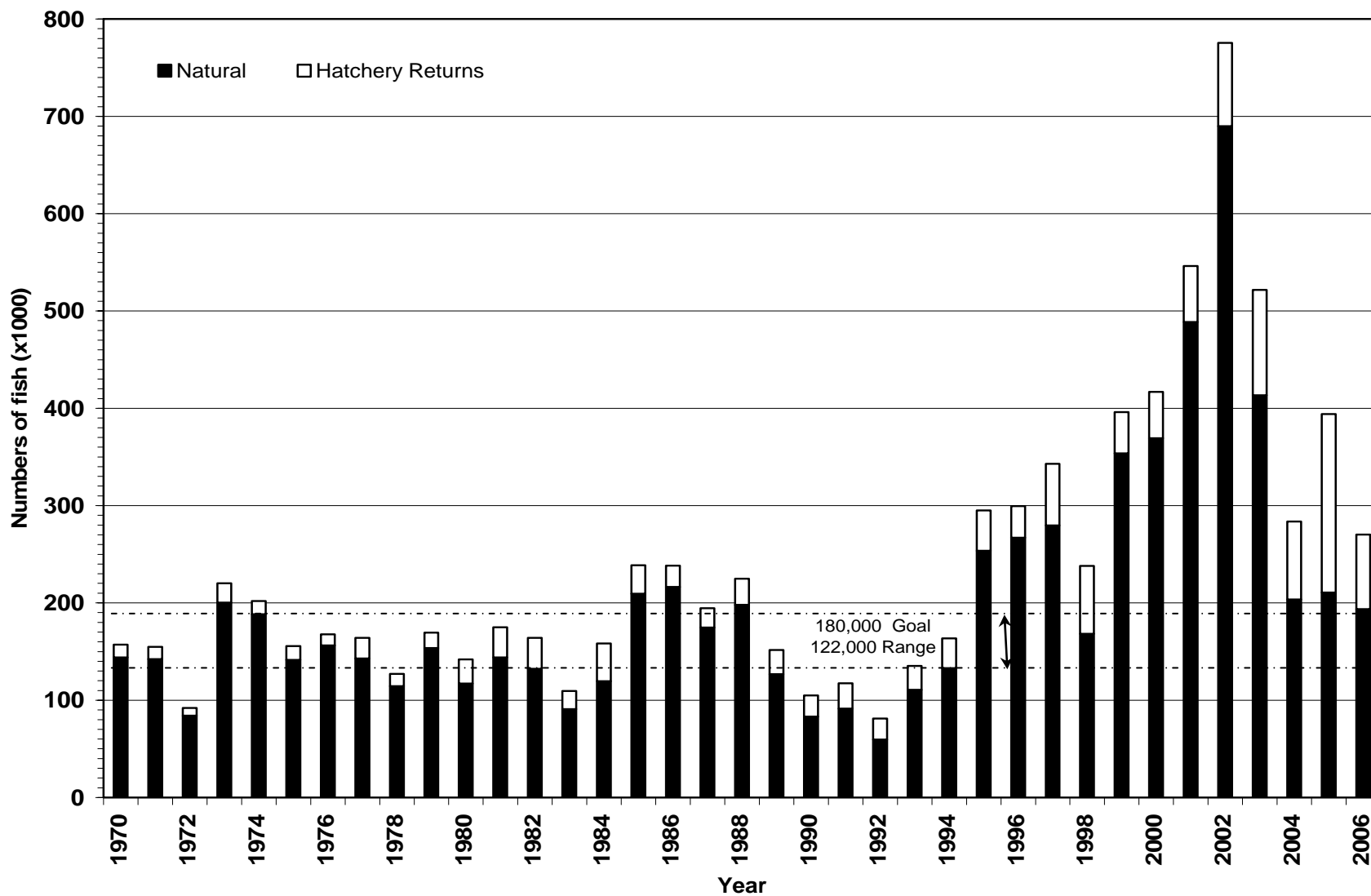


Figure II-1. Sacramento River adult fall Chinook spawning escapements, 1970-2006.

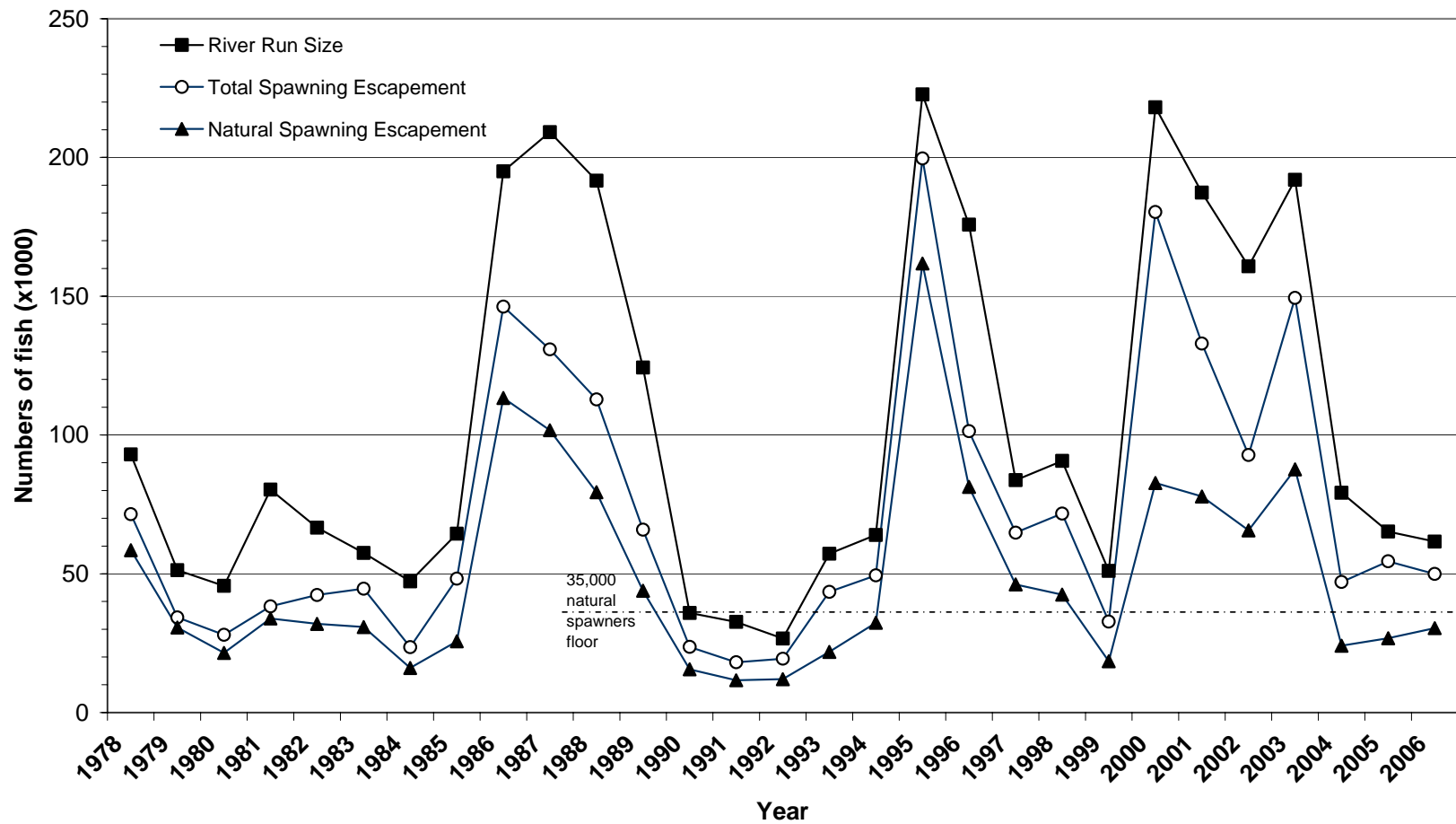


Figure II-2. Klamath River adult fall Chinook returns and spawning escapements, 1978-2006.

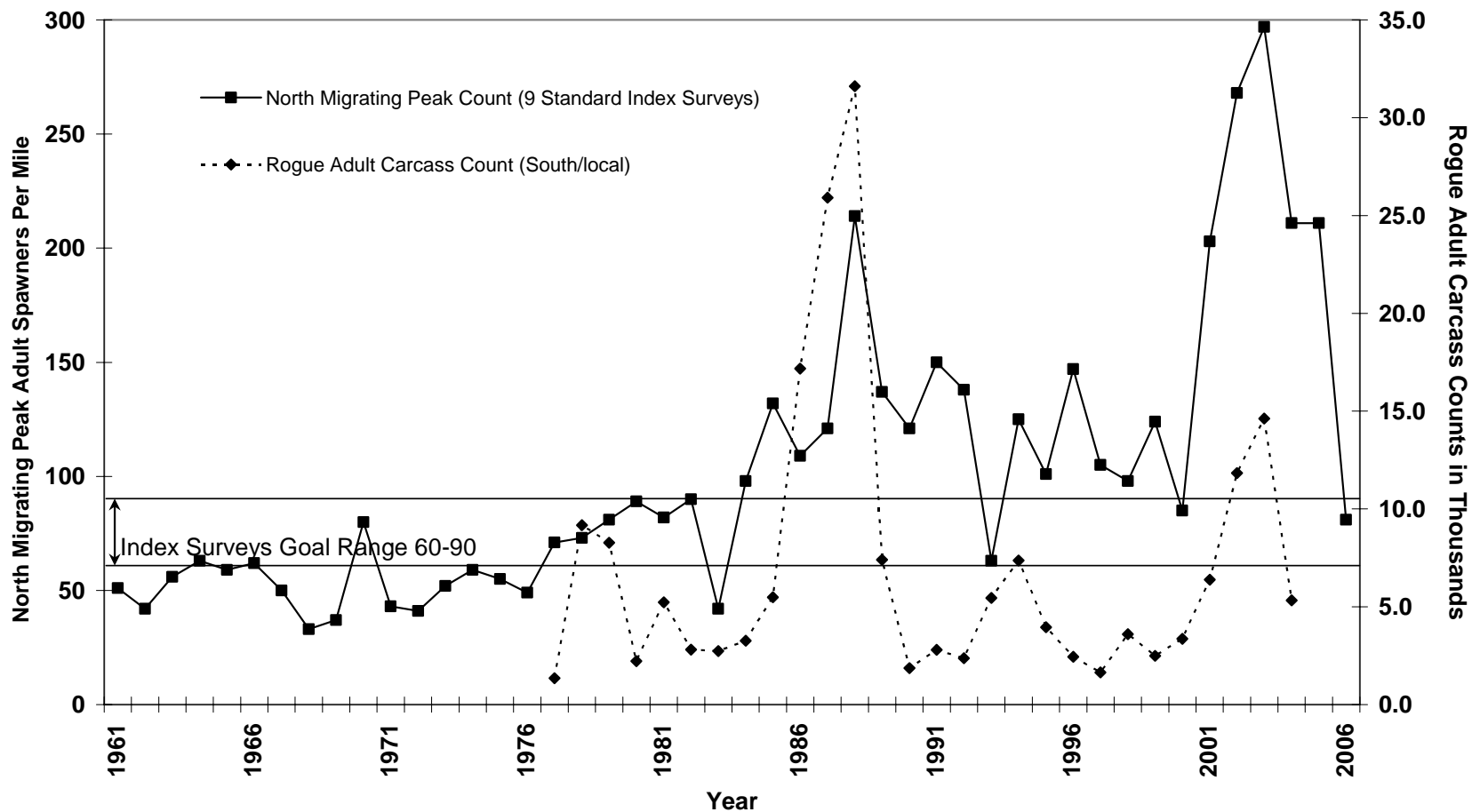


Figure II-3. Spawner indices for naturally produced Oregon coastal fall Chinook.

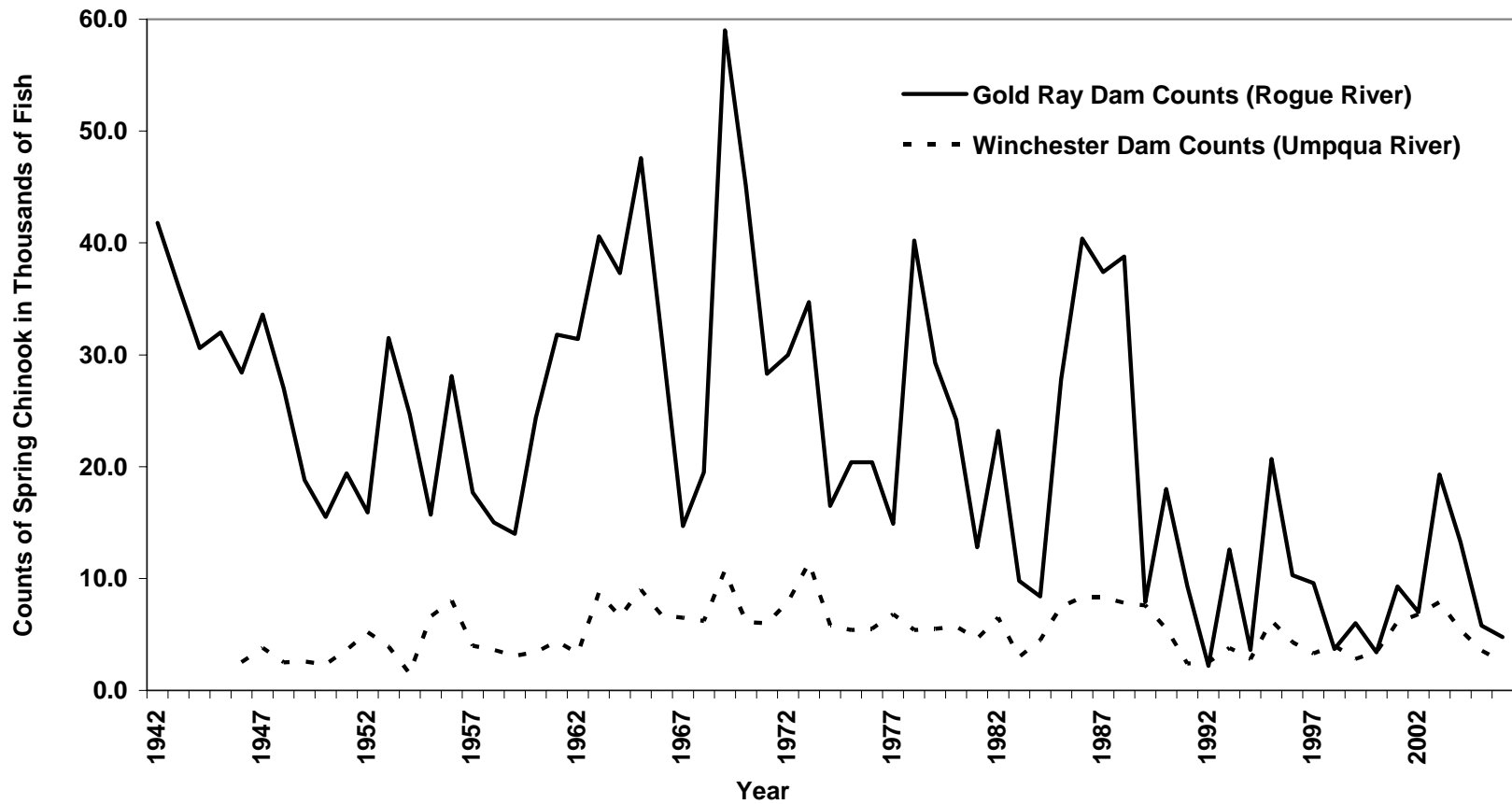


Figure II-4. Escapement indices for naturally produced Oregon coastal south/local migrating spring Chinook, 1942-2006.

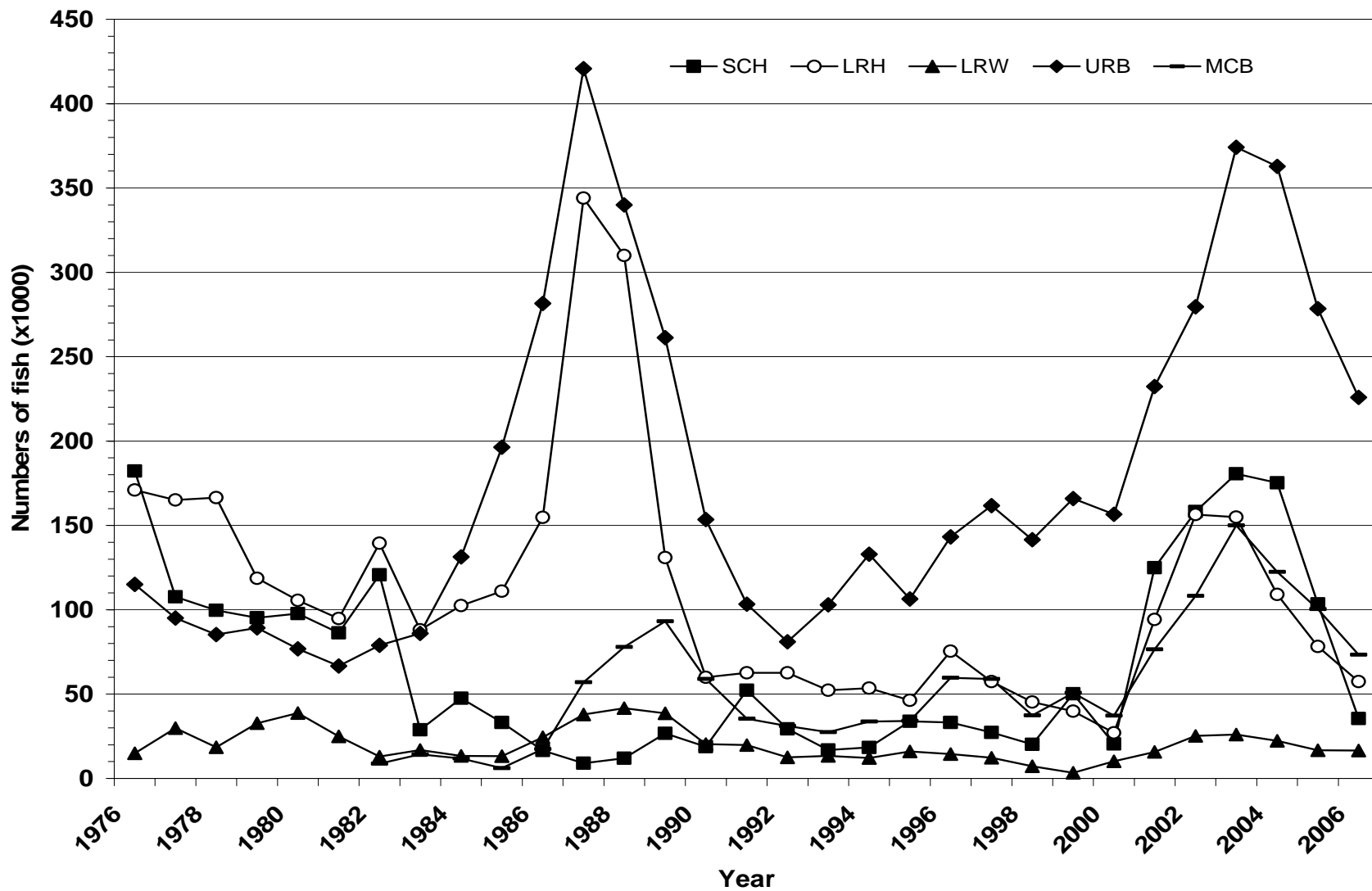


Figure II-5. Columbia River mouth adult returns of the five major fall Chinook stock groups, 1976-2006.

CHAPTER III

COHO SALMON MANAGEMENT

OREGON PRODUCTION INDEX AREA COHO STOCKS

Oregon Production Index (OPI) area coho stocks include all Washington, Oregon, and California natural and hatchery stocks from streams south of Leadbetter Point, Washington, although stocks produced north of Leadbetter Point are also intercepted in the OPI area. The largest naturally produced coho stock is OCN coho, which includes coho produced from Oregon river and lake systems south of the Columbia River. OCN coho are managed as a stock aggregate with four identified components. NMFS listed three coho ESUs within the OPI area as threatened: CCC coho listed October 1996, SONCC coho listed May 1997, and OCN coho listed August 1998. In 2002, NMFS began an update of all its listing determinations and in January of 2006 concluded that the OCN ESU did not warrant listing under the ESA. However, Columbia River natural coho were listed as endangered under the Oregon State ESA in 2002, and as threatened under the Federal ESA on June 28, 2005. The primary hatchery stocks include a south migrating Columbia River (early) stock, a north migrating Columbia River (late) stock, public hatchery coho from the Oregon and northern California Coast, and a small cooperative program along the southern Oregon Coast known as the Salmon Trout Enhancement Program (STEP).

Management Objectives

In establishing ocean salmon fisheries that impact OPI area coho stocks, the Council was guided by the reasonable and prudent alternatives of NMFS 1999 Supplemental Biological Opinion and Incidental Take Statement for CCC and SONCC coho and reasonable and prudent alternatives in the March 2006 NMFS ESA guidance letter for LCR natural coho, which required:

1. No directed coho fisheries or retention of coho in all commercial and recreational fisheries off California to protect threatened CCC coho.
2. Marine fishery impacts on threatened CCC and SONCC coho must be no more than 13.0% as indicated by projected impacts on RK hatchery coho.
3. Marine fishery impacts on threatened LCR natural coho should not exceed a coastwide marine and freshwater exploitation rate of 15.0%.

Based on parent escapement levels and observed OPI smolt-to-jack survival for 2003 brood OPI smolts, the total allowable OCN coho exploitation rate for 2006 fisheries was no greater than 20.0% under the Salmon FMP (Amendment 13), but no greater than 15.0% under the matrix developed by the OCN work group during their review of Amendment 13. The work group recommendation was accepted by the Council as expert biological advice in November 2000.

The Council was also guided by treaty Indian/non-Indian sharing agreement for Columbia upriver coho stocks, which required passage of 50% of the run destined for areas above Bonneville Dam.

Regulations to Achieve Objectives

Historically, OPI area coho stocks contributed primarily to ocean fisheries off Oregon and northern California and, to a lesser degree, Washington and B.C. The Council prohibited retention of coho in all fisheries south of the Oregon/California border, and adopted seasons the STT projected would result in

exploitation rates of 5.2% for RK coho in marine fisheries, 9.6% for OCN coho in marine and freshwater fisheries combined, and 9.9% for LCR natural coho in marine fisheries.

Commercial Troll

Commercial troll fisheries have been closed to coho retention south of Cape Falcon since 1993. Chinook fishery closures and gear restrictions (four-spread requirement) were also used to reduce coho impacts.

Non-Indian commercial troll fisheries from Cape Falcon to the U.S./Canada border occurred in 2006 with an overall quota of 6,800 coho. The fisheries were restricted to mark-selective coho retention.

All species treaty Indian fisheries north of Cape Falcon were not restricted to mark-selective retention of coho, and operated on an overall quota of 37,500 coho.

Recreational

Retention of coho has been limited in the recreational fisheries south of Cape Falcon since 1993. All coho directed recreational fisheries in the OPI area have been mark-selective since 1998. Retention of coho has been prohibited off California since 1996 to protect ESA listed CCC coho. Adequate abundance of marked coho in the OPI area has resulted in allowable harvests of marked coho in Oregon and Washington within constraints for OCN and LCR natural coho.

Inside Harvest

Coho retention in all California fisheries was prohibited.

The 2006 inside recreational harvest of coho in Oregon coastal streams, as in recent years, was very restricted and generally limited to areas where surplus hatchery coho returns were expected. Mark-selective coho fisheries occurred in nine freshwater areas. Estimates of the 2006 inriver recreational coho harvest were not available. Historical estimates of the recreational harvest of adult coho in Oregon coastal estuaries and rivers, derived from ODFW salmon and steelhead angler catch record cards, are reported in Table III-1.

A limited fishery for naturally-produced coho was approved in Siltcoos and Tahkenitch Lakes. The recreational fishery opened October 1, with a harvest quota of 400 adult coho for Siltcoos Lake and 200 adult coho for Tahkenitch Lake. The Siltcoos and Tahkenitch Lakes fisheries closed December 15 as scheduled. The final catch estimates were 220 adults and 70 jacks in the Siltcoos Lake fishery and 55 adults and 17 jacks in the Tahkenitch Lake fishery.

The 2006 Columbia River non-Indian commercial gillnet fishery harvested 64,100 adult coho, compared to 94,800 coho in 2005. Select Area fisheries in both Oregon and Washington accounted for 35,800 of the total 2006 Columbia River commercial coho catch. The treaty Indian mainstem commercial gillnet coho catch was 5,600 fish, compared to the 2005 catch of 4,700 coho. All Columbia River coho commercial fisheries were non-mark-selective. Coho harvest statistics for Columbia River commercial and recreational fisheries are presented in Appendix B, Table B-21.

The Buoy 10 and mainstem recreational fisheries below Bonneville Dam harvested 20,700 adult coho compared to 7,500 adult coho in 2005. In 2006, Columbia River managers opened the Buoy 10 fishery August 1 for both Chinook and adipose fin-clipped coho. The fishery ran through December 31 with the upriver boundary at the Tongue Point, Oregon to Rocky Point, Washington line. The 2006 Buoy 10 harvest and effort totaled 3,700 coho and 40,600 angler trips (Table III-2). All Columbia River

recreational fisheries were mark-selective for coho. Historical Buoy 10 catch and effort data are provided in Appendix B, Table B-22.

Escapement and Management Performance

The overall abundance estimate for OPI area stocks in 2006 was 557,100, down from 592,100 in 2005 and less than the ten-year average of 715,300 (Table III-3; Figure III-1).

Central California Coast and Northern California Coho

Spawner estimates were not available for CCC coho. Estimates were available for escapement to Klamath River Basin hatcheries, but not for coho spawning in natural areas. In 2006, a total of 9,818 coho returned to Trinity River Hatchery and 263 coho returned to Iron Gate Hatchery. These values compare to a combined goal of 2,000 adults.

Oregon Coast Natural Coho

The preliminary estimate of natural spawner escapement in 2006 to Oregon coastal river and lake systems from the Coquille River north (Oregon coast ESU) was 109,500 adult coho by SRS accounting. This compares to 89,300 adults in 2005. Historical spawner escapement estimates of naturally produced coho are reported in Table III-1 and have been adjusted to reflect SRS accounting.

Preliminary information based on SRS surveys indicate the 6th largest total natural spawning population on the Oregon coast on record, in part, due to very low levels of ocean exploitation. The estimate of the natural spawning population in 2006 was 113,409, including estimates from the Rogue River, which is part of the SONCC ESU (Table III-4, Figure III-2).

Preliminary estimates of total coho returns to Oregon coastal public hatcheries and STEP smolt production facilities were 32,900 and 100 adults, respectively (Table III-1). Hatchery egg-take goals were expected to be met at all public hatchery stations.

Columbia River Coho

The 2006 ocean escapement of adult early and late Columbia River coho stocks was 384,100 fish, compared to 341,800 adults in 2005 (Appendix B, Table B-21). The 2006 Columbia River coho abundance was sufficient to meet all hatchery brood stock escapement needs.

WASHINGTON COASTAL COHO STOCKS

Washington coastal coho stocks include all natural and hatchery stocks originating in Washington coastal streams north of the Columbia River through the western Strait of Juan de Fuca (west of the Elwha River, inclusive). The stocks in this group most pertinent to ocean salmon fishery management were Willapa Bay (hatchery), Grays Harbor, Quinalt (hatchery), Queets, Hoh, and Quillayute coho.

Management Objectives

Management goals for Grays Harbor and Olympic Peninsula coho stocks included achieving natural spawning escapement objectives and treaty Indian allocation requirements. The Council's conservation objectives for stocks managed for natural production were based on maximum sustainable yield (MSY) spawner escapements established pursuant to the U.S. District Court order in *Hoh versus Baldrige*. The conservation objectives for the Queets, Hoh, and Quillayute rivers were developed as ranges intended to bracket estimates of MSY escapement. The range reflects the degree of uncertainty inherent by using the high estimate of recruits-per-spawner, and the low estimate of carrying capacity for the lower bound, and the low estimate of recruits-per-spawner with the high estimate of smolt carrying capacity for the upper

end of the range. Annual targets for natural spawning escapement and total escapement were established by WDFW and treaty Indian tribes under the provisions of *U.S. versus Washington* and subsequent U.S. District Court orders. After the annual agreement was reached, ocean fishery escapement objectives were established for each river, or region of origin. The agreement includes provisions for treaty Indian allocation requirements and inside non-Indian fishery needs.

Regulations to Achieve Objectives

Washington coastal coho stocks contribute primarily to ocean fisheries off Washington and B.C. Those stocks did not play a primary role in 2006 Council area ocean fishery management because of impact constraints on Interior Fraser (Thompson River, B.C.) and LCR natural coho stocks, and treaty Indian/non-Indian inriver sharing of Columbia upriver coho. Overall harvest quotas were limited to levels well below those of the late 1980s and early 1990s. All non-Indian ocean coho fisheries north of Cape Falcon were mark-selective. Treaty Indian fisheries were not mark-selective.

Willapa Bay Coho

Inside Harvest

Historical terminal run size, harvest and escapement data for Willapa Bay coho are presented in Appendix B, Table B-24. The gillnet catch of coho in Willapa Bay in 2006 totaled 19,914 fish. Based on the preseason forecast for a terminal run of 68,005 fish, the scheduled commercial fisheries were expected to harvest approximately 17,290 total coho.

From July 3, 2006 through July 31, 2006, Willapa Bay (Marine Area 2-1) was open for recreational fishing, concurrent with the Ocean Marine Area 2 (ocean rules applied). August 1, 2006 through August 15, 2006 Willapa Bay was open to recreational fishing with a daily-bag-limit of six salmon with no more than two adults and August 16, 2006 through January 31, 2007, Willapa Bay was open to recreational fishing with a daily-bag-limit of six salmon, no more than three adults, of which only two could be Chinook. Single-point, barbless hooks were required when fishing for salmon. Marine and freshwater recreational harvest estimates were not yet available for 2006. Expected harvest in recreational fisheries based on preseason forecast abundance was 1,936. Marine Area 2-1 and freshwater recreational harvest estimates for 2005 harvest estimates totaled 4,384 fish.

Freshwater recreational fisheries in the Willapa Bay watershed were open for salmon fishing from August 1, 2006 through January 31, 2007 with a daily-bag-limit of six salmon, composed of up to three adult coho, including no more than one of natural origin identified by having an intact adipose fin.

Escapement and Management Performance

Willapa Bay coho were managed primarily for natural production. Estimates of natural spawning escapement for 2006 were not available. The most recent escapement estimate available was 26,394 in 2005. Escapement to Willapa Bay hatcheries in 2006 was estimated at 17,086 coho, which met the escapement objective of 6,100 spawners.

Grays Harbor Coho

Inside Harvest

Historical terminal run size, harvest and escapement data for Grays Harbor coho are presented in Appendix B, Table B-26. The ocean age-3 run size forecast for Grays Harbor coho, after accounting for ocean fishery impacts, was 104,774 fish (60,222 wild and 44,552 hatchery). Nearly 26,300 coho (wild, hatchery, and net-pen origin) were harvested in treaty Indian and non-Indian gillnet fisheries. This

included 8,687 coho in the Quinault Indian Nation fisheries, 649 in the non-Indian gillnet fishery, and small numbers in the Chehalis tribal fishery.

Recreational harvest estimates for 2006 were not available. The eastern portion of Grays Harbor was open for recreational salmon fishing September 16 through November 30 with a daily-bag-limit of two salmon. The Chehalis River and its tributaries downstream of the bridge crossing at the town of Porter were open for retention of up to two adult coho (regardless of mark status) from April 16 through July 31 and October 1 through November 30. The Chehalis River and its tributaries upstream of the bridge crossing at the town of Porter were open to retention of up to two adult coho (regardless of mark status) April 16 through July 31 and October 16 through November 30. In December, January, and February, openings varied by system, but coho harvest was limited to one unmarked coho in a two-adult coho bag limit or release wild adult coho in a two-adult coho bag limit. The Humptulips recreational fishery required release of all wild adult coho (December 1 through January 31).

The Quinault Indian Nation operated two separately schedule gillnet fisheries in the area of the Lower Humptulips and in the area of the Lower Chehalis, as described in Chapter 2 under the section labeled Grays Harbor Chinook, for both Chinook and coho as well as chum salmon. The expected coho fishery impacts were limited by the expected abundance and harvest of Chinook in those fisheries. The Humptulips area fishery harvested 6,422 coho, while the Chehalis area fishery harvested 2,265 coho. Harvest levels were slightly less than 50% of pre-season expected levels in both fisheries.

Escapement and Management Performance

Grays Harbor coho were managed for natural production with a spawning escapement goal of 35,400. Natural spawning escapement estimates for 2004 and 2005 were 60,690 and 44,090 respectively, however 2006 estimates were not available.

Quinault River Coho

Inside Harvest

Historical terminal run size, harvest, and escapement for Quinault River coho are presented in Appendix B, Table B-28. The treaty Indian gillnet fishery targeted hatchery Chinook and coho from early September through mid-November. A total of 9,785 coho were harvested by the gillnet fishery in 2006.

Escapement and Management Performance

Quinault River coho were managed for hatchery production. Escapement estimates for Quinault River coho in 2006 were not available. The Quinault National Fish Hatchery egg-take objectives for 2006 were achieved.

Queets River Coho

Inside Harvest

Historical terminal run size, harvest, and escapement for Queets River coho are presented in Appendix B, Table B-31. Queets River fisheries were managed under preseason agreement with WDFW based on preseason abundance estimates and planned Council ocean fisheries. The treaty Indian gillnet fishery was structured to target returning hatchery and wild coho during September and early October. The total harvest of fall coho in the gillnet fishery was 6,190 commercially landed fish. The gillnet harvest was comprised primarily of early-timed hatchery fish. Recreational fisheries operated with standard bag limits (no restriction on coho based on mark status) and schedules in the Queets, Clearwater, and Salmon Rivers. A 2006 catch estimate was not available.

Escapement and Management Performance

A preliminary wild coho escapement estimate was not available. Releases of supplemental coho were discontinued after 2004 so there were no returns of those fish in 2006. The preseason escapement estimate modeled for Queets wild coho was 5,802, at the lower end of the escapement objective of 5,800 to 14,500 established for this stock.

Hoh River Coho

Inside Harvest

Historical terminal run size, catch, and escapement data for Hoh River coho are presented in Appendix B, Table B-34. The terminal run size of Hoh River wild coho was projected to be 5,559, based on Clearwater River smolt production and moderate marine survival expectations. The tribal fishery took approximately 1,313 coho, with 1,072 estimated to be wild coho, including dip-in wild fish. This was below the preseason expected catch of approximately 1,917 wild Hoh and dip-in wild coho. The non-Indian recreational fishery extended from September 1 through November 30, with the area below Willoughby Creek open and a daily-bag-limit of six salmon, two of which could be adults and no mark selective coho restriction. The portion of the river between Willoughby Creek and Morgan's Crossing opened October 16 to reduce impacts on spawning spring/summer Chinook in that reach. The river above Morgan's Crossing did not open for recreational salmon fishing. A catch estimate was not available for the recreational fishery.

Escapement and Management Performance

Based on preliminary review of spawning ground survey data and preliminary catch and expected harvest rates, spawning escapement appears to be well below preseason expectations. The preliminary spawning escapement estimate for Hoh coho of 2,037 was at the lower end of the escapement goal range (2,000-5,000).

Quillayute River Coho

Inside Harvest

Historical terminal run size, catch, and escapement data for Quillayute River summer and fall coho are presented in Appendix B, Table B-37. The recreational and tribal fisheries for coho were established by a preseason agreement between WDFW and the Quileute Tribe. A total of 2,410 (1,181 wild) summer coho were harvested in the Quileute Tribe's commercial, and ceremonial and subsistence fisheries. An estimate of the 2006 recreational catch was not available.

The Quileute Tribal harvest of fall coho for 2006 was 9,463 (ceremonial and subsistence included). Tribal net fisheries harvested approximately 6,582 wild coho. An estimate of the 2006 recreational catch was not available.

WDFW reduced the impacts of the recreational fishery on wild summer coho by requiring mark-selective fisheries for coho during July and August. The recreational fishery for fall coho proceeded with normal bag limits and schedule. The Quileute Tribe did not have a closure in their fishery this year, but as in past years, reduced their fishery to 29 hours per week during July and August.

Escapement and Goal Assessment

The summer coho run in the Quillayute was managed primarily for the hatchery component, which returns in August and September. The summer coho rack return was 2,273, well above the goal of 300.

An additional 17 wild summer coho were collected as broodstock. The preliminary estimate for natural summer coho escapement was 574.

The preliminary 2006 escapement estimate for natural fall coho was 4,955, which was below the escapement goal of 6,300 to 15,800. The hatchery rack return of 4,450 exceeded the goal of 600 adults.

PUGET SOUND COHO STOCKS

Puget Sound coho salmon stocks include natural and hatchery stocks originating from U.S. tributaries in Puget Sound and the eastern Strait of Juan de Fuca (east of Salt Creek, inclusive). The primary stocks in this group that are most pertinent to ocean salmon fishery management were eastern Strait of Juan de Fuca, Hood Canal, Skagit, Stillaguamish, Snohomish, and South Puget Sound (hatchery) coho.

Management Objectives

The Council's conservation objectives were based on the Puget Sound Salmon Management Plan, which defined management objectives and long-term goals for these stocks as developed by representatives from Federal, state, and tribal agencies. Conservation objectives for specific stocks were based on either maximum sustainable production for stocks managed primarily for natural production or on hatchery escapement needs for stocks managed for artificial production. The original conservation objectives were developed by a State/Tribal Management Plan Development Team following the Boldt Decision with the goal for natural spawning stocks defined as "the adult spawning population that will, on the average, maximize biomass of juvenile outmigrants subsequent to incubation and freshwater rearing under average environmental conditions." The methodology used to develop the objectives was based on assessment of the quantity and quality of rearing habitat and the number of adult spawners required to fully seed the habitat. Some objectives have subsequently been modified by the U.S. District Court Fisheries Advisory Board and later determinations of the WDFW/Tribal Technical Committee. Annual escapement targets for these coho stocks were developed through procedures established in U.S. District Court. Puget Sound management procedures are outlined in a "Memorandum Adopting Salmon Management Plan" (*U.S. versus Washington*, 626 F. Supp. 1405 [1985]). A transition to exploitation rate management is currently under consideration by the involved managers.

Regulations to Achieve Objectives

Puget Sound coho stocks contribute primarily to ocean fisheries off Washington and B.C. Those stocks did not play a primary role in 2006 ocean fishery management considerations, since management of impacts to Interior Fraser (Thompson River, B.C.) and Columbia River stocks were more constraining. The mark-selective regulations in ocean and Puget Sound recreational fisheries served to increase harvest of marked hatchery fish while minimizing impacts on wild Puget Sound coho, LCR natural coho, OCN coho, and Interior Fraser coho.

Inside Harvest

Commercial inside harvest of Puget Sound coho was managed on the basis of six regional management units: Strait of Juan de Fuca, Nooksack-Samish, Skagit, Stillaguamish-Snohomish, South Puget Sound, and Hood Canal. Harvest of coho for each management unit is regulated according to the natural spawning escapement or hatchery program escapement goal for that unit. Commercial net and troll harvest (treaty Indian and non-Indian) for all coho stocks combined is presented in Appendix B, Table B-38. The 2006 total Puget Sound commercial catch of coho was 302,490 fish, compared to a catch of 316,331 coho in 2005. Non-Indian harvest was 10,042 coho, compared to a catch of 19,694 coho in 2005. Treaty Indian net and troll fisheries harvested 292,448 coho, compared to a catch of 296,637 coho in 2005.

Historical coho recreational catches in the Puget Sound recreational fishery for the years from 1971 through 2005 are listed in Appendix B, Table B-39.

Escapement and Management Performance

Estimates of 2006 natural spawning escapements were unavailable. Historical hatchery and natural run component escapements and net catches for each Puget Sound region of origin are presented in Appendix B, Table B-41.

In general, Puget Sound hatchery coho escapement and egg-take goals were likely met in all regions in 2006 except for South Puget Sound.

COASTWIDE GOAL ASSESSMENT SUMMARY

Conservation objective achievement assessments were not available for many coho stocks; however, those that were available all met their objectives. Puget Sound and Washington coastal areas experienced coho returns well below the numbers forecasted.

A summary of 2006 performance for coho salmon by stock in relation to the Council's conservation objectives is presented in Table III-5.

TABLE III-1. Estimated returns to Oregon coastal streams and lakes in thousands of adult coho (SRS spawner accounting). (Page 1 of 1)

Year	Returns to Hatcheries			Count at North Fork Umpqua Winchester Dam	Number of OCN Spawners ^{a/}			Inside Harvest Impacts ^{c/}	Ocean Escapement to Oregon Coast ^{a/}
	Private	Public	STEP ^{b/}		Lakes	Rivers	Total		
1970	-	36.2	-	0.2	20.5	51.2	71.7	39.8	147.9
1971	-	29.1	-	0.6	29.2	65.6	94.8	24.1	148.6
1972	-	12.9	-	0.3	10.0	24.1	34.1	16.6	63.9
1973	-	18.4	-	0.4	17.6	37.8	55.4	15.4	89.6
1974	-	35.1	-	0.4	6.4	28.1	34.5	13.5	83.5
1975	-	4.9	-	0.5	5.6	34.8	40.4	13.5	59.3
1976	-	38.7	-	0.3	1.5	39.2	40.7	19.6	99.3
1977	4.2	6.5	-	0.4	5.8	13.7	19.5	13.5	44.1
1978	12.3	5.6	-	0.5	1.6	18.2	19.8	4.5	42.7
1979	49.2	22.2	-	0.4	6.6	38.4	45.0	1.5	118.3
1980	38.7	21.9	-	0.2	4.7	25.6	30.3	6.3	97.4
1981	117.8	21.2	-	0.1	2.5	30.1	32.6	9.9	181.6
1982	184.7	14.8	-	2.7	7.9	68.3	76.2	14.7	293.1
1983	133.9	9.5	-	1.2	3.3	19.4	22.7	6.8	174.1
1984	115.4	28.6	-	3.2	14.7	59.7	74.4	17.4	239.0
1985	332.0	15.8	-	4.0	7.6	66.3	73.9	15.7	441.4
1986	453.7	35.8	2.5	9.6	11.8	58.2	70.0	30.3	601.9
1987	119.3	12.3	0.2	2.2	4.2	25.9	30.1	7.7	171.8
1988	116.1	33.7	1.2	1.2	5.8	51.0	56.8	13.3	222.3
1989	46.9	37.3	1.2	3.0	4.8	41.6	46.4	15.1	149.9
1990	35.6	15.4	1.6	2.3	4.4	16.5	20.9	9.5	85.3
1991	35.1	39.6	4.9	5.2	7.3	29.1	36.4	75.4	196.6
1992	-	23.3	0.6	6.0	2.0	38.6	40.6	19.3	89.8
1993	-	20.2	2.0	3.3	10.1	44.3	54.4	13.3	93.2
1994	-	23.4	1.8	2.8	5.8	37.5	43.3	2.4	73.7
1995	-	25.2	0.4	4.2	11.2	41.3	52.5	3.6	85.9
1996	-	23.8	1.0	6.2	13.5	59.5	73.0	4.0	108.0
1997	-	17.6	0.2	3.6	8.6	14.1	22.7	4.3	48.4
1998	-	15.2	0.2	5.3	11.1	19.8	30.9	5.2	56.8
1999	-	13.3	0.4	2.5	12.7	34.6	47.3	2.8	66.3
2000	-	15.0	0.5	11.1	12.7	54.1	66.8	4.5	97.9
2001	-	38.1	1.2	24.9	19.7	148.0	167.7	10.0	241.9
2002	-	30.9	2.6	11.2	22.1	231.4	253.5	8.1	306.3
2003	-	15.9	3.6	13.7	16.1	206.3	222.4	6.7	262.3
2004	-	13.2	0.8	10.9	18.7	147.6	166.2	6.3	197.4
2005 ^{d/}	-	10.0	0.3	11.0	13.9	119.3	133.2	5.9	160.4
2006 ^{d/}	-	9.8	0.1	10.1	22.2	87.2	109.5	1.1	130.6

a/ Does not include estimates for the southern OCN component (Rogue River). Spawner escapements to rivers prior to 1990 were estimated by a nonrandom standard index of streams north of the Rogue River. A total coastwide spawner escapement methodology based on SRS was initiated in 1990 and implemented concurrently with the standard index methodology. The SRS methodology indicated that actual escapements were less than estimated by the standard rivers index. The spawner index data for years prior to 1990 have been recalibrated in this table to be comparable with the SRS estimates.

b/ Oregon coastal Salmon Trout Enhancement Program (STEP) production from hatchery smolt rearing sites only.

c/ Freshwater sport catch from ODFW salmon/steelhead angler tag information and represents only those fish greater than 24 inches. Includes estimated mortality from hook-and-release.

d/ Preliminary.

TABLE III-2. Estimated weekly effort (in angler trips) and catches of Chinook and coho in the 2006 Buoy 10 recreational fisheries (all data are preliminary).^{a/} (Page 1 of 1)

Week Number	Ending Date of Period	Angler Trips	Catch		Catch Per Trip
			Chinook	Coho	
32	Aug.-6	1,244	12	0	0.01
33	Aug.-13	1,886	24	8	0.02
34	Aug.-20	10,650	715	686	0.13
35	Aug.-27	13,664	462	1,158	0.12
36	Sept.-3	9,130	466	1,715	0.24
37	Sept.-10	2,962	26	95	0.04
38	Sept.-17	755	0	21	0.03
39	Sept.-24	266	0	3	0.01
40-44	Oct.-30	131	1	1	0.02
Total		40,688	1,706	3,687	0.13

a/ Includes boat-based and shore-based fisheries from the new upstream boundary at the Tongue Point/Rocky Point line downstream to the Buoy 10 line including Clatsop Spit, the South Jetty of the Columbia River, and the North Jetty of the Columbia River after the ocean closed. Fishery was open August 1- December 31 for Chinook and adipose fin-clipped coho, with the daily-bag-limit of two salmon, only one of which may be a Chinook, except Chinook retention was prohibited from October 1-19.

TABLE III-3. Oregon production index (OPI) area coho harvest impacts, spawning, abundance, and exploitation rate estimates by SRS accounting in thousands of fish.^{a/} (Page 1 of 1)

Year or Avg.	Oregon and California Coastal Returns							Ocean	OCN Exploitation
	Ocean Fisheries ^{b/}		Hatcheries and		Private	Columbia River	Abundance	Exploitation Rate Based on OPI Abundance ^{d/}	Rate Based on Postseason FRAM ^{e/}
	Troll	Sport	Freshw ater Harvest ^{c/}	OCN Spaw ners					
1970-1975	1,629.6	558.4	45.8	55.2	-	460.4	2,749.3	0.80	-
1976	2,936.1	977.7	62.6	40.7	-	337.0	4,347.6	0.90	-
1977	664.4	412.1	21.4	19.5	4.2	93.6	1,220.4	0.89	-
1978	1,104.2	524.6	12.6	19.8	12.3	307.5	1,977.4	0.83	-
1979	1,056.6	334.4	27.4	45.0	49.2	276.5	1,789.5	0.79	-
1980	506.9	526.4	32.1	30.3	38.7	301.6	1,436.4	0.73	-
1981	830.9	339.9	34.1	32.6	117.8	170.3	1,555.0	0.81	-
1982	740.9	300.4	37.1	76.2	184.7	453.1	1,763.4	0.62	-
1983	429.6	275.0	18.2	22.8	133.9	109.7	1,070.0	0.79	-
1984	95.8	174.2	51.2	74.5	115.4	424.7	881.5	0.32	-
1985	166.4	280.4	45.4	73.9	332.0	366.2	1,373.4	0.43	-
1986	643.5	320.6	81.8	70.0	453.7	1,548.2	3,026.7	0.34	-
1987	469.1	296.2	45.3	30.1	119.3	316.3	1,377.9	0.60	-
1988	844.7	297.2	62.3	56.8	116.1	670.7	1,989.2	0.56	-
1989	646.9	425.5	62.3	46.4	46.9	711.8	1,871.2	0.55	-
1990	277.6	357.1	30.6	20.9	35.6	196.1	1,128.5	0.69	-
1991	450.6	469.9	84.0	36.3	35.1	934.3	1,823.2	0.45	-
1992	67.5	256.5	53.8	40.6	-	215.9	610.0	0.51	-
1993	13.2	140.8	41.5	54.4	-	113.9	342.1	0.42	-
1994	2.7	3.0	30.7	43.3	-	168.9	250.5	0.02	0.07
1995	5.4	43.5	40.0	52.5	-	74.1	215.9	0.23	0.12
1996	7.0	31.8	48.9	72.9	-	113.0	297.3	0.15	0.08
1997	5.5	22.4	27.9	22.7	-	148.3	204.6	0.12	0.12
1998	3.5	12.8	30.4	30.9	-	168.7	265.2	0.06	0.08
1999	3.6	36.5	22.2	47.3	-	274.1	414.0	0.12	0.09
2000	25.9	74.6	35.2	66.8	-	547.6	901.0	0.13	0.07
2001	38.1	216.8	86.0	167.7	-	1,108.3	1,438.6	0.16	0.07
2002	14.9	118.7	60.4	253.5	-	499.7	990.5	0.14	0.12
2003	28.8	252.4	51.6	222.4	-	677.2	1,183.6	0.23	0.14
2004	26.2	159.4	42.6	167.7	-	442.6	826.8	0.25	0.15
2005 ^{f/}	10.5	58.2	44.9	133.2	-	341.8	592.1	0.12	0.11
2006 ^{f/}	4.5	47.5	32.2	109.5	-	384.1	557.1	0.06	0.10

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

b/ Includes estimated nonretention mortality: troll fishery--hook-and-release mortality for 1982-2005 and drop-off mortality for all years; sport fishery--hook-and-release mortality for 1994-2005 and drop-off mortality for all years.

c/ Includes returns from Salmon-Trout Enhancement Program (STEP) smolt releases.

d/ Ocean fishery impacts on private hatchery stock and returns to private hatcheries are excluded in calculating the OPI area stock aggregate ocean exploitation rate

e/ 2001, 2002, 2003, 2004, 2005, and 2006 based on preseason FRAM estimate.

f/ Preliminary.

TABLE III-4. OCN adult coho salmon conservation objective, fishery impacts, and spawner escapement, based on stratified random survey (SRS) methodology. (Page 1 of 1)

Year	Fishery Impact (Total Marine and Freshwater Exploitation Rate)			Adjusted SRS Adult Coho Spawner Population Estimates in Thousands of Spawners by Stock Component ^{a/}					Adult Coho Spawners Per Spawner Habitat Mile				
	Conservation Objective ^{b/}	Preseason Projection	Postseason Estimate ^{c/}	Northern ^{d/}	North		Southern ^{g/}	Coastwide	Northern ^{d/}	North		Southern ^{g/}	Coastwide Average
					Central ^{e/}	Central ^{f/}				Central ^{e/}	Central ^{f/}		
1990	-	-	-	2.2	5.6	13.1	3.1	24.0	2	5	8	8	6
1991	-	0.460	0.454	9.3	6.7	20.3	1.0	37.3	10	6	13	2	9
1992	-	0.420	0.511	2.4	15.4	22.8	2.2	42.8	3	13	14	5	10
1993	-	0.260	0.423	4.5	7.8	42.1	0.4 ^{h/}	54.8	5	7	26	1 ^{h/}	13
1994	≤0.20	0.111	0.068	3.5	9.8	30.0	5.4	48.7	4	8	18	13	12
1995	≤0.20	0.118	0.124	3.9	13.6	35.0	3.8	56.3	4	12	22	9	14
1996	≤0.20	0.125	0.083	3.3	18.1	51.5	4.6	77.5	4	16	32	11	19
1997	≤0.20	0.110	0.124	2.1	2.8	17.7	8.3	30.9	2	2	11	20	8
1998	≤0.13	0.119	0.078	2.6	3.3	25.2	2.3	33.4	3	3	16	6	8
1999	≤0.15	0.087	0.087	8.8	11.4	27.1	1.4	48.7	10	10	17	3	12
2000	≤0.15	0.082	0.073	17.9	14.3	34.7	11.0	77.9	20	12	21	27	19
2001	≤0.08	0.074	NA	33.4	25.2	109.0	12.2	179.8	37	22	67	30	44
2002	≤0.15	0.123	NA	52.5	99.5	101.1	7.8	260.9	55	88	62	19	64
2003	≤0.15	0.144	NA	59.7	66.6	96.2	6.8	229.3	66	57	59	16	56
2004	≤0.15	0.147	NA	33.1	40.4	92.7	24.5	190.7	42	32	57	60	47
2005	≤0.15 ^{i/}	0.111	NA	14.8	42.2	76.2	10.3	143.5	17	36	47	25	35
2006 ^{i/}	≤0.15 ^{i/}	0.096	NA	22.6	16.1	67.1	3.9	109.7	25	14	41	10	27

a/ A spawner escapement methodology study based on SRS has been in effect since 1990 in which coho salmon population estimates have been made for Oregon coastal river systems from the Coquille River and north. Spawner population estimates include an adjustment for observation error.

b/ Prior to 1994, the conservation objective was expressed in terms of the total escapement of OCN spawners in index numbers rather than as an exploitation rate. The index escapement objectives from 1981 through 1993 are provided in Table III-2 of the Review of 1998 Ocean Salmon Fisheries and Table 1 of Amendment 11. From 1994 through 1997, Amendment 11 specified that at low stock sizes, only incidental harvest of OCN coho could occur and that impacts could not exceed 20%. Beginning in 1998, the OCN conservation objective has been as specified in Amendment 13 which is also the basis for the NMFS jeopardy standards under the Endangered Species Act listing.

c/ From the coho FRAM, except the estimates prior to 1994 represent the OPI composite exploitation rate for hatchery and natural stocks.

d/ Estimate based on 899 miles of spawner habitat within Nehalem, Tillamook, and Nestucca Rivers and other direct ocean tributaries from Necanicum River through Neskow in Creek.

e/ Estimate based on 1,163 miles of spawner habitat within Siletz, Yaquina, Alsea, and Siuslaw Rivers and other direct ocean tributaries from the Salmon through Siuslaw Rivers.

f/ Estimate based on 1,622 miles of spawner habitat within Umpqua, Coos, and Coquille Rivers. Also includes spawners using tributaries to Siltcoos, Tahkenitch, and Tenmile Lakes.

g/ Estimate based on a mark-recapture methodology and 410 miles of spawner habitat within the Rogue River.

h/ Unreliable estimate.

i/ Preliminary.

j/ The Salmon FMP specified an allowable marine and freshwater exploitation rate of 20%, however, the OCN workgroup matrix specified 15% and the Council chose to manage at the more conservative level for 2005 and 2006.

TABLE III-5. Performance of coho salmon stocks in relation to 2006 conservation objectives (preliminary data). (Page 1 of 2)

System and Stock	2006 FMP Conservation Objective	Achievement
OPI Area Coho		
(Columbia River and coastal stocks south of Leadbetter Point)	Natural spaw ner escapement objectives as provided below ; meet hatchery egg-take goals; meet treaty Indian obligations.	Hatchery egg-take goals achieved. No information available on catch allocation.
Northern California (Threatened) and CCC (Threatened)	No directed coho fisheries or retention of coho south of Humbug Mt. Marine exploitation rate $\leq 13.0\%$ as indicated by R/K hatchery stocks. Council adopted a projected exploitation rate on R/K hatchery coho of 5.2%.	No directed coho fisheries or retention of coho south of Humbug Mt. Postseason exploitation estimate not available.
OCN	Combined marine and freshw ater exploitation rate $\leq 20.0\%$ ($\leq 15.0\%$ Council and NMFS annual objective) for the four stock components. Council adopted a projected exploitation rate of 9.6%, with an expected escapement of 55,200 adult spaw ners (SRS of rivers and lakes from the Coquille River north).	Postseason exploitation rate estimate not available. Preliminary OCN escapement of 109,500 adult spaw ners (SRS of rivers and lakes from the Coquille River north).
Columbia River Natural (Threatened)	Combined exploitation rate $\leq 15\%$ in Council area and mainstem Columbia River fisheries. Council adopted management measures resulted in a projected exploitation rate of 9.9% in Council area fisheries.	No post-season assessment avialable.
Washington Coast Coho		
	Natural spaw ner escapement objectives as provided below and in state/tribal agreements; meet hatchery egg-take goals; meet treaty Indian obligations.	Hatchery egg-take goals achieved. No information available on catch allocation.
Grays Harbor	35,400 natural adult spaw ners.	Postseason estimate unavailable.
Queets	5,800 to 14,500 natural adult spaw ners.	Postseason estimate unavailable.
Hoh	2,000 to 5,000 natural adult spaw ners.	Preliminary estimate of 2,037 meets the escapement floor.
Quillayute Fall	6,300 to 15,800 natural adult spaw ners.	Preliminary estimate of 4,955 fails to meet the escapement floor.

TABLE III-5. Performance of coho salmon stocks in relation to 2006 conservation objectives (preliminary data).
(Page 2 of 2)

System and Stock	2006 FMP Conservation Objective	Achievement
Puget Sound Coho	Natural spawner escapement objectives as provided below and in state/tribal agreements; meet hatchery egg-take goals; meet treaty Indian obligations and inside non-Indian fishery needs for six management units.	Data not available for 2006 natural spawner escapements, but all are expected to meet escapement goals. Hatchery egg-take goals met, except for South Puget Sound. No information available on catch allocation.
Strait of Juan de Fuca	≤40% total exploitation rate. 12,800 adult spawners.	Preseason expected ocean escapement of 23,500 adult fish for eastern and western Strait of Juan de Fuca combined and a 11% total exploitation rate.
Hood Canal	≤65% total exploitation rate. 21,500 natural adult spawners.	Preseason expected ocean escapement of 46,400 adult fish and a 37% total exploitation rate.
Skagit	≤35% total exploitation rate. 30,000 natural adult spawners.	Preseason expected ocean escapement of 87,800 adult fish and a 36% total exploitation rate.
Stillaguamish	≤50% total exploitation rate. 17,000 natural adult spawners.	Preseason expected ocean escapement of 32,700 adult fish. 40% total exploitation rate.
Snohomish	≤60% total exploitation rate. 70,000 natural adult spawners.	Preseason expected ocean escapement of 98,000 adult fish and a 39% total exploitation rate.

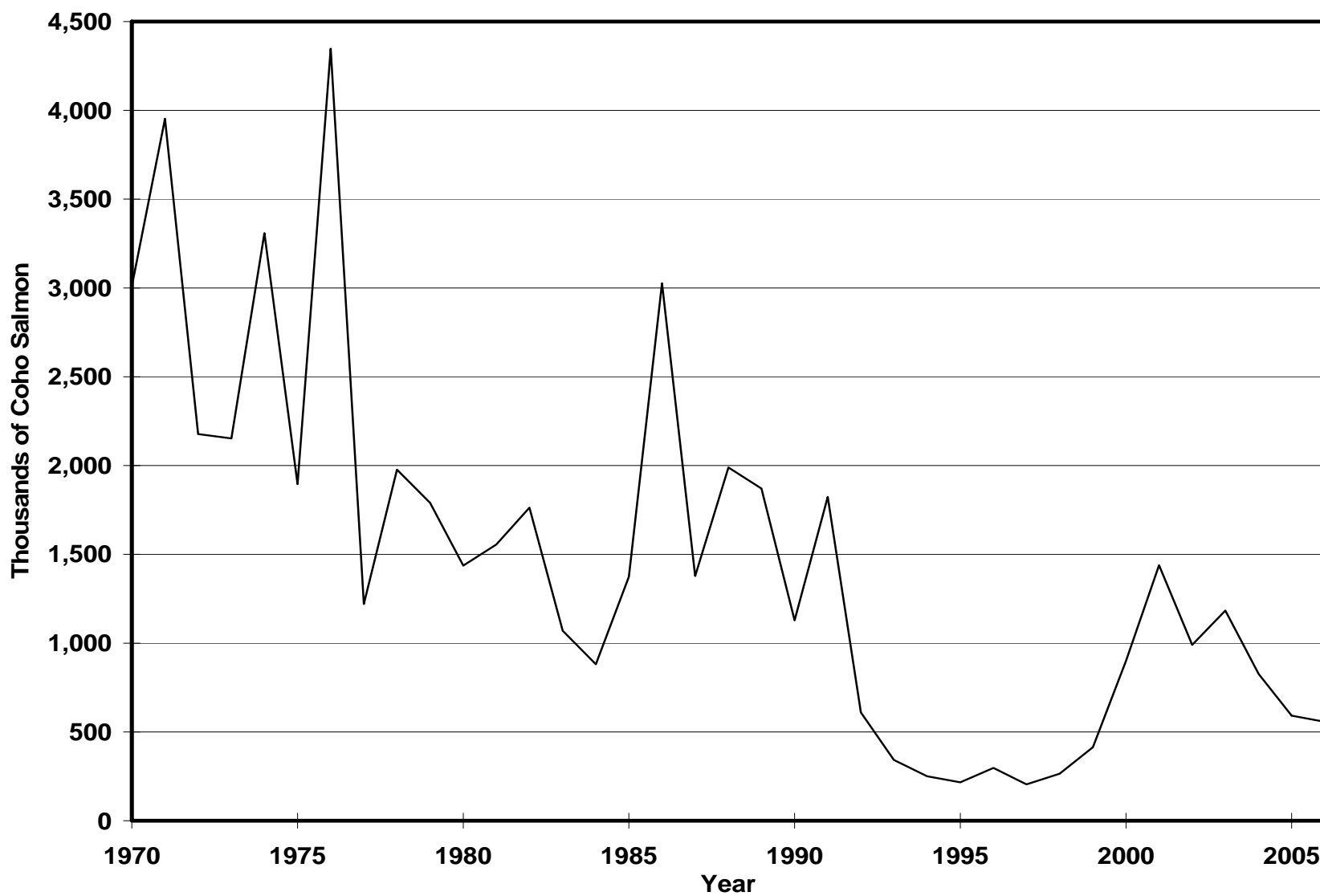


Figure III-1. Oregon Production Index (OPI) area coho abundance estimates by stratified random surveys (SRS) accounting methods (1970-2006).

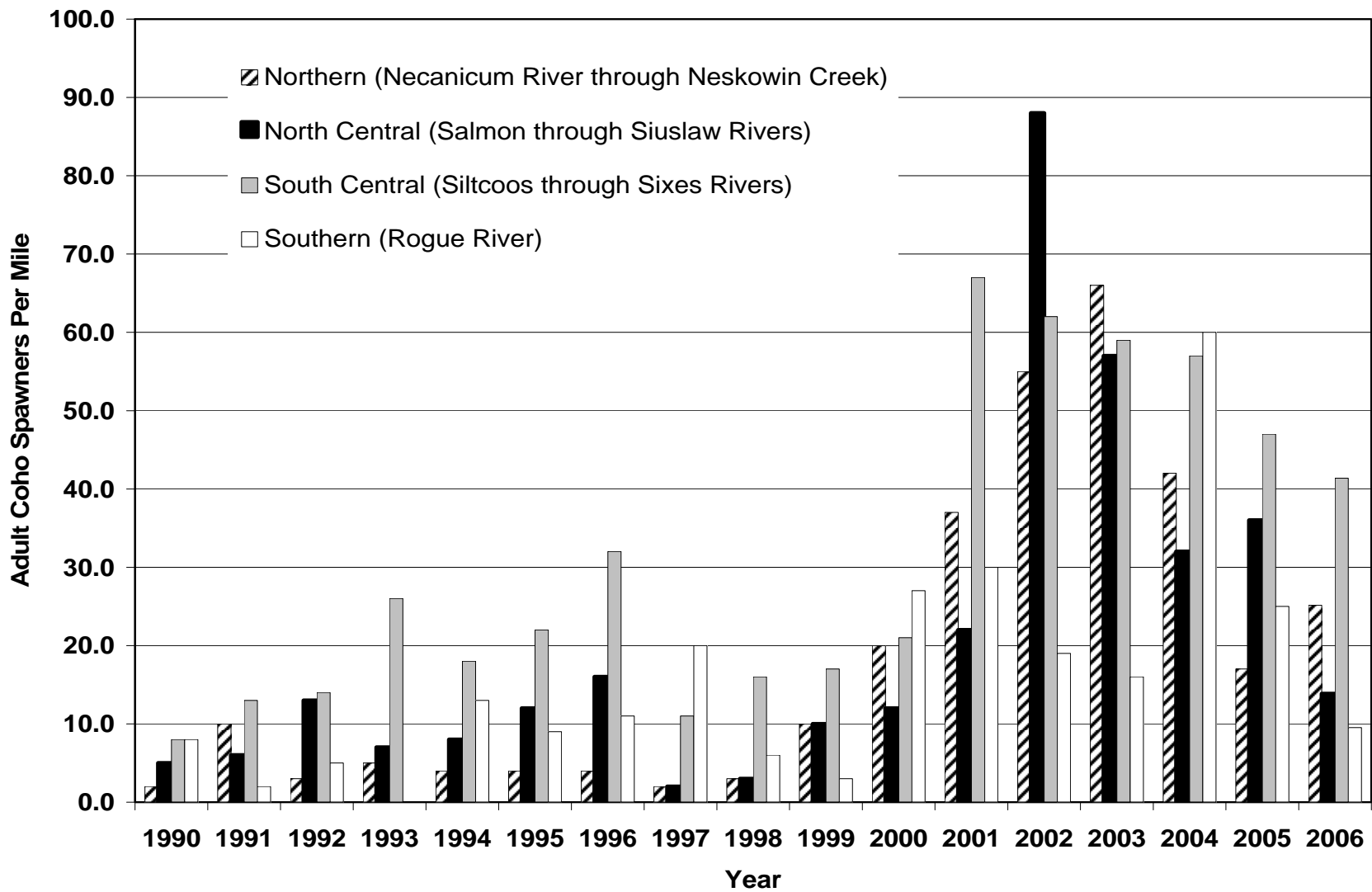


Figure III-2. Oregon coastal natural (OCN) adult coho spawners per habitat mile by coastal region based on SRS accounting methods, 1990-2006.

CHAPTER IV

SOCIOECONOMIC ASSESSMENT OF THE 2006 OCEAN SALMON FISHERIES

SUMMARY: Total 2006 exvessel value of the Council-managed non-Indian commercial salmon fishery was \$9.0 million. In real (inflation-adjusted) dollars, exvessel value was 62% below its 2005 level (\$23.5 million), and comparable to the 2001 value (\$11.2 million), but was 83% below the 1979 through 1990 inflation-adjusted average of \$53.9 million (including pinks). The 2006 average West Coast ocean harvest Chinook price was \$5.15 per pound. This was \$2.02 above the 2005 level (\$3.13 per pound), after adjusting for inflation. The 2006 average Chinook price was the highest recorded in more than 25 years in inflation-adjusted terms. At \$2.39 per pound, in inflation-adjusted terms, average 2006 West Coast coho prices were 28% higher than in 2005, 88% higher than in 2004, and higher than seen since 1990. The preliminary number of vessel-based ocean salmon recreational angler trips taken on the West Coast in 2006 was 246,000, a decrease of 27% from 2005, and 59% less than the 1979 through 1990 average. The total West Coast income impact associated with recreational and commercial ocean salmon fisheries for all three states combined was estimated at \$37.4 million in 2006. In inflation-adjusted dollars this was 48% below the estimated 2005 level (\$72.4 million), 89% lower than the inflation-adjusted value for 1979 (the highest year in the data time series) and 4% higher than the inflation-adjusted low of \$34.5 million in 1998.

ALLOCATION OF THE SALMON RESOURCE

Salmon management by the Council involves numerous allocation issues including:

- Determination of the amount of salmon available for ocean harvest after consideration of expected abundances, harvests by inside fisheries, and spawning escapement goals.
- Allocation of harvest among broad management areas and among port areas within the management areas.
- Allocation of harvest between Indian and non-Indian harvesters.
- Allocation of the non-Indian harvest between commercial and recreational harvesters.

The amount of salmon available for harvest in Council management areas depends, in part, on harvest in Canada and Alaska. Allocation of harvest between the West Coast, Canada, and Alaska is determined within the constraints of the PST.

In general, the recreational fishery has tended to have a more stable harvest than the commercial fishery (in both absolute and relative terms) (Figures IV-1 and IV-2). The majority of the annual variation in available ocean harvest is usually taken up in the commercial fishery. However, both fisheries have suffered substantial declines relative to harvest levels of the 1980s, the effects of which are amplified within specific geographic areas.

Decisions on allowable harvests for a particular stock often have implicit allocation effects on the geographic distribution of salmon harvest. Seasons may be more restrictive along a particular area of the coast to protect a depressed stock encountered in that area at a higher rate than other areas. The geographic distribution of harvest opportunity along the coast involves balancing the often conflicting objectives of maximizing ocean harvest and fairly distributing the responsibility for resource conservation. A brief outline of the regulatory objectives which shaped the 2006 season is provided in Chapter I; and an assessment of success in meeting the objectives is provided in Chapters II and III.

COMMERCIAL SALMON FISHERIES

West Coast Non-Indian Commercial Ocean Fishery

Inseason Price Trends

Monthly exvessel price data provide information on seasonal price trends (Table IV-1). The absence of a price breakdown by size category for California salmon landings makes it difficult to tell whether observed price changes were a function of seasonal changes in market conditions or a shift in the size category of fish landed. California 2006 prices were at their highest in May and June with a large drop in price for the remainder of the season. In general, Oregon and Washington prices were lowest in June and July and higher at the start or end of the season.

Annual Trends (Seasons, Value, Prices, and Pounds)

Available information on Chinook and coho exvessel price and value by species, compiled from state fish receiving tickets and expressed both in nominal terms and inflation-adjusted 2006 dollars, is presented in Tables IV-2, IV-3, and IV-4. Data on pink salmon are provided in Table IV-5. The gross domestic product implicit price deflator, developed by the Bureau of Economic Analysis, was used to adjust nominal values for inflation (Appendix D, Table D-22). Weights of landings by species and port for Chinook and coho are presented in Tables IV-6, IV-7, and IV-8. These tables and the following discussion refer to the non-Indian commercial fishery in Council management areas and associated state territorial ocean area waters.

Total 2006 exvessel value of the Council-area non-Indian commercial salmon fishery was \$9.0 million. In real (inflation-adjusted) dollars, exvessel value was 62% below the 2005 level (\$23.5 million), and the most recent comparable year was 2001 (\$11.2 million). The 2006 value was 83% below the 1979 through 1990 inflation-adjusted average of \$53.9 million, and 28% below the 1991-2000 inflation-adjusted average of \$12.5 million (including pinks).

The 2006 exvessel value of the California commercial ocean salmon catch (\$5.3 million) was 61% below the 2005 value (\$13.4 million), and 82% below the 1979 through 1990 average (\$28.8 million), in inflation-adjusted dollars. In recent years, a portion of the California harvest was believed to be subject to postseason settlements. Under a postseason settlement, fishers may be paid an additional amount for their fish after the season ends. Value accruing to the fishery from postseason settlements was not reflected on the fish receiving tickets from which estimates of exvessel value were derived. The 2006 exvessel value for the Oregon commercial catch (\$2.7 million) was down 69% from the 2005 value (\$8.8 million), and 84% below the 1979 through 1990 average (\$17.3 million), in inflation-adjusted terms. The 2006 exvessel value for the Washington non-Indian ocean commercial catch (\$1.0 million) was down 22% from the 2005 value (\$1.3 million). Over the last four years (2003-2006) exvessel values of Washington landings have been the highest since 1993 (\$1.0 million, inflation-adjusted), but were still 87% below the 1979 through 1990 inflation-adjusted average of \$7.8 million.

The 2006 average West Coast ocean harvest Chinook price was \$5.15 per pound. This was a record high price compared to recent years and is comparable to the historical years of 1979 and 1980, which had average inflation-adjusted prices of \$6.21 and \$5.08 per pound respectively. One of the main reasons 2006 prices were so high was due to the extremely restricted 2006 fishing season (see Chapter I and Appendix C for details). The 2006 price was \$2.02 above the 2005 level (\$3.13) and \$2.74 above the recent five year (2001-2005) average (\$2.74), in inflation-adjusted terms; however it was only \$0.79 greater than the 1979-1990 average (\$4.36). At \$2.39 per pound, in inflation-adjusted terms average 2006

West Coast coho prices were 28% higher than in 2005, 88% higher than in 2004, and 15% lower than the 1979-1990 average.

In terms of number of fish, the 2006 coastwide, non-Indian commercial Chinook harvest (120,500 fish) declined by 81% compared to 2005 (Figure IV-1). Historically, 2006 harvest of fish was the lowest on record. The number of Chinook harvested was 84% below the long-term average, which includes years 1976 through 2005 (771,400 fish). The coastwide average weight per Chinook (14.4 pounds) increased by 20% compared to 2005 (Appendix D, Tables D-1, D-2, and D-3). Coho catch decreased in 2006 to 2,700 fish, down 34% from the 4,100 coho recorded in 2005. The coastwide average weight per coho (8.5 pounds) increased 17% to the highest average weight for 1980 through 2005. The combined effect of increased prices and relatively stable average weights, slightly offset the historically low harvest and there was a 62% decrease in exvessel value as compared to 2005 (Figure IV-4). In 2006 about 74% of the coastwide Chinook harvest (by weight) was taken in California from the San Francisco area south, compared to 50% in 2005 and 2004 (Table IV-6, IV-7, and IV-8). The KMZ was closed to commercial fishing in 2006 and therefore had no harvest. The KMZ comprised 2% of Chinook harvest (by weight) in 2005 and 6% in 2004. The harvest in the Fort Bragg port area increased slightly compared to recent years to 26%, up from 20% in 2005 and 21% in 2004. Compared with 2005, Chinook harvest (by weight) in 2006 was down 76% in California, down 82% in Oregon and down 53% in Washington. The 2006 coho harvest (by weight) was down 34% in Oregon and no change in Washington, compared to 2005 (no coho were harvested in California in either year).

Ocean Commercial Salmon Harvesters

Based on Pacific Coast Fisheries Information Network (PacFIN) data, 886 vessels participated in the West Coast commercial salmon fishery in 2006, down 27% from the 2005 total of 1,221, and down 31% from the 2004 total of 1,295. The coastwide vessel counts from PacFIN were lower than the totals derived from summing Appendix D state-level tables because vessels may be counted in more than one state and because of differences in the degree of data completeness at the time the data were summarized. Summing the number of vessels shown landing salmon in the individual states (Tables D-4 through D-6) gives a count of 915 vessels in 2006, 1,336 in 2005 and 1,422 in 2004.

The active fleet in California decreased to 474, in 2006, 206 vessels less than in 2005. In 2005, the fleet had decreased by 61, compared to 2004. The 474 vessels that landed salmon in 2006 was the lowest participation on record (data in Table D-4 go back to 1960). In Oregon, the active fleet decreased by 208 vessels in 2006 compared to 2005, with 357 vessels landing salmon. The 357 vessels participating in 2006 was the lowest level of participation since 1999, which had 328 vessels (Table D-5). The active fleet in Washington decreased by seven vessels to 84 vessels landing salmon in 2006 (Table D-6). Coastwide, the number of limited entry salmon permits issued in 2006 decreased by 81 from the previous year, to 2,670. Landings were made on 34% of all permits in 2005, below the 40-50% observed from 2000 through 2005, but comparable to 1999. From 1982 to 1993 an average of 5,193 of 7,942 total permits (65%) were used on an annual basis.

Coastwide in 2006, average per vessel inflation-adjusted exvessel value of salmon landings decreased 44% compared to 2005, to \$9,843 per vessel. This was the lowest average per vessel revenue observed, in inflation-adjusted terms, since 2001, which had \$9,378. Compared to 2005, 2006 average per vessel exvessel revenue was down 44% in California, down 53% in Oregon, and down 17% in Washington. Some caution needs to be exercised in interpreting the per vessel average. For example, the averages may be influenced as much by the entry or exit of a disproportionate number of small or large harvesters from one year to the next as by a change in the average revenues of those vessels remaining in the fishery.

Additional historical information on landings by vessel size, percentages of the fleet responsible for the majority of harvest, and harvest by residence of those participating in the fishery off each state is provided in Appendix D.

West Coast Treaty Indian Commercial Ocean Fishery

Treaty Indian commercial fisheries off Washington operate under regulations established by the Council. While some of the treaty Indian harvest was for ceremonial and subsistence purposes, the vast majority of the catch was commercial harvest. Commercial treaty Indian fisheries provide food to consumers and generate income in local and state economies through expenditures on harvesting, processing, and marketing of the catch. From May through September 15th, the treaty Indian ocean troll fishery harvested 30,030 Chinook (315,000 pounds) and 31,695 coho (191,000 pounds) in 2006, compared with 42,000 Chinook (523,100 pounds) and 24,000 coho (151,000 pounds) in 2005 (Tables A-15 and D-3). For all of 2006 (including January through April and Mid-September through the end of the year), the preliminary exvessel value of Chinook and coho landed was \$1.2 million (values based on PacFIN data).

Columbia River Commercial Fishery

Harvest in the ocean salmon fisheries affect inriver fisheries by affecting the number of fish available for inside treaty Indian and non-Indian harvest. Table IV-9 shows the exvessel value of Columbia River commercial harvest of Chinook, coho and chum salmon. All prices and values in the table and the following discussion are reported in inflation-adjusted dollars. Exvessel prices for inriver catches of Chinook vary considerably with race (spring versus fall Chinook) and stock (tules versus brights). Spring Chinook generally bring the highest prices and tule fall Chinook and chum the lowest.

Total 2006 exvessel value of commercial salmon harvested in the Columbia River was \$5.0 million. This was 39% above the inflation-adjusted 2005 level. Total 2006 exvessel value for non-Indian commercial salmon harvested in the Columbia River was \$2.9 million, 18% above the 2005 level (Table IV-9).

The total 2006 exvessel value of treaty Indian salmon harvested in the Columbia River and sold on fish tickets was \$2.0 million. This is 87% above the 2005 value. Note that these values include only those sales made to licensed fish buyers. Treaty Indian fisher sales to the public are accounted for in harvest monitoring (Table B-20), but estimates of the pounds and value of such sales were not included in Table IV-9.

Other Inside Commercial Fisheries

Puget Sound and Washington Coastal Inside Fisheries

Information on 2006 Puget Sound and Washington coastal inside fisheries was incomplete. Based on PacFIN data, the 1981 through 2005 inflation-adjusted average exvessel value reported for all salmon species taken in the commercial non-Indian fisheries in Puget Sound and Washington coastal inside fisheries (excluding the Columbia River) was \$17.8 million. Of this, an average of \$4.5 million was for Chinook and coho. In 2005, the total inflation-adjusted exvessel values for the commercial non-Indian salmon fisheries in these areas were \$6.5 million for all salmon species, and \$2.0 million for Chinook and coho. The preliminary values for 2006 were \$7.5 million for all salmon species and \$1.2 million for Chinook and coho.

The 1981 through 2005 inflation-adjusted average exvessel value reported for all salmon species taken in the commercial treaty Indian fisheries in those areas was \$21.4 million. Of this, an average of \$7.8 million was for Chinook and coho. The preliminary values for 2006 were \$8.3 million for all salmon species and \$4.2 million for Chinook and coho.

Klamath River Fisheries

Commercial sales in the Yurok and Hoopa Valley Reservation Indian fall gillnet fisheries in the Klamath River occurred in 1987-1989, 1996, and 1999-2004. Average commercial catch was 17,600 in those years, most of which occurred in the estuary. Commercial sales also occurred in spring gillnet fisheries in 1989, 1996, and 2000-2004, with an average of about 1,600 fish sold. The 1989 harvest of 27,700 Chinook was sold for \$852,000 (unadjusted for inflation, \$1.3 million adjusted to 2006 dollars) and had an average per fish weight of 15.4 pounds. For the 1996 harvest of 3,129 spring Chinook and 40,147 fall Chinook, the value at first sale was estimated at \$525,000 (unadjusted for inflation, \$649,800 adjusted to 2006 dollars). The average weight per fish landed in 1996 was 13.5 pounds. Records were not available for the weight and value of harvests after 1996 as each Indian fisher now markets their fish independently. The commercial Chinook harvest was 2,100 fish in 1999, 4,100 in 2000, and more than 10,000 Chinook each year from 2001 through 2004. In 2005 and 2006 there were no commercial sales of either spring or fall Chinook (Appendix B, Table B-5).

CEREMONIAL AND SUBSISTENCE SALMON FISHERIES

In addition to the commercial Indian fisheries discussed above, fish are taken in Indian fisheries each year for ceremonial and subsistence purposes. Estimates of the amount of salmon used for ceremonial and subsistence purposes are documented in Appendix B. Discussion of the importance of ceremonial and subsistence fish to Indian communities is presented in Appendix B to Amendment 14 of the salmon FMP.

RECREATIONAL SALMON FISHERIES

Ocean

The preliminary number of vessel-based ocean salmon recreational angler trips taken on the West Coast in 2006 was 246,000, a decrease of 27% from 2005, and 59% less than the 1979 through 1990 average. Compared with 2005, preliminary estimates of the number of trips taken in 2006 decreased by 30% in California, decreased by 18% in Oregon, and decreased by 30% in Washington. Note that Washington effort estimates in Tables IV-10 and IV-13 differ from those in Tables I-4 and Appendix A Table A-17 because the former exclude bank effort from the Columbia River north jetty.

Recreational salmon fishing takes place primarily in two modes, (1) anglers fishing from privately owned pleasure crafts, and (2) anglers employing the services of the charter boat fleet. In general, success rates on charter vessels tend to be higher than success rates on private vessels. Small amounts of shore-based effort directed toward ocean area salmon occur, primarily from jetties and piers. Coastwide, the proportion of angler trips taken on charter vessels in Washington, Oregon and California in 2006 declined slightly from 32.7% in 2005 to 30.1% in 2006 with a decline occurring in California, Oregon remaining the same and an increase in Washington. Figure IV-5 and Tables IV-10, IV-11, IV-12, and IV-13 display details of effort and catch by port area and mode for each state.

California

The preliminary estimate of total 2006 ocean salmon angler effort in California (120,400 angler trips) decreased 30% compared to 2005, (Table IV-11) and was 33% below the most recent five year average (2001 through 2005). With the exception of Eureka, which had an effort decrease of less than 1%, effort decreased between roughly one-fifth and two-fifths in all other port areas. In 2006, the proportion of California trips occurring on charter vessels was 36%, the lowest proportion observed since 1991.

Angler success rates in California, measured in retained salmon per angler day (angler trip), decreased to 0.75 salmon per day in 2006, compared with 1.02 and 0.84 salmon per day in 2004 and 2005, respectively. In 2006 anglers on charter vessels landed about 0.07 more salmon per day than anglers

fishing from private vessels, compared with differentials of 0.47 and 0.09 fish per day in 2004 and 2005, respectively. Since 1976, the differential between charter and private boat angler success rates has ranged from a low of 0.02 in 1991 up to 0.64 salmon per day in 1994.

Oregon

Ocean recreational salmon trips in 2006 in Oregon were down 18% to 62,300 trips from an estimated 76,000 angler trips in 2005. Total 2006 trips were 48% below the most recent five year average (2001 through 2005). The port area of Tillamook had an increase in effort by about 31%, while all other port areas had an effort decrease between roughly 15% and 40%. The charter industry share of Oregon recreational salmon trips in 2006 was about 13%, which was similar to the previous year as well as the recent five year average (2001 through 2005) (Figure IV-5 and Table IV-12).

From 1984 to 1993, coho comprised 87% of the Oregon recreational ocean salmon catch, on average. From 1994 through 1998 the lack of opportunity to retain coho south of Cape Falcon generally resulted in much lower angler success rates. With the opportunity to retain coho in mark-selective fisheries south of Cape Falcon beginning in 1999, salmon retention rates increased 75% in 1999 to 0.43 salmon per angler day, from 0.25 in 1998. From 2001 through 2005, retention rates ranged between 0.55 and 1.10 salmon per angler day. The retention rate for 2006 was below this range at 0.46.

Washington

In 2006, 63,600 ocean angler trips were taken on vessels on the Washington coast, a decrease of 30% from the 90,600 trips taken in 2005, but still well above effort levels observed from 1994 through 2000. The relatively high level of activity observed in recent years is primarily due to management under mark-selective fishery regulations for coho. The proportion of Washington angler trips taken on charter vessels increased to 39% in 2006, from 35% in 2005 (Figure IV-5 and Table IV-13), which is comparable to recent years, but 30% below an early year average (1979 through 1990).

Angler success rates (in terms of retained fish per angler trip) declined to 0.73 in 2006, down from 0.97 in 2005 and 1.26 in 2004. The average retention rate between 1979 and 2000 was 1.41 salmon per trip. Note that these figures do not include angler effort that occurs from the ocean side of the Columbia River jetty, or angler effort in the state managed Area 4B add-on fishery (which has not opened since 2000).

In an effort to increase angler participation in non-salmon recreational fishing and to extend the length of the salmon season, partial-week closures were used in the recreational fishery north of Cape Falcon beginning in 1985. Sunday through Thursday openings were used beginning in 1996 in the Westport and Columbia River port areas. The Neah Bay and La Push areas were generally open seven days a week, until more recently. In 2006, all port areas switched from partial-week openings to a seven-day-a-week fishery on August 11th. Compared with 2005, bottomfish trips in 2006 increased on the Washington coast (Table IV-14).

Buoy 10 and Area 4B Add-On Fisheries

For anglers fishing from boats, angler retention rates in the Buoy 10 fishery fell from 0.30 salmon per day in 2005 to 0.14 salmon per day in 2006. The 2004 retention rate was 0.46 salmon per day. Effort in 2006 was down 41%, compared with 2005, to about 40,700 trips (boat and jetty) (Table IV-15).

In 2000, about 3,400 trips were made in the late-season Area 4B add-on fishery. Since that time there have been no late season Area 4B add-on fisheries (Table IV-15). An Area 4B add-on fishery was planned for 2006, scheduled to open upon attainment of the Neah Bay coho quota, however, the quota was not reached and the Area 4B add-on fishery did not occur.

There were numerous other inside recreational salmon fishing opportunities in Puget Sound and coastal streams and estuaries that are not discussed in this chapter of the Review. See Appendix B for estimates of harvest in some of those other fisheries.

SALMON FISHERY INCOME IMPACTS AND COMMUNITY DEPENDENCE

Coastal community income impacts provide information on the effects of fluctuations in salmon harvest on local economies and small businesses. Income impacts are estimated per commercial pound and per recreational fishing day, and were generated using the Fishery Economic Assessment Model (FEAM). Information on FEAM is available from the Council on request.

Estimated state and local community income impacts of commercial and recreational ocean salmon fisheries and selected state-managed fisheries are shown in Tables IV-16 through IV-20. These impacts represent estimates of total personal income associated with harvesting, processing and first level distribution activities in the commercial and recreational salmon fisheries at the local community (county) and state levels. Income impacts are estimated based on several components: reported landings by area, an inventory of area fleet and processors, estimates of fleet and processor expenditures, surveys of the expenditure patterns of recreational fishers, and local and state level total income coefficients generated by IMPLAN[®] models constructed for each area. Commercial ocean harvest not landed in the coastal areas (e.g., landed in Puget Sound ports) was not included in the estimates of coastal community impacts, but was included in the overall estimate of state impacts.

The impacts presented here are estimates of annual trends and are intended to indicate the possible redirection of activity between nonfishing-dependent and fishing-dependent sectors. As such they represent likely upper bounds on the local community and state income impacts generated by West Coast salmon fisheries. All income impact estimates in this review are reported in inflation-adjusted 2006 dollars.

West Coast Ocean Fishery Income Impacts

The total West Coast income impact associated with recreational and commercial ocean salmon fisheries for all three states combined was \$37.4 million in 2006. In inflation-adjusted dollars this was 48% below the estimated 2005 level (\$72.4 million), 89% lower than the inflation-adjusted value for 1979 (the highest year in the data time series) and 4% higher than the inflation-adjusted low of \$34.5 million in 1998. The 2006 value was 53% below the inflation-adjusted average of \$80.1 million for the previous five years 2001-2005 (Tables IV-16 through IV-18). West Coast income impacts associated with the 2006 non-Indian commercial ocean fishery were \$14.5 million, 73% below 2004 (\$53.5 million) and 64% below 2005 (\$40.3 million), and 66% below the recent five year (2001-2005) average (\$42.1 million), in inflation-adjusted terms;^{1/} the most recent comparable year was 1998 (\$15.5 million). Income impacts related to the 2006 ocean recreational fishery were estimated at \$22.9 million, down 29% compared to 2005 (\$32.1 million), down 49% compared with 2004 (\$44.7 million), and 40% below the 2001-2005 average in inflation-adjusted terms (\$38.0 million). These coastwide values do not reveal the reductions in particular communities compared with averages during the 1980s. Tables IV-16 through IV-18 provide greater detail on the impacts in individual states and port areas along the West Coast.

1/ Income impact estimates for the commercial fishery do not include postseason settlement payments fishers may have received from buyers. These postseason settlements may be particularly significant for the California fishery.

Selected Inside Fisheries

Columbia River Commercial Fisheries

For periods in the past, the non-Indian and treaty Indian Columbia River commercial fisheries have generated a substantial amount of income for the Oregon and Washington communities on the Columbia River, an average of \$30.9 million from 1986-1990 (inflation-adjusted). For 2006, income impacts associated with the Columbia River commercial catch (non-Indian and treaty Indian) were estimated at \$10.0 million, compared with \$8.5 million in 2005, \$11.7 million in 2004, and a 1987 through 2005 average of \$10.9 million (all values in inflation-adjusted 2006 dollars, Table IV-19). In FEAM, most of the benefit of higher than average salmon prices was assumed to go to the harvesters.

Buoy 10 and Area 4B Add-On

The estimated local community income impact associated with the 2006 Buoy 10 recreational fishery was \$1.5 million, 24% below the inflation-adjusted 2005 level of \$1.9 million, and 78% below the 1987-1990 inflation-adjusted average of \$6.8 million (Table IV-20). There has not been a late season Area 4B add-on fishery since 2000. An Area 4B add-on fishery was planned for 2006, scheduled to open upon attainment of the Neah Bay coho quota, however, the quota was not reached and the Area 4B add-on fishery did not occur. Between 1996 and 2000, the average annual inflation-adjusted total state-level income impact associated with the Area 4B add-on fishery was \$128,000 (Table IV-20).

TABLE IV-1. Average monthly exvessel troll salmon price in dollars per dressed pound for California, Oregon, and Washington in 2006. (Page 1 of 1)

Species/Grade	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season
CALIFORNIA											
Chinook ^{a/}	-	-	6.48	6.78	4.88	4.92	4.95	4.89	-	-	5.11
Coho	-	-	-	-	-	-	-	-	-	-	-
OREGON											
Chinook											
Large (>11 Pounds)	-	-	7.02	4.83	4.36	5.65	5.31	5.53	5.65	5.60	5.48
Medium (7-11 Pounds)	-	-	6.86	4.42	4.14	5.51	5.15	5.53	5.44	5.32	5.46
Small (<7 Pounds)	-	-	6.20	4.34	4.18	4.00	4.57	4.90			4.76
Ungraded Chinook	-	-	6.77	5.00	4.77	5.62	5.35	5.82	6.03	5.63	5.50
Weighted Average	-	-	6.92	4.82	4.54	5.62	5.31	5.65	5.72	5.59	5.48
Mixed Coho	-	-	-	-	2.00	2.97	2.81	-	-	-	2.91
WASHINGTON^{b/}											
Chinook											
Large (>11 Pounds)	-	-	6.59	4.37	3.49	3.59	4.03	-	-	-	4.82
Medium (8-11 Pounds)	-	-	6.45	4.26	3.34	3.48	3.45	-	-	-	4.74
Small (<8 Pounds)	-	-	5.02	2.75	3.75	2.38	1.00	-	-	-	3.90
Ungraded Chinook	-	-	-	-	-	-	-	-	-	-	-
Weighted Average	-	-	6.55	4.36	3.50	3.65	4.01	-	-	-	4.64
Mixed Coho	-	-	-	-	1.63	1.65	2.04	-	-	-	1.75

a/ Chinook salmon typically sold in two size categories. Prices paid in these categories are not extracted from dealer ticket information.

b/ Non-Indian data only.

TABLE IV-2. Troll Chinook and coho landed in California, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (2006) dollars.^{a/}

Year or Avg.	Chinook				Coho				Total ^{b/}	
	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)
1979	17,356	40,687	2.53	5.93	2,303	5,399	2.19	5.13	19,659	46,086
1980	12,741	27,384	2.27	4.88	408	877	1.36	2.92	13,149	28,261
1981-1985	10,945	19,902	2.42	4.34	554	1,019	1.94	3.81	11,499	20,921
1986-1990	21,151	32,604	2.56	3.91	490	743	1.36	2.52	21,641	33,347
1991	8,351	11,487	2.58	3.55	696	957	1.52	2.09	9,047	12,444
1992	4,487	6,033	2.74	3.68	18	24	1.63	2.19	4,505	6,057
1993	5,707	7,500	2.25	2.96	-	-	-	-	5,707	7,500
1994	6,437	8,284	2.07	2.66	-	-	-	-	6,437	8,284
1995	11,693	14,746	1.76	2.22	-	-	-	-	11,693	14,746
1996	5,984	7,406	1.44	1.78	-	-	-	-	5,984	7,406
1997	7,288	8,872	1.38	1.68	-	-	-	-	7,288	8,872
1998	3,060	3,684	1.66	2.00	-	-	-	-	3,060	3,684
1999	7,429	8,817	1.93	2.29	-	-	-	-	7,429	8,817
2000	10,304	11,968	2.01	2.33	-	-	-	-	10,304	11,968
2001	4,773	5,415	1.98	2.25	-	-	-	-	4,773	5,415
2002	7,776	8,669	1.55	1.73	-	-	-	-	7,776	8,669
2003	12,181	13,309	1.91	2.09	-	-	-	-	12,181	13,309
2004	17,895	19,052	2.87	3.06	-	-	-	-	17,895	19,052
2005	12,913	13,383	2.97	3.08	-	-	-	-	12,913	13,383
2006 ^{c/}	5,261	5,261	5.11	5.11	-	-	-	-	5,261	5,261

a/ These exvessel values do not include the postseason settlement payments some fishers may have received from buyers and therefore may underestimate the true payments received by fishers for their landings. Beginning circa 1999, these postseason settlements are believed to have grown for the California fishery. For 2002, the exvessel value reported here is believed to be under reported by roughly 5% to 10%.

b/ Does not include pink salmon landings.

c/ Preliminary.

TABLE IV-3. Troll Chinook and coho landed in Oregon, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (2006) dollars.

Year or Avg.	Chinook				Coho				Total ^{a/}	
	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)
1971-1975	2,036	7,047	0.89	3.13	3,658	12,971	0.64	2.23	5,694	20,018
1976-1980	5,290	13,268	2.17	5.42	6,389	16,514	1.51	3.77	11,679	29,782
1981-1985	3,582	6,479	2.46	4.42	2,248	4,242	1.45	2.61	5,830	10,722
1986-1990	9,381	14,437	2.47	3.78	3,203	4,941	1.54	2.36	12,584	19,378
1991	1,721	2,367	2.47	3.40	1,399	1,924	0.99	1.36	3,120	4,292
1992	2,490	3,348	2.46	3.31	222	299	1.08	1.45	2,712	3,647
1993	1,661	2,183	2.18	2.87	10	13	1.13	1.49	1,671	2,196
1994	690	888	2.40	3.09	-	-	-	-	690	888
1995	3,294	4,154	1.70	2.14	-	-	-	-	3,294	4,154
1996	3,007	3,722	1.56	1.93	-	-	-	-	3,007	3,722
1997	2,469	3,006	1.60	1.95	-	-	-	-	2,469	3,006
1998	2,297	2,766	1.64	1.97	-	-	-	-	2,297	2,766
1999	1,400	1,662	1.94	2.30	1	1	1.03	1.22	1,401	1,663
2000	2,988	3,471	2.02	2.35	75	87	1.06	1.23	3,063	3,558
2001	4,680	5,310	1.61	1.83	41	47	0.79	0.90	4,721	5,357
2002	5,383	6,001	1.54	1.72	8	9	0.75	0.84	5,391	6,010
2003	7,186	7,852	1.97	2.15	36	40	0.85	0.93	7,222	7,891
2004	9,832	10,468	3.45	3.67	86	92	1.24	1.32	9,919	10,560
2005 ^{b/}	8,466	8,774	3.17	3.29	37	38	1.87	1.94	8,503	8,813
2006 ^{b/}	2,663	2,663	5.48	5.48	38	38	2.90	2.90	2,701	2,701

a/ Does not include pink salmon landings.

b/ Preliminary.

TABLE IV-4. Non-Indian troll Chinook and coho landed in Washington, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (2006) dollars.^{a/}

Year or Avg.	Chinook				Coho				Total ^{b/}	
	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)
1971-1975	2,714	9,516	0.89	3.14	3,060	10,755	0.66	2.33	5,775	20,270
1976-1980	5,313	13,607	2.39	5.94	6,086	15,550	1.67	4.16	11,399	29,157
1981-1985	1,954	3,638	2.46	4.42	1,272	2,377	1.32	2.37	3,225	6,015
1986-1990 ^{c/}	1,310	2,011	2.61	4.01	360	544	1.62	2.48	1,670	2,555
1991	783	1,077	2.54	3.49	343	472	1.13	1.55	1,126	1,549
1992	1,200	1,614	2.41	3.24	99	133	1.33	1.79	1,299	1,747
1993	728	957	2.21	2.90	67	88	1.01	1.33	795	1,045
1994	d/	d/	d/	d/	-	-	-	-	d/	d/
1995	d/	d/	d/	d/	91	115	0.83	1.05	d/	d/
1996	d/	d/	d/	d/	59	73	0.86	1.07	d/	d/
1997	125	152	1.55	1.89	-	-	-	-	125	152
1998	123	148	1.51	1.82	-	-	-	-	123	148
1999	377	447	1.90	2.25	19	23	0.88	1.04	396	470
2000	224	261	1.71	1.99	34	39	1.09	1.27	258	300
2001	349	396	1.44	1.63	34	39	0.69	0.78	383	434
2002	756	843	1.11	1.24	2	2	1.58	1.76	758	845
2003	951	1,039	1.15	1.26	40	44	0.74	0.81	991	1,083
2004	1,079	1,149	2.14	2.28	106	112	1.16	1.24	1,185	1,262
2005	1,273	1,320	2.70	2.80	16	17	1.65	1.71	1,290	1,336
2006	1,029	1,029	4.64	4.64	16	16	1.69	1.69	1,045	1,045

a/ All values in this table are based on preliminary information available at the start of each year's salmon review.

b/ Does not include pink salmon landings.

c/ There was no legal coho fishery in 1988. The value used in this average for 1988 is for landings of fish caught south of Cape Falcon and seizures of illegal fish.

d/ Chinook were caught off Oregon and landed in Washington. Value information was not provided to preserve

TABLE IV-5. Non-Indian troll pink salmon landed in Oregon and Washington, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (2006) dollars.

Year or Avg. ^{a/}	Oregon				Washington				Total ^{b/}	
	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)
1976-1980	167	438	0.75	1.87	1,200	2,968	0.54	1.36	1,367	3,406
1981-1985	129	237	0.74	1.33	287	534	0.41	0.75	416	770
1986-1990	41	65	0.77	1.18	57	85	0.66	1.01	98	149
1991	4	6	0.53	0.73	79	108	0.47	0.65	83	114
1993	b/	b/	0.62	0.81	5	7	0.54	0.71	5	7
1995	b/	b/	0.60	0.76	30	38	0.26	0.33	30	38
1997	b/	b/	0.56	0.68	b/	b/	0.20	0.24	b/	b/
1999	b/	b/	0.67	0.80	b/	b/	0.38	0.45	b/	b/
2001	1	1	0.58	0.66	b/	b/	0.22	0.25	1	1
2003	b/	b/	0.85	0.93	b/	b/	0.30	0.33	b/	b/
2005 ^{c/}	b/	b/	1.25	1.30	b/	b/	0.52	0.54	b/	b/

a/ Odd year averages.

b/ Less than \$500.

c/ Preliminary.

TABLE IV-6. Pounds of salmon landed by the commercial troll ocean fishery for major California port areas.^{a/}

Year or Avg.	Crescent City	Eureka	Fort Bragg	San Francisco	Monterey	State Total
CHINOOK (thousands of dressed pounds)						
1976-1980	393	1,403	1,449	1,733	889	5,867
1981-1985	350	428	1,128	1,806	742	4,454
1986-1990	155	405	2,299	3,648	1,592	8,097
1991	4	79	467	1,685	1,004	3,238
1992	c/	1	21	996	613	1,632
1993	3	11	220	1,316	987	2,537
1994	c/	6	77	2,189	831	3,103
1995	5	26	130	3,277	3,197	6,633
1996	3	92	278	1,695	2,046	4,113
1997	c/	14	35	2,711	2,488	5,248
1998	1	22	35	1,081	709	1,847
1999	3	27	30	2,681	1,105	3,846
2000	3	20	354	2,607	2,148	5,131
2001	3	61	192	1,735	418	2,409
2002	54	108	872	3,060	912	5,008
2003	38	7	3,096	2,753	498	6,392
2004	308	65	1,292	3,712	853	6,230
2005	25	77	889	2,258	1,098	4,347
2006 ^{d/}	-	-	272	674	84	1,030
COHO (thousands of dressed pounds)						
1976-1980	360	391	277	109	48	1,184
1981-1985	89	104	89	54	9	345
1986-1990	22	43	136	53	9	262
1991	1	19	55	270	115	459
1992	-	c/	c/	10	1	11
1993	-	-	-	-	-	-
1994	-	-	-	-	-	-
1995	-	-	-	-	-	-
1996	-	-	-	-	-	-
1997	-	-	-	-	-	-
1998	-	-	-	-	-	-
1999	-	-	-	-	-	-
2000	-	-	-	-	-	-
2001	-	-	-	-	-	-
2002	-	-	-	-	-	-
2003	-	-	-	-	-	-
2004	-	-	-	-	-	-
2005	-	-	-	-	-	-
2006 ^{d/}	-	-	-	-	-	-

a/ The major port areas listed may include smaller ports as follows: Crescent City includes only Crescent City; Eureka includes Trinidad and Humboldt Bay; Fort Bragg includes Shelter Cove, Noyo Harbor, Mendocino, and Pt. Arena; San Francisco includes Bodega Bay, Sausalito, Berkeley, and Half Moon Bay; Monterey includes Santa Cruz, Moss Landing, Morro Bay, Avila, and all ports south of Pt. Conception.

b/ Prior to 2005 landings were based on catch area, not port of landing.

c/ Less than 500 pounds.

d/ Preliminary.

TABLE IV-7. Pounds of salmon landed by the commercial troll ocean fishery for major Oregon port areas.^{a/}

Year or Avg.	Astoria	Tillamook	New port	Coos Bay	Brookings	State Total
CHINOOK (thousands of dressed pounds)						
1976-1980	171	118	530	908	700	2,427
1981-1985	92	45	271	638	386	1,432
1986-1990	52	264	829	2,118	468	3,731
1991	9	110	267	292	18	695
1992	17	108	676	206	7	1,014
1993	5	86	460	181	28	761
1994	b/	29	165	45	47	287
1995	6	96	1,330	453	55	1,941
1996	21	125	1,219	417	142	1,926
1997	3	32	1,053	381	73	1,542
1998	b/	66	953	326	52	1,398
1999	13	32	194	403	80	721
2000	89	97	532	648	114	1,481
2001	73	223	1,673	776	152	2,897
2002	330	275	1,442	1,223	218	3,488
2003	265	245	1,634	1,353	142	3,639
2004	134	113	1,121	1,214	267	2,850
2005	130	214	1,034	1,054	239	2,671
2006 ^{c/}	99	67	218	56	45	486
COHO (thousands of dressed pounds)						
1976-1980	385	660	1,190	1,661	357	4,252
1981-1985	133	293	451	550	111	1,537
1986-1990	73	473	693	648	69	1,957
1991	69	431	440	464	7	1,411
1992	6	33	112	55	b/	206
1993	8	1	b/	b/	-	9
1994	-	-	-	-	-	-
1995	-	-	-	-	-	-
1996	-	-	-	-	-	-
1997	-	-	-	-	-	-
1998	-	-	-	-	-	-
1999	1	-	-	-	-	1
2000	71	-	-	-	-	71
2001	50	b/	2	-	-	52
2002	6	5	-	-	-	11
2003	32	11	-	-	-	43
2004	47	22	-	-	-	70
2005	9	11	-	-	-	20
2006 ^{c/}	8	5	-	-	-	13

a/ The major port areas listed include smaller ports as follows: Astoria also includes Gearhart/Seaside and Cannon Beach; Tillamook also includes Garibaldi, Netarts, Pacific City, and Nehalem Bay; New port also includes Depoe Bay, Siletz Bay, Salmon River, and Waldport; Coos Bay also includes Florence, Winchester Bay, Charleston, and Bandon; Brookings also includes Port Orford and Gold Beach.

b/ Less than 500 pounds.

c/ Preliminary.

TABLE IV-8. Pounds of salmon landed by the non-Indian commercial troll ocean fishery for major Washington port areas.^{a/b/}

Year or Avg.	Neah Bay	La Push	Westport	Ilwaco	Coastal Community	Puget Sound	State Total ^{c/}
					Total		
CHINOOK (thousands of dressed pounds)							
1976-1980	288	421	919	261	1,889	426	2,315
1981-1985	88	32	370	74	564	124	689
1986-1990	71	17	234	48	371	122	493
1991	128	7	127	14	276	32	308
1992	160	46	232	10	447	58	507
1993	122	35	132	2	291	41	332
1994 ^{d/}	-	-	-	-	-	7	7
1995 ^{d/}	-	-	3	-	3	12	15
1996 ^{d/}	-	-	4	1	5	13	18
1997	20	e/	45	-	65	15	80
1998	30	-	34	-	64	18	82
1999	62	2	66	3	133	65	198
2000	85	1	38	8	131	e/	131
2001	97	-	138	6	241	-	241
2002	262	33	322	61	678	-	678
2003	470	67	243	29	810	12	821
2004	250	74	158	15	497	7	504
2005	170	100	181	20	471	e/	471
2006	86	64	40	26	216	5	222
COHO (thousands of dressed pounds)							
1976-1980	600	786	1,066	678	3,130	496	3,626
1981-1985	133	63	277	142	616	128	744
1986-1990	70	19	97	53	239	19	259
1991	87	16	126	45	274	31	304
1992	25	13	21	4	63	12	75
1993	11	7	43	2	63	3	66
1994	-	-	-	-	-	-	-
1995	84	18	7	-	109	2	111
1996	45	1	23	-	68	e/	68
1997	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-
1999	7	1	4	1	13	9	21
2000	-	-	15	16	31	e/	31
2001	2	-	39	9	49	-	49
2002	-	-	e/	1	1	-	1
2003	11	12	21	8	52	2	54
2004	12	20	53	4	89	1	91
2005	2	1	3	5	10	-	10
2006	3	3	3	1	10	e/	10

a/ All values in this table are based on preliminary information available at the start of each year's salmon review.

b/ The major port areas listed may include smaller ports as follow s: Neah Bay includes only Neah Bay; La Push also includes Kalaloch; Westport also includes Aberdeen, Bay City, Copalis Beach, Hoquiam, Moclips, Taholah, Bay Center, Grayland Beach, Raymond, South Bend, and Tokeland; Ilwaco also includes Long Beach, Nahcotta, Naselle, and all Columbia River Ports; Puget Sound includes all Puget Sound ports east of Neah Bay.

c/ State total includes landings where port of landing is not specified.

d/ There was no ocean commercial fishery for Chinook north of Cape Falcon; however, Chinook were caught off Oregon and landed in Washington.

e/ Less than 500 pounds.

TABLE IV-9. Exvessel values (expressed in 2006 dollars) of inriver commercial harvest of Columbia River salmon.^{a/}

TABLE IV-3. Exvessel values (expressed in 2006 dollars) of inriver commercial harvest of Columbia River salmon.																			
		Average Price Per Landed Pound ^{b/} (dollars)						Exvessel Value (thousands of dollars)						Pounds (thousands)					
Fishery	Species	1987-						1987-						1987-					
		2001	2002	2003	2004 ^{c/}	2005 ^{c/}	2006 ^{c/}	2001	2002	2003	2004 ^{c/}	2005 ^{c/}	2006 ^{c/}	2001	2002	2003	2004 ^{c/}	2005 ^{c/}	2006 ^{c/}
OREGON																			
Non-Indian ^{d/}	Chinook																		
Gillnet	Spring	4.02	3.42	2.86	3.96	3.53	4.68	433	1,082	422	1,093	326	614	64	316	147	276	92	131
	Fall Brights	1.42	0.64	0.79	1.46	1.68	2.14	1,780	222	452	597	458	637	127	349	574	409	273	298
	Tules	0.40	0.12	0.11	0.23	0.27	0.28	104	31	19	52	35	18	51	255	174	224	132	65
	Coho	1.26	0.38	0.57	0.96	1.11	1.31	1,084	435	865	723	875	627	557	1,148	1,522	755	789	478
	Chum	0.43	0.40	-	0.27	0.32	0.26	e/	e/	-	e/	e/	e/	1	e/	-	e/	e/	e/
	TOTAL							3,401	1,311	1,771	1,757	2,466	1,695	799	1,819	2,069	2,417	1,664	1,286
Treaty Indian ^{f/}	Chinook																		
All Gears	Spring	2.59	1.40	4.48	1.97	-	3.00	4	20	6	158	-	e/	2	14	1	80	-	e/
	Fall Brights	1.32	0.96	0.76	1.20	1.08	1.53	748	4	15	573	216	316	122	5	19	476	200	206
	Tules	0.33	0.25	-	0.11	0.18	0.26	19	e/	-	32	12	3	78	1	-	299	67	11
	Coho	0.89	-	-	0.63	0.96	1.25	6	-	-	18	1	14	5	-	-	29	1	12
	TOTAL							778	49	24	20	780	228	207	32	20	20	884	267
WASHINGTON ^{g/h/}																			
Non-Indian	Chinook																		
Gillnet	Spring	4.19	4.72	4.47	4.18	3.71	3.67	212	329	87	289	228	320	19	70	20	69	62	87
	Fall ^{g/}	1.33	0.51	0.63	1.37	1.44	1.93	679	111	282	465	339	420	70	215	448	338	235	218
	Coho	1.26	0.36	0.61	1.00	1.07	1.33	439	196	490	370	203	276	254	538	799	370	191	207
	Chum	0.39	0.20	0.16	0.27	0.83	-	1	e/	e/	e/	e/	-	1	e/	e/	e/	e/	-
	TOTAL							1,331	503	635	860	1,124	771	343	1,093	823	1,267	777	487
Treaty Indian ^{f/}	Chinook																		
All Gears ^{i/}	Spring	3.07	1.31	1.17	1.67	1.75	2.35	30	243	155	176	117	425	25	185	133	105	67	180
	Fall ^{g/}	0.97	0.20	0.20	0.57	0.53	1.40	1,106	314	320	463	742	1,269	536	1,587	1,607	806	1,404	905
	Coho	0.92	0.14	0.12	0.23	0.31	0.56	16	3	3	10	10	25	15	22	23	43	34	45
	TOTAL							1,152	681	560	477	649	869	573	1,594	1,794	1,762	954	1,504
Columbia River Total		-	-	-	-	-	-	6,662	2,544	2,991	3,114	5,019	3,563	6,662	4,538	4,705	5,467	4,280	3,545

a/ Excluding pink, sockeye, and steelhead.

b/ Gillnet exvessel salmon prices are recorded in round weight and therefore are not strictly comparable to exvessel troll prices.

c/ Preliminary. (All Washington values in this table are based on preliminary information available when each year's Salmon Review is drafted.)

d/ Mainstem below Bonneville and select areas (Youngs Bay, Tongue Point, Blind Slough, and Deep River).

e/ Less than \$500 or 500 pounds.

f/ Treaty Indian landings and values do not include direct sales to consumers.

g/ Includes fall brights, tules, and jacks. Price changes may reflect a change in the mix of brights, tules, and jacks rather than annual price changes.

h/ Washington prices for years prior to 2000 are based on a combination of Washington and Oregon value information.

i/ Primarily set gillnet but also Includes Klickitat dipnet, Drano Lake (Little White Salmon River mouth), and Priest Rapids Pool fisheries.

TABLE IV-10. California, Oregon, and Washington ocean recreational salmon effort in thousands of angler trips and catch in thousands of fish by boat type. (Page 1 of 2)

Year or Avg.	Angler Trips		Chinook Catch ^{a/}		Coho Catch ^{a/}	
	Charter	Private	Charter	Private	Charter	Private
CALIFORNIA						
1981-1985	68.9	78.1	74.6	34.4	1.5	18.3
1986-1990	95.9	144.8	100.1	66.3	5.3	35.1
1991	69.2	127.4	39.9	40.6	13.5	55.8
1992	47.7	80.2	42.4	31.1	1.0	10.5
1993	66.0	108.9	66.0	44.0	4.2	25.6
1994	72.8	117.1	99.1	84.1	b/	0.5
1995	152.9	225.6	182.0	215.2	b/	0.9
1996	84.6	140.9	72.9	91.2	b/	0.6
1997	102.6	131.7	122.3	106.6	b/	0.5
1998	67.0	85.0	59.7	62.3	b/	0.1
1999	62.6	84.4	40.5	47.4	b/	0.6
2000	94.0	120.4	91.9	94.0	b/	0.4
2001	69.9	95.2	43.2	55.6	0.1	1.2
2002	86.6	123.4	85.1	96.9	b/	0.8
2003	59.4	75.3	48.3	46.4	0.1	0.6
2004	97.7	121.0	124.7	96.5	b/	1.4
2005	69.1	103.0	61.3	81.9	b/	0.7
2006 ^{c/}	43.3	77.0	34.7	54.8	b/	1.4
OREGON^{d/e/}						
1979	73.7	187.7	5.4	13.3	59.8	101.8
1980	79.0	218.9	5.1	11.9	98.3	207.5
1981-1985	45.7	187.9	6.2	26.9	48.0	117.6
1986-1990	56.5	184.6	7.0	28.8	71.6	148.4
1991	40.3	149.7	1.9	12.5	68.9	190.2
1992	30.0	135.4	2.7	9.9	46.2	139.6
1993	13.4	66.9	0.9	5.6	16.2	43.1
1994	1.5	25.7	0.5	5.5	-	b/
1995	4.6	31.2	0.3	6.4	4.0	7.9
1996	5.6	38.3	1.2	10.1	3.0	4.2
1997	3.9	26.4	1.5	6.2	2.4	3.6
1998	1.8	24.2	0.5	3.6	0.5	1.8
1999	5.5	43.9	0.9	6.9	3.4	10.3
2000	9.8	68.7	3.6	21.8	7.5	25.7
2001	18.2	102.3	6.4	20.8	19.3	75.0
2002	15.7	91.9	7.9	39.5	9.0	27.5
2003	23.4	121.1	8.8	31.8	23.7	90.0
2004	21.1	124.6	14.6	41.8	13.1	58.8
2005	9.9	66.1	4.5	23.4	3.1	10.6
2006 ^{c/}	8.0	54.3	1.5	11.6	3.6	12.0

TABLE IV-10. California, Oregon, and Washington ocean recreational salmon effort in thousands of angler trips and catch in thousands of fish by boat type. (Page 2 of 2)

Year or Avg.	Angler Trips		Chinook Catch ^{a/}		Coho Catch ^{a/}	
	Charter	Private	Charter	Private	Charter	Private
			WASHINGTON^{f/g/}			
1979	220.8	89.8	61.1	15.7	227.9	62.4
1980	193.9	86.2	41.1	12.5	288.4	73.1
1981-1985	102.0	69.7	42.6	13.8	113.3	69.2
1986-1990	53.5	59.4	16.0	10.0	78.0	77.6
1991	43.7	69.6	5.0	7.3	80.2	111.6
1992	38.2	56.8	11.8	6.6	48.5	62.6
1993	40.2	68.9	5.8	6.9	52.8	62.3
1994	-	-	-	-	-	-
1995	17.9	30.0	b/	0.4	26.1	37.4
1996	15.3	23.5	b/	0.2	24.5	24.4
1997	12.5	15.1	1.7	2.3	12.5	12.8
1998	5.5	6.8	1.1	0.9	5.6	7.1
1999	17.5	29.9	5.7	4.1	16.3	23.7
2000	17.1	27.9	5.1	3.4	27.9	35.8
2001	41.2	72.4	11.9	10.8	66.2	98.2
2002	37.0	57.4	30.9	27.0	30.4	43.7
2003	44.5	75.5	16.0	18.1	53.4	84.9
2004	36.5	73.1	10.3	14.6	37.6	75.1
2005 ^{c/}	31.7	58.9	15.9	20.4	19.2	32.6
2006 ^{c/}	24.5	39.1	4.0	6.7	16.2	19.9

a/ Catch numbers may include some illegal harvest.

b/ Fewer than 50 fish.

c/ Preliminary.

d/ Salmon data from surveyed ports only. These generally include Astoria, Garibaldi, Depoe Bay, Newport, Winchester Bay, Coos Bay, and Brookings. Since 1981, Pacific City and Florence have also been included. Gold Beach data are included from 1981-1987. Astoria was not included in 1994.

e/ Numbers do not include angling from the Columbia River jetty.

f/ Numbers do not include angling from the Columbia River jetty or from the late-season state waters Area 4B fishery.

g/ Values for 1982-1985 include some inriver Columbia River fishing after closure of the ocean fishery.

TABLE IV-11. Estimates of California recreational ocean salmon angler trips (thousands) by port area and boat type. (Page 1 of 1)

Year or Avg.	Crescent City	Eureka	Fort Bragg	San Francisco	Monterey	State Total
CHARTER TRIPS						
1976-1980	1.5	1.2	2.4	63.5	4.0	72.7
1981-1985	0.7	1.3	1.8	62.1	3.0	68.9
1986-1990	1.0	3.5	4.0	74.3	13.1	95.9
1991	1.0	2.1	5.4	43.7	17.0	69.2
1992	0.1	0.2	1.5	38.6	7.3	47.6
1993	0.4	1.0	2.0	53.2	9.4	66.0
1994	0.2	0.2	1.3	63.9	7.2	72.8
1995	0.1	0.7	3.8	79.2	68.9	152.9
1996	a/	0.6	5.1	57.6	21.4	84.6
1997	-	0.8	2.2	69.1	30.6	102.7
1998	-	0.3	2.7	44.2	19.7	66.9
1999	-	0.4	2.3	51.0	8.9	62.6
2000	0.1	1.6	8.6	53.9	29.9	94.0
2001	a/	1.4	9.7	43.4	15.4	69.9
2002	-	1.6	10.7	54.9	19.4	86.6
2003	-	1.1	8.2	38.7	11.4	59.4
2004	0.1	1.9	10.7	63.4	21.5	97.7
2005	-	0.9	8.9	45.8	13.5	69.1
2006 ^{b/}	-	0.7	6.4	28.5	7.6	43.3
PRIVATE TRIPS						
1976-1980	18.4	22.7	9.3	34.4	6.0	90.8
1981-1985	22.4	21.8	7.8	16.8	9.3	78.1
1986-1990	38.6	34.4	11.4	24.3	36.1	144.8
1991	24.5	25.3	17.2	26.5	33.8	127.4
1992	9.0	8.9	9.7	23.4	29.1	80.2
1993	15.0	17.3	17.4	29.6	29.7	109.0
1994	9.4	6.3	18.1	43.7	39.6	117.1
1995	11.8	12.0	25.4	62.2	114.2	225.6
1996	11.3	13.6	26.2	46.6	43.2	140.9
1997	6.6	11.6	18.0	42.1	53.5	131.7
1998	3.3	6.4	5.7	36.9	32.7	85.0
1999	5.8	11.6	7.9	38.8	20.3	84.4
2000	7.2	11.5	17.0	29.8	54.9	120.4
2001	8.6	14.7	21.1	28.1	22.7	95.2
2002	3.9	16.1	21.1	33.9	48.5	123.4
2003	2.2	12.5	15.5	27.9	17.1	75.3
2004	3.1	20.5	19.8	42.7	35.0	121.0
2005	2.5	13.9	15.4	39.0	32.2	103.0
2006 ^{b/}	1.4	14.1	13.3	28.7	19.6	77.0
TOTAL TRIPS						
1976-1980	20.0	23.9	11.7	97.9	10.0	163.5
1981-1985	23.1	23.1	9.6	78.9	12.2	147.0
1986-1990	39.6	37.9	15.4	98.6	49.2	240.7
1991	25.6	27.4	22.6	70.2	50.8	196.6
1992	9.1	9.1	11.2	62.0	36.4	127.8
1993	15.4	18.3	19.4	82.8	39.1	175.0
1994	9.6	6.5	19.4	107.6	46.8	189.9
1995	11.9	12.8	29.3	141.5	183.1	378.5
1996	11.3	14.2	31.3	104.2	64.5	225.4
1997	6.6	12.4	20.2	111.2	84.0	234.4
1998	3.3	6.7	8.4	81.1	52.4	151.9
1999	5.8	12.0	10.2	89.8	29.2	147.0
2000	7.2	13.1	25.6	83.7	84.8	214.4
2001	8.6	16.0	30.8	71.5	38.2	165.1
2002	3.9	17.7	31.8	88.8	67.9	210.1
2003	2.2	13.6	23.7	66.6	28.5	134.6
2004	3.2	22.4	30.6	106.1	56.5	218.7
2005	2.5	14.8	24.3	84.8	45.7	172.1
2006 ^{b/}	1.4	14.8	19.8	57.2	27.2	120.4

a/ Fewer than 50 angler trips.

b/ Preliminary.

TABLE IV-12. Estimates of Oregon recreational ocean salmon angler trips (thousands) by port area and boat type. (Page 1 of 1)

Year or Avg.	Astoria	Tillamook	New port	Coos Bay	Brookings	State Total
CHARTER TRIPS						
1979	18.5	2.8	26.7	22.7	3.0	73.7
1980	26.3	3.7	26.7	19.6	2.8	79.1
1981-1985	10.3	3.0	17.2	11.9	3.3	45.7
1986-1990	7.1	5.3	27.5	13.0	3.6	56.5
1991	8.1	2.5	19.2	8.4	2.1	40.3
1992	4.6	2.7	14.8	7.4	0.5	30.0
1993	5.8	0.5	4.7	1.8	0.6	13.4
1994 ^{a/}	-	1.2	-	-	0.2	1.4
1995	2.8	1.2	0.6	b/	0.3	4.9
1996	1.9	0.8	2.1	0.1	0.6	5.6
1997	1.3	0.3	1.8	-	0.5	3.9
1998	0.4	0.1	0.8	0.2	0.3	1.8
1999	1.7	0.3	2.3	0.5	0.7	5.5
2000	1.2	0.6	4.8	2.3	0.8	9.8
2001	4.3	1.4	8.8	3.0	0.7	18.2
2002	3.1	1.6	7.1	3.5	0.3	15.7
2003	3.9	2.0	13.0	4.0	0.5	23.4
2004	3.0	2.5	11.1	3.8	0.6	21.1
2005	2.3	1.0	3.7	2.6	0.3	9.9
2006 ^{c/}	2.1	0.6	3.0	2.0	0.3	8.0
PRIVATE TRIPS						
1979	24.3	16.3	45.4	52.9	48.8	187.7
1980	20.1	29.3	56.6	65.2	47.7	218.9
1981-1985	15.6	27.1	40.4	51.8	53.0	187.9
1986-1990	10.6	23.7	47.1	48.4	54.8	184.5
1991	13.6	18.5	34.0	49.3	34.4	149.7
1992	8.3	23.4	38.3	48.2	17.2	135.4
1993	12.7	5.1	12.4	13.6	23.2	67.0
1994 ^{a/}	-	9.1	0.1	0.4	16.0	25.5
1995	8.1	3.9	0.4	0.7	19.1	32.2
1996	3.7	7.5	0.6	3.8	22.7	38.3
1997	2.3	3.4	0.6	3.9	16.1	26.4
1998	1.7	5.9	0.5	2.2	13.8	24.2
1999	5.7	10.9	5.0	7.1	15.1	43.8
2000	7.2	10.9	8.2	21.2	21.2	68.7
2001	19.0	15.1	14.8	28.1	25.4	102.4
2002	9.0	22.8	10.9	29.9	19.4	91.9
2003	15.4	26.0	26.5	38.9	14.3	121.1
2004	15.6	26.8	27.9	36.7	17.7	124.6
2005	11.0	11.1	9.7	22.1	12.3	66.1
2006 ^{c/}	6.2	15.3	7.4	15.2	10.4	54.3
TOTAL TRIPS						
1979	42.8	19.1	72.1	75.6	51.8	261.4
1980	46.4	33.0	83.3	84.8	50.5	298.0
1981-1985	26.0	30.0	57.5	63.7	56.3	233.5
1986-1990	17.7	29.0	74.6	61.4	58.4	241.0
1991	21.7	21.0	53.2	57.7	36.5	190.0
1992	12.9	26.1	53.1	55.6	17.7	165.4
1993	18.5	5.6	17.1	15.4	23.8	80.4
1994 ^{a/}	-	10.3	0.1	0.4	16.2	26.9
1995	10.9	5.1	1.0	0.7	19.4	37.1
1996	5.6	8.3	2.7	3.9	23.3	43.9
1997	3.6	3.7	2.4	3.9	16.6	30.3
1998	2.1	6.0	1.3	2.4	14.1	26.0
1999	7.4	11.2	7.3	7.6	15.8	49.3
2000	8.4	11.5	13.0	23.5	22.0	78.5
2001	23.3	16.5	23.6	31.1	26.1	120.6
2002	12.1	24.4	18.1	33.4	19.7	107.6
2003	19.3	28.0	39.6	42.9	14.8	144.5
2004	18.6	29.3	39.0	40.5	18.3	145.7
2005	13.3	12.1	13.4	24.6	12.6	76.0
2006 ^{c/}	8.2	15.9	10.4	17.2	10.6	62.3

a/ The fishery north of Cape Falcon was closed, and it is assumed that no trips were taken out of Astoria into the south of Cape Falcon area. No samplers were stationed in Astoria.

b/ Fewer than 50 angler trips.

c/ Preliminary.

TABLE IV-13. Estimates of Washington recreational ocean salmon angler trips (thousands) by port area and boat type.(Page 1 of 1)

Year or Avg.	Neah Bay ^{a/}	La Push	Westport	Ilwaco ^{b/}	State Total
CHARTER TRIPS					
1984 ^{c/}	0.3	-	11.6	18.0	29.9
1985 ^{c/}	2.0	-	42.2	20.7	64.9
1986-1990	2.0	-	35.7	15.9	53.5
1991	1.4	0.2	28.6	13.5	43.7
1992	0.7	0.2	28.1	9.2	38.2
1993	1.0	0.1	27.4	11.7	40.2
1994	-	-	-	-	-
1995	0.2	0.1	12.7	5.0	17.9
1996	0.2	d/	10.3	4.8	15.3
1997	0.1	0.1	10.0	2.4	12.5
1998	-	-	4.5	1.1	5.5
1999	0.5	0.1	11.5	5.5	17.5
2000	0.7	0.1	12.2	4.1	17.1
2001	1.4	0.3	25.6	13.9	41.2
2002	1.5	0.4	24.5	10.6	37.0
2003	2.0	0.9	27.3	14.3	44.5
2004	1.9	0.6	22.5	11.4	36.5
2005 ^{e/}	1.2	0.6	20.5	9.4	31.7
2006 ^{e/}	0.5	0.5	15.4	8.0	24.5
PRIVATE TRIPS					
1984 ^{c/}	8.3	0.2	2.3	36.0	46.8
1985 ^{c/}	15.2	1.5	13.7	19.4	49.8
1986-1990	16.9	2.5	16.6	23.4	59.4
1991	14.8	3.3	24.2	27.3	69.6
1992	11.0	2.3	25.6	17.9	56.8
1993	18.4	2.8	23.5	24.2	68.9
1994	-	-	-	-	-
1995	5.3	1.4	9.0	14.2	30.0
1996	9.1	1.3	5.2	7.9	23.5
1997	2.8	0.9	7.3	4.1	15.1
1998	-	0.6	3.5	2.6	6.8
1999	7.6	2.9	7.6	11.8	29.9
2000	7.3	1.8	7.7	11.1	27.9
2001	16.6	3.1	24.1	28.7	72.4
2002	12.2	3.0	16.9	25.3	57.4
2003	18.4	3.5	20.7	32.9	75.5
2004	24.2	3.9	15.7	29.3	73.1
2005 ^{e/}	17.2	4.4	14.7	22.6	58.9
2006 ^{e/}	12.9	3.6	9.1	13.5	39.1
TOTAL TRIPS					
1984 ^{c/}	8.6	0.2	13.9	54.0	76.7
1985 ^{c/}	17.2	1.5	55.9	40.1	114.7
1986-1990	18.9	2.5	52.3	39.3	113.0
1991	16.2	3.5	52.8	40.8	113.3
1992	11.7	2.5	53.7	27.1	95.0
1993	19.4	2.9	50.9	35.9	109.1
1994	-	-	-	-	-
1995	5.5	1.5	21.7	19.2	47.9
1996	9.3	1.3	15.5	12.7	38.8
1997	2.9	0.9	17.3	6.5	27.5
1998	-	0.6	8.0	3.7	12.3
1999	8.1	3.0	19.1	17.3	47.4
2000	7.9	2.0	19.8	15.2	45.0
2001	17.9	3.4	49.7	42.5	113.6
2002	13.7	3.4	41.4	35.9	94.4
2003	20.4	4.4	48.0	47.1	120.0
2004	26.1	4.6	38.2	40.6	109.5
2005 ^{e/}	18.5	4.9	35.2	32.1	90.6
2006 ^{e/}	13.4	4.1	24.5	21.5	63.6

a/ Does not include effort from the late-season state water Area 4B fishery.

b/ Does not include effort from the Columbia River Jetty.

c/ Values for 1984 and 1985 include some Columbia River fishing after closure of the ocean fishery.

d/ Fewer than 50 angler trips.

e/ Preliminary.

TABLE IV-14. Oregon and Washington recreational salmon, bottomfish, and sturgeon angler trips (thousands) by ocean port area and boat type for the area north of Cape Falcon.
(Page 1 of 3)

Year	Columbia River and Buoy 10					Westport			La Push			Neah Bay and Area 4B Add-On		
	Charter	Private	Subtotal	Jetty	Total	Charter	Private	Total	Charter	Private	Total	Charter	Private	Total
SALMON EFFORT														
1984	NA	NA	-	NA	54.0	11.6	2.3	13.9	0.0	0.2	0.2	0.3	8.3	8.6
1985	NA	NA	-	NA	90.3	42.2	13.7	55.9	0.0	1.5	1.5	2.0	15.2	17.2
1986	NA	NA	-	NA	144.3	36.6	14.8	51.4	0.0	1.7	1.7	2.4	17.4	19.8
1987	39.5	130.0	169.5	12.4	181.9	34.1	9.8	43.9	0.0	2.0	2.0	1.9	17.8	19.7
1988	34.5	154.4	188.9	16.9	205.8	23.5	13.9	37.4	0.0	2.8	2.8	2.0	14.8	16.8
1989	40.4	169.2	209.6	22.9	232.5	40.8	18.7	59.5	0.0	1.6	1.6	2.8	25.5	28.3
1990	32.8	128.7	161.5	5.7	167.2	43.4	25.9	69.3	0.0	4.2	4.2	3.0	30.8	33.8
1991	37.9	172.7	210.6	35.5	246.1	28.6	24.2	52.8	0.2	3.3	3.5	1.9	23.5	25.4
1992	22.3	116.6	138.9	28.4	167.3	28.1	25.6	53.7	0.2	2.3	2.5	1.1	18.6	19.7
1993	20.2	103.3	123.5	24.6	148.1	27.4	23.5	50.9	0.1	2.8	2.9	1.6	25.7	27.3
1994	0.5	6.3	6.8	3.6	10.4	-	-	-	-	-	-	-	-	-
1995	9.0	43.4	52.4	8.5	60.9	12.7	9.0	21.7	0.1	1.4	1.5	0.3	9.2	9.5
1996	7.3	26.8	34.1	7.5	41.6	10.3	5.2	15.5	a/	1.3	1.3	0.3	10.6	10.9
1997	8.4	53.0	61.3	7.4	68.7	10.0	7.3	17.3	0.1	0.9	0.9	0.2	4.6	4.8
1998	3.2	30.7	33.9	3.6	37.5	4.5	3.5	8.0	0.0	0.6	0.6	0.1	6.3	6.4
1999	8.7	63.9	72.6	6.2	78.8	11.5	7.6	19.1	0.1	2.9	2.9	0.5	7.6	8.1
2000	9.8	82.2	92.0	7.0	99.0	12.2	7.7	19.8	0.1	1.8	2.0	1.1	10.3	11.4
2001	22.5	165.0	187.5	17.0	204.5	25.6	24.1	49.7	0.3	3.1	3.4	1.4	16.8	18.1
2002	15.2	115.1	130.3	2.8	133.1	44.5	16.9	41.4	0.4	3.0	3.4	1.5	12.2	13.7
2003	19.3	133.3	152.7	7.2	159.8	27.3	20.7	48.0	0.9	3.5	4.4	2.0	18.4	20.4
2004	15.8	113.3	129.2	3.2	132.3	22.5	15.7	38.2	0.6	3.9	4.6	1.9	24.2	26.1
2005 ^{bi}	12.0	88.5	100.5	c/	100.5	20.5	14.7	35.2	0.6	4.4	4.9	1.2	17.2	18.5
2006 ^{bi}	10.4	59.8	70.2	1.7	71.9	15.4	9.1	24.5	0.5	3.6	4.1	0.5	12.9	13.4

TABLE IV-14. Oregon and Washington recreational salmon, bottomfish, and sturgeon angler trips (thousands) by ocean port area and boat type for the area north of Cape Falcon. (Page 2 of 3)

Year	Columbia River and Buoy 10					Westport			La Push			Neah Bay and Area 4B Add-On		
	Charter	Private	Subtotal	Jetty	Total	Charter	Private	Total	Charter	Private	Total	Charter	Private	Total
BOTTOMFISH EFFORT^{d/}														
1984	2.1	0.1	2.2	-	-	12.4	0.5	12.9	0.0	0.0	0.0	1.8	12.3	14.1
1985	1.9	0.2	2.1	-	-	15.3	1.0	16.3	0.0	0.1	0.1	3.0	10.6	13.6
1986	1.7	0.2	1.9	-	-	19.6	0.8	20.4	0.0	0.2	0.2	3.5	11.4	14.9
1987	1.7	0.3	2.0	0.5	2.5	21.1	1.2	22.3	0.0	0.5	0.5	5.6	16.0	21.6
1988	2.1	0.2	2.3	0.8	3.1	24.4	1.1	25.5	0.0	0.7	0.7	5.7	14.8	20.5
1989	1.2	0.6	1.8	1.5	3.3	19.3	1.0	20.3	0.0	0.6	0.6	6.8	16.3	23.1
1990	1.4	0.3	1.7	2.4	4.1	21.8	0.8	22.6	0.0	0.8	0.8	6.4	18.1	24.5
1991	1.3	0.4	1.7	1.8	3.5	23.5	1.1	24.6	0.0	0.9	0.9	5.9	18.2	24.1
1992	1.4	0.5	1.9	2.3	4.1	20.5	2.2	22.7	0.0	1.5	1.5	4.8	19.1	23.9
1993	2.2	0.6	2.8	2.6	5.4	21.5	1.8	23.0	0.1	1.1	1.2	5.1	19.2	24.3
1994	2.7	0.7	3.3	2.7	6.0	26.0	1.7	27.7	0.2	1.9	2.1	4.1	15.0	19.1
1995	1.3	0.9	2.3	2.2	4.4	21.1	1.6	22.7	a/	1.6	1.6	4.1	19.2	23.3
1996 ^{e/f/}	1.2	0.5	1.7	1.7	3.4	21.4	1.2	22.6	0.0	1.6	1.6	4.8	21.0	25.8
1997	1.2	0.7	2.0	2.5	4.4	19.2	1.4	20.6	0.0	2.2	2.2	4.9	22.7	27.7
1998	1.8	0.5	2.3	0.9	3.2	21.5	1.3	22.8	0.0	1.2	1.2	5.1	23.9	29.0
1999	1.0	0.5	1.5	0.5	2.0	17.1	1.2	18.3	0.1	1.0	1.1	4.5	20.3	24.9
2000	1.2	0.6	1.8	0.5	2.3	16.7	0.9	17.6	0.2	1.3	1.5	4.5	20.1	24.6
2001	2.8	0.4	3.2	0.9	4.1	13.9	1.2	15.1	0.3	0.9	1.2	4.7	16.5	21.2
2002	14.3	0.5	1.9	0.8	2.8	14.9	1.2	16.1	0.3	1.2	1.6	4.0	15.7	19.7
2003	2.4	0.5	2.9	0.9	3.8	16.3	1.8	18.2	1.0	2.5	3.6	5.2	21.4	26.6
2004	2.4	0.8	3.2	0.3	3.5	14.8	1.7	16.5	0.4	1.7	2.1	3.5	15.2	18.7
2005 ^{b/}	2.5	1.1	3.7	g/	3.7	15.5	1.8	17.3	0.5	2.5	3.0	3.5	18.8	22.4
2006 ^{b/}	3.6	1.2	4.9	0.9	5.7	17.7	1.8	19.5	0.3	2.8	3.1	4.4	16.9	21.3

TABLE IV-14. Oregon and Washington recreational salmon, bottomfish, and sturgeon angler trips (thousands) by ocean port area and boat type for the area north of Cape Falcon. (Page 3 of 3)

Year	Columbia River and Buoy 10					Westport			La Push			Neah Bay and Area 4B Add-On		
	Charter	Private	Subtotal	Jetty	Total	Charter	Private	Total	Charter	Private	Total	Charter	Private	Total
STURGEON EFFORT^{g/}														
1984	1.7	28.4	30.1	-	30.1	-	-	-	-	-	-	-	-	-
1985	5.0	32.9	37.9	-	37.9	-	-	-	-	-	-	-	-	-
1986	5.7	37.7	43.4	-	43.4	-	-	-	-	-	-	-	-	-
1987	6.0	45.9	51.9	-	51.9	-	-	-	-	-	-	-	-	-
1988	6.2	34.4	40.6	-	40.6	-	-	-	-	-	-	-	-	-
1989	4.3	24.3	28.6	-	28.6	-	-	-	-	-	-	-	-	-
1990	3.9	30.9	34.8	-	34.8	-	-	-	-	-	-	-	-	-
1991	3.7	28.7	32.4	-	32.4	-	-	-	-	-	-	-	-	-
1992	5.0	42.3	47.3	-	47.3	-	-	-	-	-	-	-	-	-
1993	6.1	53.2	59.3	-	59.3	-	-	-	-	-	-	-	-	-
1994	7.5	43.9	51.4	-	51.4	-	-	-	-	-	-	-	-	-
1995	7.7	59.5	67.2	-	67.2	-	-	-	-	-	-	-	-	-
1996	11.1	52.8	63.9	-	63.9	-	-	-	-	-	-	-	-	-
1997	12.2	48.4	60.7	-	60.7	-	-	-	-	-	-	-	-	-
1998	14.2	64.3	78.5	-	78.5	-	-	-	-	-	-	-	-	-
1999	13.2	57.1	70.3	-	70.3	-	-	-	-	-	-	-	-	-
2000	11.6	57.6	69.2	-	69.2	-	-	-	-	-	-	-	-	-
2001	10.8	45.1	55.9	-	55.9	-	-	-	-	-	-	-	-	-
2002	9.9	49.3	59.3	-	59.3	-	-	-	-	-	-	-	-	-
2003	6.6	38.1	44.7	-	44.7	-	-	-	-	-	-	-	-	-
2004	7.4	32.2	39.6	-	39.6	-	-	-	-	-	-	-	-	-
2005	8.7	51.2	59.9	-	59.9	-	-	-	-	-	-	-	-	-
2006 ^{b/}	6.7	37.3	44.0	-	44.0	-	-	-	-	-	-	-	-	-

a/ Fewer than 50 angler trips.

b/ Preliminary.

c/ Columbia River north jetty was not sampled in 2005 due to construction limiting access.

d/ Oregon data is a minimum estimate, as the jetty is not sampled, and bottomfish sampling of vessels only occurs when the ocean is open for salmon.

e/ No Oregon bottomfish trips are included.

f/ Includes tuna trips: Ilwaco - 9 charter, 14 private; Westport - 784 charter, 0 private.

g/ Annual sturgeon angler trips for the lower Columbia River from the western tip of Puget Island to mouth.

TABLE IV-15. Buoy 10 and Area 4B add-on recreational salmon angler trips and catch by boat type.^{a/} (Page 1 of 2)

Year or Avg.	Angler Trips			Chinook Catch			Coho Catch			Pink Catch	
	Charter	Private	Jetty	Charter	Private	Jetty	Charter	Private	Jetty	Charter	Private
OREGON BUOY 10											
1987-1990	4,002	38,619	4,029	793	6,415	29	3,292	18,348	690	-	-
1991	4,077	46,468	6,884	321	2,692	26	6,543	54,720	3,003	-	-
1992	2,496	29,610	6,055	246	2,530	33	1,219	10,716	1,842	-	-
1993	684	20,244	6,052	36	1,225	89	264	5,316	1,328	-	-
1994	210	2,732	1,244	-	-	-	34	481	211	-	-
1995	174	8,680	2,538	7	145	-	64	1,366	560	-	-
1996	179	6,122	2,285	59	419	-	66	1,361	532	-	-
1997	1,071	16,207	2,744	273	4,032	-	592	5,411	761	-	-
1998	588	9,949	631	145	2,191	-	59	1,169	31	-	-
1999	454	19,030	1,370	125	3,834	9	18	3,357	146	-	-
2000	836	27,492	2,129	26	3,083	4	297	7,523	295	-	-
2001	1,616	54,444	4,115	47	5,578	10	1,481	56,403	523	-	-
2002	512	39,943	1,589	31	10,728	-	2	3,058	52	-	-
2003	991	45,461	2,315	47	7,903	-	624	28,518	526	-	-
2004	66	33,092	1,170	19	9,191	-	17	7,585	47	-	-
2005 ^{c/}	135	33,051	935	18	6,875	6	51	4,785	36	-	-
2006 ^{c/}	37	24,194	1,457	1	1,350	-	-	2,800	-	-	-
WASHINGTON BUOY 10											
1987-1990	10,678	71,927	6,567	1,907	14,398	68	8,353	40,415	1,627	1	11
1991	11,795	85,392	17,064	1,098	7,443	67	20,217	118,284	5,506	-	63
1992	6,147	60,827	10,346	907	6,796	143	4,415	23,489	1,401	-	-
1993	2,035	46,151	608	290	3,648	-	912	13,090	22	-	16
1994	316	3,561	1,126	-	-	-	101	826	96	-	-
1995	516	12,921	396	37	664	-	246	2,716	103	-	-
1996	352	9,096	-	37	894	-	123	2,455	-	-	-
1997	3,614	30,334	1,755	1,125	7,701	22	2,143	11,290	160	-	-
1998	1,080	16,388	1,362	333	3,075	40	188	1,584	44	-	-
1999	1,055	27,672	-	185	5,697	-	175	5,165	-	-	-
2000	3,685	36,268	2,108	286	2,626	60	2,123	11,033	207	-	-
2001	2,765	62,944	-	-	6,791	-	3,282	70,349	-	-	-
2002	1,001	40,927	485	232	8,424	26	98	3,023	-	-	-
2003	216	39,844	-	22	8,344	-	139	24,633	-	-	-
2004	685	33,805	-	45	6,791	-	139	7,381	-	-	-
2005 ^{c/}	183	20,879	-	5	2,383	-	34	1,972	-	-	-
2006 ^{c/}	421	14,597	-	4	351	-	8	879	-	-	-

TABLE IV-15. Buoy 10^{a/} and Area 4B add-on recreational salmon angler trips and catch by boat type.^{b/} (Page 2 of 2)

Year or Avg.	Angler Trips			Chinook Catch			Coho Catch			Pink Catch	
	Charter	Private	Jetty	Charter	Private	Jetty	Charter	Private	Jetty	Charter	Private
TOTAL BUOY 10											
1987-1990	14,680	110,547	10,596	2,700	20,812	98	11,645	58,763	2,317	1	11
1991	15,872	131,860	23,948	1,419	10,135	93	26,760	173,004	8,509	0	63
1992	8,643	90,437	16,401	1,153	9,326	176	5,634	34,205	3,243	0	0
1993	2,719	66,395	6,660	326	4,873	89	1,176	18,406	1,350	0	16
1994	526	6,293	2,370	0	0	0	135	1,307	307	0	0
1995	690	21,601	2,934	44	809	0	310	4,082	663	0	0
1996	531	15,218	2,285	96	1,313	0	189	3,816	532	0	0
1997	4,685	46,541	4,499	1,398	11,733	22	2,735	16,701	921	0	0
1998	1,668	26,337	1,993	478	5,266	40	247	2,753	75	0	0
1999	1,509	46,702	1,370	310	9,531	9	193	8,522	146	0	0
2000	4,521	63,760	4,237	312	5,709	64	2,420	18,556	502	0	0
2001	4,381	117,388	4,115	47	12,369	10	4,763	126,752	523	0	0
2002	1,513	80,870	2,074	263	19,152	26	100	6,081	52	0	0
2003	1,207	85,305	2,315	69	16,247	0	763	53,151	526	0	0
2004	751	66,897	1,170	64	15,982	0	156	14,966	47	0	0
2005 ^{c/}	318	53,930	935	23	9,258	6	85	6,757	36	0	0
2006 ^{c/}	458	38,791	1,457	5	1,701	0	8	3,679	0	0	0
TOTAL AREA 4B ADD-ON^{d/}											
1989	1,238	10,572	-	67	385	-	2,278	17,603	-	71	423
1990	929	11,310	-	56	364	-	1,912	18,439	-	-	-
1991	553	8,684	-	31	349	-	1,064	14,068	-	86	1,457
1992	406	7,589	-	-	33	-	757	10,954	-	-	-
1993	623	7,257	-	16	202	-	908	7,260	-	143	884
1994	-	-	-	-	-	-	-	-	-	-	-
1995	134	3,877	-	-	26	-	169	4,471	-	61	1,539
1996	36	1,511	-	-	5	-	61	2,266	-	-	-
1997	136	1,788	-	-	4	-	65	1,429	-	139	412
1998	71	6,296	-	5	98	-	125	7,937	-	-	3
1999 ^{e/}	-	-	-	-	-	-	-	-	-	-	-
2000	373	3,046	-	-	8	-	614	3,796	-	-	-
2001 ^{f/}	-	-	-	-	-	-	-	-	-	-	-
2002 ^{f/}	-	-	-	-	-	-	-	-	-	-	-
2003 ^{f/}	-	-	-	-	-	-	-	-	-	-	-
2004 ^{f/}	-	-	-	-	-	-	-	-	-	-	-
2005 ^{f/}	-	-	-	-	-	-	-	-	-	-	-
2006 ^{e/}	-	-	-	-	-	-	-	-	-	-	-

a/ Starting in 2000, includes catch upstream from the Astoria-Megler Bridge to the new boundary line from Tongue Point, Oregon to Rocky Point, Washington.

b/ Prior to 1987, data on charter and private anglers were combined. Total Buoy 10 catch and effort data prior to 1987 are provided in Table B-21.

c/ Preliminary.

d/ There was no Area 4B add-on fishery prior to 1989.

e/ There was no Area 4B add-on fishery opening because the Area 4 ocean quota was not attained.

f/ There was no Area 4B add-on fishery planned.

TABLE IV-16. Estimates of California coastal community and state personal income impacts in thousands of real (2006) dollars of the troll and recreational ocean salmon fishery for major port areas.^{a/}

Year or Avg.	Crescent City	Eureka	Fort Bragg	San Francisco	Monterey	Coastal Community Total ^{b/}	State Total
OCEAN TROLL^{c/}							
1976-1980	6,147	15,613	15,310	20,084	8,620	65,775	84,561
1981-1985	3,114	3,757	8,793	16,598	5,656	37,918	47,209
1986-1990	1,173	2,903	15,445	29,991	11,215	60,726	74,527
1991-1995	9	138	971	11,294	6,434	18,846	22,711
1996-2000	10	164	687	11,836	7,176	19,873	21,026
2001	14	279	922	9,687	2,049	12,951	13,443
2002	243	466	3,321	13,812	3,720	21,562	22,906
2003	196	34	13,491	14,056	2,217	29,995	33,360
2004	1,731	383	6,623	20,807	4,683	34,228	34,948
2005	130	391	4,851	12,080	6,340	23,792	24,387
2006 ^{d/}	0	0	2,193	5,720	823	8,737	8,890
RECREATIONAL							
1976-1980	1,169	1,385	807	12,127	812	16,300	18,313
1981-1985	1,297	1,349	647	10,739	858	14,889	16,773
1986-1990	2,202	2,311	1,127	13,125	3,527	22,291	25,997
1991-1995	798	866	1,308	11,102	5,317	19,390	22,773
1996-2000	372	686	1,335	11,130	4,889	18,413	21,422
2001	470	968	2,367	8,591	3,106	15,502	18,194
2002	210	1,073	2,488	10,762	4,963	19,497	22,942
2003	119	813	1,873	7,853	2,312	12,970	15,039
2004	175	1,357	2,425	12,666	4,507	21,130	24,546
2005	136	871	1,953	9,686	3,367	16,013	18,629
2006 ^{d/}	76	856	1,533	6,330	1,975	10,770	12,597

a/ Per pound and per day estimates of income impacts provided from output of the Fishery Economic Assessment Model (FEAM). These are the income impacts associated with expenditures in the troll or recreational sectors. There is no differentiation between money new to the area and money which would otherwise have been expended in other sectors. It is assumed that all fish landed at a port is processed in the port area. Values through 1995 are based on a 1992 run of the FEAM using 1989 U.S. Forest Service IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 U.S. Forest Service IMPLAN data. Beginning in 2001 values are based on a 2003 run of the FEAM using 1998 U.S. Forest Service IMPLAN data.

b/ Income impacts on the coastal economy. Totals do not include impacts of one coastal community on another.

c/ Excluding pink salmon.

d/ Preliminary.

TABLE IV-17. Estimates of Oregon coastal community and state personal income impacts in thousands of real (2006) dollars of the troll and recreational ocean salmon fishery for major port areas.^{a/}

Year or Avg.	Astoria	Tillamook	New port	Coos Bay	Brookings ^{b/}	Coastal Community Total ^{c/}	State Total
OCEAN TROLL^{d/}							
1976-1980	3,946	5,079	11,915	18,336	7,623	46,900	63,588
1981-1985	1,279	1,645	3,858	6,804	2,953	16,539	22,476
1986-1990	591	3,447	7,671	14,788	2,802	29,299	39,570
1991-1995	83	643	2,635	1,280	130	4,771	6,433
1996-2000	137	270	2,791	1,612	389	5,198	6,334
2001	344	701	5,252	2,760	566	9,623	11,714
2002	981	831	4,487	3,966	717	10,983	13,302
2003	960	870	5,807	5,279	622	13,539	16,382
2004	811	649	5,743	6,248	1,338	14,789	15,982
2005 ^{e/}	675	1,124	4,806	4,761	1,127	12,494	13,501
2006 ^{e/}	878	547	1,436	387	337	3,585	3,846
RECREATIONAL							
1979	3,315	1,058	5,041	5,104	2,457	16,974	21,885
1980	4,002	1,758	5,565	5,349	2,388	19,062	24,551
1981-1985	1,954	1,575	3,763	3,838	2,671	13,801	17,917
1986-1990	1,338	1,673	5,208	3,793	2,780	14,792	19,258
1991-1995	908	731	1,656	1,479	1,044	5,818	7,545
1996-2000	352	403	397	438	842	2,433	3,207
2001	1,427	851	1,654	1,693	1,190	6,815	8,817
2002	794	1,232	1,291	1,839	888	6,043	7,826
2003	1,200	1,418	2,664	2,326	681	8,290	10,690
2004	1,111	1,516	2,520	2,196	842	8,186	10,579
2005	800	626	860	1,353	570	4,209	5,426
2006 ^{e/}	542	776	671	955	483	3,428	4,437

a/ Per pound and per day estimates of income impacts provided by the FEAM. These are the income impacts associated with expenditures in the troll or recreational sectors. There is no differentiation between money new to the area and money which would otherwise have been expended in other sectors. It is assumed that all fish landed at a port is processed in the port area. Values through 1995 are based on a 1992 run of the FEAM using 1989 U.S. Forest Service IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 U.S. Forest Service IMPLAN data. Beginning in 2001 values are based on a 2003 run of the FEAM using 1998 U.S. Forest Service IMPLAN data.

b/ On average, between 1976-1991 over 50% of the troll fishery community income impacts for the Brookings port area originated from landings in Brookings and Gold Beach. For 1986-1990 an average of about 40% of the impacts for the Brookings port area originated in landings made through Brookings and Gold Beach. In 1992 and 1993, impacts originating through these two ports averaged less than 18% and 11%, respectively, of the total for the Brookings port area.

c/ Income impacts on the coastal economy. Totals do not include impacts of one coastal community on another.

d/ Excluding pink salmon.

e/ Preliminary.

TABLE IV-18. Estimates of Washington coastal community and state personal income impacts in thousands of real (2006) dollars of the troll and recreational ocean salmon fishery for major port areas.^{a/}

Year or Avg.	Neah Bay	La Push	Westport	Ilwaco ^{b/}	Coastal Community Total ^{c/d/}	Puget Sound	State Total
OCEAN TROLL^{e/f/}							
1976-1980	5,698	7,780	15,425	5,524	34,427	7,668	54,922
1981-1985	1,120	454	4,228	1,011	6,814	1,637	10,710
1986-1990	621	163	1,945	423	3,152	949	5,164
1991-1995 ^{g/}	457	101	650	47	1,257	183	1,850
1996-2000	154	3	186	18	361	95	496
2001	282	0	586	39	906	0	981
2002	580	76	1,018	170	1,843	0	2,031
2003	1,054	178	870	127	2,229	40	2,584
2004	777	245	966	94	2,083	24	2,407
2005	640	382	985	122	2,129	1	2,405
2006	474	384	369	247	1,473	32	1,744
RECREATIONAL							
1976-1980	2,104	1,044	20,927	10,244	34,318	-	46,392
1981-1985	1,272	130	8,234	4,232	13,868	-	18,768
1986-1990	976	111	4,672	2,519	8,279	-	11,214
1991-1995	519	102	2,884	1,463	4,967	-	6,716
1996-2000	275	74	1,350	661	2,360	-	3,182
2001	895	174	3,923	2,541	7,533	-	10,246
2002	710	179	3,468	2,083	6,440	-	8,745
2003	1,051	250	3,953	2,756	8,010	-	10,910
2004	1,301	244	3,191	2,326	7,063	-	9,621
2005	910	257	2,923	1,858	5,948	-	8,080
2006	639	220	2,110	1,343	4,313	-	5,859

a/ Per pound and per recreational day estimates of income impacts provided by the FEAM. These are the income impacts associated with expenditures in the troll or recreational sectors. There is no differentiation between money new to the area and money which would otherwise have been expended in other sectors. It is assumed that all fish landed at a port is processed in the port area. Values through 1995 are based on a 1992 run of the FEAM using 1989 U.S. Forest Service IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 U.S. Forest Service IMPLAN data. Beginning in 2001 values are based on a 2003 run of the FEAM using 1998 U.S. Forest Service IMPLAN data.

b/ Recreational values exclude recreational shorebased effort from the Columbia River north jetty.

c/ Income impacts on the coastal economy. Totals do not include impacts of one coastal community on another.

d/ Through 1993, commercial values include a very small amount of fish landed in Washington coastal areas not included in the major port groups.

e/ Excluding pink salmon.

f/ All commercial values in this table are based on preliminary information available at the start of each year's salmon review.

g/ The non-Indian commercial and recreational fisheries were closed north of Cape Falcon in 1994. Some commercial catch taken south of Cape Falcon was landed in the Puget Sound area.

TABLE IV-19. Local personal income impacts in real (2006) dollars of the inriver commercial salmon fishery on Oregon and Washington Columbia River communities.^{a/}

Fishery	Species	1987-2001	2002	2003	2004	2005	2006 ^{b/}
OREGON							
Non-Indian ^{c/}	Chinook						
Gillnet	Spring	842	2,049	824	2,004	605	1,090
	Fall Brights	2,606	722	1,303	1,329	970	1,253
	Tules	243	296	196	283	169	82
	Coho	1,731	1,743	2,608	1,612	1,773	1,183
	Chum	1	d/	-	1	d/	d/
	TOTAL	5,423	4,810	4,932	5,229	3,517	3,607
Treaty Indian ^{e/}	Chinook						
All Gears	Spring	9	47	10	334	-	1
	Fall Brights	1,157	12	43	1,364	511	679
	Tules	82	1	-	328	78	13
	Coho	11	-	-	51	1	28
	TOTAL	1,260	60	53	2,078	590	720
WASHINGTON^{b/f/}							
Non-Indian	Chinook						
Gillnet	Spring	410	591	158	526	421	587
	Fall ^{g/}	1,090	406	911	1,056	752	847
	Coho	768	807	1,411	826	410	518
	Chum	2	d/	d/	d/	d/	-
	TOTAL	2,270	1,804	2,481	2,408	1,583	1,952
Treaty Indian ^{e/}	Chinook						
All Gears ^{h/}	Spring	69	595	386	390	255	847
	Fall ^{g/}	2,061	2,239	2,234	1,552	2,566	2,802
	Coho	34	28	27	56	46	73
	TOTAL	2,163	2,862	2,648	1,998	2,867	3,721
GRAND TOTAL							
Non-Indian		7,693	6,614	7,412	7,636	5,099	5,559
Treaty Indian		3,423	2,922	2,701	4,076	3,457	4,442
Columbia River		11,116	9,536	10,113	11,712	8,556	10,001

a/ Excluding pink, sockeye, and steelhead. Values through 1995 are based on a 1992 run of the FEAM using 1989 U.S. Forest Service IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 U.S. Forest Service IMPLAN data. Beginning in 2001 values are based on a 2003 run of the FEAM using 1998 U.S. Forest Service

b/ Preliminary. (All Washington values in this table are based on preliminary information available when each year's Salmon Review is drafted.)

c/ Mainstem below Bonneville and Select Areas (Youngs Bay, Tongue Point, Blind Slough, and Deep River).

d/ Less than \$500.

e/ Treaty Indian values do not include direct sales to consumers.

f/ Washington income impacts for years prior to 2000 are based on a combination of Washington and Oregon value information.

g/ Includes fall brights, tules, and jacks.

h/ Primarily set gillnet but also Includes Klickitat dipnet, Drano Lake (Little White Salmon River mouth), and Priest Rapids Pool fisheries.

TABLE IV-20. Local personal income impacts in real (2006) dollars of the Buoy 10 recreational fishery in Oregon and Washington and the Area 4B add-on fishery in Washington. (Page 1 of 1)

Year	Total Angler Trips (thousands)	Income Impacts (thousands of dollars)		
		Oregon	Washington	Total
BUOY 10 (including bank fishing)				
1987-1990	136	2,472	4,310	6,782
1991-1995	79	1,406	2,392	3,798
1996-2000	45	901	1,232	2,133
2001	126	2,327	2,457	4,785
2002	84	1,565	1,472	3,037
2003	89	1,855	1,284	3,139
2004	69	1,244	1,178	2,422
2005 ^{b/}	55	1,243	685	1,928
2006 ^{b/}	41	929	531	1,460
AREA 4B ADD-ON ^{c/}				
1989-1990	12	-	611	611
1991-1995	6	-	285	285
1996-2000	3	-	128	128
2001	-	-	-	-
2002	-	-	-	-
2003	-	-	-	-
2004	-	-	-	-
2005	-	-	-	-
2006	-	-	-	-

a/ Values through 1995 are based on a 1992 run of the FEAM using 1989 U.S. Forest Service IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 U.S. Forest Service IMPLAN data. Beginning in 2001 values are based on a 2003 run of the FEAM using 1998 U.S. Forest Service IMPLAN data.

b/ Preliminary

c/ There was no Area 4B add-on fishery prior to 1989.

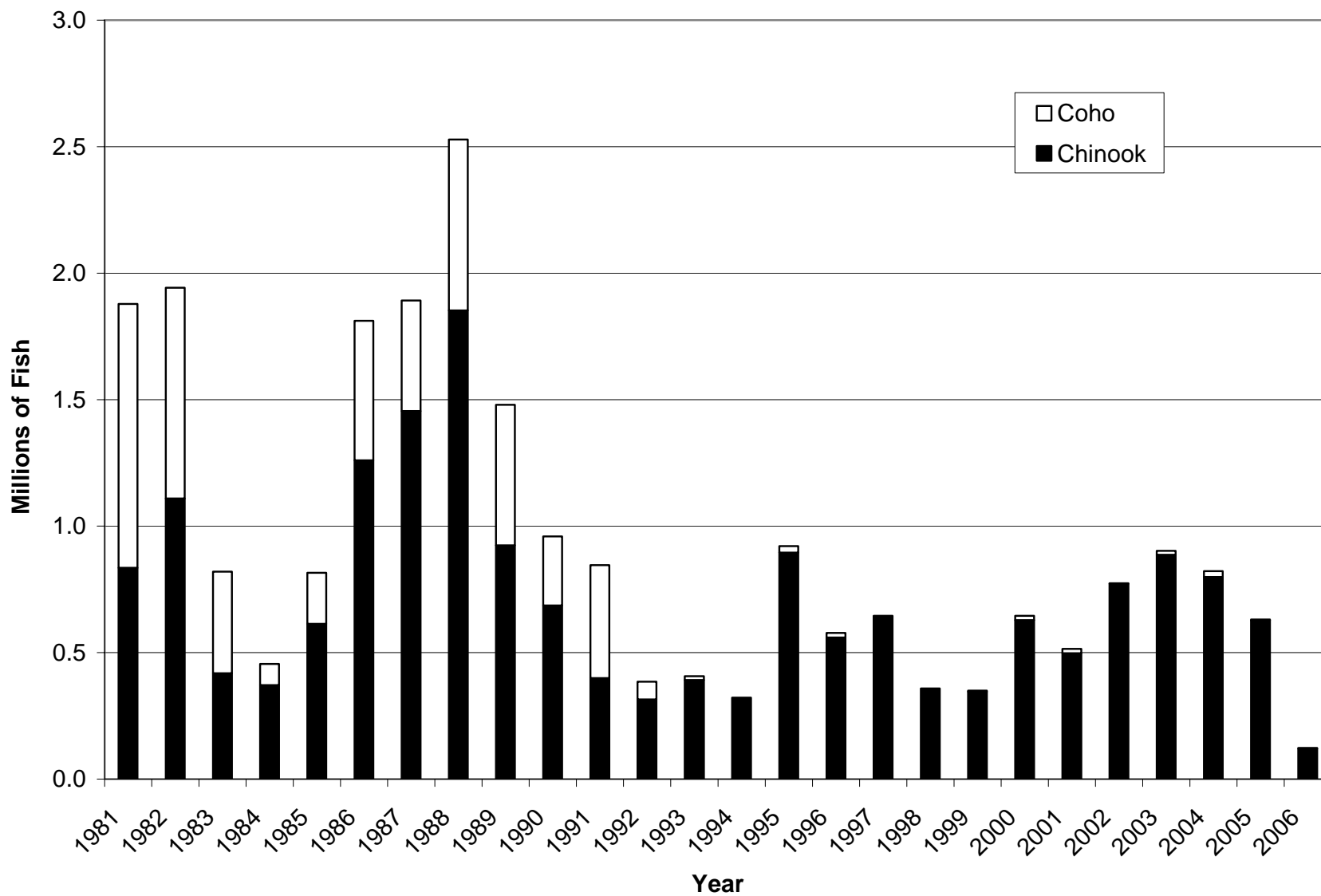


Figure IV-1. West Coast ocean non-Indian commercial Chinook and coho harvest.

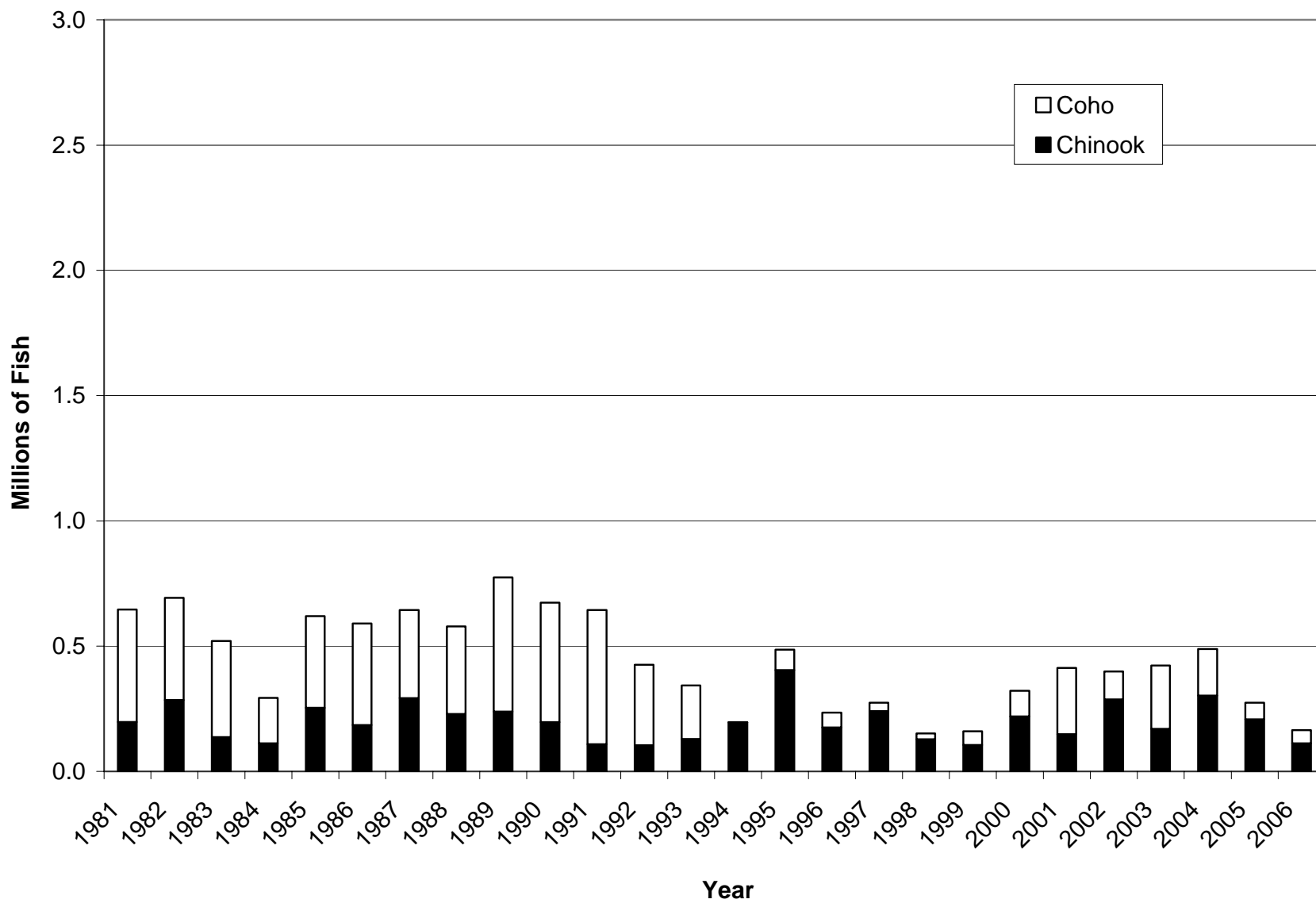


Figure IV-2. West Coast ocean recreational Chinook and coho harvest.

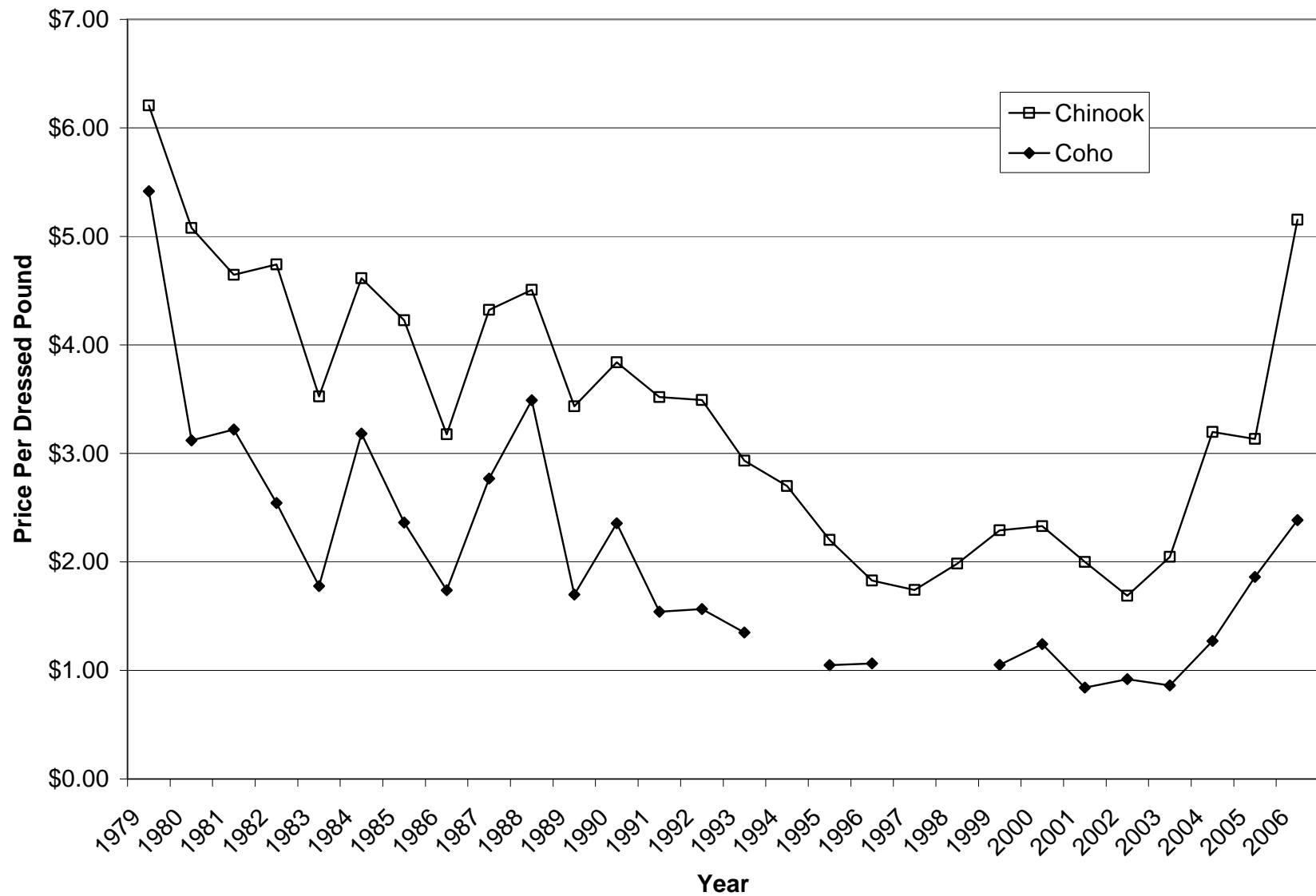


Figure IV-3. West Coast non-Indian ocean commercial salmon annual exvessel prices (2006 dollars).

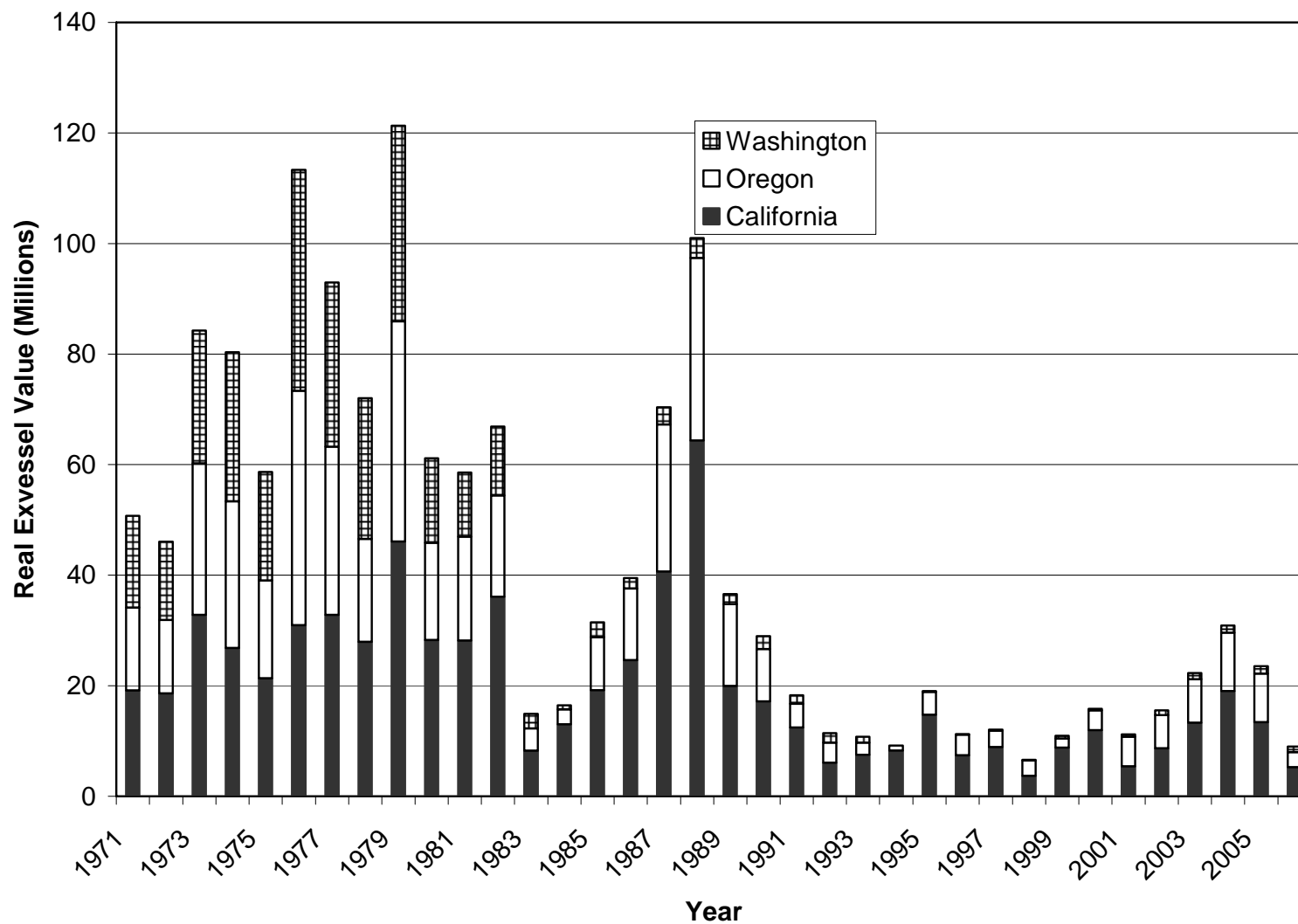


Figure IV-4. Exvessel value of West Coast non-Indian ocean commercial Chinook and coho landings by state of landing (2006 dollars).

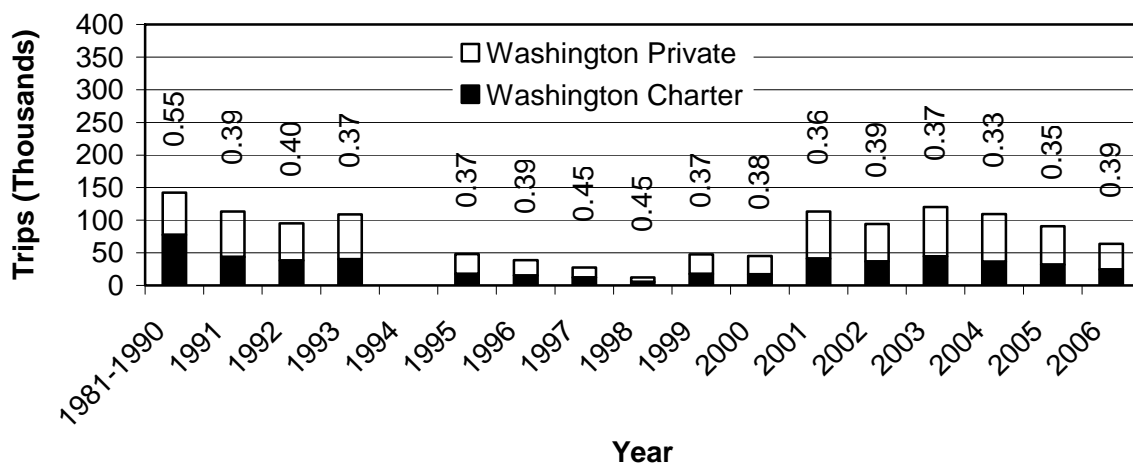
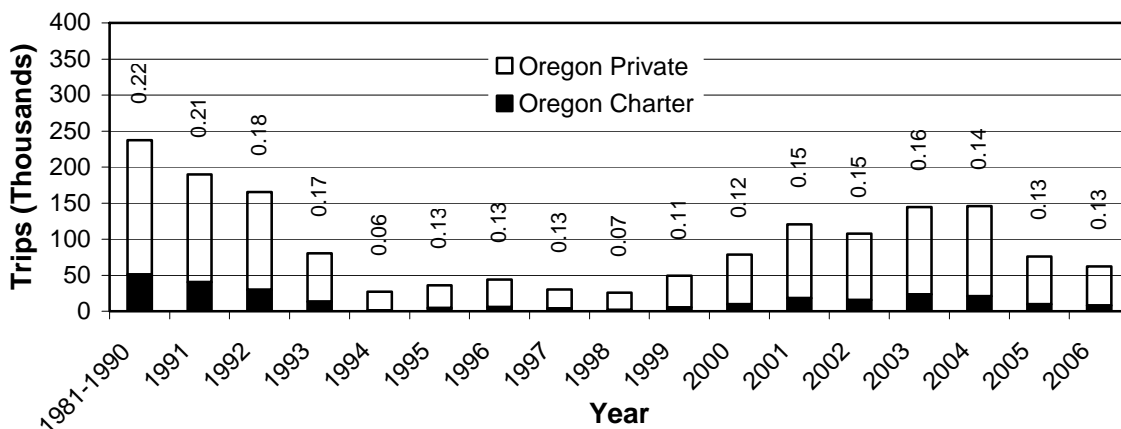
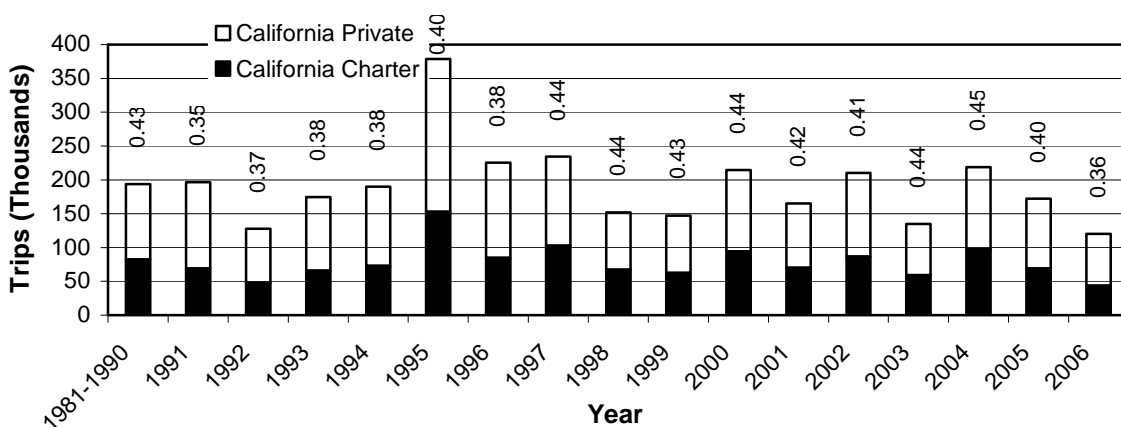


Figure IV-5. Total recreational ocean salmon trips for California, Oregon, and Washington, with proportion of charter trips shown above each bar.

APPENDIX A

HISTORICAL RECORD OF OCEAN SALMON FISHERY EFFORT AND LANDINGS

LIST OF TABLES

	<u>Page</u>
TABLE A-1. Summary of California commercial troll salmon fishing effort in days fished and landings in numbers of fish by catch area.	111
TABLE A-2. California commercial troll salmon fishing effort in days fished by port area and month.	113
TABLE A-3. California commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month.	116
TABLE A-4. California ocean recreational salmon fishing effort in angler trips by port and month.	119
TABLE A-5. California ocean recreational salmon landings in numbers of fish by port of landing and month.	122
TABLE A-6. Summary of Oregon commercial troll salmon fishing effort in days fished and landings in fish by catch area.	125
TABLE A-7. Oregon commercial troll salmon effort in days fished by area and month.	128
TABLE A-8. Oregon commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month.	132
TABLE A-9. Oregon ocean recreational effort in salmon angler trips by catch area and month.	136
TABLE A-10. Oregon ocean recreational salmon landings in fish by catch area and month.	140
TABLE A-11. Summary of Washington non-Indian commercial troll salmon fishing effort in days fished and landings in numbers of fish by catch area.	144
TABLE A-12. Washington non-Indian commercial troll salmon fishing effort in days fished by catch area and month.	146
TABLE A-13. Washington non-Indian commercial troll Chinook, coho, and pink salmon landings in numbers of fish by catch area and month.	149
TABLE A-14. Treaty Indian ocean troll salmon fishing effort in deliveries by catch area and month.	152
TABLE A-15. Treaty Indian ocean troll Chinook and coho salmon landings in numbers of fish by catch area and month.	155
TABLE A-16. Treaty Indian ocean troll pink salmon landings (odd years only) in numbers of fish by catch area and month.	158
TABLE A-17. Washington ocean recreational salmon fishing effort in angler trips by port and statistical month.	160
TABLE A-18. Washington ocean recreational Chinook and coho salmon landings in fish by port of landing and statistical month.	163
TABLE A-19. Washington ocean recreational pink salmon landings in numbers of fish by port of landing and statistical month.	166
TABLE A-20. Cape Falcon to U.S./Mexico border commercial troll salmon fishing effort in days fished by region and month.	168
TABLE A-21. Cape Falcon to U.S./Mexico border commercial troll Chinook and coho salmon landings in numbers of fish by region and month.	170
TABLE A-22. Cape Falcon to U.S./Mexico border ocean recreational fishing effort in salmon angler trips by region and month.	172
TABLE A-23. Cape Falcon to U.S./Mexico border ocean recreational salmon landings in numbers of fish by region and month.	174

LIST OF TABLES (continued)

	<u>Page</u>
TABLE A-24. U.S./Canada border to Cape Falcon commercial troll salmon fishing effort in days fished by area and month.	176
TABLE A-25. U.S./Canada border to Cape Falcon ocean troll Chinook and coho landings in number of fish by catch area and month.	179
TABLE A-26. U.S./Canada border to Cape Falcon ocean troll pink salmon landings in numbers of fish by catch area and month.	183
TABLE A-27. U.S./Canada border to Cape Falcon ocean recreational fishing effort in salmon angler trips by area and month.	185
TABLE A-28. U.S./Canada border to Cape Falcon ocean recreational Chinook and coho salmon landings in numbers of fish by area and month.	186

TABLE A-1. Summary of California commercial troll salmon fishing effort in days fished and landings in numbers of fish by catch area. (Page 1 of 2)

Year or Avg.	Crescent City ^{a/}	Eureka	Fort Bragg	San Francisco	Monterey	Oregon	Season
DAYS FISHED							
1978-1980 ^{b/}	16,986	18,446	21,943	21,106	16,523	0	95,003
1981-1985	7,428	8,053	13,819	22,079	11,482	0	62,861
1986-1990	545	1,629	16,392	25,555	14,391	12	58,523
1991	-	600	3,800	18,500	12,400	0	35,300
1992	-	-	-	10,200	10,100	0	20,300
1993	-	-	1,600	12,600	11,700	0	25,900
1994	-	-	800	12,500	7,900	0	21,200
1995	-	-	900	12,900	12,000	0	25,800
1996	21	415	2,100	8,100	10,525	0	21,161
1997	0	106	300	9,500	9,050	0	18,956
1998	0	164	300	8,300	5,800	0	14,564
1999	29	207	200	10,700	5,225	0	16,361
2000	23	119	1,079	11,131	8,101	0	20,453
2001	18	297	816	8,951	3,759	0	13,841
2002	171	426	2,124	9,145	5,529	8	17,403
2003	50	55	6,296	6,770	2,744	26	15,941
2004	35	262	5,584	10,856	4,769	227	21,733
2005	58	266	1,455	8,670	6,569	-	17,018
2006 ^{c/}	-	-	431	5,438	2,287	-	8,156
CHINOOK							
1978-1980	44,259	166,282	143,867	174,684	89,545	0	618,637
1981-1985	48,548	61,130	110,798	180,008	84,103	0	484,587
1986-1990	13,997	32,329	252,416	351,115	144,846	0	794,703
1991	-	4,700	35,600	174,800	79,800	0	294,900
1992	-	-	-	95,800	64,500	0	160,300
1993	-	-	19,891	154,999	104,663	0	279,553
1994	-	-	5,210	219,856	70,508	0	295,574
1995	-	-	8,714	357,486	313,112	0	679,312
1996	254	8,821	22,930	167,379	181,467	0	380,851
1997	0	1,424	3,776	253,484	228,731	0	487,415
1998	0	2,501	2,882	126,120	95,433	0	226,936
1999	125	2,375	2,283	180,960	78,709	0	264,452
2000	251	1,776	30,773	250,368	197,184	0	480,352
2001	223	5,300	14,993	136,630	35,940	0	193,086
2002	3,663	9,008	65,336	242,872	69,980	796	391,655
2003	1,356	688	248,875	202,876	36,099	2,000	491,894
2004	565	5,695	107,259	298,229	64,707	25,655	502,110
2005	1,255	5,799	45,869	170,531	117,408	-	340,862
2006 ^{c/}	-	-	10,761	47,164	10,883	-	68,808

TABLE A-1. Summary of **California commercial** troll salmon fishing **effort** in days fished **and landings** in numbers of fish by catch area. (Page 2 of 2)

Year or Avg.	Crescent City ^{b/}	Eureka	Fort Bragg	San Francisco	Monterey	Oregon	Season
COHO							
1978-1980	72,133	90,024	29,918	20,778	9,418	0	222,270
1981-1985	20,094	23,675	14,628	7,728	1,356	0	67,480
1986-1990	3,795	5,998	26,000	9,377	1,611	0	46,780
1991	-	3,100	4,500	53,400	21,500	-	82,500
1992	-	-	-	400	2,050	-	2,450
1993	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-
2006 ^{c/}	-	-	-	-	-	-	-

a/ Includes minor effort off Oregon for fish landed in California prior to 1986.

b/ Data not available prior to 1978.

c/ Preliminary.

TABLE A-2. California commercial troll salmon fishing effort in days fished by port area and month. (Page 1 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
<u>Crescent City^{a/}</u>								
1978-1980	-	2,043	4,261	6,285	5,025	756	-	16,986
1981-1985	-	1,363	961	1,947	2,509	1,295	-	7,428
1986-1990	-	9	360	219	253	10	-	545
1991	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-
1996	-	-	-	-	10	11	-	21
1997	-	-	-	-	-	0	-	0
1998	-	-	-	-	-	0	-	0
1999	-	-	-	-	-	29	-	29
2000	-	-	-	-	-	23	-	23
2001	-	-	-	-	-	18	-	18
2002	-	-	-	-	27	146	6	179 ^{b/}
2003	14	2	4	-	-	50	6	76 ^{b/}
2004	22	-	2	36	167	35	-	262 ^{b/}
2005	-	-	-	-	-	58	-	58
2006 ^{c/}	-	-	-	-	-	-	-	-
<u>Eureka</u>								
1978-1980	264	5,684	7,152	4,083	2,323	1,411	-	18,446
1981-1985	-	2,029	1,075	2,608	1,931	821	-	8,053
1986-1990	-	-	882	518	547	467	64	1,629
1991	-	-	-	-	-	500	100	600
1992	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-
1996	-	-	-	-	128	287	-	415
1997	-	-	-	-	-	106	-	106
1998	-	-	-	-	-	164	-	164
1999	-	-	-	-	-	207	-	207
2000	-	-	-	-	-	119	-	119
2001	-	-	-	-	-	297	-	297
2002	-	-	-	-	94	332	-	426
2003	-	-	-	-	-	55	-	55
2004	-	-	-	-	-	262	-	262
2005	-	-	-	-	-	266	-	266
2006 ^{c/}	-	-	-	-	-	-	-	-

TABLE A-2. **California** commercial **troll** salmon fishing **effort** in days fished by port area and month. (Page 2 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
Fort Bragg								
1978-1980	29	2,285	4,678	9,987	4,348	2,185	-	21,943
1981-1985	515	2,084	2,156	5,527	2,422	1,527	-	13,819
1986-1990	-	2,775	3,887	5,151	3,802	777	-	16,392
1991	-	-	-	-	3,500	300	-	3,800
1992	-	-	-	-	-	-	-	-
1993	-	100	-	-	-	1,500	-	1,600
1994	-	-	-	-	-	800	-	800
1995	-	-	-	-	-	900	-	900
1996	-	-	-	-	1,300	800	-	2,100
1997	-	-	-	-	-	300	-	300
1998	-	-	-	-	-	300	-	300
1999	-	-	-	-	-	200	-	200
2000	-	-	-	-	-	1,079	-	1,079
2001	-	206	-	-	-	610	-	816
2002	-	-	-	216	1,327	581	-	2,124
2003	-	1,022	-	1,497	2,355	1,422	-	6,296
2004	-	-	-	2,426	2,095	1,063	-	5,584
2005	-	-	-	-	-	1,455	-	1,455
2006 ^{c/}	-	-	-	-	-	431	-	431
San Francisco								
1978-1980	347	5,780	5,242	7,139	2,417	2,044	-	21,106
1981-1985	469	3,897	2,958	6,819	5,214	3,003	-	22,079
1986-1990	-	6,506	7,111	5,948	4,125	1,864	-	25,555
1991	-	5,200	5,400	3,300	3,200	1,400	-	18,500
1992	-	1,700	600	1,200	3,700	3,000	-	10,200
1993	-	4,000	1,100	3,100	3,500	900	-	12,600
1994	-	3,100	3,200	2,800	2,000	1,400	-	12,500
1995	-	3,400	2,400	3,100	1,800	2,200	-	12,900
1996	-	1,000	2,500	2,200	1,300	1,100	-	8,100
1997	-	2,700	300	2,800	2,300	1,400	-	9,500
1998	-	900	800	3,000	1,700	1,900	-	8,300
1999	100	1,200	2,500	3,600	2,100	1,200	-	10,700
2000	-	1,823	2,559	2,049	2,179	2,521	-	11,131
2001	-	2,000	774	2,694	1,392	1,590	501	8,951
2002	-	2,258	1,630	2,856	1,198	1,064	139	9,145
2003	-	1,046	2,228	1,409	1,212	739	136	6,770
2004	-	3,120	2,942	2,724	1,076	704	290	10,856
2005	-	-	-	3,533	2,586	2,150	401	8,670
2006 ^{c/}	-	-	-	617	2,533	1,924	364	5,438

TABLE A-2. **California** commercial **troll** salmon fishing **effort** in days fished by port area and month. (Page 3 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
Monterey								
1978-1980	1,024	5,293	4,310	4,581	2,220	873	-	16,523
1981-1985	1,311	4,245	2,767	2,746	964	236	-	11,482
1986-1990	-	5,235	4,255	3,367	1,335	198	-	14,391
1991	-	3,200	5,500	3,100	400	200	-	12,400
1992	-	4,900	2,800	1,500	800	100	-	10,100
1993	-	5,200	2,900	2,600	900	100	-	11,700
1994	-	3,400	1,400	2,600	400	100	-	7,900
1995	-	5,100	2,800	2,500	1,400	200	-	12,000
1996	-	3,700	3,400	3,100	300	25	-	10,525
1997	600	3,800	1,700	2,900	25	25	-	9,050
1998	-	3,400	1,300	900	100	100	-	5,800
1999	25	1,300	2,500	1,100	100	200	-	5,225
2000	-	3,387	3,304	1,199	211	-	-	8,101
2001	-	2,688	674	348	27	22	-	3,759
2002	-	1,988	1,617	1,592	291	41	-	5,529
2003	-	1,006	499	791	178	270	-	2,744
2004	-	2,026	1,092	1,147	299	205	-	4,769
2005	-	3,881	377	1,468	779	64	-	6,569
2006 ^{c/}	-	2,045	101	30	42	69	-	2,287
Total Statewide								
1978-1980	1,718	21,086	25,641	32,076	16,334	7,268	-	95,003
1981-1985	2,037	12,939	9,510	18,736	12,153	5,613	-	59,765
1986-1990	-	14,524	16,246	14,658	9,741	3,316	64	58,511
1991	-	8,400	10,900	6,400	7,100	2,400	100	35,300
1992	-	6,600	3,400	2,700	4,500	3,100	-	20,300
1993	-	9,300	4,000	5,700	4,400	2,500	-	25,900
1994	-	6,500	4,600	5,400	2,400	2,300	-	21,200
1995	-	8,500	5,200	5,600	3,200	3,300	-	25,800
1996	-	4,700	5,900	5,300	3,038	2,223	-	21,161
1997	600	6,500	2,000	5,700	2,325	1,831	-	18,956
1998	-	4,300	2,100	3,900	1,800	2,464	-	14,564
1999	125	2,500	5,000	4,700	2,200	1,836	-	16,361
2000	-	5,210	5,863	3,248	2,390	3,742	-	20,453
2001	-	4,894	1,448	3,042	1,419	2,537	501	13,841
2002	-	4,246	3,247	4,664	2,937	2,164	145	17,403
2003	14	3,076	2,731	3,697	3,745	2,536	142	15,941
2004	22	5,146	4,036	6,333	3,637	2,269	290	21,733
2005	-	3,881	377	5,001	3,365	3,993	401	17,018
2006 ^{c/}	-	2,045	101	647	2,575	2,424	364	8,156

a/ Includes minor effort off Oregon for fish landed in California.

b/ Commercial fishery closed except in August (2002) and September (2002-2004); effort for other months reportedly occurred off Oregon.

c/ Preliminary.

TABLE A-3. California commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month. (Page 1 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
	CHINOOK								COHO							
<u>Crescent City^{a/}</u>																
1978-1980	416	14,118	13,779	10,281	6,545	1,959	-	44,259	-	10,013	46,627	20,439	3,486	892	-	72,133
1981-1985	-	10,771	6,859	8,842	17,800	8,554	-	48,548	-	5,448	5,213	8,725	6,238	1,357	-	20,094
1986-1990	-	527	12,995	3,017	2,534	452	-	13,997	-	-	4,408	1,262	5	18	-	3,795
1991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	98	156	-	254	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	0	-	0	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	0	-	0	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	125	-	125	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	251	-	251	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	223	-	223	-	-	-	-	-	-	-	-
2002	-	-	-	-	681	3,354	424	4,459 ^{b/}	-	-	-	-	-	-	-	-
2003	1,654	84	100	-	-	1,356	162	3,356 ^{b/}	-	-	-	-	-	-	-	-
2004	718	-	6	5,245	19,686	565	-	26,220 ^{b/}	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	1,255	-	1,255	-	-	-	-	-	-	-	-
2006 ^{c/}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Eureka</u>																
1978-1980	8,114	77,899	35,737	34,578	13,018	5,706	-	166,282	12	30,896	49,638	13,684	5,128	603	-	90,024
1981-1985	-	26,077	7,548	11,434	12,677	6,788	-	61,130	-	2,246	6,758	10,021	6,576	651	-	23,675
1986-1990	-	-	26,180	4,316	6,726	6,295	480	32,329	-	-	5,948	508	211	860	125	5,998
1991	-	-	-	-	-	4,300	400	4,700	-	-	-	-	-	3,000	100	3,100
1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	2,599	6,222	-	8,821	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	1,424	-	1,424	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	2,501	-	2,501	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	2,375	-	2,375	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	1,776	-	1,776	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	5,300	-	5,300	-	-	-	-	-	-	-	-
2002	-	-	-	-	1,392	7,616	-	9,008	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	688	-	688	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	5,695	-	5,695	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	5,799	-	5,799	-	-	-	-	-	-	-	-
2006 ^{c/}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE A-3. **California** commercial **troll** Chinook and coho salmon **landings** in numbers of fish by port area and month. (Page 2 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK									COHO							
<u>Fort Bragg</u>																
1978-1980	1,676	24,780	26,128	57,010	26,841	12,992	-	143,867	6	5,210	35,041	14,500	3,093	191	-	29,918
1981-1985	7,701	15,487	21,136	48,976	16,891	6,767	-	110,798	-	205	2,695	9,916	1,659	194	-	14,628
1986-1990	-	46,868	72,418	91,861	36,174	5,095	-	252,416	-	-	9,106	14,014	3,376	190	-	26,000
1991	-	-	-	-	34,300	1,300	-	35,600	-	-	-	-	4,500	-	-	4,500
1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	-	388	-	-	-	19,503	-	19,891	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	5,210	-	5,210	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	8,714	-	8,714	-	-	-	-	-	-	-	-
1996	-	-	-	-	14,443	8,487	-	22,930	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	3,776	-	3,776	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	2,882	-	2,882	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	2,283	-	2,283	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	30,773	-	30,773	-	-	-	-	-	-	-	-
2001	-	4,297	-	-	-	10,696	-	14,993	-	-	-	-	-	-	-	-
2002	-	-	-	18,627	40,788	5,921	-	65,336	-	-	-	-	-	-	-	-
2003	-	31,132	-	70,542	84,285	62,916	-	248,875	-	-	-	-	-	-	-	-
2004	-	-	-	65,937	30,487	10,835	-	107,259	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	45,869	-	45,869	-	-	-	-	-	-	-	-
2006 ^{cf}	-	-	-	-	-	10,761	-	10,761	-	-	-	-	-	-	-	-
<u>San Francisco</u>																
1978-1980	20,205	53,699	37,115	53,367	12,126	9,637	-	174,684	8	5,239	13,116	3,586	1,142	315	-	20,778
1981-1985	11,854	44,645	25,209	60,551	35,241	9,621	-	180,008	8	312	2,174	4,737	495	70	-	7,728
1986-1990	-	131,362	111,938	71,214	26,550	10,050	-	351,115	-	-	5,375	3,280	820	82	-	9,377
1991	-	58,300	52,200	30,500	28,300	5,500	-	174,800	-	-	33,100	19,700	600	-	-	53,400
1992	-	16,800	4,500	10,300	37,700	26,500	-	95,800	-	-	-	-	400	-	-	400
1993	-	60,823	14,827	35,500	40,253	3,596	-	154,999	-	-	-	-	-	-	-	-
1994	-	54,498	69,505	56,963	26,272	12,618	-	219,856	-	-	-	-	-	-	-	-
1995	-	157,026	78,024	84,257	17,030	21,149	-	357,486	-	-	-	-	-	-	-	-
1996	-	21,978	77,988	43,546	11,979	11,888	-	167,379	-	-	-	-	-	-	-	-
1997	-	112,347	14,225	84,230	24,737	17,945	-	253,484	-	-	-	-	-	-	-	-
1998	-	15,215	18,849	62,242	15,307	14,507	-	126,120	-	-	-	-	-	-	-	-
1999	3,266	16,766	71,091	62,629	23,555	3,653	-	180,960	-	-	-	-	-	-	-	-
2000	-	83,347	76,141	36,125	25,743	29,012	-	250,368	-	-	-	-	-	-	-	-
2001	-	38,710	8,122	60,701	14,056	11,386	3,655	136,630	-	-	-	-	-	-	-	-
2002	-	64,569	68,773	88,077	13,584	7,399	470	242,872	-	-	-	-	-	-	-	-
2003	-	31,148	94,684	39,442	25,978	9,742	1,882	202,876	-	-	-	-	-	-	-	-
2004	-	75,176	127,403	77,267	12,843	4,329	1,211	298,229	-	-	-	-	-	-	-	-
2005	-	-	-	110,823	29,468	27,935	2,305	170,531	-	-	-	-	-	-	-	-
2006 ^{cf}	-	-	-	16,369	18,119	11,664	1,012	47,164	-	-	-	-	-	-	-	-

TABLE A-3. **California** commercial **troll** Chinook and coho salmon **landings** in numbers of fish by port area and month. (Page 3 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK									COHO							
<u>Monterey</u>																
1978-1980	12,314	29,539	23,936	18,117	9,381	3,509	-	89,545	37	3,539	4,986	1,778	72	34	-	9,418
1981-1985	15,312	34,978	16,852	19,382	5,619	1,148	-	84,103	84	149	896	260	65	12	-	1,356
1986-1990	-	61,484	42,139	29,992	9,011	2,220	-	144,846	-	-	1,024	508	89	10	-	1,611
1991	-	21,800	34,900	19,100	3,000	1,000	-	79,800	-	-	17,100	4,300	100	-	-	21,500
1992	-	34,600	14,400	10,300	3,600	1,600	-	64,500	-	-	1,500	500	50	-	-	2,050
1993	-	49,867	25,526	20,255	8,124	891	-	104,663	-	-	-	-	-	-	-	-
1994	-	24,331	11,614	32,212	1,107	1,244	-	70,508	-	-	-	-	-	-	-	-
1995	-	128,431	64,203	105,365	13,850	1,263	-	313,112	-	-	-	-	-	-	-	-
1996	-	75,097	52,296	51,871	2,159	44	-	181,467	-	-	-	-	-	-	-	-
1997	11,891	86,710	60,351	69,710	-	69	-	228,731	-	-	-	-	-	-	-	-
1998	-	61,051	20,589	12,689	593	511	-	95,433	-	-	-	-	-	-	-	-
1999	2	13,788	54,538	8,840	480	1,061	-	78,709	-	-	-	-	-	-	-	-
2000	-	122,287	62,329	11,278	1,290	-	-	197,184	-	-	-	-	-	-	-	-
2001	-	30,037	3,375	2,383	116	29	-	35,940	-	-	-	-	-	-	-	-
2002	-	21,551	24,441	21,328	2,524	136	-	69,980	-	-	-	-	-	-	-	-
2003	-	10,954	9,517	13,728	823	1,077	-	36,099	-	-	-	-	-	-	-	-
2004	-	22,420	26,772	14,033	1,195	287	-	64,707	-	-	-	-	-	-	-	-
2005	-	76,855	5,001	29,105	5,578	869	-	117,408	-	-	-	-	-	-	-	-
2006 ^{c/}	-	9,685	365	318	231	284	-	10,883	-	-	-	-	-	-	-	-
<u>Total Statewide^{a/}</u>																
1978-1980	42,724	200,034	136,693	173,352	67,912	33,804	-	618,637	38	54,897	149,408	53,987	12,921	2,035	-	210,303
1981-1985	31,016	124,589	74,723	145,130	82,132	23,673	-	462,652	92	5,037	12,948	28,164	12,469	1,079	-	58,726
1986-1990	-	240,135	257,835	195,138	77,291	24,112	480	794,703	-	-	23,790	18,257	4,444	1,138	125	46,780
1991	-	80,100	87,100	49,600	65,600	12,100	400	294,900	-	-	50,200	24,000	5,200	3,000	100	82,500
1992	-	51,400	18,900	20,600	41,300	28,100	-	160,300	-	-	1,500	500	450	-	-	2,450
1993	-	111,078	40,353	55,755	48,377	23,990	-	279,553	-	-	-	-	-	-	-	-
1994	-	78,829	81,119	89,175	27,379	19,072	-	295,574	-	-	-	-	-	-	-	-
1995	-	285,457	142,227	189,622	30,880	31,126	-	679,312	-	-	-	-	-	-	-	-
1996	-	97,075	130,284	95,417	31,278	26,797	-	380,851	-	-	-	-	-	-	-	-
1997	11,891	199,057	74,576	153,940	24,737	23,214	-	487,415	-	-	-	-	-	-	-	-
1998	-	76,266	39,438	74,931	15,900	20,401	-	226,936	-	-	-	-	-	-	-	-
1999	3,268	30,554	125,629	71,469	24,035	9,497	-	264,452	-	-	-	-	-	-	-	-
2000	-	205,634	138,470	47,403	27,033	61,812	-	480,352	-	-	-	-	-	-	-	-
2001	-	73,044	11,497	63,084	14,172	27,634	3,655	193,086	-	-	-	-	-	-	-	-
2002	-	86,120	93,214	128,032	58,969	24,426	894	391,655	-	-	-	-	-	-	-	-
2003	1,654	73,318	104,301	123,712	111,086	75,779	2,044	491,894	-	-	-	-	-	-	-	-
2004	718	97,596	154,181	162,482	64,211	21,711	1,211	502,110	-	-	-	-	-	-	-	-
2005	-	76,855	5,001	139,928	35,046	81,727	2,305	340,862	-	-	-	-	-	-	-	-
2006 ^{c/}	-	9,685	365	16,687	18,350	22,709	1,012	68,808	-	-	-	-	-	-	-	-

a/ Includes minor catches made off Oregon and landed in California prior to 2005.

b/ Commercial fishery closed except in August (2002) and September (2002-2004); catch for other months reportedly occurred off Oregon.

c/ Preliminary.

TABLE A-4. California ocean recreational salmon fishing effort in angler trips by port and month. (Page 1 of 3)

Year or Avg.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
<u>Crescent City</u>											
1976-1980	0	0	1	41	3,679	9,656	5,384	1,211	0	0	19,973
1981-1985	0	0	0	572	3,912	11,525	6,620	504	0	0	23,133
1986-1990	0	0	-	1,417	11,087	19,316	6,758	981	-	-	39,560
1991	-	-	-	643	8,504	14,015	748	1,661	-	-	25,571
1992	-	-	-	-	-	7,231	-	1,833	-	-	9,064
1993	-	-	-	1,018	979	6,503	5,836	1,066	-	-	15,402
1994	-	-	-	5,048	2,181	-	1,591	877	-	-	9,697
1995	-	-	-	2,793	5,668	-	1,099	2,376	-	-	11,936
1996	-	-	-	993	5,054	2,405	2,056	806	-	-	11,314
1997	-	-	-	920	1,724	1,533	2,242	157	-	-	6,576
1998	-	-	-	705	1,527	455	565	50	-	-	3,302
1999	-	-	-	12	1,532	802	3,068	428	-	-	5,842
2000	-	-	-	144	1,762	2,103	2,988	213	-	-	7,210
2001	-	-	-	881	2,141	3,011	2,339	273	-	-	8,645
2002	-	-	-	1,036	1,131	132	1,333	237	-	-	3,869
2003	-	-	-	319	521	521	493	340	-	-	2,194
2004	-	-	-	603	604	689	843	413	-	-	3,152
2005	-	-	-	131	794	492	904	181	-	-	2,502
2006 ^{a/}	-	-	-	312	754	240	-	87	-	-	1,393
<u>Eureka</u>											
1976-1980	0	0	3	315	5,292	12,575	5,346	350	12	0	23,893
1981-1985	0	0	1	1,222	4,740	11,724	4,914	493	14	0	23,108
1986-1990	0	0	-	1,648	9,487	18,674	7,126	963	0	-	37,898
1991	-	-	-	327	13,206	12,992	269	632	21	-	27,447
1992	-	-	-	-	-	5,783	-	3,319	-	-	9,102
1993	-	-	-	1,644	2,210	6,129	5,992	2,292	-	-	18,267
1994	-	-	-	2,553	1,773	-	1,259	785	-	-	6,370
1995	-	-	-	1,397	6,158	-	1,477	3,725	-	-	12,757
1996	-	-	-	2,415	6,491	973	2,574	1,558	-	-	14,011
1997	-	-	-	2,452	3,445	2,113	3,990	375	-	-	12,375
1998	-	-	-	1,885	1,789	570	2,041	445	-	-	6,730
1999	-	-	-	105	4,136	2,126	5,242	376	-	-	11,985
2000	-	-	-	840	3,179	3,007	5,226	860	-	-	13,112
2001	-	-	-	1,994	5,297	3,854	3,855	1,048	-	-	16,048
2002	-	-	-	2,186	5,379	599	7,428	2,082	-	-	17,674
2003	-	-	-	2,226	3,102	2,915	4,176	1,164	-	-	13,583
2004	-	-	-	3,995	3,367	4,725	8,211	2,147	-	-	22,445
2005	-	-	-	1,143	4,795	1,160	5,075	2,654	-	-	14,827
2006 ^{a/}	-	-	-	3,727	5,196	2,197	-	3,668	-	-	14,788

TABLE A-4. **California ocean recreational** salmon fishing effort in angler trips by port and month. (Page 2 of 3)

Year or Avg.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
<u>Fort Bragg</u>											
1976-1980	0	0	0	117	1,652	5,610	3,703	596	1	0	11,679
1981-1985	0	0	2	53	2,246	5,039	2,074	138	4	0	9,557
1986-1990	0	1	80	705	4,483	7,055	2,464	650	4	0	15,441
1991	--	--	21	859	6,994	11,611	3,024	116	--	--	22,625
1992	--	49	291	2,191	340	6,271	-	1,722	369	12	11,245
1993	47	232	449	1,291	1,964	9,428	4,641	1,206	82	0	19,340
1994	76	443	1,324	4,173	8,401	-	5,051	895	40	--	20,403
1995	360	529	1,639	1,489	12,988	-	8,993	2,639	614	--	29,251
1996	49	947	1,938	2,857	12,018	2,960	6,982	2,794	744	0	31,289
1997	--	430	1,131	4,003	6,813	3,476	4,089	268	--	--	20,210
1998	--	58	0	976	2,344	542	3,272	1,137	15	--	8,344
1999	14	60	195	382	1,726	2,985	4,336	488	--	--	10,186
2000	--	--	1,288	3,125	7,154	5,635	6,618	1,698	36	--	25,554
2001	0	690	1,269	3,402	7,228	9,454	6,879	1,754	107	15	30,798
2002	194	897	2,428	4,889	7,004	8,494	7,458	435	3	0	31,802
2003	607	1,282	938	2,662	5,729	8,252	3,466	768	5	0	23,709
2004	183	999	1,069	2,408	8,760	11,560	4,266	1,061	240	27	30,573
2005	869	521	841	1,910	4,525	6,666	7,994	964	22	0	24,312
2006 ^{al}	292	323	800	2,141	5,413	5,998	4,045	756	0	0	19,768
<u>San Francisco</u>											
1976-1980	8,103	10,269	7,245	8,582	10,414	15,307	15,199	12,488	7,866	4,022	97,886
1981-1985	4,117	5,811	6,039	6,892	10,779	15,006	14,061	9,291	5,577	1,343	78,915
1986-1990	4,825	9,832	12,258	8,986	12,572	18,560	15,985	9,606	4,755	1,198	98,579
1991	32	4,054	7,107	6,286	11,988	18,623	13,926	5,217	2,872	58	70,163
1992	833	2,407	2,502	5,884	8,595	16,055	11,848	9,364	4,292	237	62,017
1993	513	6,554	6,080	7,702	7,382	27,838	17,615	5,463	3,643	-	82,790
1994	0	8,133	7,884	7,930	18,765	35,423	21,043	10,802	7,494	-	117,474
1995	-	9,592	10,487	12,296	17,307	51,018	23,677	12,786	4,297	-	141,460
1996	-	19,039	13,150	9,551	12,696	28,499	13,566	5,266	2,397	-	104,164
1997	-	4,738	10,927	16,760	13,959	34,485	21,240	5,461	3,212	380	111,162
1998	-	249	6,973	5,842	13,644	23,128	20,796	6,903	3,465	--	81,000
1999	-	1,430	8,005	3,688	12,982	32,018	17,424	8,835	5,421	-	89,803
2000	-	-	6,572	9,720	16,714	19,102	13,302	11,421	5,430	1,451	83,712
2001	-	-	5,689	8,646	4,968	17,387	15,521	10,727	5,974	2,578	71,490
2002	-	-	5,322	10,758	14,016	28,354	21,029	7,104	1,820	381	88,784
2003	-	-	4,013	8,559	11,885	22,201	11,087	5,945	2,662	264	66,616
2004	-	-	7,232	15,145	15,864	32,723	21,167	8,372	4,063	1,512	106,078
2005	-	-	9,003	10,890	9,888	22,712	13,543	11,925	5,846	965	84,772
2006 ^{al}	-	-	3,778	10,389	14,007	17,925	5,419	3,439	1,734	540	57,231

TABLE A-4. **California ocean recreational** salmon fishing effort in angler trips by port and month. (Page 3 of 3)

Year or Avg.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
Monterey											
1976-1980	1,763	2,199	1,984	1,229	931	1,137	498	161	101	56	10,038
1981-1985	990	2,134	2,730	1,953	1,317	1,993	805	164	67	84	12,237
1986-1990	3,447	7,261	11,695	4,141	6,637	10,555	4,182	637	269	364	49,189
1991	23	8,162	11,089	3,886	8,910	13,994	2,723	476	1,561	--	50,824
1992	1,173	7,257	7,084	3,468	4,701	6,604	3,215	1,239	1,098	600	36,439
1993	319	8,250	11,068	6,216	2,926	5,037	2,863	1,390	1,019	-	39,088
1994	0	9,748	10,332	5,663	6,854	9,553	2,054	1,629	2,314	-	48,147
1995	-	12,796	38,038	41,564	31,919	46,518	11,742	523	--	-	183,100
1996	-	15,229	15,261	9,370	6,983	11,919	5,765	-	--	-	64,527
1997	-	16,378	17,653	9,134	18,304	18,616	3,729	232	-	-	84,046
1998	-	5,918	10,719	11,234	12,240	10,062	1,930	345	--	-	52,448
1999	-	7,231	3,585	2,405	7,379	6,260	2,064	315	-	-	29,239
2000	-	-	28,828	19,871	14,416	14,646	4,872	2,154	-	-	84,787
2001	-	883	19,395	10,966	2,071	3,934	604	301	-	-	38,154
2002	-	2,863	32,727	11,892	9,005	8,983	2,304	149	-	-	67,923
2003	-	5,092	10,118	5,834	3,165	4,083	233	--	-	-	28,525
2004	-	-	24,564	11,320	4,443	13,358	2,335	475	0	-	56,495
2005	-	-	14,787	6,997	13,298	8,870	1,354	361	-	-	45,667
2006 ^{a/}	-	-	14,544	2,906	5,515	3,990	122	104	-	-	27,181
Total Statewide											
1976-1980	9,865	12,468	9,233	10,285	21,968	44,285	30,130	14,806	7,981	4,078	163,469
1981-1985	5,107	7,945	8,772	10,692	22,993	45,287	28,475	10,590	5,662	1,426	146,950
1986-1990	8,272	17,094	24,034	16,896	44,266	74,160	36,515	12,837	5,029	1,563	240,667
1991	55	12,216	18,217	12,001	49,602	71,235	20,690	8,102	4,454	58	196,630
1992	2,006	9,713	9,877	11,543	13,636	41,944	15,063	17,477	5,759	849	127,867
1993	879	15,036	17,597	17,871	15,461	54,935	36,947	11,417	4,744	0	174,887
1994	76	18,324	19,540	25,367	37,974	44,976	30,998	14,988	9,848	--	202,091
1995	360	22,917	50,164	59,539	74,040	97,536	46,988	22,049	4,911	--	378,504
1996	49	35,215	30,349	25,186	43,242	46,756	30,943	10,424	3,141	0	225,305
1997	--	21,546	29,711	33,269	44,245	60,223	35,290	6,493	3,212	380	234,369
1998	--	6,225	17,692	20,642	31,544	34,757	28,604	8,880	3,480	--	151,824
1999	14	8,721	11,785	6,592	27,755	44,191	32,134	10,442	5,421	--	147,055
2000	--	--	36,688	33,700	43,225	44,493	33,006	16,346	5,466	1,451	214,375
2001	0	1,573	26,353	25,889	21,705	37,640	29,198	14,103	6,081	2,593	165,135
2002	194	3,760	40,477	30,761	36,535	46,562	39,552	10,007	1,823	381	210,052
2003	607	6,374	15,069	19,600	24,402	37,972	19,455	8,217	2,667	264	134,627
2004	183	999	32,865	33,471	33,038	63,055	36,822	12,468	4,303	1,539	218,743
2005	869	521	24,631	21,071	33,300	39,900	28,870	16,085	5,868	965	172,080
2006 ^{a/}	292	323	19,122	19,475	30,885	30,350	9,586	8,054	1,734	540	120,361

a/ Preliminary.

TABLE A-5. California ocean recreational salmon landings in numbers of fish by port of landing and month. (Page 1 of 3)

Year or Avg.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season	
CHINOOK												COHO											
<u>Crescent City</u>																							
1976-1980	--	--	0	2	470	1,756	1,286	81	0	0	3,595	--	--	0	9	3,087	6,587	2,049	156	0	0	11,889	
1981-1985	--	--	0	497	1,439	3,107	1,925	65	0	0	7,032	--	--	0	23	1,222	4,403	1,656	72	0	0	7,376	
1986-1990	--	--	-	414	4,552	7,689	1,640	315	-	-	14,610	--	--	-	71	3,561	8,430	1,645	141	-	-	13,847	
1991	-	-	-	7	1,321	1,943	35	61	-	-	3,367	-	-	-	0	8,790	9,234	100	194	-	-	18,318	
1992	-	-	-	-	-	842	-	47	-	-	889	-	-	-	-	-	2,642	-	198	-	-	2,840	
1993	-	-	-	125	38	519	406	184	-	-	1,272	-	-	-	10	62	3,638	2,731	257	-	-	6,698	
1994	-	-	-	4,474	1,279	-	428	140	-	-	6,321	-	-	-	3	0	-	52	2	-	-	57	
1995	-	-	-	656	2,971	-	334	1,595	-	-	5,556	-	-	-	7	38	-	15	13	-	-	73	
1996	-	-	-	315	2,253	757	341	162	-	-	3,828	-	-	-	-	67	-	15	19	-	-	101	
1997	-	-	-	288	540	840	849	10	-	-	2,527	-	-	-	4	-	60	13	-	-	-	77	
1998	-	-	-	215	687	142	59	20	-	-	1,123	-	-	-	-	10	3	3	-	-	-	16	
1999	-	-	-	0	134	218	590	74	-	-	1,016	-	-	-	-	4	18	19	-	-	-	41	
2000	-	-	-	12	522	1,443	1,454	140	-	-	3,571	-	-	-	-	-	12	57	-	-	-	69	
2001	-	-	-	484	607	533	507	105	-	-	2,236	-	-	-	3	52	24	16	-	-	-	95	
2002	-	-	-	283	245	31	392	156	-	-	1,107	-	-	-	-	26	3	4	-	-	-	33	
2003	-	-	-	62	76	60	90	103	-	-	391	-	-	-	-	4	-	12	-	-	-	16	
2004	-	-	-	487	259	172	309	63	-	-	1,290	-	-	-	8	7	40	24	-	-	-	79	
2005	-	-	-	11	829	389	240	29	-	-	1,498	-	-	-	-	4	-	17	-	-	-	21	
2006 ^{av}	-	-	-	237	273	152	-	15	-	-	677	-	-	-	-	9	5	-	-	-	-	14	
<u>Eureka</u>																							
1976-1980	--	--	0	159	1,247	3,656	953	56	4	0	6,075	--	--	1	97	4,135	7,074	1,734	74	0	0	13,114	
1981-1985	--	--	1	1,284	2,226	4,927	1,075	73	8	0	9,594	--	--	0	157	2,585	5,755	1,718	151	0	0	10,366	
1986-1990	--	--	-	953	4,926	6,722	3,014	184	0	-	15,798	--	--	-	660	5,551	12,445	2,726	269	0	-	21,651	
1991	-	-	-	57	6,382	2,788	13	267	1	-	9,508	-	-	-	62	12,570	8,664	194	279	2	-	21,771	
1992	-	-	-	-	-	1,397	-	309	-	-	1,706	-	-	-	-	-	2,732	-	859	-	-	3,591	
1993	-	-	-	258	230	1,486	1,194	446	-	-	3,614	-	-	-	562	797	3,804	1,798	659	-	-	7,620	
1994	-	-	-	1,438	1,773	-	372	81	-	-	3,664	-	-	-	-	3	-	28	1	-	-	32	
1995	-	-	-	729	4,001	-	1,322	2,023	-	-	8,075	-	-	-	2	86	-	2	107	-	-	197	
1996	-	-	-	1,711	3,584	185	939	500	-	-	6,919	-	-	-	-	98	15	17	23	-	-	153	
1997	-	-	-	1,484	1,738	1,160	2,000	74	-	-	6,456	-	-	-	12	40	12	55	5	-	-	124	
1998	-	-	-	541	470	224	471	84	-	-	1,790	-	-	-	-	5	12	30	-	-	-	47	
1999	-	-	-	6	2,150	1,041	1,902	76	-	-	5,175	-	-	-	-	30	16	44	-	-	-	90	
2000	-	-	-	284	1,800	2,350	5,010	459	-	-	9,903	-	-	-	-	19	24	76	8	-	-	127	
2001	-	-	-	1,399	3,622	2,113	2,025	1,429	-	-	10,588	-	-	-	8	50	20	13	-	-	-	91	
2002	-	-	-	2,259	4,991	564	5,487	1,723	-	-	15,024	-	-	-	10	196	23	24	9	-	-	262	
2003	-	-	-	2,875	1,764	1,379	1,686	657	-	-	8,361	-	-	-	29	50	8	34	-	-	-	121	
2004	-	-	-	5,496	1,946	4,377	7,153	2,582	-	-	21,554	-	-	-	184	76	74	123	24	-	-	481	
2005	-	-	-	1,015	6,485	1,879	4,020	2,647	-	-	16,046	-	-	-	24	44	3	11	48	-	-	130	
2006 ^{av}	-	-	-	4,507	5,396	1,835	-	3,805	-	-	15,543	-	-	-	74	25	42	-	88	-	-	229	

TABLE A-5. California ocean recreational salmon landings in numbers of fish by port of landing and month. (Page 2 of 3)

Year or Avg.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
CHINOOK												COHO										
<u>Fort Bragg</u>																						
1976-1980	--	--	0	19	367	1,724	1,212	100	0	0	3,423	--	--	0	59	634	1,239	391	82	0	0	2,406
1981-1985	--	--	1	29	616	1,553	319	11	1	0	2,530	--	--	0	0	224	568	137	3	0	0	932
1986-1990	0	1	85	360	2,626	3,857	674	71	2	0	7,676	0	0	0	38	860	1,862	264	70	0	0	3,094
1991	0	0	6	156	1,629	3,580	467	16	--	--	5,854	0	0	0	500	7,894	9,557	627	8	--	--	18,586
1992	0	2	80	983	54	2,412	-	707	24	1	4,263	0	0	0	284	151	2,467	-	405	25	0	3,332
1993	2	43	210	284	491	2,615	1,929	233	14	0	5,821	0	5	4	96	712	9,448	1,936	123	3	0	12,327
1994	27	78	872	3,343	7,060	-	2,320	309	9	--	14,018	0	0	13	0	171	-	39	0	3	--	226
1995	229	300	976	1,146	20,464	-	4,795	1,015	123	--	29,048	0	0	5	3	307	-	111	20	9	--	455
1996	11	277	1,368	1,945	13,727	1,900	3,213	1,450	111	--	24,002	-	-	3	-	180	23	98	30	-	-	334
1997	--	128	475	1,871	4,168	3,615	1,259	68	--	--	11,584	-	-	-	8	21	21	9	-	-	-	59
1998	--	40	--	594	520	683	2,197	629	0	--	4,663	-	-	-	-	-	-	3	-	-	-	3
1999	0	1	22	32	481	2,020	2,550	157	--	--	5,263	-	-	-	-	15	27	112	-	-	-	154
2000	--	--	700	2,725	5,720	8,120	7,342	1,335	--	--	25,942	-	-	-	-	46	8	9	3	-	-	66
2001	--	464	516	2,663	6,305	10,402	5,348	358	6	2	26,064	-	-	-	57	199	145	36	-	-	-	437
2002	14	200	2,496	3,960	8,636	11,582	4,151	163	0	0	31,202	-	-	-	3	47	127	30	-	-	-	207
2003	444	845	428	1,222	5,063	6,353	1,420	400	5	0	16,180	-	-	-	3	45	45	11	5	-	-	109
2004	41	510	107	1,657	8,494	10,211	1,334	729	122	0	23,205	-	-	-	-	64	230	61	21	-	-	376
2005	285	111	183	1,142	3,848	6,632	9,642	335	5	0	22,183	-	-	-	-	-	48	28	-	-	-	76
2006 ^W	55	114	255	1,314	4,293	4,153	2,741	123	0	0	13,048	-	-	-	14	140	140	40	-	-	-	334
<u>San Francisco</u>																						
1976-1980	5,338	7,787	7,423	5,763	10,882	14,396	8,390	7,292	6,618	1,328	75,216	4	8	229	1,341	875	883	203	53	14	2	3,611
1981-1985	5,339	5,819	5,505	7,181	12,346	16,869	16,032	8,497	5,527	1,367	84,484	0	1	11	138	439	323	145	37	29	0	1,123
1986-1990	4,510	10,976	16,873	8,315	12,172	17,167	15,479	7,596	4,108	1,094	98,291	0	1	38	159	339	379	480	83	12	0	1,490
1991	45	3,175	6,079	3,733	6,838	9,962	4,869	1,523	1,027	23	37,274	0	2	11	70	4,217	2,781	522	62	30	0	7,695
1992	87	759	835	3,929	6,609	13,815	8,923	9,049	3,106	81	47,193	1	8	10	104	120	1,092	149	55	24	0	1,563
1993	185	4,718	5,283	6,241	6,345	33,079	14,873	4,483	3,526	-	78,733	--	32	54	171	749	1,812	104	21	8	-	2,951
1994	0	4,545	8,902	7,131	25,083	50,608	22,594	13,815	8,299	-	140,977	--	0	7	7	54	107	4	11	5	-	195
1995	-	12,730	14,040	13,573	25,872	59,555	15,674	12,237	1,996	-	155,677	-	0	5	3	37	126	5	6	0	-	182
1996	-	21,395	14,222	6,057	11,224	22,630	4,791	2,921	1,231	-	84,471	-	-	-	2	7	21	26	-	-	-	56
1997	-	3,021	11,040	19,706	15,133	48,956	20,829	2,847	2,384	58	123,974	-	-	-	10	-	161	8	17	-	-	196
1998	-	80	3,748	4,414	12,262	27,369	17,577	3,730	1,789	--	70,969	-	-	-	-	8	16	4	-	-	-	28
1999	-	744	6,260	1,330	10,686	29,869	11,570	6,237	2,555	-	69,251	-	-	-	12	175	107	11	12	6	-	323
2000	-	-	5,684	10,207	16,317	8,458	7,207	8,060	6,815	1,905	64,653	-	-	-	-	50	36	12	-	-	-	98
2001	-	-	3,314	6,207	1,613	11,167	6,717	6,552	3,065	1,221	39,856	-	-	-	165	8	306	10	-	-	-	489
2002	-	-	4,953	13,189	17,955	34,305	13,097	3,100	348	61	87,008	-	-	2	19	72	191	16	-	-	-	300
2003	-	-	4,707	9,358	13,179	19,974	5,067	3,288	1,043	0	56,616	-	-	-	38	71	94	-	4	-	-	207
2004	-	-	6,847	18,714	23,692	47,484	22,562	7,887	2,696	338	130,220	-	-	-	41	40	236	140	13	-	-	470
2005	-	-	7,878	10,827	12,593	20,653	5,959	10,609	3,950	355	72,824	-	-	-	16	147	110	-	-	-	-	273
2006 ^W	-	-	1,776	10,993	18,173	15,871	1,257	909	220	116	49,315	-	-	-	33	296	192	9	-	-	-	530

TABLE A-5. California ocean recreational salmon landings in numbers of fish by port of landing and month. (Page 3 of 3)

Year or Avg.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
CHINOOK												COHO										
Monterey																						
1976-1980	493	717	1,292	456	532	437	92	41	45	11	4,114	6	6	9	39	43	29	7	0	0	0	139
1981-1985	608	1,446	1,731	444	341	568	236	22	18	43	5,457	0	0	10	11	17	12	20	0	0	0	70
1986-1990	1,120	4,312	9,407	1,362	4,126	7,467	1,704	167	129	225	30,020	0	0	18	15	101	144	28	1	0	0	306
1991	8	4,773	6,944	872	3,736	6,850	358	85	1,204	--	24,830	0	0	0	49	1,014	1,657	156	0	17	-	2,893
1992	386	2,646	4,495	1,413	2,797	5,874	1,183	168	192	372	19,526	0	0	0	0	175	20	0	0	0	0	195
1993	252	5,094	9,530	2,022	490	2,694	407	41	54	-	20,584	-	-	-	12	30	107	8	-	-	-	157
1994	0	3,711	6,654	1,860	3,833	3,937	1,352	809	2,679	-	24,835	-	0	0	0	3	3	0	0	0	-	6
1995	-	14,305	42,913	31,117	27,015	74,096	9,293	136	--	-	198,875	-	0	6	0	5	17	5	0	-	-	33
1996	-	10,294	16,068	5,221	2,261	7,809	3,159	-	-	-	44,812	-	-	-	-	-	-	-	-	-	-	0
1997	-	16,941	15,424	4,168	26,355	19,974	1,470	95	--	-	84,427	-	-	-	-	9	21	-	-	-	-	30
1998	-	2,869	9,382	10,262	10,959	9,033	901	62	-	-	43,468	-	-	-	-	4	5	-	-	-	-	9
1999	-	946	349	271	2,277	2,101	1,052	144	-	-	7,140	-	-	-	-	-	-	-	-	-	-	0
2000	-	-	33,927	19,178	13,261	10,799	2,960	1,657	-	-	81,782	-	-	-	-	45	10	4	-	-	-	59
2001	-	792	14,229	3,022	235	1,552	89	120	-	-	20,039	-	-	4	198	4	11	-	-	-	-	217
2002	-	2,779	30,310	4,784	3,751	5,441	611	27	-	-	47,703	-	-	-	-	11	15	-	-	-	-	26
2003	-	3,133	4,434	1,629	801	3,115	14	--	-	-	13,126	-	-	-	29	81	50	-	-	-	-	160
2004	-	-	24,516	4,476	1,762	12,916	1,074	101	0	-	44,845	-	-	-	-	9	9	-	-	-	-	18
2005	-	-	6,194	2,303	14,910	6,809	414	76	-	-	30,706	-	-	-	19	95	85	-	-	-	-	199
2006 ^{a/}	-	-	7,360	372	1,328	1,803	23	10	-	-	10,896	-	-	-	31	206	94	-	-	-	-	331
Total Statewide																						
1976-1980	5,830	8,504	8,715	6,399	13,497	21,969	11,933	7,569	6,667	1,338	92,422	10	14	239	1,545	8,774	15,812	4,383	366	15	2	31,158
1981-1985	5,947	7,266	7,239	9,435	16,968	27,024	19,587	8,667	5,554	1,410	109,097	0	1	21	329	4,486	11,061	3,677	262	29	0	19,866
1986-1990	5,630	15,288	26,365	11,404	28,402	42,902	22,512	8,333	4,240	1,319	166,395	0	1	56	943	10,412	23,259	5,142	563	12	0	40,388
1991	53	7,948	13,029	4,825	19,906	25,123	5,742	1,952	2,232	23	80,833	0	2	11	681	34,485	31,893	1,599	543	49	0	69,263
1992	473	3,407	5,410	6,325	9,460	24,340	10,106	10,280	3,322	454	73,577	1	8	10	388	446	8,953	149	1,517	49	0	11,521
1993	439	9,855	15,023	8,930	7,594	40,393	18,809	5,387	3,594	--	110,024	0	37	58	851	2,350	18,809	6,577	1,060	11	0	29,753
1994	27	8,334	16,428	18,246	39,028	54,545	27,066	15,154	10,987	--	189,815	0	0	20	10	231	110	123	14	8	0	516
1995	229	27,335	57,929	47,221	80,323	133,651	31,418	17,006	2,119	--	397,231	0	0	16	15	473	143	138	146	9	0	940
1996	11	31,966	31,658	15,249	33,049	33,281	12,443	5,033	1,342	--	164,032	-	-	3	2	352	59	156	72	-	-	644
1997	--	20,090	26,939	27,517	47,934	74,545	26,407	3,094	2,384	58	228,968	-	-	-	34	70	275	85	22	-	-	486
1998	--	2,989	13,130	16,026	24,898	37,451	21,205	4,525	1,789	--	122,013	-	-	-	-	27	36	40	-	-	-	103
1999	0	1,691	6,631	1,639	15,728	35,249	17,664	6,688	2,555	--	87,845	-	-	-	12	224	168	186	12	6	-	608
2000	--	--	40,311	32,406	37,620	31,170	23,973	11,651	6,815	1,905	185,851	-	-	-	-	160	90	158	11	-	-	419
2001	--	1,256	18,059	13,775	12,382	25,767	14,686	8,564	3,071	1,223	98,783	-	-	4	431	313	506	75	-	-	-	1,329
2002	14	2,979	37,759	24,475	35,578	51,923	23,738	5,169	348	61	182,044	-	-	2	32	352	359	74	9	-	-	828
2003	444	3,978	9,569	15,146	20,883	30,881	8,277	4,448	1,048	0	94,674	-	-	-	99	251	197	57	9	-	-	613
2004	41	510	31,470	30,830	36,153	75,160	32,432	11,362	2,818	338	221,114	-	-	-	233	196	589	348	58	-	-	1,424
2005	285	111	14,255	15,298	38,665	36,362	20,275	13,696	3,955	355	143,257	-	-	-	59	290	246	56	48	-	-	699
2006 ^{a/}	55	114	9,391	17,423	29,463	23,814	4,021	4,862	220	116	89,479	-	-	-	152	676	473	49	88	-	-	1,438

a/ Preliminary.

TABLE A-6. Summary of Oregon commercial troll salmon fishing effort in days fished and landings in fish by catch area.^{a/} (Page 1 of 3)

Year or Average	Astoria ^{b/}	Tillamook	New port	Coos Bay	Brookings	Oregon Subtotal	Alaska	Washington	California	Total
DAYS FISHED										
1976-1980	2,875	7,782	15,029	20,620	9,578	55,885	0	1	0	55,886
1981-1985	1,096	3,409	6,008	9,960	5,024	25,496	8	295	210	26,009
1986-1990	659	6,887	8,650	20,307	1,652	38,154	3	74	44	38,275
1991	659	3,462	5,062	5,643	22	14,848	0	17	13	14,878
1992	259	2,616	5,838	440	-	9,153	0	71	-	9,224
1993	205	1,767	5,908	1,587	-	9,467	0	1	3	9,471
1994	-	549	2,134	795	283	3,761	0	0	5	3,766
1995	-	1,310	4,668	1,592	282	7,852	0	0	8	7,860
1996	-	1,399	4,758	1,758	476	8,391	0	0	94	8,485
1997	8	703	5,171	1,553	375	7,810	0	0	5	7,815
1998	0	1,044	4,496	1,423	208	7,171	0	0	17	7,188
1999	1	694	1,542	2,598	248	5,083	0	26	8	5,117
2000	271	893	2,697	3,345	274	7,480	0	33	5	7,518
2001	242	1,357	5,248	3,830	471	11,148	0	19	26	11,193
2002	430	1,648	4,391	4,804	428	11,701	0	286	7	11,994
2003	413	1,889	4,562	5,026	528	12,418	0	101	9	12,528
2004	347	1,341	4,839	6,159	518	13,204	0	221	0	13,425
2005	516	1,719	4,279	4,857	249	11,620	0	0	0	11,620
2006 ^{c/}	981	749	2,248	366	183	4,527	0	0	0	4,527

TABLE A-6. Summary of **Oregon commercial** troll salmon fishing **effort** in days fished **and landings** in fish by catch area.^{a/} (Page 2 of 3)

Year or Average	Astoria ^{b/}	Tillamook	Newport	Coos Bay	Brookings	Oregon Subtotal	Alaska	Washington	California	Total
CHINOOK LANDINGS										
1976-1980	15,336	11,222	46,613	85,563	73,899	232,632	300	2,800	900	236,632
1981-1985	5,556	5,901	27,917	63,507	42,623	145,503	89	2,982	2,157	150,731
1986-1990	3,477	26,242	82,957	253,426	28,825	394,927	137	1,179	1,386	397,628
1991	914	9,474	33,407	30,442	210	74,447	0	33	150	74,630
1992	1,493	7,265	94,777	6,205	-	109,740	0	813	-	110,553
1993	405	6,344	64,223	10,545	-	81,517	0	0	29	81,546
1994	-	1,653	18,068	4,008	1,501	25,230	0	-	119	25,349
1995	-	9,698	174,196	26,570	3,325	213,789	0	0	804	214,593
1996	-	13,136	127,819	25,690	8,564	175,209	0	0	1,967	177,176
1997	28	2,331	118,966	24,861	3,573	149,759	0	0	148	149,907
1998	0	6,564	94,792	22,112	743	124,211	0	0	658	124,869
1999	15	2,804	15,864	42,488	1,362	62,533	0	1,081	90	63,704
2000	2,245	16,120	49,011	65,061	3,466	135,903	0	437	124	136,464
2001	4,091	26,357	168,644	72,272	3,599	274,963	0	1,194	539	276,696
2002	12,797	30,331	132,084	122,174	6,803	304,189	0	14,966	182	319,337
2003	10,384	33,516	148,550	132,156	5,072	329,678	0	3,188	833	333,699
2004	3,118	9,677	91,288	140,142	8,484	252,709	0	8,522	0	261,231
2005	10,085	27,980	90,064	120,900	2,266	251,295	0	0	0	251,295
2006 ^{c/}	10,489	2,768	19,003	1,966	738	34,964	0	0	0	34,964

TABLE A-6. Summary of **Oregon commercial** troll salmon fishing **effort** in days fished **and landings** in fish by catch area.^{a/} (Page 3 of 3)

Year or Average	Astoria ^{b/}	Tillamook	Newport	Coos Bay	Brookings	Oregon Subtotal	Alaska	Washington	California	Total
COHO LANDINGS										
1976-1980	73,122	126,085	192,121	290,131	60,235	741,694	1,800	9,300	300	753,094
1981-1985	21,305	84,331	109,715	131,470	24,728	301,499	0	9,590	621	311,710
1986-1990	21,364	106,658	135,872	132,522	6,375	397,243	7	4,179	279	401,708
1991	26,778	89,936	88,580	101,501	-	306,795	0	280	55	307,130
1992	1,429	7,874	34,987	5,348	-	49,638	0	137	-	49,775
1993	1,640	-	2	25	-	1,667	0	5	-	1,672
1994	-	-	-	-	-	-	0	-	-	0
1995	-	-	-	-	-	-	0	0	-	0
1996	-	-	-	8	-	8	0	0	-	8
1997	-	-	-	-	-	-	0	-	-	0
1998	-	-	-	-	-	-	0	-	-	0
1999	-	-	-	-	-	-	0	172	-	172
2000	12,258	-	-	-	-	12,258	0	0	-	12,258
2001	9,333	-	-	-	-	9,333	0	34	-	9,367
2002	1,515	-	-	-	-	1,515	0	0	-	1,515
2003	6,441	-	-	-	-	6,441	0	270	-	6,711
2004	8,839	-	-	-	-	8,839	0	453	-	9,292
2005	2,618	-	-	-	-	2,618	0	0	-	2,618
2006 ^{c/}	1,414	-	-	-	-	1,414	0	0	-	1,414

a/ Landings are reported by port of landing through 1978 and by area of catch beginning in 1979.

b/ Oregon ports only.

c/ Preliminary.

TABLE A-7. Oregon commercial troll salmon effort in days fished by area and month (beginning in 1979, monthly totals are the sum of statistical weeks with closest fit to the calendar month).^{a/} (Page 1 of 4)

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season
<u>Astoria</u>											
1976-1980	-	-	205	299	1,220	844	251	56	-	1	2,875
1981-1985	-	-	402	0	322	338	33	0	-	-	1,096
1986-1990	-	-	146	26	183	579	273	22	-	-	659
1991	-	-	92	9	-	407	151	-	-	-	659
1992	-	-	61	114	49	35	-	-	-	-	259
1993	-	-	22	6	51	55	71	-	-	-	205
1994	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	6	2	-	-	-	-	-	-	8
1998	-	-	0	0	-	-	-	-	-	-	0
1999	-	-	0	1	-	-	-	-	-	-	1
2000	-	-	1	6	-	246	18	-	-	-	271
2001	-	-	5	26	84	100	27	-	-	-	242
2002	-	-	24	56	156	194	-	-	-	-	430
2003	-	-	95	20	111	143	44	-	-	-	413
2004	-	-	48	1	66	88	144	-	-	-	347
2005	-	-	216	36	30	234	-	-	-	-	516
2006 ^{b/}	-	-	510	299	2	77	93	-	-	-	981
<u>Tillamook</u>											
1976-1980	-	-	23	1,152	3,574	2,656	316	62	-	-	7,782
1981-1985	-	-	98	47	2,030	999	140	94	-	-	3,409
1986-1990	-	-	182	328	2,931	1,831	1,007	604	17	-	6,887
1991	-	-	91	87	1,727	362	517	678	-	-	3,462
1992	-	-	98	-	246	839	689	744	-	-	2,616
1993	-	-	125	65	169	155	751	502	-	-	1,767
1994	-	-	38	81	-	-	-	428	2	-	549
1995	-	-	128	145	-	549	275	213	-	-	1,310
1996	-	-	105	341	-	206	490	257	-	-	1,399
1997	-	5	61	123	-	108	217	178	11	-	703
1998	-	23	93	119	-	233	283	259	34	-	1,044
1999	-	1	41	105	48	177	225	95	2	-	694
2000	-	1	54	252	73	204	166	139	4	-	893
2001	-	46	101	227	307	302	248	117	9	-	1,357
2002	13	19	132	242	125	323	396	394	4	-	1,648
2003	9	15	534	453	159	148	285	264	22	-	1,889
2004	15	201	226	136	106	126	290	227	14	-	1,341
2005	247	40	347	710	-	-	287	90	1	-	1,722
2006 ^{b/}	-	-	-	177	11	34	178	318	31	-	749

TABLE A-7. **Oregon commercial** troll salmon **effort** in days fished by area and month (beginning in 1979, monthly totals are the sum of statistical weeks with closest fit to the calendar month).^{a/} (Page 2 of 4)

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season
<u>Newport Area</u>											
1976-1980	-	-	300	1,662	6,370	5,374	1,003	321	1	-	15,029
1981-1985	-	-	600	300	3,004	1,728	198	174	4	-	6,008
1986-1990	-	-	826	1,180	3,835	1,597	619	594	-	-	8,650
1991	-	-	571	2,044	894	587	527	439	-	-	5,062
1992	-	-	1,405	-	1,119	1,684	746	884	-	-	5,838
1993	-	-	1,352	1,083	1,516	770	725	462	-	-	5,908
1994	-	-	813	831	-	-	201	289	-	-	2,134
1995	-	-	583	987	-	1,596	808	694	-	-	4,668
1996	-	-	1,023	1,125	-	1,308	773	529	-	-	4,758
1997	-	226	1,388	1,331	-	1,296	728	202	-	-	5,171
1998	-	667	1,339	1,175	-	950	217	148	-	-	4,496
1999	-	148	389	456	284	135	26	104	-	-	1,542
2000	-	81	460	486	374	551	523	222	-	-	2,697
2001	-	446	1,264	1,033	495	1,081	591	338	-	-	5,248
2002	186	345	788	471	278	411	746	1,166	-	-	4,391
2003	41	265	884	528	470	626	927	821	-	-	4,562
2004	485	1,060	1,279	628	383	405	496	103	-	-	4,839
2005	296	145	554	1,953	-	-	1,005	326	-	-	4,279
2006 ^{b/}	-	-	-	857	476	152	423	248	92	-	2,248
<u>Coos Bay Area</u>											
1976-1980	-	-	524	2,531	9,644	6,069	1,491	355	2,628	2,628	20,620
1981-1985	-	-	714	664	5,159	2,633	604	180	5	-	9,960
1986-1990	-	-	2,737	2,986	7,267	4,665	1,588	964	497	-	20,307
1991	-	-	33	1,817	1,481	1,018	815	479	-	-	5,643
1992	-	-	51	-	131	163	39	56	-	-	440
1993	-	-	574	163	49	28	346	281	146	-	1,587
1994	-	-	81	316	-	-	67	268	63	-	795
1995	-	-	228	489	-	463	168	190	54	-	1,592
1996	-	-	250	506	-	305	356	255	86	-	1,758
1997	-	117	491	421	-	219	88	161	56	-	1,553
1998	-	161	350	412	-	173	57	188	82	-	1,423
1999	-	28	174	800	401	730	166	172	119	8	2,598
2000	-	73	192	214	739	1,064	549	269	176	69	3,345
2001	-	445	646	720	556	668	375	293	126	1	3,830
2002	168	476	792	1,252	279	559	465	644	154	15	4,804
2003	125	1,110	1,439	560	273	573	453	362	117	14	5,026
2004	406	1,245	632	1,055	336	1,302	573	374	215	21	6,159
2005	755	184	1,931	-	-	-	1,227	544	141	75	4,857
2006 ^{b/}	-	-	-	-	-	-	30	156	155	25	366

TABLE A-7. **Oregon commercial troll salmon effort** in days fished by area and month (beginning in 1979, monthly totals are the sum of statistical weeks with closest fit to the calendar month).^{a/} (Page 3 of 4)

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season
Brookings Area											
1976-1980	-	-	187	1,090	3,079	2,241	1,469	939	572	-	9,578
1981-1985	-	-	265	188	1,367	1,708	427	732	336	-	5,024
1986-1990	-	-	319	647	556	607	125	224	217	-	1,652
1991	-	-	-	-	-	-	22	-	-	-	22
1992	-	-	-	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	-	-	-
1994	-	-	44	-	-	56	-	183	-	-	283
1995	-	-	46	-	48	-	-	188	-	-	282
1996	-	-	99	31	-	185	-	161	-	-	476
1997	-	19	149	-	-	38	-	169	-	-	375
1998	-	0	22	-	-	14	-	172	-	-	208
1999	-	-	3	-	-	78	38	120	9	-	248
2000	-	-	4	-	-	84	56	130	-	-	274
2001	-	-	18	41	-	150	96	166	-	-	471
2002	3	15	22	73	82	67	70	96	-	-	428
2003	0	7	47	70	109	106	80	107	2	-	528
2004	2	9	73	139	102	53	61	61	18	-	518
2005	6	1	-	-	-	-	114	110	18	-	249
2006 ^{b/}	-	-	-	-	-	-	6	150	27	-	183
South of Cape Falcon											
1976-1980	-	-	1,034	6,435	22,667	16,340	4,280	1,677	577	-	53,010
1981-1985	-	-	1,678	1,199	11,559	7,068	1,368	1,180	346	-	24,400
1986-1990	-	-	4,065	5,011	14,144	8,457	3,289	2,296	292	-	37,495
1991	-	-	695	3,948	4,102	1,967	1,881	1,596	-	-	14,189
1992	-	-	1,554	-	1,496	2,686	1,474	1,684	-	-	8,894
1993	-	-	2,051	1,311	1,734	953	1,822	1,245	146	-	9,262
1994	-	-	976	1,228	-	56	268	1,168	65	-	3,761
1995	-	-	985	1,621	48	2,608	1,251	1,285	54	-	7,852
1996	-	-	1,477	2,003	-	2,004	1,619	1,202	86	-	8,391
1997	-	367	2,089	1,875	-	1,661	1,033	710	67	-	7,802
1998	-	851	1,804	1,706	-	1,370	557	767	116	-	7,171
1999	-	177	607	1,361	733	1,120	455	491	130	8	5,082
2000	-	155	710	952	1,186	1,903	1,294	760	180	69	7,209
2001	-	937	2,029	2,021	1,358	2,201	1,310	914	135	1	10,906
2002	370	855	1,734	2,038	764	1,360	1,677	2,300	158	15	11,271
2003	175	1,397	2,904	1,611	1,011	1,453	1,745	1,554	141	14	12,005
2004	908	2,515	2,210	1,958	927	1,886	1,420	765	247	21	12,857
2005	1,304	370	2,832	2,663	-	-	2,633	1,070	160	75	11,107
2006 ^{b/}	-	-	-	1,034	487	186	637	872	305	25	3,546

TABLE A-7. **Oregon commercial** troll salmon **effort** in days fished by area and month (beginning in 1979, monthly totals are the sum of statistical weeks with closest fit to the calendar month).^{a/} (Page 4 of 4)

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season
Statewide Total											
1976-1980	-	-	1,238	6,734	23,887	17,184	4,531	1,733	577	1	55,885
1981-1985	-	-	2,080	1,199	11,881	7,407	1,401	1,181	346	-	25,496
1986-1990	-	-	4,211	5,027	14,180	8,804	3,398	2,301	292	-	38,154
1991	-	-	787	3,957	4,102	2,374	2,032	1,596	-	-	14,848
1992	-	-	1,615	114	1,545	2,721	1,474	1,684	-	-	9,153
1993	-	-	2,073	1,317	1,785	1,008	1,893	1,245	146	-	9,467
1994	-	-	976	1,228	-	56	268	1,168	65	-	3,761
1995	-	-	985	1,621	48	2,608	1,251	1,285	54	-	7,852
1996	-	-	1,477	2,003	-	2,004	1,619	1,202	86	-	8,391
1997	-	367	2,095	1,877	-	1,661	1,033	710	67	-	7,810
1998	-	851	1,804	1,706	-	1,370	557	767	116	-	7,171
1999	-	177	607	1,362	733	1,120	455	491	130	8	5,083
2000	-	155	711	958	1,186	2,149	1,312	760	180	69	7,480
2001	-	937	2,034	2,047	1,442	2,301	1,337	914	135	1	11,148
2002	370	855	1,758	2,094	920	1,554	1,677	2,300	158	15	11,701
2003	175	1,397	2,999	1,631	1,122	1,596	1,789	1,554	141	14	12,418
2004	908	2,515	2,258	1,959	993	1,974	1,564	765	247	21	13,204
2005	1,304	370	3,048	2,699	30	234	2,633	1,070	160	75	11,623
2006 ^{b/}	-	-	510	1,333	489	263	730	872	305	25	4,527

a/ Summary of ODFW fish receiving ticket information. Excludes effort occurring off Alaska, Washington, and California. Days fished data are reported by port of landing prior to 1979 and by area of catch after 1978. Catch and landing areas include the following port areas: Astoria area includes Oregon ports from Astoria through Cannon Beach; Tillamook area includes Nehalem through Pacific City; Newport area includes Depoe Bay through Waldport; Coos Bay area prior to 1986 includes Florence through Bandon and after 1987 includes Florence through Port Orford; Brookings area prior to 1986 includes Port Orford through Brookings and after 1987 includes Gold Beach through Brookings.

c/ Preliminary.

TABLE A-8. Oregon commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month (beginning in 1979, monthly totals are the sum of statistical weeks with closest fit to the calendar month).^a (Page 1 of 4)

Year or Avg.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season	June	July	Aug.	Sept.	Oct.	Season
CHINOOK												COHO					
<u>Astoria</u>																	
1976-1980	-	-	5,039	4,624	3,123	1,480	492	577	-	-	15,336	28,655	31,526	12,401	5,569	879	73,122
1981-1985	-	-	4,738	0	499	293	23	2	-	-	5,556	-	18,828	11,874	2,543	-	21,305
1986-1990	-	-	1,791	363	2,225	1,172	765	71	-	-	3,477	-	7,390	21,733	6,281	304	21,364
1991	-	-	325	27	-	451	111	-	-	-	914	-	-	21,618	5,160	-	26,778
1992	-	-	376	925	118	74	-	-	-	-	1,493	-	662	767	-	-	1,429
1993	-	-	253	13	37	37	65	-	-	-	405	-	207	580	853	-	1,640
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	25	3	-	-	-	-	-	-	28	-	-	-	-	-	-
1998	-	-	0	0	-	-	-	-	-	-	0	-	-	-	-	-	-
1999	-	-	0	15	-	-	-	-	-	-	15	-	-	-	-	-	-
2000	-	-	9	236	-	1,951	49	-	-	-	2,245	-	-	11,600	658	-	12,258
2001	-	-	380	1,704	925	753	329	-	-	-	4,091	-	3,701	3,376	2,256	-	9,333
2002	-	-	855	3,189	4,241	4,512	-	-	-	-	12,797	-	-	1,515	-	-	1,515
2003	-	-	4,927	1,171	1,310	2,377	599	-	-	-	10,384	-	1,473	3,657	1,311	-	6,441
2004	-	-	1,884	17	381	331	505	-	-	-	3,118	-	718	1,399	6,722	-	8,839
2005	-	-	5,119	927	367	3,672	-	-	-	-	10,085	-	204	2,414	-	-	2,618
2006 ^{b/}	-	-	7,167	3,168	1	61	92	-	-	-	10,489	-	10	1,182	222	-	1,414
<u>Tillamook Area</u>																	
1976-1980	-	-	476	3,256	4,108	2,688	505	189	-	-	11,222	49,936	66,185	27,829	2,034	124	126,085
1981-1985	-	-	1,547	283	2,380	1,210	281	199	7	-	5,901	-	68,832	20,120	1,637	-	84,331
1986-1990	-	-	1,745	3,147	8,129	6,212	4,946	2,060	11	-	26,242	-	82,150	29,287	5,397	-	106,658
1991	-	-	224	175	3,104	1,923	2,059	1,989	-	-	9,474	-	89,936	-	-	-	89,936
1992	-	-	377	-	422	2,171	1,859	2,436	-	-	7,265	-	797	7,065	-	12	7,874
1993	-	-	468	199	778	642	2,641	1,616	-	-	6,344	-	-	-	-	-	-
1994	-	-	98	282	-	-	-	1,266	7	-	1,653	-	-	-	-	-	-
1995	-	-	364	842	-	6,636	1,130	726	-	-	9,698	-	-	-	-	-	-
1996	-	-	719	8,565	-	1,088	2,062	702	0	-	13,136	-	-	-	-	-	-
1997	-	41	244	567	-	292	710	440	37	-	2,331	-	-	-	-	-	-
1998	-	165	423	809	-	2,181	2,160	784	42	-	6,564	-	-	-	-	-	-
1999	-	1	259	555	171	963	624	219	12	-	2,804	-	-	-	-	-	-
2000	-	1	170	3,817	569	5,887	1,511	4,151	14	-	16,120	-	-	-	-	-	-
2001	-	791	927	4,799	7,629	6,776	3,968	1,425	42	-	26,357	-	-	-	-	-	-
2002	131	98	1,270	4,684	1,671	5,361	6,983	10,128	5	-	30,331	-	-	-	-	-	-
2003	335	84	13,970	11,718	1,205	1,451	2,649	2,071	33	-	33,516	-	-	-	-	-	-
2004	31	2,967	3,373	562	332	457	1,001	882	72	-	9,677	-	-	-	-	-	-
2005	7,027	498	6,451	10,655	-	-	2,480	866	3	-	27,980	-	-	-	-	-	-
2006 ^{b/}	-	-	-	1,153	60	39	450	971	95	-	2,768	-	-	-	-	-	-

TABLE A-8. **Oregon commercial** troll Chinook and coho salmon **landings in numbers** of fish by catch area and month (beginning in 1979, monthly totals are the sum of statistical weeks with closest fit to the calendar month).^{a/} (Page 2 of 4)

Year or Avg.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season	June	July	Aug.	Sept.	Oct.	Season
CHINOOK												COHO					
<u>Newport Area</u>																	
1976-1980	-	-	3,649	6,485	12,469	16,372	4,788	2,828	106	-	46,613	60,615	95,719	54,446	4,784	1,339	192,121
1981-1985	-	-	6,292	2,256	11,737	5,174	959	1,476	111	-	27,917	-	75,337	66,674	4,161	-	109,715
1986-1990	-	-	8,800	14,067	27,795	14,835	6,926	10,533	-	-	82,957	56	108,283	44,241	5,166	-	135,872
1991	-	-	2,944	7,299	3,393	5,784	7,030	6,957	-	-	33,407	58,218	30,362	-	-	-	88,580
1992	-	-	19,619	-	28,494	21,880	8,556	16,228	-	-	94,777	-	19,045	15,942	-	-	34,987
1993	-	-	17,103	13,666	11,953	9,398	8,561	3,542	-	-	64,223	-	-	2	-	-	2
1994	-	-	7,178	7,047	-	-	1,040	2,803	-	-	18,068	-	-	-	-	-	-
1995	-	-	8,610	27,986	-	79,387	33,322	24,891	-	-	174,196	-	-	-	-	-	-
1996	-	-	22,690	20,565	-	53,636	19,394	11,534	-	-	127,819	-	-	-	-	-	-
1997	-	2,369	24,047	26,925	-	38,819	23,978	2,828	-	-	118,966	-	-	-	-	-	-
1998	-	16,486	34,071	25,029	-	15,983	2,293	930	-	-	94,792	-	-	-	-	-	-
1999	-	612	4,501	5,721	3,163	1,028	98	741	-	-	15,864	-	-	-	-	-	-
2000	-	595	4,426	5,762	4,409	14,178	14,926	4,715	-	-	49,011	-	-	-	-	-	-
2001	-	8,536	45,372	28,016	15,669	40,694	20,356	10,001	-	-	168,644	-	-	-	-	-	-
2002	3,938	4,321	12,233	7,372	5,135	7,648	34,931	56,506	-	-	132,084	-	-	-	-	-	-
2003	674	8,915	24,752	12,180	12,769	22,804	36,204	30,252	-	-	148,550	-	-	-	-	-	-
2004	12,970	12,286	26,499	7,350	8,085	11,018	12,354	726	-	-	91,288	-	-	-	-	-	-
2005	4,171	2,209	7,347	39,240	-	-	29,592	7,505	-	-	90,064	-	-	-	-	-	-
2006 ^{b/}	-	-	-	8,505	3,556	923	3,852	1,528	639	-	19,003	-	-	-	-	-	-
<u>Coos Bay Area</u>																	
1976-1980	-	17	3,113	11,974	30,188	28,911	7,483	3,863	28	-	85,563	88,960	168,959	47,488	2,358	264	290,131
1981-1985	-	-	5,515	4,301	29,871	17,260	5,419	1,129	11	-	63,507	-	115,958	31,021	5	-	131,470
1986-1990	-	-	30,467	28,162	103,530	64,284	18,029	8,518	2,178	-	253,426	22	103,641	44,708	10,213	-	132,522
1991	-	-	108	5,096	8,931	3,889	8,925	3,493	-	-	30,442	33,031	68,459	11	-	-	101,501
1992	-	-	648	-	2,572	2,035	342	608	-	-	6,205	-	3,222	2,126	-	-	5,348
1993	-	-	2,740	858	221	396	4,376	1,296	658	-	10,545	-	-	-	-	25	25
1994	-	-	385	1,577	-	-	199	1,476	371	-	4,008	-	-	-	-	-	-
1995	-	-	1,628	7,038	-	11,855	4,095	1,630	324	-	26,570	-	-	-	-	-	-
1996	-	-	2,221	10,137	-	6,073	4,511	1,903	845	-	25,690	8	-	-	-	-	8
1997	-	1,982	6,727	7,889	-	5,477	1,098	1,233	455	-	24,861	-	-	-	-	-	-
1998	-	3,302	5,177	7,911	-	2,711	499	1,654	858	-	22,112	-	-	-	-	-	-
1999	-	213	1,292	17,171	4,761	15,229	1,062	1,492	1,225	43	42,488	-	-	-	-	-	-
2000	-	591	1,468	1,862	14,686	27,277	13,918	3,369	1,523	367	65,061	-	-	-	-	-	-
2001	-	9,209	14,253	10,111	14,241	13,237	6,211	3,686	1,303	21	72,272	-	-	-	-	-	-
2002	2,593	6,167	9,949	47,825	5,515	15,292	16,947	16,571	1,250	65	122,174	-	-	-	-	-	-
2003	2,183	49,900	34,800	7,943	5,605	13,066	10,793	6,766	963	137	132,156	-	-	-	-	-	-
2004	8,042	18,736	7,398	14,987	5,651	65,177	11,176	6,714	2,079	182	140,142	-	-	-	-	-	-
2005	17,099	2,075	41,943	-	-	-	49,865	8,799	784	335	120,900	-	-	-	-	-	-
2006 ^{b/}	-	-	-	-	-	-	65	962	821	118	1,966	-	-	-	-	-	-

TABLE A-8. **Oregon commercial** troll Chinook and coho salmon **landings in numbers** of fish by catch area and month (beginning in 1979, monthly totals are the sum of statistical weeks with closest fit to the calendar month).^{a/} (Page 3 of 4)

Year or Avg.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season	June	July	Aug.	Sept.	Oct.	Season
CHINOOK												COHO					
Brookings Area																	
1976-1980	-	-	1,815	4,472	21,039	27,055	10,526	6,583	2,409	-	73,899	13,633	39,564	8,784	876	174	60,235
1981-1985	-	-	1,782	1,845	10,357	20,079	3,952	3,495	1,113	-	42,623	-	15,830	35,594	-	-	24,728
1986-1990	-	-	5,087	16,802	9,562	8,706	2,844	963	1,460	-	28,825	4,594	7,121	-	-	-	6,375
1991	-	-	-	-	-	-	210	-	-	-	210	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	-	-	224	-	-	234	-	1,043	-	-	1,501	-	-	-	-	-	-
1995	-	-	305	-	1,682	-	-	1,338	-	-	3,325	-	-	-	-	-	-
1996	-	-	2,876	2,233	-	2,667	-	788	-	-	8,564	-	-	-	-	-	-
1997	-	101	2,348	-	-	255	-	869	-	-	3,573	-	-	-	-	-	-
1998	-	0	69	-	-	75	-	599	-	-	743	-	-	-	-	-	-
1999	-	-	4	-	-	844	150	364	-	-	1,362	-	-	-	-	-	-
2000	-	-	21	-	-	1,405	1,179	861	-	-	3,466	-	-	-	-	-	-
2001	-	-	233	362	-	1,290	986	728	-	-	3,599	-	-	-	-	-	-
2002	5	103	118	952	1,457	1,326	2,305	537	-	-	6,803	-	-	-	-	-	-
2003	0	110	575	484	1,082	1,108	1,119	591	3	-	5,072	-	-	-	-	-	-
2004	6	32	774	2,825	2,305	2,011	271	220	40	-	8,484	-	-	-	-	-	-
2005	87	6	-	-	-	-	1,376	641	156	-	2,266	-	-	-	-	-	-
2006 ^{b/}	-	-	-	-	-	-	12	590	136	-	738	-	-	-	-	-	-
South of Cape Falcon																	
1976-1980	-	17	9,052	26,186	67,804	75,026	23,302	13,463	2,458	-	217,296	185,506	370,427	138,547	10,052	1,901	668,571
1981-1985	-	-	15,135	8,684	54,345	43,724	10,612	6,299	1,149	-	139,947	-	275,957	97,114	5,803	-	350,243
1986-1990	-	-	46,099	58,818	141,367	90,555	31,607	21,689	1,642	-	391,449	3,700	295,499	95,999	20,776	-	380,152
1991	-	-	3,276	12,570	15,428	11,596	18,224	12,439	-	-	73,533	91,249	188,757	11	-	-	280,017
1992	-	-	20,644	-	31,488	26,086	10,757	19,272	-	-	108,247	-	23,064	25,133	-	12	48,209
1993	-	-	20,311	14,723	12,952	10,436	15,578	6,454	658	-	81,112	-	-	2	-	25	27
1994	-	-	7,885	8,906	-	234	1,239	6,588	378	-	25,230	-	-	-	-	-	-
1995	-	-	10,907	35,866	1,682	97,878	38,547	28,585	324	-	213,789	-	-	-	-	-	-
1996	-	-	28,506	41,500	-	63,464	25,967	14,927	845	-	175,209	8	-	-	-	-	8
1997	-	4,493	33,366	35,381	-	44,843	25,786	5,370	492	-	149,731	-	-	-	-	-	-
1998	-	19,953	39,740	33,749	-	20,950	4,952	3,967	900	-	124,211	-	-	-	-	-	-
1999	-	826	6,056	23,447	8,095	18,064	1,934	2,816	1,237	43	62,518	-	-	-	-	-	-
2000	-	1,187	6,085	11,441	19,664	48,747	31,534	13,096	1,537	367	133,658	-	-	-	-	-	-
2001	-	18,536	60,785	43,288	37,539	61,997	31,521	15,840	1,345	21	270,872	-	-	-	-	-	-
2002	6,667	10,689	23,570	60,833	13,778	29,627	61,166	83,742	1,255	65	291,392	-	-	-	-	-	-
2003	3,192	59,009	74,097	32,325	20,661	38,429	50,765	39,680	999	137	319,294	-	-	-	-	-	-
2004	21,049	34,021	38,044	25,724	16,373	78,663	24,802	8,542	2,191	182	249,591	-	-	-	-	-	-
2005	28,384	4,788	55,741	49,895	-	-	83,313	17,811	943	335	241,210	-	-	-	-	-	-
2006 ^{b/}	-	-	-	9,658	3,616	962	4,379	4,051	1,691	118	24,475	-	-	-	-	-	-

TABLE A-8. **Oregon commercial** troll Chinook and coho salmon **landings in numbers** of fish by catch area and month (beginning in 1979, monthly totals are the sum of statistical weeks with closest fit to the calendar month).^{a/} (Page 4 of 4)

Year or Avg.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season	June	July	Aug.	Sept.	Oct.	Season
CHINOOK												COHO					
Statewide Total																	
1976-1980	-	17	14,092	30,810	70,928	76,506	23,794	14,041	2,458	-	232,632	214,161	401,952	150,948	15,621	2,305	741,694
1981-1985	-	-	19,873	8,684	54,844	44,017	10,635	6,301	1,149	-	145,503	-	290,078	84,710	8,346	-	301,499
1986-1990	-	-	47,890	59,035	141,812	91,259	31,913	21,703	1,642	-	394,927	3,700	296,977	89,839	11,112	304	397,243
1991	-	-	3,601	12,597	15,428	12,047	18,335	12,439	-	-	74,447	91,249	188,757	21,629	5,160	-	306,795
1992	-	-	21,020	925	31,606	26,160	10,757	19,272	-	-	109,740	-	23,726	25,900	-	12	49,638
1993	-	-	20,564	14,736	12,989	10,473	15,643	6,454	658	-	81,517	-	207	582	853	25	1,667
1994	-	-	7,885	8,906	-	234	1,239	6,588	378	-	25,230	-	-	-	-	-	-
1995	-	-	10,907	35,866	1,682	97,878	38,547	28,585	324	-	213,789	-	-	-	-	-	-
1996	-	-	28,506	41,500	-	63,464	25,967	14,927	845	-	175,209	8	-	-	-	-	8
1997	-	4,493	33,391	35,384	-	44,843	25,786	5,370	492	-	149,759	-	-	-	-	-	-
1998	-	19,953	39,740	33,749	-	20,950	4,952	3,967	900	-	124,211	-	-	-	-	-	-
1999	-	826	6,056	23,462	8,095	18,064	1,934	2,816	1,237	43	62,533	-	-	-	-	-	-
2000	-	1,187	6,094	11,677	19,664	50,698	31,583	13,096	1,537	367	135,903	-	-	11,600	658	-	12,258
2001	-	18,536	61,165	44,992	38,464	62,750	31,850	15,840	1,345	21	274,963	-	3,701	3,376	2,256	-	9,333
2002	6,667	10,689	24,425	64,022	18,019	34,139	61,166	83,742	1,255	65	304,189	-	-	1,515	-	-	1,515
2003	3,192	59,009	79,024	33,496	21,971	40,806	51,364	39,680	999	137	329,678	-	1,473	3,657	1,311	-	6,441
2004	21,049	34,021	39,928	25,741	16,754	78,994	25,307	8,542	2,191	182	252,709	-	718	1,399	6,722	-	8,839
2005	28,384	4,788	60,860	50,822	367	3,672	83,313	17,811	943	335	251,295	-	204	2,414	-	-	2,618
2006 ^{b/}	-	-	7,167	12,826	3,617	1,023	4,471	4,051	1,691	118	34,964	-	10	1,182	222	-	1,414

a/ Excludes harvests off Alaska, Washington (north of Leadbetter Point), and California that were landed in Oregon. Landings are reported by port of landing through 1978 and by area of catch beginning in 1979. Catch and landing areas include the following port areas: Astoria area includes Oregon ports from Astoria through Cannon Beach; Tillamook area includes Nehalem through Pacific City; Newport area includes Depoe Bay through Waldport; Coos Bay area prior to 1988 includes Florence through Bandon and after 1987 includes Florence through Port Orford; Brookings area prior to 1988 includes Port Orford through Brookings and after 1987 includes Gold Beach through Brookings.

b/ Preliminary.

TABLE A-9. Oregon ocean recreational effort in salmon angler trips by catch area and month.^{a/} (Page 1 of 4)

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
<u>Astoria</u>										
1976-1980	-	0	890	8,582	17,436	25,284	8,325	374	22	60,746
1981-1985	-	-	977	3,269	11,837	9,897	4,192	-	-	26,221
1986-1990	-	-	146	1,110	8,890	9,559	1,423	-	-	17,740
1991	-	-	-	1,496	8,959	9,422	1,777	-	-	21,654
1992	-	-	-	-	9,812	1,842	1,271	-	-	12,925
1993	-	-	-	-	5,676	7,861	4,279	-	-	17,816
1994	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	2,275	7,656	1,007	-	-	10,938
1996	-	-	-	-	963	3,782	889	-	-	5,634
1997	-	-	-	-	2,772	830	-	-	-	3,602
1998	-	-	-	-	-	1,830	284	-	-	2,114
1999	-	-	-	-	2,098	3,653	1,666	-	-	7,417
2000	-	-	-	-	3,994	4,449	-	-	-	8,443
2001	-	-	-	-	7,990	12,960	2,291	-	-	23,241
2002	-	-	155	372	3,989	6,373	1,156	6	-	12,051
2003	-	-	-	151	5,275	12,550	1,250	-	-	19,226
2004	-	-	-	256	4,439	11,290	2,608	-	-	18,593
2005	-	-	-	-	2,246	8,116	2,900	-	-	13,262
2006 ^{b/}	-	-	-	-	1,711	5,769	762	-	-	8,242
<u>Tillamook Area</u>										
1976-1980	-	0	1,043	5,476	14,753	18,525	3,792	393	61	43,838
1981-1985	-	-	678	2,040	14,150	14,502	3,413	1,603	-	30,298
1986-1990	-	-	222	2,005	12,063	11,291	4,392	--	-	29,007
1991	-	-	426	3,990	16,608	-	-	--	-	21,024
1992	-	-	1,172	3,418	11,657	7,053	2,835	--	-	26,135
1993	-	-	797	195	3,091	1,488	--	--	-	5,571
1994	-	-	603	931	-	-	-	8,749	3	10,286
1995	-	-	644	76	-	-	1,314	1,008	788	3,830
1996	-	-	762	118	44	464	3,655	3,255	-	8,298
1997	-	0	36	94	8	366	1,418	1,673	--	3,595
1998	-	0	609	59	11	258	2,256	2,900	--	6,093
1999	-	6	643	129	3,427	253	3,126	3,469	104	11,157
2000	-	14	397	108	3,763	388	3,405	3,176	235	11,486
2001	-	0	526	2,827	7,278	895	2,747	2,051	162	16,486
2002	-	11	386	360	7,005	4,787	5,041	6,767	50	24,407
2003	21	5	435	1,860	11,990	5,450	4,819	3,019	395	27,994
2004	8	94	397	2,849	11,855	6,729	4,442	2,647	291	29,312
2005	28	66	463	2,318	3,216	1,622	3,799	599	12	12,123
2006 ^{b/}	2	16	382	1,334	3,299	497	5,293	4,988	98	15,909

TABLE A-9. **Oregon ocean recreational effort** in salmon angler trips by catch area and month.^{a/} (Page 2 of 4)

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
<u>Newport Area</u>										
1976-1980	-	0	2,686	14,777	37,841	34,826	6,813	1,205	46	97,675
1981-1985	-	-	1,237	6,383	28,951	25,961	3,812	--	-	57,094
1986-1990	-	-	997	7,789	37,404	24,000	5,730	-	-	74,574
1991	-	-	848	11,837	40,566	-	-	-	-	53,251
1992	-	-	1,124	7,072	27,891	14,611	2,351	-	-	53,049
1993	-	-	233	229	11,588	5,062	-	-	-	17,112
1994	-	-	77	9	-	-	-	-	-	86
1995	-	-	139	260	-	-	427	117	-	943
1996	-	-	312	188	22	1,789	460	-	-	2,771
1997	-	25	130	169	112	1,686	313	-	-	2,435
1998	-	0	32	88	109	922	152	12	-	1,315
1999	-	6	16	67	7,127	139	46	26	-	7,427
2000	-	4	15	56	11,723	913	272	50	-	13,033
2001	-	0	175	6,648	13,301	2,432	872	143	-	23,571
2002	-	34	123	502	12,360	2,837	1,469	738	-	18,063
2003	24	28	310	3,761	20,799	12,739	1,371	526	-	39,558
2004	36	57	139	4,642	17,640	12,676	3,423	413	-	39,026
2005	0	264	429	3,927	3,562	1,863	3,187	167	-	13,399
2006 ^{b/}	8	43	139	1,593	5,785	584	1,919	299	-	10,370
<u>Coos Bay Area</u>										
1976-1980	-	0	5,296	24,105	44,633	29,677	6,974	652	98	111,116
1981-1985	-	-	3,365	13,367	34,917	20,849	3,452	--	--	63,724
1986-1990	-	-	891	8,744	33,097	15,721	3,842	--	--	61,349
1991	-	-	1,014	17,280	39,388	-	-	-	-	57,682
1992	-	-	1,396	9,431	28,632	12,782	3,317	--	-	55,558
1993	-	-	339	867	10,066	4,050	-	--	--	15,322
1994	-	-	211	156	-	-	-	--	--	367
1995	-	-	64	494	-	-	138	21	--	717
1996	-	-	197	611	577	1,881	651	--	--	3,917
1997	-	4	273	499	753	1,992	411	--	--	3,932
1998	-	0	36	19	255	1,902	123	--	--	2,335
1999	-	0	4	612	5,034	1,775	208	0	--	7,633
2000	-	8	78	164	14,885	7,213	1,140	106	--	23,594
2001	-	0	648	8,073	15,394	6,122	765	60	--	31,062
2002	-	230	786	5,319	17,293	6,570	2,812	388	--	33,398
2003	36	106	950	5,263	21,326	12,880	2,247	90	--	42,898
2004	34	87	954	7,376	19,875	9,368	2,734	34	--	40,462
2005	2	76	578	6,353	7,042	6,312	4,262	12	--	24,637
2006 ^{b/}	14	33	279	1,991	9,250	2,718	2,784	81	--	17,150

TABLE A-9. **Oregon ocean recreational effort** in salmon angler trips by catch area and month.^{a/} (Page 3 of 4)

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
Brookings Area										
1976-1980	-	0	1,250	11,841	27,828	20,162	6,768	5,604	913	74,368
1981-1985	-	-	2,109	10,478	25,949	15,387	3,357	3,402	230	56,207
1986-1990	-	-	2,226	12,965	24,727	13,463	3,098	5,030	--	58,492
1991	-	-	1,110	11,581	17,848	1,911	3,997	-	-	36,447
1992	-	-	-	-	8,888	-	4,900	3,862	-	17,650
1993	-	-	1,670	4,730	6,544	8,061	2,786	-	-	23,791
1994	-	-	6,347	1,296	-	1,383	2,910	4,222	-	16,158
1995	-	-	2,336	6,221	-	1,977	5,478	3,410	-	19,422
1996	-	-	1,687	5,922	2,205	6,020	3,226	4,282	-	23,342
1997	-	-	2,477	3,466	2,892	5,461	1,019	1,269	-	16,584
1998	-	-	1,384	2,221	1,546	4,178	2,013	2,755	-	14,097
1999	-	-	151	911	2,485	6,595	3,325	2,318	-	15,785
2000	-	-	186	2,589	2,637	11,912	1,478	3,205	-	22,007
2001	-	-	3,667	4,123	4,409	9,200	362	4,340	-	26,101
2002	-	-	1,767	4,048	528	5,651	3,755	3,973	-	19,722
2003	-	-	1,124	1,480	3,910	4,081	1,522	2,630	-	14,747
2004	-	-	1,232	3,448	3,813	4,396	3,845	1,575	-	18,309
2005	-	-	525	3,510	280	2,802	3,063	2,398	-	12,578
2006 ^{b/}	-	-	611	2,657	716	-	3,559	3,081	-	10,624
South of Cape Falcon										
1976-1980	-	0	10,275	56,199	125,056	103,191	24,348	6,954	974	326,997
1981-1985	-	-	4,749	32,267	103,968	64,436	11,899	3,723	230	207,322
1986-1990	-	-	3,869	31,504	107,292	64,475	14,270	5,030	--	223,421
1991	-	-	3,398	44,688	114,410	1,911	3,997	--	-	168,404
1992	-	-	3,692	19,921	77,068	34,446	13,403	3,862	-	152,392
1993	-	-	3,039	6,021	31,289	18,661	2,786	--	--	61,796
1994	-	-	7,238	2,392	-	1,383	2,910	12,971	3	26,897
1995	-	-	3,183	7,051	-	1,977	7,357	4,556	788	24,912
1996	-	-	2,958	6,839	2,848	10,154	7,992	7,537	--	38,328
1997	-	29	2,916	4,228	3,765	9,505	3,161	2,942	--	26,546
1998	-	0	2,061	2,387	1,921	7,260	4,544	5,667	--	23,840
1999	-	12	814	1,719	18,073	8,762	6,705	5,813	104	42,002
2000	-	26	676	2,917	33,008	20,426	6,295	6,537	235	70,120
2001	-	0	5,016	21,671	40,382	18,649	4,746	6,594	162	97,220
2002	-	275	3,062	10,229	37,186	19,845	13,077	11,866	50	95,590
2003	81	139	2,819	12,364	58,025	35,150	9,959	6,265	395	125,197
2004	78	238	2,722	18,315	53,183	33,169	14,444	4,669	291	127,109
2005	30	406	1,995	16,108	14,100	12,599	14,311	3,176	12	62,737
2006 ^{b/}	24	92	1,411	7,575	19,050	3,799	13,555	8,449	98	54,053

TABLE A-9. **Oregon ocean recreational effort** in salmon angler trips by catch area and month.^{a/} (Page 4 of 4)

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
Total All Areas										
1976-1980	-	0	11,165	64,781	142,492	128,475	32,673	7,179	978	387,743
1981-1985	-	-	4,993	27,469	115,805	74,334	13,575	3,723	230	233,544
1986-1990	-	-	3,898	32,392	116,182	72,122	14,554	5,030	--	241,161
1991	-	-	3,398	46,184	123,369	11,333	5,774	--	-	190,058
1992	-	-	3,692	19,921	86,880	36,288	14,674	3,862	-	165,317
1993	-	-	3,039	6,021	36,965	26,522	7,065	--	--	79,612
1994	-	-	7,238	2,392	-	1,383	2,910	12,971	3	26,897
1995	-	-	3,183	7,051	2,275	9,633	8,364	4,556	788	35,850
1996	-	-	2,958	6,839	3,811	13,936	8,881	7,537	--	43,962
1997	-	29	2,916	4,228	6,537	10,335	3,161	2,942	--	30,148
1998	-	0	2,061	2,387	1,921	9,090	4,828	5,667	--	25,954
1999	-	12	814	1,719	20,171	12,415	8,371	5,813	104	49,419
2000	-	26	676	2,917	37,002	24,875	6,295	6,537	235	78,563
2001	-	0	5,016	21,671	48,372	31,609	7,037	6,594	162	120,461
2002	-	275	3,217	10,601	41,175	26,218	14,233	11,872	50	107,641
2003	81	139	2,819	12,515	63,300	47,700	11,209	6,265	395	144,423
2004	78	238	2,722	18,571	57,622	44,459	17,052	4,669	291	145,702
2005	30	406	1,995	16,108	16,346	20,715	17,211	3,176	12	75,999
2006 ^{b/}	24	92	1,411	7,575	20,761	9,568	14,317	8,449	98	62,295

a/ Monthly totals are the sum of statistical weeks with closest fit to the calendar month. The 1976-1980 effort is from combined salmon/steelhead punch card and sampled port data. Since 1981, data from sampled ports only. Effort since 1979 consists of salmon angler trips only. Data prior to 1979 include combined bottomfish and salmon trips. Astoria area includes Astoria, Warrenton, and Hammond; Tillamook area includes Garibaldi and Pacific City; Newport area includes Depoe Bay and Newport; Coos Bay area includes Florence, Winchester Bay, and Coos Bay; Brookings area includes Gold Beach and Brookings.

b/ Preliminary.

TABLE A-10. Oregon ocean recreational salmon landings in fish by catch area and month.^{a/} (Page 1 of 4)

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season	May	June	July	Aug.	Sept.	Oct. ^{b/}	Season ^{b/}
CHINOOK											COHO						
<u>Astoria</u>																	
1976-1980 ^{b/}	-	0	333	3,210	4,073	7,975	1,490	85	4	17,132	897	12,916	20,699	21,677	7,142	323	63,525
1981-1985	-	-	29	922	2,427	1,902	729	-	-	5,364	1,699	4,463	16,455	11,211	5,509	-	33,780
1986-1990	-	-	29	127	954	1,459	87	-	-	2,246	-	1,825	15,220	14,456	1,307	-	28,506
1991	-	-	-	81	335	550	17	-	-	983	-	2,409	16,368	17,222	3,397	-	39,396
1992	-	-	-	-	307	161	40	-	-	508	-	-	17,882	3,005	1,393	-	22,280
1993	-	-	-	-	239	405	192	-	-	836	-	-	7,098	10,314	3,764	-	21,176
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	16	90	3	-	-	109	-	-	1,976	9,028	773	-	11,777
1996	-	-	-	-	5	13	10	-	-	28	-	-	1,429	4,670	936	-	7,035
1997	-	-	-	-	128	55	-	-	-	183	-	-	4,455	1,352	-	-	5,807
1998	-	-	-	-	-	94	11	-	-	105	-	-	-	2,021	150	-	2,171
1999	-	-	-	-	219	622	93	-	-	934	-	-	2,465	3,359	1,720	-	7,544
2000	-	-	-	-	435	329	-	-	-	764	-	-	6,751	6,975	-	-	13,726
2001	-	-	-	-	1,000	1,478	140	-	-	2,618	-	-	13,537	21,990	3,662	-	39,189
2002	-	-	33	347	1,540	827	4	3	-	2,754	-	-	4,432	8,530	1,441	-	14,403
2003	-	-	-	8	546	1,659	117	-	-	2,330	-	55	8,237	19,891	1,588	-	29,771
2004	-	-	-	25	303	1,426	429	-	-	2,183	-	368	6,583	13,601	1,946	-	22,498
2005	-	-	-	-	481	2,637	517	-	-	3,635	-	-	2,165	6,337	1,464	-	9,966
2006 ^{c/}	-	-	-	-	81	370	58	-	-	509	-	-	1,616	3,560	235	-	5,411
<u>Tillamook Area</u>																	
1976-1980 ^{b/}	-	0	104	152	409	655	99	19	29	1,436	342	3,155	6,284	11,402	960	194	22,259
1981-1985	-	0	18	28	790	582	117	42	-	1,533	89	855	10,321	8,671	766	3	20,171
1986-1990	-	0	10	67	441	864	389	0	-	1,766	29	1,993	12,423	8,726	1,827	63	24,621
1991	-	-	25	285	376	-	-	--	-	686	13	2,521	23,116	-	-	-	25,650
1992	-	-	96	272	588	323	224	--	-	1,503	60	1,848	11,347	6,072	1,431	-	20,758
1993	-	-	65	8	176	48	-	--	-	297	4	1	926	1,392	-	-	2,323
1994	-	-	59	135	-	-	-	2,204	-	2,398	-	-	-	-	-	-	-
1995	-	-	67	1	-	-	114	269	84	535	-	-	-	-	3	-	3
1996	-	-	115	5	11	56	670	733	-	1,590	-	-	-	2	4	1	7
1997	-	0	0	4	2	15	154	287	--	462	-	-	1	-	6	-	7
1998	-	0	73	4	0	25	496	526	--	1,124	-	-	-	19	11	2	32
1999	-	0	119	13	184	32	683	524	8	1,563	-	-	1,007	2	11	2	1,022
2000	-	2	45	23	130	29	506	402	63	1,200	-	-	1,920	2	11	8	1,941
2001	-	0	70	235	727	234	826	431	23	2,546	-	3,398	8,771	37	69	22	12,297
2002	-	1	56	108	3,170	2,182	1,531	1,735	-	8,783	-	-	4,753	1,096	41	22	5,912
2003	--	-	54	439	1,724	737	1,468	936	64	5,422	2	1,407	14,049	5,705	42	14	21,219
2004	--	5	40	501	3,146	2,755	940	1,409	69	8,865	-	1,305	8,693	4,212	175	23	14,408
2005	6	10	36	371	684	291	1,142	186	-	2,726	-	543	502	11	2	-	1,058
2006 ^{c/}	0	0	40	75	204	14	1,079	1,944	49	3,405	-	184	1,055	-	119	-	1,358

TABLE A-10. Oregon ocean recreational salmon landings in fish by catch area and month^{a/}. (Page 2 of 4)

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season	May	June	July	Aug.	Sept.	Oct. ^{b/}	Season ^{b/}
	CHINOOK										COHO						
<u>Newport Area</u>																	
1976-1980 ^{b/}	-	0	112	520	839	806	184	31	1	2,480	1,273	12,737	25,257	22,756	1,813	211	63,962
1981-1985	-	-	18	344	1,462	942	89	--	-	2,706	126	3,484	22,849	19,232	2,241	-	46,040
1986-1990	-	-	68	497	1,687	1,029	601	-	-	3,649	662	9,013	46,079	23,917	3,429	-	82,281
1991	-	-	81	405	394	-	-	-	-	880	59	15,216	65,792	-	-	-	81,067
1992	-	-	82	282	2,791	890	92	-	-	4,137	30	9,726	34,661	16,899	2,230	-	63,546
1993	-	-	34	0	279	123	-	-	-	436	5	4	9,425	6,950	-	-	16,384
1994	-	-	5	0	-	-	-	-	-	5	-	-	-	-	-	-	-
1995	-	-	17	26	-	-	37	28	-	108	-	-	-	-	7	-	7
1996	-	-	41	37	7	396	73	-	-	554	-	-	-	31	4	-	35
1997	-	0	45	92	66	999	98	-	-	1,300	-	-	-	14	-	-	14
1998	-	0	28	75	118	166	15	5	-	407	-	-	-	61	-	-	61
1999	-	0	7	9	276	29	9	3	-	333	-	-	3,960	-	-	-	3,960
2000	-	0	9	5	842	452	279	2	-	1,589	-	-	12,341	12	9	-	12,362
2001	-	0	70	362	1,541	2,324	858	160	-	5,315	2	7,803	15,631	16	3	-	23,455
2002	-	14	37	196	3,269	1,031	1,179	804	-	6,530	-	-	9,819	933	22	2	10,776
2003	--	1	95	871	6,939	3,049	1,126	334	-	12,415	-	2,694	21,419	14,419	-	-	38,532
2004	--	17	83	554	6,931	8,225	1,507	485	-	17,802	-	2,707	13,981	6,625	207	-	23,520
2005	0	94	109	392	463	1,000	2,556	92	-	4,706	-	659	376	18	84	-	1,137
2006 ^{c/}	2	1	17	77	326	41	128	80	-	672	-	101	3,970	10	473	-	4,554
<u>Coos Bay Area</u>																	
1976-1980 ^{b/}	-	0	484	2,108	2,866	3,618	1,181	94	24	10,323	7,484	31,027	44,646	20,736	2,845	265	106,898
1981-1985	-	-	37	921	4,075	1,994	436	--	--	7,087	2,106	13,671	29,455	13,020	1,699	--	53,301
1986-1990	-	-	75	1,213	4,999	2,206	963	--	--	9,249	453	10,859	39,003	12,888	1,568	-	64,366
1991	-	-	49	2,125	2,882	-	-	-	-	5,056	794	23,443	66,543	-	-	-	90,780
1992	-	-	70	1,977	1,006	293	417	--	-	3,763	525	13,111	43,850	15,766	2,713	-	75,965
1993	-	-	70	7	597	410	-	--	--	1,084	76	85	7,642	4,388	-	-	12,191
1994	-	-	6	12	-	-	-	--	--	18	-	-	-	-	-	-	-
1995	-	-	4	187	-	-	45	7	--	243	-	-	-	-	-	-	-
1996	-	-	7	147	289	250	148	--	--	841	-	-	-	14	3	-	17
1997	-	2	35	70	94	388	57	--	--	646	-	-	7	10	-	-	17
1998	-	0	0	2	55	418	13	--	--	488	-	-	-	-	-	-	-
1999	-	0	3	211	867	351	12	0	--	1,444	-	-	1,064	-	-	-	1,064
2000	-	2	9	15	6,994	2,559	479	31	--	10,089	-	-	5,055	43	-	-	5,098
2001	-	0	77	1,441	5,548	2,163	281	3	--	9,513	19	6,470	12,691	152	4	-	19,336
2002	-	140	237	4,840	10,170	2,782	1,213	97	--	19,479	-	35	5,129	134	40	-	5,338
2003	2	21	119	1,626	6,453	5,449	1,366	3	--	15,039	-	3,477	15,393	5,194	22	-	24,086
2004	2	2	192	2,849	11,416	3,666	2,606	13	--	20,746	2	943	8,275	830	84	-	10,134
2005	0	0	56	2,933	3,081	3,273	1,826	2	--	11,171	-	862	544	8	21	-	1,435
2006 ^{c/}	0	3	11	388	3,225	927	656	0	--	5,210	-	184	3,321	26	42	-	3,573

TABLE A-10. Oregon ocean recreational salmon landings in fish by catch area and month^{a/}. (Page 3 of 4)

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season	May	June	July	Aug.	Sept.	Oct. ^{b/}	Season ^{b/}
CHINOOK											COHO						
Brookings Area																	
1976-1980 ^{b/}	-	0	91	982	2,803	3,365	570	717	75	8,602	378	10,569	15,434	5,252	483	716	32,545
1981-1985	-	-	853	2,140	9,162	4,185	566	507	14	16,395	247	3,102	7,541	2,962	165	2	12,102
1986-1990	-	-	415	5,447	7,146	4,010	1,436	872	-	18,803	350	3,346	11,414	3,280	467	16	18,863
1991	-	-	48	4,080	2,321	64	298	-	-	6,811	-	10,236	10,582	513	895	-	22,226
1992	-	-	-	-	1,518	-	440	704	-	2,662	-	-	2,850	-	444	2	3,296
1993	-	-	1,124	224	627	1,324	468	-	-	3,767	97	70	1,922	3,445	500	-	6,034
1994	-	-	1,878	104	-	272	284	1,078	-	3,616	-	-	-	13	4	-	17
1995	-	-	212	1,615	-	472	2,603	829	-	5,731	-	38	-	3	86	3	130
1996	-	-	549	2,719	314	2,776	558	1,281	-	8,197	-	10	34	26	25	11	106
1997	-	-	844	769	1,034	1,616	149	675	-	5,087	17	26	41	39	4	-	127
1998	-	-	218	343	320	438	249	394	-	1,962	-	6	8	17	-	6	37
1999	-	-	7	44	893	1,680	475	348	-	3,447	-	2	8	32	4	-	46
2000	-	-	16	432	2,060	7,985	515	810	-	11,818	-	-	14	47	-	-	61
2001	-	-	807	996	1,213	3,022	314	856	-	7,208	-	16	11	29	-	13	69
2002	-	-	506	2,532	35	2,654	3,906	301	-	9,934	-	31	16	29	32	-	108
2003	-	-	448	316	1,199	1,354	1,579	552	-	5,448	-	5	17	17	12	-	51
2004	-	-	531	2,325	1,541	1,638	569	233	-	6,837	2	357	673	222	18	3	1,275
2005	-	-	180	2,904	49	989	1,181	404	-	5,707	-	89	0	12	9	-	110
2006 ^{c/}	-	-	52	513	186	-	644	397	-	1,792	2	474	117	-	81	7	681
South of Cape Falcon																	
1976-1980 ^{b/}	-	0	792	3,762	6,917	8,445	2,033	804	90	22,841	9,476	57,488	91,620	60,146	6,100	1,387	225,663
1981-1985	-	-	908	2,071	15,489	7,703	1,208	516	9	27,722	1,988	21,112	70,167	43,292	4,870	2	131,613
1986-1990	-	-	535	7,125	14,274	8,109	3,075	349	--	33,467	1,259	25,210	108,918	48,811	5,926	16	190,131
1991	-	-	203	6,895	5,973	64	298	0	-	13,433	866	51,416	166,033	513	895	-	219,723
1992	-	-	248	2,531	5,903	1,506	1,173	704	-	12,065	615	24,685	92,708	38,737	6,818	2	163,565
1993	-	-	1,293	239	1,679	1,905	468	0	0	5,584	182	160	19,915	16,175	500	-	36,932
1994	-	-	1,948	251	-	272	284	3,282	0	6,037	-	-	-	13	4	-	17
1995	-	-	300	1,829	-	472	2,799	1,133	84	6,617	-	38	-	3	96	3	140
1996	-	-	712	2,908	621	3,478	1,449	2,014	0	11,182	-	10	34	73	36	12	165
1997	-	2	924	935	1,196	3,018	458	962	0	7,495	17	26	49	63	10	-	165
1998	-	0	319	424	493	1,047	773	925	0	3,981	-	6	8	97	11	8	130
1999	-	0	136	277	2,220	2,092	1,179	875	8	6,787	-	2	6,039	34	15	2	6,092
2000	-	4	79	475	10,026	11,025	1,779	1,245	63	24,696	-	-	19,330	104	20	8	19,462
2001	-	0	1,024	3,034	9,029	7,743	2,279	1,450	23	24,582	21	17,687	37,104	234	76	35	55,157
2002	-	155	836	7,676	16,644	8,649	7,829	2,937	0	44,726	-	66	19,717	2,192	135	24	22,134
2003	2	22	716	3,252	16,315	10,589	5,539	1,825	64	38,324	2	7,583	50,878	25,335	76	14	83,888
2004	2	24	846	6,229	23,034	16,284	5,622	2,140	69	54,250	4	5,312	31,622	11,889	484	26	49,337
2005	6	104	381	6,600	4,277	5,553	6,705	684	0	24,310	-	2,153	1,422	49	116	-	3,740
2006 ^{c/}	2	4	120	1,053	3,941	982	2,507	2,421	49	11,079	2	943	8,463	36	715	7	10,166

TABLE A-10. Oregon ocean recreational salmon landings in fish by catch area and month.^{a/} (Page 4 of 4)

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season	May	June	July	Aug.	Sept.	Oct. ^{b/}	Season ^{b/}
CHINOOK											COHO						
Total All Areas																	
1976-1980 ^{b/}	-	0	1,125	6,972	10,989	16,420	3,522	854	91	39,974	10,373	70,404	112,320	81,823	13,242	1,710	289,189
1981-1985	-	-	915	2,809	17,916	9,605	1,499	516	9	33,085	2,412	20,297	86,622	54,503	7,625	2	165,393
1986-1990	-	-	541	7,227	15,227	9,276	3,093	349	--	35,713	1,259	26,670	124,138	60,376	6,187	16	218,637
1991	-	-	203	6,976	6,308	614	315	0	-	14,416	866	53,825	182,401	17,735	4,292	-	259,119
1992	-	-	248	2,531	6,210	1,667	1,213	704	-	12,573	615	24,685	110,590	41,742	8,211	2	185,845
1993	-	-	1,293	239	1,918	2,310	660	0	0	6,420	182	160	27,013	26,489	4,264	-	58,108
1994	-	-	1,948	251	-	272	284	3,282	0	6,037	-	-	-	13	4	-	17
1995	-	-	300	1,829	16	562	2,802	1,133	84	6,726	-	38	1,976	9,031	869	3	11,917
1996	-	-	712	2,908	626	3,491	1,459	2,014	0	11,210	-	10	1,463	4,743	972	12	7,200
1997	-	2	924	935	1,324	3,073	458	962	0	7,678	17	26	4,504	1,415	10	-	5,972
1998	-	0	319	424	493	1,141	784	925	0	4,086	-	6	8	2,118	161	8	2,301
1999	-	0	136	277	2,439	2,714	1,272	875	8	7,721	-	2	8,504	3,393	1,735	2	13,636
2000	-	4	79	475	10,461	11,354	1,779	1,245	63	25,460	-	-	26,081	7,079	20	8	33,188
2001	-	0	1,024	3,034	10,029	9,221	2,419	1,450	23	27,200	21	17,687	50,641	22,224	3,738	35	94,346
2002	-	155	869	8,023	18,184	9,476	7,833	2,940	0	47,480	-	66	24,149	10,722	1,576	24	36,537
2003	2	22	716	3,260	16,861	12,248	5,656	1,825	64	40,654	2	7,638	59,115	45,226	1,664	14	113,659
2004	2	24	846	6,254	23,337	17,710	6,051	2,140	69	56,433	4	5,680	38,205	25,490	2,430	26	71,835
2005	6	104	381	6,600	4,758	8,190	7,222	684	0	27,945	-	2,153	3,587	6,386	1,580	-	13,706
2006 ^{c/}	2	4	120	1,053	4,022	1,352	2,565	2,421	49	11,588	2	943	10,079	3,596	950	7	15,577

a/ Monthly totals are the sum of statistical weeks with closest fit to the calendar month and may include illegal catch. The 1976-1980 catch is from combined salmon/steelhead punch card and sampled port data. Since 1981, data are from sampled ports only. Astoria area includes Astoria, Warrenton, and Hammond; Tillamook area includes Garibaldi and Pacific City; Newport area includes Depoe Bay and Newport; Coos Bay area includes Florence, Winchester Bay, and Coos Bay; Brookings area includes Gold Beach and Brookings.

b/ October, Season, and Total catch for the following port areas and years includes the following catch in November: Astoria 1976 - 29 coho; Tillamook 1976 - 38 coho; Newport 1976 - 22 coho; Coos Bay 1976 - 66 coho; Brookings 1976 - 367 coho.

c/ Preliminary.

TABLE A-11. Summary of Washington non-Indian commercial troll salmon fishing effort in days fished and landings in numbers of fish by catch area. (Page 1 of 2)

harby catch area: (Page 1 of 2)

Year	Washington								
or Avg.	Ilwaco	Westport	La Push	Neah Bay ^{a/}	Subtotal	Oregon	California	Alaska	Total
DAYS FISHED									
1976-1980	9,007	15,023	9,446	9,707	43,184	664	42	970	44,860
1981-1985	1,961	5,194	1,553	3,111	11,819	244	18	25	12,106
1986-1990	871	2,619	300	928	4,718	100	0	3	4,821
1991	645	1,759	174	2,294	4,872	85	0	33	4,990
1992	272	2,570	488	1,519	4,849	5	0	10	4,864
1993	88	1,909	240	1,470	3,707	33	0	0	3,740
1994	-	-	-	-	-	30	0	0	30
1995	-	-	70	401	-	22	0	0	22
1996	-	139	18	255	412	67	0	0	479
1997	0	102	120	230	452	46	0	0	498
1998	-	6	38	95	139	0	0	0	139
1999	0	320	37	372	729	6	0	0	735
2000	59	74	64	224	421	30	0	0	451
2001	76	435	39	214	764	174	0	0	938
2002	65	782	94	397	1,338	272	0	0	1,610
2003	114	603	313	668	1,698	188	0	0	1,886
2004	52	575	246	508	1,381	0	0	0	1,381
2005 ^{b/}	103	570	282	483	1,438	0	0	0	1,438
2006 ^{b/}	134	367	597	340	1,438	0	0	0	1,438
CHINOOK LANDINGS									
1976-1980	23,518	81,100	44,972	33,934	183,524	4,878	648	12,666	201,716
1981-1985	9,172	34,995	7,061	10,074	61,303	901	184	203	62,591
1986-1990	5,089	27,281	4,251	9,601	46,222	1,431	0	1	47,654
1991	1,372	11,271	928	15,238	28,809	341	0	0	29,150
1992	2,730	18,278	5,544	17,076	43,628	68	0	0	43,696
1993	56	12,171	1,835	16,010	30,072	255	0	0	30,327
1994	-	-	-	-	-	785	0	0	785
1995	-	-	-	3	3	1,826	0	0	1,829
1996	-	-	-	-	-	1,490	0	0	1,490
1997	0	339	2,294	3,785	6,418	1,362	0	0	7,780
1998	-	79	1,690	4,160	5,929	0	0	0	5,929
1999	0	4,144	614	12,698	17,456	172	0	0	17,628
2000	553	755	1,413	7,548	10,269	1,035	0	0	11,304
2001	944	12,903	1,129	6,253	21,229	6,309	0	0	27,538
2002	1,756	30,329	3,026	18,708	53,819	7,701	0	0	61,520
2003	1,920	16,773	6,995	30,514	56,202	4,599	0	0	60,801
2004	358	11,088	4,842	19,084	35,372	0	0	0	35,372
2005 ^{b/}	1,486	15,178	6,411	11,991	35,066	0	0	0	35,066
2006 ^{b/}	2,124	2,557	7,877	4,211	16,769	0	0	0	16,769

TABLE A-11. Summary of **Washington non-Indian commercial** troll salmon fishing **effort** in days fished and **landings in numbers** of fish by catch area. (Page 2 of 2)

Year or Avg.	Ilwaco	Westport	La Push	Neah Bay ^{a/}	Washington Subtotal	Oregon	California	Alaska	Total
COHO LANDINGS									
1976-1980	136,926	207,515	203,330	156,502	704,272	21,460	1,595	15,218	742,545
1981-1985	32,087	63,633	34,020	42,272	152,480	8,260	33	876	161,649
1986-1990	23,765	15,616	4,139	19,563	54,379	1,501	0	103	55,983
1991	16,248	12,393	1,405	24,124	54,170	2,877	0	2,162	59,209
1992	1,084	5,153	3,778	7,664	17,679	57	0	299	18,035
1993	538	8,521	1,701	3,163	13,923	5	0	0	13,928
1994	-	-	-	-	-	0	0	0	0
1995	-	-	4,621	20,805	25,426	0	0	0	25,426
1996	-	4,075	409	13,042	17,526	0	0	0	17,526
1997	-	-	-	-	-	0	0	0	0
1998	-	-	-	-	-	0	0	0	0
1999	27	618	1,292	1,913	3,850	0	0	0	3,850
2000	2,799	2,468	-	-	5,267	0	0	0	5,267
2001	1,458	6,209	165	280	8,112	91	0	0	8,203
2002	127	53	-	-	180	0	0	0	180
2003	1,290	3,200	2,784	1,683	8,957	7	0	0	8,964
2004	1,130	6,365	3,175	2,623	13,293	0	0	0	13,293
2005 ^{b/}	638	373	94	337	1,442	0	0	0	1,442
2006 ^{b/}	74	184	766	241	1,265	0	0	0	1,265
PINK LANDINGS^{c/}									
1976-1980	3,598	27,219	143,277	238,787	412,880	1,829	0	2,380	417,089
1981-1985	1,272	7,589	22,914	107,620	139,394	342	1	263	140,000
1986-1990	45	412	364	18,894	19,714	19	0	0	19,733
1991	59	7	2,574	40,943	43,583	2,877	0	2,162	48,622
1992	0	0	0	0	0	57	0	299	356
1993	0	15	30	2,816	2,861	5	0	0	2,866
1994	0	0	0	0	0	0	0	0	0
1995	-	-	2,715	28,217	30,932	0	0	0	30,932
1996	0	0	0	0	0	0	0	0	0
1997	0	1	0	4	5	0	0	0	5
1998	0	0	0	0	0	0	0	0	0
1999	0	2	13	38	53	0	0	0	53
2000	0	0	0	0	0	0	0	0	0
2001	2	14	0	16	32	91	0	0	123
2002	0	0	0	0	0	0	0	0	0
2003	36	37	108	70	251	7	0	0	258
2004	0	0	0	0	0	0	0	0	0
2005 ^{b/}	0	3	5	0	8	0	0	0	8
2006 ^{b/}	0	0	0	0	0	0	0	0	0

a/ Neah Bay data includes landings from Subarea 4B.

b/ Preliminary.

c/ Landings seen in odd-years only, averages are odd-year average.

TABLE A-12. Washington non-Indian commercial troll salmon fishing effort in days fished by catch area and month.^{a/} (Page 1 of 3)

Year or Avg.	May	June	July	Aug.	Sept. ^{b/}	Oct.	Season
<u>Neah Bay^{c/}</u>							
1976-1980	656	402	3,064	4,198	1,734	-	9,707
1981-1985	416	53	1,662	1,332	14	-	3,111
1986-1990	480	178	8	434	-	-	928
1991	786	343	-	958	207	-	2,294
1992	569	486	290	174	-	-	1,519
1993	602	420	302	146	-	-	1,470
1994	-	-	-	-	-	-	-
1995	-	-	-	345	56	-	401
1996	-	-	108	147	-	-	255
1997	168	62	-	-	-	-	230
1998	87	8	-	-	-	-	95
1999	154	105	84	29	-	-	372
2000	149	75	-	-	-	-	224
2001	84	81	49	-	-	-	214
2002	97	81	139	80	-	-	397
2003	280	92	150	132	14	-	668
2004	198	1	160	116	33	-	508
2005 ^{d/}	164	24	149	146	-	-	483
2006 ^{d/}	144	89	15	54	38	-	340
<u>La Push</u>							
1976-1980	570	541	3,812	3,609	1,143	-	9,446
1981-1985	175	25	1,199	505	-	-	1,553
1986-1990	186	110	5	136	15	-	300
1991	70	39	-	52	13	-	174
1992	103	170	133	82	-	-	488
1993	49	47	121	23	-	-	240
1994	-	-	-	-	-	-	-
1995	-	-	-	52	18	-	70
1996	-	-	11	7	-	-	18
1997	54	66	-	-	-	-	120
1998	34	4	-	-	-	-	38
1999	11	0	12	9	5	-	37
2000	44	20	-	-	-	-	64
2001	29	4	6	-	-	-	39
2002	0	3	53	38	-	-	94
2003	42	24	148	91	8	-	313
2004	17	4	105	99	21	-	246
2005 ^{d/}	65	23	69	125	-	-	282
2006 ^{d/}	39	179	63	209	107	-	597

TABLE A-12. **Washington non-Indian commercial troll salmon fishing effort** in days fished by catch area and month.^{a/} (Page 2 of 3)

Year or Avg.	May	June	July	Aug.	Sept. ^{b/}	Oct.	Season
<u>Westport</u>							
1976-1980	2,255	1,320	5,000	4,231	2,218	-	15,023
1981-1985	2,109	250	2,790	1,087	-	-	5,194
1986-1990	1,723	614	855	390	-	-	2,619
1991	755	603	-	171	230	-	1,759
1992	1,216	583	429	342	-	-	2,570
1993	585	470	274	193	387	-	1,909
1994	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-
1996	-	-	62	77	-	-	139
1997	72	30	-	-	-	-	102
1998	6	0	-	-	-	-	6
1999	106	126	39	48	1	-	320
2000	0	0	-	71	3	-	74
2001	96	127	104	70	38	-	435
2002	331	99	228	124	-	-	782
2003	99	79	178	192	55	-	603
2004	245	5	127	127	71	-	575
2005 ^{d/}	263	57	119	131	-	-	570
2006 ^{d/}	176	113	21	33	24	-	367
<u>Ilwaco</u>							
1976-1980	695	673	3,199	2,907	1,668	-	9,007
1981-1985	566	97	1,092	710	568	-	1,961
1986-1990	197	61	284	583	578	-	871
1991	135	16	-	438	56	-	645
1992	146	10	83	33	-	-	272
1993	3	2	43	9	31	-	88
1994	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-
1997	0	0	-	-	-	-	0
1998	0	0	-	-	-	-	-
1999	0	0	-	-	-	-	0
2000	0	0	-	48	11	-	59
2001	24	1	13	26	12	-	76
2002	16	1	26	22	-	-	65
2003	18	4	41	32	19	-	114
2004	3	3	16	18	12	-	52
2005 ^{d/}	14	15	25	49	-	-	103
2006 ^{d/}	71	54	1	2	6	-	134

TABLE A-12. **Washington non-Indian commercial troll salmon fishing effort** in days fished by catch area and month.^{a/} (Page 3 of 3)

Year or Avg.	May	June	July	Aug.	Sept. ^{b/}	Oct.	Season
Statewide Total							
1976-1980	4,177	2,800	15,075	14,944	6,187	-	43,184
1981-1985	3,266	382	6,469	2,956	291	-	11,819
1986-1990	2,452	876	580	1,100	585	-	4,718
1991	1,746	1,001	-	1,619	506	-	4,872
1992	2,034	1,249	935	631	-	-	4,849
1993	1,239	939	740	371	418	-	3,707
1994	-	-	-	-	-	-	-
1995	-	-	-	397	74	-	-
1996	-	-	181	231	-	-	412
1997	294	158	-	-	-	-	452
1998	127	12	-	-	-	-	139
1999	271	231	135	86	6	-	729
2000	193	95	-	119	14	-	421
2001	233	213	172	96	50	-	764
2002	444	184	446	264	-	-	1,338
2003	439	199	517	447	96	-	1,698
2004	463	13	408	360	137	-	1,381
2005 ^{d/}	506	119	362	451	-	-	1,438
2006 ^{d/}	430	435	100	298	175	-	1,438

a/ Summary of Washington Department of Fish and Wildlife fish receiving ticket information by statistical month, excluding Washington landings from Oregon, California, and Alaska.

b/ Data for September includes any effort after September.

c/ Neah Bay area includes effort and catches from Strait of Juan de Fuca Area 4B.

d/ Preliminary.

TABLE A-13. Washington non-Indian commercial troll Chinook, coho, and pink salmon landings in numbers of fish by catch area and month.^{a/} (Page 1 of 3)

TABLE A-15. Washington non-Indian commercial fishery for chinook, coho, and pink salmon landings in numbers of fish by catch area and month. (Page 1 of 5)																		
Year or Avg	May	June	July	Aug.	Sept. ^{b/}	Season	May	June	July	Aug.	Sept. ^{b/}	Season	May	June	July	Aug.	Sept. ^{b/}	Season
CHINOOK						COHO						PINKS						
<u>Neah Bay^{c/}</u>																		
1976-1980	6,781	3,805	12,440	8,782	2,659	33,934	-	19,014	67,297	58,787	33,270	156,502	45	235	42,003	192,169	4,336	238,787
1981-1985	3,293	532	6,289	1,424	31	10,074	-	-	43,965	15,853	100	42,272	113	20	38,466	103,127	415	107,620
1986-1990	8,157	4,180	74	672	-	9,601	-	-	776	24,066	-	19,563	0	-	1,524	36,263	-	18,894
1991	8,814	5,479	-	579	366	15,238	-	-	-	18,750	5,374	24,124	3	16	-	40,642	282	40,943
1992	9,073	6,191	979	833	-	17,076	-	-	4,571	3,093	-	7,664	-	-	-	-	-	-
1993	8,566	5,366	1,797	281	-	16,010	-	-	2,184	979	-	3,163	14	1	64	2,737	-	2,816
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	3	-	3	-	-	-	15,593	5,212	20,805	-	-	-	27,429	788	28,217
1996	-	-	-	-	-	-	-	-	5,516	7,526	-	13,042	-	-	-	-	-	-
1997	3,236	549	-	-	-	3,785	-	-	-	-	-	-	2	2	-	-	-	4
1998	4,043	117	-	-	-	4,160	-	-	-	-	-	-	-	-	-	-	-	-
1999	2,808	4,938	3,428	1,524	-	12,698	-	-	477	1,436	-	1,913	0	0	30	8	-	38
2000	5,462	2,086	-	-	-	7,548	-	-	-	-	-	-	-	-	-	-	-	-
2001	2,072	2,284	1,897	-	-	6,253	-	-	280	-	-	280	1	8	7	-	-	16
2002	5,626	4,680	5,589	2,813	-	18,708	-	-	-	-	-	-	-	-	-	-	-	-
2003	13,364	4,385	6,554	5,848	363	30,514	-	-	706	866	111	1,683	0	0	47	23	0	70
2004	7,128	510	4,685	5,727	1,034	19,084	-	-	647	1,745	231	2,623	-	-	-	-	-	-
2005 ^{d/}	4,929	595	3,285	3,182	-	11,991	-	-	62	275	-	337	0	0	0	0	-	0
2006 ^{d/}	2,434	545	109	662	461	4,211	-	-	12	206	23	241	-	-	-	-	-	-
<u>La Push</u>																		
1976-1980	6,487	5,777	19,674	10,996	2,548	44,972	-	46,357	112,723	63,373	22,453	203,330	281	156	39,572	102,977	293	143,277
1981-1985	1,879	257	4,971	1,313	-	7,061	-	-	29,610	8,820	-	34,020	39	-	7,150	15,725	-	22,914
1986-1990	3,225	2,241	40	527	11	4,251	-	-	350	5,397	16	4,139	0	-	728	0	-	364
1991	414	399	-	104	11	928	-	-	-	1,154	251	1,405	0	0	-	2,566	8	2,574
1992	1,543	2,027	1,136	838	-	5,544	-	-	2,202	1,576	-	3,778	-	-	-	-	-	-
1993	805	635	332	63	-	1,835	-	-	1,344	357	-	1,701	0	0	20	10	-	30
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	2,773	1,848	4,621	-	-	-	2,631	84	2,715
1996	-	-	-	-	-	-	-	-	245	164	-	409	-	-	-	-	-	-
1997	1,037	1,257	-	-	-	2,294	-	-	-	-	-	-	0	0	-	-	-	0
1998	1,625	65	-	-	-	1,690	-	-	-	-	-	-	-	-	-	-	-	-
1999	128	0	336	150	-	614	-	-	35	929	328	1,292	0	0	0	13	0	13
2000	1,072	341	-	-	-	1,413	-	-	-	-	-	-	-	-	-	-	-	-
2001	843	106	180	-	-	1,129	-	-	165	-	-	165	0	0	0	-	-	0
2002	0	72	1,803	1,151	-	3,026	-	-	-	-	-	-	-	-	-	-	-	-
2003	964	787	3,564	1,631	49	6,995	-	-	1,752	928	104	2,784	0	0	63	35	10	108
2004	237	273	1,974	2,056	302	4,842	-	-	1,059	1,847	269	3,175	-	-	-	-	-	-
2005 ^{d/}	1,939	450	1,469	2,553	-	6,411	-	-	2	92	-	94	4	0	0	1	-	5
2006 ^{d/}	723	2,371	844	2,658	1,281	7,877	-	-	100	551	115	766	-	-	-	-	-	-

TABLE A-13. **Washington non-Indian commercial** troll Chinook, coho, and pink salmon **landings in numbers** of fish by catch area and month.^{a/} (Page 2 of 3)

TABLE A-15. Washington Non-Indian commercial fish Chinook, coho, and pink salmon landings in numbers of fish by catch area and month. (Page 2 of 3)																		
Year or Avg.	May	June	July	Aug.	Sept. ^{b/}	Season	May	June	July	Aug.	Sept. ^{b/}	Season	May	June	July	Aug.	Sept. ^{b/}	Season
CHINOOK						COHO						PINKS						
<u>Westport</u>																		
1976-1980	28,493	15,087	18,923	13,306	5,291	81,100	97	69,485	123,307	52,640	17,651	207,515	239	53	13,298	13,510	119	27,219
1981-1985	20,022	2,850	13,121	3,661	-	34,995	-	-	55,366	11,022	-	63,633	78	20	4,976	3,773	-	7,589
1986-1990	17,976	6,478	17,639	1,489	-	27,281	-	-	34,992	9,157	-	15,616	115	182	390	23	-	412
1991	4,414	6,483	-	-	374	11,271	-	-	-	5,526	6,867	12,393	1	1	-	-	5	7
1992	8,961	4,375	3,130	1,812	-	18,278	-	-	2,716	2,437	-	5,153	-	-	-	-	-	-
1993	4,980	4,622	483	602	1,484	12,171	-	-	1,220	2,128	5,173	8,521	2	0	4	6	3	15
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	1,376	2,699	-	4,075	-	-	-	-	-	-
1997	241	98	-	-	-	339	-	-	-	-	-	-	0	1	-	-	-	1
1998	79	0	-	-	-	79	-	-	-	-	-	-	-	-	-	-	-	-
1999	1,255	2,137	266	486	-	4,144	-	-	161	448	9	618	0	1	1	0	-	2
2000	0	0	-	752	3	755	-	-	-	2,419	49	2,468	-	-	-	-	-	-
2001	4,177	4,798	2,863	846	219	12,903	-	-	1,524	2,070	2,615	6,209	0	1	13	0	0	14
2002	12,384	6,249	7,879	3,817	-	30,329	-	-	-	53	-	53	-	-	-	-	-	-
2003	3,592	3,636	4,254	4,577	714	16,773	-	-	821	1,961	418	3,200	0	0	32	5	0	37
2004	7,889	374	1,232	1,102	491	11,088	-	-	336	1,060	4,969	6,365	-	-	-	-	-	-
2005 ^{d/}	11,426	1,159	1,255	1,338	-	15,178	-	-	102	271	-	373	0	0	2	1	-	3
2006 ^{d/}	1,578	632	120	138	89	2,557	-	-	10	59	115	184	-	-	-	-	-	-
<u>Ilwaco</u>																		
1976-1980	7,990	6,369	3,933	3,312	3,188	23,518	6	92,879	72,101	28,995	17,251	136,926	5	5	1,817	1,348	423	3,598
1981-1985	6,464	1,263	2,309	603	418	9,172	-	-	29,801	14,415	13,373	32,087	4	-	931	647	-	1,272
1986-1990	2,998	901	1,324	1,518	937	5,089	-	-	10,844	19,388	13,026	23,765	0	0	87	1	1	45
1991	848	66	-	447	11	1,372	-	-	-	14,595	1,653	16,248	0	0	-	59	0	59
1992	2,584	38	93	15	-	2,730	-	-	783	301	-	1,084	-	-	-	-	-	-
1993	8	3	20	7	18	56	-	-	170	161	207	538	0	0	0	0	0	0
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	0	0	-	-	-	0	-	-	-	-	-	-	0	0	-	-	-	0
1998	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	0	0	-	-	-	0	-	-	-	27	-	27	0	0	-	-	-	0
2000	0	0	-	513	40	553	-	-	-	2,414	385	2,799	-	-	-	-	-	-
2001	518	9	111	148	158	944	-	-	351	594	513	1,458	0	0	0	2	0	2
2002	371	48	855	482	-	1,756	-	-	-	127	-	127	-	-	-	-	-	-
2003	790	110	486	383	151	1,920	-	-	417	512	361	1,290	0	0	34	2	0	36
2004	56	77	72	99	54	358	-	-	188	309	633	1,130	-	-	-	-	-	-
2005 ^{d/}	254	308	262	662	-	1,486	-	-	154	484	-	638	0	0	0	0	-	0
2006 ^{d/}	1,746	364	0	1	13	2,124	-	-	7	29	38	74	-	-	-	-	-	-

TABLE A-13. **Washington non-Indian commercial** troll Chinook, coho, and pink salmon **landings in numbers** of fish by catch area and month. ^{a/} (Page 3 of 3)

TABLE 4. FOR WASHINGTON: NON-MARKET COMMERCIAL FISH CATCHES AND PINK SALMON HARVESTS IN NUMBERS OF FISH BY SALMON AREA AND MONTH (Page 3 of 6)																		
Year or Avg.	May	June	July	Aug.	Sept. ^{b/}	Season	May	June	July	Aug.	Sept. ^{b/}	Season	May	June	July	Aug.	Sept. ^{b/}	Season
	CHINOOK						COHO						PINKS					
<u>Statewide Total</u>																		
1976-1980	49,751	29,764	54,970	36,395	12,644	183,524	36	227,735	375,428	203,795	79,481	704,272	570	449	96,689	310,003	5,170	412,880
1981-1985	31,659	4,389	26,113	5,153	225	61,303	-	-	140,300	37,526	4,524	152,480	234	33	51,212	87,639	415	139,394
1986-1990	30,079	11,970	9,576	2,950	943	46,222	-	-	23,869	49,522	13,034	54,379	115	182	2,729	36,287	1	19,714
1991	14,490	12,427	-	1,130	762	28,809	-	-	-	40,025	14,145	54,170	4	17	-	43,267	295	43,583
1992	22,161	12,631	5,338	3,498	-	43,628	-	-	10,272	7,407	-	17,679	-	-	-	-	-	-
1993	14,359	10,626	2,632	953	1,502	30,072	-	-	4,918	3,625	5,380	13,923	16	1	88	2,753	3	2,861
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	3	-	3	-	-	-	18,366	7,060	25,426	-	-	-	30,060	872	30,932
1996	-	-	-	-	-	-	-	-	7,137	10,389	-	17,526	-	-	-	-	-	-
1997	4,514	1,904	-	-	-	6,418	-	-	-	-	-	-	2	3	-	-	-	5
1998	5,747	182	-	-	-	5,929	-	-	-	-	-	-	-	-	-	-	-	-
1999	4,191	7,075	4,030	2,160	-	17,456	-	-	673	2,840	337	3,850	0	1	31	21	0	53
2000	6,534	2,427	-	1,265	43	10,269	-	-	-	4,833	434	5,267	-	-	-	-	-	-
2001	7,610	7,197	5,051	994	377	21,229	-	-	2,320	2,664	3,128	8,112	1	9	20	2	0	32
2002	18,381	11,049	16,126	8,263	-	53,819	-	-	-	180	-	180	-	-	-	-	-	-
2003	18,710	8,918	14,858	12,439	1,277	56,202	-	-	3,696	4,267	994	8,957	0	0	176	65	10	251
2004	15,310	1,234	7,963	8,984	1,881	35,372	-	-	2,230	4,961	6,102	13,293	-	-	-	-	-	-
2005 ^{d/}	18,548	2,512	6,271	7,735	-	35,066	-	-	320	1,122	-	1,442	4	0	2	2	-	8
2006 ^{d/}	6,481	3,912	1,073	3,459	1,844	16,769	-	-	129	845	291	1,265	-	-	-	-	-	-

a/ Summary of Washington Department of Fish and Wildlife fish receiving ticket information by statistical month excluding Washington landings from Oregon, California, and Alaska.

b/ Data for September include any catch after September.

c/ Cape Flattery area includes effort and catches from Strait of Juan de Fuca Area 4B.

d/ Preliminary.

TABLE A-14. Treaty Indian ocean troll salmon fishing effort in deliveries by catch area and month. (Page 1 of 3)

Year or Avg	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	Total May-Sept.	Year Total
<u>Area 4B</u>										
1976-1980	207	33	41	37	44	22	4	37	177	424
1981-1985	167	53	43	54	57	16	14	32	224	436
1986-1990	167	63	53	75	92	24	2	43	309	520
1991	127	46	27	48	137	0	50	33	258	468
1992	80	26	43	25	65	0	1	56	159	296
1993	98	78	44	74	52	17	0	18	265	381
1994	55	19	19	0	0	0	0	4	38	97
1995	16	5	0	0	65	0	0	19	70	105
1996	45	7	21	2	20	10	0	4	60	109
1997	9	17	21	0	46	10	0	2	94	105
1998	6	7	2	0	11	8	0	2	28	36
1999	6	19	12	0	35	2	0	1	68	75
2000	5	11	16	1	11	0	0	1	39	45
2001	22	42	33	47	60	23	0	5	205	232
2002	13	8	12	5	1	0	0	3	26	42
2003	5	2	1	2	0	3	0	2	8	15
2004	28	0	12	38	68	22	0	107	140	275
2005 ^{a/}	103	21	32	45	5	3	0	206	106	415
2006 ^{a/}	14	8	151	17	15	7	0	43	198	255
<u>Neah Bay</u>										
1976-1980	2	14	59	93	65	19	2	2	250	257
1981-1985	0	11	59	115	140	100	3	0	424	427
1986-1990	1	44	52	167	149	75	0	0	486	487
1991	0	50	53	167	135	0	0	0	405	405
1992	0	43	40	104	79	0	0	7	266	273
1993	0	43	48	140	139	142	0	0	512	512
1994	0	6	27	1	0	0	0	0	34	34
1995	0	5	0	1	123	0	0	0	129	129
1996	1	5	13	0	53	70	0	0	141	142
1997	0	8	26	0	74	40	0	0	148	148
1998	0	22	15	3	19	34	0	1	93	94
1999	0	23	25	5	78	69	0	0	200	200
2000	0	32	23	4	38	0	0	0	97	97
2001	0	11	31	74	112	79	0	0	307	307
2002	1	23	29	54	44	41	0	0	191	192
2003	2	21	25	61	53	40	0	0	200	202
2004	0	26	37	86	78	52	0	0	279	279
2005 ^{a/}	0	67	110	78	133	67	0	0	455	455
2006 ^{a/}	0	83	126	131	113	107	0	0	560	560

TABLE A-14. Treaty Indian ocean troll salmon fishing effort in deliveries by catch area and month. (Page 2 of 3)

Year or Avg.	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	Total May-Sept.	Year Total
<u>La Push</u>										
1976-1980	0	14	37	54	43	8	0	0	156	156
1981-1985	0	10	26	86	93	29	0	0	243	243
1986-1990	0	21	39	119	150	37	0	0	366	366
1991	0	13	13	81	299	0	0	0	406	406
1992	0	0	3	96	89	0	0	0	188	188
1993	0	1	2	43	97	27	0	0	170	170
1994	0	3	17	1	0	0	0	0	21	21
1995	0	0	0	0	14	0	0	0	14	14
1996	0	0	0	0	6	10	0	0	16	16
1997	0	0	0	0	0	0	0	0	0	0
1998	0	0	1	0	7	0	0	0	8	8
1999	0	0	2	0	3	0	0	0	5	5
2000	0	0	0	0	0	0	0	0	0	0
2001	0	0	0	0	0	2	0	0	2	2
2002	0	0	0	1	2	0	0	0	3	3
2003	0	0	1	0	0	0	0	0	1	1
2004 ^{b/}	0	0	0	2	2	0	0	0	4	4
2005 ^{a/b/}	0	1	0	3	3	1	0	0	8	8
2006 ^{a/b/}	0	2	7	10	8	0	5	0	27	32
<u>Westport</u>										
1976-1980	0	1	1	8	10	0	0	0	20	20
1981-1985	0	6	12	30	23	2	0	0	72	72
1986-1990	0	10	24	73	68	24	0	0	199	199
1991	0	3	9	39	28	0	0	0	79	79
1992	0	4	3	19	4	0	0	0	30	30
1993	0	0	2	72	119	52	0	0	245	245
1994	0	0	7	1	0	0	0	0	8	8
1995	0	0	0	0	111	0	0	0	111	111
1996	0	0	1	0	40	23	0	0	64	64
1997	0	0	1	0	44	12	0	0	57	57
1998	0	4	1	0	4	0	0	0	9	9
1999	0	1	7	0	1	0	0	0	9	9
2000	0	0	1	0	5	0	0	0	6	6
2001	0	0	1	1	0	0	0	0	2	2
2002	0	0	1	1	4	0	0	0	6	6
2003	0	1	0	0	4	2	0	0	7	7
2004	0	1	0	1	4	2	0	0	8	8
2005 ^{a/}	0	9	3	0	9	6	0	0	27	27
2006 ^{a/}	0	3	3	2	5	3	0	0	16	16

TABLE A-14. Treaty Indian ocean troll salmon fishing effort in deliveries by catch area and month. (Page 3 of 3)

Year or Avg.	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	Total May-Sept.	Year Total
Statewide Total										
1976-1980	209	61	137	192	162	50	6	39	603	858
1981-1985	167	79	141	284	313	146	17	32	963	1,179
1986-1990	168	138	168	434	460	161	2	43	1,360	1,572
1991	127	112	102	335	599	0	50	33	1,148	1,358
1992	80	73	89	244	237	0	1	63	643	787
1993	98	122	96	329	407	238	0	18	1,192	1,308
1994	55	28	70	3	0	0	0	4	101	160
1995	16	10	0	1	313	0	0	19	324	359
1996	46	12	35	2	119	113	0	4	281	331
1997	9	25	48	0	164	62	0	2	299	310
1998	6	33	19	3	41	42	0	3	138	147
1999	6	43	46	5	117	71	0	1	282	289
2000	5	43	40	5	54	0	0	1	142	148
2001	22	53	65	122	172	104	0	5	516	543
2002	14	31	42	61	51	41	0	3	226	243
2003	7	24	27	63	57	45	0	2	216	225
2004	28	27	49	127	152	76	0	107	431	566
2005 ^{a/}	103	98	145	126	150	77	0	206	596	905
2006 ^{a/}	14	96	287	160	141	117	5	43	801	863

a/ Preliminary.

b/ Effort in October occurred during ceremonial and subsistence fishery.

TABLE A-15. Treaty Indian ocean troll Chinook and coho salmon landings in numbers of fish by catch area and month. (Page 1 of 3)

Year or Avg.	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	Total		Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	Total																
									May-Sept.	Year									May-Sept.	Year															
CHINOOK										COHO																									
Area 4B																																			
1976-1980	8,521	360	641	98	103	27	10	776	1,229	10,536	406	23	499	191	252	152	5	61	1,116	1,589															
1981-1985	13,109	1,066	248	94	49	29	145	823	1,485	15,562	42	245	184	825	1,015	208	36	7	2,476	2,561															
1986-1990	6,009	2,540	1,746	284	323	63	12	2,677	4,956	13,654	9	0	65	2,150	7,766	813	7	13	10,794	10,822															
1991	5,203	740	418	97	327	0	147	714	1,582	7,646	8	0	0	987	6,685	0	498	15	7,672	8,193															
1992	4,131	664	2,217	37	800	0	0	3,107	3,718	10,956	0	0	0	955	9,265	0	15	18	10,220	10,253															
1993	6,280	527	1,207	166	40	12	0	544	1,952	8,776	1	0	0	829	1,143	150	0	0	2,122	2,123															
1994	1,116	248	484	0	0	0	0	99	732	1,947	0	0	0	0	0	0	0	0	0	0															
1995	1,014	158	0	0	242	0	0	875	400	2,289	0	0	0	0	3,087	0	0	0	3,087	3,087															
1996	2,555	437	1,440	120	75	106	0	81	2,178	4,814	0	0	0	0	936	189	0	0	1,125	1,125															
1997	439	644	416	0	213	26	0	16	1,299	1,754	0	0	0	0	3,517	279	0	0	3,796	3,796															
1998	97	92	23	0	136	21	0	40	272	409	0	0	0	0	434	175	0	0	609	609															
1999	237	386	145	0	132	0	0	15	663	915	0	0	0	0	1,048	17	0	0	1,065	1,065															
2000	141	298	273	7	9	0	0	10	587	738	0	0	0	0	170	0	0	0	170	170															
2001	1,364	1,208	4,293	928	478	137	0	273	7,044	8,681	0	0	1	2,543	3,103	730	0	1	6,377	6,378															
2002	366	467	848	113	31	0	0	25	1,459	1,850	0	0	0	0	0	0	0	0	0	0															
2003	187	25	46	14	0	2	0	3	87	277	0	0	0	4	0	141	0	0	145	145															
2004	1,555	0	2,544	1,032	1,910	1,647	0	14,588	7,133	23,276	0	0	0	1,958	12,817	1,829	0	108	16,604	16,712															
2005 ^{a/}	999	238	3,764	522	6	6	0	3,935	4,536	9,470	0	0	0	2,040	64	25	0	41	2,129	2,170															
2006 ^{a/}	142	154	2,266	58	88	52	0	500	2,618	3,260	0	1	3	79	22	30	0	0	135	135															
Neah Bay																																			
1976-1980	8	297	1,140	1,168	146	16	1	9	2,766	2,784	1	57	3,527	1,486	483	256	6	2	5,809	5,818															
1981-1985	0	520	1,191	2,406	673	772	54	11	5,561	5,626	0	8	4,647	9,017	16,515	13,404	18	0	43,590	43,609															
1986-1990	6	2,604	2,317	3,114	2,657	685	0	0	11,376	11,382	0	3	106	16,829	16,934	7,241	0	0	41,114	41,114															
1991	0	3,469	4,844	5,495	2,361	0	0	0	16,169	16,169	0	0	0	29,190	14,255	0	0	0	43,445	43,445															
1992	0	8,107	3,284	3,616	2,298	0	0	80	17,305	17,385	0	2	3	30,710	16,695	0	0	5	47,410	47,415															
1993	0	6,779	3,965	4,852	1,919	2,357	0	0	19,872	19,872	0	1	0	3,426	13,264	24,079	0	0	40,770	40,770															
1994	0	104	1,940	1	0	0	0	0	2,045	2,045	0	0	0	0	0	0	0	0	0	0															
1995	0	540	0	23	6,943	0	0	0	7,506	7,506	0	0	0	0	25,084	0	0	0	25,084	25,084															
1996	6	997	534	0	4,702	3,421	0	0	9,654	9,660	0	0	0	0	2,852	12,054	0	0	14,906	14,906															
1997	0	175	7,053	0	3,451	888	0	0	11,567	11,567	0	0	0	0	6,008	3,411	0	0	9,419	9,419															
1998	0	5,056	4,358	47	3,470	1,119	0	85	14,050	14,135	0	0	0	74	3,115	4,037	0	0	7,226	7,226															
1999	0	2,142	15,290	1,530	3,887	3,619	0	0	26,468	26,468	0	0	0	0	11,932	20,196	0	0	32,128	32,128															
2000	0	2,587	2,552	189	1,329	0	0	0	6,657	6,657	0	0	1	0	21,230	0	0	0	21,231	21,231															
2001	0	1,070	9,047	5,438	2,510	3,171	0	0	21,236	21,236	0	0	11	5,967	24,881	21,335	0	0	52,194	52,194															
2002	34	4,897	10,263	11,805	8,005	3,123	0	0	38,093	38,127	0	1	1	3,449	4,530	9,042	0	0	17,023	17,023															
2003	21	2,821	12,946	12,921	5,023	1,031	0	0	34,742	34,763	98	3	0	4,445	4,164	2,012	0	0	10,624	10,722															
2004	0	9,809	14,433	9,670	4,978	3,387	0	0	42,277	42,277	0	3	3	14,114	23,814	7,361	0	0	45,295	45,295															
2005 ^{a/}	0	4,733	14,608	4,272	7,105	3,097	0	0	33,815	33,815	0	3	1	1,715	15,460	3,972	0	0	21,151	21,151															
2006 ^{a/}	0	2,599	5,857	6,459	5,579	4,789	0	0	25,283	25,283	0	16	98	9,810	9,365	10,406	0	0	29,695	29,695															

TABLE A-15. Treaty Indian ocean troll Chinook and coho salmon landings in numbers of fish by catch area and month. (Page 2 of 3)

Year or	Total										Total									
Avg.	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	May-Sept.	Year	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	May-Sept.	Year
CHINOOK										COHO										
<u>La Push</u>																				
1976-1980	0	118	243	483	142	27	0	0	1,013	1,013	0	641	3,624	1,229	482	34	0	0	6,010	6,010
1981-1985	0	243	321	827	508	212	0	0	2,112	2,112	0	30	2,251	5,302	6,393	2,855	0	0	16,832	16,832
1986-1990	0	1,062	944	2,044	744	259	0	0	5,054	5,054	0	0	2,694	8,430	7,021	2,250	0	0	20,395	20,395
1991	0	189	212	534	1,659	0	0	0	2,594	2,594	0	0	0	4,936	15,520	0	0	0	20,456	20,456
1992	0	0	27	1,041	925	0	0	0	1,993	1,993	0	0	0	8,454	9,371	0	0	0	17,825	17,825
1993	0	19	5	746	404	112	0	0	1,286	1,286	0	0	0	926	5,487	1,005	0	0	7,418	7,418
1994	0	97	1,148	4	0	0	0	0	1,249	1,249	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	18	0	0	0	18	18	0	0	0	0	237	0	0	0	237	237
1996	0	0	0	0	6	34	0	0	40	40	0	0	0	0	105	474	0	0	579	579
1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	26	0	113	0	0	0	139	139	0	0	0	0	115	0	0	0	115	115
1999	0	0	42	0	62	0	0	0	104	104	0	0	0	0	143	0	0	0	143	143
2000	0	0	13	0	18	0	0	0	31	31	0	0	0	0	151	0	0	0	151	151
2001	0	0	0	0	0	3	0	0	3	3	0	0	0	0	0	24	0	0	24	24
2002 ^{b/}	0	0	0	124	4	0	50	0	128	178	0	0	0	0	372	0	200	0	372	572
2003 ^{b/}	0	0	47	0	0	0	75	0	47	122	0	0	0	0	0	0	200	0	0	200
2004 ^{b/}	0	0	0	50	6	0	50	0	56	106	0	0	0	61	23	0	100	0	84	184
2005 ^{a/}	0	258	1	177	188	74	0	0	698	698	0	0	0	1	26	36	0	0	63	63
2006 ^{a/}	0	66	506	548	809	0	15	0	1,929	1,944	0	0	0	459	1,236	0	5	0	1,695	1,700
<u>Westport</u>																				
1976-1980	0	12	14	27	24	1	0	0	78	78	0	0	27	10	58	1	0	0	95	95
1981-1985	0	321	123	310	105	6	0	0	865	865	0	0	353	1,262	561	199	0	0	2,376	2,376
1986-1990	0	671	949	1,283	783	241	0	0	3,926	3,926	0	0	1,391	4,901	4,221	747	0	0	11,260	11,260
1991	0	58	565	749	150	0	0	0	1,522	1,522	0	0	0	3,830	1,551	0	0	0	5,381	5,381
1992	0	16	10	30	4	0	0	0	60	60	0	0	0	96	38	0	0	0	134	134
1993	0	0	40	159	1,285	372	0	0	1,856	1,856	0	0	0	1,763	5,526	1,141	0	0	8,430	8,430
1994	0	0	541	3	0	0	0	0	544	544	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	1,841	0	0	0	1,841	1,841	0	0	0	0	2,982	0	0	0	2,982	2,982
1996	0	39	0	337	62	0	0	0	438	438	0	0	0	0	762	1,168	0	0	1,930	1,930
1997	0	0	17	0	1,056	222	0	0	1,295	1,295	0	0	0	0	1,956	653	0	0	2,609	2,609
1998	0	41	35	0	141	8	0	0	225	225	0	0	0	0	191	13	0	0	204	204
1999	0	8	189	0	20	0	0	0	217	217	0	0	0	0	28	0	0	0	28	28
2000	0	0	214	0	149	0	0	0	363	363	0	0	0	0	623	0	0	0	623	623
2001	0	0	365	195	0	0	0	0	560	560	0	0	0	0	0	0	0	0	0	0
2002	0	0	95	37	34	0	0	0	166	166	0	0	0	0	27	0	0	0	27	27
2003	0	10	0	0	209	77	0	0	296	296	0	0	0	0	112	61	0	0	173	173
2004	0	138	0	13	66	52	0	0	269	269	0	0	0	0	30	84	0	0	114	114
2005 ^{a/}	0	1,629	1	0	801	495	0	0	2,926	2,926	0	0	0	0	399	255	0	0	654	654
2006 ^{a/}	0	29	44	34	31	62	0	0	200	200	0	0	0	5	36	124	0	0	165	165

TABLE A-15. Treaty Indian ocean troll Chinook and coho salmon landings in numbers of fish by catch area and month. (Page 3 of 3)

Year or	Total																				Total	
Avg.	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	May-Sept.	Year	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	May-Sept.	Year		
CHINOOK										COHO												
Statewide Total																						
1976-1980	8,529	787	2,037	1,776	415	70	11	785	5,086	14,411	407	720	7,677	2,915	1,275	443	11	63	13,030	13,512		
1981-1985	13,109	2,150	1,883	3,636	1,336	1,018	198	834	10,023	24,164	42	283	7,435	16,406	24,484	16,666	54	7	65,274	65,377		
1986-1990	6,015	6,877	5,955	6,726	4,506	1,248	12	2,677	25,312	34,016	9	3	4,256	32,310	35,942	11,051	7	13	83,563	83,591		
1991	5,203	4,456	6,039	6,875	4,497	0	147	714	21,867	27,931	8	0	0	38,943	38,011	0	498	15	76,954	77,475		
1992	4,131	8,787	5,538	4,724	4,027	0	0	3,187	23,076	30,394	0	2	3	40,215	35,369	0	15	23	75,589	75,627		
1993	6,280	7,325	5,217	5,923	3,648	2,853	0	544	24,966	31,790	1	1	0	6,944	25,420	26,375	0	0	58,740	58,741		
1994	1,116	449	4,113	8	0	0	0	99	4,570	5,785	0	0	0	0	0	0	0	0	0	0		
1995	1,014	698	0	23	9,044	0	0	875	9,765	11,654	0	0	0	0	31,390	0	0	0	31,390	31,390		
1996	2,561	1,473	1,974	457	4,845	3,561	0	81	12,310	14,952	0	0	0	0	4,655	13,885	0	0	18,540	18,540		
1997	439	819	7,486	0	4,720	1,136	0	16	14,161	14,616	0	0	0	0	11,481	4,343	0	0	15,824	15,824		
1998	97	5,189	4,442	47	3,860	1,148	0	125	14,686	14,908	0	0	0	74	3,855	4,225	0	0	8,154	8,154		
1999	237	2,536	15,666	1,530	4,101	3,619	0	15	27,452	27,704	0	0	0	0	13,151	20,213	0	0	33,364	33,364		
2000	141	2,885	3,052	196	1,505	0	0	10	7,638	7,789	0	0	1	0	22,174	0	0	0	22,175	22,175		
2001	1,364	2,278	13,705	6,561	2,988	3,311	0	273	28,843	30,480	0	0	12	8,510	27,984	22,089	0	1	58,595	58,596		
2002 ^{b/}	400	5,364	11,206	12,079	8,074	3,123	50	25	39,846	40,321	0	1	1	3,449	4,929	9,042	200	0	17,422	17,622		
2003 ^{b/}	208	2,856	13,039	12,935	5,232	1,110	75	3	35,172	35,458	98	3	0	4,449	4,276	2,214	200	0	10,942	11,240		
2004 ^{b/}	1,555	9,947	16,977	10,765	6,960	5,086	50	14,588	49,735	65,928	0	3	3	16,133	36,684	9,274	100	108	62,097	62,305		
2005 ^{a/}	999	6,858	18,374	4,971	8,100	3,672	0	3,935	41,975	46,909	0	3	1	3,756	15,949	4,288	0	41	23,997	24,038		
2006 ^{a/}	142	2,848	8,673	7,099	6,507	4,903	15	500	30,030	30,687	0	17	101	10,353	10,659	10,560	5	0	31,690	31,695		

a/ Preliminary.

b/ October catches taken during ceremonial and subsistence fishery.

TABLE A-16. Treaty Indian ocean troll pink salmon landings (odd years only) in numbers of fish by catch area and month.
(Page 1 of 2)

Page 1 of 27

Year or									Total	
Avg. ^{a/}	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	May-Sept.	Year
<u>Area 4B</u>										
1977-1979	1	2	267	158	649	16	0	0	1,092	1,092
1981-1985	0	23	2	108	698	7	0	0	838	838
1987-1989	0	0	0	1,395	643	142	0	0	2,179	2,179
1991	0	0	0	74	1,260	0	0	0	1,334	1,334
1993	0	0	0	54	123	5	0	0	186	186
1995	0	0	0	0	2,317	0	0	0	2,317	2,317
1997	0	0	0	0	696	10	0	0	706	706
1999	0	0	0	0	404	4	0	0	479	479
2001	0	0	0	504	334	15	0	0	1,028	1,028
2003	0	0	0	0	0	0	0	0	1	1
2005	0	0	0	154	88	0	0	0	242	242
<u>Neah Bay</u>										
1977-1979	0	42	91	636	1,339	5	0	0	2,112	2,112
1981-1985	0	0	94	1,340	6,684	302	0	0	8,419	8,419
1987-1989	0	2	4	6,553	2,901	377	0	0	9,837	9,837
1991	0	0	2	999	1,643	0	0	0	2,644	2,644
1993	0	0	0	155	1,774	747	0	0	2,676	2,676
1995	0	0	0	0	8,589	0	0	0	8,589	8,589
1997	0	0	0	0	1,061	43	0	0	1,104	1,104
1999	0	0	0	0	984	104	0	0	1,088	1,088
2001	0	11	0	192	1,203	192	0	0	1,598	1,598
2003	0	0	0	172	41	23	0	0	236	236
2005	0	0	0	32	102	3	0	0	137	137
<u>La Push</u>										
1977-1979	0	5	1,192	259	1,032	0	0	0	2,488	2,488
1981-1985	0	7	100	654	418	12	0	0	1,191	1,191
1987-1989	0	3	6	625	667	65	0	0	1,365	1,365
1991	0	0	0	75	449	0	0	0	524	524
1993	0	0	0	120	351	31	0	0	502	502
1995	0	0	0	0	32	0	0	0	32	32
1997	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0
2001	0	0	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	0	1	0	0	0	1	1
<u>Westport</u>										
1977-1979	0	0	0	0	0	0	0	0	0	0
1981-1985	0	1	18	106	6	0	0	0	132	132
1987-1989	0	0	0	419	44	8	0	0	471	471
1991	0	0	0	0	4	0	0	0	4	4
1993	0	0	0	20	13	0	0	0	33	33
1995	0	0	0	0	2	0	0	0	2	2
1997	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0
2001	0	0	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	3	3	0	0	0	6	6

TABLE A-16. Treaty Indian ocean troll pink salmon landings (odd years only) in numbers of fish by catch area and month. (Page 2 of 2)

Year or Avg. ^{a/}	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	Total	
									May-Sept.	Year
Total Statewide										
1977-1979	1	49	1,550	1,053	3,019	21	0	0	5,691	5,692
1981-1985	0	32	214	2,208	7,806	320	0	0	10,580	10,580
1987-1989	0	5	10	8,991	4,254	591	0	0	13,851	13,851
1991	0	0	2	1,148	3,356	0	0	0	4,506	4,506
1993	0	0	0	349	2,261	783	0	0	3,397	3,397
1995	0	0	0	0	10,940	0	0	0	10,940	10,940
1997	0	0	0	0	1,757	53	0	0	1,810	1,810
1999	0	0	0	0	1,388	108	0	0	1,567	1,567
2001	0	11	0	696	1,537	207	0	0	2,626	2,626
2003	0	0	0	172	41	23	0	0	237	237
2005	0	0	0	189	194	3	0	0	386	386

a/ Odd year averages only.

TABLE A-17. **Washington ocean recreational** salmon fishing **effort** in angler trips by port and statistical month. (Page 1 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
<u>Neah Bay</u>								
1976-1980	746	1,094	4,100	13,027	17,885	6,974	529	44,206
1981-1985	80	557	979	9,338	13,391	3,382	126	27,495
1986-1990	-	431	491	13,953	7,341	2,193	-	23,175
1991 ^{a/}	-	-	4	16,192	9,236	9	-	25,441
1992 ^{a/}	-	1,344	-	10,375	7,949	50	-	19,718
1993 ^{a/}	-	1,172	-	11,093	11,245	3,819	-	27,329
1994	-	-	-	-	-	-	-	-
1995 ^{a/}	-	-	-	-	9,391	98	-	9,489
1996 ^{a/}	-	-	-	-	9,786	1,096	-	10,882
1997 ^{a/}	-	-	-	2,883	1,897	21	-	4,801
1998 ^{a/}	-	-	-	-	6,367	-	-	6,367
1999	-	-	-	2,524	3,950	1,628	-	8,102
2000 ^{a/}	-	-	-	4,980	4,727	1,646	-	11,353
2001	-	-	-	10,450	6,516	981	-	17,947
2002	-	576	2,533	3,957	5,467	1,151	-	13,684
2003	-	-	1,372	10,109	8,071	897	-	20,449
2004	-	-	435	14,337	10,376	993	-	26,141
2005	-	-	-	11,462	4,977	1,972	-	18,410
2006 ^{b/}	-	-	946	6,600	4,935	928	-	13,409
<u>La Push</u>								
1976-1980	24	344	1,341	7,932	11,716	3,916	436	24,736
1981-1985	-	0	77	1,119	2,075	231	239	3,332
1986-1990	-	66	60	1,768	749	154	113	2,478
1991	-	-	-	3,528	6	-	-	3,534
1992	-	-	-	1,675	513	266	8	2,462
1993	-	-	-	1,505	762	633	-	2,900
1994	-	-	-	-	-	-	-	-
1995	-	-	-	-	911	540	-	1,451
1996	-	-	-	-	781	506	-	1,287
1997	-	-	-	925	0	-	-	925
1998	-	-	-	-	578	-	-	578
1999	-	-	-	1,022	1,230	669	-	2,921
2000	-	-	-	1,233	742	-	-	1,975
2001	-	-	-	1,941	960	247	239	3,387
2002	-	59	231	1,089	1,350	568	113	3,410
2003	-	-	244	1,774	1,595	628	128	4,369
2004	-	-	123	1,883	1,484	1,053	20	4,563
2005	-	-	-	1,867	2,039	895	160	4,961
2006 ^{b/}	-	-	173	1,029	1,943	740	258	4,143

TABLE A-17. **Washington ocean recreational** salmon fishing **effort** in angler trips by port and statistical month. (Page 2 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
<u>Westport</u>								
1976-1980	4,720	12,340	37,368	66,487	66,306	23,133	3,454	210,286
1981-1985	-	3,607	20,142	34,172	23,472	2,602	208	78,766
1986-1990	-	1,451	3,663	30,256	15,991	5,000	40	52,492
1991	-	-	4,955	35,028	8,900	3,855	-	52,738
1992	-	-	-	22,868	20,722	9,405	706	53,701
1993	-	-	-	17,753	19,390	13,747	-	50,890
1994	-	-	-	-	-	-	-	-
1995	-	-	-	4,859	11,572	5,279	-	21,710
1996	-	-	-	4,458	9,638	1,392	-	15,488
1997	-	-	-	7,986	8,147	1,150	-	17,283
1998	-	-	-	-	7,068	943	-	8,011
1999	-	-	-	5,329	9,427	4,319	-	19,075
2000	-	-	-	12,343	7,491	-	-	19,834
2001	-	-	-	25,363	16,256	8,063	-	49,682
2002	-	1,861	10,849	16,358	12,343	-	-	41,411
2003	-	-	4,278	20,747	18,302	4,722	-	48,049
2004	-	-	1,455	15,722	15,045	5,967	-	38,189
2005	-	-	1,119	12,560	15,488	6,003	-	35,170
2006 ^{b/}	-	-	-	8,857	13,802	1,883	-	24,541
<u>Ilwaco^{c/}</u>								
1976-1980	914	4,670	20,809	41,988	62,372	18,676	2,127	150,581
1981-1985	-	921	7,560	23,249	21,383	3,652	721	53,751
1986-1990	-	298	1,641	19,733	19,450	1,782	-	41,268
1991	-	-	3,320	26,055	11,294	4,798	-	45,467
1992	-	-	0	25,611	4,505	2,903	-	33,019
1993	-	-	-	12,914	19,681	15,056	-	47,651
1994	-	-	-	-	-	-	-	-
1995	-	-	-	3,821	11,583	6,890	-	22,294
1996	-	-	-	3,252	8,745	3,596	-	15,593
1997	-	-	-	4,556	2,134	-	-	6,690
1998	-	-	-	-	4,277	420	-	4,697
1999	-	-	-	4,448	11,133	5,095	-	20,676
2000	-	-	-	6,842	8,915	-	-	15,757
2001	-	-	-	21,097	25,229	9,060	-	55,386
2002	-	215	1,290	9,004	18,137	8,016	-	36,662
2003	-	-	455	15,033	29,574	6,938	-	52,000
2004	-	-	597	11,662	23,716	7,836	-	43,811
2005	-	-	-	6,070	18,968	7,016	-	32,054
2006 ^{b/}	-	-	-	5,740	15,480	1,950	-	23,170

TABLE A-17. **Washington ocean recreational** salmon fishing **effort** in angler trips by port and statistical month. (Page 3 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
Statewide Total								
1976-1980	3,574	18,447	63,618	129,433	158,279	51,916	5,256	429,809
1981-1985	80	4,067	22,991	67,877	60,321	7,746	436	163,344
1986-1990	-	1,339	5,840	65,710	43,382	5,090	40	119,412
1991 ^{a/}	-	-	8,279	80,803	29,436	8,662	-	127,180
1992 ^{a/}	-	1,344	0	60,529	33,689	12,624	714	108,900
1993 ^{a/}	-	1,172	-	43,265	51,078	33,255	-	128,770
1994	-	-	-	-	-	-	-	-
1995 ^{a/}	-	-	-	8,680	33,457	12,807	-	54,944
1996 ^{a/}	-	-	-	7,710	28,950	6,590	-	43,250
1997 ^{a/}	-	-	-	16,350	12,178	1,171	-	29,699
1998 ^{a/}	-	-	-	-	18,290	1,363	-	19,653
1999	-	-	-	13,323	25,740	11,711	-	50,774
2000 ^{a/}	-	-	-	25,398	21,875	1,646	-	48,919
2001	-	-	-	58,851	48,961	18,351	239	126,402
2002	-	2,711	14,903	30,408	37,297	9,735	113	95,167
2003	-	-	6,349	47,663	57,542	13,185	128	124,867
2004	-	-	2,610	43,604	50,621	15,849	20	112,704
2005	-	-	1,119	31,959	41,472	15,886	160	90,595
2006 ^{b/}	-	-	1,119	22,226	36,159	5,501	258	65,263

a/ Includes effort from the Washington State waters Area 4B fishery.

b/ Preliminary.

c/ Includes effort from the North Jetty when the ocean fishery was open; does not include effort reported as occurring inside the Columbia River mouth (North Jetty effort when the ocean fishery was closed and Buoy 10 was open).

TABLE A-18. Washington ocean recreational Chinook and coho salmon landings in fish by port of landing and statistical month. (Page 1 of 3)

TABLE A-16. Washington ocean recreational Chinook and coho salmon landings in fish by port of landing and statistical month. (Page 1 of 3)																
Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK									COHO							
<u>Neah Bay</u>																
1976-1980	318	534	1,197	2,438	1,424	617	96	6,334	213	537	3,363	11,424	20,652	7,761	252	44,158
1981-1985	57	149	234	1,293	483	194	35	2,224	80	338	639	8,878	16,452	3,414	150	29,436
1986-1990 ^{a/}	-	114	143	2,554	358	35	-	2,963	-	-	384	15,896	11,629	3,446	-	29,747
1991 ^{b/}	-	-	-	2,363	380	0	-	2,743	-	-	-	23,339	15,131	5	-	38,475
1992 ^{b/}	-	118	-	964	33	-	-	1,115	-	32	-	12,949	11,637	83	-	24,701
1993 ^{b/}	-	178	-	1,002	380	124	-	1,684	-	48	-	10,673	12,614	3,860	-	27,195
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	136	-	-	136	-	-	-	-	12,826	17	-	12,843
1996 ^{b/}	-	-	-	-	55	5	-	60	-	-	-	-	6,634	2,327	-	8,961
1997 ^{b/}	-	-	-	478	8	-	-	486	-	-	-	0	1,494	-	-	1,494
1998 ^{b/}	-	-	-	-	103	-	-	103	-	-	-	-	8,062	-	-	8,062
1999	-	-	-	-	-	-	-	-	-	-	-	1,456	2,963	951	-	5,370
2000	-	-	-	313	105	-	-	418	-	-	-	3,603	5,960	2,067	-	11,630
2001	-	-	-	1,103	366	54	-	1,523	-	-	-	9,840	6,936	1,101	-	17,877
2002	-	234	1,225	3,004	757	7	-	5,227	-	-	-	1,792	5,419	1,185	-	8,396
2003	-	-	589	3,071	997	40	-	4,697	-	-	785	9,104	8,721	1,139	-	19,749
2004	-	-	235	4,117	1,090	73	-	5,515	-	-	361	14,188	13,846	1,005	-	29,400
2005	-	-	-	2,254	316	213	-	2,784	-	-	-	7,033	2,420	765	-	10,218
2006 ^{c/}	-	-	166	734	443	73	-	1,417	-	-	380	3,763	1,570	309	-	6,023
<u>La Push</u>																
1976-1980	0	8	161	948	1,318	410	135	2,844	22	271	1,671	8,586	15,198	3,879	43	28,864
1981-1985	-	0	7	132	166	8	-	304	-	0	72	861	2,786	251	-	3,791
1986-1990 ^{a/}	-	9	10	303	93	15	-	391	-	-	37	2,129	1,026	125	-	3,022
1991	-	-	-	411	-	-	-	411	-	-	-	5,145	13	-	-	5,158
1992	-	-	-	126	43	31	2	202	-	-	-	1,152	447	225	2	1,826
1993	-	-	-	108	44	54	-	206	-	-	-	2,000	733	446	-	3,179
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	7	3	-	10	-	-	-	-	1,231	660	-	1,891
1996	-	-	-	-	2	7	-	9	-	-	-	-	802	809	-	1,611
1997	-	-	-	61	0	-	-	61	-	-	-	1,057	0	-	-	1,057
1998	-	-	-	-	65	-	-	65	-	-	-	-	577	-	-	577
1999	-	-	-	396	488	100	-	984	-	-	-	661	1,318	598	-	2,577
2000	-	-	-	106	70	-	-	176	-	-	-	965	961	-	-	1,926
2001	-	-	-	324	100	60	100	584	-	-	-	1,785	1,357	153	15	3,310
2002	-	7	123	1,132	579	92	43	1,976	-	-	-	492	1,010	146	4	1,652
2003	-	-	128	785	802	111	62	1,888	-	-	136	1,564	1,502	193	12	3,407
2004	-	-	38	853	529	404	6	1,830	-	-	37	1,437	1,266	420	3	3,163
2005	-	-	-	605	694	309	43	1,651	-	-	-	274	1,395	633	18	2,320
2006 ^{c/}	-	-	36	247	955	342	91	1,670	-	-	36	744	1,041	61	2	1,884

TABLE A-18. **Washington ocean recreational Chinook and coho salmon landings in fish by port of landing and statistical month.** (Page 2 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK									COHO							
<u>Westport</u>																
1976-1980	2,826	5,744	20,759	18,019	15,844	5,707	929	67,945	161	12,374	43,808	89,416	63,127	21,910	2,274	232,518
1981-1985	-	2,328	16,253	17,397	7,513	407	17	40,102	-	2,457	11,790	27,665	22,997	3,371	34	63,289
1986-1990	-	667	1,539	10,334	5,012	1,692	-	17,387	-	19	2,220	40,125	23,296	7,004	45	69,421
1991	-	-	1,911	3,786	1,265	209	-	7,171	-	-	6,781	60,610	14,508	6,963	-	88,862
1992	-	-	-	7,091	5,979	2,370	213	15,653	-	-	-	16,774	25,807	7,234	322	50,137
1993	-	-	-	1,357	3,780	3,358	-	8,495	-	-	-	16,081	21,274	12,067	-	49,422
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	12	33	46	-	91	-	-	-	3,216	17,623	8,046	-	28,885
1996	-	-	-	8	8	-	-	16	-	-	-	5,975	14,896	2,202	-	23,073
1997	-	-	-	1,199	1,563	315	-	3,077	-	-	-	5,986	6,745	424	-	13,155
1998	-	-	-	-	1,477	228	-	1,705	-	-	-	-	6,628	1,066	-	7,694
1999	-	-	-	2,271	3,103	1,211	-	6,585	-	-	-	4,060	7,264	1,271	-	12,595
2000	-	-	-	4,153	2,183	-	-	6,336	-	-	-	18,554	10,240	-	-	28,794
2001	-	-	-	12,205	2,758	782	-	15,745	-	-	-	31,372	25,115	12,909	-	69,396
2002	-	2,313	13,877	17,848	8,548	-	-	42,586	-	5	271	8,043	10,762	-	-	19,081
2003	-	-	1,972	9,103	8,953	1,786	-	21,814	-	-	2,714	14,882	17,343	4,328	-	39,267
2004	-	-	254	4,087	5,358	1,647	-	11,340	-	-	1,183	7,060	12,476	8,617	-	29,336
2005	-	-	364	5,245	12,179	4,585	-	22,373	-	-	126	3,139	4,869	2,374	-	10,508
2006 ^{c/}	-	-	-	2,293	3,125	398	-	5,815	-	-	-	2,008	5,675	1,096	-	8,779
<u>Ilwaco^{d/}</u>																
1976-1980	286	2,019	9,143	7,497	15,789	2,261	182	36,969	493	5,627	40,398	69,166	65,240	23,882	2,221	206,286
1981-1985	-	214	3,364	4,545	4,505	279	40	12,031	-	5,410	10,296	36,373	26,437	5,982	825	75,883
1986-1990	-	111	233	1,793	3,302	76	-	5,334	-	-	2,638	32,864	27,048	2,114	-	62,868
1991	-	-	171	1,180	941	52	-	2,344	-	-	5,466	45,792	16,405	7,535	-	75,198
1992	-	-	0	857	466	134	-	1,457	-	-	0	37,410	6,502	2,979	-	46,891
1993	-	-	-	738	1,350	545	-	2,633	-	-	-	15,213	21,062	9,884	-	46,159
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	40	187	45	-	272	-	-	-	3,984	13,865	6,784	-	24,633
1996	-	-	-	22	40	30	-	92	-	-	-	4,665	10,275	2,848	-	17,788
1997	-	-	-	160	185	-	-	345	-	-	-	7,337	3,719	-	-	11,056
1998	-	-	-	-	272	42	-	314	-	-	-	-	4,025	348	-	4,373
1999	-	-	-	495	1,507	316	-	2,318	-	-	-	5,171	9,486	4,926	-	19,583
2000	-	-	-	748	800	-	-	1,548	-	-	-	11,455	14,394	-	-	25,849
2001	-	-	-	2,253	2,300	569	-	5,122	-	-	-	32,325	34,359	10,795	-	77,479
2002	-	53	1,927	3,380	2,571	101	-	8,032	-	-	30	10,136	23,997	10,842	-	45,005
2003	-	-	44	1,498	3,561	681	-	5,784	-	-	600	24,359	43,757	7,957	-	76,673
2004	-	-	22	765	4,039	1,396	-	6,222	-	-	935	17,203	27,040	5,859	-	51,037
2005	-	-	-	1,174	7,002	1,385	-	9,561	-	-	-	7,000	17,066	4,658	-	28,724
2006 ^{c/}	-	-	-	478	1,148	140	-	1,765	-	-	-	6,533	12,222	646	-	19,401

TABLE A-18. **Washington ocean recreational Chinook and coho salmon landings in fish by port of landing and statistical month.** (Page 3 of 3)

TABLE 1.10: Washington Ocean Recreational Fishery and Game Commission Landings in Ton by Port of Landing and Statistical Month (Page 6 of 6)																
Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK									COHO							
<u>Statewide Total</u>																
1976-1980	2,392	8,304	31,259	28,901	34,375	8,790	1,285	114,092	551	18,809	89,239	178,591	164,217	56,656	3,873	511,827
1981-1985	57	2,153	15,884	23,367	12,667	645	46	54,662	80	2,961	22,620	73,777	68,672	9,800	436	172,399
1986-1990	-	901	1,886	14,984	8,674	1,212	-	26,075	-	19	5,077	91,015	62,794	7,165	45	165,058
1991	-	-	2,082	7,740	2,586	261	-	12,669	-	-	12,247	134,886	46,057	14,503	-	207,693
1992	-	118	0	9,038	6,521	2,535	215	18,427	-	32	0	68,285	44,393	10,521	324	123,555
1993	-	178	-	3,205	5,554	4,081	-	13,018	-	48	-	43,967	55,683	26,257	-	125,955
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	52	363	94	-	509	-	-	-	7,200	45,545	15,507	-	68,252
1996	-	-	-	30	105	42	-	177	-	-	-	10,640	32,607	8,186	-	51,433
1997	-	-	-	1,898	1,756	315	-	3,969	-	-	-	14,380	11,958	424	-	26,762
1998	-	-	-	-	1,917	270	-	2,187	-	-	-	-	19,292	1,414	-	20,706
1999	-	-	-	3,162	5,098	1,627	-	9,887	-	-	-	11,348	21,031	7,746	-	40,125
2000	-	-	-	5,320	3,158	-	-	8,478	-	-	-	34,577	31,555	2,067	-	68,199
2001	-	-	-	15,885	5,524	1,465	100	22,974	-	-	-	75,322	67,767	24,958	15	168,062
2002	-	2,607	17,152	25,364	12,455	200	43	57,821	-	5	301	20,463	41,188	12,173	4	74,134
2003	-	-	2,733	14,457	14,313	2,618	62	34,183	-	-	4,235	49,909	71,323	13,617	12	139,096
2004	-	-	549	9,822	11,016	3,520	6	24,907	-	-	2,516	39,888	54,628	15,901	3	112,936
2005	-	-	364	9,278	20,191	6,492	43	36,369	-	-	126	17,446	25,750	8,430	18	51,770
2006 ^{cl}	-	-	202	3,751	5,670	953	91	10,667	-	-	416	13,047	20,509	2,112	2	36,087

a/ Neah Bay and La Push statistics do not include estimates of 707 Chinook killed during Chinook nonretention fishery (July 19-August 20, 1987).

b/ Includes catch from the Washington State waters Area 4B fishery.

c/ Preliminary.

d/ Includes catch from the North Jetty when the ocean fishery was open; does not include catch reported as occurring inside the Columbia River mouth (North Jetty catch when the ocean fishery was closed, and Buoy 10 was open).

TABLE A-19. Washington ocean recreational pink salmon landings in numbers of fish by port of landing and statistical month.
(Page 1 of 2)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
<u>Neah Bay</u>								
1977	0	0	15	1,667	8,714	89	0	10,485
1979	17	1	308	2,375	8,408	646	24	11,779
1981	-	18	7	1,787	5,965	-	27	7,804
1983	-	-	-	409	3,605	154	-	4,168
1985	-	-	0	143	1,071	9	-	1,223
1987	-	-	6	686	713	-	-	1,405
1989 ^{a/}	-	0	0	1,443	295	202	-	1,940
1991 ^{a/}	-	-	-	479	1,543	0	-	2,022
1993 ^{a/}	-	0	-	609	1,264	371	-	2,244
1995	-	-	-	-	2,578	30	-	2,608
1997 ^{a/}	-	-	-	79	498	-	-	577
1999	-	-	-	730	1,165	81	-	1,976
2001	-	-	-	1,715	1,081	3	-	2,799
2003	-	-	6	2,863	5,136	120	-	8,125
2005	-	-	-	1,456	1,375	62	-	2,893
<u>La Push</u>								
1977	0	0	40	600	2,328	8	0	2,976
1979	-	1	16	259	1,529	0	-	1,805
1981	-	0	0	0	336	-	-	336
1983	-	-	-	7	253	1	-	261
1985	-	-	0	9	33	0	-	42
1987	-	-	0	12	37	-	-	49
1989	-	0	0	0	-	-	-	0
1991	-	-	-	46	-	-	-	46
1993	-	-	-	46	34	4	-	84
1995	-	-	-	-	78	11	-	89
1997	-	-	-	195	0	-	-	195
1999	-	-	-	87	47	0	-	134
2001	-	-	-	129	32	-	-	161
2003	-	-	4	419	459	23	0	905
2005	-	-	-	41	167	2	0	210
<u>Westport</u>								
1977	0	303	1,424	11,649	909	10	0	14,295
1979	-	40	748	990	2,188	0	-	3,966
1981	-	31	177	771	717	-	-	1,696
1983	-	0	2	26	0	2	-	30
1985	-	-	0	695	907	4	-	1,606
1987	-	-	0	183	45	-	-	228
1989	-	0	0	28	45	-	-	73
1991	-	-	0	43	33	4	-	80
1993	-	-	-	33	35	2	-	70
1995	-	-	-	40	51	2	-	93
1997	-	-	-	520	96	22	-	638
1999	-	-	-	35	40	0	-	75
2001	-	-	-	782	136	-	-	918
2003	-	-	12	3,559	756	32	-	4,359
2005	-	-	0	26	128	0	-	154

TABLE A-19. Washington ocean recreational **pink salmon** landings in **thousands of fish** by port of landing and statistical month. (Page 2 of 2)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
Ilwaco^{c/}								
1977	0	33	171	689	602	4	0	1,499
1979	-	3	8	246	26	0	-	283
1981	-	2	4	101	260	-	-	367
1983	-	0	0	0	2	0	-	2
1985	-	-	0	6	203	-	-	209
1987	-	-	0	110	9	-	-	119
1989	-	0	0	11	12	-	-	23
1991	-	-	0	45	21	0	-	66
1993	-	-	-	7	11	0	-	18
1995	-	-	-	4	18	9	-	31
1997	-	-	-	0	0	-	-	0
1999	-	-	-	0	3	0	-	3
2001	-	-	-	5	31	4	-	40
2003	-	-	0	2	16	0	-	18
2005	-	-	-	3	0	0	-	
Total Statewide								
1977	0	336	1,650	14,605	12,553	111	0	29,255
1979	17	45	1,080	3,870	12,151	646	24	17,833
1981	-	51	188	2,659	7,278	-	27	10,203
1983	-	0	2	442	3,860	157	-	4,461
1985	-	-	0	853	2,214	13	-	3,080
1987	-	-	6	991	804	-	-	1,801
1989 ^{a/}	-	0	0	1,482	352	202	-	2,036
1991 ^{a/}	-	-	0	613	1,597	4	-	2,214
1993 ^{a/}	-	0	-	695	1,344	377	-	2,416
1995	-	-	-	44	2,725	52	-	2,821
1997 ^{a/}	-	-	-	794	594	22	-	1,410
1999	-	-	-	852	1,255	81	-	2,188
2001	-	-	-	2,631	1,280	7	-	3,918
2003	-	-	22	6,843	6,367	175	0	13,407
2005	-	-	0	1,526	1,670	64	0	3,257

a/ Includes catch from the Washington State waters Area 4B fishery.

b/ Preliminary.

c/ Includes catch from the North Jetty when the ocean fishery was open; does not include catch reported as occurring inside the Columbia River mouth (North Jetty catch when the ocean fishery was closed and Buoy 10 was open).

TABLE A-20. Cape Falcon to U.S./Mexico border commercial troll salmon fishing effort in days fished by region and month.^{a/}
(Page 1 of 2)

Year or Avg	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season
<u>Cape Falcon to Humbug Mt.</u>											
1978-1980	-	-	650	2,964	12,169	11,602	1,692	598	10	-	29,684
1981-1985	-	-	1,413	1,011	10,193	5,360	941	448	10	-	19,377
1986-1990	-	-	3,745	4,494	14,033	8,093	3,214	2,162	257	-	35,843
1991	-	-	695	3,948	4,102	1,967	1,859	1,596	-	-	14,167
1992	-	-	1,554	-	1,496	2,686	1,474	1,684	-	-	8,894
1993	-	-	2,051	1,311	1,734	953	1,822	1,245	146	-	9,262
1994	-	-	932	1,228	-	-	268	985	65	-	3,478
1995	-	-	939	1,621	-	2,608	1,251	1,097	54	-	7,570
1996	-	-	1,378	1,972	-	1,819	1,619	1,041	86	-	7,915
1997	-	348	1,940	1,875	-	1,623	1,033	541	67	-	7,427
1998	-	851	1,782	1,706	-	1,356	557	595	116	-	6,963
1999	-	177	604	1,361	733	1,042	417	371	121	8	4,834
2000	-	155	706	952	1,186	1,819	1,238	630	180	69	6,935
2001	-	937	2,011	1,980	1,358	2,051	1,214	748	135	1	10,435
2002	367	840	1,712	1,965	682	1,293	1,607	2,204	158	15	10,843
2003	175	1,390	2,857	1,541	902	1,347	1,665	1,447	139	14	11,477
2004	906	2,506	2,137	1,819	825	1,833	1,359	704	229	21	12,339
2005	1,298	369	2,832	2,663	-	-	2,519	960	142	75	10,858
2006 ^{b/}	-	-	-	1,034	487	186	631	722	278	25	3,363
<u>Humbug Mt. to Horse Mt. (KMZ)</u>											
1978-1980	-	320	7,953	8,898	12,009	9,367	3,437	955	568	-	43,400
1981-1985	-	-	2,979	1,817	5,010	5,260	1,273	732	336	-	17,408
1986-1990	-	-	326	1,889	756	1,406	551	160	217	-	3,825
1991	-	-	-	-	-	-	522	100	-	-	622
1992	-	-	-	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	-	-	-
1994	-	-	44	-	-	56	-	183	-	-	283
1995	-	-	46	-	48	-	-	188	-	-	282
1996	-	-	99	31	-	323	298	161	-	-	912
1997	-	19	149	-	-	38	106	169	-	-	481
1998	-	0	22	-	-	14	164	172	-	-	372
1999	-	-	3	-	-	78	274	120	9	-	484
2000	-	-	4	-	-	84	198	130	-	-	416
2001	-	-	18	41	-	150	411	166	-	-	786
2002	3	15	22	73	82	188	548	102	-	-	1,033
2003	0	21	49	74	109	106	185	113	2	-	659
2004	2	31	73	141	138	220	358	61	18	-	1,042
2005	6	1	-	-	-	-	438	110	18	-	573
2006 ^{b/}	-	-	-	-	-	-	6	150	27	-	183

TABLE A-20. Cape Falcon to U.S./Mexico border **commercial** troll salmon fishing **effort in days** fished by region and month.^{a/}
(Page 2 of 2)

Year or Avg.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season
Horse Mt. to U.S./Mexico Border											
1978-1980	-	1,399	13,359	14,229	21,707	8,985	5,102	-	-	-	59,571
1981-1985	-	2,037	10,225	7,881	15,092	8,601	4,766	-	-	-	47,380
1986-1990	-	-	14,517	15,253	14,467	9,262	2,839	-	-	-	56,337
1991	-	-	8,400	10,900	6,400	7,100	1,900	-	-	-	34,700
1992	-	-	6,600	3,400	2,700	4,500	3,100	-	-	-	20,300
1993	-	-	9,300	4,000	5,700	4,400	2,500	-	-	-	25,900
1994	-	-	6,500	4,600	5,400	2,400	2,300	-	-	-	21,200
1995	-	-	8,500	5,200	5,600	3,200	3,300	-	-	-	25,800
1996	-	-	4,700	5,900	5,300	2,900	1,925	-	-	-	20,725
1997	-	600	6,500	2,000	5,700	2,325	1,725	-	-	-	18,850
1998	-	-	4,300	2,100	3,900	1,800	2,300	-	-	-	14,400
1999	-	125	2,500	5,000	4,700	2,200	1,600	-	-	-	16,125
2000	-	-	5,210	5,863	3,248	2,390	3,600	-	-	-	20,311
2001	-	-	4,894	1,448	3,042	1,419	2,222	501	-	-	13,526
2002	-	-	4,246	3,247	4,664	2,816	1,686	139	-	-	16,798
2003	-	-	3,074	2,727	3,697	3,745	2,431	136	-	-	15,810
2004	-	-	5,146	4,034	6,297	3,470	1,972	290	-	-	21,209
2005	-	-	3,881	377	5,001	3,365	3,669	401	-	-	16,694
2006 ^{b/}	-	-	2,045	101	647	2,575	2,424	364	-	-	8,156
Total South of Cape Falcon											
1978-1980	-	1,718	21,962	21,347	45,885	29,955	10,230	1,553	578	-	132,655
1981-1985	-	2,037	14,617	10,709	30,296	19,221	6,981	1,180	346	-	84,165
1986-1990	-	-	18,589	21,258	28,802	18,198	6,604	2,322	292	-	96,006
1991	-	-	9,095	14,848	10,502	9,067	4,281	1,696	-	-	49,489
1992	-	-	8,154	3,400	4,196	7,186	4,574	1,684	-	-	29,194
1993	-	-	11,351	5,311	7,434	5,353	4,322	1,245	146	-	35,162
1994	-	-	7,476	5,828	5,400	2,456	2,568	1,168	65	-	24,961
1995	-	-	9,485	6,821	5,648	5,808	4,551	1,285	54	-	33,652
1996	-	-	6,177	7,903	5,300	5,042	3,842	1,202	86	-	29,552
1997	-	967	8,589	3,875	5,700	3,986	2,864	710	67	-	26,758
1998	-	851	6,104	3,806	3,900	3,170	3,021	767	116	-	21,735
1999	-	302	3,107	6,361	5,433	3,320	2,291	491	130	8	21,443
2000	-	155	5,920	6,815	4,434	4,293	5,036	760	180	69	27,662
2001	-	937	6,923	3,469	4,400	3,620	3,847	1,415	135	1	24,747
2002	370	855	5,980	5,285	5,428	4,297	3,841	2,445	158	15	28,674
2003	175	1,411	5,980	4,342	4,708	5,198	4,281	1,696	141	14	27,946
2004	908	2,537	7,356	5,994	7,260	5,523	3,689	1,055	247	21	34,590
2005	1,304	370	6,713	3,040	5,001	3,365	6,626	1,471	160	75	28,125
2006 ^{b/}	-	-	2,045	1,135	1,134	2,761	3,061	1,236	305	25	11,702

a/ The current KMZ boundaries are Humbug Mt. to Horse Mt. These have changed slightly since the early 1980s. Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month.

b/ Preliminary.

TABLE A-21. Cape Falcon to U.S./Mexico border commercial troll Chinook and coho salmon landings in numbers of fish by region and month^{a/} (Page 1 of 2)

Year or Avg.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season	
CHINOOK												COHO											
Cape Falcon to Humbug Mt.																							
1976-1980	-	17	7,238	21,715	46,765	47,971	12,776	6,880	49	-	143,397	-	-	-	171,873	330,863	129,763	9,176	1,727	-	-	608,337	
1981-1985	-	-	13,353	6,839	43,988	23,644	6,660	2,804	36	-	97,325	-	-	-	-	260,127	85,249	5,803	-	-	-	325,515	
1986-1990	-	-	41,012	45,376	139,455	85,332	29,901	21,111	1,095	-	362,625	-	-	-	40	294,074	95,999	20,776	-	-	-	375,053	
1991	-	-	3,276	12,570	15,428	11,596	18,014	12,439	-	-	73,323	-	-	-	91,249	188,757	11	-	-	-	-	280,017	
1992	-	-	20,644	-	31,488	26,086	10,757	19,272	-	-	108,247	-	-	-	-	23,064	25,133	-	12	-	-	48,209	
1993	-	-	20,311	14,723	12,952	10,436	15,578	6,454	658	-	81,112	-	-	-	-	-	2	-	25	-	-	27	
1994	-	-	7,661	8,906	-	-	1,239	5,545	378	-	23,729	-	-	-	-	-	-	-	-	-	-	-	
1995	-	-	10,602	35,866	-	97,878	38,547	27,247	324	-	210,464	-	-	-	-	-	-	-	-	-	-	-	
1996	-	-	25,630	39,267	-	60,797	25,967	14,139	845	-	166,645	-	-	-	8	-	-	-	-	-	-	8	
1997	-	4,392	31,018	35,381	-	44,588	25,786	4,501	492	-	146,158	-	-	-	-	-	-	-	-	-	-	-	
1998	-	19,953	39,671	33,749	-	20,875	4,952	3,368	900	-	123,468	-	-	-	-	-	-	-	-	-	-	-	
1999	-	826	6,052	23,447	8,095	17,220	1,784	2,452	1,237	43	61,156	-	-	-	-	-	-	-	-	-	-	-	
2000	-	1,187	6,064	11,441	19,664	47,342	30,355	12,235	1,537	367	130,192	-	-	-	-	-	-	-	-	-	-	-	
2001	-	18,536	60,552	42,926	37,539	60,707	30,535	15,112	1,345	21	267,273	-	-	-	-	-	-	-	-	-	-	-	
2002	6,662	10,586	23,452	59,881	12,321	28,301	58,861	83,205	1,255	65	284,589	-	-	-	-	-	-	-	-	-	-	-	
2003	3,192	58,899	73,522	31,841	19,579	37,321	49,646	39,089	996	137	314,222	-	-	-	-	-	-	-	-	-	-	-	
2004	21,043	33,989	37,270	22,899	14,068	76,652	24,531	8,322	2,151	182	241,107	-	-	-	-	-	-	-	-	-	-	-	
2005	28,297	4,782	55,741	49,895	-	-	81,937	17,170	787	335	238,944	-	-	-	-	-	-	-	-	-	-	-	
2006 ^{b/}	-	-	-	9,658	3,616	962	4,367	3,461	1,555	118	23,737	-	-	-	-	-	-	-	-	-	-	-	
Humbug Mt. to Horse Mt. (KMZ)																							
1976-1980	-	8,530	93,832	44,084	65,898	46,619	18,192	6,583	2,409	-	284,440	-	26,012	40,909	87,919	73,686	17,399	2,371	104	-	-	248,400	
1981-1985	-	-	31,261	13,370	26,577	44,460	10,089	3,495	1,113	-	130,365	-	-	3,527	7,183	25,915	17,370	803	0	-	-	54,797	
1986-1990	-	-	5,509	55,976	9,956	17,966	8,453	770	1,460	-	75,151	-	-	-	11,960	2,350	51	565	0	-	-	14,456	
1991	-	-	-	-	-	-	4,510	400	-	-	4,910	-	-	-	-	-	-	3	0	-	-	3	
1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1994	-	-	224	-	-	234	-	1,043	-	-	1,501	-	-	-	-	-	-	-	-	-	-	-	
1995	-	-	305	-	1,682	-	-	1,338	-	-	3,325	-	-	-	-	-	-	-	-	-	-	-	
1996	-	-	2,876	2,233	-	5,364	6,378	788	-	-	17,639	-	-	-	-	-	-	-	-	-	-	-	
1997	-	101	2,348	-	-	255	1,424	869	-	-	4,997	-	-	-	-	-	-	-	-	-	-	-	
1998	-	0	69	-	-	75	2,501	599	-	-	3,244	-	-	-	-	-	-	-	-	-	-	-	
1999	-	-	4	-	-	844	2,650	364	-	-	3,862	-	-	-	-	-	-	-	-	-	-	-	
2000	-	-	21	-	-	1,405	3,206	861	-	-	5,493	-	-	-	-	-	-	-	-	-	-	-	
2001	-	-	233	362	-	1,290	6,509	728	-	-	9,122	-	-	-	-	-	-	-	-	-	-	-	
2002	5	103	118	952	1,457	3,399	13,275	961	-	-	20,270	-	-	-	-	-	-	-	-	-	-	-	
2003	0	1,764	659	584	1,082	1,108	3,163	753	3	-	9,116	-	-	-	-	-	-	-	-	-	-	-	
2004	6	750	774	2,831	7,550	21,697	6,531	220	40	-	40,399	-	-	-	-	-	-	-	-	-	-	-	
2005	87	6	-	-	-	-	8,430	641	156	-	9,320	-	-	-	-	-	-	-	-	-	-	-	
2006 ^{b/}	-	-	-	-	-	-	12	590	136	-	738	-	-	-	-	-	-	-	-	-	-	-	

TABLE A-21. Cape Falcon to U.S./Mexico border **commercial** troll Chinook and coho salmon **landings in numbers** of fish by region and month.^{a/} (Page 2 of 2)

TABLE A-21: Cape Falcon to U.S./Mexico Border Commercial Fish Chinook and Coho salmon landings in numbers of fish by region and month. (Page 2 of 2)																							
Year or Avg.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season	
CHINOOK												COHO											
<u>Horse Mt. to U.S./Mexico Border</u>																							
1976-1980	-	34,194	108,017	87,178	128,494	48,348	26,139	-	-	-	408,096	-	13	13,988	42,514	19,864	4,307	540	0	-	-	81,225	
1981-1985	-	31,016	95,110	63,197	128,909	57,751	17,536	-	-	-	374,909	-	37	503	5,765	14,913	2,219	276	0	-	-	23,712	
1986-1990	-	-	239,714	226,495	193,068	71,735	17,365	-	-	-	748,377	-	-	-	15,505	17,802	3,427	163	0	-	-	36,897	
1991	-	-	80,100	87,100	49,600	65,600	7,800	-	-	-	290,200	-	-	-	50,200	24,000	5,200	-	-	-	-	79,400	
1992	-	-	51,400	18,900	20,600	41,300	28,100	-	-	-	160,300	-	-	-	1,500	500	450	-	-	-	-	2,450	
1993	-	-	111,078	40,353	55,755	48,377	23,990	-	-	-	279,553	-	-	-	-	-	-	-	-	-	-	-	
1994	-	-	78,829	81,119	89,175	27,379	19,072	-	-	-	295,574	-	-	-	-	-	-	-	-	-	-	-	
1995	-	-	285,457	142,227	189,622	30,880	31,126	-	-	-	679,312	-	-	-	-	-	-	-	-	-	-	-	
1996	-	-	97,075	130,284	95,417	28,581	20,419	-	-	-	371,776	-	-	-	-	-	-	-	-	-	-	-	
1997	-	11,891	199,057	74,576	153,940	24,737	21,790	-	-	-	485,991	-	-	-	-	-	-	-	-	-	-	-	
1998	-	-	76,266	39,438	74,931	15,900	17,900	-	-	-	224,435	-	-	-	-	-	-	-	-	-	-	-	
1999	-	3,268	30,554	125,629	71,469	24,035	6,997	-	-	-	261,952	-	-	-	-	-	-	-	-	-	-	-	
2000	-	-	205,634	138,470	47,403	27,033	59,785	-	-	-	478,325	-	-	-	-	-	-	-	-	-	-	-	
2001	-	-	73,044	11,497	63,084	14,172	22,111	3,655	-	-	187,563	-	-	-	-	-	-	-	-	-	-	-	
2002	-	-	86,120	93,214	128,032	56,896	13,456	470	-	-	378,188	-	-	-	-	-	-	-	-	-	-	-	
2003	-	-	73,234	104,201	123,712	111,086	73,735	1,882	-	-	487,850	-	-	-	-	-	-	-	-	-	-	-	
2004	-	-	97,596	154,175	157,237	44,525	15,451	1,211	-	-	470,195	-	-	-	-	-	-	-	-	-	-	-	
2005	-	-	76,855	5,001	139,928	35,046	74,673	2,305	-	-	333,808	-	-	-	-	-	-	-	-	-	-	-	
2006 ^{b/}	-	-	9,685	365	16,687	18,350	22,709	1,012	-	-	68,808	-	-	-	-	-	-	-	-	-	-	-	
<u>Total South of Cape Falcon</u>																							
1976-1980	-	42,728	209,087	135,541	241,157	142,938	57,106	13,463	2,458	-	835,933	-	26,024	54,897	267,931	424,414	151,469	12,087	1,141	-	-	937,962	
1981-1985	-	31,016	139,724	83,407	199,475	125,855	34,284	6,299	1,149	-	602,599	-	37	4,029	12,948	248,929	70,738	2,240	0	-	-	338,921	
1986-1990	-	-	286,235	316,652	336,505	167,846	55,719	21,881	1,642	-	1,186,152	-	-	-	27,490	313,756	80,277	4,883	0	-	-	426,405	
1991	-	-	83,376	99,670	65,028	77,196	30,324	12,839	-	-	368,433	-	-	-	141,449	212,757	5,211	3	0	-	-	359,420	
1992	-	-	72,044	18,900	52,088	67,386	38,857	19,272	-	-	268,547	-	-	-	1,500	23,564	25,583	-	12	-	-	50,659	
1993	-	-	131,389	55,076	68,707	58,813	39,568	6,454	658	-	360,665	-	-	-	-	-	2	-	25	-	-	27	
1994	-	-	86,714	90,025	89,175	27,613	20,311	6,588	378	-	320,804	-	-	-	-	-	-	-	-	-	-	-	
1995	-	-	296,364	178,093	191,304	128,758	69,673	28,585	324	-	893,101	-	-	-	-	-	-	-	-	-	-	-	
1996	-	-	125,581	171,784	95,417	94,742	52,764	14,927	845	-	556,060	-	-	-	8	-	-	-	-	-	-	8	
1997	-	16,384	232,423	109,957	153,940	69,580	49,000	5,370	492	-	637,146	-	-	-	-	-	-	-	-	-	-	-	
1998	-	19,953	116,006	73,187	74,931	36,850	25,353	3,967	900	-	351,147	-	-	-	-	-	-	-	-	-	-	-	
1999	-	4,094	36,610	149,076	79,564	42,099	11,431	2,816	1,237	43	326,970	-	-	-	-	-	-	-	-	-	-	-	
2000	-	1,187	211,719	149,911	67,067	75,780	93,346	13,096	1,537	367	614,010	-	-	-	-	-	-	-	-	-	-	-	
2001	-	18,536	133,829	54,785	100,623	76,169	59,155	19,495	1,345	21	463,958	-	-	-	-	-	-	-	-	-	-	-	
2002	6,667	10,689	109,690	154,047	141,810	88,596	85,592	84,636	1,255	65	683,047	-	-	-	-	-	-	-	-	-	-	-	
2003	3,192	60,663	147,415	136,626	144,373	149,515	126,544	41,724	999	137	811,188	-	-	-	-	-	-	-	-	-	-	-	
2004	21,049	34,739	135,640	179,905	178,855	142,874	46,513	9,753	2,191	182	751,701	-	-	-	-	-	-	-	-	-	-	-	
2005	28,384	4,788	132,596	54,896	139,928	35,046	165,040	20,116	943	335	582,072	-	-	-	-	-	-	-	-	-	-	-	
2006 ^{b/}	-	-	9,685	10,023	20,303	19,312	27,088	5,063	1,691	118	93,283	-	-	-	-	-	-	-	-	-	-	-	

a/ The current KMZ boundaries are Humbug Mt. to Horse Mt. These have changed slightly since the early 1980s. Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month.

b/ Preliminary.

TABLE A-22. Cape Falcon to U.S/Mexico border ocean recreational fishing effort in salmon angler trips by region and month.^{a/}
(Page 1 of 2)

Year or Avg	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
<u>Cape Falcon to Humbug Mt.</u>											
1976-1980	-	-	0	9,025	44,358	97,228	83,028	17,580	2,250	151	252,629
1981-1985	-	-	-	5,279	21,790	78,019	61,312	10,677	1,603	--	151,116
1986-1990	-	-	-	2,054	18,538	82,564	51,012	13,964	--	--	164,930
1991	-	-	-	2,288	33,107	96,562	-	-	--	-	131,957
1992	-	-	-	3,692	19,921	68,180	34,446	8,503	--	-	134,742
1993	-	-	-	1,369	1,291	24,745	10,600	--	--	--	38,005
1994	-	-	-	891	1,096	-	-	-	8,749	3	10,739
1995	-	-	-	847	830	-	-	1,879	1,146	788	5,490
1996	-	-	-	1,271	917	643	4,134	4,766	3,255	--	14,986
1997	-	-	29	439	762	873	4,044	2,142	1,673	--	9,962
1998	-	-	0	677	166	375	3,082	2,531	2,912	--	9,743
1999	-	-	12	663	808	15,588	2,167	3,380	3,495	104	26,217
2000	-	-	26	490	328	30,371	8,514	4,817	3,332	235	48,113
2001	-	-	0	1,349	17,548	35,973	9,449	4,384	2,254	162	71,119
2002	-	-	275	1,295	6,181	36,658	14,194	9,322	7,893	50	75,868
2003	-	81	139	1,695	10,884	54,115	31,069	8,437	3,635	395	110,450
2004	-	78	238	1,490	14,867	49,370	28,773	10,599	3,094	291	108,800
2005 ^{b/}	-	30	406	1,470	12,598	13,820	9,797	11,248	778	12	50,159
2006 ^{b/}	-	24	92	800	4,918	18,334	3,799	9,996	5,368	98	43,429
<u>Humbug Mt. to Horse Mt. (KMZ)</u>											
1976-1980	0	0	4	1,607	20,812	50,059	30,892	8,329	5,617	913	118,233
1981-1985	0	0	1	3,481	14,938	49,198	26,922	4,354	3,416	138	102,448
1986-1990	0	0	-	5,291	33,539	62,718	27,347	5,042	3,353	-	135,949
1991	-	-	-	2,080	33,291	44,855	2,928	6,290	21	-	89,465
1992	-	-	-	-	-	21,902	-	10,052	3,862	-	35,816
1993	-	-	-	4,332	7,919	19,176	19,889	6,144	-	-	57,460
1994	-	-	-	13,948	5,250	-	4,233	4,572	4,222	-	32,225
1995	-	-	-	6,526	18,047	-	4,553	11,579	3,410	-	44,115
1996	-	-	-	5,095	17,467	5,583	10,650	5,590	4,282	-	48,667
1997	-	-	-	5,849	8,635	6,538	11,693	1,551	1,269	-	35,535
1998	-	-	-	3,974	5,537	2,571	6,784	2,508	2,755	-	24,129
1999	-	-	-	268	6,579	5,413	14,905	4,129	2,318	-	33,612
2000	-	-	-	1,170	7,530	7,747	20,126	2,551	3,205	-	42,329
2001	-	-	-	6,542	11,561	11,274	15,394	1,683	4,340	-	50,794
2002	-	-	-	4,989	10,558	1,259	14,412	6,074	3,973	-	41,265
2003	-	-	-	3,669	5,103	7,346	8,750	3,026	2,630	-	30,524
2004	-	-	-	5,830	7,419	9,227	13,450	6,405	1,575	-	43,906
2005 ^{b/}	-	-	-	1,799	9,099	1,932	8,781	5,898	2,398	-	29,907
2006 ^{b/}	-	-	-	4,650	8,607	3,153	-	7,314	3,081	-	26,805

TABLE A-22. Cape Falcon to U.S./Mexico border ocean **recreational fishing effort in salmon angler trips** by region and month.^{a/}
(Page 2 of 2)

Year or Avg.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
<u>Horse Mt. to U.S./Mexico Border</u>											
1976-1980	9,865	12,468	9,230	9,929	12,998	22,054	19,400	13,245	7,968	4,078	119,603
1981-1985	5,107	7,945	8,771	8,898	14,341	22,038	16,941	9,593	5,648	1,426	100,709
1986-1990	8,272	17,094	24,034	13,831	23,693	36,170	22,631	10,893	5,029	1,563	163,209
1991	55	12,216	18,217	11,031	27,892	44,228	19,673	5,809	4,433	58	143,612
1992	2,006	9,713	9,877	11,543	13,636	28,930	15,063	12,325	5,759	849	109,701
1993	879	15,036	17,597	15,209	12,272	42,303	25,119	8,059	4,744	0	141,218
1994	76	18,324	19,540	17,766	34,020	44,976	28,148	13,326	9,848	--	186,024
1995	360	22,917	50,164	55,349	62,214	97,536	44,412	15,948	4,911	--	353,811
1996	49	35,215	30,349	21,778	31,697	43,378	26,313	8,060	3,141	0	199,980
1997	--	21,546	29,711	29,897	39,076	56,577	29,058	5,961	3,212	380	215,418
1998	--	6,225	17,692	18,052	28,228	33,732	25,998	8,385	3,480	--	141,792
1999	14	8,721	11,785	6,475	22,087	41,263	23,824	9,638	5,421	--	129,228
2000	--	0	36,688	32,716	38,284	39,383	24,792	15,273	5,466	1,451	194,053
2001	0	1,573	26,353	23,014	14,267	30,775	23,004	12,782	6,081	2,593	140,442
2002	194	3,760	40,477	27,539	30,025	45,831	30,791	7,688	1,823	381	188,509
2003	607	6,374	15,069	17,055	20,779	34,536	14,786	6,713	2,667	264	118,850
2004	183	999	32,865	28,873	29,067	57,641	27,768	9,908	4,303	1,539	193,146
2005 ^{b/}	869	521	24,631	19,797	27,711	38,248	22,891	13,250	5,868	965	154,751
2006 ^{b/}	292	323	19,122	15,436	24,935	27,913	9,586	4,299	1,734	540	104,180
<u>Total South of Cape Falcon</u>											
1976-1980	9,865	12,468	9,233	20,561	78,167	169,341	133,321	39,154	14,935	3,420	490,465
1981-1985	5,107	7,945	8,772	14,491	42,353	149,255	92,912	22,489	9,385	1,564	354,272
1986-1990	8,272	17,094	24,034	20,765	75,770	181,452	100,990	27,107	7,041	1,563	464,088
1991	55	12,216	18,217	15,399	94,290	185,645	22,601	12,099	4,454	58	365,034
1992	2,006	9,713	9,877	15,235	33,557	119,012	49,509	30,880	9,621	849	280,259
1993	879	15,036	17,597	20,910	21,482	86,224	55,608	14,203	4,744	--	236,683
1994	76	18,324	19,540	32,605	40,366	44,976	32,381	17,898	22,819	3	228,988
1995	360	22,917	50,164	62,722	81,091	97,536	48,965	29,406	9,467	788	403,416
1996	49	35,215	30,349	28,144	50,081	49,604	41,097	18,416	10,678	--	263,633
1997	--	21,546	29,740	36,185	48,473	63,988	44,795	9,654	6,154	380	260,915
1998	--	6,225	17,692	22,703	33,931	36,678	35,864	13,424	9,147	--	175,664
1999	14	8,721	11,797	7,406	29,474	62,264	40,896	17,147	11,234	104	189,057
2000	--	0	36,714	34,376	46,142	77,501	53,432	22,641	12,003	1,686	284,495
2001	0	1,573	26,353	30,905	43,376	78,022	47,847	18,849	12,675	2,755	262,355
2002	194	3,760	40,752	33,823	46,764	83,748	59,397	23,084	13,689	431	305,642
2003	607	6,455	15,208	22,419	36,766	95,997	54,605	18,176	8,932	659	259,824
2004	183	1,077	33,103	36,193	51,353	116,238	69,991	26,912	8,972	1,830	345,852
2005 ^{b/}	869	551	25,037	23,066	49,408	54,000	41,469	30,396	9,044	977	234,817
2006 ^{b/}	292	347	19,214	20,886	38,460	49,400	13,385	21,609	10,183	638	174,414

a/ The current KMZ boundaries are Humbug Mt. to Horse Mt. These have changed slightly since the early 1980s. Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month.

b/ Preliminary.

TABLE A-24. U.S./Canada border to Cape Falcon commercial troll salmon fishing effort in days fished by area and month.^{a/}
(Page 1 of 3)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season
U.S./Canada Border to Leadbetter Pt. - Non-Indian							
1976-1980	3,482	2,262	11,876	12,038	4,519	-	34,176
1981-1985	2,700	309	5,650	2,388	14	-	9,858
1986-1990	2,255	830	438	750	15	-	3,847
1991	1,611	985	-	1,181	450	-	4,227
1992	1,888	1,239	852	598	-	-	4,577
1993	1,236	937	697	362	387	-	3,619
1994	-	-	-	-	-	-	-
1995	-	-	-	397	74	-	471
1996	-	-	181	231	-	-	412
1997	294	158	-	-	-	-	452
1998	127	12	-	-	-	-	139
1999	271	231	135	86	6	-	729
2000	193	95	-	71	3	-	362
2001	209	212	159	70	38	-	688
2002	428	183	420	242	-	-	1,273
2003	421	195	476	415	77	-	1,584
2004	460	10	392	342	125	-	1,329
2005 ^{b/}	492	104	337	402	-	-	1,335
2006 ^{b/}	359	381	99	296	169	-	1,304
U.S./Canada Border to Leadbetter Pt. - Treaty Indian^{c/}							
1976-1980	61	137	192	162	50	6	603
1981-1985	79	141	284	313	146	17	963
1986-1990	138	168	434	460	161	2	1,360
1991	112	102	335	599	0	50	1,148
1992	73	89	244	237	0	1	643
1993	122	96	329	407	238	0	1,192
1994	28	70	3	0	0	0	101
1995	10	0	1	313	0	0	324
1996	12	35	2	119	113	0	281
1997	25	48	0	164	62	0	299
1998	33	19	3	41	42	0	138
1999	43	46	5	117	71	0	282
2000	43	40	5	54	0	0	142
2001	53	65	122	172	104	0	516
2002	31	42	61	51	41	0	226
2003	24	27	63	57	45	0	216
2004	27	49	127	152	76	0	431
2005 ^{b/}	98	145	126	150	77	0	596
2006 ^{b/}	96	287	160	141	117	5	801
U.S./Canada Border to Leadbetter Pt. - Total^{c/}							
1976-1980	3,543	2,399	12,069	12,200	4,569	6	34,780
1981-1985	2,779	388	4,804	2,701	149	17	10,821
1986-1990	2,393	832	609	1,210	164	2	5,207
1991	1,723	1,087	335	1,780	450	50	5,375
1992	1,961	1,328	1,096	835	0	1	5,220
1993	1,358	1,033	1,026	769	625	0	4,811
1994	28	70	3	0	0	0	101
1995	10	0	1	710	74	0	795
1996	12	35	183	350	113	0	693
1997	319	206	0	164	62	0	751
1998	160	31	3	41	42	0	277
1999	314	277	140	203	77	0	1,011
2000	236	135	5	125	3	0	504
2001	262	277	281	242	142	0	1,204
2002	459	225	481	293	41	0	1,499
2003	445	222	539	472	122	0	1,800
2004	487	59	519	494	201	0	1,760
2005 ^{b/}	590	249	463	552	77	0	1,931
2006 ^{b/}	455	668	259	437	286	5	2,105

TABLE A-24. U.S./Canada border to Cape Falcon **commercial** troll salmon fishing **effort in days fished** by area and month.^{a/}
(Page 2 of 3)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season
Leadbetter Pt. to Cape Falcon - Non-Indian							
1976-1980	900	838	4,419	3,751	1,920	56	11,882
1981-1985	969	58	977	906	146	0	3,057
1986-1990	343	87	467	1,162	850	22	1,530
1991	227	25	-	845	207	-	1,304
1992	207	124	132	68	-	-	531
1993	25	8	94	64	102	-	293
1994	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-
1997	6	2	-	-	-	-	8
1998	0	0	-	-	-	-	0
1999	0	1	-	-	-	-	1
2000	1	6	-	294	29	-	330
2001	29	27	97	126	39	-	318
2002	40	57	182	216	-	-	495
2003	113	24	152	175	63	-	527
2004	51	4	82	106	156	-	399
2005 ^{b/}	230	51	55	283	-	-	619
2006 ^{b/}	581	353	3	79	99	-	1,115

U.S./Canada Border to Cape Falcon - Non-Indian

1976-1980	4,382	3,100	16,295	15,788	6,438	56	46,058
1981-1985	3,669	305	5,497	3,294	149	0	12,915
1986-1990	2,598	895	671	1,447	858	22	5,377
1991	1,838	1,010	-	2,026	657	-	5,531
1992	2,095	1,363	984	666	-	-	5,108
1993	1,261	945	791	426	489	-	3,912
1994	-	-	-	-	-	-	-
1995	-	-	-	397	74	-	471
1996	-	-	181	231	-	-	412
1997	300	160	-	-	-	-	460
1998	127	12	-	-	-	-	139
1999	271	232	135	86	6	-	730
2000	194	101	-	365	32	-	692
2001	238	239	256	196	77	-	1,006
2002	468	240	602	458	-	-	1,768
2003	534	219	628	590	140	-	2,111
2004	511	14	474	448	281	-	1,728
2005 ^{b/}	722	155	392	685	-	-	1,954
2006 ^{b/}	940	734	102	375	268	-	2,419

U.S./Canada Border to Cape Falcon - Treaty Indian^{c/}

1976-1980	61	137	192	162	50	6	603
1981-1985	79	141	284	313	146	17	963
1986-1990	138	168	434	460	161	2	1,360
1991	112	102	335	599	0	50	1,148
1992	73	89	244	237	0	1	643
1993	122	96	329	407	238	0	1,192
1994	28	70	3	0	0	0	101
1995	10	0	1	313	0	0	324
1996	12	35	2	119	113	0	281
1997	25	48	0	164	62	0	299
1998	33	19	3	41	42	0	138
1999	43	46	5	117	71	0	282
2000	43	40	5	54	0	0	142
2001	53	65	122	172	104	0	516
2002	31	42	61	51	41	0	226
2003	24	27	63	57	45	0	216
2004	27	49	127	152	76	0	431
2005 ^{b/}	98	145	126	150	77	0	596
2006 ^{b/}	96	287	160	141	117	5	801

TABLE A-24. U.S./Canada border to Cape Falcon **commercial** troll salmon fishing **effort in days fished** by area and month.^{a/}
(Page 3 of 3)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season
U.S./Canada Border to Cape Falcon - Total Treaty Indian and Non-Indian^{c/}							
1976-1980	4,598	1,584	14,872	14,595	3,982	38	39,663
1981-1985	3,186	443	3,575	1,919	273	16	9,396
1986-1990	2,569	1,036	678	1,862	635	16	6,784
1991	1,950	1,112	335	2,625	657	50	6,679
1992	2,168	1,452	1,228	903	0	1	5,751
1993	1,383	1,041	1,120	833	727	0	5,104
1994	28	70	3	0	0	0	101
1995	10	0	1	710	74	0	795
1996	12	35	183	350	113	0	693
1997	325	208	0	164	62	0	759
1998	160	31	3	41	42	0	277
1999	314	278	140	203	77	0	1,012
2000	237	141	5	419	32	0	834
2001	291	304	378	368	181	0	1,522
2002	499	282	663	509	41	0	1,994
2003	558	246	691	647	185	0	2,327
2004	538	63	601	600	357	0	2,159
2005 ^{b/}	820	300	518	835	77	0	2,550
2006 ^{b/}	1,036	1,021	262	516	385	5	3,220

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month. Washington data are summarized by statistical month.

b/ Preliminary.

c/ Treaty troll effort in number of landings, which closely approximates days fished because treaty Indian fishers do not usually make multi-day trips. Season totals do not include October treaty troll effort.

TABLE A-25. U.S./Canada border to Cape Falcon ocean troll Chinook and coho landings in number of fish by catch area and month.^{a/} (Page 1 of 4)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK								COHO						
<u>U.S./Canada Border to Leadbetter Pt. - Non-Indian</u>														
1976-1980	41,761	24,669	51,037	33,083	9,456	-	160,006	97	134,856	303,327	174,800	62,229	-	567,347
1981-1985	25,195	3,442	24,381	4,671	31	-	52,131	-	-	117,950	25,994	100	-	120,394
1986-1990	27,081	11,294	8,914	1,811	11	-	41,133	-	-	18,447	34,981	16	-	35,367
1991	13,642	12,361	-	683	751	-	27,437	-	-	-	25,430	12,492	-	37,922
1992	19,577	12,593	5,245	3,483	-	-	40,898	-	-	9,489	7,106	-	-	16,595
1993	14,351	10,623	2,612	946	1,484	-	30,016	-	-	4,748	3,464	5,173	-	13,385
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	3	-	-	3	-	-	-	18,366	7,060	-	25,426
1996	-	-	-	-	-	-	-	-	-	7,137	10,389	-	-	17,526
1997	4,514	1,904	-	-	-	-	6,418	-	-	-	-	-	-	-
1998	5,747	182	-	-	-	-	5,929	-	-	-	-	-	-	-
1999	4,191	7,075	4,030	2,160	-	-	17,456	-	-	673	2,813	337	-	3,823
2000	6,534	2,427	-	752	3	-	9,716	-	-	-	2,419	49	-	2,468
2001	7,092	7,188	4,940	846	219	-	20,285	-	-	1,969	2,070	2,615	-	6,654
2002	18,010	11,001	15,271	7,781	-	-	52,063	-	-	-	53	-	-	53
2003	17,920	8,808	14,372	12,056	1,126	-	54,282	-	-	3,279	3,755	633	-	7,667
2004	15,254	1,157	7,891	8,885	1,827	-	35,014	-	-	2,042	4,652	5,469	-	12,163
2005 ^{b/}	18,294	2,204	6,009	7,073	-	-	33,580	-	-	166	638	-	-	804
2006 ^{b/}	4,735	3,548	1,073	3,458	1,831	-	14,645	-	-	122	816	253	-	1,191
<u>U.S./Canada Border to Leadbetter Pt. - Treaty Indian^{c/}</u>														
1976-1980	787	2,037	1,776	415	70	11	5,086	720	7,677	2,915	1,275	443	11	13,030
1981-1985	2,150	1,883	3,636	1,336	1,018	198	10,023	283	7,435	16,406	24,484	16,666	54	65,274
1986-1990	6,877	5,955	6,726	4,506	1,248	12	25,312	3	4,256	32,310	35,942	11,051	7	83,563
1991	4,456	6,039	6,875	4,497	0	147	21,867	0	0	38,943	38,011	0	498	76,954
1992	8,787	5,538	4,724	4,027	0	0	23,076	2	3	40,215	35,369	0	15	75,589
1993	7,325	5,217	5,923	3,648	2,853	0	24,966	1	0	6,944	25,420	26,375	0	58,740
1994	449	4,113	8	0	0	0	4,570	0	0	0	0	0	0	0
1995	698	0	23	9,044	0	0	9,765	0	0	0	31,390	0	0	31,390
1996	1,473	1,974	457	4,845	3,561	0	12,310	0	0	0	4,655	13,885	0	18,540
1997	819	7,486	0	4,720	1,136	0	14,161	0	0	0	11,481	4,343	0	15,824
1998	5,189	4,442	47	3,860	1,148	0	14,686	0	0	74	3,855	4,225	0	8,154
1999	2,536	15,666	1,530	4,101	3,619	0	27,452	0	0	0	13,151	20,213	0	33,364
2000	2,885	3,052	196	1,505	0	0	7,638	0	1	0	22,174	0	0	22,175
2001	2,278	13,705	6,561	2,988	3,311	0	28,843	0	12	8,510	27,984	22,089	0	58,595
2002	5,364	11,206	12,079	8,074	3,123	50	39,846	1	1	3,449	4,929	9,042	200	17,422
2003	2,856	13,039	12,935	5,232	1,110	75	35,172	3	0	4,449	4,276	2,214	200	10,942
2004	9,947	16,977	10,765	6,960	5,086	50	49,735	3	3	16,133	36,684	9,274	100	62,097
2005 ^{b/}	6,858	18,374	4,971	8,100	3,672	0	41,975	3	1	3,756	15,949	4,288	0	23,997
2006 ^{b/}	2,848	8,673	7,099	6,507	4,903	15	30,030	17	101	10,353	10,659	10,560	5	31,690

TABLE A-25. U.S./Canada border to Cape Falcon ocean troll Chinook and coho landings in number of fish by catch area and month.^{a/} (Page 2 of 4)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK								COHO						
U.S./Canada Border to Leadbetter Pt. - Total^{d/}														
1976-1980	42,548	26,706	52,813	33,498	9,526	11	165,092	740	34,648	306,242	176,074	62,673	11	580,376
1981-1985	27,345	4,637	23,141	6,007	1,024	198	62,154	283	7,435	110,766	50,478	16,706	54	185,667
1986-1990	33,958	14,990	10,291	5,955	1,250	12	66,445	3	4,256	39,689	63,927	11,054	7	118,930
1991	18,098	18,400	6,875	5,180	751	147	49,304	0	0	38,943	63,441	12,492	498	114,876
1992	28,364	18,131	9,969	7,510	0	0	63,974	2	3	49,704	42,475	0	15	92,184
1993	21,676	15,840	8,535	4,594	4,337	0	54,982	1	0	11,692	28,884	31,548	0	72,125
1994	449	4,113	8	0	0	0	4,570	0	0	0	0	0	0	0
1995	698	0	23	9,047	0	0	9,768	0	0	0	49,756	7,060	0	56,816
1996	1,473	1,974	457	4,845	3,561	0	12,310	0	0	7,137	15,044	13,885	0	36,066
1997	5,333	9,390	0	4,720	1,136	0	20,579	0	0	0	11,481	4,343	0	15,824
1998	10,936	4,624	47	3,860	1,148	0	20,615	0	0	74	3,855	4,225	0	8,154
1999	6,727	22,741	5,560	6,261	3,619	0	44,908	0	0	673	15,964	20,550	0	37,187
2000	9,419	5,479	196	2,257	3	0	17,354	0	1	0	24,593	49	0	24,643
2001	9,370	20,893	11,501	3,834	3,530	0	49,128	0	12	10,479	30,054	24,704	0	65,249
2002	23,374	22,207	27,350	15,855	3,123	50	91,909	1	1	3,449	4,982	9,042	200	17,475
2003	20,776	21,847	27,307	17,288	2,236	75	89,454	3	0	7,728	8,031	2,847	200	18,609
2004	25,201	18,134	18,656	15,845	6,913	50	84,749	3	3	18,175	41,336	14,743	100	74,260
2005 ^{b/}	25,152	20,578	10,980	15,173	3,672	0	75,555	3	1	3,922	16,587	4,288	0	24,801
2006 ^{b/}	7,583	12,221	8,172	9,965	6,734	15	44,675	17	101	10,475	11,475	10,813	5	32,881
Leadbetter Pt. to Cape Falcon - Non-Indian														
1976-1980	13,048	10,310	7,546	5,975	4,004	577	41,459	6	37,584	95,592	40,793	21,260	1,875	189,215
1981-1985	11,202	758	1,884	775	107	2	14,728	-	-	48,629	26,289	15,916	-	53,392
1986-1990	4,789	1,264	3,549	2,691	1,702	71	8,566	-	-	18,234	41,121	19,306	304	45,128
1991	1,173	93	-	898	122	-	2,286	-	-	-	36,213	6,813	-	43,026
1992	2,960	963	211	89	-	-	4,223	-	-	1,445	1,068	-	-	2,513
1993	261	16	57	44	83	-	461	-	-	377	741	1,060	-	2,178
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	25	3	-	-	-	-	28	-	-	-	-	-	-	-
1998	0	0	-	-	-	-	0	-	-	-	-	-	-	-
1999	0	15	-	-	-	-	15	-	-	-	27	-	-	27
2000	9	236	-	2,464	89	-	2,798	-	-	-	14,014	1,043	-	15,057
2001	898	1,713	1,036	901	487	-	5,035	-	-	4,052	3,970	2,769	-	10,791
2002	1,226	3,237	5,096	4,994	-	-	14,553	-	-	-	1,642	-	-	1,642
2003	5,717	1,281	1,796	2,760	750	-	12,304	-	-	1,890	4,169	1,672	-	7,731
2004	1,940	94	453	430	559	-	3,476	-	-	906	1,708	7,355	-	9,969
2005 ^{b/}	5,373	1,235	629	4,334	-	-	11,571	-	-	358	2,898	-	-	3,256
2006 ^{b/}	8,913	3,532	1	62	105	-	12,613	-	-	17	1,211	260	-	1,488

TABLE A-25. U.S./Canada border to Cape Falcon ocean troll Chinook and coho landings in number of fish by catch area and month.^{a/} (Page 3 of 4)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK								COHO						
<u>U.S./Canada Border to Cape Falcon - Non-Indian</u>														
1976-1980	54,809	34,978	58,583	39,058	13,460	577	201,465	36	71,298	398,919	215,593	83,490	1,875	756,562
1981-1985	36,397	3,511	21,389	5,446	113	2	66,859	-	-	154,422	47,025	5,372	-	173,785
1986-1990	31,870	12,242	10,688	3,829	1,708	71	49,699	-	-	27,564	65,822	19,314	304	71,470
1991	14,815	12,454	-	1,581	873	-	29,723	-	-	-	61,643	19,305	-	80,948
1992	22,537	13,556	5,456	3,572	-	-	45,121	-	-	10,934	8,174	-	-	19,108
1993	14,612	10,639	2,669	990	1,567	-	30,477	-	-	5,125	4,205	6,233	-	15,563
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	3	-	-	3	-	-	-	18,366	7,060	-	25,426
1996	-	-	-	-	-	-	-	-	-	7,137	10,389	-	-	17,526
1997	4,539	1,907	-	-	-	-	6,446	-	-	-	-	-	-	-
1998	5,747	182	-	-	-	-	5,929	-	-	-	-	-	-	-
1999	4,191	7,090	4,030	2,160	-	-	17,471	-	-	673	2,840	337	-	3,850
2000	6,543	2,663	-	3,216	92	-	12,514	-	-	-	16,433	1,092	-	17,525
2001	7,990	8,901	5,976	1,747	706	-	25,320	-	-	6,021	6,040	5,384	-	17,445
2002	19,236	14,238	20,367	12,775	-	-	66,616	-	-	-	1,695	-	-	1,695
2003	23,637	10,089	16,168	14,816	1,876	-	66,586	-	-	5,169	7,924	2,305	-	15,398
2004	17,194	1,251	8,344	9,315	2,386	-	38,490	-	-	2,948	6,360	12,824	-	22,132
2005 ^{b/}	23,667	3,439	6,638	11,407	-	-	45,151	-	-	524	3,536	-	-	4,060
2006 ^{b/}	13,648	7,080	1,074	3,520	1,936	-	27,258	-	-	139	2,027	513	-	2,679
<u>U.S./Canada Border to Cape Falcon - Treaty Indian^{c/}</u>														
1976-1980	787	2,037	1,776	415	70	11	5,086	720	7,677	2,915	1,275	443	11	13,030
1981-1985	2,150	1,883	3,636	1,336	1,018	198	10,023	283	7,435	16,406	24,484	16,666	54	65,274
1986-1990	6,877	5,955	6,726	4,506	1,248	12	25,312	3	4,256	32,310	35,942	11,051	7	83,563
1991	4,456	6,039	6,875	4,497	0	147	21,867	0	0	38,943	38,011	0	498	76,954
1992	8,787	5,538	4,724	4,027	0	0	23,076	2	3	40,215	35,369	0	15	75,589
1993	7,325	5,217	5,923	3,648	2,853	0	24,966	1	0	6,944	25,420	26,375	0	58,740
1994	449	4,113	8	0	0	0	4,570	0	0	0	0	0	0	0
1995	698	0	23	9,044	0	0	9,765	0	0	0	31,390	0	0	31,390
1996	1,473	1,974	457	4,845	3,561	0	12,310	0	0	0	4,655	13,885	0	18,540
1997	819	7,486	0	4,720	1,136	0	14,161	0	0	0	11,481	4,343	0	15,824
1998	5,189	4,442	47	3,860	1,148	0	14,686	0	0	74	3,855	4,225	0	8,154
1999	2,536	15,666	1,530	4,101	3,619	0	27,452	0	0	0	13,151	20,213	0	33,364
2000	2,885	3,052	196	1,505	0	0	7,638	0	1	0	22,174	0	0	22,175
2001	2,278	13,705	6,561	2,988	3,311	0	28,843	0	12	8,510	27,984	22,089	0	58,595
2002	5,364	11,206	12,079	8,074	3,123	50	39,846	1	1	3,449	4,929	9,042	200	17,422
2003	2,856	13,039	12,935	5,232	1,110	75	35,172	3	0	4,449	4,276	2,214	200	10,942
2004	9,947	16,977	10,765	6,960	5,086	50	49,735	3	3	16,133	36,684	9,274	100	62,097
2005 ^{b/}	6,858	18,374	4,971	8,100	3,672	0	41,975	3	1	3,756	15,949	4,288	0	23,997
2006 ^{b/}	2,848	8,673	7,099	6,507	4,903	15	30,030	17	101	10,353	10,659	10,560	5	31,690

TABLE A-25. U.S./Canada border to Cape Falcon ocean troll Chinook and coho landings in number of fish by catch area and month.^{a/} (Page 4 of 4)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK								COHO						
<u>U.S./Canada Border to Cape Falcon - Total Treaty Indian and Non-Indian^{c/}</u>														
1976-1980	49,538	15,956	46,754	30,068	8,461	599	151,314	999	17,805	321,926	177,538	51,106	365	569,728
1981-1985	34,696	5,308	19,980	4,503	1,077	147	65,565	26	10,149	98,551	68,757	17,148	52	194,631
1986-1990	35,583	18,522	11,638	7,187	2,106	56	75,050	3	23	40,800	81,969	22,635	167	145,491
1991	19,271	18,493	6,875	6,078	873	147	51,590	0	0	38,943	99,654	19,305	498	157,902
1992	31,324	19,094	10,180	7,599	0	0	68,197	2	3	51,149	43,543	0	15	94,697
1993	21,937	15,856	8,592	4,638	4,420	0	55,443	1	0	12,069	29,625	32,608	0	74,303
1994	449	4,113	8	0	0	0	4,570	0	0	0	0	0	0	0
1995	698	0	23	9,047	0	0	9,768	0	0	0	49,756	7,060	0	56,816
1996	1,473	1,974	457	4,845	3,561	0	12,310	0	0	7,137	15,044	13,885	0	36,066
1997	5,358	9,393	0	4,720	1,136	0	20,607	0	0	0	11,481	4,343	0	15,824
1998	10,936	4,624	47	3,860	1,148	0	20,615	0	0	74	3,855	4,225	0	8,154
1999	6,727	22,756	5,560	6,261	3,619	0	44,923	0	0	673	15,991	20,550	0	37,214
2000	9,428	5,715	196	4,721	92	0	20,152	0	1	0	38,607	1,092	0	39,700
2001	10,268	22,606	12,537	4,735	4,017	0	54,163	0	12	14,531	34,024	27,473	0	76,040
2002	24,600	25,444	32,446	20,849	3,123	50	106,462	1	1	3,449	6,624	9,042	200	19,117
2003	26,493	23,128	29,103	20,048	2,986	75	101,758	3	0	9,618	12,200	4,519	200	26,340
2004	27,141	18,228	19,109	16,275	7,472	50	88,225	3	3	19,081	43,044	22,098	100	84,229
2005 ^{b/}	30,525	21,813	11,609	19,507	3,672	0	87,126	3	1	4,280	19,485	4,288	0	28,057
2006 ^{b/}	16,496	15,753	8,173	10,027	6,839	15	57,288	17	101	10,492	12,686	11,073	5	34,369

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month. Washington data are summarized by statistical month.

b/ Preliminary.

c/ Season totals do not include October treaty troll catches.

TABLE A-26. U.S./Canada border to Cape Falcon ocean troll pink salmon landings in numbers of fish by catch area and month (odd-year averages).^{a/} (Page 1 of 2)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season
U.S./Canada Border to Leadbetter Pt. - Non-Indian							
1976-1980	565	444	94,872	308,655	4,747	-	409,282
1981-1985	230	33	50,591	86,991	415	-	138,123
1986-1990	115	182	2,642	36,286	-	-	19,670
1991	4	17	-	43,208	295	-	43,524
1993	16	1	88	2,753	3	-	2,861
1995	-	-	-	30,060	872	-	30,932
1997	2	3	-	-	-	-	5
1999	0	1	31	21	0	-	53
2001	1	9	20	0	0	-	30
2003	0	0	142	63	10	-	215
2005 ^{b/}	4	0	2	2	-	-	8
U.S./Canada Border to Leadbetter Pt. - Treaty Indian^{c/}							
1976-1980	49	1,550	1,053	3,019	21	0	5,691
1981-1985	32	214	2,208	7,806	320	0	10,580
1986-1990	5	10	8,991	4,254	591	0	13,851
1991	0	2	1,148	3,356	0	0	4,506
1993	0	0	349	2,261	783	0	3,397
1995	0	0	0	10,940	0	0	10,940
1997	0	0	0	1,757	53	0	1,810
1999	0	0	0	1,388	108	0	1,567
2001	11	0	696	1,537	207	0	2,626
2003	0	0	172	41	23	0	237
2005 ^{b/}	0	0	189	194	3	0	386
U.S./Canada Border to Leadbetter Pt. - Total^{c/}							
1976-1980	614	1,993	95,925	311,674	4,768	0	414,973
1981-1985	262	247	52,799	94,798	597	0	148,703
1986-1990	120	101	10,312	22,397	591	0	33,520
1991	4	19	1,148	46,564	295	0	48,030
1993	16	1	437	5,014	786	0	6,258
1995	0	0	0	41,000	872	0	41,872
1997	2	3	0	1,757	53	0	1,815
1999	0	1	31	1,409	108	0	1,620
2001	12	9	716	1,537	207	0	2,656
2003	0	0	314	104	33	0	452
2005 ^{b/}	4	0	191	196	3	0	394

TABLE A-26. U.S./Canada border to Cape Falcon ocean troll pink salmon landings in numbers of fish by catch area and month (odd-year averages).^{a/} (Page 2 of 2)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season
Leadbetter Pt. to Cape Falcon - Non-Indian							
1976-1980	5	36	3,110	3,798	1,052	0	12,402
1981-1985	5	4	842	2,327	0	0	5,084
1986-1990	0	0	109	1	1	0	178
1991	0	0	314	104	33	0	452
1993	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0
1997	10	71	4,031	2,929	846	-	11,814
1999	0	0	2,189	4,667	1,257	-	12,990
2001	12	11	2,525	2,474	0	-	7,241
2003	0	0	2	8	1	-	14
2005 ^{b/}	3	0	0	4,498	0	-	7,998
U.S./Canada Border to Cape Falcon - Non-Indian							
1976-1980	570	479	97,982	312,453	5,799	-	421,684
1981-1985	235	37	51,434	89,318	277	-	143,207
1986-1990	115	91	1,430	18,144	1	-	19,847
1991	4	17	0	43,373	295	-	43,795
1993	16	1	88	2,753	3	-	2,861
1995	0	0	0	30,060	872	-	30,932
1997	2	3	0	0	0	-	5
1999	0	1	31	21	0	-	53
2001	1	9	21	13	0	-	56
2003	0	0	176	67	10	-	255
2005 ^{b/}	4	0	3	3	1	-	11
U.S./Canada Border to Cape Falcon - Treaty Indian^{c/}							
1976-1980	1	49	1,550	1,053	3,019	21	0
1981-1985	0	32	214	2,208	7,806	320	0
1986-1990	0	5	10	8,991	4,254	591	0
1991	0	0	2	1,148	3,356	0	0
1993	0	0	0	349	2,261	783	0
1995	0	0	0	0	10,940	0	0
1997	0	0	0	0	1,757	53	0
1999	0	0	0	0	1,388	108	0
2001	0	11	0	696	1,537	207	0
2003	0	0	0	172	41	23	0
2005 ^{b/}	0	0	0	189	194	3	0
U.S./Canada Border to Cape Falcon - Total^{c/}							
1976-1980	570	528	99,532	313,506	8,818	21	421,684
1981-1985	235	68	51,648	91,526	8,083	320	143,207
1986-1990	115	96	1,440	27,135	4,255	591	19,847
1991	4	17	2	44,521	3,651	0	43,795
1993	16	1	88	3,102	2,264	783	2,861
1995	0	0	0	30,060	11,812	0	30,932
1997	2	3	0	0	1,757	53	5
1999	0	1	31	21	1,388	108	53
2001	1	20	21	709	1,537	207	56
2003	0	0	176	239	51	23	255
2005 ^{b/}	4	0	3	192	195	3	11

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month. Washington data are summarized by statistical month.

b/ Preliminary.

c/ Season totals do not include October treaty troll catches.

TABLE A-27. U.S./Canada border to Cape Falcon ocean recreational fishing effort in salmon angler trips by area and month.^{a/}
(Page 1 of 1)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
U.S./Canada Border to Leadbetter Pt.^{b/}								
1976-1980	3,118	13,778	42,809	87,445	95,907	33,240	3,554	212,977
1981-1985	80	3,331	16,943	44,629	38,938	5,555	196	109,593
1986-1990	-	1,190	4,199	45,977	23,931	4,377	40	78,144
1991	-	-	4,959	54,748	18,142	3,864	-	81,713
1992	-	1,344	-	34,918	29,184	9,721	714	75,881
1993	-	1,172	-	30,351	31,397	18,199	-	81,119
1994	-	-	-	-	-	-	-	-
1995	-	-	-	4,859	21,874	5,917	-	32,650
1996	-	-	-	4,458	20,205	2,994	-	27,657
1997	-	-	-	11,794	10,044	1,171	-	23,009
1998	-	-	-	-	14,013	943	-	14,956
1999	-	-	-	8,875	14,607	6,616	-	30,098
2000	-	-	-	18,556	12,960	1,646	-	33,162
2001	-	-	-	37,754	23,732	9,291	239	71,016
2002	-	2,496	13,613	21,404	19,160	1,719	113	58,505
2003	-	-	5,894	32,630	27,968	6,247	128	72,867
2004	-	-	2,013	31,942	26,905	8,013	20	68,893
2005	-	-	1,119	25,889	22,504	8,870	160	58,541
2006 ^{c/}	-	-	1,119	16,486	20,679	3,551	258	42,093
Leadbetter Pt. to Cape Falcon								
1976-1980	609	5,560	29,391	59,424	87,656	27,001	2,407	211,327
1981-1985	-	1,165	10,828	35,085	31,281	4,835	721	79,973
1986-1990	-	444	2,751	28,624	27,098	2,493	-	59,008
1991	-	-	4,816	35,014	20,716	6,575	-	67,121
1992	-	-	0	35,423	6,347	4,174	-	45,944
1993	-	-	-	18,590	27,542	19,335	-	65,467
1994	-	-	-	-	-	-	-	-
1995	-	-	-	6,096	19,239	7,897	-	33,232
1996	-	-	-	4,215	12,527	4,485	-	21,227
1997	-	-	-	7,328	2,964	-	-	10,292
1998	-	-	-	-	6,107	704	-	6,811
1999	-	-	-	6,546	14,786	6,761	-	28,093
2000	-	-	-	10,836	13,364	-	-	24,200
2001	-	-	-	29,087	38,189	11,351	-	78,627
2002	-	370	1,662	12,993	24,510	9,172	6	48,713
2003	-	-	606	20,308	42,124	8,188	-	71,226
2004	-	-	853	16,101	35,006	10,444	-	62,404
2005	-	-	-	8,316	27,084	9,916	-	45,316
2006 ^{c/}	-	-	-	7,451	21,249	2,712	-	31,412
U.S./Canada Border to Cape Falcon^{b/}								
1976-1980	3,574	19,337	72,200	146,869	183,563	60,241	5,480	424,304
1981-1985	80	4,263	25,606	79,714	70,218	9,423	436	189,565
1986-1990	-	1,412	6,950	74,600	51,029	5,374	40	137,152
1991	-	-	9,775	89,762	38,858	10,439	-	148,834
1992	-	1,344	0	70,341	35,531	13,895	714	121,825
1993	-	1,172	-	48,941	58,939	37,534	-	146,586
1994	-	-	-	-	-	-	-	-
1995	-	-	-	10,955	41,113	13,814	-	65,882
1996	-	-	-	8,673	32,732	7,479	-	48,884
1997	-	-	-	19,122	13,008	1,171	-	33,301
1998	-	-	-	-	20,120	1,647	-	21,767
1999	-	-	-	15,421	29,393	13,377	-	58,191
2000	-	-	-	29,392	26,324	1,646	-	57,362
2001	-	-	-	66,841	61,921	20,642	239	149,643
2002	-	2,866	15,275	34,397	43,670	10,891	119	107,218
2003	-	-	6,500	52,938	70,092	14,435	128	144,093
2004	-	-	2,866	48,043	61,911	18,457	20	131,297
2005	-	-	1,119	34,205	49,588	18,786	160	103,857
2006 ^{c/}	-	-	1,119	23,937	41,928	6,263	258	73,505

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month. Washington data are summarized by statistical month.

b/ Does not include the late-season Washington state-waters Area 4B fishery when open.

c/ Preliminary.

TABLE A-28. U.S./Canada border to Cape Falcon ocean recreational Chinook and coho salmon landings in numbers of fish by area and month.^{a/} (Page 1 of 2)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season	April	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK									COHO							
U.S./Canada Border to Leadbetter Pt. ^{b/}																
1976-1980	2,202	6,285	22,116	21,405	18,586	6,528	1,103	77,123	304	13,182	48,841	109,426	98,977	32,774	2,097	305,540
1981-1985	57	1,982	13,193	18,822	8,162	505	26	42,631	80	1,157	12,324	37,404	42,235	6,211	161	96,516
1986-1990	-	790	1,653	13,191	5,373	1,161	-	20,741	-	19	2,439	58,151	35,746	6,320	45	102,190
1991	-	-	1,911	6,560	1,645	209	-	10,325	-	-	6,781	89,094	29,652	6,968	-	132,495
1992	-	118	-	8,181	6,055	2,401	215	16,970	-	32	-	30,875	37,891	7,542	324	76,664
1993	-	178	-	2,467	4,204	3,536	-	10,385	-	48	-	28,754	34,621	16,373	-	79,796
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	12	176	49	-	237	-	-	-	3,216	31,680	8,723	-	43,619
1996	-	-	-	8	65	12	-	85	-	-	-	5,975	22,332	5,338	-	33,645
1997	-	-	-	1,738	1,571	315	-	3,624	-	-	-	7,043	8,239	424	-	15,706
1998	-	-	-	-	1,645	228	-	1,873	-	-	-	-	15,267	1,066	-	16,333
1999	-	-	-	2,667	3,591	1,311	-	7,569	-	-	-	6,177	11,545	2,820	-	20,542
2000	-	-	-	4,572	2,358	-	-	6,930	-	-	-	23,122	17,161	2,067	-	42,350
2001	-	-	-	13,632	3,224	896	100	17,852	-	-	-	42,997	33,408	14,163	15	90,583
2002	-	2,554	15,225	21,984	9,884	99	43	49,789	-	5	271	10,327	17,191	1,331	4	29,129
2003	-	-	2,689	12,959	10,752	1,937	62	28,399	-	-	3,635	25,550	27,566	5,660	12	62,423
2004	-	-	527	9,057	6,977	2,124	6	18,685	-	-	1,581	22,685	27,588	10,042	3	61,899
2005	-	-	364	8,104	13,189	5,107	43	26,808	-	-	126	10,446	8,684	3,772	18	23,046
2006 ^{c/}	-	-	202	3,274	4,522	813	91	8,902	-	-	416	6,514	8,287	1,466	2	16,686
Leadbetter Pt. to Cape Falcon																
1976-1980	191	2,352	12,353	11,569	23,764	3,751	246	54,102	493	6,524	53,314	89,865	86,917	31,024	2,463	269,812
1981-1985	-	221	4,286	6,972	6,406	672	40	17,395	-	7,109	14,759	52,828	37,648	7,241	825	109,663
1986-1990	-	140	360	2,747	4,469	120	-	7,580	-	-	4,463	48,084	38,613	2,767	-	91,374
1991	-	-	252	1,515	1,491	69	-	3,327	-	-	7,875	62,160	33,627	10,932	-	114,594
1992	-	-	0	1,164	627	174	-	1,965	-	-	0	55,292	9,507	4,372	-	69,171
1993	-	-	-	977	1,755	737	-	3,469	-	-	-	22,311	31,376	13,648	-	67,335
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
1995	-	-	-	56	277	48	-	381	-	-	-	5,960	22,893	7,557	-	36,410
1996	-	-	-	27	53	40	-	120	-	-	-	6,094	14,945	3,784	-	24,823
1997	-	-	-	288	240	-	-	528	-	-	-	11,792	5,071	-	-	16,863
1998	-	-	-	-	366	53	-	419	-	-	-	-	6,046	498	-	6,544
1999	-	-	-	714	2,129	409	-	3,252	-	-	-	7,636	12,845	6,646	-	27,127
2000	-	-	-	1,183	1,129	-	-	2,312	-	-	-	18,206	21,369	-	-	39,575
2001	-	-	-	3,253	3,778	709	-	7,740	-	-	-	45,862	56,349	14,457	-	116,668
2002	-	86	2,274	4,920	3,398	105	3	10,786	-	-	30	14,568	32,527	12,283	-	59,408
2003	-	-	52	2,044	5,220	798	-	8,114	-	-	655	32,596	63,648	9,545	-	106,444
2004	-	-	47	1,068	5,465	1,825	-	8,405	-	-	1,303	23,786	40,641	7,805	-	73,535
2005	-	-	-	1,655	9,639	1,902	-	13,196	-	-	-	9,165	23,403	6,122	-	38,690
2006 ^{c/}	-	-	-	559	1,518	198	-	2,274	-	-	-	8,149	15,782	881	-	24,812

Review of 2006 Ocean Salmon Fisheries

186

FEBRUARY 2007

TABLE A-28. U.S./Canada border to Cape Falcon ocean **recreational** Chinook and coho salmon **landings in numbers** of fish by area and month.^{a/} (Page 2 of 2)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season	April	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK									COHO							
U.S./Canada Border to Cape Falcon ^{b/}																
1976-1980	1,794	8,638	34,469	32,974	42,350	10,279	1,348	131,225	551	19,705	102,155	199,291	185,895	63,798	4,067	575,352
1981-1985	57	2,159	16,622	25,794	14,568	1,009	46	60,026	80	3,527	27,083	90,232	79,883	12,003	436	206,178
1986-1990	-	930	2,014	15,938	9,841	1,241	-	28,321	-	19	6,902	106,235	74,359	7,427	45	193,564
1991	-	-	2,163	8,075	3,136	278	-	13,652	-	-	14,656	151,254	63,279	17,900	-	247,089
1992	-	118	0	9,345	6,682	2,575	215	18,935	-	32	0	86,167	47,398	11,914	324	145,835
1993	-	178	-	3,444	5,959	4,273	-	13,854	-	48	-	51,065	65,997	30,021	-	147,131
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
1995	-	-	-	68	453	97	-	618	-	-	-	9,176	54,573	16,280	-	80,029
1996	-	-	-	35	118	52	-	205	-	-	-	12,069	37,277	9,122	-	58,468
1997	-	-	-	2,026	1,811	315	-	4,152	-	-	-	18,835	13,310	424	-	32,569
1998	-	-	-	-	2,011	281	-	2,292	-	-	-	-	21,313	1,564	-	22,877
1999	-	-	-	3,381	5,720	1,720	-	10,821	-	-	-	13,813	24,390	9,466	-	47,669
2000	-	-	-	5,755	3,487	-	-	9,242	-	-	-	41,328	38,530	2,067	-	81,925
2001	-	-	-	16,885	7,002	1,605	100	25,592	-	-	-	88,859	89,757	28,620	15	207,251
2002	-	2,640	17,499	26,904	13,282	204	46	60,575	-	5	301	24,895	49,718	13,614	4	88,537
2003	-	-	2,741	15,003	15,972	2,735	62	36,513	-	-	4,290	58,146	91,214	15,205	12	168,867
2004	-	-	574	10,125	12,442	3,949	6	27,090	-	-	2,884	46,471	68,229	17,847	3	135,434
2005	-	-	364	9,759	22,828	7,009	43	40,004	-	-	126	19,611	32,087	9,894	18	61,736
2006 ^{c/}	-	-	202	3,832	6,040	1,011	91	11,176	-	-	416	14,663	24,069	2,347	2	41,498

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month. Washington data are summarized by statistical month.

b/ Does not include the late-season Washington state-waters Area 4B fishery when open.

c/ Preliminary.

APPENDIX B

HISTORICAL RECORD OF ESCAPEMENTS TO INLAND FISHERIES AND SPAWNING AREAS

LIST OF TABLES

	<u>Page</u>
TABLE B-1. California Central Valley natural fall Chinook salmon spawning escapements in numbers of fish	191
TABLE B-2. California Central Valley hatchery fall Chinook salmon spawning escapements in numbers of fish	192
TABLE B-3. Sacramento River late-fall, winter, and spring Chinook salmon spawning escapement estimates in numbers of fish.....	193
TABLE B-4. Summary of Klamath River fall Chinook salmon estimates in numbers of adults and jacks	194
TABLE B-5. Estimates of Yurok and Hoopa Valley reservation Indian gillnet Chinook harvest in numbers of fish	195
TABLE B-6. Shasta River fall Chinook salmon weir counts or spawning escapement estimates in numbers of fish	196
TABLE B-7. Summary of California North Coast salmon spawning stock surveys in numbers of fish	197
TABLE B-8. Peak spawning counts in index areas for selected south/local migrating Oregon coastal fall Chinook stocks	198
TABLE B-9. Counts of natural and hatchery spring Chinook salmon at Gold Ray Dam on the Rogue River and at Winchester Dam on the North Umpqua River in thousands of fish	199
TABLE B-10. Rogue River fall Chinook carcass counts in numbers of fish	200
TABLE B-11. Peak counts for north migrating Oregon coastal Chinook stocks on selected fall Chinook spawning index stream surveys.....	201
TABLE B-12. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult spring Chinook destined for areas below Bonneville Dam	202
TABLE B-13. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult spring Chinook destined for areas above Bonneville Dam	203
TABLE B-14. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult summer Chinook destined for areas above Bonneville Dam	204
TABLE B-15. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult Spring Creek Hatchery (SCH) stock fall Chinook	205
TABLE B-16. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult lower river hatchery (LRH) stock fall Chinook	206
TABLE B-17. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult lower river wild (LRW) stock fall Chinook	207
TABLE B-18. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult upriver bright (URB) stock fall Chinook destined for areas above McNary Dam and the Deschutes River	208
TABLE B-19. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult mid-Columbia bright (MCB) stock fall Chinook destined for areas below McNary Dam, not including the Deschutes River	209

LIST OF TABLES (continued)

	<u>Page</u>
TABLE B-20. Estimates of minimum inriver run size and catch in numbers of adult spring, summer, and fall Chinook from the Columbia River.....	210
TABLE B-21. Estimates of minimum inriver run size, catch, and escapement in thousands of adult coho entering the Columbia River	215
TABLE B-22. Estimated catch and effort in the Buoy 10 fishery	216
TABLE B-23. Willapa Bay fall Chinook terminal run size, catch, and spawning escapement in numbers of fish	217
TABLE B-24. Willapa Bay coho terminal run size, catch, and spawning escapement in numbers of fish	218
TABLE B-25. Grays Harbor Chinook terminal catch, spawning escapement, and run size in numbers of fish	219
TABLE B-26. Grays Harbor coho terminal catch, spawning escapement, and run size estimates in numbers of fish	221
TABLE B-27. Treaty Indian gillnet catch of Chinook, chum, and sockeye salmon in the Quinault River in numbers of fish	222
TABLE B-28. Estimated inriver run size, catch and escapement for Quinault River coho in numbers of fish	223
TABLE B-29. Estimated inriver run size, catch, and escapement of Queets River spring/summer Chinook in numbers of fish.....	224
TABLE B-30. Estimated inriver run size, catch, and escapement of Queets River fall Chinook in numbers of fish	225
TABLE B-31. Estimated terminal run size, catch, and escapement for Queets River coho in numbers of fish	226
TABLE B-32. Estimated inriver run size, catch, and escapement for Hoh River spring/summer Chinook in numbers of fish.....	227
TABLE B-33. Estimated inriver run size, catch, and escapement for Hoh River fall Chinook in numbers of fish	228
TABLE B-34. Estimated inriver run size, catch, and escapement for Hoh River coho in numbers of fish	229
TABLE B-35. Estimated inriver run size, catch, and escapement for Quillayute River spring/summer Chinook in numbers of fish.....	230
TABLE B-36. Estimated inriver run size, catch, and escapement for Quillayute River fall Chinook in numbers of fish.....	231
TABLE B-37. Estimated inriver run size, catch, and escapement for Quillayute River coho stocks in numbers of fish	232
TABLE B-38. Puget Sound commercial net and troll fishery salmon catches in numbers of fish.....	234
TABLE B-39. Summary of Puget Sound marine recreational salmon catch estimates in numbers of fish from catch record cards	236
TABLE B-40. Puget Sound reported commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound Chinook stocks	237
TABLE B-41. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound coho stocks	240
TABLE B-42. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound pink stocks.....	243
TABLE B-43. Puget Sound spring Chinook spawning escapement estimates in numbers of adult fish	246

TABLE B-1. California Central Valley natural fall Chinook salmon spawning escapements in numbers of fish.^{a/}

Year or Average	Upper Sacramento River		Lower Sacramento River								Sacramento River Totals		San Joaquin River Totals		Central Valley	
	Adults	Jacks	Feather River		Yuba River		American River		Total		Adults	Jacks	Adults	Jacks	Adults	Jacks
1971-1975	58,462	18,289	40,221	9,745	10,877	1,615	41,726	3,695	92,824	15,055	151,286	33,344	13,462	1,345	164,748	34,690
1976-1980	67,011	17,905	33,954	3,544	7,387	1,563	28,509	1,344	69,850	6,452	136,861	24,357	2,886	763	139,747	25,120
1981-1985	57,793	22,432	36,252	5,243	12,825	5,146	32,332	4,954	81,409	15,343	139,202	37,775	34,930	10,721	174,132	48,496
1986-1990	87,397	17,244	38,709	6,426	9,261	2,444	24,420	3,323	72,390	12,193	159,787	29,437	10,853	4,377	170,640	33,814
1991	35,258	4,633	28,524	2,821	11,164	2,844	16,456	1,627	56,144	7,292	91,402	11,925	764	153	92,166	12,078
1992	31,734	9,112	19,790	4,315	4,517	1,845	3,416	1,395	27,723	7,555	59,457	16,667	1,094	846	60,551	17,513
1993	55,144	5,409	27,367	3,556	5,818	885	22,227	6,527	55,412	10,968	110,556	16,377	2,659	751	113,215	17,128
1994	66,383	20,371	31,013	7,369	7,046	3,844	28,589	2,931	66,647	14,145	133,030	34,516	4,168	1,253	137,197	35,770
1995	112,234	17,958	56,197	3,715	12,998	1,239	72,056	8,274	141,252	13,227	253,486	31,185	4,445	1,515	257,931	32,700
1996	131,267 ^{b/}	11,650 ^{b/}	44,593	12,577	23,492	4,408	67,719	7,026	135,803	24,012	267,071	35,661	5,766	5,979	272,837	41,640
1997	167,354	13,736	47,009	3,538	19,202	6,746	46,036	6,159	112,246	16,444	279,600	30,180	17,983	1,146	297,583	31,326
1998	60,713 ^{b/}	5,137 ^{b/}	39,600 ^{c/}	3,400	26,737	4,353	41,094	13,698	107,431	21,451	168,144	26,588	13,119	6,292	181,263	32,880
1999	256,629	7,495	30,000 ^{c/}	7,500	18,778	5,452	48,311	8,688	97,089	21,640	353,718	29,135	10,708	7,185	364,426	36,320
2000	152,923	3,900	109,924	7,017	12,954	2,041	93,413	5,646	216,291	14,704	369,214	18,604	36,896	2,578	406,110	21,182
2001	130,440	5,132	169,588	9,114	21,567	1,825	167,062	13,553	358,217	24,492	488,657	29,624	23,899	3,705	512,555	33,330
2002	481,924 ^{d/}	9,009	93,766	11,397	18,406	4,796	95,711	10,635	207,883	26,828	689,806	35,837	21,852	3,788	711,658	39,626
2003	164,802	4,402	85,578	4,369	26,820	1,489	136,238	9,627	248,636	15,485	413,438	19,887	14,519	2,164	427,957	22,051
2004	70,557	7,221	48,580	5,591	9,260	5,208	75,090	13,774	132,930	24,573	203,487	31,794	7,249	3,311	210,736	35,105
2005	96,716	3,267	43,738	4,848	16,251	987	54,001	2,842	113,990	8,677	210,706	11,944	15,905	1,517	226,611	13,461
2006 ^{e/}	86,312	2,652	79,412	2,288	7,890	237	19,895	1,105	107,197	3,630	193,509	6,282	6,709	1,209	200,218	7,491

a/ Upper Sacramento River jack estimates based on Red Bluff Diversion Dam samples. All other estimates generally are based on carcass surveys. (Adult and jack numbers generally are based on a 24-inch fork length cut-off [unpublished CDFG data.]) Upper Sacramento River estimates also include Tehama-Colusa Spawning Channel for 1971 to 1980. For years prior to 2004, all numbers in this table were reviewed and updated by CDFG in 2003 to reflect CDFG final project reports.

b/ Total includes Butte Creek, for which a fall spawner survey was conducted in 1996 and 1998.

c/ Survey methodology was variable; may not be comparable to other surveys.

d/ Change in estimation methodology (due to extremely high Battle Creek escapement in 2002).

e/ Preliminary.

TABLE B-2. California Central Valley hatchery fall Chinook salmon spawning escapements in numbers of fish.^{a/}

Year or Average	Sacramento Hatcheries								San Joaquin Hatcheries						Central Valley Hatchery Totals	
	Coleman ^{b/}		Feather River		Nimbus		Totals		Mokelumne River		Merced River		Totals			
	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults ^{c/}	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks
1971-1975	1,373	1,167	3,882	1,387	7,791	1,311	13,661	4,065	305	156	460	19	765	175	14,427	4,240
1976-1980	4,239	1,292	4,261	1,043	7,238	1,990	17,198	4,760	271	59	346	23	617	82	17,814	4,842
1981-1985	11,557	3,734	6,845	884	10,072	2,257	29,832	7,689	759	734	797	449	1,556	1,183	31,388	8,872
1986-1990	11,507	2,288	5,837	1,947	5,685	1,349	23,028	5,584	278	286	299	140	577	426	23,605	6,010
1991	10,031	652	9,227	1,490	6,772	356	26,030	2,498	33	8	32	9	65	17	26,095	2,515
1992	6,257	1,019	10,324	6,116	5,107	1,349	21,688	8,483	264	446	123	245	387	691	22,074	9,175
1993	7,056	531	10,228	1,763	7,342	3,314	24,626	5,608	1,542	622	234	175	1,776	797	26,402	6,405
1994	11,585	7,406	11,341	3,861	7,676	891	30,601	12,159	1,168	751	497	446	1,665	1,197	32,266	13,356
1995	24,810	1,867	11,566	583	5,172	1,326	41,548	3,776	2,378	945	311	291	2,689	1,236	44,237	5,012
1996	18,848	2,330	6,494	1,613	7,177	474	32,519	4,417	1,828	2,055	395	746	2,223	2,801	34,742	7,218
1997	44,590	6,080	13,358	1,770	5,328	322	63,276	8,172	6,305	189	838	108	7,143	297	70,419	8,469
1998	42,400	1,951	17,567	1,322	9,949	1,839	69,915	5,113	2,686	585	347	452	3,033	1,037	72,948	6,150
1999	23,194	3,776	12,822	1,104	6,207	3,553	42,224	8,432	1,611	1,542	650	987	2,261	2,529	44,484	10,962
2000	20,793	866	16,470	1,676	10,312	848	47,575	3,390	4,637	887	1,615	331	6,252	1,218	53,827	4,608
2001	23,710	988	24,001	871	9,688	1,956	57,399	3,815	4,467	1,427	1,137	523	5,604	1,950	63,003	5,765
2002	61,946	4,112	17,516	2,991	6,231	3,586	85,693	10,689	5,800	2,119	1,250	588	7,050	2,707	92,743	13,396
2003	82,708	5,555	13,615	1,352	11,875	3,012	108,198	9,919	5,108	3,009	392	157	5,500	3,166	113,698	13,085
2004	51,557	16,672	15,769	5,535	12,741	13,659	80,067	35,866	5,477	4,879	456	594	5,933	5,473	86,000	41,339
2005	142,135	2,604	20,597	1,787	20,569	1,780	183,301	6,171	5,035	528	346	75	5,381	603	188,682	6,774
2006 ^{d/}	56,962	1,055	11,431	150	8,322	406	76,715	1,611	2,796	1,320	130	20	2,926	1,340	79,641	2,951
GOALS ^{e/}	9,000	-	5,000	-	6,000	-	20,000	-	5,000	-	1,000	-	6,000	-	26,000	-

a/ For years prior to 2004, all numbers in this table were reviewed and updated by CDFG in 2003 to reflect CDFG final project reports.

b/ Fall spawning fish. Some spring run are included.

c/ Total adults in Sacramento Hatcheries include Tehama-Colusa Fish Facility for 1971 to 1985.

d/ Preliminary.

e/ Hatchery specific goals, not PFMC goals.

TABLE B-3. Sacramento River late-fall, winter, and spring Chinook salmon spawning escapement estimates in numbers of fish.

Year or Average	Upper Sacramento River										Grand Totals	
	Late Fall ^{a/b/}		Winter ^{a/b/}		Tributary ^{c/} Adults and Jacks ^{f/}	Spring		Feather River ^{d/e/}				
	Adults	Jacks	Adults	Jacks		Adults	Jacks	Adults	Jacks			
	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks		
1971-1975	18,193	1,087	22,863	9,063	5,194	5,098	1,718	366	-	51,714	11,650	
1976-1980	9,662	1,798	13,499	2,640	1,201	8,335	2,571	375	-	33,073	7,009	
1981-1985	8,102	1,746	5,027	921	1,061	9,798	4,241	1,446	133	25,434	7,040	
1986-1990	10,047	1,761	1,369	390	1,658	8,795	1,930	2,884	406	24,753	4,487	
1991	7,404	859	192	19	798	607	218	4,148	155	13,149	1,251	
1992	9,665	727	1,160	80	1,176	320	51	1,323	174	13,644	1,032	
1993	1,093	174	250	137	1,007	275	116	3,943	729	6,568	1,156	
1994	751	138	62	124	1,684	509	353	2,785	856	5,791	1,471	
1995	307 ^{g/}	16 ^{g/}	1,267	30	9,398	341	85	5,003	411	16,315	543	
1996	1,003 ^{g/}	382 ^{g/}	708	629	2,322	314	64	5,571	810	9,918	1,886	
1997	4,166 ^{g/}	412 ^{g/}	528	352	1,303	36	90	2,970	683	9,003	1,537	
1998	40,185 ^{h/}	5,055 ^{h/}	2,079	923	23,609	624	491	6,240	506	72,738	6,974	
1999	24,475 ^{h/}	3,986 ^{h/}	822	2,466	6,104	142	117	3,530	201	35,073	6,770	
2000	11,060 ^{h/}	3,507 ^{h/}	563	789	5,504	94	38	3,657	315	20,878	4,649	
2001	23,956 ^{h/}	998 ^{h/}	1,696	3,827	21,623 ^{i/}	981	0	4,052	83	52,308	4,908	
2002	39,700 ^{h/}	401 ^{h/}	7,614	1,555	20,198 ^{i/}	430	53	3,982	207	71,924	2,216	
2003	9,295 ^{h/}	191 ^{h/}	6,172	3,585	21,798 ^{i/}	0	0	8,373	389	45,638	4,165	
2004	13,552 ^{h/}	370 ^{h/}	2,588	4,604	12,556 ^{i/}	763	326	3,630	572	33,089	5,872	
2005 ^{k/}	14,437 ^{h/}	2,598 ^{h/}	3,521	1,778	21,319 ^{i/}	21	9	1,811 ^{m/}	24 ^{m/}	41,109	4,409	
2006 ^{k/}	21,657 ^{h/}	1,477 ^{h/}	4,918	2,595	10,615 ^{i/}	0	0	1,948 ^{m/}	4 ^{m/}	39,138	4,076	

a/ Estimated number of jacks and adults based on sampling at Red Bluff Diversion Dam (unpublished CDFG data). Beginning in 1987 for late-fall and winter and 1994 for fall, estimates have been based on historical run patterns and partial counts at Red Bluff Diversion Dam, due to the raising of the dam gates during the last part of fall and late-fall runs and first part of the winter run.

b/ Variable numbers of late-fall and winter run are trapped at Keswick Dam and spawned at Coleman or Livingston Stone Hatcheries.

c/ Natural spawning spring run which are isolated from fall run. Primarily Mill, Deer, and Butte Creeks.

d/ Primarily fish returning to Feather River Hatchery.

e/ Spring run Chinook are not distinguished from fall run in the natural spawning surveys. They are reported in the fall run natural escapement numbers.

f/ No data available for age composition of tributary spring run.

g/ Primarily number of fish spawned at Coleman hatchery. No data are available for natural spawners, as gates were raised during the time coinciding with the late-fall

h/ Data from carcass counts of natural spawners and fish spawned at Coleman hatchery.

i/ Includes Butte Creek spring run estimates.

j/ Jack proportion could not be determined.

k/ Preliminary.

l/ Sacramento River spring run estimates are the total Red Bluff Diversion Dam counts minus the spring run numbers in the upper Sacramento tributaries. If this number

m/ Methodology change for distinguishing spring run Chinook at Feather River Hatchery was implemented in 2005. Fish arriving at the hatchery prior to the spring Chinook spawning period were tagged and returned to the river. The spring Chinook escapement estimate was the number of these tagged fish that subsequently returned to the hatchery during the spring Chinook spawning period.

TABLE B-5. Estimates of Yurok and Hoopa Valley reservation Indian gillnet Chinook harvest in numbers of fish.

Year	Area	Spring Run			Fall Run		
		Jack	Adult	Total	Jack	Adult	Total
2000	Commercial:Estuary	-	33	33	-	4,104	4,104
	Middle Klamath	-	2	2	-	186	186
	Upper Klamath	-	1	1	-	813	813
	Subsistence:Estuary	5	1,739	1,744	35	13,174	13,209
	Middle Klamath	0	509	509	29	1,049	1,078
	Upper Klamath	8	909	917	111	4,127	4,238
	Trinity River	29	1,325	1,354	128	5,962	6,090
	Total	42	4,518	4,560	303	29,415	29,718
2001	Commercial:Estuary	79	4,637	4,716	63	7,011	7,074
	Upper Klamath	1	58	59	1	51	52
	Subsistence:Estuary	152	8,846	8,998	198	21,956	22,154
	Middle Klamath	0	134	134	28	1,697	1,725
	Upper Klamath	19	1,504	1,523	49	2,976	3,025
	Trinity River	46	4,164	4,210	60	4,954	5,014
	Total	297	19,343	19,640	399	38,645	39,044
2002	Commercial:Estuary	7	1,852	1,859	7	8,952	8,959
	Upper Klamath	-	-	-	-	-	-
	Subsistence:Estuary	25	6,551	6,576	10	11,197	11,207
	Middle Klamath	70	1,310	1,380	10	729	739
	Upper Klamath	24	2,205	2,229	31	2,528	2,559
	Trinity River	40	3,052	3,062	68	1,168	1,236
	Total	166	14,970	15,136	126	24,574	24,700
2003	Commercial:Estuary	4	779	783	11	17,084	17,095
	Upper Klamath	0	0	0	0	0	0
	Subsistence:Estuary	10	1,800	1,810	4	5,604	5,608
	Middle Klamath	0	2,355	2,355	5	1,376	1,381
	Upper Klamath	0	1,730	1,730	12	3,199	3,211
	Trinity River	7	2,380	2,387	12	2,771	2,783
	Total	21	9,044	9,065	44	30,034	30,078
2004	Commercial:Estuary	2	408	410	13	14,251	14,264
	Upper Klamath	0	0	0	13	540	554
	Subsistence:Estuary	10	2,178	2,188	62	6,787	6,848
	Middle Klamath	6	2,346	2,352	14	577	591
	Upper Klamath	11	1,715	1,726	46	1,959	2,005
	Trinity River	62	1,944	2,006	20	1,689	1,709
	Total	91	8,591	8,682	168	25,083	25,971
2005	Commercial:Estuary	0	0	0	0	0	0
	Upper Klamath	0	0	0	0	0	0
	Subsistence:Estuary	0	477	477	21	2,293	2,314
	Middle Klamath	0	518	518	5	464	469
	Upper Klamath	0	1,320	1,320	33	2,851	2,884
	Trinity River	17	1,858	1,858	11	2,409	2,420
	Total	33	7,286	7,302	70	8,017	8,087
2006 ^{a/}	Commercial:Estuary	0	0	0	0	0	0
	Upper Klamath	0	0	0	0	0	0
	Subsistence:Estuary	0	309	309	30	2,726	2,756
	Middle Klamath	3	1,113	1,116	92	1,310	1,402
	Upper Klamath	11	1,281	1,292	148	2,086	2,234
	Trinity River	56	1,632	1,688	145	4,163	4,308
	Total	70	4,335	4,405	415	10,285	10,700

a/ Preliminary.

TABLE B-6. Shasta River fall Chinook salmon weir counts or spawning escapement estimates in numbers of fish.^{a/}

Year or Average	Adults	Jacks	Total
1931-1935 ^{b/}	37,474	12,690	50,164
1936-1940	26,165	8,223	34,389
1941-1945	9,654	3,129	12,783
1946-1950	1,862	178	2,040
1951-1955	1,577	370	1,947
1956-1960	6,146	1,074	7,220
1961-1965	15,167	4,388	19,555
1966-1970	10,472	1,410	11,882
1971-1975	6,297	2,866	9,163
1976-1980 ^{c/}	6,506	3,194	9,700
1981-1985	4,560 ^{d/}	1,942	6,503
1986-1990 ^{e/}	2,403	318	2,721
1991	716	10	726
1992	520	66	586
1993	1,341	85	1,426
1994	3,363	1,840	5,203
1995	12,816	695	13,511
1996	1,404	46	1,450
1997	1,667	334	2,001
1998	2,466	76	2,542
1999	1,296	1,901	3,197
2000	11,025	1,271	12,296
2001	8,452	2,641	11,093
2002	6,432	386	6,818
2003	4,134	155	4,289
2004	833	129	962
2005 ^{f/}	2,018	37	2,055
2006 ^{f/}	789	1,395	2,184

a/ From 1930-1937, 1957-1987 and 1991-1995, the counts were made near the river mouth. From 1938-1955, they were made 6.5 miles upstream from the mouth; considerable spawning occurred downstream from the racks in these years. From 1988-1990, escapements were estimated from mark-recapture data (spawning surveys).

b/ Commercial fishing in lower Klamath River closed by the state after the 1933 season.

c/ Gillnetting resumed in lower 20 miles of Klamath River by Hoopa Valley Indian Reservation fishers in 1976.

d/ Includes 276 females taken to Iron Gate Hatchery in 1981.

e/ Low water conditions appeared to hinder entry into the river in 1998.

f/ Preliminary.

TABLE B-7. Summary of California North Coast salmon spawning stock surveys in numbers of fish.

Year	Canon Creek (Mad River) ^{a/b/}			Sprowl Creek (Eel River) ^{a/c/}			Tomki Creek (Eel River) ^{d/}
	Surveys	Chinook	Coho	Surveys	Chinook	Coho	Chinook
1963-1964	12	70	55	-	-	-	-
1964-1965	NA	45	0	-	-	-	1,747
1965-1966	-	-	-	-	-	-	607
1966-1967	NA	334	3	3	1,189	6	-
1967-1968	-	-	-	-	-	-	-
1968-1969	-	-	-	-	-	-	-
1969-1970	-	-	-	-	-	-	-
1970-1971	NA	230	0	-	-	-	103
1971-1972	-	-	-	-	-	-	52
1972-1973	-	-	-	-	-	-	-
1973-1974	-	-	-	-	-	-	-
1974-1975	-	-	-	1	247	0	-
1975-1976	-	-	-	1	339	2	367
1976-1977	-	-	-	-	-	-	-
1977-1978	-	-	-	-	-	-	-
1978-1979	-	-	-	2	534	23	-
1979-1980	-	-	-	2	572	0	2,410
1980-1981	-	-	-	1	164	4	317
1981-1982	3	23	0	2	121	0	1,153
1982-1983	3	68	0	6	169	1	1,807
1983-1984	2	137	0	2	82	0	-
1984-1985 ^{e/}	1	16	0	6	67	13	1,292
1985-1986	10	514	14	6	320	0	3,558
1986-1987 ^{e/}	4	90	3	5	307	13	2,173
1987-1988	4	117	29	3	2,187	4	3,666
1988-1989	2	69	7	3	339	12	556
1989-1990 ^{e/}	4	9	9	5	89	14	-
1990-1991	1	0	3	2	0	0	-
1991-1992 ^{e/}	2	8	0	2	159	0	3
1992-1993 ^{e/}	3	57	1	2	142	2	15
1993-1994	3	20	0	4	171	36	5
1994-1995	3	33	3	7	52	0	21
1995-1996 ^{e/}	1	93	4	3	136	8	69
1996-1997	1	129	4	3	106	8	84
1997-1998	2	55	1	4	97	0	39
1998-1999	2	66	0	4	79	11	45
1999-2000 ^{e/}	8	162	1	7	34	1	24
2000-2001 ^{e/}	3	79	3	4	12	0	50
2001-2002	2	45	6	5	136	25	162 ^{f/}
2002-2003	3	402	1	6	267	17	5 ^{f/}
2003-2004 ^{e/}	2	79	1	5	106	8	137 ^{f/}
2004-2005 ^{e/}	4	86	0	5	199	36	115 ^{f/}
2005-2006	1	270	0	5	201	13	68 ^{f/}
2006-2007 ^{g/}	2	152	2	5	24	7	16 ^{f/}

a/ Numbers reflect maximum annual counts of live fish and carcasses with adults and jacks combined. Counts in years of poor visibility are not shown.

b/ Survey area was from mouth to falls (2 miles).

c/ Survey area was the mainstem and West Fork (4.5 miles).

d/ Total run size estimate including jacks and adults.

e/ Low flows this season appeared to increase mainstem spawning and decrease tributary spawning.

f/ Survey methodology changed to using index sites and is not comparable to previous estimates.

g/ Preliminary data. Poor visibility this year during surveys, Canon 12/1/06-1/2/07 with 20 unknowns, Sprowl 11/13/06-1/3/07 and 13 unknowns observed.

TABLE B-8. Peak spawning counts in index areas for selected south/local migrating Oregon coastal fall Chinook stocks.

Year or Avg.	Deep Creek (Pistol River) (0.4 mile)		Big Emily Creek (Chetco River) (1.0)		Bear Creek (Winchuck River) (0.8 mile)		Index (fish per mile)	
	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks
1961-1965	6	1	-	-	22	1	-	-
1966-1970	31	3	-	-	36	2	-	-
1971-1975	5	0	211	12	25	2	130	7
1976-1980	2	1	124	32	18	1	65	14
1981-1985	24	2	62	10	13	1	45	6
1986-1990	9 ^{a/}	1 ^{a/}	58	12	10	2	35	7
1991	3	2	75	5	10	1	40	4
1992	9	0	44	13	16	1	31	6
1993	10	7	69	19	7	2	39	13
1994	29	31	71	8	30	4	59	20
1995	8	4	111	7	18	1	61	5
1996	81	9	79	7	27	5	85	10
1997	17	1	60	5	41	1	41	3
1998	46	11	52	3	19	2	53	7
1999	58	3	12	0	10	0	36	1
2000	26	3	63	6	11	1	45	5
2001	25	2	49	2	9	3	38	3
2002	62	7	70	3	15	0	67	5
2003	20	7	28	5	12	1	27	6
2004	97	19	29	4	11	1	62	11
2005	15	2	16	3	1	0	15	2
2006 ^{b/}	22	3	24	2	5	1	23	3

a/ Pistol River was subject to several "slope failures" in 1986 resulting in severe short-term alterations in gravel bars and spawning index areas. Considerable debris and siltation severely limited Chinook surveys resulting in "0" counts in Deep Creek index areas through December.

b/ Preliminary.

TABLE B-9. Counts of natural and hatchery spring Chinook salmon at Gold Ray Dam on the Rogue River and at Winchester Dam on the North Umpqua River in thousands of fish.

Year or Avg.	Gold Ray Dam, Rogue River ^{a/}				Winchester Dam, Umpqua River ^{a/}			
	Natural	Hatchery	Total	Jacks ^{b/}	Natural	Hatchery	Total	Jacks ^{b/}
1942-1945	35.1	-	35.1	4.9	-	-	-	-
1946-1950	24.7	-	24.7	3.0	2.7	-	2.7	0.5
1951-1955	21.4	-	21.4	4.2	4.2	0.9	4.9	1.0
1956-1960	19.8	-	19.8	3.4	4.4	0.9	5.4	0.7
1961-1965	37.7	-	37.7	6.4	6.4	1.8	8.2	1.8
1966-1970	33.9	-	33.9	5.5	7.2	4.5	11.8	3.2
1971-1975	26.0	0.8	26.8	5.0	7.3	6.2	13.5	3.8
1976-1980	25.8	6.3	32.1	7.0	5.8	3.9	9.7	3.2
1981-1985	16.4	6.2	22.6	7.3	5.2	3.5	8.7	2.5
1986-1990	28.5	39.2	67.7	14.9	7.5	4.1	11.6	2.5
1991	9.3	3.0	12.3	2.4	2.4	1.8	4.2	0.6
1992	2.2	3.6	5.8	1.3	2.5	2.5	5.0	0.9
1993	12.6	13.5	26.1	6.8	3.8	2.1	5.9	1.2
1994	3.6	10.5	14.1	2.6	2.8	2.5	5.3	1.1
1995	20.7	61.2	81.9	6.2	6.2	3.6	9.8	1.9
1996	10.3	26.3	36.6	3.4	4.3	2.2	6.5	1.0
1997	9.6	32.2	41.8	2.8	3.3	2.5	5.8	16.0
1998	3.7	12.3	16.0	2.8	4.0	2.9	6.9	1.5
1999	6.0	15.0	21.0	1.9	2.8	4.6	7.4	3.1
2000	3.4	26.8	30.2	3.1	3.4	9.2	12.6	4.6
2001	9.3	23.9	33.2	2.3	6.1	14.6	20.7	4.7
2002	7.0	40.8	47.8	3.2	6.8	17.3	24.1	3.1
2003	19.3	22.6	41.9	3.0	7.9	12.3	20.2	4.1
2004	13.3	26.0	39.3	3.8	5.4	10.1	15.5	2.5
2005	5.8	12.3	18.1	1.3	3.6	5.5	9.0	1.3
2006 ^{c/}	4.8	7.0	11.7	2.2	2.6	3.5	6.1	1.7

a/ Jacks included in natural, hatchery, and total counts.

b/ Jacks include all Chinook less than 20 inches prior to 1978 and all Chinook less than 24 inches beginning in 1978.

c/ Preliminary.

TABLE B-10. Rogue River fall Chinook carcass counts in numbers of fish.

Year or Avg.	Carcass Counts		
	Adults	Jacks	Combined
1977-1980	5,256	1,004	6,259
1981-1985	3,906	1,009	4,915
1986-1990	16,797	1,527	18,324
1991	2,799	157	2,956
1992	2,366	464	2,830
1993	5,447	257	5,704
1994	7,366	529	7,895
1995	3,958	173	4,131
1996	2,448	121	2,569
1997	1,643	68	1,711
1998	3,601	40	3,641
1999	2,493	157	2,650
2000	3,366	226	3,592
2001	6,380	772	7,152
2002	11,836	905	12,741
2003	14,620	983	15,603
2004	5,326 ^{a/}	250	5,576
2005 ^{b/}	-	-	-
2006 ^{b/}	-	-	-

a/ In 2004, one of the standard survey sections was not sampled. In the previous two years, this section accounted for 33% of the total adult carcass counts.

b/ Surveys were not conducted.

TABLE B-11. Peak counts for north migrating Oregon coastal Chinook stocks on selected fall Chinook spawning index stream surveys.

Year or Average	Tributaries (River)																			
	Humbug (Nehalem) (1.0 mile)		Tillamook (1.8 mile)		Niagara (Nestucca) (0.4 mile)		Sunshine (Siletz) (1.2 mile)		Grant (Yaquina) (1.7 mile)		Buck (Alsea) (1.0 mile)		Siuslaw Lake (0.8 mile)		W.F. Millicoma (Coos) (0.5 mile)		Salmon (Coquille) (0.8 mile)		Index Fish Per Mile	
	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adults	Jack	Adult	Jack	Adult	Jack	Adult	Jack
1961-1965	95	22	116	25	72	5	59	13	43	13	28	9	61	15	2	1	23	13	54	13
1966-1970	57	3	93	27	47	6	30	5	61	13	26	16	134	40	6	1	26	9	52	13
1971-1975	101	26	55	5	55	4	40	5	64	8	17	3	94	49	18	13	15	5	50	14
1980 ^{a/}	143	12	61	6	32	2	47	5	127	23	22	3	166	37	31	28	39	12	73	14
1981-1985	163	18	95	9	78	6	55	2	178	24	47	6	149	31	21	2	45	7	89	11
1986-1990	136	4	154	8	118	3	54	2	240	25	100	6	427	44	13	5	49	6	140	11
1991	43	0	135	10	91	3	58	6	187	17	36	2	701	27	4	1	123	12	150	8
1992	90	4	200	15	76	7	73	1	137	6	66	9	521	32	10	5	92	6	138	9
1993	50	0	46	1	24	1	17	0	136	7	15	1	106	7	113	10	73	2	63	3
1994	83	5	36	1	201	2	113	2	b/	b/	46	4	300	19	73	14	86	6	125	7
1995	57	3	41	4	124	1	41	0	b/	b/	59	4	346	5	43	6	46	1	101	3
1996	86	2	60	0	40	0	122	0	b/	b/	62	2	614	29	92	3	29	3	147	5
1997	162	1	47	1	24	1	60	0	b/	b/	49	3	325	9	12	0	108	3	105	2
1998	93	2	42	1	42	0	83	3	b/	b/	78	0	176	2	29	11	191	7	98	3
1999	116	3	38	1	60	2	36	3	b/	b/	55	5	478	14	14	3	136	8	124	6
2000	175	3	40	3	32	2	63	1	b/	b/	38	3	205	18	5	0	83	9	85	5
2001	220	4	62	6	53	7	195	3	b/	b/	95	6	711	49	30	5	153	22	203	14
2002	311	1	137	3	124	1	221	1	b/	b/	114	6	834	22	51	12	218	9	268	7
2003	215	6	135	5	27	1	120	3	b/	b/	145	1	1,230	37	209	31	147	2	297	11
2004	196	3	71	1	76	1	19	0	b/	b/	91	5	988	16	40	4	101	5	211	5
2005	124	3	c/	c/	74	2	54	1	b/	b/	40	1	302	5	17	2	61	2	118	3
2006 ^{d/}	31	0	65	0	67	0	82	0	b/	b/	22	0	165	0	7	1	129	8	81	1

a/ Flow s too low to allow spawning.

b/ Survey discontinued; landowner would not allow access.

c/ Surveys were not conducted in 2005.

d/ Preliminary.

TABLE B-12. Estimates of minimum inriver run size, catch, and escapement in numbers of Columbia River adult spring Chinook destined for areas below Bonneville Dam. (Page 1 of 1).

Year or Average	Minimum Inriver Run Size	Tributary Runs									
		Lower River Catch ^{a/}		Willamette			Sandy	Cow litz ^{c/}	Lewis ^{c/}	Kalama	Hatchery Escapement ^{d/}
				Run Size	L. Willamette Sport Catch	Will. Falls Escapement ^{b/}					
		Commercial	Sport								
1971-1975	84,000	13,800	3,700	53,300	17,000	34,300	-	11,900	200	1,100	20,000
1976-1980	92,160	6,160	2,720	51,240	14,380	31,420	975	19,680	2,980	2,020	26,580
1981-1985	130,000	6,680	1,840	67,700	15,620	35,580	1,940	19,960	4,220	3,740	28,840
1986-1990	176,103	11,980	4,330	103,640	21,140	58,760	2,425	10,691	11,340	1,877	32,460
1991	191,344	11,700	4,100	109,900	30,500	48,700	3,652	8,945	8,334	2,613	30,200
1992	136,259	4,900	4,100	75,000	13,500	39,700	9,234	10,353	6,025	2,430	29,800
1993	127,647	1,200	1,600	65,900	20,700	29,700	6,369	9,458	8,195	2,874	26,700
1994	81,835	500	1,700	49,600	11,500	25,500	3,498	3,149	3,068	1,265	16,600
1995	73,212	100	-	42,600	14,700	19,300	2,686	2,102	3,726	697	15,200
1996	55,879	149	-	34,800	6,100	20,400	3,997	1,787	1,730	627	15,900
1997	54,324	300	-	35,300	1,900	26,200	4,625	1,877	2,196	505	18,100
1998	54,254	100	49	45,100	2,800	33,100	3,768	1,055	1,611	407	22,900
1999	64,964	349	0	54,200	5,500	38,900	3,985	2,069	1,753	977	25,900
2000	74,041	1,149	249	57,500	9,000	39,100	3,778	2,199	2,515	1,418	24,100
2001	102,971	3,700	4,300	80,300	7,600	52,700	5,742	1,649	3,777	1,784	29,000
2002	151,773	7,900	5,749	121,700	10,800	83,100	6,366	5,019	3,554	2,883	58,300
2003	166,753	1,900	8,200	126,600	13,500	87,600	5,848	15,890	5,104	4,528	45,725
2004	199,904	8,500	7,500	143,700	12,000	95,200	12,186	16,712	11,090	4,573	67,910
2005	88,772	3,000	3,578	61,000	5,800	35,453	9,519	9,200	3,400	3,100	32,891
2006 ^{e/}	92,688	2,900	2,900	59,312	7,200	36,851	5,695	7,000	7,500	5,600	21,248

a/ Includes some upriver origin spring Chinook through 1980. Beginning in 1981, the lower river catch of lower river spring Chinook is based on mark recoveries rather than timing of the catch as in previous years. Since 1986, GSI and VSI techniques have been used for stock composition analysis. Commercial catch includes Select Area fisheries. Sport catch is mainstem Columbia River, does not include tributaries. Catch may include small numbers of jacks. Sport fishery closed in 1995 to

b/ Prior to 1988, the escapement goal at Willamette Falls was 30,000 to 35,000. Beginning in 1988, the goal was dependent on run size under the Willamette Basin Fish Management Plan. Since 2001 hatchery escapement targets are set in the Fisheries Management and Evaluation Plan developed by ODFW. Lower Willamette sport catch may include small numbers of jacks.

c/ Includes hatchery escapement, tributary recreational catch, and natural spawning escapement for 1975 to present. The years 1971-1973 are based on using the 1975-1976 Cow litz River recreational fishery adult harvest rates.

d/ Includes hatcheries operated by all agencies. Values are included in the totals for the tributary runs.

e/ Preliminary.

TABLE B-13. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult spring Chinook destined for areas above Bonneville Dam.^{a/} This table includes Snake River summer Chinook. (Page 1 of 1)

Year or Avg.	Inriver Run Size	Lower River Catch ^{b/}		Bonneville Dam Count	Mainstem Treaty Indian Catch		Zone 6 Escapement ^{d/}	Snake River Escapement ^{e/}		U. Columbia River Escapement ^{f/}		Hatchery Escapement
		Commercial	Sport		Commercial ^{c/}	Ceremonial/ Subsistence		Total	Wild			
1976-1980	82,702	185	0	55,712	259	1,714	53,740	9,317	6,413	8,138		5,703
1981-1985	70,057	1,706	393	67,959	1,024	2,545	64,390	18,295	10,679	13,943		12,887
1986-1990	107,535	2,378	1,356	103,800	186	6,771	96,843	29,893	9,755	15,359		27,883
1991	64,233	1,017	1,537	61,679	5	3,871	57,803	10,858	6,013	7,737		9,172
1992	95,323	397	1,187	93,739	48	5,711	87,980	25,131	13,079	19,589		23,869
1993	119,203	611	413	118,179	0	7,296	110,883	29,499	12,831	29,301		31,870
1994	23,809	527	409	22,873	10	1,151	21,712	4,050	1,954	3,106		3,300
1995	12,634	2	5	12,627	13	620	11,994	1,838	1,186	1,130		1,204
1996	55,299	46	17	55,236	0	2,911	52,325	7,037	3,788	2,430		5,211
1997	123,824	53	13	123,758	14	8,309	115,435	44,849	4,406	6,780		46,089
1998	43,512	27	14	43,471	1	2,224	41,246	14,337	7,391	4,124		9,872
1999	42,582	28	21	42,533	1	1,983	40,549	6,741	2,856	4,150		7,303
2000	186,141	265	102	185,774	1,354	9,973	174,447	38,064	8,255	19,143		37,039
2001	437,910	2,543	22,714	412,653	43,715	10,985	357,953	188,145	45,335	50,379		167,281
2002	331,303	10,150	16,213	304,940	24,254	9,208	271,478	99,070	30,248	34,083		89,725
2003	242,638	3,524	9,615	229,499	9,205	9,090	211,204	87,999	32,366	18,136		66,540
2004	221,600	6,234	17,041	198,325	8,370	9,114	180,841	81,423	21,401	13,521		67,162
2005 ^{g/}	106,935	2,303	7,235	97,397	1	6,163	91,233	33,277	10,158	14,148		31,955
2006 ^{g/}	132,138	1,819	4,161	126,158	0	8,401	117,757	30,042	9,490	8,535		27,763
GOAL				115,000				35,000	25,000			

a/ Spring Chinook accounting ends on June 15. Chinook formerly managed separately as Snake River summer Chinook are now grouped with all upriver spring Chinook because of overlap in run timing. Snake River summer Chinook have been moved from Table B-14 to this table.

b/ Includes some lower river origin spring Chinook through 1980. Beginning in 1981, the lower river catch of upriver spring Chinook is based on mark recoveries rather than timing of the catch as in previous years. Since 1986, GSI techniques have been used for stock composition analysis. Catch includes estimated miscellaneous fishery-related impacts from test fisheries, commercial shad fisheries, and Select Area commercial gillnet fisheries beginning in 1979 and catch and release mortalities from selective fisheries beginning in 2001.

c/ Spring season fishery closed in 1975, 1976, and from 1978 to 2000. Spring Chinook landed during those years were from the winter season fishery.

d/ Bonneville Dam count minus Zone 6 mainstem commercial and ceremonial/subsistence treaty Indian harvest.

e/ Count at uppermost Snake River Dam (Little Goose in 1971-1974 and Lower Granite plus Tucannon wild escapement after 1974) plus harvest below Lower Granite [

f/ Priest Rapids Dam count.

g/ Preliminary.

TABLE B-14. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult summer Chinook destined for areas above Bonneville Dam.^{a/} This table does not include Snake River summer Chinook. (Page 1 of 1)

Year or Avg.	Inriver Run Size	Lower River Catch ^{b/}		Bonneville Dam Count	Mainstem Treaty Indian Catch		Zone 6 Escapement ^{e/}	U. Columbia River Escapement ^{f/}
		Commercial ^{c/}	Sport		Commercial ^{d/}	Ceremonial/ Subsistence		
1976-1980	22,566	81	0	22,485	38	1,047	21,401	18,161
1981-1985	17,092	55	0	17,037	304	654	16,079	12,202
1986-1990	21,668	71	7	21,590	708	194	20,689	15,785
1991	14,569	9	3	14,557	0	171	14,386	14,815
1992	9,796	35	12	9,749	0	46	9,703	8,523
1993	14,781	81	15	14,686	0	328	14,358	16,377
1994	14,977	23	27	14,927	0	171	14,756	14,859
1995	12,615	0	18	12,597	0	417	12,180	12,162
1996	12,333	15	27	12,291	0	374	11,917	10,995
1997	18,277	6	19	18,252	0	270	17,982	13,107
1998	16,332	1	27	16,304	0	335	15,969	13,387
1999	22,347	1	41	22,305	0	411	21,894	20,898
2000	23,169	0	25	23,144	0	209	22,935	22,306
2001	54,935	1	64	54,870	150	542	54,286	53,170
2002	92,820	8	1,503	91,309	42	2,019	89,225	96,326
2003	83,120	36	2,007	81,077	3,587	710	80,098	83,004
2004	65,446	236	1,240	63,970	8,004	390	63,542	67,060
2005	60,060	2,574	1,622	55,684	6,415	1,227	54,563	61,227
2006 ^{g/}	76,196	5,017	3,360	67,819	15,771	548	67,231	57,236
GOAL	29,300							

a/ Summer Chinook accounting begins on June 16. Chinook managed as Snake River summer Chinook prior to 2004 are now grouped with all upriver spring Chinook because of overlap in run timing. As of 2004, they have been moved from this table to Table B-13.

b/ Includes estimated miscellaneous fishery-related impacts from test fisheries, commercial shad fisheries, and terminal area commercial gillnet fisheries beginning in 1979. Includes catch and release mortality in selective fisheries beginning in 2002.

c/ No directed commercial summer Chinook fishery from 1964 to 2003. Landings during those years are bycatch from commercial shad and sockeye fisheries.

d/ No directed commercial summer Chinook fishery from 1965 to 2003. Landings during those years are bycatch from commercial sockeye fishery.

e/ Bonneville Dam count minus Zone 6 mainstem commercial and ceremonial/subsistence treaty Indian harvest.

f/ Priest Rapids Dam count.

g/ Preliminary.

TABLE B-15. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult Spring Creek Hatchery (SCH) stock fall Chinook.^{a/} Page 1 of 1)

Year or Average	Inriver Run Size	Harvest					
		Bonneville Dam Count	Treaty Indian Commercial and Subsistence	Non-Indian		Escapement	
				Commercial ^{b/}	Sport	Natural	Hatchery ^{c/}
1971-1975	105,700	67,600	29,000	37,900	300	2,900	17,000
1976-1980	116,522	83,000	32,533	31,794	131	3,884	21,972
1981-1985	63,342	49,780	24,637	9,747	580	2,711	15,955
1986-1990	16,673	10,200	6,080	2,920	820	1,500	4,600
1991	52,353	41,618	21,000	4,300	3,300	1,300	12,400
1992	29,477	24,700	9,700	1,000	1,500	1,300	8,800
1993	16,837	13,400	5,100	900	1,000	1,400	7,900
1994	18,473	15,800	5,000	-	200	1,900	10,300
1995	33,821	32,300	16,000	-	400	1,400	9,100
1996	33,137	30,300	21,100	1,700	900	1,300	7,700
1997	27,377	23,300	10,329	0	2,981	4,612	8,688
1998	20,158	17,100	6,592	197	2,556	2,731	3,224
1999	50,189	46,800	28,197	258	2,617	3,338	14,488
2000	20,527	98,322	7,903	1,141	897	4,085	6,257
2001	124,951	98,322	52,124	3,693	3,302	5,063	36,663
2002	158,299	98,322	48,350	11,485	6,654	8,069	67,436
2003	180,592	98,322	48,204	9,850	7,659	27,894	56,935
2004	175,245	98,322	59,941	3,690	5,614	14,084	68,932
2005	103,526	98,322	49,471	3,981	3,049	4,667	31,977
2006 ^{d/}	35,600	31,491	11,918	4,423	1,208	1,489	9,900
GOAL							7,000 ^{e/}

a/ Based on Columbia River fall Chinook database, WDFW, unpublished.

b/ Includes Select Area fisheries.

c/ Does not include strays to hatcheries below Bonneville Dam. Includes fall Chinook tules trapped at Bonneville Dam, 1986-1994 and 1998.

d/ Preliminary estimates based on inseason run updates.

e/ Escapement goal was changed from 8,200 fish to 7,000 fish, or 4,000 females, in 1994.

TABLE B-16. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult lower river hatchery (LRH) stock fall Chinook.^{a/} (Page 1 of 1)

Year or Average	Inriver Run Size	Harvest			Escapement	
		Treaty Indian	Non-Indian		Natural	Hatchery ^{d/}
		Commercial	Commercial ^{b/}	Sport ^{c/}		
1971-1975	175,900	0	78,100	5,400	49,200	43,200
1976-1980	145,377	20	59,400	4,380	36,940	44,620
1981-1985	107,163	851	25,604	4,486	37,755	36,846
1986-1990	199,938	655	93,794	17,420	38,774	48,821
1991	62,680	367	6,961	8,343	19,161	27,692
1992	62,617	212	3,022	8,625	24,248	26,457
1993	52,344	218	4,362	6,006	19,709	21,980
1994	53,596	33	7	232	22,674	30,637
1995	46,360	358	2	1,784	13,784	30,330
1996	75,495	360	3,899	4,641	23,909	42,662
1997	57,393	0	2,369	7,704	22,663	24,657
1998	45,265	0	844	4,519	16,713	23,035
1999	39,933	0	2,234	6,118	12,551	19,030
2000	26,997	0	860	3,212	10,714	12,211
2001	94,331	0	4,428	7,443	39,434	42,996
2002	156,444	279	9,928	15,353	80,670	50,138
2003	154,983	0	9,216	14,213	97,089	34,465
2004	109,055	475	13,122	11,870	53,399	30,103
2005 ^{e/}	78,293	186	9,219	10,140	33,598	25,042
2006 ^{e/}	57,500	0	7,143	1,952	26,328	19,500
GOAL						Hatchery Production

a/ Based on Columbia River fall Chinook database, WDFW, unpublished.

b/ Includes select area fisheries.

c/ Includes tributary catches.

d/ Does not include strays to hatcheries above Bonneville Dam or fish trapped at Bonneville Dam.

e/ Preliminary estimates based on inseason run updates.

TABLE B-17. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult lower river wild (LRW) stock fall Chinook.^{a/} (Page 1 of 1)^f

Year or Average	Inriver Run Size	Harvest			Escapement	
		Treaty Indian	Non-Indian		Natural	Hatchery
		Commercial	Commercial	Sport ^{b/}		
1971-1975	59,700	0	27,900	2,100	29,400	100
1976-1980	26,963	20	11,720	1,220	13,720	240
1981-1985	16,287	0	1,940	1,320	12,480	480
1986-1990	32,600	60	10,689	3,251	18,383	181
1991	19,817	0	6,554	2,116	11,131	16
1992	12,508	0	2,327	2,256	7,896	29
1993	13,320	0	1,592	2,837	8,792	99
1994	12,191	0	300	922	10,921	48
1995	15,971	0	23	4,034	11,766	148
1996	14,566	0	325	234	13,914	93
1997	12,323	0	0	1,082	11,241	0
1998	7,253	0	0	667	6,493	93
1999	3,349	0	18	0	3,257	74
2000	10,234	0	604	0	9,422	208
2001	15,721	0	1,382	729	13,610	0
2002	25,171	161	1,801	3,245	19,654	50
2003	26,021	0	3,391	4,962	17,668	0
2004	22,327	0	2,343	3,638	16,346	0
2005 ^{c/}	16,767	0	2,240	2,632	11,725	170
2006 ^{c/}	16,600	0	2,062	563	12,010	0
GOAL					5,700 ^{d/}	

a/ Based on Columbia River fall Chinook database, WDFW, unpublished.

b/ Includes tributary catches.

c/ Preliminary estimates based on inseason run updates..

d/ Escapement objective is for North Lewis River, but escapement numbers include other fish. The escapement objective for the North Lewis River was met for all years except 1998-1999.

TABLE B-18. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult upriver bright (URB) stock fall Chinook destined for areas above McNary Dam and the Deschutes River.^{a/} (Page 1 of 1)

and the Deschutes River: (Page 1 of 1)													
Harvest							Escapement						
Year or Average	Inriver Run Size	Bonneville Dam Count	Treaty Indian Commercial and Subsistence	Non-Indian		Natural ^{c/}	Hatchery	Deschutes above Sheares Falls	McNary Dam Count	Ice Harbor Dam Count	Total Lower Granite Count	SRW L. Granite Dam Count ^{d/}	
				Commercial	Sport ^{b/}								
1971-1975	110,500	80,400	35,100	29,300	3,100	36,800	2,600	NA	39,500	5,600	-	-	
1976-1980	92,301	72,360	32,160	19,180	980	29,480	1,980	NA	31,080	1,160	532	532	
1981-1985	111,873	94,120	26,700	13,880	3,020	46,060	8,100	NA	51,042	1,583	586	450	
1986-1990	291,407	222,337	100,379	61,499	13,613	90,709	13,231	5,023	107,252	4,369	691	289	
1991	103,286	87,307	26,250	13,773	5,941	41,484	3,646	3,678	46,625	4,500	630	318	
1992	81,016	73,990	13,926	5,780	4,007	38,774	9,142	2,777	51,189	4,636	855	549	
1993	102,908	95,458	20,350	5,390	5,253	49,761	9,907	8,235	54,876	2,805	1,170	742	
1994	132,839	132,766	24,856	10	4,829	68,553	14,228	5,455	85,932	2,069	791	406	
1995	106,459	105,621	18,685	46	5,447	58,546	10,172	7,581	68,186	2,750	1,067	350	
1996	143,155	135,499	29,868	3,717	8,918	59,598	15,905	8,759	73,929	3,810	1,308	639	
1997	161,735	152,941	42,637	1,429	11,506	68,889	13,114	20,678	67,192	2,752	1,451	797	
1998	141,575	137,509	33,760	770	8,137	54,297	18,798	10,923	63,791	4,220	1,909	306	
1999	165,889	155,756	38,822	2,133	15,173	48,372	30,272	3,997	78,356	6,586	3,381	905	
2000	156,595	256,119	36,501	5,551	10,545	66,512	10,841	3,230	66,378	6,509	3,602	1,148	
2001	232,366	256,119	35,422	8,151	12,648	92,194	21,143	11,161	110,517	13,635	8,915	5,163	
2002	279,548	256,119	57,405	6,881	25,651	123,446	17,299	12,252	141,682	15,319	12,351	2,116	
2003	374,154	256,119	49,060	15,930	25,918	176,865	12,356	12,590	179,970	20,903	11,732	3,856	
2004	362,804	256,119	46,566	19,760	22,276	148,028	23,137	11,879	170,648	21,100	14,960	4,756	
2005 ^{e/}	278,539	256,119	45,776	8,464	23,980	115,612	23,299	14,092	131,550	14,677	11,170	2,954	
2006 ^{e/}	225,900	198,100	46,094	9,330	9,310	67,842	8,156	13,374	90,901	10,272	8,048	2,743	
GOAL									40,000 ^{f/}				

a/ Based on Columbia River fall Chinook database, WDFW, unpublished. Does not include hatchery URB Chinook reared and released below McNary Dam.

b/ Includes tributary and mainstem catches.

c/ Includes Deschutes, Yakima, Upper Columbia, and Snake River escapements.

d/ Snake River wild; adjusted for stray hatchery fish. Includes wild fish hauled to Lyons Ferry Hatchery.

e/ Preliminary based on inseason run update.

f/ FMP goal. The U.S. v Oregon parties managed for an escapement of 45,000 between 1990 and 1993 at McNary Dam to account for increased hatchery brood stock needs and concern for the Snake River wild fall Chinook stock. Starting in 1994, inriver fisheries were based on ESA consultation standards, rather than a McNary Dam escapement goal.

TABLE B-19. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult mid-Columbia bright (MCB) stock fall Chinook destined for areas below McNary Dam, not including the Deschutes River.^{a/} (Page 1 of 1)

			Harvest				
Year or Average	Inriver Run Size	Bonneville Dam Count	Treaty Indian	Non-Indian		Escapement	
			Commercial and Subsistence	Commercial	Sport ^{b/}	Natural	Hatchery ^{c/}
1982-1985	10,275	4,925	1,875	1,675	100	0	3,450
1986-1990	60,894	24,780	16,288	26,547	2,277	4,253	9,194
1991	35,386	18,300	6,870	9,069	1,121	5,586	10,282
1992	31,105	16,800	5,144	5,558	1,837	6,838	9,590
1993	27,439	16,700	6,872	4,833	1,385	4,352	7,853
1994	33,712	21,500	4,677	1,209	931	12,192	11,411
1995	34,120	23,500	6,505	85	2,834	7,665	14,019
1996	59,698	38,100	12,443	5,306	3,387	15,618	15,868
1997	58,932	36,600	11,596	3,320	6,517	15,916	15,808
1998	37,328	29,900	5,570	1,063	5,697	11,380	8,401
1999	50,788	40,400	10,581	1,543	5,927	17,213	7,334
2000	37,191	25,600	7,186	3,739	3,507	10,135	7,884
2001	76,504	48,100	16,821	7,023	9,580	14,600	13,701
2002	108,198	57,600	24,358	9,437	12,737	27,005	21,946
2003	150,042	97,179	27,830	20,432	12,804	38,204	24,175
2004	122,496	79,866	23,392	9,178	11,167	27,779	26,210
2005 ^{d/}	100,333	60,464	23,158	6,590	10,727	14,271	30,991
2006 ^{d/}	73,400	61,892	24,573	9,119	2,491	7,008	20,000
GOAL							Hatchery Production

a/ Based on Columbia River fall Chinook database, WDFW, unpublished. Does not include URB Chinook destined for areas above McNary Dam or the Deschutes

b/ Includes tributary and mainstem catches.

c/ Little White Salmon and Bonneville Hatcheries.

d/ Preliminary based on inseason run updates.

TABLE B-20. Estimates of minimum inriver run size and catch in numbers of adult spring, summer, and fall Chinook from the Columbia River. (Page 1 of 5)

TABLE D-20: Estimates of minimum inriver run size and catch-in numbers of adult spring, summer, and fall chinook from the Columbia River. (Page 1 of 3)															
Year	Minimum Inriver Run Size	Above Bonneville Dam										Non-Indian Total		Treaty Indian & Non- Indian	
		Below Bonneville Dam					Bonneville Dam Counts		Treaty Indian						
		Non-Indian Sport		Non-Indian Commercial					Non-Indian Sport		Ticketed	Non-Ticketed	Ceremonial &		
		Tributary ^{a/}	Buoy 10	Mainstem	Select Area ^{b/}	Mainstem	Mainstem	Tributary ^{c/}	Commercial ^{d/}	Public Sales	Subsistence ^{e/}	Sport	Commercial		
Spring Chinook ^f															
1979	146,896	13,900	g/	1,700	-	5,500	54,347	-	-	489	0	1,601	15,600	5,500	23,190
1980	146,099	8,954	g/	600	-	300	57,077	-	-	29	0	1,826	9,554	300	11,709
1981	184,423	12,741	g/	3,107	-	5,411	66,075	-	144	1,595	0	1,803	15,992	5,411	24,801
1982	217,638	22,587	g/	2,459	-	4,108	75,580	-	64	3,308	0	2,000	25,110	4,108	34,526
1983	184,381	15,677	g/	2,348	-	7,525	59,460	-	76	31	0	2,500	18,101	7,525	28,157
1984	206,323	22,523	g/	1,785	-	9,609	50,310	-	-	75	0	3,400	24,308	9,609	37,392
1985	207,522	24,310	g/	1,464	-	14,331	88,370	-	2,823	111	0	3,024	28,597	14,331	46,063
1986	250,559	26,108	g/	5,688	-	8,982	125,105	-	3,863	359	0	7,078	35,659	8,982	52,078
1987	279,583	39,942	g/	2,796	-	11,187	108,149	-	3,638	279	0	6,410	46,376	11,187	64,252
1988	298,726	41,736	g/	4,635	-	18,330	98,539	-	4,573	204	0	6,802	50,944	18,330	76,280
1989	271,693	44,075	g/	3,047	-	13,908	87,343	-	1,081	86	0	6,640	48,203	13,908	68,837
1990	317,630	46,580	g/	12,264	-	18,282	99,866	-	2,626	4	0	6,924	61,470	18,282	86,680
1991	255,577	51,795	g/	5,637	NA	12,597	61,679	-	3	5	0	3,871	57,435	12,597	73,908
1992	231,582	30,415	g/	5,287	296	5,135	93,739	-	1,649	48	0	5,711	37,351	5,431	48,541
1993	246,850	41,748	g/	2,013	851	1,438	118,179	-	1,596	0	0	7,296	45,357	2,289	54,942
1994	105,644	20,342	g/	2,109	156	941	22,873	-	8	10	0	1,151	22,459	1,096	24,716
1995	85,846	21,861	g/	5	201	100	12,627	-	2	13	0	620	21,868	301	22,802
1996	111,178	13,206	g/	17	789	154	55,236	-	264	0	0	2,911	13,487	943	17,341
1997	178,148	8,270	g/	13	1,821	309	123,758	-	7,326	14	0	8,309	15,609	2,130	26,062
1998	97,766	10,350	g/	63	2,313	100	43,471	-	1,717	1	0	2,224	12,130	2,413	16,768
1999	107,546	14,940	g/	21	1,980	351	42,533	-	220	1	0	1,983	15,181	2,331	19,496
2000	260,182	17,721	g/	351	6,631	1,237	185,774	-	11,502	1,354	0	9,973	29,574	7,868	48,769
2001	540,881	19,288	g/	27,014	9,719	5,279	412,653	93	56,685	22,019	21,696	10,985	103,080	14,998	172,778
2002	483,076	32,265	g/	21,962	12,251	17,383	304,940	875	25,859	17,930	6,324	9,208	80,961	29,634	144,057
2003	409,391	34,126	g/	17,815	8,783	4,659	229,499	1,302	21,179	6,363	2,842	9,090	74,422	13,442	106,159
2004	421,504	41,188	g/	24,541	11,643	14,489	198,325	1,349	22,508	5,256	3,114	9,114	89,586	26,132	133,202
2005 ^{h/}	195,707	19,503	g/	10,813	2,553	5,246	97,397	449	6,485	-	-	6,163	37,250	7,799	51,212
2006 ^{h/}	224,826	14,831	g/	7,061	7,581	4,589	126,158	648	2,396	-	-	8,401	24,936	12,170	45,507

TABLE B-20. Estimates of minimum inriver run size and catch in numbers of adult spring, summer, and fall Chinook from the Columbia River. (Page 2 of 5)

Year	Minimum Inriver Run Size	Below Bonneville Dam						Above Bonneville Dam						Non-Indian Total		Total Treaty Indian & Non-Indian
		Non-Indian Sport			Non-Indian Commercial			Non-Indian Sport		Treaty Indian						
		Tributary ^{a/}	Buoy 10	Mainstem	Select Area ^{b/}	Mainstem	Bonneville Dam Counts	Mainstem	Tributary ^{c/}	Ticketed Commercial ^{d/}	Non-Ticketed Public Sales	Ceremonial & Subsistence ^{e/}				
Summer Chinook ^{f/}																
1979	22,142	-	-	-	-	147	21,995	0	-	6	--	981	0	147	1,134	
1980	22,991	-	-	-	-	16	22,975	0	-	69	--	1,112	0	16	1,197	
1981	19,124	-	-	-	-	9	19,115	0	-	20	--	1,344	0	9	1,373	
1982	14,677	-	-	-	-	117	14,560	0	-	39	--	1,256	0	117	1,412	
1983	13,576	-	-	-	-	92	13,484	0	-	0	--	297	0	92	389	
1984	18,999	-	-	-	-	22	18,977	0	-	112	--	345	0	22	479	
1985	19,084	-	-	-	-	36	19,048	0	-	1,349	--	27	0	36	1,412	
1986	19,307	-	-	0	-	109	19,198	0	-	710	--	406	0	109	1,225	
1987	23,604	-	-	5	-	141	23,457	0	-	1,370	--	314	5	141	1,831	
1988	23,397	-	-	8	-	81	23,308	0	-	1,460	--	37	8	81	1,586	
1989	22,739	-	-	17	-	9	22,713	0	-	-	-	100	17	9	126	
1990	19,296	-	-	6	-	15	19,275	0	-	-	-	111	6	15	132	
1991	14,569	-	-	3	-	9	14,557	0	-	-	-	171	3	9	183	
1992	9,796	-	-	12	-	35	9,749	0	-	-	-	46	12	35	93	
1993	14,781	-	-	15	-	81	14,686	0	-	-	-	328	15	81	423	
1994	14,977	-	-	27	-	23	14,927	0	-	-	-	171	27	23	221	
1995	12,615	-	-	18	-	0	12,597	0	-	-	-	417	18	0	435	
1996	12,333	-	-	27	-	15	12,291	0	-	-	-	374	27	15	416	
1997	18,277	-	-	19	-	6	18,252	0	-	-	-	270	19	6	295	
1998	16,332	-	-	27	-	1	16,304	0	-	-	-	335	27	1	363	
1999	22,347	-	-	41	-	1	22,305	0	-	-	-	411	41	1	453	
2000	23,169	-	-	25	-	0	23,144	0	-	-	-	209	25	0	234	
2001	54,935	-	-	64	-	1	54,870	42	0	150	--	542	64	1	799	
2002	92,820	-	-	1,503	-	8	91,309	65	0	42	--	2,019	1,568	8	3,637	
2003	83,120	-	-	2,007	36	-	81,077	269	0	3,587	--	710	2,276	36	6,609	
2004	65,446	-	-	1,240	3	233	63,970	38	157	8,004	--	390	1,435	236	10,065	
2005 ^{h/}	60,060	-	-	1,622	0	2,553	55,684	74	338	6,415	--	1,227	2,034	2,574	12,250	
2006 ^{h/}	76,196	-	-	3,360	9	5,008	67,819	40	216	15,771	--	548	3,616	5,017	24,952	

TABLE B-20. Estimates of minimum inriver run size and catch in numbers of adult spring, summer, and fall Chinook from the Columbia River. (Page 3 of 5)

Year	Minimum Inriver Run Size	Below Bonneville Dam						Above Bonneville Dam						Total Treaty Indian & Non-Indian	
		Non-Indian Sport			Non-Indian Commercial			Bonneville Dam Counts	Non-Indian Sport		Treaty Indian		Non-Indian Total		
		Tributary ^{a/}	Buoy 10	Mainstem	Select Area ^{b/}	Mainstem	Mainstem		Tributary ^{c/}	Ticketed Commercial ^{d/}	Non-Ticketed Public Sales	Ceremonial & Subsistence ^{e/}			
Fall Chinook ^{f/}															
1979	356,200	NA	NA	NA	1,585	NA	144,038	NA	NA	NA	NA	NA	NA	NA	NA
1980	319,016	3,651	-	1,155	40,000	73,253	127,718	500	NA	32,568	--	--	5,306	113,253	151,127
1981	272,791	3,790	-	1,000	24,900	5,561	147,109	100	NA	48,928	--	500	4,890	30,461	84,779
1982	360,990	5,054	-	820	6,000	84,064	157,771	-	NA	53,552	--	5,292	5,874	90,064	154,782
1983	234,230	2,902	-	1,706	4,700	20,560	112,721	-	NA	22,790	--	6,872	4,608	25,260	59,530
1984	306,477	4,069	11,960	1,472	3,600	60,250	147,230	1,689	NA	50,896	--	6,284	19,190	63,850	140,220
1985	361,540	4,976	2,392	2,642	3,600	57,015	189,011	6,597	NA	68,272	--	6,176	16,607	60,615	151,670
1986	496,829	1,913	12,613	2,146	4,600	154,347	226,426	5,137	NA	102,322	--	5,902	21,809	158,947	288,980
1987	870,979	7,602	41,005	4,305	36,900	292,703	337,004	6,310	NA	138,830	--	5,122	59,222	329,603	532,777
1988	783,866	6,247	29,786	4,443	28,800	293,903	290,049	6,494	NA	145,684	--	9,108	46,970	322,703	524,465
1989	553,967	11,234	15,827	6,458	6,600	126,222	263,149	6,397	NA	128,154	--	7,785	39,916	132,822	308,677
1990	312,924	4,919	3,972	3,244	3,397	41,908	177,406	4,785	442	79,330	4,765	543	17,362	45,305	147,305
1991	274,622	3,782	10,093	2,740	2,471	38,858	150,175	4,522	378	51,106	2,643	1,059	21,515	41,329	117,652
1992	218,723	4,632	9,632	1,782	2,284	16,313	116,200	2,897	275	28,126	1,141	--	19,218	18,597	67,082
1993	215,148	4,788	4,633	3,844	860	16,699	126,472	3,320	369	30,420	2,161	113	16,954	17,559	67,207
1994	252,911	1,086	-	229	110	1,544	170,397	5,017	750	27,893	5,808	1,108	7,082	1,654	43,545
1995	239,931	3,415	537	4,568	426	50	164,202	4,996	1,149	29,497	11,907	350	14,665	476	56,895
1996	332,051	1,474	1,322	9,178	4,879	11,937	205,358	5,125	1,479	41,718	21,533	504	18,578	16,816	99,149
1997	322,460	2,615	13,048	8,447	4,002	5,130	214,779	4,300	2,100	40,878	23,757	341	30,510	9,132	104,618
1998	255,379	120	5,441	10,232	1,700	2,350	189,085	4,297	2,324	28,096	16,923	--	22,414	4,050	71,483
1999	313,648	2,462	10,170	8,551	2,009	5,774	242,143	7,375	1,720	43,780	32,883	1,310	30,278	7,783	116,034
2000	257,917	320	4,549	7,422	2,007	11,539	192,793	4,324	1,988	37,514	13,635	269	18,603	13,546	83,567
2001	553,636	2,971	12,287	8,683	4,200	22,938	400,205	7,922	2,800	79,959	31,397	365	34,663	27,138	173,522
2002	739,040	7,789	18,273	21,235	7,899	34,428	473,692	11,171	5,940	96,277	33,918	457	64,408	42,327	237,387
2003	902,026	11,999	14,873	25,931	9,360	54,620	610,075	9,267	4,490	91,826	31,021	699	66,560	63,980	254,086
2004	806,124	8,379	15,201	16,968	12,400	40,373	583,600	10,297	4,215	111,306	14,855	417	55,060	52,773	234,411
2005 ^{h/}	590,609	7,810	9,983	20,111	8,677	26,231	410,905	9,110	4,307	91,229	22,084	570	51,321	34,908	200,112
2006 ^{h/}	421,400	0	1,725	13,200	4,100	27,977	299,138	600	NA	66,068	16,517	460	15,525	32,077	130,647

TABLE B-20. Estimates of minimum inriver run size and catch in numbers of adult spring, summer, and fall Chinook from the Columbia River. (Page 4 of 5)

Year	Minimum Inriver Run Size	Below Bonneville Dam						Above Bonneville Dam						Non-Indian Total		Total Treaty Indian & Non-Indian
		Non-Indian Sport			Non-Indian Commercial			Non-Indian Sport			Treaty Indian					
		Tributary ^{a/}	Buoy 10	Mainstem	Select Area ^{b/}	Mainstem	Bonneville Dam Counts	Mainstem	Tributary ^{c/}	Ticketed Commercial ^{d/}	Non-Ticketed Public Sales	Ceremonial & Subsistence ^{e/}				
													Sport	Commercial		
Total Chinook																
1979	525,238	13,900	-	1,700	1,585	5,647	220,380	0	0	495	0	2,582	15,600	5,647	24,324	
1980	488,105	12,605	-	1,755	40,000	73,569	207,770	500	0	32,666	0	2,938	14,860	113,569	164,033	
1981	476,338	16,531	-	4,107	24,900	10,981	232,299	100	144	50,543	0	3,647	20,882	35,881	110,953	
1982	593,305	27,641	-	3,279	6,000	88,289	247,911	0	64	56,899	0	8,548	30,984	94,289	190,720	
1983	432,187	18,579	-	4,054	4,700	28,177	185,665	0	76	22,821	0	9,669	22,709	32,877	88,076	
1984	531,799	26,592	11,960	3,257	3,600	69,881	216,517	1,689	0	51,083	0	10,029	43,498	73,481	178,091	
1985	588,146	29,286	2,392	4,106	3,600	71,382	296,429	6,597	2,823	69,732	0	9,227	45,204	74,982	199,145	
1986	766,695	28,021	12,613	7,834	4,600	163,438	370,729	5,137	3,863	103,391	0	13,386	57,468	168,038	342,283	
1987	1,174,165	47,544	41,005	7,106	36,900	304,031	468,610	6,310	3,638	140,479	0	11,846	105,603	340,931	598,860	
1988	1,105,989	47,983	29,786	9,086	28,800	312,314	411,896	6,494	4,573	147,348	0	15,947	97,922	341,114	602,331	
1989	848,399	55,309	15,827	9,522	6,600	140,139	373,205	6,397	1,081	128,240	0	14,525	88,136	146,739	377,640	
1990	649,851	51,499	3,972	15,514	3,397	60,205	296,547	4,785	3,068	79,334	4,765	7,578	78,838	63,602	234,117	
1991	544,767	55,577	10,093	8,380	2,471	51,464	226,411	4,522	381	51,111	2,643	5,101	78,953	53,935	191,743	
1992	460,102	35,047	9,632	7,081	2,580	21,483	219,688	2,897	1,924	28,174	1,141	5,757	56,581	24,063	115,716	
1993	476,780	46,536	4,633	5,872	1,711	18,218	259,337	3,320	1,965	30,420	2,161	7,737	62,326	19,929	122,572	
1994	373,532	21,428	-	2,365	266	2,508	208,197	5,017	758	27,903	5,808	2,430	29,568	2,773	68,482	
1995	338,392	25,276	537	4,591	627	150	189,426	4,996	1,151	29,510	11,907	1,387	36,551	777	80,132	
1996	455,563	14,680	1,322	9,222	5,668	12,106	272,885	5,125	1,743	41,718	21,533	3,789	32,092	17,774	116,906	
1997	518,884	10,885	13,048	8,479	5,823	5,445	356,789	4,300	9,426	40,892	23,757	8,920	46,138	11,268	130,975	
1998	369,477	10,470	5,441	10,322	4,013	2,451	248,860	4,297	4,041	28,097	16,923	2,559	34,571	6,464	88,614	
1999	443,541	17,402	10,170	8,613	3,989	6,126	306,981	7,375	1,940	43,781	32,883	3,704	45,499	10,115	135,982	
2000	541,268	18,041	4,549	7,798	8,638	12,776	401,711	4,324	13,490	38,868	13,635	10,451	48,202	21,414	132,570	
2001	1,149,452	22,259	12,287	35,761	13,919	28,218	867,728	8,057	59,485	102,128	53,093	11,892	137,807	42,137	347,099	
2002	1,314,937	40,054	18,273	44,700	20,150	51,819	869,941	12,111	31,799	114,249	40,242	11,684	146,937	71,969	385,081	
2003	1,394,537	46,125	14,873	45,753	18,179	59,279	920,651	10,838	25,669	101,776	33,863	10,499	143,258	77,458	366,854	
2004	1,293,074	49,567	15,201	42,749	24,046	55,095	845,895	11,684	26,880	124,566	17,969	9,921	146,081	79,141	377,678	
2005 ^{h/}	846,376	27,313	9,983	32,546	11,230	34,030	563,986	9,633	11,130	97,644	22,084	7,960	90,605	45,281	263,574	
2006 ^{h/}	722,422	14,831	1,725	23,621	11,690	37,574	493,115	1,288	2,612	81,839	16,517	9,409	44,077	49,264	201,106	

TABLE B-20. Estimates of minimum inriver run size and catch in numbers of adult spring, summer, and fall Chinook from the Columbia River. (Page 5 of 5)

- a/ For spring Chinook: includes lower and upper Willamette, Clackamas, Cowlitz, Kalama, Lewis, and Sandy Rivers. Sandy River harvest not available before 1990. Catch estimates may include small numbers of jacks. For summer Chinook: all tributaries are closed. For fall Chinook: all tributaries downstream from Bonneville Dam.
- b/ Youngs Bay Select Area began in 1992. Tongue Point and Blind Slough began in 1998. Select Area test fisheries began in 1991. Other Select Areas include Knappa in Oregon and Deep River in Washington.
- c/ Includes tributaries between Bonneville and McNary Dams, the Snake and Yakima rivers, Icicle and Ringold creeks.
- d/ Primarily mainstem fisheries between Bonneville and McNary dams, but also includes fish caught in miscellaneous commercial Indian fisheries such as Klickitat dip net and mainstem fisheries upstream from McNary.
- e/ Primarily mainstem fisheries between Bonneville and McNary dams. Significant subsistence fisheries also occur in tributaries throughout the Columbia and Snake River basin, especially for spring Chinook, which are not included in these estimates.
- f/ Upriver spring Chinook accounting ends on June 15 and summer Chinook accounting begins on June 16.
- g/ Spring Chinook Buoy 10 area catch is included in mainstem sport.
- h/ Preliminary. Fall Chinook estimates are from inseason run updates.
- i/ Summer Chinook retention was prohibited for all mainstem non-Indian and treaty Indian fisheries until 2003. Small non-Indian incidental mortalities prior to 2003 are associated with recreational steelhead fisheries and commercial shad and sockeye fisheries. A few stray summer Chinook are caught in Select Area (terminal) fisheries that are open for late returning spring Chinook and early returning fall Chinook. Prior to 2003, Treaty Indians could retain summer Chinook for subsistence purposes.
- j/ Fall chinook minimum run size includes LRH, LRW, SCH, URB, MCB, and SAB.

TABLE B-21. Estimates of minimum inriver run size, catch, and escapement in thousands of adult coho entering the Columbia River.^{a/} (Page 1 of 1)

Year or Average	Minimum Inriver Run Size	Below Bonneville Dam					Above Bonneville Dam			
		Lower River Catch ^{b/}			Lower River Escapement		Mainstem			
		Recreational		Mainstem	Tributary Dam		Bonneville Dam Counts ^{e/}	Commercial Treaty Catch	Zone 6 Escapement ^{f/}	Hatchery Escapement
		Commercial	Buoy 10		Hatchery ^{c/}	Counts ^{d/}				
1971-1975	367.3	194.2	-	11.7	117.1	8.5	35.8	8.3	27.6	12.1
1976-1980	229.9	101.8	-	9.4	94.3	3.5	20.8	2.1	18.7	6.0
1981-1985	581.3	316.3	48.5	14.8	142.7	5.8	53.3	5.6	47.7	16.5
1986-1990	474.2	245.1	72.8	12.0	114.7	5.0	25.6	2.7	22.9	7.0
1991	954.3	407.5	208.7	30.4	243.3	5.5	58.9	6.7	52.2	18.0
1992	217.7	54.1	43.1	9.0	88.6	5.2	17.8	1.0	16.8	5.2
1993	114.2	35.6	20.9	6.9	39.4	0.8	10.6	0.9	9.7	1.7
1994	169.1	60.7	1.8	4.3	78.0	4.1	20.3	1.0	19.3	3.9
1995	75.2	21.4	5.0	2.9	32.2	2.9	10.4	0.3	10.1	1.5
1996	104.6	19.8	4.5	3.6	60.2	0.6	15.7	0.1	15.6	1.4
1997	145.3	16.4	20.4	11.6	69.9	2.8	24.2	0.6	23.6	4.4
1998	164.5	23.0	3.2	6.7	83.8	1.3	46.6	0.2	46.4	11.3
1999	273.5	79.0	8.9	19.9	123.9	1.0	40.7	1.7	39.0	10.0
2000	551.0	168.4	21.5	37.7	232.0	5.6	85.6	6.3	79.3	26.6
2001	1,109.1	253.1	132.0	78.0	378.5	8.2	259.6	5.5	254.0	80.6
2002	503.7	163.0	6.2	27.2	215.2	3.6	88.1	1.6	86.5	2.9
2003	677.2	257.3	54.4	23.2	205.4	11.2	125.7	2.6	123.2	3.9
2004 ^{g/}	441.4	119.8	15.1	13.6	172.3	5.6	115.0	6.4	108.6	6.2
2005 ^{g/}	346.8	94.8	6.9	15.4	143.3	3.2	83.2	4.7	78.5	2.3
2006 ^{g/}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GOAL		Hatchery Production					Hatchery Production			

a/ These numbers match OPI databases. Adjustments were made to the escapement figures and catches.

b/ Includes some upriver origin coho. Mainstem recreational catches listed in this table include tributary catches and catches in the Chinook/Hammond area of 3,195 in 1989, 28 in 1990, and 1,151 in 1991.

c/ Includes hatcheries operated by all agencies.

d/ Willamette Falls, Clackamas River (North Fork Dam) and Sandy River (Marmot Dam).

e/ Includes additional small adults counted as jacks for 1983-1984 and 1986-1989.

f/ Bonneville Dam count minus Zone 6 mainstem commercial treaty Indian harvest.

g/ Preliminary.

TABLE B-22. Estimated catch and effort in the Buoy 10 fishery.^{a/} (Page 1 of 1)

Year	Angler Trips	Catch		Catch Per Trip
		Chinook	Coho	
1982-1985	30,996	4,040	30,547	0.97
1986-1990 ^{b/c/}	130,633	22,107	82,910	0.78
1991 ^{d/}	171,680	11,647	208,638	1.28
1992	115,481	10,655	43,082	0.47
1993	75,774	5,288	20,932	0.35
1994	9,253	0	1,795	0.19
1995	25,186	853	5,026	0.23
1996	18,034	1,409	4,537	0.33
1997	55,725	13,153	20,357	0.60
1998	29,998	5,784	3,175	0.30
1999	49,581	9,850	8,861	0.38
2000 ^{e/}	72,518	6,085	21,478	0.38
2001 ^{e/}	125,884	12,709	132,038	1.15
2002 ^{e/}	84,457	19,441	6,233	0.30
2003 ^{e/}	88,827	16,316	54,440	0.80
2004 ^{e/}	68,818	16,016	15,169	0.45
2005 ^{e/f/}	55,182	9,286	6,878	0.29
2006 ^{e/f/}	40,688	1,706	3,687	0.13

a/ Prior to 1982, Buoy 10 area catches were not estimated separately and are included in the Columbia River marine area (Cape Falcon to Leadbetter Pt.) recreational catches. Estimates include bank anglers fishing from Clatsop Spit in Oregon and from the North Jetty in Washington. Effort and catch for the North Jetty fishery applied to the ocean quota for the Columbia River area until the ocean fishery

b/ 1989 includes catch and effort data for the Chinook/Hammond fishery occurring during weeks 32 and 33. A total of 7,922 angler trips produced catches of 492 Chinook and 3,195 coho and a catch rate of 0.47 fish per trip. Catches in this fishery were counted against the Buoy 10 quota.

c/ 1990 includes catch and effort data for the Chinook/Hammond fishery occurring during weeks 31 and 32. A total of 3,225 angler trips produced catches of 54 Chinook and 28 coho and a catch rate of 0.03 fish per trip.

d/ Includes catch and effort data for the Chinook/Hammond fishery occurring during weeks 31 and 32. A total of 2,759 angler trips produced catches of 39 Chinook and 1,151 coho and a catch rate of 0.43 fish per trip.

e/ Includes catch and effort from the Astoria-Megler Bridge upstream to the new boundary from Tongue Point, Oregon to Rocky Point, Washington.

f/ Preliminary.

TABLE B-23. Willapa Bay fall Chinook terminal run size, catch, and spawning escapement in numbers of fish. (Page 1 of 1)

Year or Average	Non-local Stocks	Terminal Catch		Spawning Escapement		Terminal Run Size ^{d/}
	Gillnet Catch ^{a/}	Gillnet	Sport ^{b/}	Natural ^{c/}	Hatchery	
1976-1980	8,660	14,496	419	1,995	4,529	21,439
1981-1985	1,011	7,331	589	1,588	5,398	14,906
1986-1990	2,521	18,173	1,578	5,596	22,458	47,805
1991	1,658	25,619	1,932	2,987	16,053	46,591
1992	1,226	36,659	2,190	3,728	21,505	64,082
1993	603	31,153	4,252	3,033	16,214	54,652
1994	0	21,490	2,839	1,486	14,434	40,249
1995	0	25,490	2,903	2,854	17,226	48,473
1996	0	37,065	3,024	2,153	12,079	54,321
1997	0	12,311	2,404	3,852	13,729	32,296
1998	0	6,765	2,178	3,114	8,658	20,715
1999	0	265	1,906	1,360	6,966	10,497
2000	0	5,902	1,399	2,303	10,455	20,059
2001	0	5,444	2,121	2,161	10,099	19,825
2002	36	9,416	2,532	1,729	13,680	27,357
2003	220	7,471	3,252	2,738	14,553	28,007
2004 ^{e/}	0	7,349	3,851	2,532	21,286	32,017
2005 ^{e/}	0	6,523	4,729	1,804	18,425	31,421
2006 ^{e/}	0	12,334	NA	NA	NA	NA
GOAL				4,400 ^{f/}	9,800 ^{f/}	

a/ Non-local gillnet is catch in Area 2G prior to Aug. 16.

b/ Adults. Sport catch since 1991 includes marine areas within Willapa Bay (e.g., Washaway Beach).

c/ Escapement estimates after 1984 are based on revised spawning habitat estimates. Wild = adult returns assumed to be from natural origin parents.

d/ Does not include non-local stocks catch.

e/ Preliminary.

f/ Not an FMP goal.

TABLE B-24. Willapa Bay coho terminal run size, catch, and spawning escapement in numbers of fish. (Page 1 of 1)

Year or Average	Terminal Catch		Spaw ning Escapement		Terminal Run Size ^{d/}
	Gillnet	Sport ^{a/}	Natural ^{b/}	Hatchery ^{c/}	
1976-1980	15,011	2,842	5,800	14,328	37,981
1981-1985	39,007	2,181	3,567	26,640	69,968
1986-1990	69,199	2,591	e/	35,811	107,601
1991	95,569	6,258	e/	62,338	164,165
1992	10,767	2,031	e/	15,443	28,241
1993	19,837	1,620	e/	11,976	33,433
1994	11,710	2,358	e/	15,798	29,866
1995	33,554	1,743	4,582	30,471	70,350
1996	38,316	4,052	15,711	48,854	106,933
1997	1,550	806	4,934	6,691	13,981
1998	13,140	852	13,807	6,902	34,701
1999	5,467	2,836	12,355	22,823	43,481
2000	10,193	1,780	23,031	29,387	64,391
2001	31,837	5,707	48,414	54,359	140,317
2002 ^{f/}	59,435	5,685	58,703	48,871	172,694
2003 ^{f/}	66,460	5,782	49,086	66,115	187,443
2004 ^{f/}	16,533	2,325	30,402	17,669	66,929
2005 ^{f/}	50,031	4,384	26,394	40,897	121,706
2006 ^{f/}	19,914	NA	NA	17,086	NA
GOAL			13,090 ^{g/}	6,100 ^{g/}	

a/ Adults. Sport catch since 1991 includes marine areas within Willapa Bay (e.g., Washaw ay Beach).

b/ Natural spaw ning escapement estimates in 1996, 1997, and 1998 do not include adult fish released upstream of hatchery racks.

c/ Hatchery rack number includes fish released upstream.

d/ Does not include natural spaw ning escapement betw een 1984 and 1995.

e/ Estimates of natural spaw ning escapement w ere not made betw een 1984 and 1995.

f/ Preliminary

g/ WDFW goal; not an FMP goal.

TABLE B-25. Grays Harbor Chinook terminal catch, spawning escapement, and run size in numbers of fish. (Page 1 of 2)

TABLE D-26: Grays Harbor Chinook terminal catch, spawning escapement, and run size in numbers of fish. (Page 1 of 2)								
Year or Average	Early Non- local Catch	Terminal Catch				Spawning Escapement		Terminal Run Size ^{d/}
		Non-Indian Gillnet	Treaty Indian Gillnet	Chehalis Tribal Gillnet	Sport ^{a/}	Natural ^{b/}	Hatchery ^{c/}	
SPRING Chinook								
1976-1980	-	-	-	587	e/	600	-	1,187
1981-1985	-	-	-	57	5	924	-	963
1986-1990	-	-	e/	143	6	1,875	-	2,024
1991	-	-	0	187	13	1,289	-	1,489
1992	-	-	0	35	3	1,813	-	1,851
1993	-	-	0	92	53	1,254	-	1,399
1994	-	-	0	72	4	1,403	-	1,479
1995	-	-	0	82	4	2,070	-	2,156
1996	-	-	104	127	52	4,462 ^{f/}	-	4,745
1997	-	-	52	172	160	4,460 ^{f/}	-	4,844
1998	-	-	6	164	121	2,288	-	2,579
1999	-	-	3	187	76	1,285	-	1,551
2000	-	-	17	174	91	3,135	-	3,417
2001 ^{g/}	-	-	4	210	239	2,860	-	3,313
2002 ^{g/}	-	-	76	419	147	2,598	-	3,240
2003 ^{g/}	-	-	68	0	141	1,904	-	2,113
2004 ^{g/}	-	-	54	177	70	5,034	-	5,335
2005 ^{g/}	-	-	26	439	88	2,129	-	2,682
2006 ^{g/}	-	-	5	NA	NA	2,481	-	NA
GOAL						1,400		

TABLE B-25. Grays Harbor Chinook terminal catch, spawning escapement, and run size in numbers of fish. (Page 2 of 2)

Year or Average	Early Non-local Catch	Terminal Catch				Spawning Escapement		Terminal Run Size ^{d/}
		Non-Indian Gillnet	Treaty Indian Gillnet	Chehalis Tribal Gillnet	Sport ^{a/}	Natural ^{b/}	Hatchery ^{c/}	
FALL Chinook								
1976-1980	4,433	3,642	3,108	1,006	1,128	7	413	13,736
1981-1985	602	964	3,524	465	268	10	742	6,575
1986-1990	694	4,122	10,414	597	1,340	20,692	1,319	39,178 ^{h/}
1991	246	5,886	8,036	599	3,696	14,392	1,431	34,286 ^{h/}
1992	753	4,955	6,645	893	2,775	16,592	4,519	37,132 ^{h/}
1993	30	5,414	8,807	1,602	3,497	13,349	2,387	35,086 ^{h/}
1994	0	3,662	7,865	725	3,600	14,320	3,320	33,492 ^{h/}
1995	0	5,085	7,399	687	5,401	12,727	3,374	34,673 ^{h/}
1996	148	1,441	4,068	49	7,456	20,227	4,307	37,696 ^{h/}
1997	24	2,796	6,630	311	2,687	18,168	2,416	33,032 ^{h/}
1998	5	267	4,135	0	2,912	12,539	1,921	21,779 ^{h/}
1999	0	87	1,926	1	114	10,363	1,990	14,481 ^{h/}
2000	671	647	3,289	0	1,714	9,250	1,450	17,021
2001	0	2,523	3,885	0	3,210	9,491	1,121	20,230
2002 ^{g/}	40	26	960	0	2,503	11,343	2,006	16,878
2003 ^{g/}	0	99	919	0	738	19,417	2,858	24,031
2004 ^{g/}	0	108	3,497	0	5,711	29,273	2,695	41,284
2005 ^{g/}	0	218	2,260	21	222	19,249	3,285	25,255
2006 ^{g/}	0	0	3,751	NA	NA	NA	NA	NA
GOAL						14,600		

a/ Age-3 and older.

b/ Age-3 and older, including hatchery fish spawning naturally.

c/ Includes naturally spawning fish taken for broodstock.

d/ Minimum estimate due to incomplete estimates of river recreational catch. Does not include non-local catch.

e/ Fewer than 50 fish.

f/ WDFW is not able to differentiate spawning time and believes this includes fall Chinook.

g/ Preliminary.

h/ Recreational catch estimates by WDFW reflect application of catch record card bias correction factor of 0.833. Quinault Indian Nation does not believe this factor is appropriate for this fishery. Unadjusted catch estimates are 1,000 for 1987; 2,400 for 1988; 2,500 for 1989; 2,400 for 1990; 4,500 for 1991; 2,600 for 1992; 4,200 for 1993; 4,300 for 1994; 6,500 for 1995; 6,800 for 1996; 3,400 for 1997; 3,500 for 1998; and 0.1 for 1999; terminal run sizes would be adjusted accordingly.

TABLE B-26. Grays Harbor coho terminal catch, spawning escapement, and run size estimates in numbers of fish. (Page 1 of 1)

Year or Average	Terminal Catch				Spaw ning Escapement ^{b/}		Terminal Run Size		
	Non-Indian	Indian	Tribal	Sport ^{a/}	Natural	Hatchery	Natural	Hatchery	Total ^{c/}
	Gillnet	Gillnet	Gillnet						
1976-1980	5,231	9,675	3,500	2,021	29,510	9,310	44,430	17,933	59,248
1981-1985	5,299	15,614	2,863	5,012	36,847	16,753	42,974	32,432	82,388
1986-1990	7,715	30,109	1,817	5,355	44,836	30,767	53,030	65,193	120,600
1991	47,764	69,080	8,120	29,408	64,330	80,903	110,179	185,967	299,605
1992	666	14,118	1,122	5,264	32,906	9,806	41,510	21,875	63,882
1993	3,759	18,386	1,292	6,363	25,499	14,913	37,012	29,959	70,212
1994	715	8,632	918	1,789	12,423	15,020	11,818	26,809	39,497
1995	9,604	38,510	2,127	9,690	47,422	37,626	58,920	83,640	144,979
1996	10,096	51,812	2,915	20,846	63,572	49,378	83,263	100,764	198,619
1997	115	5,548	125	1,547	22,469	12,710	19,299	22,352	42,514
1998	795	13,586	361	2,123	35,551	16,903	36,076	32,435	69,319
1999	1,674	12,212	797	4,507	33,346	31,488	34,325	48,561	84,024
2000	4,995	10,947	331	5,122	38,054	28,253	39,997	47,070	87,702
2001	3,152	15,671	533	20,868	79,112	80,865	74,489	137,858	200,201
2002 ^{d/}	6,853	14,518	666	13,103	108,695	45,365	104,738	81,615	189,200
2003 ^{d/}	6,623	12,041	1,000	11,904	83,874	66,922	89,503	94,067	182,364
2004 ^{d/}	5,231	17,681	977	9,847	60,690	49,147	65,860	79,199	143,573
2005 ^{d/}	3,073	23,260	4,400	11,648	44,090	50,892	49,767	84,410	137,363
2006 ^{d/}	649	8,687	NA	NA	NA	NA	NA	NA	NA
GOAL					35,400				

a/ Beginning in 1987, estimates provided by WDFW for recreational catch reflect punch card bias correction factor.

b/ "Natural" includes hatchery fish spawning in wild. "Hatchery" includes wild fish taken for broodstock.

c/ The combined Natural and Hatchery run size total may not add to the sum of the catch and escapements due to Hatchery Total Runsize including on-station and off station escapements.

d/ Preliminary.

TABLE B-27. Treaty Indian gillnet catch of Chinook, chum, and sockeye salmon in the Quinault River in numbers of fish. (Page 1 of 1)

Year or Average	Spring/Summer Chinook ^{a/}	Fall Chinook ^{a/}	Chum	Sockeye
1976-1980	149	4,320	7,960	17,560
1981-1985	114	5,100	4,720	12,600
1986-1990	338	8,822	4,686	11,218
1991	109	6,304	2,565	5,566
1992	142	7,512	2,566	8,801
1993	126	6,695	5,259	32,077
1994	85	6,878	1,449	963
1995	26	4,076	687	207
1996	41	5,221	594	1,244
1997	19	2,625	1,033	2,532
1998	75	6,124	4,699	3,440
1999	10	4,840	599	73
2000	0	3,421	755	0
2001	5	4,047	2,009	0
2002	36	4,542	1,151	16,939
2003	92	7,343	3,742	37,130
2004	142	10,662	2,916	6,990
2005 ^{b/}	24	7,648	1,283	116
2006 ^{b/}	16	7,044	862	1

a/ Preliminary. Stock separation under review .

b/ Preliminary.

TABLE B-28. Estimated inriver run size, catch and escapement for Quinault River coho in numbers of fish. (Page 1 of 1)

Year or Average	Terminal Catch ^{a/}			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport	Natural	Hatchery	Natural	Hatchery	Total
1977-1980	9,750	-	-	3,425	3,107	8,465	7,750	16,215
1981-1985	10,700	-	-	3,237	6,239	7,809	12,657	20,466
1986-1990	13,777	-	-	3,185	4,239	8,024	13,200	21,224
1991	21,506	-	-	9,250	22,531	13,166	38,517	51,683
1992	5,214	-	-	4,617	4,855	6,682	7,771	14,453
1993	6,020	-	-	1,940	5,688	3,077	10,057	13,134
1994	1,564	-	-	820	1,299	1,278	2,047	3,325
1995	5,513	-	-	4,969	5,858	6,824	8,970	15,794
1996	10,087	-	-	13,327	9,521	18,849	13,865	32,714
1997	365	-	-	3,150	1,054	3,339	1,118	4,457
1998	5,946	-	-	3,770	3,158	7,156	5,581	12,737
1999	15,491	-	-	12,666	14,617	19,138	23,101	42,239
2000	16,194	-	-	7,421	9,481	14,559	18,099	32,658
2001	25,348	-	-	21,565	30,689	30,016	47,115	77,131
2002	19,197	-	-	12,213	16,841	16,847	30,196	47,043
2003	22,546	-	-	4,710	16,841	9,546	34,132	43,678
2004	17,055	-	-	1,404	10,321	3,377	24,821	28,198
2005 ^{b/}	23,852	-	-	6,418	10,034	15,951	25,574	41,525
2006 ^{b/}	9,785	-	-	NA	NA	NA	NA	NA
GOAL				Hatchery Production				

a/ Ceremonial, subsistence, and recreational catch negligible. Includes dip-in fish destined for other river systems.

b/ Preliminary.

TABLE B-29. Estimated inriver run size, catch, and escapement of Queets River spring/summer Chinook in numbers of fish. (Page 1 of 1)

Year or Average	Terminal Catch			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{a/}	Natural ^{b/}	Hatchery	Natural	Hatchery	Total
1976-1980	267	18	53	851	24	1,176	37	1,078
1981-1985	243	20	27	890	31	956	44	1,209
1986-1990	646	46	67	1,527	0	2,287	0	2,287
1991	112	9	10	630	0	761	0	761
1992	104	11	15	375	0	505	0	505
1993	46	3	26	713	0	788	0	788
1994	21	1	0	705	0	727	0	725
1995	35	2	0	625	0	662	0	662
1996	43	3	69	776	0	891	0	891
1997	72	10	71	540	0	693	0	693
1998	18	27	0	492	0	537	0	537
1999	12	41	0	373	0	426	0	426
2000	0	2	0	248	0	250	0	250
2001	0	17	0	548	0	565	0	565
2002	0	17	0	738	0	755	0	755
2003	0	6	0	189	0	195	0	195
2004 ^{c/}	0	15	0	604	0	619	0	619
2005 ^{c/}	0	8	0	298	0	306	0	306
2006 ^{c/}	0	6	0	330	0	336	0	336
GOAL				700 ^{d/}				

a/ River catch of adults.

b/ Natural escapement includes hatchery strays.

c/ Preliminary.

d/ Minimum. Terminal run managed at 30% exploitation rate of inriver run size.

TABLE B-30. Estimated inriver run size, catch, and escapement of Queets River fall Chinook in numbers of fish. (Page 1 of 1).

Average	Terminal Catch			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{a/}	Natural ^{b/}	Hatchery ^{c/}	Natural	Hatchery	Total
1976-1980	1,540	100	36	2,820	-	4,320	-	4,320
1981-1985	2,104	20	135	3,720	360	5,691	591	6,282
1986-1990	2,430	20	214	8,298	619	10,677	861	11,538
1991	1,553	20	116	4,486	459	5,888	705	6,593
1992	1,711	20	106	4,695	366	6,338	542	6,880
1993	1,786	20	253	3,383	230	5,107	560	5,667
1994	2,441	20	18	3,805	578	5,866	988	6,854
1995	1,809	20	52	2,876	401	4,355	746	5,101
1996	1,307	20	238	3,441	927	4,693	1,234	5,927
1997	1,708	20	210	2,477	545	4,122	823	4,945
1998	804	20	347	3,951	58	5,009	164	5,173
1999	947	20	93	1,933	135	2,885	220	3,105
2000	262	20	50	3,572	333	3,752	395	4,147
2001	1,366	64	306	2,321	778	3,604	1,204	4,808
2002	2,887	69	20	2,097	492	4,377	1,184	5,562
2003	1,322	93	278	4,120	859	5,203	1,415	6,618
2004 ^{d/}	1,228	93	370	3,576	1,529	4,778	2,019	6,796
2005 ^{d/}	1,648	90	441	3,076	1,480	4,521	2,213	6,734
2006 ^{d/}	1,079	NA	NA	NA	NA	NA	NA	NA
GOAL				2,500 ^{e/}				

a/ River sport catch of 3-year olds and older. The 2000 sport fishery was closed to retention of unmarked Chinook. The 2002 sport fishery was closed to Chinook retention on October 18 due to unusually low water conditions.

b/ Includes fish taken for hatchery broodstock.

c/ This is an integrated wild/hatchery program. All broodstock are unmarked wild fish collected from spawning grounds.

d/ Preliminary.

e/ Minimum. Terminal run managed at 40% exploitation rate of inriver run size.

TABLE B-31. Estimated terminal run size, catch, and escapement for Queets River coho in numbers of fish. (Page 1 of 1)

Year or Average	Terminal Catch ^{a/}			Escapement			Terminal Run Size			
	Gillnet	Ceremonial & Subsistence	River Sport ^{b/}	Natural ^{c/}	Supplemental	Hatchery	Natural ^{c/}	Supplemental	Hatchery	Total
1976-1980	2,440	60	140	3,460	-	1,000	5,100	-	1,640	6,740
1981-1985	2,385	20	104	5,457	-	2,654	6,414	-	3,794	10,208
1986-1990	8,455	18	241	4,824	2,128	3,366	6,357	2,988	9,357	17,507
1991	10,345	20	638	6,525	d/	4,129	8,574	d/	12,441	21,015
1992	2,057	272	302	6,266	922	1,402	6,999	998	2,923	10,920
1993	3,897	556	306	5,020	2,208	5,938	5,350	2,482	9,663	17,495
1994	1,612	182	18	1,105	95	2,901	1,242	176	4,222	5,640
1995	4,203	396	103	6,181	592	2,385	7,273	794	5,311	13,378
1996	16,035	920	279	8,993	3,574	5,191	10,715	5,319	17,646	33,680
1997	3,087	222	106	1,851	d/	2,137	1,970	d/	5,086	7,056
1998	7,411	452	135	4,102	1,413	3,504	4,576	1,562	10,364	16,502
1999	3,974	381	119	4,791	521	3,551	5,029	557	7,061	12,647
2000	5,066	479	223	7,939	682	3,849	8,498	702	5,619	14,819
2001	13,722	1,280	1,554	23,793	1,084	6,594	28,303	2,081	13,589	43,974
2002	23,712	1,003	399	13,773	1,048	2,240	15,904	1,292	21,290	38,486
2003	12,692	918	743	9,846	704	7,394	13,223	1,344	15,707	30,273
2004 ^{e/}	8,189	655	1,287	8,709	0	3,260	11,470	243	10,494	22,207
2005 ^{e/}	20,810	980	873	6,539	432	7,810	9,801	534	25,935	36,270
2006 ^{e/}	6,190	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL				5,800-14,500						

a/ Includes dip-in fish from other river systems.

b/ Recreational catch of adults (coho over 20 inches).

c/ Natural escapement and run sizes estimates include fish taken for hatchery brood stock.

d/ Included in natural escapement and run size.

e/ Preliminary.

TABLE B-32. Estimated inriver run size, catch, and escapement for Hoh River spring/summer Chinook in numbers of fish. (Page 1 of 1)

Year or Average	Terminal Catch ^{a/}			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{b/}	Natural	Hatchery	Natural	Hatchery	Total
1976-1980	640	52	84	1,040	0	1,835	0	1,835
1981-1985	448	30	124	1,431	50	1,944	128	2,073
1986-1990	1,072	33	315	2,829	34	4,043	257	4,300
1991	600	13	138	1,078	0	1,693	153	1,846
1992	445	26	81	1,018	0	1,443	167	1,610
1993	509	25	357	1,411	0	2,065	242	2,307
1994	378	20	404	1,699	0	2,372	152	2,524
1995	230	25	387	1,132	0	1,686	68	1,754
1996	471	30	267	1,371	16	2,083	114	2,197
1997	416	57	331	1,826	0	2,582	53	2,635
1998	294	20	288	1,287	0	1,880	28	1,908
1999 ^{c/}	155	20	52	928	99	1,081	171	1,252
2000 ^{d/}	87	38	21	492	0	529	116	645
2001 ^{d/}	134	39	43	1,159	0	1,231	101	1,332
2002 ^{e/}	587	37	372	2,464	0	3,375	85	3,460
2003 ^{e/f/}	296	20	206	1,228	0	1,646	104	1,750
2004 ^{e/f/}	401	20	102	1,786	0	2,239	70	2,309
2005 ^{e/f/}	323	36	73	1,193	0	1,389	217	1,606
2006 ^{e/f/}	576	37	109	904	0	662	557	1,219
GOAL				900 ^{g/}				

a/ Beginning in 1981, catch breakouts recalculated to account for Solduc hatchery yearling release dip-in fish.

b/ Recreational catch of adults (at least 24 inches total length).

c/ Sport fishery closed until July 14.

d/ Sport fishery closed through August 31 to retention of wild adult spring/summer Chinook. Sport catch reflects retention of hatchery fish only.

e/ Sport fishery open May 16-Aug 31 from mouth to Willoughby Creek.

f/ Preliminary.

g/ Minimum. Terminal run managed at 31% harvest rate of inriver run size.

TABLE B-33. Estimated inriver run size, catch, and escapement for Hoh River fall Chinook in numbers of fish. (Page 1 of 1)

Year or Average	Terminal Catch			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{a/}	Natural ^{b/}	Hatchery	Natural	Hatchery	Total
1976-1980	760	36	37	2,080	-	2,960	-	2,960
1981-1985	849	36	59	2,745	20	3,684	100	3,764
1986-1990	2,000	32	213	4,500	33	6,819	88	6,907
1991	1,076	15	130	1,420	0	2,628	13	2,641
1992	940	30	184	4,003	0	5,139	18	5,157
1993	1,148	30	416	2,280	0	2,951	91	3,042
1994	687	30	242	3,967	0	4,322	179	4,501
1995	502	30	194	2,202	0	2,912	22	2,934
1996	836	30	192	3,022	0	4,061	19	4,080
1997	1,114	35	164	1,773	0	3,034	52	3,086
1998	846	30	268	4,257	0	5,388	13	5,401
1999	596	30	413	1,924	0	2,941	22	2,963
2000	404	20	479	1,749	0	2,632	20	2,652
2001	946	40	600	2,560	0	4,116	120	4,236
2002 ^{c/}	1,461	30	134	4,415	82	5,716	406	6,122
2003 ^{d/}	517	30	216	1,649	32	2,319	99	2,418
2004 ^{d/}	815	30	400	3,211	26	4,410	72	4,482
2005 ^{d/}	970	21	229	4,180	14	5,316	77	5,393
2006 ^{d/}	571	30	NA	1,325	NA	1,877	19	1,896
GOAL				1,200 ^{e/}				

a/ Recreational catch of age-3 and older fish.

b/ Includes fish taken for hatchery brood stock.

c/ Low water in October and early November delayed upstream migration, prompting closure of the sport fishery to Chinook retention on October 19 for the remainder of season. Tribal gillnet fishery closed weeks 44 and 45.

d/ Preliminary.

e/ Minimum. Terminal run managed at 40% harvest rate of inriver run size through 1996; for 1997 and 1998, fishing regimes were designed to target a range near 40%.

TABLE B-34. Estimated inriver run size, catch, and escapement for Hoh River coho in numbers of fish. (Page 1 of 1)

Year or Average	Terminal Catch ^{a/}			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{b/}	Natural ^{c/}	Hatchery	Natural	Hatchery	Total
1976-1980	1,960	74	28	2,700	39	4,683	259	4,942
1981-1985	1,604	48	22	3,371	92	4,655	452	5,107
1986-1990	2,507	30	165	3,145	238	5,221	760	5,981
1991	1,254	20	276	4,129	14	5,370	323	5,693
1992	1,420	30	110	4,045	594	5,010	1,189	6,199
1993	709	30	90	1,345	0	1,874	300	2,174
1994	144	20	123	1,161	0	1,404	44	1,448
1995	478	30	242	4,710	0	5,420	40	5,460
1996	972	50	101	4,858	0	5,835	146	5,981
1997 ^{d/}	85	25	4	1,386	0	1,449	51	1,500
1998	650	20	213	4,418	0	5,184	118	5,302
1999	1,706	25	256	4,594	0	6,293	308	6,601
2000	1,932	20	280	6,772	0	8,831	173	9,004
2001	3,909	40	786	10,773	840	14,801	1,547	16,348
2002 ^{e/}	3,114	30	401	9,009	1,922	11,254	3,222	14,476
2003 ^{f/}	1,872	20	350	6,273	645	8,118	1,021	9,139
2004 ^{f/}	1,255	20	437	4,702	14	6,291	137	6,428
2005 ^{f/}	3,830	30	280	4,711	732	8,294	1,259	9,553
2006 ^{f/}	1,313	30	NA	2,037	NA	3,109	241	3,350
GOAL				2,000 to 5,000				

a/ Includes dip-in fish from other river systems.

b/ Recreational catch of adults (coho over 20 inches).

c/ Natural escapement and run sizes estimates include fish taken for hatchery brood stock.

d/ Recreational fishermen were limited to Chinook only. Release of adult coho required. Tribal net fishery used large mesh to minimize coho

e/ Sport and tribal gillnet seasons reduced inseason in response to delayed upriver movement of coho caused by extreme low water conditions in October and early November. Closures were for two weeks.

f/ Preliminary.

TABLE B-35. Estimated inriver run size, catch, and escapement for Quillayute River spring/summer Chinook in numbers of fish. (Page 1 of 1)

Year or Average	Terminal Catch			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{a/}	Natural ^{b/}	Hatchery	Natural	Hatchery ^{c/}	Total
1976-1980	2,520	20	380	2,093	800	NA	NA	3,698
1981-1985	700	20	48	731	260	NA	NA	1,164
1986-1990	1,631	22	258	1,602	1,003	3,085	2,503	4,341
1991	1,271	25	381	1,188	781	1,500	2,146	3,646
1992	917	25	295	1,009	1,540	1,271	2,515	3,786
1993	1,237	25	367	1,292	866	1,531	2,256	3,787
1994	570	25	79	974	537	1,187	998	2,185
1995	471	25	341	1,333	438	1,731	877	2,608
1996	136	50	257	1,170	226	1,388	426	1,814
1997	106	50	263	890	198	1,177	305	1,482
1998	199	50	128	1,599	247	1,829	369	2,198
1999	368	50	238	713	596	818	1,147	1,965
2000	254	50	307	989	227	1,149	678	1,827
2001	330	50	353	1,225	973	1,399	1,515	2,914
2002	419	50	367	1,002	836	1,100	1,573	2,673
2003	184	50	343	1,219	1,250	1,308	1,738	3,046
2004	217	50	331	1,093	763	1,259	1,195	2,454
2005 ^{d/e/f/}	332	3	488	876	801	1,033	1,467	2,500
2006 ^{d/e/f/}	688	0	NA	600	1,032	656	1,664	2,320
GOAL				1,200 ^{g/}				

a/ Recreational catch of adults.

b/ Natural escapement includes hatchery strays and broodstock fish.

c/ Hatchery escapement and terminal run size exclude hatchery strays.

d/ Preliminary.

e/ Terminal run size estimates incomplete because inriver sport catch estimates are unavailable.

f/ Beginning in 2005, C&S catch taken during scheduled gillnet fishery is included in gillnet harvest numbers.

g/ FMP goal is adults; WDFW goal of 1,200 includes age-3 males (jacks).

TABLE B-36. Estimated inriver run size, catch, and escapement for Quillayute River fall Chinook in numbers of fish. (Page 1 of 1)

Year or Average	Terminal Catch			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{a/}	Natural ^{b/}	Hatchery ^{c/}	Natural	Hatchery ^{c/}	Total
1976-1980	2,640	20	220	4,220	144	6,540	640	7,180
1981-1985	2,075	50	131	6,282	77	8,219	305	8,525
1986-1990	5,475	50	564	12,238	112	18,004	379	18,383
1991	951	50	376	6,292	13	7,631	51	7,682
1992	1,208	50	200	6,342	14	7,750	62	7,812
1993	407	50	26	5,254	28	5,735	30	5,765
1994	448	50	262	4,932	0	5,692	0	5,692
1995	552	50	582	5,532	0	6,716	0	6,716
1996	1,377	100	500	7,316	0	9,293	0	9,293
1997	282	50	310	5,405	0	6,047	0	6,047
1998	762	100	326	6,752	0	7,940	0	7,940
1999	1,129	100	195	3,334	0	4,758	0	4,758
2000	604	100	360	3,730	0	4,794	0	4,794
2001	1,650	100	659	5,136	0	7,545	0	7,545
2002	3,074	100	271	6,067	0	9,512	0	9,512
2003	1,345	100	626	7,398	0	9,469	23	9,492
2004	527	100	681	3,831	0	6,133	12	6,145
2005 ^{d/e/f}	1,414	0	499	6,406	0	8,319	32	8,351
2006 ^{d/e/f}	2,020	0	NA	6,336	0	8,356	14	8,370
GOAL				3,000 ^{g/}				

a/ River recreational catch of age-3 and older fish.

b/ Includes fish taken for hatchery brood stock and hatchery strays.

c/ Hatchery escapement and terminal run size exclude hatchery strays.

d/ Preliminary.

e/ Terminal run size estimates incomplete since inriver sport catch estimates are unavailable.

f/ Beginning in 2005, C&S catch taken during scheduled gillnet fishery is included in gillnet harvest numbers.

g/ Minimum. Terminal run managed at 40% harvest rate.

TABLE B-37. Estimated inriver run size, catch, and escapement for Quillayute River coho stocks in numbers of fish. (Page 1 of 2)

Year or Average	Terminal Catch ^{a/}			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{b/}	Natural ^{c/}	Hatchery ^{d/}	Natural ^{c/}	Hatchery ^{d/}	Total
SUMMER COHO								
1976-1980	5,038	56	266	1,192	4,565	1,962	9,154	11,116
1981-1985	4,062	50	105	946	2,744	2,106	5,802	7,908
1986-1990	3,204	50	94	723	4,001	1,643	6,430	8,072
1991	2,661	50	319	1,001	9,877	1,280	12,628	13,908
1992	1,254	50	491	921	15,376	1,022	17,070	18,092
1993	396	50	63	256	1,654	324	2,095	2,419
1994	974	50	51	683	1,643	999	2,402	3,401
1995	1,144	50	29	1,060	3,957	1,318	4,922	6,240
1996	2,552	50	189	465	3,400	801	5,855	6,656
1997	70	50	14	753	1,509	798	1,598	2,396
1998	1,310	50	93	346	1,688	593	2,894	3,487
1999	945	50	292	624	7,527	723	8,715	9,438
2000	1,188	50	278	1,001	3,745	1,237	5,025	6,262
2001	2,196	50	590	961	12,993	1,841	14,949	16,790
2002 ^{e/}	3,982	50	150	1,012	3,939	2,099	7,034	9,133
2003 ^{e/}	2,412	50	326	505	6,539	1,472	8,360	9,832
2004 ^{e/f/}	1,337	50	343	1,269	6,527	1,874	7,652	9,526
2005 ^{e/f/h}	10,273	0 ^{h/}	487	1,218	7,182	2,197	16,963	19,160
2006 ^{e/f/h}	2,410	h/	NA	574	2,273	1,772	3,502	5,274
GOAL				Hatchery Production				

TABLE B-37. Estimated inriver run size, catch, and escapement for Quillayute River coho stocks in numbers of fish. (Page 2 of 2)

Year or Average	Terminal Catch ^{a/}			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{b/}	Natural ^{c/}	Hatchery ^{d/}	Natural ^{c/}	Hatchery ^{d/}	Total
FALL COHO								
1976-1980	5,985	53	70	9,002	2,435	13,959	3,587	17,546
1981-1985	3,789	49	164	7,464	2,102	10,988	2,580	13,568
1986-1990	5,794	100	385	8,766	1,771	14,119	2,695	16,815
1991	2,078	100	626	9,532	7,168	10,648	8,856	19,504
1992	7,069	100	841	8,170	3,858	13,623	6,415	20,038
1993	1,318	100	60	4,165	3,746	4,676	4,713	9,389
1994	2,138	100	307	4,882	3,090	6,415	4,102	10,517
1995	5,386	100	991	10,035	5,819	14,286	8,045	22,331
1996	8,419	100	1,336	11,009	11,515	14,596	17,783	32,379
1997	456	50	38 ^{g/}	4,623	2,645	5,021	2,791	7,812
1998	4,606	50	1,340	13,866	12,834	16,980	15,716	32,696
1999	22,946	50	1,054	9,365	13,528	19,524	27,515	47,039
2000	5,606	50	1,059	13,343	13,118	17,706	15,470	33,176
2001	23,991	50	2,620	18,876	23,892	36,714	32,715	69,429
2002	22,214	50	2,002	23,016	30,656	34,695	43,243	77,938
2003 ^{e/}	13,949	50	2,533	14,756	13,799	25,188	19,899	45,087
2004 ^{e/f/}	19,321	50	2,831	13,354	21,248	25,118	31,687	56,805
2005 ^{e/f/h}	29,530	0 ^{h/}	3,420	11,501	24,137	22,125	46,463	68,588
2006 ^{e/f/h}	9,463	h/	NA	4,955	4,450	11,537	7,331	18,868
GOAL				6,300-15,800				

a/ Includes dip-in fish from other systems.

b/ Recreational catch of adults (coho over 20 inches).

c/ Natural escapement and run size estimates include fish taken for hatchery brood stock.

d/ Hatchery escapement and terminal run size exclude hatchery strays.

e/ Preliminary.

f/ Terminal run size estimates incomplete since inriver sport catch estimates are unavailable.

g/ Regulations required nonretention of coho.

h/ Beginning in 2005, C&S catch taken during scheduled gillnet fishery is included in gillnet harvest numbers.

TABLE B-38. Puget Sound commercial net and troll fishery salmon catches in numbers of fish.^{a/} (Page 1 of 2)

Year or Average	Fishery	Chinook	Coho	Pink ^{b/}	Chum	Sockeye
1971-1975	Non-Indian	105,332	525,867	1,172,614	331,029	2,158,784
	Treaty Indian	57,672	224,743	61,818	78,266	38,225
	Total	163,005	750,610	1,234,433	409,295	2,197,009
1976-1980	Non-Indian	103,546	413,583	1,050,560	407,859	1,095,603
	Treaty Indian	135,592	492,549	185,831	296,057	277,771
	Total	239,138	906,132	1,236,391	703,916	1,373,374
1981-1985	Non-Indian	72,934	346,125	1,154,851	368,762	928,477
	Treaty Indian	155,966	608,241	829,340	387,951	912,408
	Total	228,899	954,366	1,984,191	756,713	1,840,885
1986-1990	Non-Indian	57,550	470,494	509,445	540,843	964,690
	Treaty Indian	176,966	812,712	590,138	662,215	1,028,361
	Total	234,516	1,283,206	1,099,583	1,203,058	1,993,051
1991	Non-Indian	21,629	196,928	1,578,440	476,214	983,408
	Treaty Indian	120,057	406,801	1,710,032	545,421	844,690
	Total	141,686	603,729	3,288,472	1,021,635	1,828,098
1992	Non-Indian	19,496	98,920	82	618,909	316,113
	Treaty Indian	90,331	292,526	121	763,831	292,140
	Total	109,827	391,446	203	1,382,740	608,253
1993	Non-Indian	19,040	27,305	974,865	587,690	1,328,468
	Treaty Indian	62,719	164,555	1,117,356	540,018	1,365,219
	Total	81,759	191,860	2,092,221	1,127,708	2,693,687
1994	Non-Indian	20,855	24,248	30	561,243	880,632
	Treaty Indian	65,913	438,937	208	802,872	959,599
	Total	86,768	463,185	238	1,364,115	1,840,231
1995	Non-Indian	6,577	24,455	1,366,919	372,923	170,551
	Treaty Indian	73,547	281,100	1,337,021	383,000	243,641
	Total	80,124	305,555	2,703,940	755,923	414,192
1996	Non-Indian	9,046	19,218	2	530,372	50,474
	Treaty Indian	67,061	153,748	58	264,486	286,187
	Total	76,107	172,966	60	794,858	336,661
1997	Non-Indian	21,894	10,454	869,345	229,261	690,236
	Treaty Indian	56,638	133,150	1,007,380	188,850	678,489
	Total	78,532	143,604	1,876,725	418,111	1,368,725

TABLE B-38. Puget Sound commercial net and troll fishery salmon catches in numbers of fish.^{a/} (Page 2 of 2)

Year or Average	Fishery	Chinook	Coho	Pink ^{b/}	Chum	Sockeye
1998	Non-Indian	12,428	12,538	352	505,349	229,313
	Treaty Indian	43,273	148,441	512	320,122	308,446
	Total	55,701	160,979	864	825,471	537,759
1999	Non-Indian	9,512	11,902	1,109	133,404	37
	Treaty Indian	83,686	102,278	51,432	117,763	20,495
	Total	93,198	114,180	52,541	251,167	20,532
2000	Non-Indian	11,468	21,910	9	140,611	230,379
	Treaty Indian	71,551	386,714	346	159,477	315,628
	Total	83,019	408,624	355	300,088	546,007
2001	Non-Indian	18,029	28,299	463,083	824,328	85,112
	Treaty Indian	109,865	366,011	319,553	777,019	170,309
	Total	127,894	394,310	782,636	1,601,347	255,421
2002 ^{c/}	Non-Indian	17,628	24,459	7	1,117,666	141,456
	Treaty Indian	98,251	286,500	327	833,497	339,773
	Total	115,879	310,959	334	1,951,163	481,229
2003 ^{c/}	Non-Indian	8,567	18,105	683,393	764,132	90,618
	Treaty Indian	84,680	244,091	556,943	814,212	183,670
	Total	93,247	262,196	1,240,336	1,578,344	274,288
2004 ^{c/}	Non-Indian	5,042	39,481	4	1,174,295	81,031
	Treaty Indian	99,741	529,668	712	934,155	137,699
	Total	104,783	569,149	716	2,108,450	218,730
2005 ^{c/}	Non-Indian	6,236	19,694	144,567	383,127	65,931
	Treaty Indian	86,071	296,637	243,012	351,416	141,747
	Total	92,307	316,331	387,579	734,543	207,678
2006 ^{c/}	Non-Indian	13,090	10,042	6	877,224	223,447
	Treaty Indian	134,604	292,448	195	546,812	543,546
	Total	147,694	302,490	201	1,424,036	766,993

a/ Data does not reflect treaty Indian allocations. Includes U.S. and Canadian-origin salmon and fish caught in test fisheries.

b/ Odd-year averages for pink salmon.

c/ Preliminary.

TABLE B-39. Summary of Puget Sound marine recreational salmon catch estimates in numbers of fish from catch record cards.^{a/} (Page 1 of 1)

Year or Average	Chinook	Coho	Pink ^{b/}
1971-1975	225,650	119,301	14,855
1976-1980	253,763	202,983	47,029
1981-1985 ^{c/}	156,183	196,632	14,910
1986-1990 ^{c/d/e/}	127,860	251,087	40,884
1991 ^{e/f/}	90,566	252,361	44,946
1992 ^{e/f/}	97,733	189,372	384
1993 ^{e/f/}	80,166	135,974	67,575
1994 ^{e/}	48,286	31,801	5
1995 ^{e/}	69,799	78,675	100,570
1996 ^{e/}	72,069	85,139	50
1997 ^{e/}	60,425	137,571	35,197
1998 ^{e/}	26,114	89,520	201
1999 ^{e/}	28,739	22,055	23,780
2000 ^{e/}	23,879	74,934	17
2001 ^{e/}	44,422	193,454	117,367
2002 ^{e/g/}	30,900	67,261	31
2003 ^{e/g/}	30,936	101,485	148,965
2004 ^{e/g/}	27,121	88,036	213
2005 ^{e/g/}	22,758	62,110	68,166
2006	NA	NA	NA

a/ WDFW Statistical Areas 5 through 13, which include the Strait of Juan de Fuca, San Juan Islands, and inner Puget Sound.

b/ Odd-year averages for pink salmon.

c/ 1981-1987: Adjusted all Puget Sound and Freshwater estimates by 0.833; due to previous estimates being 20% too high.

d/ 1988: Area 5, no adjustment. Areas 6-13 adjusted by 0.633; due to estimates being 58% too high.

e/ 1989-Present: Area 5, no adjustment. Areas 6-13 adjusted by 0.685; due to estimates being 46% too high.

f/ Catch record card estimates adjusted for results of 1987-1990 WDFW/tribal sports emphasis study.

g/ Preliminary.

TABLE B-40. Puget Sound reported commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound Chinook stocks.^{a/} (Page 1 of 3)

Year or Average	Commercial Net Catches			Spawning Escapement			Puget Sound Run Size ^{c/}		
	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total
Strait of Juan de Fuca									
1981-1985	57	126	183	811	1,450	2,261	868	1,576	2,444
1986-1990	136	448	584	1,276	4,538	5,814	1,412	4,986	6,398
1991-1995	28	149	177	348	2,904	3,252	376	3,053	3,429
1996	0	13	13	214	3,110	3,324	214	3,123	3,337
1997	6	58	64	318	3,394	3,712	324	3,452	3,776
1998	6	6	12	1,689	1,934	3,623	1,695	1,940	3,635
1999	10	17	27	726	2,675	3,401	736	2,692	3,428
2000	5	6	11	1,244	1,683	2,927	1,249	1,689	2,938
2001 ^{d/}	4	4	8	1,660	1,947	3,607	1,664	1,951	3,615
2002 ^{d/}	5	6	11	1,513	2,182	3,695	1,518	2,188	3,706
2003 ^{d/}	4	10	14	1,258	2,787	4,045	1,262	2,797	4,059
2004 ^{d/}	7	18	25	1,368	4,044	5,412	1,375	4,062	5,437
2005 ^{d/}	7	9	16	1,397	2,083	3,480	1,404	2,092	3,496
2006 ^{d/}	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL						5,300			
Nooksack-Samish									
1981-1985	54,046	33,562	87,608	16,083	6,541	22,623	70,129	40,103	110,232
1986-1990	37,987	26,271	64,368	10,698	4,127	14,825	48,685	30,398	79,194
1991-1995	18,170	3,294	20,759	8,620	731	9,351	26,790	4,025	30,110
1996	18,010	1,327	19,429	9,026	866	9,892	27,036	2,193	29,321
1997	18,200	3,743	14,541	15,775	3,985	19,760	33,975	7,728	34,301
1998	16,239	5,006	19,259	7,706	2,539	10,245	23,945	7,545	29,504
1999	25,724	6,804	31,295	6,962	2,598	9,560	32,686	9,402	40,855
2000	25,796	2,258	28,054	3,723	432	4,164	29,519	2,690	32,218
2001 ^{d/}	22,209	27,159	49,368	6,300	9,017	15,317	28,509	36,176	64,685
2002 ^{d/}	9,240	29,476	38,716	3,665	13,593	17,258	12,905	43,069	55,974
2003 ^{d/}	6,686	12,425	19,111	3,347	7,864	11,211	10,033	20,289	30,322
2004 ^{d/}	4,619	5,887	9,906	2,966	4,325	7,291	7,585	10,212	17,197
2005 ^{d/}	5,641	3,885	9,526	2,439	1,641	4,080	8,080	5,526	13,606
2006 ^{d/}	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL				1,800					

TABLE B-40. Puget Sound reported commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound Chinook stocks.^{a/}
(Page 2 of 3)

Year or Average	Commercial Net Catches			Spawning Escapement			Puget Sound Run Size ^{c/}		
	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total
Skagit									
1981-1985	573	9,208	9,781	787	11,545	12,332	1,360	20,753	22,112
1986-1990	246	4,157	4,404	815	12,641	13,456	1,061	16,798	17,860
1991-1995	450	1,914	2,364	2,402	6,285	8,687	2,852	8,200	11,052
1996	21	1,625	1,646	1,133	10,613	11,746	1,154	12,238	13,392
1997	18	1,127	1,145	78	4,872	4,950	96	5,999	6,095
1998	2	319	321	91	14,609	14,700	93	14,928	15,021
1999	5	257	262	92	4,924	5,016	97	5,181	5,278
2000	4	291	295	185	16,930	17,115	189	17,221	17,410
2001 ^{d/}	2	247	249	150	13,793	13,943	152	14,040	14,192
2002 ^{d/}	0	323	323	99	19,591	19,690	99	19,914	20,013
2003 ^{d/}	7	292	299	194	9,489	9,683	201	9,781	9,982
2004 ^{d/}	0	650	650	197	23,750	23,947	197	24,400	24,597
2005 ^{d/}	34	2,593	2,627	271	20,803	21,074	305	23,396	23,701
2006 ^{d/}	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL					14,900				
Hood Canal									
1981-1985	4,917	3,648	8,565	3,787	2,038	5,824	8,704	5,685	14,389
1986-1990	10,497	18,719	29,216	6,223	2,006	8,229	16,721	20,724	37,445
1991-1995	1,828	1,021	2,849	3,806	1,408	5,214	5,634	2,429	8,063
1996	30	4	34	7,103	1,028	8,131	7,133	1,032	8,165
1997	135	7	142	7,292	492	7,784	7,427	499	7,926
1998	964	132	1,096	13,432	1,803	15,235	14,396	1,935	16,331
1999	7,184	950	8,134	18,443	2,975	21,418	25,627	3,925	29,552
2000	9,744	1,291	11,035	9,063	1,582	10,645	18,807	2,873	21,680
2001 ^{d/}	23,285	4,212	27,497	13,616	2,428	16,044	36,901	6,640	43,541
2002 ^{d/}	21,031	2,786	23,817	12,953	1,712	14,665	33,984	4,498	38,482
2003 ^{d/}	24,355	1,406	25,761	4,850	1,422	6,272	29,205	2,828	32,033
2004 ^{d/}	13,037	2,164	15,201	16,691	2,618	19,728	29,728	4,782	34,929
2005 ^{d/}	24,619	558	25,177	19,758	2,776	22,534	44,377	3,334	47,711
2006 ^{d/}	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL				3,400					

TABLE B-40. Puget Sound reported commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound Chinook stocks.^{a/}
(Page 3 of 3)

Year or Average	Commercial Net Catches			Spawning Escapement			Puget Sound Run Size ^{c/}		
	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total
Stillaguamish-Snohomishe/									
1981-1985	2,714	6,915	9,630	1,849	4,901	6,750	4,564	11,816	16,380
1986-1990	932	4,241	5,174	1,134	5,210	6,344	2,066	9,451	11,517
1991-1995	710	1,959	2,669	2,230	4,255	6,485	2,940	6,214	9,153
1996	18	23	41	4,555	6,035	10,590	4,573	6,058	10,631
1997	242	112	354	11,746	5,451	17,197	11,988	5,563	17,551
1998	37	68	105	4,691	7,844	12,535	4,728	7,912	12,640
1999	15,142	100	15,242	4,700	5,897	10,597	19,842	5,997	25,839
2000	8,275	31	8,306	1,931	7,739	9,670	10,206	7,770	17,976
2001 ^{d/}	5,114	291	5,405	871	9,513	10,384	5,985	9,804	15,789
2002 ^{d/}	5,192	57	5,249	2,542	8,808	11,350	7,734	8,865	16,599
2003 ^{d/}	9,420	445	9,865	5,657	6,435	12,092	15,077	6,880	21,957
2004 ^{d/}	6,347	316	6,663	6,141	12,112	18,253	12,488	12,428	24,916
2005 ^{d/}	7,463	155	7,618	3,592	5,447	9,039	11,055	5,602	16,657
2006 ^{d/}	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL					7,300				
South Puget Sound									
1981-1985	25,093	9,099	34,191	23,341	6,371	29,712	48,434	15,470	63,903
1986-1990	25,548	20,168	45,716	35,315	18,110	53,425	60,863	38,278	99,141
1991-1995	18,988	13,660	32,648	28,692	14,476	43,168	47,680	28,136	75,816
1996	18,866	11,590	30,456	39,499	24,343	63,842	58,365	35,933	94,298
1997	11,307	4,442	15,749	36,303	16,347	52,650	47,610	20,789	68,399
1998	12,021	7,467	19,488	42,501	20,210	62,711	54,522	27,677	82,199
1999	18,185	8,141	26,326	56,495	18,948	75,443	74,680	27,089	101,769
2000	14,030	5,083	19,113	47,175	13,319	60,494	61,205	18,402	79,607
2001 ^{d/}	33,992	10,436	44,428	67,134	25,665	92,799	101,126	36,101	137,227
2002 ^{d/}	26,232	9,631	35,863	74,436	18,626	93,062	100,668	28,257	128,925
2003 ^{d/}	22,385	2,366	2,475	53,783	12,767	66,550	76,168	15,133	69,025
2004 ^{d/}	25,062	11,376	36,438	54,224	18,431	72,655	79,286	29,807	109,093
2005 ^{d/}	25,872	2,318	28,190	56,891	7,484	64,375	82,763	9,802	92,565
2006 ^{d/}	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL						34,900			

a/ Includes treaty Indian and non-Indian net commercial catches during the adult accounting period. Source: Puget Sound run reconstruction model.

b/ Includes estimated off-station returns.

c/ Puget Sound run size is defined as the run available to Puget Sound net fisheries; spawning escapement plus Puget Sound net fishery catch. Does not include fish caught by troll and recreational fisheries inside Puget Sound.

d/ Preliminary.

e/ Since 1999, numbers include Tulalip hatchery returns, which are not added into escapement since no broodstock is taken at the hatchery.

TABLE B-41. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound coho stocks.^{a/} (Page 1 of 3)

Year or Average	Commercial Net Catches ^{c/}			Spawning Escapement			Terminal Run Size ^{c/}		
	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total
Strait of Juan de Fuca									
1981-1985	15,822	2,907	18,729	9,300	5,960	15,260	25,122	8,867	33,989
1986-1990	5,956	2,301	8,258	2,913	6,920	9,833	8,869	9,221	18,091
1991-1995	1,872	286	2,158	4,316	4,810	9,126	6,188	5,096	11,284
1996	4,176	81	4,257	7,563	3,090	10,653	11,739	3,171	14,910
1997 ^{d/}	227	65	292	13,889	8,769	22,658	14,116	8,834	22,950
1998 ^{d/}	5,272	964	6,236	6,109	18,077	24,186	11,381	19,041	30,422
1999 ^{d/}	3,830	313	4,143	6,253	10,002	16,255	10,083	10,315	20,398
2000 ^{d/}	7,989	1,726	9,715	19,233	23,758	42,991	27,222	25,484	52,706
2001 ^{d/}	10,758	2,663	13,421	24,768	43,039	67,807	35,526	45,702	81,228
2002 ^{d/}	8,105	1,458	9,563	10,837	24,346	35,183	18,942	25,804	44,746
2003 ^{d/}	3,790	1,289	5,079	15,513	18,873	34,386	19,303	20,162	39,465
2004 ^{d/}	4,800	908	5,708	6,235	20,515	26,750	11,035	21,423	32,458
2005 ^{d/}	4,041	NA	NA	4,123	NA	NA	9,111	NA	NA
2006 ^{d/}	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL						14,800			
Nooksack-Samish									
1981-1985	122,433	17,539	139,972	27,720	7,700	35,420	150,153	25,239	175,392
1986-1990	140,733	21,839	162,572	23,087	8,020	31,107	163,821	29,859	193,680
1991-1995	48,056	13,878	61,934	19,793	10,835	30,629	67,849	24,713	92,563
1996	50,711	1,607	52,318	40,293	2,518	42,811	91,004	4,125	95,129
1997 ^{d/}	13,751	1,257	15,008	34,305	6,700	41,005	48,056	7,957	56,013
1998 ^{d/}	15,751	7,134	22,885	21,089	10,300	31,389	36,840	17,434	54,274
1999 ^{d/}	41,926	7,457	49,383	41,876	8,039	49,915	83,802	15,496	99,298
2000 ^{d/}	58,011	9,597	67,608	49,035	11,000	60,035	107,046	20,597	127,643
2001 ^{d/}	49,044	26,099	75,143	49,788	27,500	77,288	98,832	53,599	152,431
2002 ^{d/}	34,625	16,825	51,450	45,161	20,300	65,461	79,786	37,125	116,911
2003 ^{d/}	35,331	10,122	45,453	35,482	14,200	49,682	70,813	24,322	95,135
2004 ^{d/}	71,741	18,927	90,668	27,603	11,591	39,194	99,344	30,518	129,862
2005 ^{d/}	20,098	15,477	35,575	25,052	2,222	27,274	45,851	17,974	63,825
2006 ^{d/}	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL				17,900					

TABLE B-41. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound coho stocks.^{a/}
(Page 2 of 3)

Year or Average	Commercial Net Catches ^{c/}			Spawning Escapement			Terminal Run Size ^{c/}		
	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total
Skagit									
1981-1985	6,619	8,858	15,477	21,740	19,800	41,540	28,359	28,658	57,017
1986-1990	5,309	11,448	16,757	13,861	25,800	39,661	19,170	37,248	56,418
1991-1995	1,338	1,739	3,077	11,082	14,240	25,322	12,420	15,979	28,399
1996	719	332	1,051	17,983	8,300	26,283	18,702	8,632	27,334
1997 ^{d/}	155	1,139	1,294	4,784	22,383	27,167	4,939	23,522	28,461
1998 ^{d/}	749	9,563	10,312	11,046	73,678	84,724	11,795	83,241	95,036
1999 ^{d/}	495	6,777	7,272	3,024	27,341	30,365	3,519	34,118	37,637
2000 ^{d/}	1,526	11,777	13,303	13,935	62,898	76,833	15,461	74,675	90,136
2001 ^{d/}	1,658	17,933	19,591	16,852	87,017	103,869	18,510	104,950	123,460
2002 ^{d/}	2,205	11,743	13,948	19,096	55,968	75,064	21,301	67,711	89,012
2003 ^{d/}	5,122	24,906	30,028	9,118	69,221	78,339	14,240	94,127	108,367
2004 ^{d/}	7,926	32,663	40,589	11,815	139,170	150,985	19,741	171,833	191,574
2005 ^{d/}	3,251	16,052	19,303	12,163	34,658	46,821	16,195	52,940	69,135
2006 ^{d/}	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL					30,000				
Hood Canal									
1981-1985	36,470	21,180	57,650	19,020	23,589	42,609	55,490	44,769	100,259
1986-1990	42,838	21,862	64,699	14,711	18,328	33,039	57,549	40,190	97,738
1991-1995	13,334	673	14,007	14,792	30,048	44,840	28,126	30,721	58,847
1996	4,066	137	4,203	27,337	37,051	64,388	31,403	37,188	68,591
1997 ^{d/}	4,359	5,570	9,929	35,319	95,861	131,180	39,678	101,431	141,109
1998 ^{d/}	3,374	18,599	21,973	13,761	100,818	114,579	17,135	119,417	136,552
1999 ^{d/}	3,641	1,246	4,887	14,113	16,563	30,676	17,754	17,809	35,563
2000 ^{d/}	9,155	13,902	23,057	24,940	27,239	52,179	34,095	41,141	75,236
2001 ^{d/}	8,720	11,946	20,666	39,243	94,773	134,016	47,963	106,719	154,682
2002 ^{d/}	6,021	12,123	18,144	39,330	69,300	108,630	45,351	81,423	126,774
2003 ^{d/}	15,424	29,952	45,376	33,221	170,255	203,476	48,645	200,207	248,852
2004 ^{d/}	27,024	73,830	100,854	26,696	146,873	173,569	53,720	220,703	274,423
2005 ^{d/}	23,827	37,752	61,579	30,962	38,066	69,028	63,050	79,771	142,821
2006 ^{d/}	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL					21,500				

TABLE B-41. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound coho stocks.^{a/}
(Page 3 of 3)

Year or Average	Commercial Net Catches ^{c/}			Spawning Escapement			Terminal Run Size ^{c/}		
	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total
Stillaguamish-Snohomish									
1981-1985	19,973	47,552	67,524	12,940	88,000	100,940	32,913	135,552	168,464
1986-1990	58,543	86,887	145,431	26,134	110,400	136,534	84,677	197,287	281,965
1991-1995	40,705	21,375	62,080	23,570	97,720	121,290	64,275	119,095	183,370
1996	23,406	7,159	30,565	23,583	59,200	82,783	46,989	66,359	113,348
1997 ^{d/}	19,337	5,687	25,024	25,162	69,100	94,262	44,499	74,787	119,286
1998 ^{d/}	14,520	10,207	24,727	18,715	177,300	196,015	33,235	187,507	220,742
1999 ^{d/}	16,636	1,634	18,270	11,578	68,300	79,878	28,214	69,934	98,148
2000 ^{d/}	84,222	5,682	89,904	31,338	122,510	153,848	115,560	128,192	243,752
2001 ^{d/}	58,375	17,137	75,512	41,516	334,630	376,146	99,891	351,767	451,658
2002 ^{d/}	49,489	18,371	67,860	12,732	187,305	200,037	62,221	205,676	267,897
2003 ^{d/}	3,453	21,162	24,615	14,925	228,290	243,215	18,378	249,452	267,830
2004 ^{d/}	54,471	45,928	100,399	13,984	310,904	324,888	68,455	356,832	425,287
2005 ^{d/}	21,886	14,543	36,429	13,763	134,804	148,567	36,552	157,990	194,542
2006 ^{d/}	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL - Snohomish					70,000				
GOAL - Stillaguamish					17,000				
South Puget Sound									
1981-1985	328,516	141,229	469,745	76,560	38,510	115,070	405,076	179,738	584,815
1986-1990	509,525	211,476	721,001	69,198	28,882	98,080	578,723	240,358	819,081
1991-1995	137,961	56,462	194,423	97,002	23,945	120,947	234,963	80,407	315,370
1996	56,117	13,503	69,620	107,463	21,991	129,454	163,580	35,494	199,074
1997 ^{d/}	27,242	52,147	79,389	61,274	40,500	101,774	88,516	92,647	181,163
1998 ^{d/}	50,203	15,204	65,407	33,290	18,052	51,342	83,493	33,256	116,749
1999 ^{d/}	15,986	5,417	21,403	26,559	10,008	36,567	42,545	15,425	57,970
2000 ^{d/}	139,605	59,438	199,043	139,838	51,192	191,030	279,443	110,630	390,073
2001 ^{d/}	110,988	59,923	170,911	127,179	37,688	164,867	238,167	97,611	335,778
2002 ^{d/}	97,237	33,486	130,723	115,145	18,296	133,441	212,382	51,782	264,164
2003 ^{d/}	117,185	40,336	157,521	94,890	51,654	146,544	212,075	91,990	304,065
2004 ^{d/}	188,927	50,095	239,022	120,600	43,147	163,747	309,527	93,242	402,769
2005 ^{d/}	108,712	32,923	141,635	81,963	33,657	115,620	203,616	73,159	276,775
2006 ^{d/}	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL				52,000					

a/ Includes treaty Indian and non-Indian net commercial catches during the adult accounting period. Source: Puget Sound run reconstruction model.

b/ Includes estimated off-station returns.

c/ Terminal run size is defined as the run to terminal marine areas; spawning escapement plus sport and commercial net catch (inriver and terminal fishery catch). Prior to 1996, estimates are Puget Sound run size, which is defined as the run available to Puget Sound net fisheries; spawning escapement plus commercial net catch (inriver, terminal, and pre-terminal Puget Sound net fishery catch), but not including fish caught in Puget Sound troll and recreational fisheries.

d/ Preliminary.

Year or Average	Commercial Net Catches			Spawning Escapement			Puget Sound Run Size ^{c/}		
	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total
Strait of Juan de Fuca									
1981	0	295	295	0	3,100	3,100	0	3,395	3,395
1983	0	144	144	0	5,088	5,088	0	5,232	5,232
1985	0	58	58	0	4,830	4,830	0	4,888	4,888
1987	3	158	161	47	1,956	2,003	50	2,114	2,164
1989	0	1,053	1,053	0	10,903	10,903	0	11,956	11,956
1991	0	1,129	1,129	0	9,896	9,896	0	11,025	11,025
1993	0	91	91	0	1,696	1,696	0	1,787	1,787
1995	4	262	266	100	8,254	8,354	104	8,516	8,620
1997	8	538	546	71	4,953	5,024	79	5,491	5,570
1999	0	6	6	0	7,306	7,306	0	7,312	7,312
2001	3	578	581	469	80,949	81,418	472	81,527	81,999
2003	0	282	282	0	15,148	15,148	0	15,430	15,430
2005 ^{d/}	0	241	241	0	8,688	8,688	0	8,929	8,929
GOAL Not Agreed Upon									
Nooksack-Samish									
1981	0	21,659	21,659	0	26,814	26,814	0	48,473	48,473
1983	0	13,321	13,321	0	66,966	66,966	0	80,287	80,287
1985	0	6,204	6,204	0	24,914	24,914	0	31,118	31,118
1987	0	5,069	5,069	0	32,685	32,685	0	37,754	37,754
1989	237	24,727	24,964	1,200	126,006	127,206	1,437	150,733	152,170
1991	0	21,852	21,852	0	21,304	21,304	0	43,156	43,156
1993	0	4,323	4,323	0	51,680	51,680	0	56,003	56,003
1995	0	13,532	13,532	0	207,112	207,112	0	220,644	220,644
1997	0	4,152	4,152	0	26,000	26,000	0	30,152	30,152
1999	0	2,478	2,478	0	95,000	95,000	0	97,478	97,478
2001	215	13,735	13,950	3,714	226,000	229,714	3,929	239,735	243,664
2003	338	2,400	2,738	7,264	51,011	58,275	7,602	53,411	61,013
2005 ^{d/}	259	1,975	2,234	1,791	13,627	15,418	2,050	15,602	17,652
GOAL 50,000									

TABLE B-42. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound pink stocks.^{a/}
(Page 2 of 3)

Year or Average	Commercial Net Catches			Spawning Escapement			Puget Sound Run Size ^{c/}		
	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total
Skagit									
1981	403	150,626	151,029	268	100,268	100,536	671	250,894	251,565
1983	4	19,023	19,027	128	470,128	470,256	132	489,151	489,283
1985	9	229,993	230,002	30	710,030	710,060	39	940,023	940,062
1987	1,090	421,176	422,266	1,535	593,535	595,070	2,625	1,014,711	1,017,336
1989	8	661,061	661,069	5	401,300	401,305	13	1,062,361	1,062,374
1991	0	188,927	188,927	0	351,000	351,000	0	539,927	539,927
1993	0	180,088	180,088	0	530,000	530,000	0	710,088	710,088
1995	0	568,561	568,561	0	857,000	857,000	0	1,425,561	1,425,561
1997	0	57,710	57,710	0	60,000	60,000	0	117,710	117,710
1999	0	32,626	32,626	0	320,000	320,000	0	352,626	352,626
2001	0	206,533	206,533	0	894,061	894,061	0	1,100,594	1,100,594
2003	0	232,732	232,732	0	567,080	567,080	0	799,812	799,812
2005 ^{d/}	0	20,147	20,147	0	60,000	60,000	0	80,147	80,147
GOAL					330,000				
Hood Canal									
1981	380	1,241	1,621	1,557	6,551	8,108	1,937	7,792	9,729
1983	50	831	881	503	25,201	25,704	553	26,032	26,585
1985	138	2,854	2,992	1,456	64,101	65,557	1,594	66,955	68,549
1987	1,855	6,942	8,797	8,056	62,220	70,276	9,911	69,162	79,073
1989	7,799	26,946	34,745	2,500	60,970	63,470	10,299	87,916	98,215
1991	409	13,518	13,927	3,300	118,450	121,750	3,709	131,968	135,677
1993	623	1,917	2,540	11,497	35,647	47,144	12,120	37,564	49,684
1995	1,565	994	2,559	24,665	31,306	55,971	26,230	32,300	58,530
1997	2,436	910	3,346	21,493	8,363	29,856	23,929	9,273	33,202
1999	18	10	28	7,617	12,667	20,284	7,635	12,677	20,312
2001	713	703	1,416	71,539	98,338	169,877	72,252	99,041	171,293
2003	464	691	1,155	25,217	37,531	62,748	25,681	38,222	63,903
2005 ^{d/}	98	121	219	14,116	17,481	31,597	14,214	17,602	31,816
GOAL				Not Agreed Upon					

TABLE B-42. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound pink stocks.^{a/}
(Page 3 of 3)

Year or Average	Commercial Net Catches			Spawning Escapement			Puget Sound Run Size ^{c/}		
	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total	Hatchery ^{b/}	Wild	Total
Stillaguamish-Snohomish									
1981	40	49,480	49,520	96	108,096	108,192	136	157,576	157,712
1983	51	57,452	57,503	283	324,383	324,666	334	381,835	382,169
1985	63	175,095	175,158	192	502,192	502,384	255	677,287	677,542
1987	173	111,881	112,054	418	271,418	271,836	591	383,299	383,890
1989	33	354,805	354,838	16	150,549	150,565	49	505,354	505,403
1991	139	82,150	82,289	447	260,000	260,447	586	342,150	342,736
1993	13	21,444	21,457	135	210,000	210,135	148	231,444	231,592
1995	5	33,871	33,876	26	309,600	309,626	31	343,471	343,502
1997	0	59,173	59,173	0	192,109	192,109	0	251,282	251,282
1999	0	13,443	13,443	0	461,543	461,543	0	474,986	474,986
2001	0	100,015	100,015	0	1,847,648	1,847,648	0	1,947,663	1,947,663
2003	0	187,286	187,286	0	1,577,001	1,577,001	0	1,764,287	1,764,287
2005 ^{d/}	0	19,193	19,193	0	600,124	600,124	0	619,317	619,317
GOAL - Stillaguamish					155,000				
GOAL - Snohomish					120,000				
South Puget Sound									
1981	1,569	9,818	11,387	791	12,715	13,506	2,360	22,533	24,893
1983	492	11,265	11,757	149	12,200	12,349	641	23,465	24,106
1985	119	5,335	5,454	13	34,700	34,713	132	40,035	40,167
1987	15	9,386	9,401	3	42,200	42,203	18	51,586	51,604
1989	361	36,999	37,360	452	62,220	62,672	813	99,219	100,032
1991	357	5,037	5,394	346	15,950	16,296	703	20,987	21,690
1993 ^{e/}	3	2,330	2,333	21	10,619	10,640	24	12,949	12,973
1995 ^{e/}	13	5,163	5,176	84	18,278	18,362	97	23,441	23,538
1997 ^{e/}	0	449	449	0	2,965	2,965	0	3,414	3,414
1999 ^{e/}	0	80	80	12	4,670	4,682	12	4,750	4,762
2001 ^{e/f/}	5	735	740	48	16,173	16,221	53	16,908	16,961
2003 ^{e/f/}	1	5,393	5,394	68	185,277	185,345	69	190,670	190,739
2005 ^{d/e/f/}	0	3,964	3,964	0	466,435	466,435	0	470,399	470,399
GOAL					25,000				

a/ Includes treaty Indian and non-Indian net commercial catches during the adult accounting period. Source: Puget Sound run reconstruction model.

b/ Includes estimated off-station returns.

c/ Puget Sound run size is defined as the run available to Puget Sound net fisheries; spawning escapement plus Puget Sound net fishery catch. Does not include fish caught by troll and recreational fisheries inside Puget Sound.

d/ Preliminary.

e/ Nisqually escapement estimate incomplete.

f/ Large runs of pinks have returned to Green River in 2001, 2003, and 2005; however, no formal escapement methodology exists, and Green River pinks are not included in the run reconstruction model. When the model is revised, pre-terminal catch estimates for all stocks will be affected.

TABLE B-43. Puget Sound spring Chinook spawning escapement estimates in numbers of adult fish. (Page 1 of 1)

Year or Average	Stock						
	Skagit		NF Nooksack		SF Nooksack	White River	Quilcene
	Hatchery	Natural	Hatchery	Natural ^{a/}	Hatchery/ Natural	Hatchery ^{b/}	Hatchery ^{c/}
1981-1985	15	1,408	0	152	317	70	149
1986-1990	155	1,826	0	235	280	408	125
1991	386	1,442	151	108	365	426	23
1992	249	986	1,016	498	103	1,039	20
1993	1,574	782	1,364	449	235	948	27
1994	881	470	549	45	118	1,227	10
1995	984	855	769	230	290	1,684	16
1996	856	1,051	1,070	534	203	1,625	12
1997	1,220	1,041	1,663	520	180	1,609	16
1998	1,054	1,086	1,370	368	157	2,710	5
1999	3,171	471	2,873	823	166	1,550	4
2000	1,102	1,021	1,204	1,245	284	2,363	0
2001	1,566	1,856	1,006	2,209	267	5,690	0
2002 ^{d/}	1,606	1,065	5,649	3,741	289	1,780	0
2003 ^{d/}	1,537	844	6,250	2,857	204	2,760	0
2004 ^{d/}	3,119	1,622	3,533	1,746	130	1,115	0
2005 ^{d/}	2,319	1,305	1,569	2,167	120	2,061	0
2006 ^{d/}	NA	NA	NA	NA	NA	NA	0
GOAL	3,000						

a/ Natural escapement estimates based on carcass counts which are conservative. Redd counts have been made in 2 years and escapement estimates from redd counts are 3 to 4 times higher than the carcass counts. Most natural spaw ners are hatchery fish spaw ning in the wild.

b/ This estimate includes adult Chinook returns to Hupp Springs, White River Hatchery and to the Buckley Trap.

c/ Program has been discontinued.

d/ Preliminary.

APPENDIX C

HISTORICAL RECORD OF OCEAN SALMON FISHERY REGULATIONS AND A CHRONOLOGY OF 2006 EVENTS

LIST OF TABLES

	<u>Page</u>
TABLE C-1. Summary of actual California commercial salmon seasons in state and federal (EEZ) waters, 2001-2006.....	249
TABLE C-2. Summary of actual California recreational ocean salmon regulations, 2001-2006.	251
TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and federal (EEZ) waters, 2001-2006.....	253
TABLE C-4. Summary of actual Oregon recreational ocean salmon regulations, 2001-2006	260
TABLE C-5. Summary of actual Washington commercial salmon seasons in state and federal (EEZ) waters, 2001-2006.....	263
TABLE C-6. Summary of actual Washington recreational ocean salmon regulations, 2001-2006.	265
TABLE C-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons, 2001-2006.....	268
TABLE C-8. Council preseason adopted catch quotas (thousands of fish) for ocean fisheries north of Cape Falcon and critical stocks driving management	272
TABLE C-9. Sequence of events in ocean salmon fishery management, 2006	274

TABLE C-1. Summary of actual California commercial salmon seasons in state and federal (EEZ) waters, 2001-2006.^{a/} (Page 1 of 2)

Year	Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-Coho	All Salmon	Chinook	Coho	
2001	OR/CA Border to Humboldt South Jetty	Sept. 1-30	-	30	-	26	-	30 fish per day per vessel limit
	Horse Mt. to Pt. Arena	May 1-21	-	21	-	26	-	
		Sept. 1-30	-	30	-	26	-	
	Pt. Arena to Pt. Reyes	June 24-30	-	7	-	26	-	
		July 1-Sept. 30	-	92	-	27	-	
	Pt. Reyes to Pt. San Pedro	May 24-June 30	-	38	-	26	-	
		July 1-Sept. 30;	-	102	-	27	-	
		Oct 1-5, 8-12	-					
	Pt. San Pedro to Pt. Sur	May 1-June 30	-	61	-	26	-	
		July 1-Aug. 14	-	45	-	27	-	
	Pt. Sur to U.S./Mexico Border	May 1-June 30	-	61	-	26	-	
		July 1-Aug. 14; Sept 11-30	-	65	-	27	-	
2002	OR/CA Border to Humboldt South Jetty	Aug. 16-30	-	15	-	26	-	40 fish per day per vessel limit
		Sept. 1-20; 26-27	-	22	-	26	-	40 fish per day per vessel limit
	Horse Mt. to Pt. Arena	July 20-23	-	4	-	26	-	
		Aug. 1-30	-	30	-	26	-	
		Sept. 1-30	-	30	-	26	-	
	Pt. Arena to U.S./Mexico Border	May 1-Sept. 30	-	153	-	26	-	
	Pt. Reyes to Pt. San Pedro	Oct. 1-4, 7-11, 14-18	-	14	-	26	-	
2003	OR/CA Border to Humboldt South Jetty	Sept. 1-30	-	30	-	26	-	40 fish per day per vessel limit
	Horse Mt. to Pt. Arena	May 1-31	-	31	-	26	-	
		July 3-14	-	12	-	26	-	150 fish per day per vessel limit
		July 18-Sept. 30	-	75	-	26	-	
	Pt. Arena to U.S./Mexico Border	May 1-Sept. 30	-	153	-	26	-	
		Oct. 1-3, 6-10, 13-17	-	13	-	26	-	

TABLE C-1. Summary of actual California commercial salmon seasons in state and Federal (EEZ) waters, 2001-2006.^{a/} (Page 2 of 2)

Year	Area	Seasons		Number of Days		Minimum Size Limit		
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-Coho	All Salmon	Chinook	Coho	
2004	OR/CA Border to Humboldt South Jetty	Sept. 1-17	-	17	-	28	-	30 fish per day per vessel limit
	Horse Mt. to Pt. Arena	July 10-Aug. 29 Sept. 1-30	-	51 30	- -	27 28	- -	
	Pt. Arena to U.S./Mexico Border	May 1-June 30 July 1-Aug. 29; Sept. 1-30	- - -	61 90	- -	26 27	- -	
	Pt. Reyes to Pt. San Pedro	Oct. 1, 4-8, 11-15	-	11	-	26	-	
2005	OR/CA Border to Humboldt South Jetty	Sept. 3-16	-	14	-	28	-	30 fish per day per vessel limit
	Horse Mt. to Pt. Arena	Sept. 1-30	-	30	-	27	-	
	Pt. Arena to Pigeon Pt.	July 4-Aug. 29; Sept. 1-30	- -	57 30	- -	28 27	- -	
	Pt. Reyes to Pt. San Pedro	Oct. 3-7, 10-14	-	10	-	26	-	
	Pigeon Pt. to Pt. Sur	May 1-31 July 4-Aug. 29; Sept. 1-30	- - -	31 57 30	- - -	27 28 27	- - -	
	Pt. Sur to U.S./Mexico Border	May 1-June 30 July 1-Aug. 31; Sept. 1-30	- - -	61 62 30	- - -	27 28 27	- - -	
2006^{b/}	OR/CA Border to Humboldt South Jetty	Closed	-	-	-	-	-	
	Horse Mt. to Pt. Arena	Sept. 1-5	-	5	-	27	-	4,000 Chinook quota; 30 Chinook per vessel per day landing limit
	Pt. Arena to Pigeon Pt.	July 26-Aug. 31; Sept. 1-30	- -	37 30	- -	28 27	- -	75 Chinook per vessel per week landing limit
	Pt. Reyes to Pt. San Pedro	Oct. 2-6, 9-13	-	10	-	26	-	20,000 Chinook quota
	Pigeon Pt. to Pt. Sur	May 1-31 July 26-Aug. 31; Sept. 1-30	- - -	31 37 30	- - -	27 28 27	- - -	75 Chinook per vessel per week landing limit 75 Chinook per vessel per week landing limit
	Pt. Sur to U.S./Mexico Border	May 1-June 30 July 1-Aug. 31; Sept. 1-30	- - -	61 62 30	- - -	27 28 27	- - -	

a/ For earlier years and additional detail, see Review of 2004 Ocean Salmon Fisheries, Appendix C, Table C-1.

b/ For detailed regulations see TABLE I-1.

TABLE C-2. Summary of actual California recreational ocean salmon regulations, 2001-2006.^{a/} (Page 1 of 2)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho	
2001	OR/CA Border to Horse Mt.	May 17-July 8; July 24-Sept. 3	95	2	20	-	
	Horse Mt. to Pt. Arena	Feb. 17-May 31	104	2	24	-	
		June 1-Nov. 18	171	2	20	-	
	Pt. Arena to Pigeon Pt.	Apr. 14-June 30	78	2	24	-	
		July 1-Nov. 13	136	2	20	-	
	Pigeon Pt. to U.S./Mexico Border	Mar. 31-June 30	92	2	24	-	
		July 1-Sept. 30	92	2	20	-	
2002	OR/CA Border to Horse Mt.	May 15-June 30; July 3-4; Aug. 1- Sept. 15	95	2	20	-	
	Horse Mt. to Pt. Arena	Feb. 16-Apr. 30	74	2	24	-	
		May 1-July 7; July 20-Nov. 17	189	2	20	-	
	Pt. Arena to Pigeon Pt.	Apr. 13-30	18	2	24	-	
		May 1-Nov. 10	194	2	20	-	
	Pigeon Pt. to U.S./Mexico Border	Mar. 30-Apr. 30	32	2	24	-	
		May 1-Sept. 29	152	2	20	-	
2003	OR/CA Border to Horse Mt.	May 17-Sept. 14	121	2	20	-	
	Horse Mt. to Pt. Arena	Feb. 15-Apr. 30	75	2	24	-	
		May 1-Nov. 16	200	2	20	-	
	Pt. Arena to Pigeon Pt.	Apr. 12-30	19	2	24	-	
		May 1-Nov. 9	193	2	20	-	
	Pigeon Pt. to U.S./Mexico Border	Mar. 29-Apr. 30	33	2	24	-	
		May 1-Sept. 28	151	2	20	-	

TABLE C-2. Summary of actual California recreational ocean salmon regulations, 2001-2006.^{a/} (Page 2 of 2)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho	
2004	OR/CA Border to Horse Mt.	May 15-Sept. 12	121	2	20	-	
	Horse Mt. to Pt. Arena	Feb. 14-Apr. 30	76	2	24	-	
		May 1-Nov. 14	198	2	20	-	
	Pt. Arena to Pigeon Pt.	Apr. 17-30	14	2	24	-	
		May 1-Nov. 14	198	2	20	-	
	Pigeon Pt. to U.S./Mexico Border	Apr. 3-30	28	2	24	-	
		May 1-Oct. 3	156	2	20	-	
2005	OR/CA Border to Horse Mt.	May 21-July 4; Aug. 14-Sept. 11	74	2	24	-	
	Horse Mt. to Pt. Arena	Feb. 12-July 10; July 16-17; July 23-Nov. 13	265	2	20	-	
	Pt. Arena to Pigeon Pt.	Apr. 2-Nov. 13	226	2	20	-	
	Pigeon Pt. to U.S./Mexico Border	Apr. 2-Sept. 25	177	2	20	-	
2006^{b/}	OR/CA Border to Horse Mt.	May 15-July 4; Sept. 1-6	57	2	24	-	
	Horse Mt. to Pt. Arena	Feb. 18-May 31; June 1-4, 7-11, 14-18, 21-25, 28-30; July 1-9, 15-16, 22-23; July 26 - Nov. 12	247	2	20	-	
	Pt. Arena to Pigeon Pt.	Apr. 1-June 11; June 14-July 9; July 12-Nov. 12	222	2	20	-	April 1-30 open only inside 3nm (State waters)
	Pigeon Pt. to Pt. Sur	Apr. 1-Sept. 24	177	2	20	-	April 1-30 open only inside 3nm (State waters)
	Pt. Sur to U.S./Mexico Border	Apr. 1-Sept. 24	177	2	20	-	

a/ For earlier years and additional detail, see Review of 2004 Ocean Salmon Fisheries, Appendix C, Table C-2.

b/ For detailed regulations see TABLE I-3.

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and federal (EEZ) waters, 2001-2006.^{a/} (Page 1 of 7)

TABLE 3-3. Summary of actual Oregon commercial salmon seasons in state and federal (ELF) waters, 2001-2000. (Page 1 of 7)								
Year	Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	Except-	All Salmon	Chinook	Coho ^{b/}	
2001	WA/OR Border to Cape Falcon	May 1-June 15	-	46	-	28	-	
			July 20-23, 27-30	-	8	28	16	65 Chinook per open period vessel limit
			Aug. 3-12	-	10	28	16	100 Chinook per open period vessel limit
			Aug 17-27	-	11	28	16	150 Chinook per open period vessel limit
			Aug. 31-Sept. 30	-	31	28	16	No Chinook limit
	Cape Falcon to Florence South Jetty	Apr. 1-July 18; July 27-Aug. 29; Sept. 1- Oct. 31	-	204	-	26	-	
	Tw in Rocks to Pyramid Rock Inside 3 nm (Tillamook Area)	Nov. 1-15	-	15	-	26	-	Chinook only
	Florence South Jetty to Humbug Mt.	Apr. 1-July 9; July 18-Aug. 29; Sept. 1- Oct. 31	-	204	-	26	-	
	Cape Blanco to Humbug Mt. Inside 3 nm (Elk River Area)	Nov. 1-Dec. 15	-	45	-	26	-	
	Humbug Mt. to OR/CA Border	May 1-31 June 3-4, 7-8, 11-12, 15-30; Aug 1-31; Sept. 1-30	- - - -	31 94	- -	26 26	- -	30 fish per day per vessel limit
Tw in Rocks to OR/CA Border Inside 3 nm (Chetco River Area)	Oct. 13-31	-	19	-	26	-	20 fish per day per vessel limit; Chinook only	

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and federal (EEZ) waters, 2001-2006.^{a/} (Page 2 of 7)

Year	Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-	All Salmon	Chinook	Coho ^{b/}	
2002	WA/OR Border to Cape Falcon	May 1-June 7	-	38	-	28	-	
		July 1-8	-	8	-	28	-	250 Chinook per open period vessel limit
		July 12-22	-	11	-	28	-	400 Chinook per open period vessel limit
		July 26-31	Aug. 1-5	6	5	28	16	450 Chinook per open period vessel limit
			Aug 9-18	-	10	28	16	400 Chinook per open period vessel limit
			Aug 22-28	-	7	28	16	250 Chinook per open period vessel limit
	Cape Falcon to Florence South Jetty	Mar. 20-July 15; Aug. 1-29; Sept. 1- Oct. 31	-	208	-	26	-	
	Twin Rocks to Pyramid Rock Inside 3 nm (Tillamook Area)	Nov. 1-14	-	14	-	26	-	Chinook only
	Florence South Jetty to Humbug Mt.	Mar. 20-June 30; July 17-Aug. 29; Sept. 1- Oct. 31	-	208	-	26	-	
	Cape Blanco to Humbug Mt. Inside 3 nm (Elk River Area)	Nov. 1-Dec. 15	-	45	-	26	-	
254	Humbug Mt. to OR/CA Border	Mar. 20-May 31	-	73	-	26	-	
		June 1-30; July 1-26; Aug 1-29; Sept. 1-9	-	94	-	26	-	50 fish per trip per vessel limit
	Twin Rocks to OR/CA Border Inside 3 nm (Chetco River Area)	Oct. 14-Nov. 3	-	21	-	26	-	25 fish per day per vessel limit; Chinook only

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and federal (EEZ) waters, 2001-2006.^{a/} (Page 3 of 7)

Year	Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-	All Salmon	Chinook	Coho ^{b/}	
2003	WA/OR Border to Cape Falcon	May 1-June 6; June 26-30	-	42	-	28	-	
			July 3-7	-	5	28	16	75 chinook per open period vessel limit
			July 10-14, 17-21, 24-28; July 31-	-	49	28	16	150 chinook per open period vessel limit
			Aug. 4; Aug 7-11, 14-18, 21-25; Aug. 27-Sept. 1; Sept 4- 8, 11-14					
	Cape Falcon to Florence South Jetty	Mar. 15-Apr. 30 May 1-July 16; Aug. 1-19; Sept. 1-30 Oct. 1-31	-	47	-	26	-	
			-	126	-	27	-	
				31	-	28	-	
	Twin Rocks to Pyramid Rock Inside 3 nm (Tillamook Area)	Nov. 1-14	-	14	-	26	-	Chinook only
	Florence South Jetty to Humbug Mt.	Mar. 15-Apr. 30 May 1-June 30; July 17-31; Aug. 11-29; Sept. 1-30 Oct. 1-31	-	47	-	26	-	
			-	125	-	27	-	
			-	31	-	28	-	
	Cape Blanco to Humbug Mt. Inside 3 nm (Elk River Area)	Nov. 1-Dec. 15	-	45	-	28	-	
	Humbug Mt. to OR/CA Border	Mar. 15-May 31 June 1-30; July 1-31; Aug 1-29 Sept. 1-30	-	47	-	26	-	
			-	90	-	26	-	50 fish per trip per vessel limit
			-	30	-	28	-	65 fish per trip per vessel limit
	Twin Rocks to OR/CA Border Inside 3 nm (Chetco River Area)	Oct. 13-Nov. 3	-	22	-	26	-	25 fish per day per vessel limit; Chinook only

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and federal (EEZ) waters, 2001-2006.^{a/} (Page 4 of 7)

Year	Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-	All Salmon	Chinook	Coho ^{b/}	
2004	WA/OR Border to Cape Falcon	May 1-5	-	5	-	28	-	
		May 15-18	-	4	-	28	-	125 chinook per open period vessel limit
		May 24-26	-	3	-	28	-	70 chinook per open period vessel limit
		June 26-30	-	5	-	28	-	50 chinook per open period vessel limit
			July 8-12	-	5	28	16	100 chinook per open period vessel limit
			July 16-19, 22-26; July 29-Aug 2; Aug 5-9, 11-15, 18- 22, 25-29 Sept 1-5	-	34	28	16	125 chinook per open period vessel limit
	Cape Falcon to Florence South Jetty	Mar 15-Apr. 30	-	47	-	26	-	
		May 1-June 30; July 7-12, 19-27; Aug. 1-14, 19-24; Sept. 1-30 Oct. 1-31	- - - - -	126 31	- - - - -	27 28	- - - -	
		Nov. 1-14	-	14	-	26	-	Chinook only
	Florence South Jetty to Humbug Mt.	Mar 15-Apr. 30	-	47	-	26	-	
		May 1-July 6; July 13-18, 26-29; Aug. 1-8, 15-22, 26-29; Sept. 1-30 Oct. 1-31	- - - - -	127 31	- - - - -	27 28	- - -	
		Nov. 1-Dec. 15	-	45	-	28	-	
	Cape Blanco to Humbug Mt. Inside 3 nm (Elk River Area)	Mar 15-Apr. 30	-	47	-	26	-	
		May 1-31	-	31	-	27	-	
		June 1-19; July 1-19; Aug 1-4	- - -	42 22	- - -	27 28	- -	50 fish per trip per vessel limit
	Humbug Mt. to OR/CA Border	Sept. 1-3, 8-10, 15-30	-	22	-	28	-	65 fish per trip per vessel limit
		Oct. 13-Nov. 3	-	22	-	26	-	25 fish per day per vessel limit; Chinook only

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and federal (EEZ) waters, 2001-2006.^{a/} (Page 5 of 7)

Year	Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-	All Salmon	Chinook	Coho ^{a/}	
2005	WA/OR Border to Cape Falcon	May 1-3	-	3	-	28	-	75 chinook per open period vessel limit
		May 6-9	-	4	-	28	-	100 chinook per open period vessel limit
		May 13-16; 20-26	-	11	-	28	-	125 chinook per open period vessel limit
		June 3-6	-	4	-	28	-	60 chinook per open period vessel limit
		June 26-30	-	5	-	28	-	30 chinook per open period vessel limit
			July 7-11; 14-18		10	28	16	75 chinook per open period vessel limit
			July 21-25; July 28- Aug 1; Aug 3-7; 10- 14; 17-22		26	28	16	100 chinook per open period vessel limit
	Cape Falcon to Florence South Jetty	Mar 15-25; Apr. 1-15	-	26	-	27	-	
		May 1-3, 8-10, 15-17, 22-24, 29-30; June 1-30; Sept. 1-23; Oct. 1-31	-	98	-	28	-	
	Twin Rocks to Pyramid Rock Inside 3 nm (Tillamook Area)	Nov. 1-15	-	15	-	26	-	Chinook only
2006	Florence South Jetty to Humbug Mt.	Mar 15-25; Apr. 1-15	-	26	-	27	-	
		May 1-30; Sept. 1- 23; Oct. 1-31	-	84	-	28	-	
	Cape Blanco to Humbug Mt. Inside 3 nm (Elk River Area)	Nov. 1-Dec. 15	-	45	-	28	-	
	Humbug Mt. to OR/CA Border	Mar 15-25; Apr 1-15	-	26	-	27	-	
		Sept. 3-30	-	28	-	28	-	45 fish per day per vessel limit
	Twin Rocks to OR/CA Border Inside 3 nm (Chetco River Area)	Oct. 13-Nov. 3	-	22	-	26	-	25 fish per day per vessel limit; Chinook only

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and federal (EEZ) waters, 2001-2006.^{a/} (Page 6 of 7)

Year	Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-	All Salmon	Chinook	Coho ^{b/}	
2006 ^{c/}	WA/OR Border to Cape Falcon	May 1-2	-	2	-	28	-	75 Chinook per open period vessel limit
		May 6-9, 13-16, 20-23, 27-30, June 3-6, 10-13	-	24	-	28	-	80 Chinook per open period vessel limit
		June 27-30	-	4	-	28	-	20 Chinook per open period vessel limit
			July 15-18, 22-25		8	28	16	35 Chinook and 35 coho per open period vessel limit
			July 29-Aug. 1		4	28	16	60 Chinook and 35 coho per open period vessel limit
			Aug. 5-7, 12-14		6	28	16	60 Chinook and 40 coho per open period vessel limit
			Aug. 19-22, 26-29, Sept. 2-5		12	28	16	80 Chinook and 40 coho per open period vessel limit
			Sept. 8-15		8	28	16	160 Chinook and 40 coho per open period vessel limit
	Cape Falcon to Florence South Jetty	June 4-7, 11-14, 18-21, 25-28; July 9-11, 16-18, 23-25; Aug. 1-3	-	28	-	28	-	75 Chinook per calendar week vessel limit
		Sept. 17-30; Oct. 17-31	-	29	-	28	-	50 Chinook per calendar week vessel limit
	Cape Falcon to Pyramid Rock Inside 3 nm (Tillamook/Nehalem Area)	Sept. 1-16; Oct. 1-16	-	32	-	28	-	Chinook only; 50 per calendar week vessel limit
	Twin Rocks to Pyramid Rock Inside 3 nm (Tillamook Area)	Nov. 1-15	-	15	-	28	-	Chinook only
	Cape Kiwanda to Neskowin Creek Inside 3 nm (Nestucca Area)	Sept. 1-16; Oct. 1-16	-	32	-	28	-	Chinook only; 50 per calendar week vessel limit
	Yaquina Head to 44°33'00" Inside 3 nm (Yaquina Area)	Sept. 1-16; Oct. 1-16	-	32	-	28	-	Chinook only; 50 per calendar week vessel limit
	44°29'00" to 44°23'00" Inside 3 nm (Alsea Area)	Sept. 1-16; Oct. 1-16	-	32	-	28	-	Chinook only; 50 per calendar week vessel limit

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and federal (EEZ) waters, 2001-2006.^{a/} (Page 7 of 7)

Year	Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-	All Salmon	Chinook	Coho ^{b/}	
2006 ^{c/}	Florence South Jetty to Humbug Mt.	Closed	-	-	-	-	-	
Cont'd	Heceta Head to 44°00'00" Inside 3 nm (Siuslaw Area)	Sept. 1-16; Oct. 1-16	-	32	-	28	-	Chinook only; 50 per calendar week vessel limit
	Tahkenitch Creek to 43°37'00" Inside 30 fathoms (Umpqua Area)	Sept. 1-30	-	30	-	28	-	Chinook only; 50 per calendar week vessel limit
	43°31'00" to Cape Arago Inside 30 fathoms (Coos Area)	Sept. 1-Oct. 16	-	46	-	28	-	Chinook only; 50 per calendar week vessel limit
	Nesika Reef to Cape Sebastian Inside 3 nm (Rogue Area)	Sept. 1-15	-	15	-	28	-	Chinook only; 50 per calendar week vessel limit
	Cape Blanco to Humbug Mt. Inside 3 nm (Elk River Area)	Sept. 15-Dec. 15	-	92	-	28	-	
	Humbug Mt. to OR/CA Border	Closed	-	-	-	-	-	
	Twin Rocks to OR/CA Border Inside 3 nm (Chetco River Area)	Oct. 13-Nov. 3	-	22	-	28	-	25 fish per day per vessel limit; Chinook only

a/ For earlier years and additional detail, see Review of 2004 Ocean Salmon Fisheries, Appendix C, Table C-3.

b/ Mark selective coho fishery; all retained coho must be marked with a healed adipose fin clip.

c/ For detailed regulations see TABLE I-1.

TABLE C-4. Summary of actual Oregon recreational ocean salmon regulations, 2001-2006.^{a/} (Page 1 of 3)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho ^{b/}	
2001	WA/OR Border to Cape Falcon	July 1-Sept. 3	47	2	24	16	Sun.-Thurs.; No more than one Chinook
	Closed south of Tillamook Head	Sept. 4-30	27	2	24	16	Seven days per week; No more than one Chinook
	Beginning Aug. 1						
	Cape Falcon to Humbug Mt.	Apr. 1-June 21; July 20-Oct. 31	186	2	20	-	
		June 22-July 19	28	2	20	16	
	Tw in Rocks to Pyramid Rock	Nov. 1-15	15	2	20	-	Chinook only
	Inside 3 nm (Tillamook Area)						
	Cape Blanco to Humbug Mt.	Nov. 1-Dec. 15	45	2	20	-	Chinook only
	Inside 3 nm (Elk River Area)						
	Humbug Mt. to OR/CA Border	May 17-July 8; July 24-Sept. 3	95	1	20	-	
2002	Tw in Rocks to OR/CA Border	Oct. 1-12	12	1	20	-	Chinook only
	Inside 3 nm (Chetco River Area)						
	WA/OR Border to Cape Falcon	May 25-June 16	23	2	24	-	Chinook only
		July 7-20	10	2	24	16	Sun.-Thurs.
	Closed south of Tillamook Head	July 21-Aug. 7	14	2	26	16	Sun.-Thurs.
	Beginning Aug. 1	Aug. 8-15	6	2	-	16	Sun.-Thurs.; No Chinook
		Aug. 16-Sept. 2; Sept. 6-15	28				Seven days per week; No Chinook
	Cape Falcon to Humbug Mt.	Apr. 1-July 6; Aug. 2-Oct. 31	188	2	20	-	
		July 7-Aug. 1	26	2	20	16	
	Tw in Rocks to Pyramid Rock	Nov. 1-15	15	2	20	-	Chinook only
	Inside 3 nm (Tillamook Area)						
	Cape Blanco to Humbug Mt.	Nov. 1-Dec. 15	45	2	20	-	Chinook only
	Inside 3 nm (Elk River Area)						
	Humbug Mt. to OR/CA Border	May 15-June 30; July 3-4;	95	2	20	-	
		Aug. 1-Sept. 15					
	Tw in Rocks to OR/CA Border	Oct. 1-13	13	1	20	-	Chinook only
	Inside 3 nm (Chetco River Area)						

TABLE C-4. Summary of actual Oregon recreational ocean salmon regulations, 2001-2006^{av}. (Page 2 of 3)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho ^b	
2003	WA/OR Border to Cape Falcon	June 29-July 24;	20	2	26	16	Sun.-Thurs.; No more than one Chinook
	Closed south of Tillamook Head	July 25-Sept. 30	68	2	26	16	Seven days per week; No more than one Chinook
	Cape Falcon to Humbug Mt.	Mar. 15-June 20; Aug. 20-Oct. 31	171	2	20	-	
		June 21-Aug. 19	60	2	20	16	
	Twin Rocks to Pyramid Rock	Nov. 1-15	15	2	20	-	Chinook only
	Inside 3 nm (Tillamook Area)						
	Cape Blanco to Humbug Mt.	Nov. 1-Dec. 15	45	2	20	-	Chinook only
	Inside 3 nm (Elk River Area)						
	Humbug Mt. to OR/CA Border	May 17-Sept. 14	121	2	20	-	
	Twin Rocks to OR/CA Border	Oct. 1-12	12	1	20	-	Chinook only
	Inside 3 nm (Chetco River Area)						
2004	WA/OR Border to Cape Falcon	June 27-July 22;	19	2	26	16	Sun.-Thurs.; No more than one Chinook
	Closed south of Tillamook Head	July 23-Aug. 12;	21	2	26	16	Seven days per week
	Aug. 1-Sept. 3	Aug. 13-Sept. 30	49	2	24	16	
	Cape Falcon to Humbug Mt.	Mar. 15-June 18; Sept. 1-Oct. 31	157	2	20	-	
		June 19-Aug. 31	74	2	20	16	
	Twin Rocks to Pyramid Rock	Nov. 1-15	15	2	20	-	Chinook only
	Inside 3 nm (Tillamook Area)						
	Cape Blanco to Humbug Mt.	Nov. 1-Dec. 15	45	2	20	-	Chinook only
	Inside 3 nm (Elk River Area)						
	Humbug Mt. to OR/CA Border	May 15-June 18; Sept. 1-12	47	2	20	-	
		June 19-Aug. 31	74	2	20	16	
	Twin Rocks to OR/CA Border	Oct. 1-12	12	1	20	-	Chinook only
	Inside 3 nm (Chetco River Area)						

TABLE C-4. Summary of actual Oregon recreational ocean salmon regulations, 2001-2006^{a/}. (Page 3 of 3)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho ^{b/}	
2005	WA/OR Border to Cape Falcon	July 3-28	20	2	24	16	Sun.-Thurs.; No more than one Chinook
	Closed south of Tillamook Head	July 29-Sept. 8; Sept.17-30	56	2	24	16	Seven days per week
	Beginning Aug. 1	Sept. 9-16	8	2	-	16	Seven days per week; No Chinook
	Cape Falcon to Humbug Mt.	Mar. 15-June 17; Aug. 1-Oct. 31	188	2	20	-	
		June 18-July 31	44	2	20	16	
	Twin Rocks to Pyramid Rock	Nov. 1-15	15	2	20	-	Chinook only
	Inside 3 nm (Tillamook Area)						
	Cape Blanco to Humbug Mt.	Nov. 1-Dec. 15	45	2	20	-	Chinook only
	Inside 3 nm (Elk River Area)						
	Humbug Mt. to OR/CA Border	May 21-June 17; Aug. 14-Sept. 11	57	2	24	-	
2006 ^{c/}		June 18-July 4	17	2	20	16	
	Twin Rocks to OR/CA Border	Oct. 1-12	12	1	20	-	Chinook only
	Inside 3 nm (Chetco River Area)						
	WA/OR Border to Cape Falcon	July 3-Aug. 10	29	2	24	16	Sun.-Thurs.; No more than one Chinook; Closed south of Tillamook Head Aug. 1-10
		Aug. 11-Sept. 30	51	2	24	16	Seven days per week; two Chinook allowed; Closed south of Tillamook Head Aug. 11-25
	Cape Falcon to Humbug Mt.	Mar. 15-June 16; Aug. 1-31; Sept. 7-Oct. 31	180	2	20	-	
		June 17-July 31; Sept 1-6	51	2	20	16	20,000 marked coho quota, includes Humbug Mt. to OR/CA border June 17-July 4 and Sept. 1-6
	Twin Rocks to Pyramid Rock	Nov. 1-15	15	2	20	-	Chinook only
	Inside 3 nm (Tillamook Area)						
	Cape Blanco to Humbug Mt.	Nov. 1-Dec. 15	45	2	20	-	Chinook only
	Inside 3 nm (Elk River Area)						
	Humbug Mt. to OR/CA Border	May 15-June 16	33	2	24	-	
		June 17-July 4; Sept 1-6	24	2	20	16	20,000 marked coho quota includes Cape Falcon to Humbug Mt.
	Twin Rocks to OR/CA Border	Oct. 1-12	12	1	20	-	Chinook only
	Inside 3 nm (Chetco River Area)						

a/ For earlier years and additional detail, see Review of 2004 Ocean Salmon Fisheries, Appendix C, Table C-4.

b/ Mark selective coho fishery; all retained coho must be marked with a healed adipose fin clip.

c/ For detailed regulations see TABLE I-3.

TABLE C-5. Summary of actual Washington commercial salmon seasons in state and federal (EEZ) waters, 2001-2006. ^{a/} (Page 1 of 2)

Year	Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-Coho	All Salmon	Chinook	Coho ^{b/}	
2001	U.S./Canada Border to WA/OR Border	May 1-June 15	-	46	-	28	-	
		-	July 20-23, 27-30	-	8	28	16	65 Chinook per open period vessel limit
		-	Aug. 3-12	-	10	28	16	100 Chinook per open period vessel limit
		-	Aug. 17-27	-	11	28	16	150 Chinook per open period vessel limit
		-	Aug. 31-Sept. 30	-	31	28	16	No Chinook limit
2002	U.S./Canada Border to WA/OR Border	May 1-June 7	-	38	-	28	-	
		July 1-8	-	8	-	28	-	250 Chinook per open period vessel limit
		July 12-22	-	11	-	28	-	400 Chinook per open period vessel limit
		July 26-31	Aug. 1-5	6	5	28	16	450 Chinook per open period vessel limit; No coho north of Leadbetter Point
		-	Aug. 9-18	-	10	28	16	400 Chinook per open period vessel limit; No coho north of Leadbetter Point
		-	Aug. 22-28	-	7	28	16	250 Chinook per open period vessel limit; No coho north of Leadbetter Point
2003	U.S./Canada Border to WA/OR Border	May 1-June 6; June 26-30	- -	37 5	- -	28 28	- -	50 Chinook per open period vessel limit
		-	July 3-7	-	5	28	16	75 Chinook per open period vessel limit
		-	July 10-14, 17-21, 24-28; July 31- Aug. 4; Aug. 7-11, 14-18, 21-25; Aug. 27-Sept. 1; Sept. 4-8, 11-14	-	49	28	16	150 Chinook per open period vessel limit
2004	U.S./Canada Border to WA/OR Border	May 1-5	-	5	-	28	-	
		May 15-18	-	4	-	28	-	125 Chinook per open period vessel limit
		May 24-26	-	3	-	28	-	70 Chinook per open period vessel limit
		June 26-30	-	5	-	28	-	50 Chinook per open period vessel limit
		-	July 8-12	-	5	28	16	100 Chinook per open period vessel limit
		-	July 16-19, 22-26; July 29-Aug. 2; Aug. 5-9, 11-15, 18-22, 25-29	-	34	28	16	125 Chinook per open period vessel limit No chum beginning Aug. 1
		-	Sept. 1-5	-	5	28	16	125 Chinook per open period vessel limit; no coho mark restriction

TABLE C-5. Summary of actual Washington commercial salmon seasons in state and federal (EEZ) waters, 2001-2006.^{a/} (Page 2 of 2)

Year	Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-Coho	All Salmon	Chinook	Coho ^{b/}	
2005	U.S./Canada Border to WA/OR Border	May 1-3	-	3	-	28	-	75 Chinook per open period vessel limit
		May 6-9	-	4	-	28	-	100 Chinook per open period vessel limit
		May 13-16; 20-26	-	11	-	28	-	125 Chinook per open period vessel limit
		June 3-6	-	4	-	28	-	60 Chinook per open period vessel limit
		June 26-30	-	5	-	28	-	30 Chinook per open period vessel limit
		-	July 7-11; 14-18	-	10	28	16	75 Chinook per open period vessel limit
		-	July 21-25; July 28- Aug. 1; Aug. 3-7; 10-14; 17-22	-	36	28	16	100 Chinook per open period vessel limit
2006^{c/}	U.S./Canada Border to WA/OR Border	May 1-2	-	2	-	28	-	75 Chinook per open period vessel limit
		May 6-9, 13-16, 20- 23, 27-30, June 3-6, 10-13	-	24	-	28	-	80 Chinook per open period vessel limit
		June 27-30	-	4	-	28	-	20 Chinook per open period vessel limit
			July 15-18, 22-25		8	28	16	35 Chinook and 35 coho per open period vessel limit
			July 29-Aug. 1		4	28	16	60 Chinook and 35 coho per open period vessel limit
			Aug. 5-7, 12-14		6	28	16	60 Chinook and 40 coho per open period vessel limit
			Aug. 19-22, 26-29, Sept. 2-5 Sept. 8-15		12 8	28 28	16 16	80 Chinook and 40 coho per open period vessel limit 160 Chinook and 80 coho per open period vessel limit

a/ For earlier years and additional detail, see Review of 2004 Ocean Salmon Fisheries, Appendix C, Table C-5.

b/ Mark selective coho fishery; all retained coho must be marked with a healed adipose fin clip.

c/ For detailed regulations see TABLE I-1.

TABLE C-6. Summary of actual Washington recreational ocean salmon regulations, 2001-2006. ^{a/} (Page 1 of 3)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho ^{b/}	
2001	U.S./Canada Border to Cape Alava	July 1-Sept 30	92	2	24	16	No more than one Chinook
	Cape Alava to Queets River	July 1-Sept 23	85	2	24	16	No more than one Chinook
	Cake Rock-QBuoy-Teahw hit Head	Sept. 24-Oct 21	28	2	24	16	No more than one Chinook
	Queets River to Leadbetter Point	July 1-Sept. 6	69	2	24	16	Sun.-Thurs.; No more than one Chinook
		Sept. 7-30	24	2	24	16	Seven days per week; No more than one Chinook
	Leadbetter Point to WA/OR Border Closed Leadbetter Pt. to N. Head Lighthouse Sept. 4-6; Closed N. Head Lighthouse to Klipsan Beach Sept. 7-30	July 1-Sept 3	47	2	24	16	Sun.-Thurs.; No more than one Chinook
		Sept 4-30	27	2	24	16	Seven days per week; No more than one Chinook
2002	U.S./Canada Border to Cape Alava	May 25-June 16	23	2	24	-	Chinook only
		July 7-20	14	2	24	16	
		July 21-31	11	2	28	16	
		Aug. 1-7	7	2	28	16	No chum
		Aug. 8-Sept. 8	32	2	-	16	No Chinook or chum
	Cape Alava to Queets River	May 25-June 16	23	2	24	-	Chinook only
		July 7-20	14	2	24	16	
		July 21-Aug. 7	18	2	28	16	
		Aug. 8-Sept. 8	32	2	-	16	No Chinook
		Sept. 21-Oct 6	16	2	24	16	No more than one Chinook
	Queets River to Leadbetter Point	May 25-June 16	23	2	24	-	Chinook only
		June 30-July 20	15	2	24	16	Sun.-Thurs.
		July 21-Aug. 17	20	2	28	16	Sun.-Thurs.
		Aug. 18-19	2	2	-	16	Sun.-Thurs.; No Chinook
	Leadbetter Point to WA/OR Border	May 25-June 16	23	2	24	-	Chinook only
		July 7-20	10	2	24	16	Sun.-Thurs.
		July 21-Aug. 7	14	2	26	16	Sun.-Thurs.
		Aug. 8-15	6	2	-	16	Sun.-Thurs.; No Chinook
		Aug. 16-Sep. 2; Sept 6-15	28				Seven days per week; No Chinook

TABLE C-6. Summary of actual Washington recreational ocean salmon regulations, 2001-2006^{a/}. (Page 2 of 3)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho ^{b/}	
2003	U.S./Canada Border to Cape Alava	June 22-July 31	40	2 ^{d/}	26	16	No more than one Chinook
		Aug. 1-Sept. 14	45	2 ^{d/}	26	16	No more than one Chinook; No chum
	Cape Alava to Queets River Cake Rock-QBuoy-Teahwhit Head	June 22-Sept. 19	85	2 ^{d/}	26	16	No more than one Chinook
		Sept. 20-Oct 5	16	2 ^{d/}	26	16	No more than one Chinook
	Queets River to Leadbetter Point	June 22-July 24;	25	2	26	16	Sun.-Thurs.; No more than one Chinook
		July 25-Sept. 14	52	2	26	16	Seven days per week; No more than one Chinook
	Leadbetter Point to WA/OR Border	June 29-July 24;	20	2	26	16	Sun.-Thurs.; No more than one Chinook
		July 25-Sept. 30	68	2	26	16	Seven days per week; No more than one Chinook
	U.S./Canada Border to Cape Alava	June 27-July 31	35	2	26	16	No more than one Chinook
		Aug. 1-Sept. 2; Sept 10-19	43	2	24	16	Two Chinook allowed; No chum
2004	Cape Alava to Queets River	June 27-Aug 12	47	2	26	16	No more than one Chinook
		Aug. 13-Sept. 19	38	2	24	16	Two Chinook allowed
		Sept. 25-Oct 10	16	2	24	16	Two Chinook allowed
	47°58' N. Lat. To 47°50' N. Lat. Inside 3 nm						
	Queets River to Leadbetter Point	June 27-July 22;	19	2	26	16	Sun.-Thurs.; No more than one Chinook
		July 23-Aug. 12;	21	2	26	16	Seven days per week
		Aug. 13-28	16	2	24	16	
		Aug. 29-Sept. 6	9	2	24	16	No coho mark restriction
	WA/OR Border to Cape Falcon	June 27-July 22;	19	2	26	16	Sun.-Thurs.; No more than one Chinook
		July 23-Aug. 12;	21	2	26	16	Seven days per week
		Aug. 13-Sept. 30	49	2	24	16	

TABLE C-6. Summary of actual Washington recreational ocean salmon regulations, 2001-2006^{a/}. (Page 3 of 3)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho ^{b/}	
2005	U.S./Canada Border to Cape Alava	July 1-July 31	22	2	24	16	Tues.-Sat.; No more than one Chinook
		Aug 1-15	10	2	24	16	Tues-Sat. No more than one Chinook; No chum
		Aug. 16-29	10	2	24	16	Tues.-Sat.; Two Chinook allowed; No chum
		Aug. 30-Sept. 18	20	2	24	16	Seven days per week; Two Chinook allowed; No chum
	Cape Alava to Queets River	July 1-28	20	2	24	16	Tues.-Sat.; No more than one Chinook
		July 29-Sept. 18	52	2	24	16	Seven days per week; Two Chinook allowed
	48°00' N. Lat. To 47°50' N. Lat.	Sept. 24-Oct 9	16	2	24	16	Seven days per week; Two Chinook allowed
	Queets River to Leadbetter Point	June 26-July 28	25	2	24	16	Sun.-Thurs; No more than one Chinook
		July 29-Sept. 18	52	2	24	16	Seven days per week; Two Chinook allowed
	Leadbetter Point to WA/OR Border	July 3-28	20	2	24	16	Sun.-Thurs; No more than one Chinook
		July 29-Sept. 8; Sept.17-30	56	2	24	16	Seven days per week; Two Chinook allowed
		Sept. 9-16	8	2	-	16	Seven days per week; No Chinook
2006 ^{c/}	U.S./Canada Border to Cape Alava	June 30-Aug. 10	30	2	24	16	Tues.-Sat.; No more than one Chinook
		Aug. 11-Sept. 17	38	2	24	16	Seven days per week; Two Chinook allowed
	Cape Alava to Queets River	June 30-Aug. 10	30	2	24	16	Tues.-Sat.; No more than one Chinook
		Aug. 11-Sept. 17	38	2	24	16	Seven days per week; Two Chinook allowed
	48°00' N. Lat. To 47°50' N. Lat.	Sept. 23-Oct 8	16	2	24	16	Seven days per week; Two Chinook allowed
	Queets River to Leadbetter Point	July 3-Aug. 10	29	2	24	16	Sun.-Thurs.; No more than one Chinook
		Aug. 11-Sept. 17	38	2	24	16	Seven days per week; two Chinook allowed
	Leadbetter Point to WA/OR Border	July 3-Aug. 10	29	2	24	16	Sun.-Thurs.; No more than one Chinook
		Aug. 11-Sept. 30	51	2	24	16	Seven days per week; two Chinook allowed

a/ For earlier years and additional detail, see Review of 2004 Ocean Salmon Fisheries, Appendix C, Table C-6.

b/ Mark selective coho fishery; all retained coho must be marked with a healed adipose fin clip except Aug. 29-Sept. 6, 2004 Queets River to Leadbetter Point.

c/ For detailed regulations see TABLE I-3.

d/ Plus one additional pink salmon.

TABLE C-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons, 2001-2006.^{a/} (Page 1 of 3)

Year	Tribe/Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-Coho	All Salmon	Chinook	Coho	
2001	Quinault, Quileute, and Hoh							
	Sand Point to Point Chehalis	May 1-June 30	-	61	-	24	-	
		-	July 1-Sept. 15	-	77	24	16	
	Makah							
	Ocean waters north of 48°02'15" N. Lat. and east of 125°44'00" W. Long.	May 1-June 30	-	61	-	24	-	
		-	July 1-Sept. 15	-	77	24	16	
	Area 4B inside waters	Jan. 1-Apr. 15	-	105	-	22	-	
		May 1-June 30	-	61	-	24	-	
		-	July 2-Sept. 15	-	76	24	16	
		-	Nov. 1-Dec. 31	-	61	22	16	
	Jamestown S'Kallam							
	Area 4B inside waters	-	Jan. 1-Apr. 15	-	105	22	16	
		May 1-June 30	-	61	-	24	-	
		-	July 1-Sept. 15	-	77	24	16	
		Nov. 1-Dec. 31	-	61	-	22	-	
2002	Quinault, Quileute, and Hoh							
	Sand Point to Point Chehalis	May 1-June 30	-	61	-	24	-	
		-	July 1-Sept. 15	-	77	24	16	
	Makah							
	Ocean waters north of 48°02'15" N. Lat. and east of 125°44'00" W. Long.	May 1-June 30	-	61	-	24	-	
		-	July 1-Sept. 15	-	77	24	16	
	Area 4B inside waters	Jan. 1-Apr. 15	-	105	-	22	-	
		May 1-June 30	-	61	-	24	-	
		-	July 2-Sept. 15	-	76	24	16	
		Sept. 16-Oct. 31	-	46	-	24	-	
		Nov. 1-Dec. 31	-	61	-	22	-	
	Jamestown S'Kallam							
	Area 4B inside waters	-	Jan. 1-Apr. 15	-	105	22	16	
		May 1-June 30	-	61	-	24	-	
		-	July 1-Oct. 31	-	123	24	16	
		-	Nov. 1-Dec. 31	-	61	22	16	

TABLE C-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons, 2001-2006.^{a/} (Page 2 of 4)

Year	Tribe/Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-Coho	All Salmon	Chinook	Coho	
2003	Quinault, Quileute, and Hoh							
	Sand Point to Point Chehalis	May 1-June 30	-	61	-	24	-	No size limits for ceremonial and subsistence
		-	July 1-Sept. 15	-	77	24	16	No size limits for ceremonial and subsistence
	Sand Point to Queets River (Quileute only)	-	Sept. 16-Oct. 15	-	30	None	None	Ceremonial and subsistence only
	Makah							
	Ocean waters north of 48°02'15" N. Lat. and east of 125°44'00" W. Long.	May 1-June 30	-	61	-	24	-	No size limits for ceremonial and subsistence
		-	July 1-Sept. 15	-	77	24	16	No size limits for ceremonial and subsistence
	Area 4B inside waters	Jan. 1-Apr. 15	-	105	-	22	-	No size limits for ceremonial and subsistence
		May 1-June 30	-	61	-	24	-	No size limits for ceremonial and subsistence
		-	July 1-Sept. 15	-	77	24	16	No size limits for ceremonial and subsistence
		Sept. 16-Oct. 31	-	46	-	24	-	No size limits for ceremonial and subsistence
		Nov. 1-Dec. 31	-	61	-	22	-	No size limits for ceremonial and subsistence
	Jamestown S'Kallam							
	Area 4B inside waters	-	Jan. 1-Apr. 15	-	105	22	16	No size limits for ceremonial and subsistence
		May 1-June 30	-	61	-	24	-	No size limits for ceremonial and subsistence
		-	July 1-Oct. 31	-	123	24	16	No size limits for ceremonial and subsistence
		-	Nov. 1-Dec. 31	-	61	22	16	No size limits for ceremonial and subsistence
2004	Quinault, Quileute, and Hoh							
	Sand Point to Point Chehalis	May 1-June 17	-	48	-	24	-	
		-	July 1-Sept. 10	-	72	24	16	
	Sand Point to Queets River (Quileute only)	-	Sept. 16-Oct. 15	-	30	24	16	Ceremonial and subsistence only
	Makah							
	Ocean waters north of 48°02'15" N. Lat. and east of 125°44'00" W. Long.	May 1-June 17	-	48	-	24	-	
		-	July 1-Sept. 10	-	72	24	16	
	Area 4B inside waters	Jan. 1-Apr. 15	-	105	-	22	-	
		May 1-June 17	-	48	-	24	-	
		-	July 1-Sept. 10	-	72	24	16	
		Sept. 16-Oct. 31	-	46	-	24	-	
		Nov. 1-Dec. 31	-	61	-	22	-	
	Jamestown S'Kallam							
	Area 4B inside waters	-	Jan. 1-Apr. 15	-	105	22	16	
		May 1-June 17	-	48	-	24	-	
		-	July 1-Sept. 10; Sept. 16-Oct. 31	-	123	24	16	
		-	Nov. 1-Dec. 31	-	61	22	16	

TABLE C-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons, 2001-2006.^{a/} (Page 3 of 4)

Year	Tribe/Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-Coho	All Salmon	Chinook	Coho	
2005	Quinault, Quileute, and Hoh							
	Sand Point to Point Chehalis	May 1-June 23	-	54	-	24	-	
		-	July 1-Sept. 15	-	77	24	16	
	Sand Point to Queets River (Quileute only)		Sept. 16-Oct. 15	-	30	24	16	Ceremonial and subsistence only
	Makah							
	Ocean waters north of 48°02'15" N. Lat. and east of 125°44'00" W. Long.	May 1-June 23	-	54	-	24	-	
		-	July 1-Sept. 15	-	77	24	16	
	Area 4B inside waters							
		-	Jan. 1-Feb. 3	-	34	22	16	
		May 1-June 23	-	54	-	24	-	
		-	July 1-July 3	-	54	24	16	
			July 19-23; 26-30; Aug. 2-6; 9-13; Aug. 15-Sept. 15	-	20	24	16	
		-	Nov. 1-Dec. 31	-	32	24	16	
				-	61	22	16	
	Jamestown S'Kallam							
	Area 4B inside waters	-	Jan. 1-Apr. 15	-	105	22	16	
		May 1-June 23	-	54	-	24	-	
		-	July 1-Sept. 15; Sept. 16-Oct. 31	-	123	24	16	
		-	Nov. 1-Dec. 31	-	61	22	16	

TABLE C-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons, 2001-2006.^{a/} (Page 4 of 4)

Year	Tribe/Area	Seasons		Number of Days		Minimum Size Limit		Other Restrictions
		All-Salmon- Except-Coho	All Salmon	All-Salmon- Except-Coho	All Salmon	Chinook	Coho	
2006 ^{b/}	Quinault, Quileute, and Hoh							
	Sand Point to Point Chehalis	May 1-June 30	-	61	-	24	-	
		-	July 1-Sept. 15	-	77	24	16	
	Sand Point to Queets River (Quileute only)		Sept. 16-Oct. 15	-	30	24	16	Ceremonial and subsistence only
	Makah							
	Ocean waters north of 48°02'15" N. Lat. and east of 125°44'00" W. Long.	May 1-June 30	-	61	-	24	-	
		-	July 1-Sept. 15	-	77	24	16	
	Area 4B inside waters		Jan. 1-Apr. 15	-	105	22	16	
		May 1-June 30	-	61	-	24	-	
		-	July 1-Sept. 15	-	77	24	16	
		-	Nov. 1-Dec. 31	-	61	22	16	
	Jamestown S'Kallam							
	Area 4B inside waters	-	Jan. 1-Apr. 15	-	105	22	16	
		May 1-June 30	-	61	-	24	-	
		-	July 1-Sept. 15; Sept. 16-Oct. 31	-	123	24	16	
		-	Nov. 1-Dec. 31	-	61	22	16	

a/ For earlier years and additional detail, see Review of 2004 Ocean Salmon Fisheries, Appendix C, Table C-7.

b/ For detailed regulations see TABLE I-2.

TABLE C-8. Council preseason adopted catch quotas (thousands of fish) for ocean fisheries north of Cape Falcon and critical stocks driving management. (Page 1 of 2)

Chinook					Coho				
Year	Critical Stocks	Catch Quota			Critical Stocks	Catch Quota			
		Treaty Indian	Non-Indian Commercial	Sport		Treaty Indian	Non-Indian Commercial	Sport	
1979	None	-	-	-	None	-	-	-	
1980	None	-	-	-	Washington coastal coho	-	-	-	
1981	None	-	-	-	Hoh and Skagit ^{a/}	-	372.0	248.0	
1982	None	-	-	-	Washington coastal coho	-	293.0	215.0	
1983	Columbia River hatchery and depressed upriver stocks	-	114.0	88.0	Queets and Skagit ^{b/}	-	164.0	318.0	
1984	Columbia River Low er River and Spring Creek Hatchery tules	8.3	16.7	10.3	Grays Harbor	38.5	24.8	50.2	
1985	Columbia River Spring Creek Hatchery tules	10.5	47.5 ^{c/}	37.2	Skagit	75.0	91.5	198.4	
1986	Columbia River Spring Creek Hatchery tules	12.5	51.0	37.1	Quillayute and Queets	86.0	140.6	207.5	
1987	Columbia River Spring Creek Hatchery tules	15.8	58.2 ^{d/}	44.6	Skagit	86.0	141.2	200.9	
1988	Columbia River upriver stocks	60.0	73.7	29.8	Washington coastal and Puget Sound	68.0	0.0 ^{e/}	100.0	
1989	Columbia River upriver stocks	32.0	47.5	47.5	Queets and Skagit	77.0	75.0	225.0	
1990	Columbia River Low er River Hatchery tules	31.2	37.5	37.5	Queets and Skagit	90.0	105.0	245.0	
1991	Columbia River Low er River Hatchery tules	33.0	40.0	40.0	Hood Canal and Skagit	80.0	87.0	233.0	
1992	Columbia River Low er River and Spring Creek Hatchery tules, and Snake River falls	33.0	47.0	33.0	Hood Canal and Stillaguamish	68.0	19.0	141.0	
1993	Columbia River Low er River and Spring Creek Hatchery tules, and Snake River falls	33.0	35.0	25.0	Skagit	90.0	47.5	202.5	
1994	Columbia River Low er River Hatchery tules and Snake River falls	16.4	0.0	0.0	Washington coastal and Puget Sound	0.0	0.0	0.0	
1995	Columbia River Low er River Hatchery tules and Snake River falls	12.0	0.0	0.0	Washington coastal and Puget Sound	30.0	25.0	75.0	
1996	Columbia River Low er River Hatchery tules and Snake River falls	11.0	0.0	0.0	Washington coastal and Puget Sound	30.0	20.8	62.2	
1997	Snake River falls	15.0	11.5	5.2	Washington coastal and Puget Sound	12.4	0.0	32.3 ^{f/}	
1998	Columbia River Low er River Hatchery tules	15.0	6.5	3.5	Washington coastal and Oregon Coast Natural	10.0	0.0	16.0	
1999	Columbia River Low er River Wild (Lew is River)	30.0	28.5	21.5	Queets, Strait of Juan de Fuca, and Oregon coast Natural	38.5	20.0	110 ^{g/}	
2000	Columbia River Low er River Wild (Lew is River)	25.5	12.5	12.5	Queets, Skagit, Stillaguamish, Snohomish, Strait of Juan de Fuca, and Oregon Coast Natural	20.0	25.0 ^{g/}	75.0 ^{g/}	
2001	Columbia Rivernatural tules (Cow eeman)	37.0	30.0	30.0	Oregon Coast Natural	90.0	75.0 ^{g/}	225.0 ^{g/}	
2002	Columbia Rivernatural tules (Cow eeman)	60.0	82.5	67.5	Oregon Coast Natural	60.0	5.0 ^{g/}	115.0 ^{g/}	

TABLE C-8. Council preseason adopted catch quotas (thousands of fish) for ocean fisheries north of Cape Falcon and critical stocks driving management. (Page 2 of 2)

Chinook					Coho			
Year	Critical Stocks	Catch Quota			Critical Stocks	Catch Quota		
		Treaty Indian	Non-Indian Commercial	Sport		Treaty Indian	Non-Indian Commercial	Sport
2003	Columbia River natural tules (Coweeman) and Snake River falls	60.0	64.4	59.6	Oregon Coast Natural	90.0	75.0 ^{g/}	225.0 ^{g/}
2004	Snake River falls and Columbia River natural tules (Coweeman)	49.0	44.5	44.5	Interior Fraser (B.C.), Oregon Coast Natural, and upper Columbia River escapement	75.0	67.5 ^{g/}	202.5 ^{g/}
2005	Snake River falls	48.0	43.3	43.3	Interior Fraser (B.C.) and Skagit River	50.0	23.2 ^{g/}	121.8 ^{g/}
2006	Columbia River natural tules (Coweeman) ^{h/}	42.2	34.0	31.0	Lower Columbia River natural and Interior Fraser (B.C.)	37.5	6.8 ^{g/}	73.2 ^{g/}

a/ Although the Skagit River escapement goal would not be achieved, management was based on meeting WDFW's escapement goal for Hoh River coho and allocation based on aggregation to Washington coastal tribes.

b/ The Council management regime was not expected to meet equitable adjustment requirements for Skagit River coho.

c/ Plus 7,430 hooking mortality for pink fishery.

d/ Plus 3,250 hooking mortality for pink fishery.

e/ Hooking mortality of 2,800 coho for June 1-15 fishery not included.

f/ Plus 1,200 hook-and-release mortality for the Neah Bay all-salmon-except-coho fishery.

g/ Marked hatchery coho only (healed adipose fin clip). Except 2004 non-Indian troll Sept. 1-5 between Queets River and Cape Falcon, and sport Aug. 29-Sept. 6 between Queets River and Leadbetter Point.

h/ Sharing of impacts on ESA listed Puget Sound Chinook also affected the shaping of ocean and inside fisheries.

i/ For 2002, the Council elected to constrain fishing so that the OCN exploitation rate would not exceed 12.5% per ODFW's recommendation to provide additional protection for lower Columbia River natural coho, which are listed as endangered under the Oregon State-ESA. The FMP objective for OCN coho was 15%.

TABLE C-9. Sequence of events in ocean salmon fishery management, 2006.^{a/} (Page 1 of 6)

GENERAL MANAGEMENT ACTIONS AND INSEASON CONFERENCES	
Mar. 10	<p>National Marine Fisheries Service (NMFS) provides the Council with a letter outlining the 2006 management guidance for stocks listed under the Endangered Species Act (ESA).</p> <p>Council recommends first inseason adjustments for:</p> <ol style="list-style-type: none"> 1. Commercial fisheries between Cape Falcon and the Oregon/California border to be closed March 15 through April 30. 2. Recreational fisheries between Point Arena and Point Sur to be closed April 1-30. (State waters remained open). <p>New regulations take effect May 1, 2006.</p> <p>Council adopts three commercial and recreational ocean salmon fishery management options for public review.</p>
Mar. 15	North of Cape Falcon Salmon Forum meets in Lynwood, Washington to initiate consideration of recommendations for treaty Indian and non-Indian salmon management options.
Mar. 27-28	Council holds public hearings on proposed 2006 management options in Westport, Washington, Coos Bay, Oregon, and Santa Rosa, California.
Mar. 30	North of Cape Falcon Salmon Forum meets in Lynnwood, Washington to further consider recommendations for treaty Indian and non-Indian salmon management options.
Apr. 6	Council adopts final ocean salmon fishery management recommendations for approval and implementation by the U.S. Secretary of Commerce. The proposed measures comply with the salmon fishery management plan (FMP) and the current biological opinions for listed species, except that the Klamath River fall Chinook natural spawning escapement is projected to be 21,100, less than the 35,000 FMP conservation objective; therefore, an emergency rule is required for implementation.
May 4	Ocean salmon seasons implemented as recommended by the Council and published in the <i>Federal Register</i> on May 4 (71 FR 26254).
June 15	NMFS inseason conference number two results in closing the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery effective midnight, June 16. The fishery remains closed until it reopens June 27 through June 30, 2006 with a 20 Chinook per vessel landing and possession limit for the four-day open period.
July 24	NMFS inseason conference number three results in changing the U.S./Canada border to Cape Falcon recreational fishery to open seven days per week and to allow retention of two Chinook in the bag limit beginning August 11.
July 27	NMFS inseason conference number four results in changing the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery to allow a landing and possession limit of 60 Chinook per open period effective July 29.
Aug. 17	NMFS inseason conference number five results in changing the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery to allow fishing four days per week (Saturday through Tuesday), a landing and possession limit of 80 Chinook per open period, and use of all gear (lifting the 6 inch plug only restriction) effective, August 19.
Aug. 25	<p>NMFS inseason conference number six results in two actions:</p> <ol style="list-style-type: none"> 1. Reducing the coho quota in the Queets River to Leadbetter point recreational fishery from 27,603 to 25,603 and increasing the coho quota in the Cape Alava to Queets River recreational fishery from 1,889 to 3,029 in order to extend the latter fishery into September and maintain impacts on Interior Fraser coho at or below preseason expectations (Effective August 26, 2006). 2. Reopening the recreational fishery in the Tillamook Head to Cape Falcon area effective August 26, 2006.

TABLE C-9. Sequence of events in ocean salmon fishery management, 2006.^{a/} (Page 2 of 6)

GENERAL MANAGEMENT ACTIONS AND INSEASON CONFERENCES (continued)	
Sept. 5	NMFS inseason conference number seven results in closing the Horse Mt. to Point Arena, non-Indian commercial all-salmon-except-coho fishery effective 3 p.m., Sept. 5 as the 4,000 Chinook quota is reached.
Sept. 6	NMFS inseason conference number eight results in changing the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery to allow fishing during the final open period from September 8 through September 15 with a landing and possession limit of 160 Chinook and 80 coho for the eight day open period.
NON-INDIAN COMMERCIAL TROLL SEASONS	
May 1	Pigeon Point to Point Sur, non-Indian commercial all-salmon-except-coho fishery opens through May 31 with a 75 Chinook per vessel per calendar week landing and possession limit; fish must be landed south of Point Arena; Chinook minimum size limit 27 inches total length. Point Sur to U.S./Mexico border, non-Indian commercial all-salmon-except-coho fishery opens through September 30; fish must be landed south of Pigeon Point; Chinook minimum size limit 27 inches total length in May, June, and September and 28 inches in July and August.
May 1-2	U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery opens with a 75 Chinook per vessel landing limit for the two-day open period and a 22,450 Chinook quota. The fishery reopens with the remaining quota May 6.
May 6	U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery reopens Saturday to Tuesday through June 13 with the remainder of the 22,450 Chinook quota, and an 80 Chinook per vessel per open period landing and possession limit.
May 31	Pigeon Point to Point Sur, non-Indian commercial all-salmon-except-coho fishery closes. Fishery reopens July 26.
June 4	Cape Falcon to Florence south Jetty, non-Indian commercial all-salmon fishery opens Saturday to Tuesday through June 28 with a 75 Chinook per vessel per open period landing and possession limit.
June 13	U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery closes as there is insufficient quota remaining for another opening prior to June 27. The fishery reopens with the remaining quota June 27.
June 27-30	U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery opens with the remainder of the 22,450 Chinook quota and a 20 Chinook per vessel landing limit for the four-day open period.
June 28	Cape Falcon to Florence south Jetty, non-Indian commercial all-salmon fishery closes. The fishery reopens July 9.
June 30	U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery closes as scheduled.
July 9	Cape Falcon to Florence south Jetty, non-Indian commercial all-salmon fishery opens Friday to Sunday through July 25 with a 75 Chinook per vessel per open period landing and possession limit.

TABLE C-9. Sequence of events in ocean salmon fishery management, 2006.^{a/} (Page 3 of 6)

NON-INDIAN COMMERCIAL TROLL SEASONS (continued)	
July 15	<p>U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens through the earlier of September 15 or quotas of 11,550 Chinook and 6,800 marked (adipose fin clipped) coho.</p> <p>July 15 through July 25: Saturday to Tuesday, with a 35 Chinook and 35 marked coho per vessel per open period landing and possession limit. Gear is restricted to plugs six inches or longer.</p> <p>July 29 through August 1: Saturday to Tuesday, with a 60 Chinook and 35 marked coho per vessel per open period landing and possession limit. Gear is restricted to plugs six inches or longer.</p> <p>August 5-14: Saturday to Monday with a 60 Chinook and 40 marked coho per vessel per open period landing and possession limit. Gear is restricted to plugs six inches or longer.</p> <p>August 19 through September 5: Saturday to Tuesday with an 80 Chinook and 40 coho per vessel per open period landing and possession limit. No special gear restrictions.</p> <p>September 8-15 with a 160 Chinook and 80 marked coho per vessel landing and possession limit for the eight day open period. Non special gear restrictions.</p>
July 25	Cape Falcon to Florence south Jetty, non-Indian commercial all-salmon fishery closes. The fishery reopens August 1.
July 26	<p>Point Arena to Pigeon Point, non-Indian commercial all-salmon-except-coho fishery opens through September 30</p> <p>July 26 through August 31: 75 Chinook per vessel per calendar week landing and possession limit; fish must be landed south of Horse Mt.; Chinook minimum size limit 28 inches total length.</p> <p>September 1-30: fishery opens with a 20,000 Chinook quota; fish must be landed in the area or an adjacent closed area if that area has been closed at least 96 hours; Chinook minimum size limit 27 inches total length.</p> <p>Pigeon Point to Point Sur, non-Indian commercial all-salmon-except-coho fishery reopens through September 30.</p> <p>July 26 through August 31: 75 Chinook per vessel per calendar week landing and possession limit; fish must be landed south of Point Arena; Chinook minimum size limit 28 inches total length.</p> <p>September 1-30: fish must be landed south of Pigeon Point or an adjacent closed area if that area has been closed at least 96 hours; Chinook minimum size limit 27 inches total length.</p>
Aug. 1-3	Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery opens with a 75 Chinook per vessel per open period landing and possession limit. The fishery reopens September 17.
Sept. 1	Horse Mt. to Point Arena non-Indian commercial all-salmon-except-coho fishery opens through the earlier of September 15 or a Chinook quota of 4,000.
Sept. 5	Horse Mt. to Point Arena non-Indian commercial all-salmon-except-coho fishery closes as the 4,000 Chinook quota is reached.
Sept. 15	U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery closes as scheduled.
Sept. 17	Cape Falcon to Florence south Jetty, non-Indian commercial all-salmon fishery opens through September 30 with a 50 Chinook per vessel per calendar week landing and possession limit.

TABLE C-9. Sequence of events in ocean salmon fishery management, 2006.^{a/} (Page 4 of 6)

NON-INDIAN COMMERCIAL TROLL SEASONS (continued)

Sept. 30	Cape Falcon to Florence south Jetty, non-Indian commercial all-salmon fishery closes. The fishery reopens October 17. Point Arena to Pigeon Point, non-Indian commercial all-salmon-except-coho fishery closes as scheduled, without reaching the 20,000 Chinook quota. Pigeon Point to Point Sur, non-Indian commercial all-salmon-except-coho fishery closes. Point Sur to U.S./Mexico border, non-Indian commercial all-salmon-except-coho fishery closes.
Oct. 2-13	Point Reyes to Point San Pedro, non-Indian commercial all-salmon-except-coho fishery opens Monday to Friday; all fish must be landed between Point Arena and Pigeon Point; Chinook minimum size limit 26 inches total length.
Oct. 17	Cape Falcon to Florence south Jetty, non-Indian commercial all-salmon fishery opens through October 31 with a 50 Chinook per vessel per calendar week landing and possession limit.
Oct. 31	Cape Falcon to Florence south Jetty, non-Indian commercial all-salmon fishery closes.

TREATY INDIAN COMMERCIAL TROLL SEASONS

May 1	All-salmon-except-coho fisheries open through the earlier of June 30 or a 22,700 Chinook quota.
June 30	All-salmon-except-coho fisheries close as scheduled.
July 1	All-salmon fisheries open through the earlier of September 15, a 19,500 Chinook quota, or a 37,500 non-mark-selective coho quota.
Sep. 15	All-salmon commercial fisheries close as scheduled.

RECREATIONAL SEASONS

Feb. 18	Horse Mt. to Point Arena, all-salmon-except-coho fishery opens through June 4.
Mar. 15	Cape Falcon to Humbug Mt., all-salmon-except-coho fishery opens through October 31. Cape Falcon to OR/CA border mark-selective (adipose fin clipped) coho retention allowed June 17 through July 31 (July 4 south of Humbug Mt.) and September 1-6 with a 20,000 marked coho quota.
Apr. 1	Point Sur to the U.S./Mexico border, all-salmon-except-coho fishery opens through September 24.
Apr. 1-30	Point Arena to Point Sur, all-salmon-except-coho fishery opens inside state waters (3 nm).
May 1	Point Arena to Pigeon Point all-salmon-except-coho fishery opens through June 11. Pigeon Point to Point Sur all-salmon-except-coho fishery opens through September 24.
May 15	Humbug Mt. to Horse Mt., all-salmon-except-coho fishery opens through July 4. Cape Falcon to OR/CA border mark-selective (adipose fin clipped) coho retention allowed June 17 through July 4 (July 31 north of Humbug Mt.) and September 1-6 with a 20,000 marked coho quota.
June 4	Horse Mt. to Point Arena, all-salmon-except-coho fishery closes. The fishery reopens June 7.
June 7	Horse Mt. to Point Arena, all-salmon-except-coho fishery opens Wednesday to Sunday through June 25.
June 11	Point Arena to Pigeon Point all-salmon-except-coho fishery closes. The fishery reopens June 14.

TABLE C-9. Sequence of events in ocean salmon fishery management, 2006.^{a/} (Page 5 of 6)

RECREATIONAL SEASONS (continued)	
June 14	Point Arena to Pigeon Point all-salmon-except-coho fishery opens through July 9.
June 17	Cape Falcon to OR/CA border, all-salmon mark-selective coho fishery opens through the earlier of July 31 north of Humbug Mt. or July 4 south of Humbug Mt., or a quota of 20,000 marked coho.
June 25	Horse Mt. to Point Arena, all-salmon-except-coho fishery closes. The fishery reopens June 28.
June 28	Horse Mt. to Point Arena, all-salmon-except-coho fishery opens through July 9.
June 30	U.S./Canada border to Cape Alava, all-salmon mark-selective coho fishery opens through the earlier of September 17 or a 7,058 coho quota, with a 3,200 Chinook guideline. Fishery is open Tuesday to Saturday with a daily-bag-limit of two fish, only one of which can be a Chinook, through August 10. Beginning August 11 the fishery is open seven days per week with a two fish bag limit and no Chinook bag restriction. All coho must have a healed adipose fin clip. No chum retention in August and September.
	Cape Alava to Queets River, all-salmon mark-selective coho fishery opens through the earlier of September 17 or a 1,889 coho quota, with a 1,300 Chinook guideline. Fishery is open Tuesday to Saturday with a daily-bag-limit of two fish, only one of which can be a Chinook, through August 10. Beginning August 11 the fishery is open seven days per week with a two fish bag limit and no Chinook bag restriction. All coho must have a healed adipose fin clip.
July 3	Queets River to Leadbetter Point, all-salmon mark-selective coho fishery opens through the earlier of September 17 or a 27,603 marked coho quota, with an 18,100 Chinook guideline. Fishery is open Sunday to Thursday with a daily-bag-limit of two fish, only one of which can be a Chinook, through August 10. Beginning August 11 the fishery is open seven days per week with a two fish bag limit and no Chinook bag restriction. All coho must have a healed adipose fin clip.
	Leadbetter Point to Cape Falcon, all-salmon mark-selective coho fishery opens through the earlier of September 30 or a 36,600 marked coho quota, with an 8,300 Chinook guideline. Fishery is open Sunday to Thursday with a daily-bag-limit of two fish, only one of which can be a Chinook, through August 10. Beginning August 11 the fishery is open seven days per week with a two fish bag limit and no Chinook bag restriction. All coho must have a healed adipose fin clip. Closed between Tillamook Head and Cape Falcon August 1-25.
July 4	Humbug Mt. to Horse Mt. all-salmon-except-coho fishery closes. OR/CA border, all-salmon mark-selective coho fishery closes as scheduled.
July 9	Horse Mt. to Point Arena, all-salmon-except-coho fishery closes. The fishery reopens July 15. Point Arena to Pigeon Point all-salmon-except-coho fishery closes. The fishery reopens July 11.
July 12	Point Arena to Pigeon Point all-salmon-except-coho fishery opens through November 12.
July 15-16	Horse Mt. to Point Arena, all-salmon-except-coho fishery opens. The fishery reopens July 22-23.
July 22-23	Horse Mt. to Point Arena, all-salmon-except-coho fishery opens. The fishery reopens July 26.
July 26	Horse Mt. to Point Arena, all-salmon-except-coho fishery opens through November 12.
July 31	Cape Falcon to OR/CA border, all-salmon mark-selective coho fishery closes as scheduled. The all-salmon-except-coho fishery reopens August 1 for the area north of Humbug Mt. The all-salmon mark-selective coho fishery reopens September 1-6 for both areas as sufficient coho quota remains. The all-salmon-except-coho fishery reopens September 7 for the area north of Humbug Mt. and continues through October 31.
Aug. 1	Cape Falcon to Humbug Mt., all-salmon-except-coho fishery reopens through August 31. Tillamook Head to Cape Falcon all-salmon mark-selective coho fishery closes.

TABLE C-9. Sequence of events in ocean salmon fishery management, 2006.^{a/} (Page 6 of 6)

RECREATIONAL SEASONS (continued)

Aug. 26	Queets River to Leadbetter Pt. all-salmon recreational fishery mark-selective coho quota is reduced from 27,603 to 25,603 to allow the Cape Alava to Queets River coho quota to be increased by 1,140 to 3,029, and remain impact neutral with respect to Interior Fraser coho. Tillamook Head to Cape Falcon all-salmon mark-selective coho fishery reopens.
Aug. 31	Cape Falcon to Humbug Mt., all-salmon-except-coho fishery closes. The all-salmon mark-selective coho fishery reopens September 1-6 for the Cape Falcon to OR/CA border area with the remainder of the 20,000 marked coho quota from the June 17-July 31 coho fishery. The all-salmon-except-coho fishery reopens September 7.
Sep. 1	Cape Falcon to Oregon/California border, all-salmon mark-selective coho fishery opens through September 6 with the remainder of the 20,000 marked coho quota from the June 17-July 31 (July 4 south of Humbug Mt.) coho fishery. OR/CA border to Horse Mt., all-salmon-except-coho fishery opens through September 6.
Sep. 6	Cape Falcon to OR/CA border, all-salmon mark-selective coho fishery closes as scheduled. The all-salmon-except-coho fishery reopens September 7 for the area north of Humbug Mt. OR/CA border to Horse Mt., all-salmon-except-coho fishery closes.
Sep. 7	Cape Falcon to Humbug Mt., all-salmon-except-coho fishery reopens through October 31.
Sep. 17	U.S./Canada border to Cape Alava, all-salmon mark-selective coho fishery closes as scheduled. Cape Alava to Queets River, all-salmon mark-selective coho fishery closes as scheduled. Queets River to Leadbetter Point, all-salmon non-mark-selective fishery closes as scheduled.
Sep. 23	La Push area (48°00'00" N. Lat. to 47°50'00" N. Lat.), all-salmon mark-selective coho fishery opens through the earlier of October 8, a 100 Chinook quota attainment of the subarea quota.
Sep. 24	Pigeon Point to Point Sur, all-salmon-except-coho fishery closes. Point Sur to U.S./Mexico border, all-salmon-except-coho fishery closes.
Sep. 30	Leadbetter Point to Cape Falcon, all-salmon mark-selective coho fishery closes as scheduled.
Oct. 8	La Push area, all-salmon mark-selective coho fishery closes as scheduled.
Oct. 31	Cape Falcon to Humbug Mt., all-salmon-except-coho fishery closes.
Nov. 12	Horse Mt. to Point Arena, all-salmon-except-coho fishery closes. Point Arena to Pigeon Point, all-salmon-except-coho fishery closes.

a/ Unless stated otherwise, season openings or modifications of restrictions are effective at 0001 hours of the listed date. Closures are effective at 2359 hours of the listed date.

APPENDIX D

HISTORICAL ECONOMIC DATA

LIST OF TABLES

	<u>Page</u>
TABLE D-1. California monthly troll Chinook and coho average dressed weights (pounds) by area of landing.	283
TABLE D-2. Oregon monthly troll Chinook and coho average dressed weights (pounds) by area of landing.	286
TABLE D-3. Washington monthly troll Chinook and coho salmon average dressed weights (pounds).....	287
TABLE D-4. California troll combined Chinook and coho salmon landings in dressed weight, value of landings and number of registered vessels making commercial salmon landings	288
TABLE D-5. Oregon troll combined Chinook and coho salmon landings in dressed weight, value of landings and number of registered vessels making commercial salmon landings.....	289
TABLE D-6. Washington non-Indian troll combined Chinook and coho salmon landings in dressed weight, value of landings and number of registered vessels making commercial salmon landings.....	290
TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon	291
TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon	295
TABLE D-9. Washington non-Indian salmon troll boat-size catch statistics in pounds of dressed salmon.....	298
TABLE D-10. Preliminary California salmon landings (in pounds of dressed salmon) and exvessel values by vessel size categories and ports from Crescent City to Morro Bay South, 2006	300
TABLE D-11. Preliminary 2006 Washington non-Indian troll salmon landings (in pounds of dressed salmon) and exvessel value by vessel size category and port area.....	301
TABLE D-12. California number of vessels landing 50% and 90% of total pounds of salmon troll catch by year	302
TABLE D-13. Oregon number of vessels landing 50% and 90% of total pounds of salmon troll catch by year	303
TABLE D-14. Washington number of vessels landing 50% and 90% (by numbers of fish) of non-Indian troll salmon catch	304
TABLE D-15. Preliminary 2006 California, Oregon, and Washington troll fleet by home state and salmon landings and exvessel value.....	305
TABLE D-16. Vessels landing salmon in California by vessel length and skipper's state of residence	306
TABLE D-17. Percentages of vessels landing troll salmon in Oregon by license holder's state of residence.....	307
TABLE D-18. Percentages of vessels landing non-Indian troll salmon in Washington by license holder's state of residence	308
TABLE D-19. Number of California charter boats participating in the ocean recreational salmon fishery, by port area and activity level	309
TABLE D-20. Number of charter boats licensed in Oregon	310
TABLE D-21. Number of salmon charter boats licensed in Washington (including Puget Sound).....	311
TABLE D-22. Price index	312

TABLE D-1. California monthly troll Chinook and coho average dressed weights (pounds) by area of landing. (Page 1 of 3)

Year	Apr.	May	June	July	Aug.	Sept.	Oct.	Season ^{a/}	May	June	July	Aug.	Sept.	Season
	CHINOOK								COHO					
<u>Crescent City</u>														
1976-1980	8.6	8.5	8.8	9.0	9.8	8.4	-	8.9	4.0	4.6	6.2	7.0	7.4	5.6
1981-1985	-	7.7	8.3	8.6	8.7	9.2	-	8.5	3.9	4.6	5.4	6.4	6.8	5.9
1986-1990	-	-	9.6	9.5	9.2	9.4	-	9.6	-	5.0	5.0	4.5	5.6	5.0
1991	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	8.3	10.6	-	9.6	-	-	-	-	-	-
1997	-	-	-	-	-	10.0	-	10.0	-	-	-	-	-	-
1998	-	-	-	-	-	8.9	-	8.9	-	-	-	-	-	-
1999	-	-	-	-	-	10.6	-	10.6	-	-	-	-	-	-
2000	-	-	-	-	-	10.7	-	10.7	-	-	-	-	-	-
2001	-	-	-	-	-	13.8	-	13.8	-	-	-	-	-	-
2002	-	-	-	-	13.4	12.1	11.1	12.2	-	-	-	-	-	-
2003	12.0	12.0	12.0	-	-	10.3	9.1	11.2	-	-	-	-	-	-
2004	10.1	-	9.8	11.6	11.9	10.8	-	11.8	-	-	-	-	-	-
2005	-	-	-	-	-	14.1	-	14.1	-	-	-	-	-	-
2006 ^{b/}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Eureka</u>														
1976-1980	7.7	8.1	8.4	8.9	9.2	9.5	-	8.4	4.1	4.4	6.2	6.9	6.8	5.1
1981-1985	-	7.4	8.2	8.9	9.2	9.6	-	6.6	4.6	4.7	5.9	6.2	6.6	5.7
1986-1990	-	-	9.0	10.1	10.2	9.2	9.6	9.3	-	5.1	5.6	5.5	6.2	5.3
1991	-	-	-	-	-	9.5	17.7	10.1	-	-	-	-	6.2	6.2
1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	11.9	10.3	-	10.7	-	-	-	-	-	-
1997	-	-	-	-	-	10.0	-	10.0	-	-	-	-	-	-
1998	-	-	-	-	-	8.9	-	8.9	-	-	-	-	-	-
1999	-	-	-	-	-	10.4	-	10.4	-	-	-	-	-	-
2000	-	-	-	-	-	10.9	-	10.9	-	-	-	-	-	-
2001	-	-	-	-	-	11.5	-	11.5	-	-	-	-	-	-
2002	-	-	-	-	11.4	12.1	-	12.0	-	-	-	-	-	-
2003	-	-	-	-	-	9.9	-	9.9	-	-	-	-	-	-
2004	-	-	-	-	-	11.4	-	11.4	-	-	-	-	-	-
2005	-	-	-	-	-	11.8	-	11.8	-	-	-	-	-	-
2006 ^{b/}	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE D-1. California monthly troll Chinook and coho average dressed weights (pounds) by area of landing. (Page 2 of 3)

Year	Apr.	May	June	July	Aug.	Sept.	Oct.	Season ^{a/}	May	June	July	Aug.	Sept.	Season
CHINOOK									COHO					
<u>Fort Bragg</u>														
1976-1980	7.7	8.5	7.8	10.5	10.1	10.1	-	10.0	4.1	4.7	6.8	7.0	8.8	5.9
1981-1985	7.6	9.0	10.4	9.6	10.3	10.1	-	9.8	5.3	6.0	6.3	6.6	7.2	6.2
1986-1990	-	9.3	10.2	9.3	10.1	10.1	-	9.6	-	5.3	5.8	6.4	6.2	5.7
1991	-	-	-	-	10.5	9.5	-	10.5	-	-	-	6.4	-	6.4
1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	-	8.2	-	-	-	9.4	-	9.4	-	-	-	-	-	-
1994	-	-	-	-	-	11.0	-	11.0	-	-	-	-	-	-
1995	-	-	-	-	-	11.7	-	11.7	-	-	-	-	-	-
1996	-	-	-	-	11.0	11.7	-	11.2	-	-	-	-	-	-
1997	-	-	-	-	-	9.3	-	9.3	-	-	-	-	-	-
1998	-	-	-	-	-	12.2	-	12.2	-	-	-	-	-	-
1999	-	-	-	-	-	12.2	-	12.2	-	-	-	-	-	-
2000	-	-	-	-	-	11.5	-	11.5	-	-	-	-	-	-
2001	-	12.3	-	-	-	13.0	-	12.8	-	-	-	-	-	-
2002	-	-	-	11.7	13.8	15.3	-	13.4	-	-	-	-	-	-
2003	-	14.9	-	12.7	12.1	11.4	-	12.4	-	-	-	-	-	-
2004	-	-	-	12.0	11.7	13.1	-	12.0	-	-	-	-	-	-
2005	-	-	-	-	-	12.2	-	12.2	-	-	-	-	-	-
2006 ^{b/}	-	-	-	-	-	15.9	-	15.9	-	-	-	-	-	-
<u>San Francisco</u>														
1976-1980	8.5	8.9	7.8	10.7	11.3	11.7	-	9.9	4.6	5.2	7.1	6.8	8.4	6.1
1981-1985	6.8	8.6	9.4	10.5	10.5	10.1	-	9.7	5.3	5.9	6.7	6.6	7.8	6.3
1986-1990	-	9.2	10.2	10.9	12.4	12.1	-	10.1	-	5.6	6.1	6.7	6.2	5.9
1991	-	9.4	10.4	10.8	11.8	10.8	-	10.4	-	5.3	5.9	6.4	-	5.6
1992	-	8.2	-	-	11.0	12.4	-	11.5	-	-	-	4.8	-	4.8
1993	-	7.7	7.8	9.8	9.7	11.3	-	8.8	-	-	-	-	-	-
1994	-	9.1	10.1	10.5	10.4	11.7	-	10.1	-	-	-	-	-	-
1995	-	8.4	8.8	9.8	13.5	12.8	-	9.3	-	-	-	-	-	-
1996	-	9.4	9.4	10.8	12.5	12.9	-	10.3	-	-	-	-	-	-
1997	-	10.0	10.2	11.1	12.4	12.3	-	10.7	-	-	-	-	-	-
1998	-	7.1	7.5	7.9	10.8	11.7	-	8.5	-	-	-	-	-	-
1999	9.9	12.0	12.4	13.7	14.1	13.7	-	13.1	-	-	-	-	-	-
2000	-	8.7	9.6	11.7	12.6	14.1	-	10.4	-	-	-	-	-	-
2001	-	10.9	12.9	12.8	14.2	14.8	16.8	12.7	-	-	-	-	-	-
2002	-	11.4	12.9	12.7	14.7	15.1	14.9	12.6	-	-	-	-	-	-
2003	-	12.0	15.0	12.3	12.7	13.2	11.2	13.6	-	-	-	-	-	-
2004	-	13.4	11.8	12.0	14.9	13.8	12.9	12.4	-	-	-	-	-	-
2005	-	-	-	12.9	13.7	15.0	15.2	13.4	-	-	-	-	-	-
2006 ^{b/}	-	-	-	15.1	14.4	16.8	18.0	15.3	-	-	-	-	-	-

TABLE D-1. California monthly troll Chinook and coho average dressed weights (pounds) by area of landing. (Page 3 of 3)

Year	Apr.	May	June	July	Aug.	Sept.	Oct.	Season ^{a/}	May	June	July	Aug.	Sept.	Season
CHINOOK									COHO					
<u>Monterey</u>														
1976-1980	8.5	9.3	7.9	11.3	13.0	10.1	-	10.1	4.6	4.8	5.9	7.1	6.5	5.3
1981-1985	7.3	8.6	9.6	10.4	11.1	10.2	-	9.3	5.4	5.2	6.5	7.6	8.3	6.1
1986-1990	-	10.3	11.3	12.2	12.3	11.7	-	11.1	-	5.6	6.0	6.5	6.4	5.9
1991	-	9.7	14.2	13.0	12.1	13.0	-	12.6	-	5.2	6.0	6.6	-	5.4
1992	-	8.6	9.3	9.1	9.9	9.7	-	9.0	-	4.3	5.2	4.4	-	4.5
1993	-	8.7	9.2	11.0	10.7	10.9	-	9.4	-	-	-	-	-	-
1994	-	10.9	11.6	12.5	12.8	10.0	-	11.8	-	-	-	-	-	-
1995	-	9.2	10.2	11.0	12.9	12.0	-	10.2	-	-	-	-	-	-
1996	-	10.4	11.3	12.6	11.7	11.2	-	11.3	-	-	-	-	-	-
1997	10.6	10.6	10.5	11.9	-	10.0	-	10.9	-	-	-	-	-	-
1998	-	7.5	7.2	7.4	11.1	8.1	-	7.4	-	-	-	-	-	-
1999	11.5	13.6	13.3	15.7	12.6	11.0	-	13.6	-	-	-	-	-	-
2000	-	9.5	12.9	14.3	11.9	-	-	10.9	-	-	-	-	-	-
2001	-	11.5	11.9	12.6	11.0	14.7	-	11.6	-	-	-	-	-	-
2002	-	11.1	13.5	14.4	13.2	13.9	-	13.0	-	-	-	-	-	-
2003	-	13.0	14.4	14.0	14.7	13.8	-	13.8	-	-	-	-	-	-
2004	-	13.9	12.5	13.2	14.5	13.7	-	13.2	-	-	-	-	-	-
2005	-	10.9	13.1	14.1	16.5	13.1	-	12.1	-	-	-	-	-	-
2006 ^{b/}	-	12.4	12.6	16.2	13.3	15.6	-	12.6	-	-	-	-	-	-
<u>Total Statewide</u>														
1976-1980	8.3	8.6	9.3	10.1	10.7	10.4	-	9.5	3.9	4.6	6.4	6.9	7.4	5.5
1981-1985	7.1	8.5	9.7	10.0	10.2	10.0	-	9.5	5.2	5.6	6.3	6.6	7.0	6.2
1986-1990	-	9.5	10.2	10.3	11.1	10.8	9.6	10.1	-	5.2	5.9	6.5	6.0	5.6
1991	-	9.5	11.9	11.6	11.2	10.4	17.7	11.0	-	5.3	5.9	6.4	6.2	5.6
1992	-	8.6	9.3	9.1	10.9	12.1	-	10.0	-	4.3	5.2	4.8	-	4.5
1993	-	8.2	8.7	10.2	9.9	9.7	-	9.1	-	-	-	-	-	-
1994	-	9.7	10.3	11.2	10.5	11.4	-	10.5	-	-	-	-	-	-
1995	-	8.8	9.5	10.5	13.2	12.4	-	9.8	-	-	-	-	-	-
1996	-	10.2	10.2	11.8	11.7	11.9	-	10.8	-	-	-	-	-	-
1997	10.6	10.3	10.4	11.5	12.4	11.7	-	10.8	-	-	-	-	-	-
1998	-	7.4	7.3	7.9	10.8	11.3	-	8.1	-	-	-	-	-	-
1999	9.9	12.8	12.8	14.0	14.1	12.8	-	13.2	-	-	-	-	-	-
2000	-	9.2	11.1	12.4	12.5	12.7	-	10.7	-	-	-	-	-	-
2001	-	11.2	12.6	12.8	14.1	13.5	16.8	12.5	-	-	-	-	-	-
2002	-	11.3	13.1	12.8	13.9	13.8	13.0	12.8	-	-	-	-	-	-
2003	12.0	13.4	14.9	12.7	12.2	11.7	11.0	13.0 ^{a/}	-	-	-	-	-	-
2004	10.1	13.5	11.9	12.1	12.5	12.7	12.9	12.4 ^{a/}	-	-	-	-	-	-
2005	-	10.9	13.1	13.1	14.1	13.1	15.2	12.8	-	-	-	-	-	-
2006 ^{b/}	-	12.4	12.6	15.1	14.4	16.4	18.0	15.0	-	-	-	-	-	-

a/ Season total and average includes minor landings in March and October from Oregon prior to 2005.

b/ Preliminary.

TABLE D-2. Oregon monthly troll Chinook and coho average dressed weights (pounds) by area of landing. (Page 1 of 1)

Year	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season
CHINOOK											
1971-1975	-	-	9.5	10.7	10.4	10.2	9.4	10.7	16.9	-	10.2
1976-1980	-	-	10.2	10.2	10.6	10.0	9.9	10.5	15.4	-	10.3
1981-1985	-	-	9.0	9.1	9.5	9.0	8.8	11.5	14.7	-	9.2
1986-1990	-	-	9.3	9.5	9.6	9.0	9.3	10.4	13.8	-	9.5
1991	-	-	10.4	9.9	9.7	8.3	8.9	10.4	-	-	9.3
1992	-	-	9.7	10.3	8.7	8.5	9.7	9.9	-	-	9.2
1993	-	-	9.5	8.9	9.5	8.2	9.2	10.9	12.5	-	9.3
1994	-	-	10.6	10.6	8.7	13.0	9.6	13.3	15.6	-	11.3
1995	-	-	9.5	9.3	9.5	9.1	8.7	8.9	8.9	-	9.0
1996	-	-	9.8	11.3	12.3	11.2	10.5	10.2	11.1	-	10.9
1997	-	11.8	11.3	11.0	11.9	9.3	9.1	12.4	15.8	-	10.3
1998	-	11.1	10.8	11.5	12.7	10.8	10.0	14.4	15.6	-	11.2
1999	-	9.1	10.8	11.7	11.1	10.2	11.8	15.7	16.3	15.2	11.3
2000	-	13.0	12.9	12.9	11.9	10.9	9.3	10.0	14.2	13.4	10.9
2001	-	10.3	10.8	10.3	10.5	10.7	9.8	10.3	13.8	13.2	10.5
2002	12.3	9.9	10.2	10.5	11.2	10.9	11.4	11.1	15.1	14.1	10.9
2003	10.3	9.9	11.6	11.2	11.8	11.3	10.5	10.4	15.6	15.0	10.9
2004	9.4	10.1	10.9	11.5	11.5	11.4	9.8	12.2	14.4	12.6	10.9
2005	8.6	8.9	9.9	10.5	10.7	10.9	11.9	11.4	15.4	13.9	10.7
2006 ^{a/}	-	-	12.2	13.6	15.5	15.3	13.4	16.0	15.8	14.3	13.9
COHO											
1971-1975	-	-	-	5.1	6.1	7.0	7.0	7.9	-	-	6.2
1976-1980	-	-	-	4.4	5.5	6.1	5.9	6.3	-	-	5.5
1981-1985	-	-	-	-	4.8	5.3	3.6	-	-	-	5.0
1986-1990	-	-	-	4.8	4.8	5.1	5.4	7.2	-	-	4.9
1991	-	-	-	4.2	4.8	5.1	4.8	-	-	-	4.6
1992	-	-	-	-	4.0	4.2	-	-	-	-	4.2
1993	-	-	-	-	3.3	5.2	6.0	-	-	-	5.4
1994	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	5.9	6.6	-	-	-	5.9
2001	-	-	-	-	5.0	6.2	6.0	-	-	-	5.6
2002	-	-	-	-	-	7.0	-	-	-	-	7.0
2003	-	-	-	-	5.2	6.7	6.7	-	-	-	6.4
2004	-	-	-	-	5.6	6.8	7.9	-	-	-	7.5
2005	-	-	-	-	5.4	7.7	8.3	-	-	-	7.5
2006 ^{a/}	-	-	-	-	7.2	9.1	9.5	-	-	-	9.2

a/ Preliminary.

TABLE D-3. Washington monthly troll Chinook and coho salmon average dressed weights (pounds).^{a/} (Page 1 of 1)

Year	May		June		July		Aug.		Sept.		Oct.		Season	
	Treaty Indian	Non-Indian	Treaty Indian	Non-Indian	Treaty Indian	Non-Indian	Treaty Indian	Non-Indian	Treaty Indian	Non-Indian	Treaty Indian	Non-Indian	Treaty Indian ^{b/}	Non-Indian
CHINOOK														
1980	10.9	12.0	12.6	-	12.5	13.2	14.2	13.5	10.9	13.1	6.7	-	7.3	13.0
1981-1985	7.3	9.7	8.8	-	9.6	12.3	9.3	12.2	7.7	12.7	5.1	-	6.4	10.6
1986-1990	8.1	9.5	8.1	11.1	9.6	12.1	9.1	12.1	6.8	12.2	5.2	12.6	6.7	10.4
1991	7.4	10.1	7.9	10.9	8.9	-	8.7	12.7	4.3	12.0	7.9	-	6.5	10.6
1992	6.4	11.3	7.3	12.3	8.3	12.1	8.4	11.5	7.5	-	4.8	-	6.1	11.6
1993	6.3	10.7	7.3	10.8	8.5	12.0	8.3	11.4	8.4	12.1	8.5	-	7.0	11.0
1994 ^{c/}	9.6	-	9.9	9.3	11.9	-	-	-	-	-	-	-	8.1	9.3
1995 ^{c/}	5.7	-	6.7	-	6.0	-	7.7	9.1	6.2	9.4	4.2	8.3	6.9	8.4
1996 ^{c/}	5.8	-	6.2	12.9	-	12.6	7.8	-	6.7	-	-	-	6.9	12.4
1997	7.3	10.4	6.7	10.9	-	-	8.4	-	9.3	-	-	-	7.4	10.6
1998	11.1	11.4	11.7	12.9	7.4	-	11.0	-	8.2	-	-	-	10.8	11.4
1999	7.1	11.0	8.8	11.1	-	11.9	7.7	11.0	5.6	-	0.0	-	8.1	11.2
2000	10.6	12.0	9.2	12.0	6.7	-	7.3	10.9	-	10.7	-	-	9.2	11.9
2001	7.4	10.3	9.5	11.7	12.1	12.6	9.7	10.9	8.7	10.1	-	-	9.5	11.4
2002	9.5	11.4	12.9	12.2	11.5	13.1	11.8	14.5	8.3	NA	-	-	11.3	12.6
2003	11.2	12.4	9.3	12.9	13.9	16.0	18.0	17.4	13.4	13.9	-	-	12.5	14.6
2004	10.2	11.6	12.1	14.4	13.7	16.2	13.0	16.5	17.3	16.8	5.0	-	11.8	14.2
2005	9.1	10.7	9.9	11.7	16.2	17.1	18.4	17.9	12.0	-	-	-	11.9	13.4
2006	8.5	11.9	9.8	12.3	13.3	15.6	10.4	15.4	7.2	14.4	-	-	10.2	13.2
COHO														
1980	2.5	-	3.4	-	4.3	4.8	5.7	6.0	6.9	5.7	-	-	3.7	5.2
1981-1985	2.3	-	3.2	-	3.8	4.6	4.9	4.6	5.6	5.4	6.5	5.8	4.6	4.5
1986-1990	-	-	2.8	-	4.0	4.9	4.2	4.4	4.9	5.5	5.3	7.0	4.1	4.5
1991	-	-	-	-	4.1	-	4.8	5.0	3.9	5.6	6.0	-	4.4	5.1
1992	-	-	2.7	-	3.5	3.8	3.4	4.5	2.9	-	3.9	-	3.5	4.1
1993	-	-	-	-	3.4	3.6	4.6	5.0	4.9	5.8	5.7	-	4.6	4.8
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	3.8	-	4.6	4.2	3.9	4.7	8.0	-	4.6	4.4
1996	-	-	-	-	-	3.8	3.5	4.0	5.3	-	-	-	5.0	4.0
1997	-	-	-	-	-	-	3.4	-	3.9	-	-	-	3.6	-
1998	-	-	-	-	-	-	5.0	-	5.8	-	-	-	5.4	-
1999	0.0	-	0.0	-	5.0	4.6	5.0	5.7	0.0	5.9	0.0	-	5.0	5.5
2000	-	-	4.0	-	-	-	5.0	5.8	-	6.7	-	-	5.0	5.9
2001	-	-	5.2	-	4.8	5.0	5.6	6.1	6.0	6.8	-	-	5.6	6.0
2002	12.0	-	5.0	-	5.4	10.0	6.6	5.9	5.4	-	-	-	5.8	6.0
2003	7.3	-	-	-	5.3	5.1	6.2	6.4	5.8	7.1	-	-	5.7	6.0
2004	5.0	-	5.0	-	5.5	5.9	6.0	6.7	7.9	7.3	7.4	-	6.2	6.8
2005	3.7	-	3.9	-	4.5	6.1	6.9	7.0	5.5	-	-	-	6.3	6.8
2006	5.5	-	4.3	-	5.6	5.9	6.4	7.1	6.3	10.1	-	-	6.1	7.7

a/ All values in this table are based on preliminary information available at the start of each year's review. Treaty Indian statistics include landings from Puget Sound.

b/ Season totals include additional winter treaty Indian troll.

c/ The non-Indian fishery for Chinook was closed north of Cape Falcon, however, Chinook were caught off Oregon and landed in Washington.

TABLE D-4. California troll combined Chinook and coho salmon landings in dressed weight, value of landings and number of registered vessels making commercial salmon landings.^{a/} (Page 1 of 1)

Year	Dressed Pounds Landed (thousands)	Nominal Exvessel Value (\$ thousands)	Vessels Landing Salmon	Vessels with Permits	Nominal Average Exvessel Value/Vessel (dollars)	Real Average Exvessel Value/Vessel (2005 dollars)
1960	6,221	3,339	1,365	-	2,446	13,504
1961	8,638	4,698	1,615	-	2,909	15,880
1962	6,673	4,023	1,563	-	2,574	13,861
1963	7,849	3,959	1,611	-	2,457	13,095
1964	9,481	5,013	1,774	-	2,826	14,831
1965	9,674	4,989	2,001	-	2,493	12,851
1966	9,447	4,845	1,929	-	2,512	12,588
1967	7,402	3,945	2,137	-	1,846	8,974
1968	6,952	4,014	2,249	-	1,785	8,321
1969	6,151	3,843	2,125	-	1,808	8,033
1970	6,629	5,101	2,065	-	2,470	10,421
1971	8,117	4,757	2,221	-	2,142	8,605
1972	6,423	4,830	2,392	-	2,019	7,775
1973	9,669	8,991	2,848	-	3,157	11,513
1974	8,749	8,013	3,185	-	2,516	8,415
1975	6,925	6,972	3,150	-	2,213	6,765
1976	7,788	10,707	3,526	-	3,037	8,775
1977	5,920	12,074	3,797	-	3,180	8,639
1978	6,788	11,001	4,919	-	2,236	5,677
1979	8,746	19,659	4,593	-	4,280	10,034
1980	6,017	13,149	4,738	-	2,775	5,965
1981	6,012	14,322	4,102	-	3,491	6,860
1982	8,000	19,489	4,013	5,964	4,856	8,993
1983	2,411	4,608	3,223	4,617	1,430	2,547
1984	2,970	7,562	2,569	4,180	2,944	5,054
1985	4,600	11,515	2,308	3,869	4,989	8,313
1986	7,598	15,112	2,582	3,753	5,853	9,541
1987	9,293	25,623	2,442	3,533	10,493	16,651
1988	14,750	41,927	2,571	3,493	16,308	25,024
1989	5,720	13,485	2,534	3,464	5,322	7,869
1990	4,436	12,056	2,115	3,372	5,700	8,115
1991	3,697	9,047	1,769	3,242	5,114	7,035
1992	1,643	4,505	1,085	2,974	4,152	5,583
1993	2,537	5,707	1,240	2,741	4,602	6,049
1994	3,103	6,437	1,024	2,470	6,286	8,090
1995	6,633	11,693	1,104	2,344	10,591	13,357
1996	4,113	5,984	985	2,221	6,075	7,519
1997	5,248	7,288	835	2,076	8,728	10,625
1998	1,847	3,060	670	1,899	4,567	5,499
1999	3,846	7,429	666	1,800	11,155	13,239
2000	5,131	10,304	759	1,704	13,576	15,769
2001	2,409	4,773	689	1,650	6,927	7,860
2002	5,008	7,776	708	1,586	10,982	12,244
2003	6,392	12,181	584	1,521	20,858	22,790
2004	6,230	17,895	741	1,475	24,150	25,711
2005	4,347	12,913	680	1,426	18,990	19,681
2006 ^{b/}	1,030	5,261	474	1,386	11,099	11,099

a/ Derived from vessel registrations and fish landing tickets.

b/ Preliminary.

TABLE D-5. Oregon troll combined Chinook and coho salmon landings in dressed weight, value of landings and number of registered vessels making commercial salmon landings.^{a/} (Page 1 of 1)

Year	Dressed Pounds Landed (thousands)	Nominal Exvessel Value (\$ thousands)	Vessels Landing Salmon	Vessels with Permits	Nominal Average Exvessel Value/Vessel	Real Average Exvessel Value/Vessel (2005 dollars)
1974	-	7,937	2,253	-	3,523	11,784
1975	-	5,808	2,304	-	2,521	7,705
1976	10,983	14,681	2,770	-	5,300	15,315
1977	6,209	11,202	3,108	-	3,604	9,792
1978	4,673	7,340	3,158	-	2,324	5,900
1979	7,166	16,989	3,114	-	5,456	12,790
1980 ^{b/}	4,362	8,185	3,875	4,314	2,112	4,540
1981	4,897	9,573	3,615	3,926	2,648	5,203
1982	5,060	9,895	3,269	3,646	3,027	5,605
1983	1,753	2,296	2,951	3,439	778	1,386
1984 ^{c/}	621	1,611	771	3,203	2,090	3,588
1985 ^{d/}	2,514	5,774	2,050	2,993	2,817	4,693
1986	5,275	7,954	2,288	2,739	3,476	5,667
1987	7,098	16,763	2,111	2,626	7,941	12,601
1988	7,723	21,536	2,061	2,597	10,449	16,035
1989	5,528	10,025	1,937	2,569	5,176	7,653
1990	2,815	6,641	1,557	2,528	4,265	6,072
1991 ^{e/}	2,106	3,120	1,217	2,044	2,564	3,526
1992	1,220	2,712	649	2,111	4,179	5,619
1993	769	1,671	612	1,814	2,730	3,588
1994	287	690	371	1,569	1,860	2,393
1995	1,941	3,294	476	1,465	6,920	8,727
1996	1,926	3,007	455	1,377	6,609	8,179
1997	1,542	2,469	433	1,295	5,702	6,942
1998	1,398	2,297	373	1,201	6,159	7,415
1999	722	1,401	328	1,111	4,271	5,069
2000	1,552	3,063	399	1,062	7,677	8,917
2001 ^{f/}	2,949	4,721	449	1,175	10,515	11,930
2002 ^{f/}	3,498	5,391	468	1,175	11,519	12,842
2003 ^{f/}	3,681	7,222	494	1,178	14,620	15,974
2004 ^{f/}	2,920	9,919	595	1,181	16,670	17,748
2005 ^{f/}	2,691	8,503	565	1,168	15,050	16,023
2006 ^{f/}	499	2,701	357	1,127	7,565	7,565

a/ Derived from vessel registrations and fish landing tickets.

b/ In 1980, the establishment of a restricted vessel permit system drew a number of historically active vessels back into the fishery.

c/ In 1984, vessels were not required to land at least one salmon to be eligible for a permit in 1985. The Oregon Fish and Wildlife Commission waived this requirement because of the elimination of the coho fishery south of

d/ In 1985, vessels traditionally landing salmon south of Cape Blanco and north of Cape Falcon were not required to land at least one salmon to be eligible for a permit in 1986. The Oregon Fish and Wildlife Commission waived this requirement because of the complete salmon closure south of Cape Blanco and a limited one-day coho season between the Columbia River and Cape Blanco.

e/ During the 1991 session of the Oregon Legislature, legislation passed waiving the requirement that troll permit holders must buy a 1991 permit to be able to renew for 1992. This was a one-time exemption for 1991 only.

f/ Permits were reissued in a lottery, because the total number of permits had fallen below 1,200.

TABLE D-6. Washington non-Indian troll combined Chinook and coho salmon landings in dressed weight, value of landings and number of registered vessels making commercial salmon landings.^{a/} (Page 1 of 1)

Year	Dressed Pounds Landed (thousands)	Nominal Exvessel Value (\$ thousands)	Vessels Landing Salmon	Vessels w ith Permits	Nominal Average Exvessel Value/Vessel	Real Average Exvessel Value/Vessel (2005 dollars)
1978	4,746	10,025	3,041	3,291	3,297	8,368
1979	5,262	15,091	2,778	3,068	5,432	12,735
1980	3,398	7,114	2,626	2,797	2,709	5,823
1981	2,678	5,921	2,439	2,603	2,428	4,770
1982	2,671	6,730	2,253	2,512	2,987	5,531
1983	653	1,465	2,045	2,328	716	1,276
1984 ^{b/}	197	410	381	2,071	1,076	1,848
1985 ^{c/}	964	1,601	1,259	1,650	1,272	2,119
1986	659	1,175	1,252	1,531	938	1,530
1987	758	1,960	883	1,401	2,219	3,522
1988	798	2,337	650	1,337	3,595	5,517
1989	696	1,230	883	1,306	1,393	2,060
1990	850	1,648	897	1,170	1,837	2,616
1991	612	1,126	811	1,013	1,388	1,910
1992	583	1,299	604	806	2,151	2,892
1993	398	795	474	668	1,677	2,204
1994 ^{d/f/}	7	e/	1	7	e/	e/
1995 ^{g/}	126	117	96	435	1,214	1,530
1996	86	83	90	333	925	1,145
1997 ^{h/}	80	125	51	324	2,451	2,984
1998 ^{i/}	82	123	23	299	5,345	6,435
1999	219	396	57	214	6,947	8,245
2000 ^{j/}	162	258	49	179	5,274	6,126
2001	290	383	57	169	6,718	7,622
2002	679	758	75	165	10,102	11,262
2003	875	991	82	163	12,087	13,207
2004	594	1,185	86	160	13,779	14,670
2005	481	1,290	91	157	14,170	15,087
2006	231	1,045	84	157	12,440	12,440

a/ Derived from vessel registrations and fish landing tickets. All values in this table are based on preliminary information available.

b/ 312 licenses and delivery permits purchased by buyback program.

c/ 118 licenses and delivery permits purchased by buyback program.

d/ Chinook were caught off Oregon and landed in Puget Sound.

e/ Value information is not provided in order to preserve confidentiality.

f/ Vessels were not required to purchase a permit in 1994 to maintain their eligibility for a permit in 1995.

g/ 190 licenses and delivery permits purchased by buyback program.

h/ 72 licenses and delivery permits purchased by buyback program at the end of 1996 and early 1997.

i/ 100 licenses and delivery permits purchased by buyback program at the end of 1997 and early 1998.

j/ 41 licenses purchased by buyback program at the end of 2000.

TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon.^{a/} (Page 1 of 4)

Year	Vessels			Catch ^{c/}		
	Length Category (feet)	Number ^{b/}	Percent of Total	Average Per Boat (pounds)	Total (pounds)	Percent of Total
2006 ^{d/}	<20	19	4%	338	6,416	1%
	21-25	84	18%	928	77,959	8%
	26-30	78	16%	1,457	113,622	11%
	31-35	105	22%	2,273	238,632	23%
	36-40	88	19%	2,932	258,058	25%
	41-45	59	12%	3,722	219,594	21%
	46-50	30	6%	2,851	85,517	8%
	51-55	7	1%	3,397	23,782	2%
	>56	4	1%	1,533	6,131	1%
	TOTAL	474		2,172	1,029,711	
2005 ^{d/}	<20	34	5%	840	28,546	1%
	21-25	107	16%	2,249	240,668	6%
	26-30	107	16%	3,325	355,799	8%
	31-35	132	19%	6,127	808,775	19%
	36-40	130	19%	7,754	1,008,071	23%
	41-45	84	12%	10,779	905,449	21%
	46-50	62	9%	11,429	708,576	16%
	51-55	13	2%	15,821	205,679	5%
	>56	11	2%	7,802	85,827	2%
	TOTAL	680		6,393	4,347,390	
2004	<20	39	5%	1,121	43,706	1%
	21-25	118	16%	2,203	259,933	4%
	26-30	112	15%	3,288	368,224	6%
	31-35	144	19%	7,202	1,037,078	17%
	36-40	141	19%	9,880	1,393,035	22%
	41-45	84	11%	16,223	1,362,724	22%
	46-50	66	9%	17,814	1,175,700	19%
	51-55	18	2%	21,405	385,281	6%
	>56	19	3%	10,764	204,515	3%
	TOTAL	741		8,408	6,230,196	
2003	<20	22	4%	1,966	43,251	1%
	21-25	104	18%	2,665	277,192	4%
	26-30	94	16%	4,208	395,574	6%
	31-35	111	19%	8,288	919,974	14%
	36-40	113	19%	14,938	1,687,971	26%
	41-45	68	12%	20,592	1,400,250	22%
	46-50	48	8%	24,450	1,173,576	18%
	51-55	12	2%	24,685	296,220	5%
	>56	12	2%	16,468	197,613	3%
	TOTAL	584		10,945	6,391,621	
2002	<20	34	5%	1,314	44,687	1%
	21-25	123	17%	2,211	271,972	5%
	26-30	111	16%	3,137	348,249	7%
	31-35	122	17%	5,760	702,716	14%
	36-40	147	21%	9,090	1,336,204	27%
	41-45	79	11%	13,411	1,059,442	21%
	46-50	64	9%	11,734	750,989	15%
	51-55	15	2%	19,988	299,817	6%
	>56	13	2%	14,880	193,446	4%
	TOTAL	708		7,073	5,007,522	

TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon.^{a/} (Page 2 of 4)

Year	Vessels			Catch ^{c/}		
	Length Category (feet)	Number ^{b/}	Percent of Total	Average Per Boat (pounds)	Total (pounds)	Percent of Total
2001	<20	26	4%	559	14,529	1%
	21-25	117	17%	1,117	130,707	5%
	26-30	105	15%	2,212	232,279	10%
	31-35	124	18%	3,308	410,150	17%
	36-40	145	21%	4,627	670,878	28%
	41-45	76	11%	6,087	462,586	19%
	46-50	64	9%	5,245	335,652	14%
	51-55	18	3%	5,324	95,824	4%
	>56	14	2%	4,000	56,006	2%
	TOTAL	689		3,496	2,408,611	
2000	<20	41	5%	1,348	55,282	1%
	21-25	139	18%	2,502	347,743	7%
	26-30	116	15%	3,850	446,629	9%
	31-35	130	17%	6,389	830,573	16%
	36-40	165	22%	8,183	1,350,228	26%
	41-45	73	10%	11,447	835,622	16%
	46-50	66	9%	12,811	845,530	16%
	51-55	17	2%	17,942	305,017	6%
	>56	12	2%	9,512	114,139	2%
	TOTAL	759		6,760	5,130,763	
1999	<20	41	6%	891	36,524	1%
	21-25	125	19%	2,259	282,366	7%
	26-30	88	13%	3,712	326,697	8%
	31-35	131	20%	5,196	680,635	18%
	36-40	139	21%	7,867	1,093,568	28%
	41-45	65	10%	10,422	677,411	18%
	46-50	55	8%	10,202	561,119	15%
	51-55	15	2%	9,101	136,509	4%
	>56	7	1%	7,275	50,928	1%
	TOTAL	666		5,774	3,845,757	
1998	<20	45	7%	934	42,044	2%
	21-25	154	23%	1,406	216,593	12%
	26-30	101	15%	2,277	229,951	12%
	31-35	119	18%	2,604	309,870	17%
	36-40	129	19%	4,040	521,184	28%
	41-45	64	10%	4,514	288,916	16%
	46-50	40	6%	4,764	190,579	10%
	51-55	11	2%	3,256	35,821	2%
	>56	6	1%	2,018	12,105	1%
	TOTAL	669		2,761	1,847,063	
1997	<20	54	6%	1,482	80,022	2%
	21-25	197	24%	2,791	549,756	10%
	26-30	126	15%	4,462	562,213	11%
	31-35	144	17%	6,358	915,510	17%
	36-40	157	19%	8,500	1,334,555	25%
	41-45	78	9%	11,281	879,913	17%
	46-50	54	6%	13,156	710,418	14%
	51-55	13	2%	11,806	153,476	3%
	>56	12	1%	5,161	61,929	1%
	TOTAL	835		6,285	5,247,792	

TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon.^{a/} (Page 3 of 4)

Year	Vessels			Catch ^{c/}		
	Length Category (feet)	Number ^{b/}	Percent of Total	Average Per Boat (pounds)	Total (pounds)	Percent of Total
1996	<20	66	7%	1,500	99,021	2%
	21-25	221	22%	1,793	396,205	10%
	26-30	163	17%	2,648	431,620	10%
	31-35	161	16%	4,315	694,793	17%
	36-40	176	18%	5,945	1,046,274	25%
	41-45	97	10%	7,311	709,120	17%
	46-50	73	7%	7,984	582,826	14%
	51-55	14	1%	7,751	108,511	3%
	>56	14	1%	3,217	45,032	1%
	TOTAL	985		4,176	4,113,402	
1995	<20	88	7%	1,478	130,074	2%
	21-25	295	25%	2,905	856,987	13%
	26-30	188	16%	4,542	853,887	13%
	31-35	176	15%	6,636	1,167,899	18%
	36-40	210	18%	8,147	1,710,765	26%
	41-45	105	9%	8,748	918,546	14%
	46-50	82	7%	8,480	695,374	10%
	51-55	21	2%	10,708	224,861	3%
	>56	14	1%	5,362	75,068	1%
	TOTAL	1,179		5,626	6,633,461	
1994	<20	78	8%	584	45,530	1%
	21-25	254	25%	1,425	362,007	12%
	26-30	170	17%	2,085	354,515	11%
	31-35	151	15%	3,340	504,287	16%
	36-40	188	18%	4,719	887,232	29%
	41-45	94	9%	5,878	552,514	18%
	46-50	69	7%	4,001	276,100	9%
	51-55	13	1%	8,541	111,033	4%
	>56	7	1%	1,412	9,887	0%
	TOTAL	1,024		3,030	3,103,105	
1993	<20	101	8%	447	45,103	2%
	21-25	321	26%	1,028	330,110	13%
	26-30	218	18%	1,538	335,333	13%
	31-35	167	13%	2,467	411,989	16%
	36-40	216	17%	3,103	670,209	26%
	41-45	103	8%	3,859	397,525	16%
	46-50	78	6%	3,050	237,930	9%
	51-55	22	2%	4,205	92,500	4%
	>56	14	1%	1,156	16,185	1%
	TOTAL	1,240		2,046	2,536,884	
1992	<20	98	9%	347	33,962	2%
	21-25	279	26%	838	233,894	14%
	26-30	190	18%	1,178	223,847	14%
	31-35	158	15%	1,535	242,532	15%
	36-40	180	17%	2,579	464,288	28%
	41-45	87	8%	2,842	247,249	15%
	46-50	64	6%	1,720	110,058	7%
	51-55	19	2%	3,719	70,668	4%
	>56	10	1%	1,691	16,906	1%
	TOTAL	1,085		1,515	1,643,404	

TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon.^{a/} (Page 4 of 4)

Year	Vessels			Catch ^{c/}		
	Length Category (feet)	Number ^{b/}	Percent of Total	Average Per Boat (pounds)	Total (pounds)	Percent of Total
1991	<20	196	11%	540	105,895	3%
	21-25	427	24%	944	403,026	11%
	26-30	300	17%	1,489	446,841	12%
	31-35	219	12%	2,284	500,112	14%
	36-40	309	17%	3,194	987,011	27%
	41-45	148	8%	4,315	638,649	17%
	46-50	118	7%	3,814	450,025	12%
	51-55	27	2%	4,852	130,991	4%
	56-60	13	1%	1,514	19,681	1%
	>60	9	1%	1,594	14,349	0%
	Unknown	3	0%	226	677	0%
	TOTAL	1,769		2,090	3,697,257	

a/ Derived from vessel registrations and fish landing tickets.

b/ Number of boats includes only those recording pounds greater than 0.

c/ Excludes pink salmon landings.

d/ Preliminary.

TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon. (Page 1 of 3)

Year	Vessels			Catch		
	Length Category (feet)	Number ^{a/}	Percent of Total	Average Per Boat (pounds)	Total (pounds)	Percent of Total
2006 ^{b/}	<20	3	1%	1,094	3,281	0%
	20-29	78	13%	662	51,607	2%
	30-39	124	21%	1,484	184,030	7%
	40-49	127	21%	1,672	212,290	8%
	>50	25	4%	1,898	47,462	2%
	TOTAL	357		1,397	498,670	
2005 ^{b/}	<20	7	1%	335	2,343	0%
	20-29	122	21%	1,716	209,336	8%
	30-39	186	31%	4,878	907,312	34%
	40-49	188	32%	6,436	1,209,982	45%
	>50	62	10%	5,840	362,051	13%
	TOTAL	565		4,763	2,691,024	
2004	<20	4	1%	721	2,883	0%
	20-29	120	20%	2,266	271,944	9%
	30-39	205	34%	5,149	1,055,574	36%
	40-49	199	33%	6,360	1,265,683	44%
	>50	67	11%	4,668	312,752	11%
	TOTAL	595		4,889	2,908,836	
2003	<20	4	1%	957	3,829	0%
	20-29	120	24%	2,425	291,051	8%
	30-39	167	34%	7,702	1,286,218	35%
	40-49	152	31%	10,170	1,545,898	42%
	>50	48	10%	11,220	538,580	15%
	TOTAL	491		7,466	3,665,576	
2002	<20	3	1%	1,760	5,281	0%
	20-29	103	22%	3,488	359,299	10%
	30-39	179	38%	7,931	1,419,713	41%
	40-49	140	30%	10,092	1,412,864	40%
	>50	42	9%	7,173	301,280	9%
	TOTAL	467		7,491	3,498,437	
2001	<20	6	1%	1,271	7,626	0%
	20-29	102	23%	2,768	282,386	10%
	30-39	170	38%	6,894	1,172,058	40%
	40-49	141	31%	9,175	1,293,723	44%
	>50	30	7%	6,488	194,652	7%
	TOTAL	449		6,571	2,950,445	
2000	<20	3	1%	2,056	6,169	0%
	20-29	100	25%	1,933	193,346	12%
	30-39	157	39%	4,726	741,968	48%
	40-49	111	28%	4,594	509,986	33%
	>50	28	7%	3,606	100,965	7%
	TOTAL	399		3,891	1,552,434	

TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon. (Page 2 of 3)

Year	Vessels			Catch		
	Length Category (feet)	Number ^{a/}	Percent of Total	Average Per Boat (pounds)	Total (pounds)	Percent of Total
1999	<20	6	2%	1,131	6,783	1%
	20-29	68	21%	1,205	81,964	11%
	30-39	140	43%	2,517	352,355	49%
	40-49	93	28%	2,499	232,418	32%
	>50	21	6%	2,298	48,263	7%
	TOTAL	328		2,201	721,783	
1998	<20	5	1%	1,536	7,679	1%
	20-29	65	17%	1,036	67,332	5%
	30-39	163	44%	3,673	598,702	43%
	40-49	110	29%	5,395	593,433	42%
	>50	30	8%	4,351	130,537	9%
	TOTAL	373		3,747	1,397,683	
1997	<20	5	1%	1,149	5,743	0%
	20-29	98	23%	838	82,089	5%
	30-39	185	43%	3,976	735,478	48%
	40-49	114	26%	5,401	615,756	40%
	>50	31	7%	3,322	102,982	7%
	TOTAL	433		3,561	1,542,048	
1996	<20	6	1%	2,088	12,530	1%
	20-29	117	26%	1,009	118,069	6%
	30-39	186	41%	5,010	931,895	48%
	40-49	115	25%	6,466	743,584	39%
	>50	32	7%	3,720	119,048	6%
	TOTAL	456		4,222	1,925,126	
1995	<20	8	2%	1,561	12,486	1%
	20-29	142	30%	1,190	168,999	9%
	30-39	185	39%	4,571	845,647	44%
	40-49	111	23%	6,884	764,118	39%
	>50	30	6%	4,995	149,846	8%
	TOTAL	476		4,078	1,941,096	
1994	<20	7	2%	968	6,776	2%
	20-29	114	31%	435	49,573	17%
	30-39	153	41%	825	126,188	44%
	40-49	85	23%	1,080	91,834	32%
	>50	12	3%	1,032	12,382	4%
	TOTAL	371		773	286,753	
1993	<20	10	2%	662	6,619	1%
	20-29	206	34%	558	115,029	15%
	30-39	236	39%	1,549	365,597	47%
	40-49	128	21%	1,888	241,663	31%
	>50	32	5%	1,282	41,029	5%
	TOTAL	612		1,258	769,937	

TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon. (Page 3 of 3)

Year	Vessels			Catch		
	Length Category (feet)	Number ^{a/}	Percent of Total	Average Per Boat (pounds)	Total (pounds)	Percent of Total
1992	<20	7	1%	706	4,945	0%
	20-29	242	37%	849	205,466	17%
	30-39	245	38%	2,384	584,162	48%
	40-49	134	21%	2,911	390,040	32%
	>50	21	3%	1,630	34,231	3%
	TOTAL	649		1,878	1,218,844	
1991	<20	22	2%	621	13,672	1%
	20-29	568	47%	1,266	719,071	34%
	30-39	365	30%	2,138	780,386	37%
	40-49	209	17%	2,468	515,790	24%
	>50	53	4%	1,590	84,279	4%
	TOTAL	1,217		1,736	2,113,198	

a/ Number of boats includes only those with at least one landing containing troll caught salmon.

b/ Preliminary.

TABLE D-9. Washington non-Indian salmon troll boat-size catch statistics in pounds of dressed salmon.^{a/b/} (Page 1 of 2)

Year	Vessels			Catch		
	Length Category (feet)	Number ^{c/}	Percent of Total	Average Per Boat (pounds)	Total (pounds)	Percent of Total
2006	<25	3	4%	2,398	7,194	3%
	25-36	24	29%	1,983	47,593	21%
	>36	56	67%	3,073	172,069	74%
	Unknown	1	1%	4,804	4,804	2%
	TOTAL	84		12,258	231,660	
2005	<25	6	7%	4,309	25,854	5%
	25-36	24	26%	4,801	115,228	24%
	>36	60	66%	5,540	332,400	69%
	Unknown	1	1%	7,088	7,088	1%
	TOTAL	91		21,738	480,570	
2004	<25	8	9%	4,463	35,700	6%
	25-36	20	23%	5,797	115,933	20%
	>36	56	65%	7,749	433,952	73%
	Unknown	2	2%	4,464	8,927	2%
	TOTAL	86		6,913	594,512	
2003	<25	10	12%	6,141	61,407	7%
	25-36	19	23%	7,433	141,235	16%
	>36	53	65%	12,715	673,876	77%
	Unknown	0	-	-	-	-
	TOTAL	82		10,689	876,518	
2002	<25	7	9%	7,326	51,283	8%
	25-36	17	23%	6,275	106,668	16%
	>36	50	67%	9,931	496,565	73%
	Unknown	1	1%	25,133	25,133	4%
	TOTAL	75		9,062	679,649	
2001	<25	3	5%	4,534	13,603	5%
	25-36	15	26%	3,960	59,403	20%
	>36	39	68%	5,576	217,467	75%
	Unknown	0	-	-	-	-
	TOTAL	57		5,096	290,473	
2000	<25	3	6%	873	2,620	2%
	25-36	13	27%	3,401	44,218	27%
	>36	29	59%	3,627	105,171	65%
	Unknown	4	8%	2,573	10,291	6%
	TOTAL	49		3,312	162,300	
1999	<25	5	9%	2,511	12,557	6%
	25-36	14	25%	3,731	52,237	24%
	>36	35	61%	4,333	151,638	69%
	Unknown	3	5%	1,220	3,661	2%
	TOTAL	57		3,861	220,093	

TABLE D-9. Washington non-Indian salmon troll boat-size catch statistics in pounds of dressed salmon.^{a/b/} (Page 2 of 2)

Year	Vessels			Catch		
	Length Category (feet)	Number ^{c/}	Percent of Total	Average Per Boat (pounds)	Total (pounds)	Percent of Total
1998	<25	3	13%	545	1,634	2%
	25-36	6	26%	2,842	17,050	21%
	>36	13	57%	4,799	62,385	76%
	Unknown	1	4%	522	522	1%
	TOTAL	23		3,547	81,591	
1997	<25	7	14%	322	2,253	3%
	25-36	16	31%	1,468	23,491	29%
	>36	26	51%	2,096	54,500	67%
	Unknown	2	4%	352	703	1%
	TOTAL	51		1,587	80,947	
1996	<25	39	43%	709	27,664	31%
	25-36	24	27%	868	20,826	23%
	>36	20	22%	1,372	27,440	31%
	Unknown	7	8%	1,861	13,029	15%
	TOTAL	90		988	88,959	
1995	<25	45	47%	1,864	83,901	36%
	25-36	30	31%	2,936	88,083	38%
	>36	17	18%	2,950	50,144	22%
	Unknown	4	4%	2,351	9,403	4%
	TOTAL	96		2,412	231,531	
1994 ^{d/}	<25	0	-	-	-	-
	25-36	0	-	-	-	-
	>36	1	100%	7,263	7,263	100%
	Unknown	0	-	-	-	-
	TOTAL	1		7,263	7,263	
1993	<25	174	37%	235	40,879	10%
	25-36	134	28%	627	84,005	20%
	>36	145	31%	1,832	265,684	65%
	Unknown	21	4%	924	19,406	5%
	TOTAL	474		865	409,974	
1992	<25	241	40%	276	66,617	11%
	25-36	167	28%	727	121,416	21%
	>36	170	28%	2,175	369,833	63%
	Unknown	26	4%	956	24,848	4%
	TOTAL	604		965	582,714	
1991	<25	292	36%	426	124,397	16%
	25-36	204	25%	729	148,643	19%
	>36	212	26%	1,859	394,075	51%
	Unknown	103	13%	1,006	103,637	13%
	TOTAL	811		950	770,752	

a/ All values in this table are based on preliminary information available at the start of each year's review.

b/ Excludes pink salmon landings.

c/ Number of boats includes only those recording pounds greater than 0.

d/ The fishery was closed north of Cape Falcon, however, Chinook were caught off Oregon and landed in Puget Sound.

TABLE D-10. Preliminary California salmon landings (in pounds of dressed salmon) and exvessel values by vessel size categories and ports from Crescent City to Morro Bay South, 2006. (Page 1 of 1)

Port	Length Category (feet)	Number of Deliveries	Total Dressed Pounds Landed	Total Exvessel Value (dollars)	Percent Exvessel Value Landed in Port
Crescent City	<25	-	-	-	-
	26-30	-	-	-	-
	>36	-	-	-	-
	TOTAL	-	-	-	-
Eureka ^{a/}	<25	-	-	-	-
	26-30	-	-	-	-
	>36	-	-	-	-
	TOTAL	-	-	-	-
Shelter Cove	<25 ^{b/}	6	886 ^{b/}	4,508	100%
	26-30	-	-	-	-
	>36	c/	c/	c/	-
	TOTAL	6	0	4,508	-
Fort Bragg ^{d/}	<25	55	14,571	73,797	5%
	26-30	164	62,820	317,399	24%
	>36	387	193,384	952,035	71%
	TOTAL	606	270,775	1,343,231	-
Bodega Bay	<25	459	49,885	247,319	11%
	26-30	785	182,581	890,729	39%
	>36	646	230,281	1,122,254	50%
	TOTAL	1,890	462,747	2,260,302	-
San Francisco	<25	64	5,869	32,347	6%
	26-30	132	39,955	207,056	40%
	>36	186	58,079	284,524	54%
	TOTAL	382	103,903	523,927	-
Half Moon Bay	<25	3	120	626	0%
	26-30	184	33,342	187,965	31%
	>36	266	73,592	422,816	69%
	TOTAL	453	107,054	611,407	-
Santa Cruz	<25	28	899	5,915	3%
	26-30	125	14,289	87,767	39%
	>36	83	20,860	129,575	58%
	TOTAL	236	36,048	223,257	-
Moss Landing	<25	209	7,247	43,573	24%
	26-30	193	13,706	84,392	46%
	>36	45	8,839	55,902	30%
	TOTAL	447	29,792	183,867	-
Monterey	<25	101	3,774	22,235	52%
	26-30	48	2,827	12,558	30%
	>36	25	1,357	7,694	18%
	TOTAL	174	7,958	42,487	-
Morro Bay south	<25	32	1,204	7,575	11%
	26-30	43	2,735	18,016	26%
	>36	57	6,610	42,636	62%
	TOTAL	132	10,549	68,227	-

a/ Eureka includes minor landings made in Trinidad port area.

b/ Includes one vessel greater than 36 feet in length.

c/ Fewer than 3 vessels. Values combined with next category above to preserve confidentiality.

d/ Fort Bragg includes minor landings made in Mendocino port area.

TABLE D-11. Preliminary 2006 Washington non-Indian troll salmon landings (in pounds of dressed salmon) and exvessel value by vessel size category and port area.^{a/b/} (Page 1 of 1)

Port Area	Length Category (feet)	Number of Boats	Number of Boat Days Fished	Total Dressed Pounds Landed	Total Exvessel Value (dollars)	Percent Exvessel Value Landed in Port
Neah Bay and Puget Sound	<25	2	c/	c/	c/	c/
	25-36 ^{d/}	4	56	13,952	53,491	16%
	>36	24	409	75,235	283,185	84%
	Unknown					-
	TOTAL	30	465	89,187	336,676	
La Push	<25	0	-	-	-	-
	25-36	10	97	17,113	64,615	23%
	>36	6	235	44,915	187,872	68%
	Unknown	1	27	4,804	23,910	9%
	TOTAL	17	359	66,832	276,397	
Westport	<25	1	c/	c/	c/	c/
	25-36 ^{d/}	14	216	19,287	102,638	44%
	>36	30	183	23,850	129,190	56%
	Unknown	0				-
	TOTAL	45	399	43,137	231,828	
Ilwaco	<25	0	-	-	-	-
	25-36	2	c/	c/	c/	c/
	>36 ^{d/}	12	143	27,062	181,327	100%
	Unknown					-
	TOTAL	14	143	27,062	181,327	
Puget Sound ^{e/}	<25	0	-	-	-	-
	25-36	4	12	2,338	7,558	40%
	>36	4	13	3,104	11,464	60%
	Unknown	0	-	-	-	-
	TOTAL	8	25	5,442	19,022	

a/ Preliminary.

b/ Total pounds and exvessel values reported in this table are less than are reported in other tables of the Review. The differences are 1% or less and likely related to vessel information missing for certain landings.

c/ Fewer than 3 vessels. Values combined with next category below to preserve confidentiality.

d/ Includes one or two vessels from the above size category.

e/ Landed on the coast and transported to Puget Sound for processing.

TABLE D-12. California number of vessels landing 50% and 90% of total pounds of salmon troll catch by year. (Page 1 of 1)

Year	Total Vessels	50% of Pounds Landed		90% of Pounds Landed	
		Number of Vessels	Percent of Fleet	Number of Vessels	Percent of Fleet
1978	4,919	542	11.0%	2,024	41.1%
1979	4,594	373	8.1%	1,641	35.7%
1980	4,738	431	9.1%	1,733	36.6%
1981	4,102	395	9.6%	1,599	39.0%
1982	4,013	438	10.9%	1,602	39.9%
1983	3,223	353	11.0%	1,268	39.3%
1984	2,569	213	8.3%	918	35.7%
1985	2,308	241	10.4%	898	38.9%
1986	2,582	302	11.7%	1,151	44.6%
1987	2,442	320	13.1%	1,080	44.2%
1988	2,571	409	15.9%	1,285	50.0%
1989	2,534	363	14.3%	1,244	49.1%
1990	2,115	295	13.9%	976	46.1%
1991	1,769	224	12.7%	791	44.7%
1992	1,085	131	12.1%	485	44.7%
1993	1,240	163	13.1%	554	44.7%
1994	1,024	141	13.8%	459	44.8%
1995	1,179	190	16.1%	581	49.3%
1996	985	128	13.0%	434	44.1%
1997	835	117	14.0%	377	45.1%
1998	670	90	13.4%	325	48.5%
1999	666	103	15.5%	316	47.4%
2000	759	117	15.4%	370	48.7%
2001	689	90	13.1%	328	47.6%
2002	708	89	12.6%	315	44.5%
2003	584	74	12.7%	237	40.6%
2004	741	108	14.6%	344	46.4%
2005	680	111	16.3%	341	50.1%
2006 ^{a/}	474	80	16.9%	236	49.8%

a/ Preliminary.

TABLE D-13. Oregon number of vessels landing 50% and 90% of total pounds of salmon troll catch by year.^{a/} (Page 1 of 1)

Year	Total Vessels	50% of Pounds Landed		90% of Pounds Landed	
		Number of Vessels	Percent of Fleet	Number of Vessels	Percent of Fleet
1974	1,914	326	17.0%	1,032	53.9%
1975	1,979	329	16.6%	1,054	53.3%
1976	2,770	453	16.4%	1,460	52.7%
1977	3,108	473	15.2%	1,597	51.4%
1978	3,157	446	14.1%	1,576	49.9%
1979	3,114	423	13.6%	1,449	46.5%
1980	3,875	372	9.6%	1,375	35.5%
1981	3,615	420	11.6%	1,391	38.5%
1982	3,269	359	11.0%	1,249	38.2%
1983	2,951	294	10.0%	1,082	36.7%
1984	771	88	11.4%	333	43.2%
1985	2,050	132	6.4%	514	25.1%
1986	2,284	238	10.4%	851	37.3%
1987	2,111	292	13.8%	928	44.0%
1988	2,061	337	16.4%	1,069	51.9%
1989	1,937	303	15.6%	959	49.5%
1990	1,557	221	14.2%	709	45.5%
1991	1,217	206	16.9%	651	53.5%
1992	649	87	13.4%	286	44.1%
1993	612	67	10.9%	235	38.4%
1994	371	43	11.6%	152	41.0%
1995	476	52	10.9%	184	38.7%
1996	456	62	13.6%	202	44.3%
1997	433	60	13.9%	184	42.5%
1998	373	51	13.7%	165	44.2%
1999	328	47	14.3%	150	45.7%
2000	399	68	17.0%	197	49.4%
2001	449	68	15.1%	221	49.2%
2002	467	76	16.3%	230	49.3%
2003	491	83	16.9%	254	51.7%
2004	595	110	18.5%	318	53.4%
2005 ^{b/}	565	103	18.2%	310	54.9%
2006 ^{b/}	357	67	18.8%	200	56.0%

a/ Includes licensed (permitted for 1980 on) and properly identified vessels only. Total poundage on which the numbers are based is not equal to total aggregate troll landings because of landings by unlicensed or misidentified vessels. Percentages of total pounds not credited to licensed (permitted) vessels were: 1974 -19%, 1975 - 19%, 1976 - 9.4%, 1977 - 8%, 1978 - 1.4%, 1979 - 0.2%, 1980 - 1.7%, 1981 - 0.11%, 1982-2002 - less than 0.05%, 2003 - 0.06%, 2004 -

b/ Preliminary.

TABLE D-14. Washington number of vessels landing 50% and 90% (by numbers of fish) of non-Indian troll salmon catch.^{a/}
(Page 1 of 1)

Year	Total Vessels	50% of Fish Landed		90% of Fish Landed	
		Number of Vessels	Percent of Fleet	Number of Vessels	Percent of Fleet
1978	3,041	223	7.3%	1,040	34.2%
1979	2,778	253	9.1%	946	34.1%
1980	2,626	206	7.8%	883	33.6%
1981	2,439	214	8.8%	810	33.2%
1982	2,253	181	8.0%	703	31.2%
1983	2,056	75	3.6%	409	19.9%
1984	374	55	14.7%	180	48.1%
1985	1,259	104	8.3%	443	35.2%
1986	1,252	100	8.0%	387	30.9%
1987	883	97	11.0%	385	43.6%
1988	650	51	7.8%	239	36.8%
1989	883	70	7.9%	268	30.4%
1990	897	111	12.4%	373	41.6%
1991	811	84	10.4%	344	42.4%
1992	604	59	9.8%	193	32.0%
1993	474	47	9.9%	162	34.2%
1994 ^{b/}	1	NA	NA	NA	NA
1995	96	13	13.5%	41	42.7%
1996	90	14	15.6%	45	50.0%
1997	51	7	13.7%	23	45.1%
1998	23	5	21.7%	12	52.2%
1999	57	10	17.5%	32	56.1%
2000	49	11	22.4%	28	57.1%
2001	57	12	21.1%	34	59.6%
2002	75	15	20.0%	42	56.0%
2003	82	18	22.0%	47	57.3%
2004	86	18	20.9%	53	61.6%
2005	91	25	27.5%	63	69.2%
2006	84	17	20.2%	48	57.1%

a/ All values in this table are based on preliminary information available at the start of each year's review and are not updated in subsequent years.

b/ The fishery was closed north of Cape Falcon, however, Chinook were caught off Oregon and landed in Puget Sound. Values omitted to preserve confidentiality.

TABLE D-15. Preliminary 2006 California, Oregon, and Washington troll fleet by home state and salmon landings and exvessel value.^{a/} (Page 1 of 1)

Home State	Number of Vessels	Percent	Landings (Pounds)	Percent	Total Value (Dollars)	Percent
CALIFORNIA						
California	461	97%	986,228	96%	5,063,289	96%
Oregon	6	1%	18,873	2%	91,243	2%
Washington	2	0%	16,901	2%	72,366	1%
Unknown/Other	5	1%	7,708	1%	34,314	1%
TOTAL	474		1,029,710		5,261,212	
OREGON						
Oregon	289	81%	386,537	78%	N/A	N/A
California	17	5%	24,523	5%	N/A	N/A
Washington	48	13%	84,829	17%	N/A	N/A
Unknown/Other	3	1%	2,781	1%	N/A	N/A
TOTAL	357		498,670			
WASHINGTON						
Washington	83	99%	231,005	100%	1,040,261	100%
Oregon	1	1%	655	0%	4,992	0%
California	0	0%	0	0%	0	0%
Unknown/Other	0	0%	0	0%	0	0%
TOTAL	84		231,660		1,045,253	

a/ Pinks excluded, except Oregon.

TABLE D-16. Vessels landing salmon in California by vessel length and skipper's state of residence. (Page 1 of 1)

Year	Home State ^{a/}														
	California (length)				Oregon (length)				Washington (length)				Total (length) ^{b/}		
	<26	26-36	>36	Subtotal	<26	26-36	>36	Subtotal	<26	26-36	>36	Subtotal	<26	26-36	>36
1978	2,325	1,165	1,006	4,496	97	176	262	535	5	16	85	106	2,462	1,365	1,378
1979	2,243	1,152	980	4,375	68	158	210	436	3	20	59	82	2,338	1,338	1,266
1980	2,069	1,248	1,138	4,455	97	163	228	488	6	25	90	121	2,189	1,447	1,478
1981	1,611	1,052	865	3,528	64	126	204	394	2	11	66	79	1,717	1,224	1,159
1982 ^{d/}	1,535	1,051	873	3,459	59	117	196	372	2	16	64	82	1,631	1,223	1,157
1983	1,223	891	733	2,847	41	82	125	248	0	13	34	47	1,292	1,020	909
1984	909	805	620	2,334	25	47	84	156	2	10	34	46	951	871	745
1985	769	731	630	2,130	6	23	66	95	2	7	15	24	795	784	726
1986	866	815	658	2,339	22	60	98	180	1	8	27	36	898	891	790
1987	831	759	641	2,231	11	42	85	138	2	4	34	40	854	816	769
1988	834	788	670	2,292	12	42	92	146	1	7	35	43	895	855	817
1989	865	771	652	2,288	11	46	94	151	4	4	42	50	880	821	788
1990	744	653	553	1,950	6	31	63	100	2	5	20	27	752	689	636
1991	615	548	465	1,628	3	34	57	94	2	6	13	21	620	588	535
1992	374	369	304	1,047	2	12	10	24	0	2	1	3	376	383	315
1993	414	422	347	1,183	2	11	22	35	0	3	4	7	421	440	379
1994	323	341	286	950	4	18	24	46	0	3	9	12	327	362	319
1995	372	395	326	1,093	4	21	38	63	0	2	8	10	376	418	372
1996	275	340	283	898	3	9	27	39	0	4	17	21	278	353	327
1997	245	297	242	784	1	8	19	28	1	1	4	6	250	314	271
1998	192	239	200	631	0	5	11	16	2	2	3	7	198	254	218
1999	161	209	249	619	0	6	20	26	1	0	6	7	166	219	281
2000	177	236	285	698	0	5	39	44	2	4	8	14	180	244	334
2001	142	221	286	649	0	4	23	27	1	3	7	11	1443	229	317
2002	153	229	285	667	1	3	28	32	2	0	4	6	157	233	318
2003	126	201	230	557	0	2	16	18	0	0	5	5	126	205	253
2004	155	250	288	693	1	3	28	32	0	2	11	13	157	256	328
2005	139	233	271	643	1	2	25	28	0	2	3	5	141	239	300
2006 ^{e/}	102	179	180	461	0	1	5	6	0	1	1	2	103	183	188

a/ "Home state" refers to the declared state of residence of vessel skipper, who, in most cases, is also the vessel owner.

b/ Includes vessels with home states other than California, Oregon, and Washington.

c/ Includes vessels of unknown lengths.

d/ Length category for 1982 is ≥ 36 .

e/ Preliminary.

TABLE D-17. Percentages of vessels landing troll salmon in Oregon by license holder's state of residence. (Page 1 of 1)

Year	Oregon	California	Washington	Other/Unknown
1977	83.8%	6.9%	8.7%	0.6%
1978	83.6%	5.9%	10.0%	0.5%
1979	82.5%	6.5%	10.3%	0.7%
1980	80.4%	8.5%	9.6%	1.5%
1981	81.2%	7.4%	9.9%	1.6%
1982	82.1%	6.3%	10.2%	1.4%
1983	85.0%	3.9%	10.1%	1.0%
1984	85.2%	2.9%	11.0%	0.9%
1985	86.9%	4.0%	8.0%	1.1%
1986	84.5%	5.2%	9.1%	1.2%
1987	81.7%	6.8%	10.2%	1.2%
1988	78.7%	6.4%	13.5%	1.3%
1989	80.0%	5.6%	12.9%	1.4%
1990	81.1%	6.7%	10.7%	1.5%
1991	83.8%	2.5%	12.1%	1.6%
1992	83.4%	3.4%	12.5%	0.8%
1993	85.8%	2.5%	11.1%	0.6%
1994	86.5%	1.1%	12.1%	0.3%
1995	85.5%	2.7%	10.7%	1.1%
1996	83.5%	2.0%	13.8%	0.7%
1997	85.0%	1.2%	12.5%	1.4%
1998	82.3%	0.8%	16.6%	0.3%
1999	87.2%	0.9%	11.6%	0.3%
2000	84.4%	1.8%	13.3%	0.5%
2001	81.1%	4.0%	14.3%	0.6%
2002	79.7%	3.9%	15.6%	9.8%
2003	79.2%	3.7%	15.9%	1.2%
2004	72.3%	10.3%	15.8%	1.7%
2005	73.3%	10.8%	14.2%	1.8%
2006 ^{a/}	81.0%	4.8%	13.4%	0.8%

a/ Preliminary.

TABLE D-18. Percentages of vessels landing non-Indian troll salmon in Washington by license holder's state of residence.^{a/}
(Page 1 of 1)

Year	Washington	Oregon	California	Alaska	Other/Unknown
1978	90.8%	4.6%	0.3%	0.2%	4.1%
1979	90.9%	3.8%	0.3%	0.3%	4.7%
1980	93.7%	3.6%	0.3%	0.3%	2.1%
1981	92.6%	3.0%	0.4%	0.2%	3.8%
1982	92.6%	4.1%	0.6%	0.0%	2.8%
1983	92.7%	2.8%	0.2%	0.1%	4.2%
1984	94.8%	1.6%	0.0%	0.0%	3.7%
1985	92.7%	3.3%	0.2%	0.2%	3.6%
1986	93.1%	1.7%	0.0%	0.1%	5.1%
1987	90.4%	1.3%	0.0%	0.3%	8.0%
1988	88.0%	1.8%	0.2%	1.5%	8.5%
1989	92.2%	0.9%	0.0%	1.0%	5.9%
1990	92.7%	0.7%	0.0%	0.1%	6.5%
1991	85.8%	0.7%	0.0%	0.0%	13.5%
1992	92.7%	2.0%	0.7%	0.3%	4.3%
1993	93.3%	0.8%	0.8%	0.0%	5.1%
1994 ^{b/}	100.0%	0.0%	0.0%	0.0%	0.0%
1995	95.8%	0.0%	0.0%	0.0%	4.2%
1996	93.3%	0.0%	0.0%	0.0%	6.7%
1997	96.1%	0.0%	0.0%	0.0%	3.9%
1998	95.7%	0.0%	0.0%	0.0%	4.3%
1999	94.7%	0.0%	0.0%	0.0%	5.3%
2000	91.8%	0.0%	0.0%	0.0%	8.2%
2001	100.0%	0.0%	0.0%	0.0%	0.0%
2002	96.1%	0.0%	0.0%	0.0%	3.9%
2003	100.0%	0.0%	0.0%	0.0%	0.0%
2004	96.5%	1.2%	0.0%	0.0%	2.3%
2005	95.6%	3.3%	0.0%	0.0%	1.1%
2006	98.8%	1.2%	0.0%	0.0%	0.0%

a/ All values in this table are based on preliminary information available at the start of each year's review .

b/ The fishery was closed north of Cape Falcon, however, Chinook were caught off Oregon and landed in Washington.

TABLE D-19. Number of California charter boats participating in the ocean recreational salmon fishery, by port area and activity level. (Page 1 of 1)

Year	Activity Level ^{a/}	Port Area						Total
		Monterey	San Francisco	Fort Bragg	Eureka	Crescent City	Unknown ^{b/}	
2006	Active	9	41	9	5	0	0	64
	Casual	15	17	2	4	0	0	38
	TOTAL	24	58	11	9	0	0	102
2005	Active	16	46	10	5	0	0	77
	Casual	9	17	1	3	0	0	30
	TOTAL	25	63	11	8	0	0	107
2004	Active	16	48	11	8	0	0	83
	Casual	7	12	1	1	1	0	22
	TOTAL	23	60	12	9	1	0	105
2003	Active	10	43	11	3	0	0	67
	Casual	14	10	2	4	0	0	30
	TOTAL	24	53	13	7	0	0	97
2002	Active	17	50	13	5	0	0	85
	Casual	23	6	4	2	0	0	35
	TOTAL	40	56	17	7	0	0	120
2001	Active	17	40	10	4	0	0	71
	Casual	6	21	2	1	1	0	31
	TOTAL	23	61	12	5	1	0	102
2000	Active	23	46	9	2	0	0	80
	Casual	2	15	0	2	1	0	20
	TOTAL	25	61	9	4	1	0	100
1999	Active	7	43	2	1	0	0	53
	Casual	14	28	11	3	0	0	56
	TOTAL	21	71	13	4	0	0	109
1998	Active	41	19	6	1	0	0	67
	Casual	16	38	2	3	0	0	59
	TOTAL	57	57	8	4	0	0	126
1997	Active	27	44	7	4	0	0	82
	Casual	18	15	2	3	0	0	38
	TOTAL	45	59	9	7	0	0	120
1996	Active	19	46	8	2	0	0	75
	Casual	27	18	3	2	1	0	51
	TOTAL	46	64	11	4	1	0	126
1995	Active	40	47	5	1	0	0	93
	Casual	51	15	0	3	1	1	71
	TOTAL	91	62	5	4	1	1	164
1994	Active	12	34	3	0	1	10	60
	Casual	17	18	3	3	1	0	42
	TOTAL	29	52	6	3	2	10	102
1993	Active	13	36	2	2	2	11	66
	Casual	37	14	3	3	0	4	61
	TOTAL	50	50	5	5	2	15	127

a/ Active vessels landed more than 100 salmon; casual vessels landed 100 salmon or less.

b/ Unknown vessels did not report port of landing or landed in two or more port areas during the season.

TABLE D-20. Number of charter boats licensed in Oregon. (Page 1 of 1)

Year	Total Number of Licensed Charter Boats ^{a/}	Oregon Resident License Holders	Washington Resident License Holders	Other State Resident License Holders
1980	194	192	2	0
1981	248	213	34	1
1982	253	212	40	1
1983	255	206	47	2
1984	218	185	31	2
1985	226	198	25	3
1986	247	216	26	5
1987	254	226	23	5
1988	313	266	42	5
1989	322	273	44	5
1990 ^{b/}	170	157	9	4
1991	171	161	7	3
1992	157	150	4	3
1993	148	144	2	2
1994	145	137	6	2
1995	134	NA	NA	NA
1996	127	121	6	0
1997	122	119	3	0
1998	129	125	4	0
1999	137	133	4	0
2000	143	139	4	0
2001	172	162	10	0
2002	181	172	9	0
2003	206	186	19	1
2004	203	184	18	1
2005	225	205	19	1
2006 ^{c/}	228	203	24	1

a/ Legislation that created the license requirement expired in 1987. Fees were between \$25 and \$100 from 1980-1987. The license requirement was reinstituted by rule in 1988 and 1989 with a \$10 fee.

b/ In 1990, responsibility for licensing of charter vessels was transferred to the Marine Board and fees for Oregon residents were increased from \$10 to between \$50 and \$100.

c/ Preliminary.

TABLE D-21. Number of salmon charter boats licensed in Washington (including Puget Sound). (Page 1 of 1)

Year	Number of Licenses	Washington Resident	Other State Resident	Buyback
	Issued	License Holders	License Holders	
1975	404	351	53	-
1976	427	362	65	-
1977 ^{a/}	569	NA	NA	-
1978	535	483	52	-
1979	516	473	43	-
1980	510	465	45	16
1981	478	443	35	3
1982	415	387	28	25
1983	375	354	21	19
1984	334	313	21	21
1985	288	268	20	19
1986	308	286	22	15
1987	280	269	11	-
1988	281	268	13	-
1989	276	263	13	-
1990	273	258	15	-
1991	267	251	16	-
1992	269	252	17	-
1993	265	250	15	-
1994	260	245	15	-
1995	231	217	14	23
1996	210	199	9	18
1997	210	197	13	0
1998	198	188	10	20
1999	180	172	8	0
2000	143	139	4	37
2001	142	137	5	0
2002	138	134	4	0
2003	140	137	3	0
2004	143	140	3	0
2005 ^{b/}	141	135	6	0
2006 ^{b/}	141	136	5	0

a/ First year moratorium in effect.

b/ Preliminary.

TABLE D-22. Price index.^{a/} (Page 1 of 1)

Year	Price Index
1960	18.1
1961	18.3
1962	18.6
1963	18.8
1964	19.1
1965	19.4
1966	20.0
1967	20.6
1968	21.4
1969	22.5
1970	23.7
1971	24.9
1972	26.0
1973	27.4
1974	29.9
1975	32.7
1976	34.6
1977	36.8
1978	39.4
1979	42.7
1980	46.5
1981	50.9
1982	54.0
1983	56.1
1984	58.2
1985	60.0
1986	61.3
1987	63.0
1988	65.2
1989	67.6
1990	70.2
1991	72.7
1992	74.4
1993	76.1
1994	77.7
1995	79.3
1996	80.8
1997	82.1
1998	83.1
1999	84.3
2000	86.1
2001	88.1
2002	89.7
2003	91.5
2004	93.9
2005 ^{b/}	96.5
2006 ^{b/}	100.0

a/ Based on gross domestic product implicit price

b/ Preliminary estimate of annual change based on the second and third quarters of the year.

