

I. SUMMARY OF 1985 OCEAN SALMON MANAGEMENT

Troll Fishing Regulations

A summary of the actual 1985 non-treaty troll fishing regulations for both the fishery conservation zone (FCZ) and state territorial waters (zero to three miles) is provided in Table I-1. The actual seasons in the FCZ south of Cape Falcon did not vary from the Council's preseason recommendations. However, north of Cape Falcon several inseason management changes were implemented, primarily due to a large over-quota harvest of coho in the July 15 through July 18 troll fishery north of Leadbetter Point.

Adequate abundance of Sacramento fall chinook allowed for a May 1 through September 30 season off California south of Point Delgada. Based on a record low projection of the abundance of Klamath River fall chinook, no general troll season was allowed between Point Delgada and Cape Blanco, Oregon. However, a limited late season fishery for local stocks of chinook was allowed near the mouths of the Elk and Sixes rivers in Oregon state territorial waters. The commercial season off Oregon was primarily a chinook fishery with a small incidental harvest of coho allowed during part of July.

North of Cape Falcon the fisheries were limited primarily by projected low abundance of Skagit River coho and Spring Creek Hatchery tulle fall chinook. The May chinook fishery was initially closed on the fourteenth and then reopened for the last eleven days of the month when updated harvest estimates disclosed that the quota had not been met. The fishery north of Leadbetter Point opened on July 15 with exceptionally high coho catch rates. Even though the fishery was closed within 4 days, the harvest of coho exceeded the quota by almost 58,000 fish. This significant over-quota harvest required emergency action by the Council to modify the remaining troll seasons to reduce their coho harvest impacts.

Actual seasons for 1985 treaty Indian troll fisheries in ocean management areas and area 4B are summarized in Table I-2. Treaty troll fisheries were regulated under chinook and coho quotas in response to concerns for projected low abundance of Spring Creek tulle hatchery chinook and Skagit naturally-spawning coho. During the season, the Makah, Quileute, Hoh, and Quinault tribes agreed to institute a number of management measures such as monthly catch targets, coho to chinook landing ratios, and size limits in an attempt to meet quotas for both species. A pink only fishery was conducted from August 15 through August 31 after the monthly catch target for coho was reached. The Quinault, Quileute, Hoh, and Makah treaty troll fisheries were closed on September 4 when chinook and coho quotas were reached. The Makah Tribe opened an all-species troll fishery in ocean and inside areas from September 10 through September 11 and conducted a ceremonial and subsistence coho fishery during the periods September 7 through September 10 and September 11 through September 30 in area 4B.

A summary of troll fishing regulations since 1977 for each of the three Pacific coast states and for treaty Indian troll fisheries is provided in Appendix C, Tables C-1, C-3, C-5, and C-7. Appendix C also contains a chronological summary of ocean salmon management events for 1985.

Table I-1. Summary of actual ocean troll salmon fishing regulations for 1985.

Area	Salmon Species	Season		Preseason quota		Special Restrictions ^{a/b/}
		Dates	Total Days	Chinook	Coho	
U.S.-CANADA BORDER TO CAPE FALCON, OR	All except coho	May 1-14 May 21-31	25	27,000	-	Conservation Zone 1 (Columbia R. mouth) closed
U.S.-Canada Border to Carroll Island	All except coho	Aug. 3-31 ^{c/}	29	960 ^{c/}	31,200 ^{c/}	Flashers with bare, blued hooks only
Capa Alava to Leadbetter Point	All	July 15-18	4	16,100	78,500	
South Jetty at Columbia River Mouth to Cape Falcon	All	Aug. 21	1	2,700	32,000 ^{d/}	
CAPE FALCON TO CAPE BLANCO, OR	All except coho	May 1-June 30	61	none	-	During the all-salmon season one more coho than chinook may be retained, provided at least one chinook is retained
	All	July 1-26	26	none	e/	
	All except coho	July 27-Oct. 31	97	none	-	
Tower Rock to Cape Blanco	All except coho	Nov. 1-30	30	none	-	Open only inside 3 miles
CAPE BLANCO TO POINT DELGADA, CA						
Cape Blanco to Humbug Mountain, OR	All except coho	Oct. 1-Nov. 30	61	none	-	Open only inside 3 miles
POINT DELGADA TO U.S.-MEXICO BORDER	All except coho	May 1-31	31	none	-	Not more than 6 lines per boat
	All	June 1-Sept. 30	122	none	e/	

a/ Barbless hooks required in all areas in 1985 except for (1) federal regulations could not be changed inseason to match state imposed barbless hook regulation in the August fishery north of Carroll Island and (2) north of Cape Falcon barbed hooks could be used with whole bait or plugs.

b/ Minimum size limits north of Cape Falcon, Oregon were 28 inches for chinook and 16 inches for coho. Minimum size limits south of Cape Falcon were 26 inches for chinook, 16 inches for coho caught off Oregon, and 22 inches for coho caught off California.

c/ Quotas adjusted inseason prior to opening date to 2,150 chinook and zero coho. Effective August 22, WDF restricted landings of chinook to not more than one chinook per twenty pink salmon.

d/ Quota adjusted inseason prior to opening date to 10,000.

e/ Coho quota south of Cape Falcon was 55,000 including a 10,000 hooking mortality during the all-except-coho season. The all-salmon fishery south of Point Delgada does not close for coho when the quota is reached.

Table I-2. Summary of actual treaty Indian troll seasons for 1985.

Tribe and Area	Species	Seasons		Minimum Size Limit	
		Dates	Days	Chinook	Coho
Quinault, Hoh, and Quileute Tribes	Chinook	May 1-22	22	26"	16"
	All	June 15-July 22	37	28" ^{a/}	16"
	All	Aug. 1-10 ^{b/}	10	26"	16"
	Pink	Aug. 16-31	16	NA	NA
	All	Sept. 1-4	4	26"	16"
Makah Tribe Inside 3 Miles, Areas 3N, 4, 4A	All	Jan. 1-April 30	120	22"	20"
	Chinook	May 1-20	20	24"	NA
	All	June 15-30	16	28"	20"
	All	July 1-20	20	24"	20"
	All	Aug. 1-10 ^{b/}	10	28"	20"
	Pink	Aug. 15-31	17	NA	NA
	All	Sept. 1-4	4	28"	20"
	All	Sept. 10-11	2	28"	20"
	All	Oct. 1-Dec. 31	92	22"	20"
3-200 Miles, Areas 3N, 4, 4A	Chinook	May 1-20	20	24"	NA
	All	June 15-30	16	28"	20"
	All	July 1-20	20	24"	20"
	All	Aug. 1-10 ^{b/}	10	28"	20"
	Pink	Aug. 15-31	17	NA	NA
	All	Sept. 1-4	4	28"	20"
	All	Sept. 10-11	2	28"	20"
Area 4B	Chinook	May 1-20	20	24"	NA
	All	June 15-30	16	28"	20"
	All	July 1-20	20	24"	20"
	All	Aug. 1-10	10	28"	20"
	Pink	Aug. 15-31	17	NA	NA
	All	Sept. 1-4	4	28"	20"
	Coho	Sept. 7-10 ^{c/}	3	NA	0
	All	Sept. 10-11 ^{d/}	2	28"	20"
	Coho	Sept. 11-30 ^{c/}	20	NA	0
	All	Oct. 1-31	31	22"	20"
Klallam Tribes (Area 4B)	All	Jan. 1-Dec. 31	365	22" ^{e/}	16"

- a/ Size limit 28 inches from June 15-30, maximum coho to chinook landing ratio of 10 to 1.
- b/ Landing ratio of 13 coho to 1 chinook.
- c/ Ceremonial and subsistence fishery.
- d/ Landing ratio of 20 coho to 1 chinook.
- e/ Maximum size limit of 30 inches for chinook from April 14 through June 15.

Recreational Fishing Regulations

A summary of the actual recreational fishing regulations for both the FCZ and state territorial waters is provided in Table I-3.

Several inseason management changes were made in both state and federal regulations. The season off California was governed by normal regulations except that unexpectedly high harvests of chinook off northern California and concern for depressed chinook stocks led to inseason management actions closing fishing on Mondays and Tuesdays between July 22 and August 31 for the area between the California-Oregon border and Point Delgada. Off Oregon south of Cape Falcon the all-salmon season began July 1 and remained open through Labor Day under its coho quota of 170,000. North of Cape Falcon, where seasons opened on June 30, the special five day per week fishery was effective in extending the fisheries. The Cape Falcon to Leadbetter Point subarea closed on August 22 while the subarea north of Leadbetter Point to the Queets River extended to Labor Day, plus one additional weekend after the state imposed Labor Day closure. Additionally, an inseason quota transfer, nearshore closures, and chinook retention restrictions were employed to extend the fishery north of the Queets River through September 1.

A summary of recreational fishing regulations since 1977 for each of the three Pacific coast states is provided in Appendix C, Tables C-2, C-4, and C-6.

Fishing Effort and Harvest

Coastwide Summary

A coastwide summary of ocean fishing effort and harvest is provided in Tables I-4 through I-8 for chinook, coho, and pink salmon. The combined harvest by the 1985 commercial troll ocean salmon fisheries of California, Oregon, and Washington amounted to 629,000 chinook; 310,000 coho; and 153,000 pinks. The recreational fleet harvested 245,000 chinook; 376,000 coho; and 11,000 pinks.

The commercial chinook harvest was 161 percent of the 1984 catch and 60 percent of the 1971-1975 average. Coastwide recreational chinook harvest was 217 percent of the 1984 catch and 57 percent of the 1971-1975 average.

The commercial coho harvest was 250 percent of the 1984 catch, but only 14 percent of the 1971-1975 average. Coastwide recreational coho harvest was 207 percent of the 1984 catch and 42 percent of the 1971-1975 average.

The commercial pink harvest was 146 percent of the 1983 catch and 251 percent of the 1971-1975 (odd year) average. Coastwide recreational pink harvest was 275 percent of the 1983 catch.

A complete listing of historical effort and harvest data for each state and for treaty Indian troll fisheries is provided in tabular form in Appendix A.

Table I-3. Summary of actual ocean recreational salmon fishing regulations for 1985.

Area	Season			Preseason quota		Bag Limit and Special Restrictions ^{a/b/}
	Salmon Species	Dates	Total Days	Chinook	Coho	
U.S.-CANADA BORDER TO QUEETS RIVER, WA	All ^{c/}	June 30-Sept. 1	46	1,700 ^{c/}	28,400 ^{c/}	2 fish, no more than one chinook; closed Fridays and Saturdays ^{c/}
QUEETS RIVER TO LEADBETTER POINT, WA	All	June 30-Sept. 8 ^{d/}	51	23,300	74,000	2 fish; closed inside 3 miles and closed Fridays and Saturdays thru Aug. 29
LEADBETTER POINT TO CAPE FALCON, OR	All	June 30-Aug. 22	40	12,100	99,000	2 fish; closed (1) Fridays and Saturdays, (2) Red Buoy line at Columbia River mouth to Klipsan Beach 0-200 miles, and (3) north of Klipsan Beach 0-3 miles
CAPE FALCON TO CAPE BLANCO, OR	All	July 1-Sept. 2	64	None	170,000 ^{e/}	First 2 fish per day, no more than 6 fish in 7 days
Twin Rocks to Pyramid Rock	All except coho	Sept. 15-Oct. 31	47	None	-	Open inside the latitude of the Whistle Buoy at the mouth of Tillamook Bay
Tower Rock to Cape Blanco	All except coho	Oct. 1-Nov. 30	61	None	-	Open inside 3 miles
CAPE BLANCO TO OR-CA BORDER	All	May 25-31	7	None	None	First 2 fish per day, no more than 6 fish in 7 days
	All	July 1-Sept. 2	64	None	170,000 ^{e/}	
	All except coho	Sept. 3-Oct. 31	59	None	-	
Cape Blanco to Humbug Mountain	All except coho	Nov. 1-30	30	None	-	Open inside 3 miles
OR-CA BORDER TO U.S.-MEXICO BORDER	All	Feb. 16-Nov. 17 ^{f/}	275	None	None	2 fish; 12-mile square closed at mouth of Klamath River, Aug. 1-Aug. 31

a/ Barbless hooks required in all areas except between Cape Falcon and the Oregon-California border.

b/ Minimum size limits north of Cape Falcon, Oregon were 24 inches for chinook and 16 inches for coho. Between Cape Falcon and the Oregon-California border there were no minimum size limits. Off California the minimum size limits were 20 inches for both chinook and coho.

c/ Effective July 24, the State of Washington closed the area inside a line approximately one mile offshore from Sekiu River to the Umatilla Reef light. Effective August 15 the state changed the bag limit to allow only the retention of coho salmon. An inseason recommendation by the Council for transferring quotas resulted in a quota of 2,450 chinook and 25,400 coho for this area.

d/ Fishing closed by state regulations September 3-6 and reopened September 7-8. Federal closure followed on September 11 at midnight.

e/ Includes all coho caught south of Cape Falcon to U.S.-Mexico border.

f/ Closed north of Point Delgada on Mondays and Tuesdays, July 19-August 31 by state regulation (identical federal regulation effective on August 2).

Table I-4. Coastwide chinook catches (thousands of fish) in the ocean troll and ocean sport fisheries, 1971-1985 and the 1971-1975 average.

Year	California ^{a/}			Oregon ^{b/}			Washington ^{c/}			PFMC Area			Canadian		Southeast Alaska		Grand Total
	Troll	Sport	Total	Troll	Sport	Total	Troll	Sport	Total	Troll	Sport	Total	Troll	Sport	Troll	Sport	
1971	434	188	622	103	30	133	252	160	412	789	378	1,167	1,270	134	334	15	2,920
1972	492	200	692	127	44	171	203	212	415	822	456	1,278	1,223	175	242	15	2,933
1973	817	198	1,015	363	61	424	317	204	521	1,497	463	1,960	1,091	223	308	17	3,599
1974	492	157	649	224	37	261	353	215	568	1,069	409	1,478	1,178	271	322	17	3,266
1975	579	104	683	225	76	301	274	262	536	1,078	442	1,520	1,103	386	287	17	3,313
1971-1975 Average	563	169	732	209	49	258	280	210	490	1,052	429	1,481	1,173	238	299	16	3,206
1976	540	81	621	184	79	263	359	171	530	1,083	331	1,414	1,249	506	231	17	3,417
1977	600	104	704	340	61	401	265	175	440	1,205	340	1,545	1,111	382	272	17	3,327
1978	638	72	710	192	23	215	166	96	262	996	191	1,187	1,033	486	376	17	3,099
1979	727	122	849	245	21	266	147	77	224	1,119	220	1,339	997	440	338	17	3,131
1980	589	84	673	209	19	228	135	54	189	933	157	1,090	1,002	414	300	20	2,826
1981	588	82	670	160	29	189	117	84	201	865	195	1,060	868	285	248	21	2,482
1982	765	144	909	232	39	271	160	107	267	1,157	290	1,447	994	196	242	26	2,905
1983	294	63	357	79	25	104	75	48	123	449	136	585	759	228	271	22	1,865
1984	300	89	389	64	17	81	28	7	35	391	113	504	811	443	236	22	2,016
1985	360	161	521	217	56	273	52	28	80	629	245	874	632	272	217	23	2,018

a/ California troll estimates are preliminary for 1985 and sport estimates are preliminary for 1981-1985.

b/ Includes troll catches from Alaska, Washington, and California landed in Oregon. Preliminary data for 1984-1985.

c/ Includes troll catches from Alaska, Oregon, and California landed in Washington. Preliminary data for 1984-1985.

Table I-5. Coastwide coho catches (thousands of fish) in the ocean troll and ocean sport fisheries, 1971-1985 and 1971-1975 average.

Year	California ^{a/}			Oregon ^{b/}			Washington ^{c/}			PFMC Area			Canadian		Southeast Alaska		Grand Total
	Troll	Sport	Total	Troll	Sport	Total	Troll	Sport	Total	Troll	Sport	Total	Troll	Sport	Troll	Sport	
1971	442	67	509	1,490	312	1,802	1,264	747	2,011	3,196	1,126	4,322	3,457	NA	391	NA	8,170
1972	158	45	203	825	248	1,073	575	542	1,117	1,558	835	2,393	2,369	335	792	NA	5,889
1973	348	32	380	796	232	1,028	702	472	1,174	1,846	736	2,582	2,483	373	540	NA	5,978
1974	656	77	733	1,137	314	1,451	1,038	595	1,633	2,831	986	3,817	2,700	772	845	NA	8,134
1975	204	21	225	657	252	909	774	481	1,255	1,635	754	2,389	1,404	454	214	NA	4,461
1971-1975 Average	362	48	410	981	272	1,253	870	567	1,437	2,214	887	3,101	2,482	484	556	NA	6,526
1976	622	58	680	1,827	501	2,328	1,377	943	2,320	3,827	1,502	5,329	2,876	415	525	NA	9,145
1977	35	27	62	446	195	641	710	490	1,200	1,191	712	1,903	2,248	682	507	36	5,376
1978	238	44	282	612	260	872	610	470	1,080	1,460	774	2,234	2,570	1,103	1,101	49	7,057
1979	164	16	180	715	181	896	667	290	957	1,546	487	2,033	2,906	414	919	23	6,295
1980	50	21	71	383	326	709	389	362	751	823	709	1,531	2,695	642	707	33	5,608
1981	78	10	88	620	200	820	400	238	638	1,100	448	1,548	2,112	406	862	28	4,956
1982	90	25	115	522	175	697	379	206	585	991	406	1,397	2,509	454	1,322	53	5,735
1983	57	27	84	320	147	467	68	209	277	445	383	828	3,456	404	1,280	55	6,023
1984	43	19	62	14	123	137	67	40	107	124	182	306	3,148	443	1,133	60	5,090
1985	11	15	26	84	182	266	216	179	395	310	376	686	2,239	728	1,589	NA	5,241 ^{d/}

a/ California troll estimates are preliminary for 1985 and sport estimates are preliminary for 1981-1985.

b/ Includes troll catches from Alaska, Washington, and California landed in Oregon. Preliminary data for 1984-1985.

c/ Includes troll catches from Alaska, Oregon, and California landed in Washington. Preliminary data for 1984-1985.

d/ Incomplete.

Table I-6. Coastwide pink salmon catches (thousands of fish) in the ocean troll and ocean sport fisheries, 1971-1985 and 1971-1975 average.

Year	California			Oregon		Washington			PFMC Area			Canada	Southeast Alaska	Grand Total
	Troll	Troll	Sport	Total	Troll	Sport	Total	Troll	Sport	Total	Troll	Troll		
1971	1	2	NA	NA	21	9	30	24	NA	NA	1,284	105	NA	
1972	a/	a/	a/	a/	4	a/	4	a/	a/	a/	1,033	167	1,200	
1973	19	3	2	5	55	8	63	77	10	87	1,232	135	1,454	
1974	a/	a/	a/	a/	1	a/	1	1	a/	a/	609	265	874	
1975	3	a/	1	1	77	14	91	80	15	95	1,288	77	1,460	
1971-1975 Average ^{b/}	8	2	NA	NA	51	10	61	61	NA	NA	1,089	150	NA	
1976	a/	0	0	a/	2	0	2	2	0	2	781	194	977	
1977	1	88	4	92	286	29	315	375	33	419	2,677	281	3,368	
1978	NA	a/	0	a/	4	0	4	NA	0	NA	428	618	NA	
1979	a/	21	1	21	561	18	578	582	19	599	4,036	629	5,264	
1980	a/	a/	0	a/	1	0	1	1	0	1	1,295	268	1,564	
1981	7	60	2	62	237	10	247	304	12	316	4,150	579	5,035	
1982	a/	a/	0	a/	a/	0	a/	1	0	1	NA	534	NA	
1983	a/	a/	a/	a/	106	4	110	106	4	110	NA	498	NA	
1984 ^{c/}	a/	0	a/	a/	a/	a/	a/	a/	a/	a/	NA	573	NA	
1985 ^{c/}	7	45	8	52	108	3	111	160	11	171	4,091	968	5,230	

a/ Less than 500 fish.

b/ Odd year average for California, Oregon, Washington, and PFMC.

c/ Preliminary.

Table I-7. Ocean salmon troll effort and landings for California, Oregon, and Washington, 1976-1985 and 1971-1975 averages.

Year	Effort in Thousands		Catch					
	Number of Deliveries	Days Fished	Numbers (thousands)			Pounds ^{a/} (thousands)		
			Chinook	Coho	Pink	Chinook	Coho	Pink
California								
1971-1975 Average	45.2	NA	562.7	361.6	7.8 ^{b/}	5,742.8	2,211.3	37.0 ^{b/}
1976	60.0	NA	539.9	621.8	c/	4,943.9	2,843.9	c/
1977	61.5	NA	600.2	45.2	1.8	5,637.0	283.2	9.3
1978	66.9	98.5	637.7	315.8	c/	5,492.4	1,295.1	c/
1979	56.1	104.4	726.8	184.4	0.7	7,547.8	1,198.0	3.8
1980	51.1	82.4	588.7	49.8	0.1	5,715.2	301.6	0.4
1981	47.8	69.0	588.1	83.9	7.0	5,534.8	477.2	28.3
1982	57.7	92.6	765.2	91.9	c/	7,448.6	551.9	c/
1983	30.4	43.1	294.0	59.9	c/	2,144.4	266.4	c/
1984	25.0	42.5	299.8	47.0	0	2,620.6	348.7	0.0
1985 ^{d/}	32.4	53.3	360.3	11.1	7.0	4,506.2	81.2	39.7
Oregon^{e/}								
1971-1975 Average	45.6	NA	208.5	981.0	1.8 ^{b/}	2,127.9	6,015.4	8.0 ^{b/}
1976	75.8	NA	184.3	1,827.0	0	1,921.6	9,061.2	0.0
1977	85.1	NA	340.0	446.1	88.0	3,464.9	2,640.8	396.1
1978	45.7	NA	191.5	611.6	<0.1	1,893.6	2,779.0	0.2
1979	43.6	48.8	245.5	714.6	20.5	2,580.0	4,586.3	106.3
1980	29.9	39.9	209.4	383.3	0.3	2,171.5	2,190.2	1.6
1981	35.1	45.2	160.4	620.3	60.2	1,573.4	3,324.3	324.0
1982	26.5	33.9	232.8	521.9	<0.1	2,351.3	2,708.4	<0.1
1983	17.4	22.1	79.6	319.8	<0.1	654.8	1,098.0	0.2
1984	5.6	7.9	64.3	14.1	0	549.7	71.0	0.0
1985 ^{d/}	15.7	21.1	216.6	84.0	44.9	2,029.8	483.8	258.6
Washington^{f/}								
1971-1975 Average	NA	53.8 ^{g/}	279.5	869.0	50.3 ^{b/}	3,211.2	4,804.1	240.6 ^{b/}
1976	NA	60.6 ^{h/}	359.0	1,377.2	1.5	3,802.4	6,231.5	5.8
1977	NA	56.9 ^{h/}	264.6	709.7	285.5	2,834.5	3,713.5	1,384.2
1978	NA	43.5 ^{h/}	166.1	609.8	3.5	2,073.5	2,802.2	13.4
1979	NA	42.5 ^{h/}	147.2	666.7	560.7	1,686.6	3,657.5	2,534.4
1980	NA	27.5 ^{h/}	135.1	388.9	1.7	1,666.4	1,972.1	7.5
1981	NA	28.7 ^{h/}	117.1	400.4	236.6	1,237.8	1,751.5	928.5
1982 ^{d/}	NA	20.1 ^{h/}	160.3	378.9	0.3	1,650.2	1,935.2	0.9
1983 ^{d/}	NA	13.5 ^{h/}	75.4	67.8	106.4	686.9	193.1	374.1
1984 ^{d/}	NA	3.1 ^{h/}	27.5	66.8	0	192.2	212.8	0
1985 ^{d/}	NA	8.1 ^{h/}	52.4	216.4	108.3	524.2	1,053.3	487.3

- a/ Dressed weight.
- b/ Odd-year average.
- c/ Under 50.
- d/ Preliminary.
- e/ Includes catches made off California, Washington, and Alaska and landed in Oregon.
- f/ Includes treaty Indian catches (ocean and 4B only) and catches made off Oregon, California, and Alaska and landed in Washington.
- g/ This is a 1973-1975 average; 1971 and 1972 effort data are deliveries and are not comparable.
- h/ Includes treaty Indian deliveries which represent a minimum estimate of days fished.

Table I-8. Ocean salmon recreational effort and catch off California, Oregon, and Washington, 1976-1985 and 1971-1975 average.

Year	Angler Trips (thousands)		Catch (thousands of fish)				Salmon/ Angler Trip
	Salmon Trips	Total Trips	Chinook	Coho	Pinks	Total	
<u>California</u>							
1971-1975 Average	242.2		169.6	48.3		217.9	0.90
1976	182.2		81.0	57.9		138.9	0.76
1977	182.2		103.6	14.2		117.8	0.65
1978	156.1		72.0	41.0		113.0	0.72
1979	163.6		122.2	15.4		137.6	0.84
1980	148.4		84.1	21.0		105.1	0.71
1981	128.0		82.3	9.3		91.6	0.72
1982	170.4		144.3	26.1		170.4	1.00
1983	111.6		63.2	27.7		90.9	0.81
1984	123.6		88.6	19.0		107.6	0.87
1985 ^{a/}	185.6		160.6	15.2		175.8	0.95
<u>Oregon^{b/}</u>							
1971-1975 Average	NA	345.8	49.4	271.8	1.1 ^{c/}	321.8	0.93
1976	NA	538.4	79.3	501.3		580.6	1.08
1977	NA	404.5	61.4	195.3	4.0	260.7	0.64
1978	NA	403.7	22.8	259.8		282.6	0.70
1979	301.3	341.8	20.9	180.8	0.6	202.3	0.67
1980	331.4	362.0	19.0	325.8		344.9	1.04
1981	311.0	346.7	29.2	199.8	1.6	230.6	0.74
1982	226.0	249.7	38.7	175.1		213.8	0.95
1983	226.0	261.5	24.7	146.9	<0.1	171.7	0.76
1984	153.1	203.6	17.0	123.3	<0.05	140.3	0.92
1985 ^{a/}	251.6	270.9	55.9	182.5	7.7	246.1	0.98
<u>Washington</u>							
1971-1975 Average	482.9		210.4	567.4	10.1 ^{c/}	787.9	1.60
1976	538.1		170.7	942.8		1,113.5	2.07
1977	530.0		175.0	490.2	29.3	694.5	1.31
1978	482.8		96.4	469.8		566.2	1.17
1979	310.7		76.9	290.3	17.6	384.8	1.24
1980	280.1		53.6	361.5		415.1	1.48
1981	234.7		84.4	237.6	10.2	332.2	1.42
1982 ^{d/}	218.1		106.7	206.0		312.7	1.43
1983	209.5		48.3	209.3	4.5	262.0	1.25
1984	36.8		6.9	40.4		47.3	1.29
1985 ^{a/}	127.9		28.1	178.9	3.1	210.1	1.64

a/ Preliminary.

b/ Oregon fish/angler computed on total angler trips prior to 1979 and on salmon trips beginning in 1979.

c/ Odd-year pink average for 1971-1975.

d/ Includes Washington-based effort and catch from Oregon state waters (July 26-August 1) and Strait of Juan de Fuca after WDF and NMFS ocean closures.

Quota Attainment

South of Cape Falcon, a quota was established at 170,000 coho for recreational fisheries. The actual catch of 166,700 coho in this fishery was 2 percent below the quota.

All ocean non-treaty and treaty Indian troll fisheries in the area north of Cape Falcon, except the winter treaty troll fishery, were regulated by catch quotas for both chinook and coho. The total impact for some fisheries included an additional non-landed component representing estimated numbers of fish killed through the process of hook and release. Table I-9 summarizes the catch quotas and actual landings associated with each fishery.

Non-treaty - Non-treaty troll chinook impacts were within established limits for individual fisheries. The total chinook harvest of 43,200 was 4,300 fish less than the overall non-treaty troll fishery quota of 47,520.

All non-treaty troll fishery coho harvests exceeded established catch quotas. The total coho harvest for non-treaty troll fisheries in the area north of Cape Falcon was 169,100 fish, 77,600 fish greater than the allowable catch quota. The non-treaty troll fishery south of Cape Falcon landed 54,900 coho, 9,900 above the 45,000 catch quota.

The total chinook catch for the recreational fishery north of Cape Falcon was 31,680, and was 6,200 fish less than the overall quota of 37,850 chinook. Individual port or area chinook catches were within the quota harvest amounts, but for the Neah Bay-LaPush area, the total fishery impact including hooking mortality, was approximately 200 fish greater than the catch quota of 2,450 chinook. The total coho catch for the recreational fishery north of Cape Falcon was 209,800, exceeding the overall quota by 11,400 fish. By individual port or area, coho catches were within established quotas, except for the Leadbetter Point to Cape Falcon area, where the catch was 110,800 compared to the quota of 99,000.

Treaty Indian Troll - The summer season (May through September) treaty Indian troll ocean fishery was constrained by harvest quotas of 75,000 coho and 10,500 chinook. Both quotas were exceeded. The summer season catch was 87,200 coho and 12,000 chinook.

California Troll Fishery

Troll effort for California totaled 53,300 days fished (Table I-7). This was a 25 percent increase over the 42,500 days fished in 1984, but was only 60 percent of the 1978-1982 average of 89,400. Chinook landings of 360,300 increased 20 percent over 1984 landings of 299,800 chinook, but were only 64 percent of the 1971-1975 average of 562,700. Coho landings of 11,100 were 24 percent of 1984 landings of 47,000 coho and only 3 percent of the 1971-1975 average of 361,600.

California Recreational Fishery

California recreational fishery effort for the 1985 season totaled 185,600 angler trips (Table I-8). This compares to 123,600 trips in 1984 and an average of 242,200 trips for the 1971-1975 period. Chinook landings in 1985

Table I-9. The PFMC 1985 coho and chinook quotas and actual harvest, in numbers of fish by management area and fishery.

Fishery Management Area	Chinook			Coho		
	Quota	Harvest	Percent of Quota	Quota	Harvest	Percent of Quota
NON-TREATY						
Troll ^{a/}						
North of Cape Falcon						
May Season	27,000	27,000	100	-	-	-
July Season	16,100	11,300	70	81,500	136,300	167
August (Columbia River)	2,700	1,000	35	10,000	32,800	325
August (Pink)	<u>1,720^{b/}</u>	<u>3,900</u>	<u>227</u>	<u>0^{c/}</u>	<u><50</u>	<u>-</u>
Subtotal	47,520	43,200	91	91,500	169,100	185
South of Cape Falcon	-	567,800		45,000 ^{d/}	54,910	122
Recreational						
North of Cape Falcon						
North of Queets River	2,450	2,380	97	25,400	25,400	100
Queets River to Leadbetter Pt.	23,300	18,100	78	74,000	73,600	99
Leadbetter Pt. to Cape Falcon	<u>12,100</u>	<u>11,200^{e/}</u>	<u>93</u>	<u>99,000</u>	<u>110,800^{e/}</u>	<u>112</u>
Subtotal	37,850	31,680	84	198,400	209,800	106
South of Cape Falcon	-	212,900		170,000	166,700	98
TREATY INDIAN						
Troll	10,500	12,000	114	75,000	87,200	116

a/ A chinook impact limitation of 50,900 fish from the U.S.-Canada border to Cape Falcon, Oregon was established during the season.

b/ The 1,720 chinook listed here is a harvest quota. A hooking mortality limit of 7,430 chinook also was established.

c/ Quota for coho salmon was reduced inseason from 31,200. A hooking mortality limit of 7,500 coho also was established.

d/ In addition, a postseason hooking mortality of 44,000 coho was established. The fishery south of Point Delgada was not closed when the south of Cape Falcon quota was predicted to be reached.

e/ Buoy 10 catches of 2,100 chinook and 10,200 coho from August 18-22 counted towards the area quotas. When the fishery reopened on August 31, coho catches no longer counted towards the area quota. The August 31-September 2 Buoy 10 fishery had a 10,000 coho quota and catches were 300 chinook and 10,100 coho.

were 160,600 fish compared to 88,600 in 1984 and an average of 169,600 for the 1971-1975 period. Coho landings in 1985 were 15,200 fish compared to 19,000 coho in 1984, and an average of 48,300 for the 1971-1975 period.

Oregon Troll Fishery

Troll effort for Oregon totaled 21,100 vessel days, an increase of 13,200 days fished over 1984 (167 percent). Chinook landings increased significantly to 216,600 fish, well above the low 1984 landings of 64,300 fish and 4 percent above the 1971-1975 average (Table I-7). Coho landings of 84,000 fish were well above the record low of 14,100 coho in 1984 but were well below the 1971-1975 average of 981,000. Pink landings of 44,900 compared to less than 100 fish landed in 1983 and a high of 88,000 landed in 1977.

Oregon Recreational Fishery

Oregon recreational fishery effort for the 1985 season totaled 251,600 salmon angler trips compared to 153,100 trips in 1984 (Table I-8). Chinook landings in 1985 were 55,900 fish compared to 17,000 in 1984 and an average 49,400 for the period 1971-1975. Most of the chinook catch was taken during July (31,400 fish) followed by August (20,800 fish). Brookings was the leading port of landing with a record high 36,100 chinook landed, followed by Coos Bay with 9,500 fish. Coho landings in 1985 were 182,500 fish compared to a record low season catch of 123,300 in 1984, and an average of 271,800 for the 1971-1975 period. Pink salmon landings were 7,700 compared to less than 100 fish landed in 1983 and an average of 1,100 fish for odd years of the period 1971-1975.

Washington Troll Fishery

Non-treaty - Non-treaty troll effort for Washington totaled 6,200 days fished (Appendix A, Table A-11). This is a substantial increase over the 1,100 days fished in 1984, but only 12 percent of the 1971-1975 average of 52,400. Chinook landings of 34,400 fish increased significantly above the record low 1984 landings of 9,800 fish, but were only 13 percent of the 1971-1975 average of 264,900 fish. Coho landings of 129,100 compared to the record low 23,400 coho for 1984 and the 1971-1975 average of 858,300. Pink landings of 101,700 compared to 86,600 landed in 1983 and a high of 554,300 landed in 1979.

Treaty Indian - Total deliveries by 1985 treaty Indian ocean troll fisheries were 1,800, approximately 84 percent of the number of deliveries in 1984 (Appendix A, Table A-13). Deliveries in the Strait of Juan de Fuca chinook fishery accounted for 52 percent of all deliveries, but were 34 percent lower than 1984. The total chinook harvest was 17,900 in 1985, compared to 17,700 in 1984. Approximately 42 percent of the total ocean chinook catch was taken in the Strait of Juan de Fuca during the winter season. Chinook catch in ocean management areas during the May to September period was 12,000. The fishery harvested 87,200 coho compared to 43,400 coho taken in 1984. Nearly all the coho harvest was taken in ocean management areas. The pink harvest was 6,600, compared to 19,900 harvested during the 1983 season.

Washington Recreational Fishery

Washington recreational fishery effort for the 1985 season totaled 127,900 angler trips. This compares to 36,800 trips in 1984 and an average of 482,900

trips for the 1971-1975 period. Chinook landings in 1985 were 28,100 fish compared to 6,900 in 1984 and an average of 210,400 for the period 1971-1975. Coho landings in 1985 were 178,900 fish compared to a record low season catch of 40,400 in 1984, and an average of 567,400 for the 1971-1975 period. Pink salmon landings were 3,100 compared to 4,500 landed in 1983 and an average of 10,100 for odd years of the period 1971-1975.

Pacific Salmon Treaty

The Pacific Salmon Treaty between the U.S. and Canada became effective in March 1985 and established the Pacific Salmon Commission with the responsibility for implementing the treaty. 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 new commission can be expected at both the policy and technical levels.

The treaty established a number of harvest ceilings for chinook salmon for various Canadian and Alaskan fisheries in response to a coastwide program to rebuild depressed stocks of chinook salmon. Ceilings for northern British Columbia and Southeast Alaska fisheries affect far-northerly migrating stocks originating in Washington, Oregon, and Idaho such as Washington coastal, upper Columbia River bright, spring and summer, and northern Oregon coastal. The ceiling for west coast Vancouver Island troll and Georgia Strait troll and sport fisheries affect far-northerly migrating stocks to a lesser degree and have a major impact on more southerly distributed Columbia River tule and Puget Sound stocks. Actual catches compared to Pacific Salmon Treaty harvest ceilings are summarized in Table I-10.

No direct management measures for chinook within the Council management area were specified in the treaty except for a commitment to ensure that depressed naturally spawning chinook stocks, saved as a result of harvest ceilings in the northern area, accrue principally to escapement. The Council's ocean fisheries and inside fisheries on depressed chinook stocks were designed to minimize impacts on spawning escapements of these depressed stocks.

The Pacific Salmon Treaty also established a 1.75 million coho harvest ceiling for the Canadian troll fishery off the west coast of Vancouver Island for 1985 and 1986. The actual 1985 catch by this fishery was approximately 1.405 million coho. The only coho management actions for U.S. fisheries specified in the treaty concerned continuation of net fishery restriction for certain northern Puget Sound and Strait of Juan de Fuca areas. The coho catch by U.S. net fisheries in management areas 6, 7, and 7A totaled 141,800; approximately 82 percent of which was taken during fisheries under the control of the International Pacific Salmon Fisheries Commission (IPSFC) directed at Fraser River sockeye and pink salmon. The IPSFC has been replaced by the Pacific Salmon Commission and the Fraser River Panel established under the treaty. The Fraser River Panel will be responsible for inseason management of Fraser River sockeye and pink stocks during the times and in the areas formerly under the jurisdiction of the IPSFC. In contrast to the past operation of the IPSFC, the Fraser River Panel will be required to directly consider management of stocks and species other than Fraser River sockeye and pink salmon.

Table I-10. Actual catches (thousands of fish) compared to Pacific Salmon Treaty harvest ceilings for 1985.

Area and Fishery	Thousands of Chinook		Difference	
	Ceilings	Catch	Numbers	Percent
Southeast Alaska (T, N, S) ^{a/}	263	276	13	+5
	269 ^{b/}	276	7	+3
North and Central BC (T, N, S)	263	277	14	+5
West Coast Vancouver Island (T)	360	359	<1	<1
Georgia Strait (T, S)	275	292	17	+6

a/ T = troll; N = net; S = sport.

b/ Adjusted for hatchery add-on of 6,000.