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November 1987

PACIFIC SALMON COMMISSION

JOINT COHO TECHNICAL COMMITTEE REPORT TO THE SOUTHERN PANEL

TCCOHO (87)-4

November 1987

REPORT OF THE COHO TECHNICAL COMMITTEE TO THE SOUTHERN PANEL NOVEMBER 1987

Table of Contents

INTRODUCTION	1
SOUTHERN PANEL ASSIGNMENT 1	
Snapshot of 1987 Coho Fisheries	
Alaska	1
British Columbia Area 20	2 2 2
Washington/Oregon Areas 7/7A Strait of Juan de Fuca Ocean Fisheries Puget Sound Sport Other Puget Sound Net Washington Coast Columbia River	3 3 3 3
Potential 1988 Coho Conservation Concerns	4
SOUTHERN PANEL ASSIGNMENT 2 - Progress Report	
Lack of Common Understanding of Committee Assignments	5
Evaluation of Management Actions	5
Annual Review of Coho Stock Status	5
Information on Exploitation Rates and Patterns	6
Productivity	6
Historical Catch & Fishery Information	6
Estimate Stock Composition	7
Alternative Management Strategies	7
Research Needs	7
Indicator Stock Programs	7

Contents Cont'd

Progress Report Cont'd
Stock & Fishery Assessments and Management Recommendations
Programs to Assure Attainment of Spawning Escapement Goals and Prevent Overfishing
Exchange Information to Assess Effectiveness of Alternative Fishery Regulatory Measures
Develop Standardized Methodologies for Stock and Fishery Assessment
SOUTHERN PANEL ASSIGNMENT 3 - Timetable for Stock Composition Estimates10
Time Table For Data Availability For Coho Management10
Table 1. 1983 to Preliminary 1987 Coho Catches
Appendix A. Time Schedules For Coho Data Availability

REPORT OF THE COHO TECHNICAL COMMITTEE TO THE SOUTHERN PANEL NOVEMBER 1987

INTRODUCTION

The Coho Technical Committee convened on November 2-3 in Vancouver, Canada to address the work assignments made by the Pacific Salmon Commission at its October 6-8, 1987 Executive Session. At least one other meeting of the Committee will be required to develop the time schedules for estimation of stock composition for Southern Panel areas and for filling data gaps in northern areas. This report: (1) reviews preliminary data for 1987 fisheries and identifies potential conservation concerns of relevance to fisheries in Canadian Area 20 and U.S. Areas 7/7A; and (2) presents a progress report on activities undertaken under the Committee's general instructions in Chapter 5 of Annex IV.

SOUTHERN PANEL ASSIGNMENT 1

November PSC Meeting: Review 1987 post-season fishery reports and preliminary stock status expectations for 1988 fisheries. Identify potential conservation problems that are of concern for the management of 1988 coho fisheries in Canadian Area 20 and U.S. Areas 7/7A.

SNAPSHOT OF 1987 COHO FISHERIES

A summary of coastwide coho catches by troll, net and sport fisheries for the period 1983-87 is presented in Table 1. Data for 1987 is incomplete and preliminary.

No specific provisions of the Coho salmon chapter currently apply to Southeast Alaska or northern B.C. fisheries.

ALASKA

In general, coho returns to Southeast Alaska since 1980 have increased substantially compared to the low levels of the 1970's. The 1987 Southeast Alaska fisheries were managed in a manner similar to that employed since 1980. Fisheries are managed inseason on the basis of run strength assessment to achieve conservation objectives and allocation objectives established by the Board of Fisheries.

The 1987 all gear harvest of 1.5 million coho salmon was slightly less than half the record 1986 catch of 3.3 million and approximately 20% below the 1981-85 average of 2.0 million. Preliminary CWT data indicate Alaska hatchery contributions in 1987 were substantially below 1986 levels.

BRITISH COLUMBIA

Fisheries Under the Coho Chapter

Area 20

A total of 223,000 coho were caught by commercial net fisheries in Area 20. Of this total, 127,000 were caught incidentally during Fraser Panel controlled sockeye and pink fisheries, while 96,000 were taken after Fraser Panel control.

WCVI Troll Fishery

An estimated 1,792,000 coho were caught in the WCVI troll fishery (based on sales slips accumulated to October 14th). The catch ceiling for this fishery was 1.8 million. The 1987 coho season was the shortest on record, beginning on July 1st and ending on August 23rd.

Swiftsure Bank

Swiftsure Bank (part of Area 21) was closed to trolling throughout the 1987 fishing season.

Other South Coast Fisheries of Interest to the Southern Panel

Georgia Strait Sport

The coho catch in the Georgia Strait sport fishery to the end of September was 625,435. This is the second highest total to this date since 1980 when the current creel survey program was started. Only the 1985 season had a higher catch to the end of September.

Georgia Strait Troll

The troll fishery in Georgia Strait took approximately 205,000 coho during a season which ran from July 1st to September 30th. This catch is similar to 1985 and 1986 levels.

WASHINGTON/OREGON

<u>Fisheries Conducted Under Coho Chapter</u>

Area 7/7A

A total of 81,500 coho salmon were harvested by net fisheries in the San Juan Islands (areas 7 and 7A). The harvest was taken incidentally during fisheries under the control of the Fraser Panel (29,800) and during fisheries directed at coho salmon (51,700).

Strait of Juan de Fuca:

The treaty Indian troll fishery in the Strait of Juan de Fuca (areas 4B, 5, 6, and 6C) harvested 3,600 coho salmon (excluding 4,600 coho harvested in Area 4B during the PFMC management period). The net fishery in this area harvested 63,100 coho. All the all-citizen catch was taken during fisheries under control of the Fraser Panel. The treaty Indian net catch was taken incidentally during fisheries under control of the Fraser Panel and during fisheries directed at chinook, coho, and chum salmon.

Other Fisheries

Ocean Fisheries:

No specific management regimes were established by the Pacific Salmon Commission for coho fisheries off the coasts of Washington, Oregon and California. Ocean troll and sport fisheries in this area operated under coho ceilings developed through domestic regulatory processes of the PFMC. Fisheries north of Cape Falcon were closed upon attainment of chinook quotas; preliminary data indicate that none of the PFMC coho ceilings were reached in 1987.

A total of 147,000 coho were harvested by troll fisheries north of Cape Falcon, Oregon. A total of 148,400 coho were harvested by recreational fisheries north of Cape Falcon, Oregon.

Puget Sound

Sport Fishery:

Catch estimates are not available at this time for the 1987 Puget Sound sport fishery.

Net Fisheries Other than in Juan De Fuca Strait and San Juan Islands areas:

Net fisheries harvested 1,433,287 coho salmon in other areas of Puget Sound. The majority of this harvest occurred in terminal areas in which the coho run exceeded escapement requirements.

Washington Coast

A total of 134,596 coho have been taken in Washington coastal net fisheries (35,618 north coast; 39,386 Grays Harbor; 59,592 Willapa Bay).

Columbia River

Through October 2nd, the Columbia River coho net fisheries have harvested 86,800 coho; the lower river sport fishery has taken approximately 46,400 coho.

Preliminary Indications of Potential Coho Conservation Concerns For the Management of 1988 Fisheries in Canadian Area 20 and U.S. Areas 7/7A

Canada: Fraser River - On the basis of brood year escapement levels and the declining trend observed for this cycle (see TCCOHO(86)1), the 1988 escapement of Fraser River coho is expected to be insufficient to meet the escapement goal of 175,000.

U.S.: Preliminary indications are that extremely low flow conditions during the summer of 1986 will result in reduced production of natural stocks from Puget Sound. Smolt enumeration studies along the Washington Coast indicate reduced natural coho production can be expected from this area as well. Although Washington coastal stocks are not generally impacted significantly by harvests in Area 20 and Areas 7/7A, under ceiling management for the WCVI fishery, the reduced abundance of contributing stocks can be expected to increase harvest pressures on depressed Puget Sound stocks.

SOUTHERN PANEL ASSIGNMENT 2

November PSC Meeting: Provide a progress report on the Joint Technical Committee work to be accomplished under the Coho Chapter.

The Committee does not have a common understanding as to the intent of the Coho Chapter regarding instructions to the Coho Technical Committee. The U.S. members of the Committee view the items listed in paragraph 1(b) as standing assignments. The Canadian members regard these items as a general list of possible Committee assignments that are to be undertaken only at the explicit instruction of the Commission and Panels.

(i) evaluate management actions for their consistency with measures set out in this Chapter and for their potential effectiveness in attaining the objectives established by the Commission.

Management Actions:

The Committee has undertaken only limited evaluation of alternative management actions. Alternative fishery regimes for 1986 fisheries on Georgia Strait, Fraser River, Puget Sound, and Washington Coastal stock complexes were examined in a report entitled "Joint Technical Committee Response to Questions Posed by the Southern Panel", March 2, 1986, TCCOHO(86)1. The effect of the Swiftsure Bank closure was addressed in a special report produced by the Committee in June 1987 ("Impacts of Swiftsure Bank Closure and Incidental Coho Catch Estimates for 1987 Canadian Area 20 and U.S. Areas 7/7A", Joint Coho Technical Committee, June 1, 1987, TCCOHO(87)3). Neither of these reports specifically address the objectives identified in the Coho Chapter to: (1) prevent overfishing; and (2) provide for optimum production.

(ii) annually identify, review, and evaluate the status of coho stocks in relation to the objectives set out in this Chapter and make recommendations for adjustments to the management measures consistent with those objectives.

The Committee has not routinely performed this task. Stock descriptions and assessments are contained in two main documents:

- 1. Preliminary Report of the Canada/U.S. Technical Committee on Coho Salmon, December 6, 1984.
- 2. Report of the Joint Coho Technical Committee to the Pacific Salmon Commission, June 20, 1986 including appendices for Washington/Oregon, Canada, and Southeast Alaska (TCCOHO(86)1).

(iii) present the most current information on exploitation rates and patterns on these stocks and develop a joint data base for assessments.

The Committee has presented information on exploitation rates and patterns in several reports:

- 1. Preliminary Report of the Canada/U.S. Technical Committee on Coho Salmon, December 6, 1984.
- 2. Joint Technical Committee Responses to Questions Posed By the Southern Panel, March 2, 1986, TCCOHO(86)1.
- 3. Report of the Joint Coho Technical Committee to the Pacific Salmon Commission, June 20, 1986 including appendices for Washington/Oregon, Canada, and Southeast Alaska (TCCOHO(86)1).
- 4. Response to a Request from the Northern Panel for Information on Stock Composition of Coho Harvested in Northern B.C. and Southeast Alaska, Joint Coho Technical Committee, TCCOHO(87)2.
- 5. Response to Southern Panel Questions, Report of the Coho Technical Committee, February 7, 1987, TCCOHO(87)1.

The Committee has not attempted to develop a joint data base for assessment of exploitation rates and patterns. The primary information sources for this type of data are coded-wire-tag release and recoveries. These data currently are maintained by their respective agencies. The working group on CWT data bases of the Data Sharing Committee is still in the process of developing standards and recommendations.

(iv) collate available information on the productivity of coho stocks in order to identify the management measures necessary to prevent overfishing.

The Committee has prepared a working draft reviewing available information on Coho Productivity. A summary of that report was presented in the Committee's "Response to Southern Panel Questions", dated February 7, 1987, TCCOHO(87)1.

(v) present historical catch data and associated fishing regimes.

Previous reports of the Committee contain historical catch statistics and information on fishing regimes. These data are updated annually by post-season reports prepared by the Parties.

(vi) estimate stock composition in fisheries of concern to the Commission and Panels.

A report describing alternative methodologies for estimating coho stock composition is in preparation within the Committee.

The Committee has not as yet attempted to estimate stock composition for fisheries of concern to the Southern Panel. The Committee's March 2, 1986 report (Joint Technical Committee Responses to Questions Posed By the Southern Panel, March 2, 1986, TCCOHO(86)1) and February 7, 1987 report entitled, "Response to Southern Panel Questions" summarized available estimates of stock composition to various fisheries and identified problems with the methodologies employed. In response to the October 1987 directives from the Southern Panel, the Committee will attempt to develop estimates of stock composition for fisheries within the jurisdiction of the Southern Panel during 1988.

A report on available stock composition information for Northern Panel areas was prepared in February 1987 (Response to a Request from the Northern Panel for Information on Stock Composition of Coho Harvested in Northern B.C. and Southeast Alaska, TCCOHO(87)2. Per the request of the Northern Panel, research programs will be outlined to fill in some of the information gaps highlighted in that report.

(vii) Devise analytical methods for the development of alternative regulatory and production strategies.

A working draft describing, from a theoretical basis, alternative management strategies, information requirements for implementation, potential application to fisheries in Washington, Canada and Alaska is in preparation. Once the Commission and Panels establish policy guidance as to the strategies to be pursued for further evaluation, development of analytical methods and tools can proceed.

(viii) identify information and research needs, including future monitoring programs for stock assessments.

The Committee identified research needs in pages 22-31 of its "Report of the Joint Coho Technical Committee to the Pacific Salmon Commission, June 20, 1986 (TCCOHO(86) 1)".

(ix) investigate the feasibility of alternative methodologies for implementing indicator stock programs in all areas.

Although various indicator stock programs have been identified and implemented in both countries, a coordinated program with common objectives and design has not been developed to date.

In June 1987, the Northwest Indian Fisheries Commission organized and conducted a two-day workshop to exchange information on the theoretical bases and field techniques for chinook and coho indicator stock programs. Representatives from Washington, Oregon, Alaska, and Canada, and the chinook, coho and data sharing committees participated. The first day concentrated on the role of indicator stocks in monitoring the effectiveness of management regimes in meeting the objectives of the Treaty, and theoretical problems in assessment and evaluation of stock The second day of the workshop concentrated on tagging requirements, recovery systems, and case studies to share field experience in implementation. Reports summarizing the results of the workshop can be made available upon request.

In Washington State, a comprehensive coho indicator stock program and spawning escapement enumeration studies have been implemented. These efforts involve stocks originating in Puget Sound and Washington Coastal Rivers and are designed to produce information on stock status and exploitation rates over time.

In Southeast Alaska, coho salmon management investigations and research have been expanded significantly during the past several years. The primary objectives of the Southeast Alaska studies have been: (1) to increase annual monitoring of coho escapements; (2) to obtain stock productivity information necessary for establishing escapement goals for management; (3) to determine the migratory patterns of indicator stocks; and (4) potential application of various stock identification techniques to coho.

In Canada, research into the applicability of hatchery CWT data for wild stock assessment purposes has been conducted since 1985 in Southern B.C.. In addition, coded wire tags have been applied to a number of small hatchery stocks in north coastal B.C. for the purpose of collecting basic stock distribution information. Although a few B.C. wild coho stocks are being coded wire tagged, a coordinated coastwide indicator stock program has not yet been established.

(x) for each season, make stock and fishery assessments and recommend to the Commission conservation measures consistent with the principles of the Treaty.

The principles of the Treaty concern: (1) prevention of overfishing and provision of optimum production; and (2) "equity". These concepts require policy interpretation and direction. To date, the Committee has not generally undertaken activities specifically designed to address this assignment. Committee did address the issues of levels of anticipated incidental coho catch in Areas 20/7/7A and the impact of the Swiftsure Bank closure in its report to the Southern Panel Chairmen's meeting ("Impacts of Swiftsure Bank Closure and Incidental Coho Catch Estimates for 1987 Canadian Area 20 and U.S. Areas 7/7A", Joint Coho Technical Committee, June 1, 1987, TCCOHO(87)3).

(xi) develop programs to assure the attainment of spawning escapement goals and prevent overfishing.

The Committee has not undertaken specific activities designed to address this assignment. In Canada and Southeast Alaska, spawning escapement goals generally have not been established. Investigation of this subject will require further development of work on analytical methods and alternative management strategies.

(xii) exchange information necessary to analyze the effectiveness of alternative fishery regulatory measures in achieving conservation objectives.

The Committee has examined the Swiftsure Bank closure as a specific conservation management measure. The Committee's conclusions were presented in a June 1, 1987 report entitled, "Impacts of Swiftsure Bank Closure and Incidental Coho Catch Estimates for 1987 Canadian Area 20 and U.S. Areas 7/7A", TCCOHO(87)3.

The Data Sharing Committee's working group on coded-wire-tag databases is in the process of standardizing formats for data exchange. The Commission has also instructed the Co-Chairmen of the Technical Committees to meet with the Data Sharing Committee to discuss problems of information exchange.

(xiii) work to develop, under the direction of the Joint Northern and Southern Panels, standard methodologies for coho stock and fishery assessment.

The Joint Northern and Southern Panels have provided no direction to the Committee on this assignment.

SOUTHERN PANEL ASSIGNMENT 3

<u>January/February</u> <u>PSC</u> <u>Meetings:</u> Prepare a timetable for:

- (a) estimating stock composition for fisheries within the jurisdiction of the Southern Panel;
- (b) providing information on exploitation rates and patterns for stocks within the jurisdiction of the Southern Panel;
- (c) exchanging catch, escapement, CWT, hatchery release, and other data necessary to accomplish (a) & (b).

The Committee will prepare a proposed timetable for consideration by the Southern Panel during its meetings early in 1988.

TIME TABLE FOR DATA AVAILABILITY

The PSC is considering the recommendations of the Working Group on Procedural Reform (WGPR). One recommendation involves the use of "trend data" and managing a "year out" in order to meet the scheduled meeting dates for the PSC.

For coho, the implications of the WGPR schedule and recommendations are that the PSC will be unable to respond to annual run fluctuations, unless: (1) conservative approaches are employed to establish fishing regimes; (2) additional meetings are scheduled when abundance information becomes available; or (3) regimes include some sort of triggering mechanism. This can be a significant problem in the southern Panel area, where only a single year class contributes to major fisheries and substantial fluctuations in annual abundance occurs.

Time schedules for data availability for coho management are presented in Appendix A.

TABLE 1. PRELIMINARY 1987 COHO CATCHES FROM U.S. FISHERIES AND CANADIAN a/COMPARED WITH 1986, 1985, 1984 AND 1983 (thousand fish)

UPDATED

PRELIMINARY 11-17-87

*******************			TROLL			===== 		NET			===== 		SPORT	=====		===== 	 	TOTAL		
AREA	1987	1986	1985	1984	1983	1987 1987	1986	1985	1984	1983	 1987	1986	1985	1984	1983	1987	1986	1985	1984	1983
S.E. ALASKA b/	1040	2126	1589	1133	1280	416	1083	951	805	703	58	58	60	60	55	1514	3267	2600	1998	2038
BRITISH COLUMBIA						 					 c/]	 				
North Central	759	1648	655	859	1166	192	490	273	223	370					1	951	2138	928	1082	1536
West Coast Vanc. Is.	1792	2157	1389	2172	2169	NA	11	8	11	9						1792	2168	1397	2183	2178
Georgia Str/Fraser	205	209	200	117	121	9	51	49	23	27	625	572	728	443	404	839	832	249	868	552
Johnstone Strait d/e/	-	-	-	-	-	62	127	147	119	243	1				1	62	127	147	119	243
Juan De Fuca Strait d/	-	-	-	-	-	223	203	225	75	17	1				1	223	203	225	<i>7</i> 5	17
WASHINGTON/OREGON OCEAN						 					[!				1					
North of Cape Falcon	147	206	256	97	66	l I _	_	_	_	_	l I 148	210	210	51	247	l 295	416	466	148	313
South of Cape Falcon	382		55	47	373	 •	_		_	_	1 278	191	166	131	137	•	619	221	178	510
South of tape factor	302	420	رر	41	3,3	! !					270 	171	100	131	157	1	017		110	310
WASHINGTON INSIDE						! 					 					[
Juan De Fuca Strait	4	5	1	<1	<1	64	72	84	46	38	NA	142	89	59	72	68	219	174	105	110
San Juan Islands	-	-	-	-	-	82	164	142	24	61	NA	12	9	4	8	82	176	151	28	69
Other Puget Sound	-	-	-	-	-	1433	1108	930	710	827	NA	115	119	78	194	1433	1223	1049	788	1021
Coastal	-	-	-	-	-	135	216	71	91	29	NA	NA	4	20	4	135	216	<i>7</i> 5	111	33
						1					1				-					
COLUMBIA RIVER	-	-	-	-	-	86	996	195	203	7	43	124	27	75	3	129	1120	222	278	10
						[[
GRAND TOTAL	4329	6779	4145	4425	5175	2702	4521	3075	2330	2331	1152	1424	1412	921	1124	8183	12724	7904	7961	8630

a/ All totals include data as available on 11-1-87. NA catches are treated as zeros in totals.

b/ Southeast Alaska coho catches shown for calendar year. Data for 1985 are preliminary.

c/ 1987 Sport catch through September only. Other years through end of December. Sport catch data has not been compiled for areas other than Georgia Strait.

d/ Johnstone Strait and Juan de Fuca Strait troll catch included with Georgia Strait/Fraser

Appendix A
TIME SCHEDULES FOR COHO DATA AVAILABILITY

COHO TECHNICAL COMMITTEE SCHEDULE FOR DATA AND INFORMATION AVAILABILITY FOR THE PACIFIC SALMON COMMISSION

ASENCY: Canada Dept. of Fisheries & Oceans

CONTACT: Ron Kadowaki PHONE: (604) 756-7229

NOTE: ENTER DATES BY MONTH & YEAR. E.G. IF ***** CWT DATA AVAILABLE IN MARCH AFTER FISHING SEASON, ENTER "MAR*1"; IF CATCH DATA AVAIL IN DECEMBER OF THE FISHING SEASON, ENTER "DEC". ETC.

CONTACT: Kon Kadowaki	PHONE:	(604)	/35-/224	"JEC", ETC.	and wife line land t
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	A6				
	VERY PRLM		FINAL		
EASON & REGULATIONS (PLANS)	********* Mar				
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go: orugon urvira	100 the Ste Ste and	MUA	1 511 1 7		
ATCH BY FISHERY (#'S)	Sept	Nov	June+1		
STOCK COMPOSITION	148 414 007 841148	HIR DEL TOP OFF SHE	110 mm 110 mm		
ATCH BY STOCK (TERMINAL/NET)	MIA	MAA	81776	DATOUCHY PIDENT	
GUMMER STOCKS FALL STOCKS	N/A N/A	N/A N/A	N/A N/A	HATCHERY STOCKS	
PALL 310GA3	N/H	M/H	N/H	VERY PRLM PRELIM FINAL	
IOLOGICAL SAMPLING				**************************************	
CATCH	Sept	Nov	June+1		
ESCAPENENT	Dec	Feb+1	June+1	COP 13% 300 MB 164 THE MAY PERSON PORT OF MET AND	
				water closed extra maps and one maps above . The second print to t	
CODED-WIRE TAG DATA					
FISHERY RECOVERIES	Dec	Jan+i	Mar+l		
ESCAPEMENT RECOVERIES	Feb+1	Mar+1	June+1		
EXPANSION FACTORS	Sept	Nov	June+1		
RELEASES	July	PP APP CAN MA NO	Dec		
NHANCEMENT ACTIVITIES					
RELEAGES	July		Dec		
PLANNED CHANGES	Mar-1	ter see the see ble	Aug-1		
		P9 444 F20 Bee F20			
		STOCKS		HATCHERY STOCKS	
	A(A CONTRACTOR OF THE STATE OF TH	
	VERY PRLM		FINAL	VERY PRLM PRELIM FINAL	
PANNING ESCAPENENT	********			춙쫎Z F 및 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등	
NORTHERN STOCKS	Oct No.	Nov I	Dec	Dan Tan Mus	
SOUTHERN STOCKS	Dec	Jan	Mar	Dec Jan Mar	
ABUNDANCE FORECASTS	N/A	N/A	N/A	N/A N/A N/A	
				**************************************	1888

COHO TECHNICAL COMMITTEE SCHEDULE FOR DATA AND INFORMATION AVAILABILITY FOR THE PACIFIC SALMON COMMISSION

**** CWT DATA AVAILABLE IN MARCH AFTER FISHING SEASON, ENTER "MAR+1"; IF CATCH DATA AVAIL IN DECEMBER OF THE FISHING SEASON, ENTER

NOTE: ENTER DATES BY MONTH & YEAR. E.G. IF

AGENCY: WDF -- Ocean Troll & Sport CONTACT: Bunnie Ponwith PHONE: (206) 586-3127

"DEC", ETC. ENTER DATE EXPECTED TO BE AVAILABLE VERY PRLM PRELIM FINAL *********** SEASON & REGULATIONS (PLANS) Mar Agr SEASON & REGULATIONS (REPORTING) Apr and the same day who CATCH BY FISHERY (#'S) in-seasn in-seasn Dec STOCK COMPOSITION Dec CATCH BY STOCK (TERMINAL/NET) SUMMER STOCKS HATCHERY STOCKS ----AGENCY----FALL STOCKS VERY PRLM PRELIM FINAL BIOLOGICAL SAMPLING ********** CATCH ESCAPEMENT CODED-WIRE TAG DATA FISHERY RECOVERIES ESCAPEMENT RECOVERIES **EXPANSION FACTORS** RELEASES ENHANCEMENT ACTIVITIES RELEASES PLANNED CHANGES WILD STOCKS HATCHERY STOCKS ----AGENCY----AGENCY VERY PRLM PRELIM FINAL VERY PRLM PRELIM FINAL SPAWNING ESCAPEMENT 춙쑴按按점점점점점점점점점점점점점점점점점점점점점 C SUMMER STOCKS FALL STOCKS ADUNDANCE FORECASTS COHO TECHNICAL COMMITTEE SCHEDULE FOR DATA AND INFORMATION AVAILABILITY FOR THE PACIFIC SALMON COMMISSION

AGENCY: WDF -- Columbia River & Washington Coastal CONTACT: Brian Edie PHONE: (208) 75

NOTE: ENTER DATES BY MONTH & YEAR. E.G. IF ***** CMT DATA AVAILABLE IN MARCH AFTER FISHING SEASON, ENTER "MAR+1"; IF CATCH DATA AVAIL IN DECEMBER OF THE FISHING SEASON, ENTER "DEC", ETC.

	ENTER DATE		D 70 BE AV/	AILABLE			
	VERY PRLM		FINAL				

EASON & REGULATIONS	Oct	Nov	Dac				
ATCH BY FISHERY (#'S)	Dec	Feb+1	June+1				
STOCK COMPOSITION (if aval) Jan+1	Feb+1	June+1				
ATCH BY STOCK (TERMINAL/NET)							
FALL STOCKS	Jan+1	Feb+1	Mar+1		ENCY	***************************************	
				VERY PRLM	PRELIM	FINAL	
TOLOGICAL SAMPLING				*********	*******	****	
CATCH	Dec	Feb+1	June÷i	(may 4/1/4 of 16 may 1874	total total billion drive bad	100 1000 mm 100 000	
ESCAPEMENT	Dec	Feb+1	June+i	derme de qui tio	Arm rest 145 min to 5	EU (10 850 905 EC4	
ODED-WIRE TAG DATA							
FISHERY RECOVERIES	Jan+1	Fehtl	June+1				
ESCAPEMENT RECOVERIES	Jan+1	Feb+1	June+1				
EXPANSION FACTORS	Jan+1	Feb+1	June+1				
RELEASES	<i>šu</i> ž y	Sept	Jan+1				
NHANCEMENT ACTIVITIES							
RELEASES	Jul	Sept	Jan+1				
PLANNED CHANGES	Nov	Janti	June+1				
		STOCKS	NO. 113 AC 155 NO. 705 NO. 705	HAL CALL HOW HOW HITE HOW AND TOTAL AND	TCHERY ST		
				VERY PRLM		FINAL	
PAWNING ESCAPEMENT	***			*****			
FALL STOCKS	An seld here time and	eye hits down billy that	and dist one thinkey	Dec	Feb+1	Mar+1	
BUNDANCE FORECASTS				Dec-1	Feb	Mar	

COHO TECHNICAL CONNITTEE SCHEDULE FOR DATA AND INFORMATION AVAILABILITY FOR THE PACIFIC SALMON COMMISSION

NOTE: ENTER DATES BY WONTH & YEAR. E.G. IF ***** CWT DATA AVAILABLE IN MARCH AFTER FISHING SEASON, ENTER "WAR+1"; IF CATCH DATA AVAIL IN DECEMBER OF THE FISHING SEASON, ENTER

AGENCY: Washington Coastal Tribal (Terminal Area)

	ENTER DATE			\ILABLE			
	VERY PRLM	PRELIM	FINAL				
	<u> </u>	****	****				
EASON & REGULATIONS (PLANS)	Mar	April	June				
EASON & REGULATIONS (REPORTING)	As 400 lost 441 and	Jan+1	July+1				
ATCH BY FISHERY (#'S)	part start rate miss alon	Jan+i	1+nsU				
STOCK COMPOSITION (if aval)		Jan+i	Jan+1				
ATCH BY STOCK (TERMINAL/NET)							
SUMMER STOCKS	Nov+1	Jan+1	Jan+1	Н	ATCHERY ST	OCKS	
FALL STOCKS	Jan+1	Jan+i	Jan+1	No. 422 MIN SO AND SO STO SO AND	GENCY	you are not got pice ying disp	
				VERY PRLM	PRELIM	FINAL	
IOLOGICAL SAMPLING				**********	****	****	
CATCH		Jan+1	Mar+1	W 100 SE 60 140	54 tot 49 40 mm	EA 144 HW 144 509	
ESCAPEMENT	Med Boy and med and	Feb+1	Mar+1	the sea seal mile has	eres and the second	we granted by	
ODED-WIRE TAG DATA							
FISHERY RECOVERIES	Dec	Feb+1	Marti				
ESCAPEMENT RECOVERIES	Jan+i	ere mo ma ma no	Mar+1				
EXPANSION FACTORS	Jan+i	*****	Jan+1				
RELEASES	Nov-1	ON THE MOVERT CH.	Nov-1				
NHANCEMENT ACTIVITIES							
RELEASES	Nov-1		Nov-1				
PLANNED CHANGES	Jan-i	and held the real Will	Jan−1				
	WILD AAG	STOCKS	on and the ord the side for my	H AA	ATCHERY ST		
	VERY PRLM		FINAL	VERY PRLM	PRELIM	FINAL	
AWNING ESCAPEMENT	******			*****			
SUMMER STOCKS	Jan+1	Feb+1	Feh+1	Jan+1	Feb+1	Feb+1	
FALL STOCKS	Feb+1	Feb+1	Feb+L	Feb+1	Feb+1	Feh+1	
BUNDANCE FORECASTS	Nov	Mar-1	Mar-1		Mar-1	Mar-1	

COHO TECHNICAL COMMITTEE SCHEDULE FOR DATA AND INFORMATION AVAILABILITY FOR THE PACIFIC SALMON COMMISSION

NOTE: ENTER DATES BY MONTH & YEAR. E.G. IF ***** CMT DATA AVAILABLE IN MARCH AFTER FISHING SEASON. ENTER "MAR+1"; IF CATCH DATA AVAIL IN DECEMBER OF THE FISHING SEASON. ENTER "DFC". FTC.

AGENCY: Skagit System Cooperative -- Puget Sound Net and Sports Data CONTACT: Robert Hayman PHDNE: (206) 466-3163

"DEC", ETC. CONTACT: Robert Hayman PHONE: (206) 466-3163 ENTER DATE EXPECTED TO BE AVAILABLE VERY PRLM PRELIM FINAL ***** SEASON & REGULATIONS -- SPORTS Jan April Marti --- NET June August Mar+1 CATCH BY FISHERY (%'S) Jan+1 Mar+1 Mar+2 STOCK COMPOSITION CATCH BY STOCK (TERMINAL/NET) HATCHERY STOCKS SUMMER STOCKS FALL STOCKS Jan+i April+1 VERY PRLM PRELIM FINAL BIOLOGICAL SAMPLING <u>용용통용관심들은 공통공통용 등록 등록 공통공통을 통통을 통통을 통</u> CATCH Mar+1 Mar+1 Julv+1 ESCAPEMENT Mar+1 May+1 July+1 Jan+1 May+1 July+1 CODED-WIRE TAG DATA See Agency: WDF CWT Data FISHERY RECOVERIES ESCAPEMENT RECOVERIES EXPANSION FACTORS 150 250 250 250 250 V4 44 87 80 70 Des Pric 200 PCS III RELEASES สิสท Mar June ENHANCEMENT ACTIVITIES Jan+i Mar+i June+i RELEASES PLANNED CHANGES May-1 Nov-1 June+1 WILD STOCKS HATCHERY STOCKS ----AGENCY-----VERY PRLM PRELIM FINAL VERY PRLM PRELIM FINAL SPANNING ESCAPEMENT SUMMER STOCKS FALL STOCKS Mar+1 April+l Mar+1 Mar+1 April+1 Jan÷i May ABUNDANCE FORECASTS Dec-1 Mar Dec-1 Mar May

COHO TECHNICAL CONMITTEE SCHEDULE FOR DATA AND INFORMATION
AVAILABILITY FOR THE PACIFIC SALMON COMMISSION

AGENCY: WDF CWT Data

NOTE: ENTER DATES BY MONTH & YEAR. E.G. IF

***** CWT DATA AVAILABLE IN MARCH AFTER FISHING

SEASON, ENTER "MAR+1"; IF CATCH DATA AVAIL

IN DECEMBER OF THE FISHING SEASON, ENTER

"DEC", ETC.

CONTACT: Dick D'Connor	PHONE:	(20a) 5			DEC", ETC		
************************	ENTER DATE		TO BE AVA	ILABLE	tidd ildd yfd, ddy tog pida flyr taw Le pud dig ridd mig dom blir day bis 30	to the two the law and the the same the province for it.	tā pils var vaga pilst pieta a na mas piet var slot vieta p
	VERY PRLM	PRELIM	FINAL				
SEASON & REGULATIONS (PLANS) SEASON & REGULATIONS (REPORTING)	erd met 200 met 400 m	ACTOR ACTOR ACTOR ACTOR	ASS NOT THE NOT THE				
CATCH BY FISHERY (#'S) STUCK COMPOSITION	244 NA COL VIII NA	AND THE THE THE AND	and the time for the				
CATCH BY STOCK (TERMINAL/NET) SUMMER STOCKS FALL STOCKS	JAS BIR ZIN GO KID	431.74 Ab.(1) ***	care that more high little.	АН 2 А	TCHERY ST ENCY		
BIOLOGICAL SAMPLING	199 HE 153 HE WAS	NO. 449-740-750-882	ASS AND NEW MICH.	VERY PRLM	PRELIM	FINAL	
CATCH ESCAPEMENT	Mg 000 Mg 600 Mg	-00 100 00 00 00	was 1650 than AdmicAE days 8.50 year bets bets	\$144.100 (tv# \$49.250) 400 (mt 344.49) 456	909-800 800 WALCON	46 and 20 to tak	
CODED-WIRE TAG DATA	Recoveri	es Throug	ıh Sept.	October	- Decembe	r.	
FISHERY RECOVERIES ESCAPEMENT RECOVERIES EXPANSION FACTORS RELEASES		Dec Jan+1 Mar+1 Jan+1	Feb+1 Feb+1 Oct+1 Feb+1	Mar+1 Mar+1 Mar+1 Jan+1	Mar+1 Mar+1 Apr+1 Jan+1	May+1 May+1 Oct+1 Feb+1	
ENHANCEMENT ACTIVITIES RELEASES PLANNED CHANGES	on on one on an	die odd tod to en-	مامد های کامه طبط کرات مامد جدای کامه طبط جدای مامد جدای چدای مدامه جدای				
) STOCKS	en dist tink tild kill tild den alla	AH DA	TCHERY ST		
SPANNING ESCAPENENT SUMMER STOCKS FALL STOCKS	VERY PRLM	PRELIM	FINAL	VERY PRLM	PRELIM	FINAL	

COHO TECHNICAL COMMITTEE SCHEDULE FOR DATA AND INFORMATION AVAILABILITY FOR THE PACIFIC SALMON COMMISSION

NOTE: ENTER DATES BY MONTH & YEAR. E.G. IF **** CWT DATA AVAILABLE IN MARCH AFTER FISHING SEASON, ENTER "MAR+1": IF CATCH DATA AVAIL IN DECEMBER OF THE FISHING SEASON, ENTER

AGENCY: ADF&G "DEC", ETC. ENTER DATE EXPECTED TO BE AVAILABLE ----AGENCY----VERY PRLM PRELIM FINAL /1 ****************** SEASON & REGULATIONS Oct Nov Jan+1 CATCH BY FISHERY (#'S) Oct Nov Mar+1 STOCK COMPOSITION Jan+i Har+1 Jun+1 CATCH BY STOCK (TERMINAL/NET) Oct Nav Jan+1 VERY PRLM PRELIM FINAL. BIOLOGICAL SAMPLING CATCH Jan+1 Mar+1 Jun+1 ESCAPEMENT Jan+i Mar+1 Jun+1 *** *** *** *** CODED-WIRE TAG DATA FISHERY RECOVERIES Nov Jan+1 Mar+1 ESCAPEMENT RECOVERIES Nov Jan+1 Marti EXPANSION FACTORS Nov Jan+1 Mar+1 RELEASES Nov Janti Mar+1 (in year of release) ENHANCEMENT ACTIVITIES RELEASES Nov Jan+i Jan+1 PLANNED CHANGES Aug-2 Aug-2 Aug-2 (as they occur - not scheduled?) WILD STOCKS HATCHERY STOCKS ----AGENCY---------AGENCY-----VERY PRLM PRELIM FINAL VERY PRLM PRELIM FINAL SPANNING ESCAPEMENT COHO Nov Nov Jan ABUNDANCE FORECASTS None None None

^{1/} Subject to minor changes in case more fish tickets are discovered.