

---

## **CHAPTER III INSIDE COHO SALMON FISHERIES AND SPAWNING ESCAPEMENTS**

---

### **CALIFORNIA STOCKS**

Inside harvest estimates of coho are not available for any river system in California. Spawning escapement estimates are available for Klamath River Basin hatcheries, but not for coho spawning in natural areas. In 1996, coho returns to Iron Gate and Trinity River hatcheries were 13,100 adults, compared to a combined goal of 2,000.

### **OREGON COASTAL STOCKS**

Oregon coastal natural (OCN) coho stocks are managed as one stock aggregate that includes coho produced from Oregon river and lake systems south of the Columbia River. The OCN stock aggregate contributes primarily to ocean fisheries off Oregon and California, and to a lesser degree to ocean fisheries off Washington and British Columbia. As discussed in the fishery management plan (FMP), ocean fisheries within the Oregon Production Index (OPI) area (Leadbetter Point, Washington to the U.S.-Mexico border) are managed to achieve OCN coho spawner escapement goals.

#### **Inside Harvest**

The inside recreational harvest of coho in 1996, as in recent years, was very restricted. Coho harvest in river fisheries was limited to areas where surplus hatchery coho returns were expected. Estimates of the 1996 inriver recreational coho harvest are not available at this time. Historical estimates of the recreational harvest of adult coho in Oregon coastal estuaries and rivers, derived from Oregon Department of Fish and Wildlife (ODFW) salmon and steelhead angler tag returns, are reported on Table III-1.

Inside commercial coho harvest in recent years has been limited to returns to private aquaculture operations. All private Oregon facilities have ceased operations; thus, there were no returns in 1996 (Table III-1).

#### **Escapement and Goal Assessment**

The preliminary assessment of OCN spawner escapement indicates about 43 adults per mile on standard index surveys compared to the predicted 32 adults per mile (Table III-2 and Figure III-1). Natural spawner escapement to Oregon coastal river and lake systems is preliminarily estimated at 88,100 adult coho in stratified random sampling (SRS) accounting, which compares to 52,400 coho in 1995. In 1996, an estimated 74,600 coho spawned in river systems from the Coquille River north and 13,500 coho spawned in lake systems. Historical spawner escapement estimates of naturally produced coho, based on SRS initiated in 1990, are reported in parenthesis on Table III-1. Also reported on Table III-1 are traditional natural spawner "index" estimates to OCN river systems since 1970. Based on the results of the SRS assessment program, historical spawner escapements into river systems are probably less than reported by index accounting.

Preliminary information based on SRS surveys suggests that the recent trend of disproportionate spawner distribution among coastal rivers continued in 1996. The number of adult spawners observed per mile on north coast rivers was estimated at 17 and 15% of densities observed on central and south central rivers, respectively (Table III-3 and Figure III-2).

TABLE III-1. Estimated **adult** escapement in thousands of Oregon coastal hatchery and natural **coho**, 1970-1996. (Page 1 of 1)

Year	OCN Spawner Escapement <sup>a/</sup>												
	Returns to Facilities			Count at NF Umpqua		Lakes		Rivers		Total		Estimated Ocean Escapement to Oregon Coast <sup>a/</sup>	
	Private	Public	STEP <sup>c/</sup>	Winchester Dam	Count at NF Umpqua	Lakes	Index	SRS	Index	SRS	Index	SRS	Index
1970	-	36.2	-	0.2	20.5	228.7	-	249.2	-	39.8	325.4	-	
1971	-	29.1	-	0.6	29.2	293.2	-	322.4	-	24.1	376.2	-	
1972	-	12.9	-	0.3	10.0	116.9	-	126.9	-	16.6	156.7	-	
1973	-	18.4	-	0.4	17.6	143.5	-	161.1	-	15.4	195.3	-	
1974	-	35.1	-	0.4	6.4	126.4	-	132.8	-	13.5	181.8	-	
1975	-	4.9	-	0.5	5.6	153.0	-	158.6	-	13.5	177.5	-	
1976	-	38.7	-	0.3	1.5	156.8	-	158.3	-	19.6	216.9	-	
1977	4.2	6.5	-	0.4	5.8	61.0	-	66.8	-	13.5	91.4	-	
1978	12.3	5.6	-	0.5	1.6	72.2	-	73.8	-	4.5	96.7	-	
1979	49.2	22.2	-	0.4	6.6	167.0	-	173.6	-	1.5	246.9	-	
1980	38.7	21.9	-	0.2	4.7	104.2	-	108.9	-	6.3	176.0	-	
1981	117.8	21.2	-	0.1	2.5	70.5	-	73.0	-	9.9	222.0	-	
1982	184.7	14.8	-	2.7	7.9	124.7	-	132.6	-	14.7	349.5	-	
1983	133.9	9.5	-	1.2	3.3	55.5	-	58.8	-	6.8	210.2	-	
1984	115.4	28.6	-	3.2	14.7	194.0	-	208.7	-	17.4	373.3	-	
1985	332.0	15.8	-	4.0	7.6	183.3	-	190.9	-	15.7	558.4	-	
1986	453.7	35.8	2.5	9.6	11.8	179.0	-	190.8	-	30.3	722.7	-	
1987	119.3	12.3	0.2	2.2	4.2	78.3	-	82.5	-	7.7	224.2	-	
1988	116.1	33.7	1.2	1.2	5.8	155.0	-	160.8	-	13.3	326.3	-	
1989	46.9	37.3	1.2	3.0	4.8	139.7	-	144.5	-	15.1	248.0	-	
1990	35.6	15.4	1.6	2.3	4.4	99.6	(16.5)	104.0	(20.9)	9.5	168.4	(85.3)	
1991	35.1	39.6	4.9	5.2	7.3	128.2	(29.1)	135.5	(36.4)	31.5	251.8	(152.7)	
1992	-	23.3	0.6	6.0	2.0	136.6	(37.7)	138.6	(39.7)	18.7	187.2	(88.3)	
1993	-	20.2	2.0	3.3	10.1	157.9	(44.3)	168.0	(54.4)	13.3	206.8	(93.2)	
1994	-	23.4	1.8	2.8	5.8	124.7	(37.9)	130.5	(43.7)	3.4	161.9	(75.1)	
1995	-	25.2	0.4	4.2	11.2	120.1	(41.2)	131.3	(52.4)	3.5	164.6	(85.7)	
1996 <sup>d/</sup>	-	20.8	1.0	6.2	13.5	198.6	(74.6)	212.1	(88.1)	4.4	244.5	120.5	

a/ Spawner escapements to rivers have historically been estimated by a nonrandom standard index. A spawner escapement methodology study based on stratified random sampling (SRS) has been in effect since 1990. The SRS methodology indicates that actual escapements are probably less than indicated by the standard rivers index.

b/ 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.

c/ Oregon coastal STEP production from hatchery smolt rearing sites only.

d/ Preliminary.

TABLE III-2. Oregon coastal natural adult coho spawner escapements compared with the Council goal. (Page 1 of 1)

Year of Adult Return	Spawner Goal <sup>a/</sup>		Spawner Escapement	
	Index Escapement	Total Adults per Mile <sup>b/</sup>	Index Escapement <sup>c/</sup>	Total Adults per Mile <sup>b/</sup>
1981	175,000	-	73,000	18
1982	172,000	-	132,600	32
1983	140,000	-	58,800	14
1984	135,000	-	208,700	44
1985	175,000	-	190,900	45 <sup>d/</sup>
1986	143,000 <sup>e/</sup>	-	190,800	42 <sup>d/</sup>
1987	200,000	-	82,500	19 <sup>d/</sup>
1988	200,000	-	160,800	33 <sup>d/</sup>
1989	200,000	-	144,500	28 <sup>d/</sup>
1990	161,000 <sup>f/</sup>	-	104,000	15 <sup>d/</sup>
1991	200,000	-	135,500	24 <sup>d/</sup>
1992	135,000 <sup>f/</sup>	-	138,600	25 <sup>d/</sup>
1993	142,000 <sup>f/</sup>	-	168,000	29 <sup>d/</sup>
1994	-	26 <sup>g/</sup>	130,500	27 <sup>d/</sup>
1995	-	38 <sup>g/</sup>	131,300	26 <sup>d/</sup>
1996 <sup>h/</sup>	-	32 <sup>g/</sup>	212,100	43

a/ Council goal initially established in 1981 to rebuild OCN stocks and amended in 1987 (Amendment 7) to provide a range of 135,000 to 200,000 coho. The goal was amended again in 1993 (Amendment 11) to 42 adults per mile on standard index surveys. Amendment 11 allows up to a 20% exploitation rate if it does not cause irreparable harm to the stock.

b/ Total adults per mile on standard index surveys. The total adults per mile on standard index surveys is calculated as total adults on all standard index surveys/total standard index survey miles.

c/ Spawner escapements prior to 1985 were calculated using complete OCN spawner habitat mileage (streams and lakes combined) and based on a coastwide average adult spawners per mile value observed for rivers. Estimates since 1984 are calculated by individual coastal river basins with adult spawners per mile values calculated for each basin separately. A spawner escapement methodology study based on stratified random sampling (SRS) has been in effect since 1990. The SRS methodology indicates that actual escapements are probably less than indicated by the standard rivers index. Changes in estimates from previous reports reflect revisions in escapements into lake systems.

d/ Adjusted to remove hatchery fish. No hatchery strays were identified in 1991.

e/ Salmon framework amendment rebuilding goal of 170,000 was modified by the Council for optimum yield considerations.

f/ Reflects sliding scale portion of Council framework amendment spawner goal in Amendment 7.

g/ Based on projections of OCN abundance, the annual goals for spawner density reflect the following expected exploitation rates (largely attributable to hook-and-release and drop-off mortality in chinook directed fisheries):

1994	11.0%
1995	12.0%
1996	12.5%

h/ Preliminary.

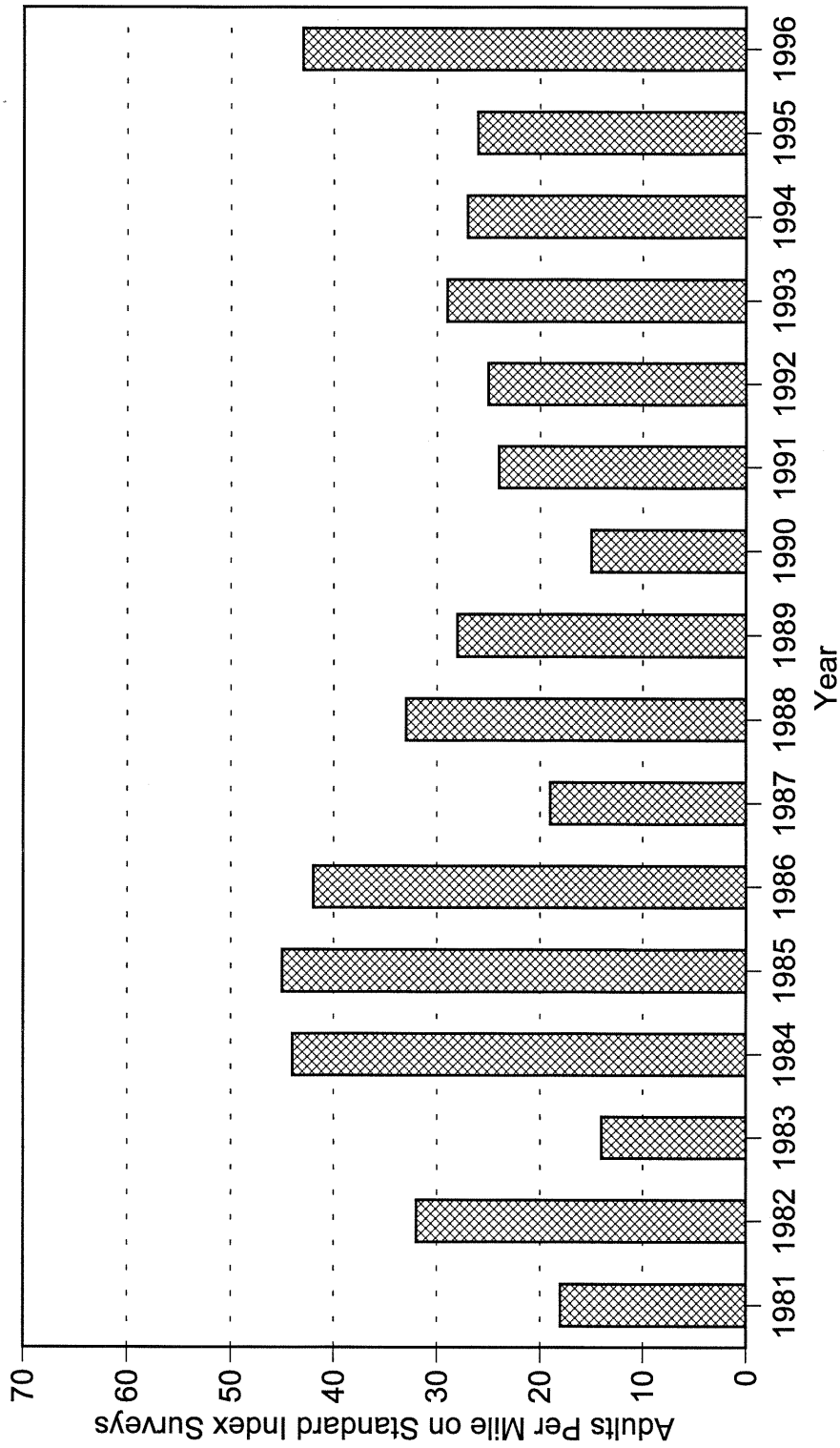


FIGURE III-I. Total Oregon Coastal Natural adult coho salmon per mile on standard index spawner surveys, 1981-1996. Amendment 11 goal of 42 adults per mile was implemented in 1994. It included an allowance for up to a 20% exploitation rate for all ocean and inside fisheries combined if it does not cause irreparable harm to the stock. Because of low projected abundances, the expected adults per mile under adopted regulations in 1994 and 1995 were 26 and 38 adults, respectively.

TABLE III-3. Oregon coastal natural adult coho salmon spawner escapement and spawner per habitat mile by coastal region, based on stratified random sampling (SRS), 1990-1996. (Page 1 of 1)

Year	Adjusted SRS Adult Coho Salmon Spawner Population Estimates (Thousands) <sup>a/</sup>				Adult Coho Salmon Spawners Per Spawner Habitat Mile			
	Region				Region			
	North <sup>b/</sup>	Central <sup>c/</sup>	South Central <sup>d/</sup>	Coastwide <sup>e/</sup>	North <sup>b/</sup>	Central <sup>c/</sup>	South Central <sup>d/</sup>	Coastwide Average <sup>e/</sup>
1990	2.2	5.6	8.7	16.5	2	5	5	4
1991	9.3	6.7	13.1	29.1	10	6	8	8
1992	2.4	15.4	19.9	37.7	3	13	12	10
1993	4.5	7.8	32.0	44.3	5	7	19	12
1994	4.1	9.7	24.1	37.9	5	8	15	10
1995	4.0	13.6	23.6	41.2	4	12	14	11
1996 <sup>f/</sup>	3.7	28.0	42.8	74.6	4	24	26	20

- 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/ Includes runs from the Necanicum through Neskowin Rivers. Total spawner habitat is estimated at 893 miles.
- c/ Includes runs from the Salmon through Siuslaw Rivers. Total spawner habitat is estimated at 1,163 miles.
- d/ Includes runs from the Umpqua through Coquille Rivers. Total spawner habitat is estimated at 1,656 miles.
- e/ Includes only river systems from the Coquille River and north. Excludes spawner escapements to all Oregon coastal lake systems.
- f/ Preliminary.

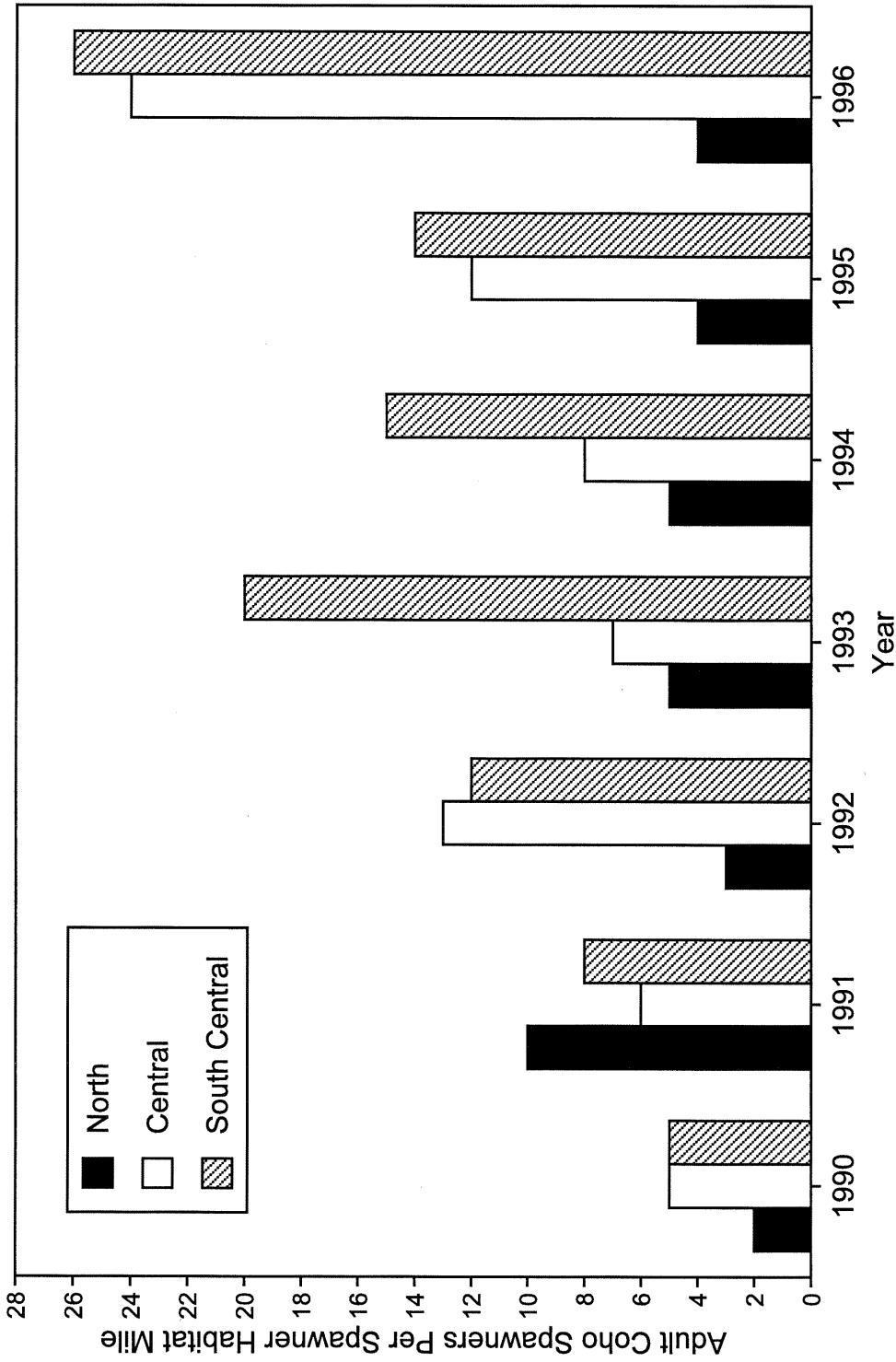


FIGURE III-2. Oregon Coastal Natural adult coho salmon spawners per spawner habitat mile by coastal region based on SRS, 1990-1996. The north region includes runs from the Necanicum through Neskowin rivers. The central region includes runs from the Salmon through Siuslaw rivers. The south central region includes runs from the Umpqua through Coquille rivers. Excludes spawner escapement to all Oregon coastal lake systems.

Preliminary estimates of total coho returns to Oregon coastal public hatcheries and STEP smolt production facilities were 22,500 and 1,000 adults, respectively (Table III-1). Hatchery egg-take goals are expected to be met at all public hatchery stations.

## **COLUMBIA RIVER STOCKS**

### **Inside Harvest**

Coho harvest statistics for Columbia River commercial and recreational fisheries are presented in Appendix B, Table B-20. The 1996 Columbia River non-Indian commercial gillnet fishery catch was 27,200 adult coho. Most of this catch occurred in the Youngs Bay terminal area gillnet fishery (14,800 coho). Other terminal area fisheries in both Oregon and Washington caught an additional 7,100 coho. The lower river late fall mainstem commercial gillnet season targeted coho for 13 days in October for a total mainstem catch of 5,300. The 1996 catch of 27,200 adult coho compares to the 1995 catch of 21,400 coho and the 1986-1990 average catch of 392,200 coho. The treaty Indian mainstem commercial gillnet coho catch was 100 fish, compared to the 1995 catch of 300 coho and the 1986-1990 average catch of 5,600 coho.

The mainstem and Buoy 10 recreational adult coho catch below Bonneville Dam was 8,500 fish. In 1996, Columbia River managers opened the Buoy 10 fishery as scheduled on August 1, however chinook retention was prohibited until August 29 because of expected shortfalls of lower Columbia River hatchery (LRH) fall chinook and the need to provide additional protection for wild Snake River fall chinook returning to the Columbia River. The final Buoy 10 catch totalled 4,500 coho in 1996. Fishing effort was poor at 18,034 angler days and peaked during the week incorporating the Labor Day holiday (Table III-4). Angler catch per trip (0.33) was also very poor and was only slightly above the 1995 catch per trip of 0.23 and the record low level (0.19) in 1994. The 1996 Buoy 10 coho harvest of 4,500 fish was 10% less than the 1995 catch of 5,000 coho, and only 5% of the 1986-1990 average catch of 82,300 coho. Historical Buoy 10 catch and effort data are provided in Appendix B, Table B-21.

### **Escapement and Goal Assessment**

The 1996 ocean escapement of adult early and late Columbia River coho stocks was 111,400 fish, a 52% increase over the 1995 return of 74,900 adults, but still the third lowest return since 1976 (Appendix B, Table B-20). The 1996 Columbia River coho abundance was not sufficient to meet all hatchery brood stock escapement needs. Hatchery escapement goals for early coho were achieved, but there were some shortfalls for late stock coho. It must be remembered that all Council area fisheries south of Cape Falcon were closed for coho in 1996 to achieve even this very poor return.

## **WASHINGTON COASTAL STOCKS**

### **Willapa Bay Coho**

#### **Inside Harvest**

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

The gillnet catch of coho in Willapa Bay totaled 38,300 fish, up from 33,600 in 1995, and about 12% above the mean from the years 1991-1995. The 1996 run returned at more than twice the preseason forecast, and the average size of the fish was near 10 pounds, similar to 1994 and 1995 and unusually large compared to the previous 20 years.

Recreational harvest estimates are not yet available for 1996. All recreational fisheries opened at the usual time and were of normal duration, although prior to the season the daily limit for the fishery occurring in the salt water of Willapa Bay itself was increased to six fish, four of which could be adults of any species.

TABLE III-4. Estimated weekly **effort** (in angler trips) and **catches** of chinook and coho in the 1996 **Buoy 10 recreational** fisheries.<sup>a/</sup> (Page 1 of 1)

Week Number	Ending Date of Period	Angler Trips <sup>b/</sup>	Catch		Catch Per Trip
			Chinook <sup>c/</sup>	Coho	
31 <sup>d/</sup>	Aug. 4	702	0	22	0.03
32	Aug. 11	941	0	58	0.06
33	Aug. 18	1,713	0	366	0.21
34	Aug. 25	1,328	0	178	0.13
35	Sept. 1	4,604	510	1,653	0.47
36	Sept. 8	5,121	814	1,633	0.48
37	Sept. 15	2,696	78	579	0.24
38	Sept. 22	617	5	43	0.08
39-42	Oct. 13	312	2	5	0.02
Total		18,034	1,409	4,537	0.33

a/ Includes boat-based and shore-based fisheries at Clatsop Spit, the South Jetty of the Columbia River and the North Jetty of the Columbia River after the ocean closed.

b/ Preliminary.

c/ Fishery was closed to the retention of chinook through August 29.

d/ Fishery opened August 1 for coho only.



## **Escapement and Goal Assessment**

Willapa Bay coho are managed for hatchery production. Escapement to Willapa Bay hatcheries in 1996 numbered 48,900 coho, far exceeding the 5,200 fish needed to provide for hatchery production goals. The excess to the hatcheries occurred in part because most of the Bay was closed from October 15-November 10 to protect the weak run of Willapa Bay chum salmon.

No estimates of natural spawning escapement have been made since 1983.

## **Grays Harbor Coho**

### **Inside Harvest**

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

The preseason expectation for Grays Harbor coho in 1996 was for a strong return. Full season terminal marine and freshwater recreational fisheries were planned and net fisheries were scheduled within the constraints imposed by projected chinook returns. A total of 64,800 coho of natural, hatchery and net-pen origin were harvested in net fisheries. This included 51,800 coho in the Quinault Indian Nation fishery, 10,100 coho in the non-Indian fishery, and 2,900 coho in the Chehalis Tribe fishery. This represents a 30% increase in catch over 1995.

Recreational harvest estimates are not yet available for 1996. However, it is expected that recreational harvest will exceed the 9,700 adult coho caught in 1995.

### **Escapement and Goal Assessment**

Grays Harbor coho are managed for natural production. Natural spawning escapement estimates are not yet available. Initial indications are that the escapement goal of 35,400 fish will be met.

The preliminary estimates of the total return to Grays Harbor hatcheries is 45,500 coho. This return will meet on-station as well as cooperative coho rearing project needs. Net-pen reared coho also returned to Grays Harbor in 1996 and contributed to the coho harvest, but no estimate of escapement is available.

## **Quinault River Coho**

### **Inside Harvest**

Historical terminal run size, harvest and escapement for Quinault River coho are presented in Appendix B, Table B-27.

Quinault River coho are managed for hatchery production. The treaty Indian gillnet fishery targeted hatchery coho from early September through mid-November. A total of 10,100 coho were harvested by the gillnet fishery in 1996.

### **Escapement and Goal Assessment**

Quinault River coho are managed for hatchery production. Preliminary data indicate that hatchery and natural escapements of Quinault River coho in 1996 were 9,200 and 5,500 fish, respectively. Hatchery production objectives were achieved for Quinault River coho.

## **Queets River Coho**

### **Inside Harvest**

Historical terminal run size, harvest and escapement for Queets River coho are presented in Appendix B, Table B-30.

Queets River fisheries were established by preseason agreement, based on preseason abundance estimates and planned Council ocean fisheries. The treaty Indian gillnet fishery was structured to target returning hatchery coho during September and early October, followed by a reduced level of fishing to update natural coho and chinook run sizes through mid-October. The inseason updates indicated that the natural coho run was slightly above the preseason forecast. The total harvest of fall coho by the net fishery was 16,000 fish. The gillnet harvest was comprised primarily of hatchery fish (less than 1,600 natural fish were taken). Recreational fisheries operated in the Queets, Clearwater, and Salmon Rivers.

### **Escapement and Goal Assessment**

Analysis of spawning escapement survey data for Queets River coho has not yet been completed. Based on the inseason run size and inriver catch estimates, the preliminary natural spawning escapement estimate is 6,500 adults, above the lower end of the escapement goal range of 5,800-14,500 natural adults.

## **Hoh River Coho**

### **Inside Harvest**

Historical terminal run size, harvest and escapement for Hoh River coho are presented in Appendix B, Table B-33.

The preseason terminal run size forecast for Hoh River coho was 2,951 natural coho, after being updated for the reduced West Coast Vancouver Island troll fishery. Management of fall coho was affected by this brood cycle's parent escapement of 1,345 which was well below the escapement floor for this stock. Tribal and nontreaty inriver recreational fisheries operated as described in Chapter II. The tribal fishery was conducted with 8-inch stretch mesh gillnets in order to avoid catching wild coho. Larger than expected catches of coho were observed with an unusually early peak catch occurring during weeks 41-43. The tribal gillnet fishery opened with 6-inch mesh at the beginning of the steelhead season in week 49.

### **Escapement and Goal Assessment**

Based on preliminary spawning ground information and anticipated inriver harvest rates, spawning escapements may meet or exceed the upper end of the spawning escapement range (5,000 fish). The 1996 tribal fishery, which was expected to catch 10% of the run, caught 850 wild coho, providing some indication that the run may be considerably larger than expected. Coho observed in the catch and on the spawning grounds were above normal size for this stock.

## **Quillayute River Coho**

### **Inside harvest**

Historical terminal run size, harvest, and escapements for Quillayute River summer and fall coho are presented in Appendix B, Table B-36. The basic structure of the 1996 river recreational and tribal fisheries for summer and fall coho were established by preseason agreements between the Washington Department of Fish and Wildlife and the Quileute Tribe.

The summer coho run in the Quillayute River was managed primarily for its hatchery component. The treaty gillnet fishery harvested 1,708 summer coho during the period from mid-August through mid-September. A small scale recreational fishery harvested a limited number of summer coho during this period.

The fall coho preseason terminal run size prediction was 8,879 hatchery adults and 8,305 wild adults. Weekly 2- to 3-day tribal fisheries were scheduled from late August to early November, based on the preseason run size predictions, and projected harvest rates. The tribal fishery harvested 8,430 fall coho during this period. The recreational coho and fall chinook fishery was open for the full season through the end of November. A postseason estimate of harvest from the recreational fishery is not yet available.

### **Escapement and goal assessment**

The summer coho run in the Quillayute River was managed primarily for the hatchery component. The summer coho hatchery rack return was 3,400 adults, greatly exceeding the 300 adult minimum goal.

The hatchery fall coho rack return was 11,515 adults, greatly exceeding the goal of 600 adults. Preliminary spawning survey data through early January indicate that the minimum goal of 6,300 natural spawners should be greatly exceeded, but a formal postseason escapement estimate is not yet available.

## **PUGET SOUND STOCKS**

### **Inside Harvest**

Commercial inside fishery harvest of Puget Sound coho is managed on the basis of six regional management stock 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-37. The 1996 total Puget Sound commercial catch of coho was 159,200 fish, a decrease of 46% from the 1995 catch of 293,400 coho. Non-Indian harvest was 17,300 coho, a decrease of 16% from the 20,700 coho caught in 1995. Treaty Indian net and troll fisheries harvested 141,900 coho, a decrease of 48% from the 272,700 coho caught in 1995.

Historic coho recreational catches in the Puget Sound recreational fishery for the years from 1976-1995 are listed in Appendix B, Table B-38.

### **Escapement and Goal Assessment**

Estimates of 1996 natural spawning escapements are unavailable at this time. Historic hatchery and natural run component escapements and net catches for each Puget Sound region of origin are presented in Appendix B, Table B-40.

In general, Puget Sound hatchery coho escapement and egg-take goals were met in all regions in 1996.

## **COASTWIDE GOAL ASSESSMENT SUMMARY**

A summary of 1996 performance for coho salmon by management system and stock in relation to escapement goals is presented in Table III-5.

TABLE III-5. Summary of 1996 performance for **coho** salmon by management system and stock in relation to escapement goals (preliminary data). (Page 1 of 1)

System and Stock	1996 Escapement Goal	Escapement Goal Assessment
Columbia River and Oregon Coastal Coho (OPI)	OCN spawner escapement of no less than 32 adults per mile on standard index surveys (12.5% exploitation rate).	Preliminary OCN spawner escapement is 43 adults per mile on standard index surveys. Hatchery egg-take goals were met for the Oregon coast but not the Columbia River.
Washington Coastal Coho	Natural spawning escapements within 1983 court-ordered range for Quillayute, Hoh and Queets Rivers. Grays Harbor natural escapement of 35,400; meet hatchery egg-take goals; meet treaty Indian obligations.	Queets and Quillayute River fall natural escapement above lower end of range. Hoh coho escapement may exceed upper end of range. Grays Harbor natural escapement estimate unavailable, but initial indications are goal will be met. Hatchery egg-take goals achieved. No information available on catch allocation.
Puget Sound Coho	Meet escapement objectives for natural and hatchery stocks. (Preseason expectation was that Skagit River, Hood Canal and Strait of Juan de Fuca natural escapement goals would not be met in 1996.) Meet treaty Indian allocation requirements, and inside non-Indian fishery needs for 6 management units.	Data not available for natural spawning escapement. Hatchery egg-take goals met. No information available on catch allocation.