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Summary of Ocean and Major Inland Salmon Harvest Data for Washington, Oregon and California

by

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INTRODUCTION

This report provides a summary of recent commercial and recreational harvest data for chinook, coho and pink salmon caught in U.S. ocean salmon fisheries off Washington, Oregon and California. Harvest of chum, sockeye and steelhead is very rare in ocean fisheries in this area and is not routinely summarized.

In addition to ocean landings, salmon harvest is also reported for Puget Sound (Washington landings), the Columbia River, and the Klamath and Sacramento river basins of California. These fisheries include a major portion of the landings for all commercial and recreational salmon fisheries in inland waters in the three Pacific Coast states and Idaho.

The ocean and Puget Sound landings data are extracted from an annual summary produced by the Salmon Technical Team and staff of the Pacific Fishery Management Council (Council 1995). An annual report prepared jointly by the Oregon Department of Fish and Wildlife (ODFW) and Washington Department of Fisheries and Wildlife (WDFW) served as the source of Columbia River salmon harvest data (ODFW and WDFW 1995). California inland salmon landings were obtained from internal reports of the California Department of Fish and Game.

HARVEST SUMMARY

Tables 1-3 provide ocean salmon landings data in numbers and pounds of fish for recent years through 1994. The 1994 ocean salmon season was the most restrictive on record in the Council management area. For non-Indian fisheries, the season included a complete coastwide closure to coho retention and a complete closure of all salmon fishing north of Cape Falcon, Oregon.

Inland salmon harvest data is provided in tables 4-7. Preliminary 1994 data is not yet available for recreational fisheries in Puget Sound.

LITERATURE CITED

- Council. 1995. Review of 1994 ocean salmon fisheries. Pacific Fishery Management Council. Portland, Oregon.
- WDFW and ODFW. 1995. Status report, Columbia River fish runs and fisheries, 1938-1994 (in press). Washington Department of Fisheries and Wildlife and Oregon Department of Fish and Wildlife. Battle Ground, Washington; Clackamas, Oregon.

TABLE 1. Washington, Oregon and California commercial troll and recreational ocean salmon landings in thousands of fish. ("-" indicates closed season)

Year or Average	California			Oregon ^{a/}			Washington ^{b/}			Council Area		
	Troll	Sport	Total	Troll	Sport	Total	Troll	Sport	Total	Troll	Sport	Total
CHINOOK												
1971-1975	563	170	733	209	49	258	280	211	491	1,052	430	1,482
1976-1980	619	92	711	234	40	274	214	115	329	1,067	247	1,314
1981-1985	463	109	572	151	33	184	86	55	141	700	197	897
1986-1990	795	166	961	398	36	434	80	26	106	1,273	228	1,501
1986	826	142	968	403	22	425	46	21	67	1,275	185	1,460
1987	876	193	1,069	530	59	589	75	41	116	1,481	293	1,774
1988	1,317	171	1,488	470	38	508	106	19	125	1,893	228	2,121
1989	531	187	718	354	32	386	73	20	93	958	239	1,197
1990	423	140	563	232	27	259	63	30	93	718	197	915
1991	295	81	376	75	14	89	50	13	63	420	108	528
1992	163	74	237	110	13	123	66	18	84	339	105	444
1993	280	110	390	82	6	88	55	13	68	417	129	546
1994 ^{c/}	275	170	445	25	6	31	4	-	4	304	176	480
COHO												
1971-1973	316	48	364	1,037	264	1,301	847	587	1,434	2,200	899	3,099
1974-1976	494	52	546	1,207	356	1,563	1,063	673	1,736	2,764	1,081	3,845
1977-1979	182	26	208	591	212	803	662	417	1,079	1,435	655	2,090
1980-1982	75	19	94	508	234	742	389	269	658	972	522	1,494
1983-1985	39	21	60	139	151	290	117	143	260	295	315	610
1986-1988	44	34	78	472	205	677	124	129	253	640	368	1,008
1986	36	19	55	440	212	652	160	175	335	636	406	1,042
1987	44	47	91	354	177	531	138	124	262	536	348	884
1988	51	35	86	623	226	849	73	89	162	747	350	1,097
1989	42	50	92	454	272	726	145	213	358	641	535	1,176
1990	61	52	113	122	200	322	190	225	415	373	477	850
1991	82	69	151	307	259	566	136	208	344	525	536	1,061
1992	2	12	14	50	186	236	92	124	216	144	322	466
1993	-	30	30	2	59	61	75	126	201	77	215	292
1994 ^{c/}	-	d/	d/	-	d/	d/	-	-	-	-	d/	d/
PINK												
1986	0	e/	0	d/	d/	d/	d/	d/	d/	d/	d/	d/
1987	1	e/	1	18	1	19	19	2	21	38	3	41
1988	0	e/	0	0	0	0	0	0	0	0	0	0
1989	1	e/	1	4	1	5	48	2	50	53	3	56
1990	0	e/	0	0	0	0	d/	0	d/	d/	0	d/
1991	d/	e/	d/	2	d/	2	48	2	50	50	2	52
1992	0	e/	0	d/	d/	d/	d/	d/	d/	d/	d/	d/
1993	0	e/	0	d/	d/	d/	6	2	8	6	2	8
1994 ^{c/}	0	e/	0	0	0	0	-	-	-	0	0	0

a/ Includes troll catches from Alaska, Washington and California landed in Oregon.

b/ Includes (1) troll catches from Area 4B (May 1-Sept. 30); (2) troll catches from Alaska, Oregon and California landed in Washington; (3) treaty Indian troll catches (May 1-Sept. 30); and (4) beginning in 1989, includes catch from Washington state-waters Area 4B recreational fishery.

c/ Preliminary.

d/ Less than 500 fish.

e/ Catch of pink salmon is very rare and not routinely recorded.

TABLE 2. Washington, Oregon and California commercial ocean troll effort and salmon landings. ("-" indicates closed season)

Year or Average	Days Fished ^{a/} (thousands)	Landings					
		Numbers (thousands)			Pounds (thousands) ^{b/}		
		Chinook	Coho	Pink	Chinook	Coho	Pink
CALIFORNIA							
1971-1975	NA	562.7	361.6	7.8 ^{c/}	5,743.0	2,211.3	37.0 ^{c/}
1976-1980	95.0 ^{d/}	618.6	243.4	1.3 ^{c/}	5,867.2	1,184.3	6.6 ^{c/}
1981-1985	59.8	462.7	58.7	4.7	4,453.6	344.9	22.7
1986-1990	58.5	794.7	46.8	0.8	8,097.4	262.2	4.0
1988	75.7	1,317.2	51.0	0.0	14,430.8	319.5	0.0
1989	57.4	530.9	41.9	0.7	5,489.8	230.6	4.5
1990	46.2	423.4	61.0	0.0	4,122.4	313.7	0.0
1991	35.3	294.9	82.3	e/	3,237.9	459.2	e/
1992	20.3	163.4	2.2	0.0	1,632.1	10.1	0.0
1993	25.9	279.6	-	0.0	2,536.9	-	0.0
1994 ^{f/}	19.6	275.4	-	0.0	2,877.5	-	0.0
OREGON^{g/}							
1971-1975	NA	209.2	981.0	1.8 ^{c/}	2,127.9	6,015.4	8.0 ^{c/}
1976-1980	NA	234.1	744.3	54.2 ^{c/}	2,406.3	4,251.5	251.2 ^{c/}
1981-1985	26.1	150.7	312.1	21.0	1,431.8	1,537.1	116.6
1986-1990	38.3	397.8	398.7	4.3	3,728.4	1,957.2	21.0
1988	51.1	470.0	623.2	0.0	4,384.7	3,335.9	0.0
1989	42.2	353.9	454.2	3.8	3,531.9	1,995.5	17.6
1990	25.9	232.4	122.0	0.0	2,180.6	633.6	0.0
1991	14.7	74.8	306.9	1.8	693.5	1,410.2	7.6
1992	9.2	110.5	49.7	0.0	1,013.2	206.2	e/
1993	9.5	81.5	1.7	e/	760.7	8.8	e/
1994 ^{f/}	3.8	25.3	-	0.0	286.7	-	0.0
WASHINGTON^{h/}							
1971-1975	53.3 ^{i/}	279.5	869.0	50.3 ^{c/}	3,211.2	4,804.1	240.6 ^{c/}
1976-1980	45.3	214.4	750.5	423.1 ^{c/}	2,412.7	3,675.4	1,959.3 ^{c/}
1981-1985	13.4	72.7	227.1	151.1 ^{c/}	858.3	1,029.2	596.6 ^{c/}
1986-1990	6.9	72.6	141.2	33.6 ^{c/}	775.5	612.7	120.5 ^{c/}
1988	8.9	106.1	72.7	0.0	1,122.0	295.0	0.0
1989	7.3	73.1	144.7	47.9	783.3	595.0	170.0
1990	8.3	62.9	189.7	0.1	625.0	985.0	0.3
1991	6.4	49.7	136.0	48.2	482.9	634.3	160.6
1992	6.0	66.2	92.3	0.0	677.8	334.8	0.0
1993	5.5	55.4	75.2	6.1	563.4	336.1	19.9
1994 ^{f/}	0.2	5.2	-	0.0	52.8	-	0.0

a/ For Washington, days fished includes treaty Indian deliveries.

b/ Dressed weight.

c/ Odd-year average.

d/ Days fished estimates are for 1978-1980. Data unavailable for 1976-1977.

e/ Less than 50.

f/ Preliminary.

g/ Includes catches made off California, Washington and Alaska and landed in Oregon.

h/ Includes treaty Indian landings (ocean and Area 4B only from May 1-Sept. 30) and catches made off Oregon, California and Alaska and landed in Washington.

i/ This is a 1973-1975 average; 1971 and 1972 effort data are deliveries and are not comparable.

TABLE 3. Washington, Oregon and California recreational ocean salmon effort and catch. ("-" indicates closed season)

Year or Average	Thousands of Salmon Angler Trips	Catch (thousands of fish)				Salmon Per Angler Trip
		Chinook	Coho	Pink	Total	
CALIFORNIA						
1971-1975	247.4	169.6	48.3	0.0	217.9	0.88
1976-1980	163.5	92.4	31.2	0.0	123.6	0.76
1981-1985	147.0	109.1	19.9	0.0	129.0	0.88
1986-1990	240.7	166.4	40.4	0.0	206.8	0.86
1988	242.4	171.4	34.7	0.0	206.1	0.85
1989	244.9	186.6	49.6	0.0	236.2	0.96
1990	252.1	139.8	51.6	0.0	191.4	0.76
1991	196.6	80.8	69.3	0.0	150.1	0.76
1992	127.9	73.6	11.5	0.0	85.1	0.67
1993	174.9	110.0	29.8	0.0	139.8	0.80
1994 ^{a/}	169.0	170.0	0.4	0.0	170.4	1.01
OREGON^{b/}						
1971-1975	NA	49.4	271.8	1.1 ^{c/}	322.3	0.93
1976-1980	395.9	40.0	289.2	2.3 ^{c/}	331.5	0.85
1981-1985	233.5	33.1	165.5	1.9 ^{c/}	200.5	0.86
1986-1990	241.0	35.6	217.6	0.4 ^{c/}	253.6	1.05
1988	250.6	38.3	226.2	0.0	264.5	1.06
1989	266.6	32.0	272.3	1.3	305.6	1.15
1990	246.2	26.5	200.5	0.0	226.8	0.92
1991	190.0	14.4	259.1	0.3	273.8	1.44
1992	165.3	12.6	185.8	0.0	198.4	1.20
1993	80.3	6.5	59.3	0.0	65.8	0.82
1994 ^{a/}	27.3	6.0	d/	0.0	6.0	0.22
WASHINGTON						
1971-1975	483.0	210.3	566.8	9.9 ^{c/}	787.0	1.63
1976-1980	429.8	114.6	511.8	23.8 ^{c/}	650.2	1.51
1981-1985 ^{e/}	163.3	54.7	172.4	5.9 ^{c/}	233.0	1.43
1986-1990	119.4	26.1	165.1	1.9 ^{c/}	193.1	1.62
1988	68.9	18.9	88.9	0.0	107.8	1.56
1989	142.2	19.9	212.9	2.0	234.8	1.65
1990	175.2	30.0	224.9	0.0	254.9	1.46
1991	127.2	12.7	207.7	2.2	222.6	1.75
1992	108.9	18.4	123.6	0.0	142.0	1.30
1993	128.8	13.0	126.0	2.4	141.4	1.10
1994 ^{a/}	-	-	-	-	-	-

a/ Preliminary.

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

c/ Odd-year average.

d/ Less than 50 fish (illegal catch).

e/ 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.

TABLE 4. Washington commercial and recreational salmon fishery landings in thousands of fish from Puget Sound.

Year or Average	Chinook	Coho	Pink	Chum	Sockeye
COMMERCIAL NET AND TROLL FISHERIES					
1971-1975	157.9	748.3	2,057.3 ^{a/}	409.3	2,196.8
1976-1980	229.6	901.9	3,090.5 ^{a/}	702.9	1,373.4
1981-1985	215.5	950.7	3,294.9 ^{a/}	756.7	1,837.2
1986-1990	234.6	1,282.1	2,748.8 ^{a/}	1,202.6	2,000.2
1986	223.9	1,357.1	0.1	1,155.8	2,751.3
1987	213.1	1,782.2	2,069.8	1,301.6	1,946.1
1988	231.4	1,237.5	0.1	1,568.7	849.4
1989	253.9	965.4	3,427.7	886.5	2,251.7
1990	250.2	1,067.7	0.3	1,100.5	2,166.7
1991	143.3	598.2	3,288.5	1,021.8	1,828.1
1992	113.5	398.9	0.2	1,381.2	608.2
1993 ^{b/}	82.3	189.7	2,092.1	1,128.0	2,693.0
1994 ^{b/}	84.3	447.8	1.7	1,359.3	1,834.5
MARINE RECREATIONAL FISHERY^{c/}					
1971-1975	225.6	119.3	14.8 ^{a/}	d/	d/
1976-1980	252.4	200.2	47.0 ^{a/}	d/	d/
1981-1985	160.2	197.6	24.8 ^{a/}	d/	d/
1986-1990	128.5	248.3	39.9 ^{a/}	2.1	0.4
1986	170.0	261.0	0.0	1.8	0.1
1987 ^{e/}	102.9	247.5	30.9	3.9	0.7
1988 ^{e/}	108.3	195.0	f/	2.8	0.4
1989 ^{e/}	135.7	220.6	48.8	2.8	0.4
1990 ^{e/}	125.5	317.2	f/	1.1	0.4
1991 ^{e/}	90.6	252.4	44.9	3.6	0.2
1992 ^{e/}	97.7	189.4	0.4	8.7	0.2
1993 ^{b/e/}	80.2	136.0	67.6	5.8	1.0

a/ Odd-year average.

b/ Preliminary.

c/ WDFW Statistical Areas 5 through 13, which include the Strait of Juan de Fuca, San Juan Islands and inner Puget Sound.

d/ Not available.

e/ Punch card estimates adjusted for results of 1987-1990 WDFW/tribal sports emphasis study.

f/ Less than 50 fish.

TABLE 5. Columbia River commercial landings of salmon and steelhead.

Year	Chinook	Coho	Sockeye	Chum	Steelhead	Total
THOUSANDS OF FISH						
1986	283.1	997.8	6.1	1.8	72.0	1,360.8
1987	483.5	170.1	67.8	1.3	79.1	801.8
1988	489.0	368.2	48.5	2.5	78.5	986.7
1989	275.0	391.7	<0.1	1.4	60.9	729.0
1990	148.0	76.2	<0.1	0.8	32.6	257.6
1991	106.9	416.0	<0.1	0.4	37.0	560.3
1992	53.2	58.8	<0.1	0.7	51.9	164.7
1993	50.8	37.0	<0.1	<0.1	27.7	115.5
1994	33.5	64.8	0.0	<0.1	12.9	111.3
THOUSANDS OF POUNDS						
1986	4,729.0	6,820.1	23.8	20.2	683.8	12,276.9
1987	9,016.9	1,313.4	256.5	14.1	753.8	11,354.7
1988	10,539.1	2,683.5	181.1	30.2	764.8	14,198.7
1989	6,120.3	2,683.1	0.1	17.3	591.0	9,411.8
1990	3,095.3	501.2	<0.1	9.4	331.0	3,936.9
1991	1,994.5	2,730.3	<0.1	4.2	307.4	5,036.4
1992	952.3	303.8	<0.1	6.9	465.2	1,728.2
1993	877.8	271.4	<0.1	0.5	263.0	1,412.7
1994	604.6	505.0	0.0	0.4	110.2	1,220.2

TABLE 6. Lower Columbia River (estuary to Bonneville Dam) recreational catch of salmon in thousands of fish (including jacks).

Year	Chinook	Coho	Total
1986	26.9	124.9	151.8
1987	50.8	51.1	101.9
1988	41.6	145.4	187.0
1989	26.0	82.5	108.5
1990	22.4	21.7	44.1
1991	20.4	211.0	231.4
1992	19.2	45.2	64.4
1993	11.4	21.5	32.9
1994	2.2	2.7	4.9

TABLE 7. California inland chinook salmon harvest (including jacks).

Year	Recreational ^{a/}	Tribal ^{b/}	Total
THOUSANDS OF CHINOOK			
1991	39.2	10.8	50.0
1992	25.2	6.5	31.7
1993	43.0	10.4	53.4
1994	53.3	12.3	65.6

a/ Recreational harvest in the Klamath and Sacramento river basins.

b/ Klamath tribal harvest in the Klamath River.