

CHAPTER IV

SOCIOECONOMIC ASSESSMENT OF THE 2010 OCEAN SALMON FISHERIES

SUMMARY: Total 2010 exvessel value of the Council-managed non-Indian commercial salmon fishery was \$7.15 million, which is the fifth lowest on record, but more than four times above its 2009 level of \$1.5 million. California had its first commercial salmon fishery since 2007. The 2010 exvessel value of the commercial fishery was 28 percent below the 2005-2009 inflation-adjusted average of \$10 million and 88 percent below the 1979 through 1990 inflation-adjusted average of \$59.3 million. The coastwide average exvessel price for Chinook in 2010 was \$5.54 per pound. This was four percent below the 2009 level. At \$2.17 per pound, average 2010 West Coast coho prices were six percent higher than in 2009. The preliminary number of vessel-based ocean salmon recreational angler trips taken on the West Coast in 2010 was 182,900 a decrease of three percent from 2009, and 70 percent below the 1979 through 1990 average. Total West Coast income impact associated with recreational and commercial ocean salmon fisheries for all three states combined was estimated at \$25.5 million in 2010. This was 46 percent above the estimated 2009 level of \$17.4 million. 2010 had the third lowest income impacts on record, with 2008 having the lowest on record at \$7.5 million and 2009 the second lowest (adjusted for inflation).

ALLOCATION OF THE SALMON RESOURCE

Salmon management by the Council involves numerous allocation issues including:

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

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

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

Decisions on allowable harvests for a particular stock often have implicit allocation effects on the geographic distribution of salmon harvest. Seasons may be more restrictive along a particular area of the coast to protect a depressed stock encountered in that area at a higher rate than other areas. The geographic distribution of harvest opportunity along the coast involves balancing the often conflicting objectives of maximizing ocean harvest and fairly distributing the responsibility for resource conservation. A brief outline of the regulatory objectives which shaped the 2010 season is provided in Chapter I; and an assessment of success in meeting the objectives is provided in Chapters II and III.

COMMERCIAL SALMON FISHERIES

West Coast Non-Indian Commercial Ocean Fishery

In-season Price Trends

Monthly exvessel price data provide information on seasonal price trends (Table IV-1). Coastwide average exvessel prices for Chinook and coho in 2010 were \$5.54 and \$2.17 per pound, respectively. California 2010 Chinook prices were at their highest in August, averaging more than \$5.50 per pound. Oregon 2010 Chinook prices were at their highest in October, averaging just under \$6.50 per pound. Washington average Chinook prices were highest in May at \$5.73 per pound. Oregon and Washington average Chinook prices were at their lowest in July and September, respectively. For the season, exvessel Chinook prices in Washington, Oregon and California averaged \$5.61, \$5.49 and \$5.47 per pound, respectively. Coho prices in Washington and Oregon averaged \$2.14 and \$2.23 per pound, respectively.

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

Available information on Chinook and coho exvessel price and value by species, compiled from state fish receiving tickets and expressed both in nominal terms and inflation-adjusted 2010 dollars, is presented in Tables IV-2, IV-3, and IV-4. Data on pink salmon are provided in Table IV-5. The gross domestic product implicit price deflator, developed by the Bureau of Economic Analysis, was used to adjust nominal values for inflation (Appendix D, Table D-22). Weights of landings by species and port for Chinook and coho are presented in Tables IV-6, IV-7, and IV-8. These tables and the following discussion refer to the non-Indian commercial fishery in Council management areas and associated state territorial ocean area waters.

Total 2010 exvessel value of the Council-managed non-Indian commercial salmon fishery was \$7.15 million, which is the fifth lowest on record. Exvessel value was more than four times above its 2009 level (\$1.5 million) and 88 percent below the 1979 through 1990 inflation-adjusted average of \$59.3 million (including pinks), and 28 percent below the 2005-2009 inflation-adjusted average of \$10 million.

In 2010 California had its first commercial salmon fishery since 2007, although it remained heavily constrained by SRFC management objectives. The exvessel value of the California commercial ocean salmon catch in 2010 was \$1.2 million compared with (inflation adjusted) \$8.2 million in 2007 and a 1979-2009 average of \$17.7 million (inflation adjusted). The 2010 exvessel value for the Oregon commercial catch of \$2.8 million was the highest since 2007, although down 13 percent from the 2005-2009 average, and 85 percent below the 1979-1990 average of \$18.7 million, in inflation-adjusted terms. The 2010 exvessel value of the Washington non-Indian ocean commercial catch of \$3.1 million was up 164 percent from the inflation adjusted value in 2009 of \$1.2 million. Exvessel values of Washington landings over the last nine years (2002-2010) have been higher than any period since 1993 when they were \$1.1 million in inflation-adjusted terms. While 2010 Washington exvessel values were higher in inflation adjusted terms than in any year since 1988, they were still 63 percent below the 1979 through 1990 inflation-adjusted average of \$8.4 million.

The 2010 average West Coast ocean harvest Chinook price was \$5.54 per pound, which is the third highest in nominal terms reported since 1979. The last five years (2006 through 2010) all had average Chinook prices over \$5.48 per pound (adjusted for inflation). Chinook prices have not been this high since 1979, when the average inflation-adjusted price was \$6.70 per pound. One of the main reasons prices have been relatively high in recent years is due to the restricted fishing seasons (see Chapter I and Appendix C for details). The 2010 Chinook price was 2 percent above the recent five year (2005-2009) average of \$5.45 in inflation-adjusted terms, and 18 percent above the 1979-1990 average (\$4.70). At

\$2.17 per pound, average 2010 West Coast coho prices were 6 percent higher than in 2009 in inflation-adjusted terms, but 17 percent lower than in 2008 and 28 percent lower than the 1979-1990 average.

In terms of number of fish, the 2010 coastwide, non-Indian commercial Chinook harvest of 99,600 fish increased more than seven fold compared to 2009 (Figure IV-1). Historically, the 2009 harvest of Chinook was the lowest on record. The number of Chinook harvested in 2010 was 86 percent below the 1976-2009 long-term average of 690,600. The coastwide average weight per Chinook (12.7 pounds) was slightly higher than last year (12.6 pounds) and 12 percent higher than in 2008 (11.4 pounds) (Appendix D, Tables D-2, and D-3). The coastwide average weight per Chinook caught in the commercial fishery in 2010 was equal to the previous five years' (2005-2009) average weight.

Coho catch in 2010 was 3,100 fish, a decrease of more than 93 percent from the 2009 coho harvest (42,100), but still 47 percent above the 2008 catch (2,100). The coastwide average weight per coho (7 pounds) was 10 percent higher than the prior year (6.4 pounds) but 17 percent lower than in 2008 (8.4 pounds), which was the second highest average weight recorded since 1980. The highest average weight during that period was 8.5 pounds recorded in 2006. Coastwide coho exvessel value was \$48 thousand in 2010, a decrease of 91 percent from \$543 thousand recorded in 2009, but very close to 2008's value of \$47 thousand, in inflation adjusted terms (Figure IV-4).

West Coast ports with the most Chinook landings (by weight) were Westport (32 percent), Fort Bragg (14.8 percent) and Newport (14.7 percent). By comparison, in 2009, Westport (54 percent), La Push (15 percent) and Neah Bay (18 percent) were the leading ports, indicative of the absence of salmon fishing opportunities in the south. In 2010, areas north of Cape Falcon accounted for about 51 percent of coastwide Chinook harvest by weight, whereas in 2008 and 2009 areas north of Cape Falcon accounted for 84 and 94 percent of the Chinook harvest by weight, respectively. Compared with 2009, Chinook harvest by weight in 2010 was up 33-fold in Oregon and nearly more than three-fold in Washington. In contrast with 2009, the 2010 coho harvest by weight was down by 95 percent in Oregon, and by 89 percent in Washington. Coho harvest in California has been prohibited since 1992.

Ocean Commercial Salmon Harvesters

Based on Pacific Coast Fisheries Information Network (PacFIN) data, a total of 641 vessels participated in the West Coast commercial salmon fishery in 2010. This is more than double the number that participated in 2009 (313), and nearly triple the number in 2008. However the 2010 total was down 36 percent from 2007's total of 1,007 vessels. Note that these coastwide vessel counts are lower than the totals derived from summing Appendix D state-level tables (Tables D-4, D-5, and D-6) because vessels may be counted in more than one state and because of differences in the degree of completeness at the time the data were summarized for this report.

In 2010, 216 vessels made salmon landings in California compared with zero vessels in 2008 and 2009. In 2007, there were 601 vessels active in California, compared with 477 vessels active in 2006 (Table D-4). In Oregon, the active fleet increased by 144 vessels in 2010, with 369 vessels compared to 225 vessels in 2009 (Table D-5). The number of active vessels in Washington increased from 97 vessels in 2009 to 116 vessels in 2010 and 2009 (Table D-6). Coastwide, the number of limited entry salmon permits issued in 2010 decreased by 104 from the previous year to 2,395. Landings were made on 25 percent of all permits in 2010, up from 13 percent in 2009 and from 9 percent in 2008. Years 2008 and 2009 are the two lowest vessel participation years on record (1982-2010). From 1982 to 1993 an average of 5,193 of 7,942 total permits (65 percent) were used on an annual basis. Harvest opportunity began declining substantially after that time, and some permits were purchased in a buyback program.

In 2010, the coastwide average per vessel, inflation-adjusted exvessel value of salmon landings increased 115 percent compared to 2009, to \$10,201 per vessel. Compared to 2009, 2010 average per vessel exvessel revenue was up nearly five-fold in Oregon, and 121 percent in Washington. California harvesters experienced their first commercial salmon fishery in three years. Some caution needs to be exercised in interpreting the per-vessel averages. For example, the averages may be influenced as much by a disproportionate change in the number of small or large harvesters from one year to the next as by a change in the average revenues of those vessels remaining in the fishery.

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

West Coast Treaty Indian Commercial Ocean Fishery

Treaty Indian commercial fisheries off Washington operate under regulations established by the Council. While some of the treaty Indian harvest was for ceremonial and subsistence purposes, the vast majority of the catch was commercial harvest. Commercial treaty Indian fisheries provide food to consumers and generate income in local and state economies through expenditures on harvesting, processing, and marketing of the catch. From May through September 15th 2010, the treaty Indian ocean troll fishery harvested 35,000 Chinook (307,600 pounds) and 11,500 coho (80,500 pounds) compared with 12,811 Chinook (103,700 pounds) and 60,600 coho (347,000 pounds) in 2009 (Tables A-15 and D-3). For all of 2010 the preliminary exvessel value of Chinook and coho landed in the treaty Indian ocean troll fishery was \$1.8 million, compared with the exvessel value in 2009 of \$1.0 million (values based on PacFIN data).

Columbia River Commercial Fishery

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

Total 2010 exvessel value of commercial salmon harvested in the Columbia River was \$10.0 million. This was 69 percent above the 2009 level (\$5.9 million) and 27 percent above the inflation-adjusted 2008 level (\$7.8 million). Total exvessel value for non-Indian commercial salmon harvested in the Columbia River was \$5.1 million compared with \$3.6 million in both 2008 and 2009 (Table IV-9).

The total 2010 exvessel value of treaty Indian salmon harvested in the Columbia River and sold on fish tickets was \$4.9 million. This is more than double the 2009 value of \$2.2 million and 17 percent above the 2008 value of \$4.2 million. Note that these values include only those sales made to licensed fish buyers. Treaty Indian fisher sales to the public are accounted for in harvest monitoring reports (Table B-20), but estimates of the pounds and value of such sales were not included in Table IV-9.

Puget Sound and Washington Coastal Inside Fisheries

Information on 2010 Puget Sound and Washington coastal inside fisheries is preliminary. Based on PacFIN data, the 2010 exvessel value reported for all salmon species taken in the commercial non-Indian fisheries in Puget Sound and Washington coastal inside fisheries (excluding the Columbia River) was \$6 million. Of this, \$1.1 million was for Chinook and coho. In 2009, the total inflation-adjusted exvessel value of the commercial non-Indian salmon fisheries in these areas was \$5.8 million for all salmon

species, of which \$1.3 million was Chinook and coho. The 1981 through 2009 inflation-adjusted annual average exvessel value was \$17.3 million, of which on average \$4.4 million was Chinook and coho.

The preliminary 2010 exvessel value reported to PacFIN (as of January 25, 2011) for all salmon species taken in the commercial treaty Indian fisheries in Puget Sound and Washington coastal inside fisheries (excluding the Columbia River) was \$6.4 million. Of this, \$3 million was Chinook and coho. In previous years, substantial additional landing reports have come in after publication of this review. The updated value for 2009 was \$11.3 million for all salmon species, of which \$6.6 million was Chinook and coho. The 1981 through 2009 inflation-adjusted exvessel value is \$21.7 million, of which on average \$8.2 million was Chinook and coho.

Klamath River Fisheries

Commercial sales in the Yurok and Hoopa Valley Reservation Indian fall gillnet fisheries in the Klamath River occurred in 1987-1989, 1996, 1999-2004, and 2007-2010. Average commercial catch of fall Chinook was about 17,600 in those years, most of which occurred in the estuary. Commercial sales also occurred in spring gillnet fisheries in 1989, 1996, 2000-2004, and 2007-2009, with an average of about 1,300 fish sold. The 1989 harvest of 27,700 Chinook was sold for \$852,000 (unadjusted for inflation, \$1.4 million adjusted to 2010 dollars) and had an average per fish weight of 15.4 pounds. For the 1996 harvest of 3,129 spring Chinook and 40,147 fall Chinook, the value at first sale was estimated at \$525,000 (unadjusted for inflation, \$700,000 adjusted to 2010 dollars). The average weight per fish landed in 1996 was 13.5 pounds. Records were not available for the weight and value of harvests after 1996 as each Indian fisher now markets their fish independently. In recent years the fishery has occurred fairly regularly with the exceptions of 2005 and 2006. The commercial fall Chinook harvest was 15,300 Chinook in 2010, compared to 15,700 Chinook in 2009 (Appendix B, Table B-5).

CEREMONIAL AND SUBSISTENCE SALMON FISHERIES

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

RECREATIONAL SALMON FISHERIES

Ocean

The preliminary number of vessel-based ocean salmon recreational angler trips taken on the West Coast in 2010 was 182,900, a decrease of three percent from 2009, and 70 percent less than the 1979 through 1990 average. Compared with 2009, preliminary estimates of the number of trips taken in 2010 decreased by 37 percent in Oregon and 18 percent in Washington. California effort was up substantially since the sport fishery was not restricted to a 10-day fishery in the Klamath Management Zone as it was in 2009; however it was still severely depressed compared to historic levels. (Note that Washington effort estimates shown in Tables IV-10 and IV-13 differ from those in Tables I-4 and Appendix A Table A-17 because the former exclude bank effort from the Columbia River north jetty.)

Recreational salmon fishing takes place primarily in two modes, (1) anglers fishing from privately owned pleasure crafts, and (2) anglers employing the services of the charter boat fleet. In general, success rates on charter vessels tend to be higher than success rates on private vessels. Small amounts of shore-based effort directed toward ocean area salmon occur, primarily from jetties and piers. Coastwide, the proportion of angler trips taken on charter vessels in 2010 was relatively stable at 24 percent compared with 23 percent in 2009; however underlying this trend was a decline in the proportion of charter trips in

Oregon and increases in California and Washington. Figure IV-5 and Tables IV-10, IV-11, IV-12, and IV-13 display details of effort and catch by port area and mode for each state.

California

The California recreational salmon fishery was more open in 2010 than it has been any year since 2007. Fishing was recorded in all areas, although compared with 2009 the number of trips in the Crescent City and Eureka areas declined by 81 percent and 5 percent, respectively. Coastwide 14,697 Chinook were caught in California on a total of 48,757 trips, for a success rate of 0.305 fish per trip.

Oregon

Ocean recreational salmon trips in 2010 in Oregon were down 37 percent to 53,319 trips compared with an estimated 84,524 angler trips in 2009 (Tables IV-10 and IV-12). Total trips in 2010 were 22 percent below the most recent five year average (2005-2009). Compared to 2009, effort was down 49 percent in Newport and 16 percent in Astoria. In the other Oregon ports, change in effort was minus 40 percent in Tillamook and Coos Bay and virtually no change in Brookings. The charter industry's share of Oregon recreational salmon trips in 2010 was about 9 percent, which, with the exception of 2008, was well below the trend of the recent past (Figure IV-5 and Table IV-12).

From 1984 to 1993, coho accounted for 87 percent of the annual Oregon recreational ocean salmon catch, on average. From 1994 through 1998 the lack of opportunity to retain coho south of Cape Falcon generally resulted in much lower angler success rates. With the opportunity to retain coho in mark-selective fisheries south of Cape Falcon beginning in 1999, salmon retention rates increased 75 percent, from 0.25 salmon per angler-day in 1998 to 0.43 in 1999. From 2002 through 2009, retention rates ranged between 0.44 and 1.07 salmon per angler-day. The retention rate for 2010 was at the bottom of this range at 0.44. In 2010, coho contributed almost 79 percent of the total Oregon recreational ocean salmon catch.

Washington

In 2010, 80,827 ocean angler trips were taken on vessels on the Washington coast (Tables IV-10 and IV-13), a decrease of 18 percent from the 98,926 trips taken in 2009, but 12 percent above the recent five year (2005-2009) average. About one third of Washington angler trips were taken on charter vessels in 2010, up slightly from 30 percent in 2009, (Figure IV-5 and Table IV-13), but tied with 2004 for the second-lowest charter trip share observed since 1979.

The angler success rate (in terms of retained fish per angler trip) was 0.905 in 2010, down from 1.52 in 2009 and slightly lower than 0.92 recorded in 2008. Between 1979 and 1990, the retention rate averaged 1.49 salmon per trip. Since that period it has averaged 1.26 salmon per trip. Note that these figures do not include angler effort that occurs from the ocean side of the Columbia River jetty, or angler effort in the state managed Area 4B add-on fishery, when open.

In order to increase angler participation in non-salmon recreational fishing (e.g., bottomfish trips) and to extend the length of the salmon season, partial-week closures were instituted in the recreational fishery north of Cape Falcon beginning in 1985. Sunday through Thursday salmon openings were used beginning in 1996 in the Westport and Columbia River port areas. The Neah Bay and La Push areas were generally open seven days a week, until more recently. In 2010 the recreational salmon fishery was open seven-days-per-week in the Columbia River area (south of Leadbetter Point). All open ports north of Leadbetter Point started the year with partial week openings but switched from partial week openings to a seven-day-per-week fishery in late-July. In 2010, north of Cape Falcon there were 39,600 bottomfish trips, an increase from 37,200 trips in 2009 (Table IV-14). All port areas with the exception of Westport experienced an increase in bottomfish trips compared with 2009.

Buoy 10 and Area 4B Add-On Fisheries

In 2010 anglers made a total of 52,000 trips in the Buoy 10 fishery, fishing from private and charter boats. This effort level is down 28 percent from 73,000 trips in 2009. Angler retention rates decreased from 0.75 salmon per angler day in 2009 to 0.29 salmon per angler day in 2010. This is the second-lowest retention rate on record since 2002, Table IV-15).

In 2000, about 3,400 trips were made in the late-season Area 4B add-on fishery. Since that time there have been no late season Area 4B add-on fisheries (Table IV-15), with the exception of 2008, during which there were an estimated 782 private trips and no charter trips. There was no Area 4B add-on fishery in 2010.

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

SALMON FISHERY INCOME IMPACTS AND COMMUNITY DEPENDENCE

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

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

The income impacts presented here are estimates of annual trends and are intended to indicate the possible redirection of activity between nonfishing and fishing-dependent sectors. As such they represent likely upper bounds on the local community and state income impacts generated by West Coast salmon fisheries. All income impact estimates in this review are reported in inflation-adjusted 2010 dollars.

West Coast Ocean Fishery Income Impacts

The total West Coast income impacts associated with recreational and commercial ocean salmon fisheries for all three states combined in 2010 were \$25.4 million, the third lowest on record but the highest since 2007. This was 46 percent above the estimated 2009 level of \$17.4 million and 93 percent below the inflation-adjusted value for 1979 (the highest year in the data time series). The 2010 value was 27 percent below the inflation-adjusted average value for the previous five years (2005-2009) of \$34.7 million (Tables IV-16 through IV-18). West Coast income impacts associated with the 2010 non-Indian commercial ocean fishery were \$10.9 million, more than quadruple the estimate for 2009 (\$2.5 million), but 34 percent below the recent five year (2005-2009) average of \$16.5 million, in inflation-adjusted

terms;^{1/} Income impacts related to the 2010 ocean recreational fishery were estimated at \$14.5 million, slightly below last year's level, but two-and-a-half times greater than the 2008 level of \$5.6 million, and 20 percent below the 2005-2009 inflation-adjusted average of \$18.2 million. Note that these coastwide values may mask reductions in particular communities compared with averages during the 1980s. Tables IV-16 through IV-18 provide greater detail on the impacts in individual states and port areas along the West Coast.

Selected Inside Fisheries

Columbia River Commercial Fisheries

Historically the non-Indian and treaty Indian Columbia River commercial fisheries have generated a substantial amount of income for the Oregon and Washington communities on the Columbia River. An average of \$33.0 million (inflation-adjusted) was generated annually from 1986-1990. In 2010, income impacts associated with the Columbia River commercial catch (non-Indian and treaty Indian) were estimated at \$19.6 million. This value is 79 percent above the 2005-2009 average. By comparison, total income impacts of these fisheries in 2008 and 2009 were \$15.2 million and \$12.2 million, respectively (Table IV-19).

Buoy 10 and Area 4B Add-On

The estimated local community income impact associated with the 2010 Buoy 10 recreational fishery was \$1.9 million, down 29 percent from the inflation-adjusted 2009 level, and 73 percent below the 1987-1990 inflation-adjusted average of \$7.2 million, but higher than inflation-adjusted average over 2006-2008 of \$1.4 million (Table IV-20). There was no late-season Area 4B add-on fishery in 2010. The most recent add-on fishery occurred in 2008, which was the first since 2000. The inflation-adjusted local community income impact associated with the area 4B add-on in 2008 was \$30,400. Between 1996 and 2000, the average annual inflation-adjusted total state-level income impact associated with the Area 4B add-on fishery was \$137,500 (Table IV-20).

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

TABLE IV-1. Average monthly exvessel troll salmon price in dollars per dressed pound for California, Oregon, and Washington in 2010.

Species/Grade	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season
CALIFORNIA											
Chinook ^{a/}	-	-	-	-	5.42	5.54	-	-	-	-	5.47
Coho	-	-	-	-	-	-	-	-	-	-	-
OREGON											
Chinook											
Large (>11 Pounds)	-	-	5.74	5.26	4.71	5.49	5.86	6.47	-	-	5.50
Medium (7-11 Pounds)	-	-	5.35	5.08	4.68	5.30	5.13	6.38	-	-	5.18
Small (<7 Pounds)	-	-	4.86	6.06	3.45	4.57	2.83	4.36	-	-	5.03
Ungraded Chinook	-	-	5.78	5.45	5.50	5.66	4.83	6.76	-	-	5.62
Weighted Average	-	-	5.67	5.28	5.13	5.54	5.43	6.48	-	-	5.49
Mixed Coho	-	-	-	-	2.19	2.09	4.17		-	-	2.23
WASHINGTON^{b/}											
Chinook											
Large (>11 Pounds)	-	-	5.97	5.77	5.22	5.47	4.71	-	-	-	5.57
Medium (8-11 Pounds)	-	-	5.47	5.52	4.79	5.26	4.35	-	-	-	5.26
Small (<8 Pounds)	-	-	3.90	3.55	3.73	3.87	4.76	-	-	-	3.79
Ungraded Chinook	-	-	-	-	-	-	-	-	-	-	-
Weighted Average	-	-	5.73	5.68	5.16	5.43	4.67	-	-	-	5.61
Mixed Coho	-	-	-	-	2.03	2.17	2.44	-	-	-	2.14

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

b/ Non-Indian data only.

TABLE IV-2. Troll Chinook and coho landed in California, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (inflation adjusted, 2010) dollars.^{a/}

Year or Avg.	Chinook				Coho				Total ^{b/}	
	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)
1979	17,356	43,931	2.53	6.40	2,303	5,829	2.19	5.54	19,659	49,760
1980	12,741	29,555	2.27	5.27	408	946	1.36	3.15	13,149	30,501
1981-1985	10,945	21,485	2.42	4.69	554	1,100	1.94	4.11	11,499	22,585
1986-1990	21,151	35,145	2.56	4.22	490	801	1.36	2.72	21,641	35,946
1991-1995	7,335	10,352	2.28	3.25	143	211	1.25	2.40	7,478	10,563
1996	5,984	7,977	1.44	1.92	-	-	-	-	5,984	7,977
1997	7,288	9,547	1.38	1.81	-	-	-	-	7,288	9,547
1998	3,060	3,964	1.66	2.15	-	-	-	-	3,060	3,964
1999	7,429	9,484	1.93	2.46	-	-	-	-	7,429	9,484
2000	10,304	12,875	2.01	2.51	-	-	-	-	10,304	12,875
2001	4,773	5,832	1.98	2.42	-	-	-	-	4,773	5,832
2002	7,776	9,350	1.55	1.87	-	-	-	-	7,776	9,350
2003	12,181	14,338	1.91	2.25	-	-	-	-	12,181	14,338
2004	17,895	20,483	2.87	3.29	-	-	-	-	17,895	20,483
2005	12,913	14,303	2.97	3.29	-	-	-	-	12,913	14,303
2006	5,350	5,739	5.13	5.50	-	-	-	-	5,350	5,739
2007	7,902	8,235	5.18	5.40	-	-	-	-	7,902	8,235
2008	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-
2010 ^{c/}	1,246	1,246	5.47	5.47	-	-	-	-	1,246	1,246

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

b/ Does not include pink salmon landings, if any.

c/ Preliminary.

TABLE IV-3. Troll Chinook and coho landed in Oregon, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (inflation adjusted, 2010) dollars.

Year or Avg.	Chinook				Coho				Total ^{a/}	
	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)
1971-1975	2,036	7,611	0.89	3.38	3,658	14,008	0.64	2.41	5,694	21,620
1976-1980	5,290	14,327	2.17	5.85	6,389	17,833	1.51	4.07	11,679	32,160
1981-1985	3,582	6,995	2.46	4.77	2,248	4,580	1.45	2.82	5,830	11,574
1986-1990	9,381	15,562	2.47	4.07	3,203	5,326	1.54	2.54	12,584	20,888
1991-1995	1,971	2,787	2.24	3.19	326	482	0.64	0.93	2,297	3,269
1996	3,007	4,009	1.56	2.08	-	-	-	-	3,007	4,009
1997	2,469	3,234	1.60	2.10	-	-	-	-	2,469	3,234
1998	2,297	2,976	1.64	2.12	-	-	-	-	2,297	2,976
1999	1,400	1,787	1.94	2.48	1	1	1.03	1.31	1,401	1,788
2000	2,988	3,734	2.02	2.52	75	94	1.06	1.32	3,063	3,827
2001	4,680	5,718	1.61	1.97	41	50	0.79	0.97	4,721	5,769
2002	5,383	6,473	1.54	1.85	8	10	0.75	0.90	5,391	6,482
2003	7,186	8,459	1.97	2.32	36	43	0.85	1.00	7,222	8,501
2004	9,832	11,255	3.45	3.95	86	99	1.24	1.42	9,919	11,353
2005	8,466	9,377	3.17	3.51	37	41	1.87	2.07	8,503	9,418
2006	2,663	2,856	5.48	5.88	38	41	2.90	3.11	2,701	2,897
2007	2,630	2,740	5.66	5.90	193	201	1.90	1.98	2,822	2,941
2008	484	493	7.31	7.45	10	11	2.82	2.88	494	504
2009	77	78	5.06	5.11	267	270	2.04	2.06	345	348
2010 ^{b/}	2,774	2,774	5.49	5.49	16	16	2.23	2.23	2,790	2,790

a/ Does not include pink salmon landings.

b/ Preliminary.

TABLE IV-4. Non-Indian troll Chinook and coho landed in Washington, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (inflation adjusted, 2010) dollars.^{a/}

Year or Avg.	Chinook				Coho				Total ^{b/}	
	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)
1971-1975	2,714	10,277	0.89	3.39	3,060	11,615	0.66	2.52	5,775	21,892
1976-1980	5,313	14,694	2.39	6.41	6,086	16,792	1.67	4.49	11,399	31,486
1981-1985	1,954	3,927	2.46	4.77	1,272	2,566	1.32	2.56	3,225	6,494
1986-1990 ^{c/}	1,310	2,168	2.61	4.32	360	586	1.62	2.67	1,670	2,754
1991-1995 ^{d/}	550	797	2.17	3.09	120	174	0.86	1.23	670	971
1996	d/	d/	d/	d/	59	78	0.86	1.15	d/	d/
1997	125	164	1.55	2.03	-	-	-	-	125	164
1998	123	159	1.51	1.96	-	-	-	-	123	159
1999	377	481	1.90	2.43	19	24	0.88	1.12	396	506
2000	224	280	1.71	2.14	34	42	1.09	1.36	258	323
2001	349	426	1.44	1.76	34	42	0.69	0.84	383	468
2002	756	909	1.11	1.33	2	2	1.58	1.90	758	911
2003	951	1,119	1.15	1.35	40	47	0.74	0.87	991	1,167
2004	1,079	1,235	2.14	2.45	106	121	1.16	1.33	1,185	1,356
2005	1,273	1,410	2.70	2.99	16	18	1.65	1.83	1,290	1,428
2006	1,029	1,103	4.64	4.98	16	18	1.69	1.81	1,045	1,121
2007	905	943	4.90	5.11	48	50	1.46	1.52	953	993
2008	673	687	6.73	6.86	36	36	2.49	2.54	709	723
2009	893	903	5.76	5.82	276	279	2.02	2.04	1,169	1,181
2010	3,083	3,083	5.61	5.61	32	32	2.14	2.14	3,115	3,115

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

b/ Does not include pink salmon landings.

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

d/ In 1994-1996 Chinook were caught off Oregon and landed in Washington. Value information was not provided to preserve confidentiality.

TABLE IV-5. Non-Indian troll pink salmon landed in Oregon and Washington, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (inflation adjusted, 2010) dollars.

Year or Avg. ^{a/}	Oregon				Washington				Total ^{a/}	
	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)	Nominal Price Per Pound (\$)	Real Price Per Pound (\$)	Nominal Value (\$*1,000)	Real Value (\$*1,000)
1976-1980	167	473	0.75	2.02	1,200	3,205	0.54	1.47	1,367	3,678
1981-1985	129	255	0.74	1.44	287	576	0.41	0.81	416	831
1986-1990	41	70	0.77	1.27	57	91	0.66	1.09	98	161
1991-1995	1	2	0.88	1.24	38	55	0.64	0.91	39	57
1997	b/	b/	0.56	0.74	b/	b/	0.20	0.26	b/	b/
1999	b/	b/	0.67	0.86	b/	b/	0.38	0.49	b/	b/
2001	1	1	0.58	0.71	b/	b/	0.22	0.27	1	1
2003	b/	b/	0.85	1.00	b/	b/	0.30	0.35	b/	b/
2005	b/	b/	1.25	1.38	b/	b/	0.52	0.58	b/	b/
2007	b/	b/	1.03	1.07	b/	b/	0.33	0.34	b/	b/
2009	b/	b/	1.03	1.04	b/	b/	0.33	0.33	b/	b/

a/ Odd year averages.

b/ Less than \$500.

c/ Preliminary.

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

Year or Avg.	Crescent City	Eureka	Fort Bragg	San Francisco	Monterey	State Total
CHINOOK (thousands of dressed pounds)						
1976-1980	393	1,403	1,449	1,733	889	5,867
1981-1985	350	428	1,128	1,806	742	4,454
1986-1990	155	405	2,299	3,648	1,592	8,097
1991-1995	2	25	183	1,893	1,326	3,429
1996-2000	2	35	146	2,155	1,699	4,037
2001	3	61	192	1,735	418	2,409
2002	54	108	872	3,060	912	5,008
2003	38	7	3,096	2,753	498	6,392
2004	308	65	1,292	3,712	853	6,230
2005	25	77	889	2,258	1,098	4,347
2006	-	-	273	684	87	1,043
2007	34	81	357	888	165	1,525
2008	-	-	-	-	-	-
2009	-	-	-	-	-	-
2010 ^{c/}	-	4	187	16	20	228
COHO (thousands of dressed pounds)						
1976-1980	360	391	277	109	48	1,184
1981-1985	89	104	89	54	9	345
1986-1990	22	43	136	53	9	262
1991-1995	d/	4	11	56	23	94
1996-2000	-	-	-	-	-	-
2001	-	-	-	-	-	-
2002	-	-	-	-	-	-
2003	-	-	-	-	-	-
2004	-	-	-	-	-	-
2005	-	-	-	-	-	-
2006	-	-	-	-	-	-
2007	-	-	-	-	-	-
2008	-	-	-	-	-	-
2009	-	-	-	-	-	-
2010 ^{c/}	-	-	-	-	-	-

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

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

c/ Preliminary.

d/ Less than 500 pounds.

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

Year or Avg.	Astoria	Tillamook	Newport	Coos Bay	Brookings	State Total
CHINOOK (thousands of dressed pounds)						
1976-1980	171	118	530	908	700	2,427
1981-1985	92	45	271	638	386	1,432
1986-1990	52	264	829	2,118	468	3,731
1991-1995	7	86	580	235	31	940
1996-2000	25	70	790	435	92	1,414
2001	73	223	1,673	776	152	2,897
2002	330	275	1,442	1,223	218	3,488
2003	265	245	1,634	1,353	142	3,639
2004	134	113	1,121	1,214	267	2,850
2005	130	214	1,034	1,054	239	2,671
2006	99	67	218	56	45	486
2007	22	37	76	232	98	464
2008	39	19	-	-	8	66
2009	7	4	-	-	5	15
2010 ^{c/}	116	40	185	122	43	506
COHO (thousands of dressed pounds)						
1976-1980	385	660	1,190	1,661	357	4,252
1981-1985	133	293	451	550	111	1,537
1986-1990	73	473	693	648	69	1,957
1991-1995	17	93	110	104	1	325
1996-2000	14	-	-	-	-	14
2001	50	b/	2	-	-	52
2002	6	5	-	-	-	11
2003	32	11	-	-	-	43
2004	47	22	-	-	-	70
2005	9	11	-	-	-	20
2006	8	5	-	-	-	13
2007	37	34	13	14	3	101
2008	3	1	-	-	-	4
2009	48	43	35	5	b/	131
2010 ^{c/}	6	1	0	0	0	7

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

b/ Less than 500 pounds.

c/ Preliminary.

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

Year or Avg.	Neah Bay	La Push	Westport	Ilwaco	Coastal	Puget Sound	State Total ^{c/}
					Community Total		
CHINOOK (thousands of dressed pounds)							
1976-1980	288	421	919	261	1,889	426	2,315
1981-1985	88	32	370	74	564	124	689
1986-1990	71	17	234	48	371	122	493
1991-1995 ^{d/}	137	29	123	9	204	30	234
1996-2000 ^{d/}	49	1	37	3	80	22	102
2001	97	-	138	6	241	-	241
2002	262	33	322	61	678	-	678
2003	470	67	243	29	810	12	821
2004	250	74	158	15	497	7	504
2005	170	100	181	20	471	e/	471
2006	86	64	40	26	216	5	222
2007	38	31	105	8	182	2	184
2008	20	17	49	13	99	1	100
2009	31	25	92	3	153	2	155
2010	48	62	402	10	522	-	522
COHO (thousands of dressed pounds)							
1976-1980	600	786	1,066	678	3,130	496	3,626
1981-1985	133	63	277	142	616	128	744
1986-1990	70	19	97	53	239	19	259
1991-1995	52	14	49	13	102	12	111
1996-2000	10	e/	8	3	22	2	24
2001	2	-	39	9	49	-	49
2002	-	-	e/	1	1	-	1
2003	11	12	21	8	52	2	54
2004	12	20	53	4	89	1	91
2005	2	1	3	5	10	-	10
2006	3	3	3	1	10	e/	10
2007	3	3	9	17	33	-	33
2008	2	3	8	1	14	e/	14
2009	29	34	54	14	131	5	136
2010	1	2	12	1	15	-	15

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

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

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

d/ There was no ocean commercial fishery for Chinook north of Cape Falcon in 1994-1996; however, Chinook were caught off Oregon and landed in Washington.

e/ Less than 500 pounds.

TABLE IV-9. Exvessel values (inflation adjusted, 2010 dollars) of inriver commercial harvest of Columbia River salmon.^{a/}
(Page 1 of 2)

Year or Avg.	Non-Indian Gillnet ^{b/}					Treaty Indian ^{c/} - All Gears					Columbia River Total By State		
	Chinook		Tules	Coho	Chum	TOTAL	Chinook		Coho	Chum		TOTAL	
	Fall						Fall						
	Spring	Brights ^{d/}	Spring	Brights ^{d/}	Spring	Brights ^{d/}	Tules	Coho	Chum	TOTAL			
Oregon													
Average Price Per Landed Pound ^{e/} (dollars)													
1987-2003	4.22	1.44	0.40	1.26	0.55		4.38	1.37	0.35	0.96	-		
2004	4.26	1.57	0.25	1.03	0.29		2.12	1.29	0.11	0.68	-		
2005	3.78	1.79	0.29	1.19	0.34		-	1.15	0.19	1.03	-		
2006	5.02	2.30	0.30	1.41	0.28		3.22	1.64	0.28	1.34	-		
2007	5.62	2.95	0.05	1.69	0.78		3.91	2.72	0.03	1.12	-		
2008 ^{g/}	6.30	2.55	0.58	1.34	0.66		4.73	2.61	0.46	1.18	0.92		
2009 ^{g/}	4.55	2.08	0.55	1.22	0.53		3.45	1.41	0.36	0.93	-		
2010 ^{g/}	4.93	2.12	0.50	1.39	0.67		4.21	2.02	0.63	1.89	-		
Exvessel Value (thousands of dollars)													
1987-2003	507	1,736	102	1,112	2	3,458	6	712	18	6	-	742	4,201
2004	1,175	641	56	778	f/	2,651	169	616	34	20	-	839	3,490
2005	348	490	38	936	f/	1,811	-	230	13	1	-	244	2,055
2006	659	684	19	673	f/	2,035	f/	339	3	15	-	358	2,392
2007	797	368	1	321	f/	1,487	66	377	1	15	-	459	1,946
2008 ^{g/}	729	1,052	65	684	f/	2,529	329	956	59	52	f/	1,396	3,925
2009 ^{g/}	441	908	91	1,034	f/	2,475	144	569	36	24	-	773	3,248
2010 ^{g/}	1,885	901	155	776	1	3,718	495	602	f/	32	-	1,130	4,848
Pounds (thousands)													
1987-2003	116	749	156	785	2	1,807	3	337	62	5	-	407	2,213
2004	276	409	224	755	f/	1,664	80	476	299	29	-	884	2,548
2005	92	273	132	789	f/	1,286	-	200	67	1	-	267	1,554
2006	131	298	65	478	f/	971	f/	206	11	12	-	229	1,200
2007	142	135	f/	189	f/	466	17	138	25	14	-	194	660
2008 ^{g/}	116	413	112	512	f/	1,152	70	366	129	44	f/	609	1,761
2009 ^{g/}	97	436	168	846	f/	1,547	42	403	100	26	-	571	2,118
2010 ^{g/}	382	426	257	560	1	1,626	140	226	140	17	-	524	2,150

TABLE IV-9. Exvessel values (inflation adjusted, 2010 dollars) of inriver commercial harvest of Columbia River salmon.^{a/} (Page 2 of 2)

Year or Avg.	Non-Indian Gillnet ^{b/}					Treaty Indian ^{c/} - All Gears					Columbia River Total By State	
	Chinook		Tules	Coho	Chum	TOTAL	Chinook		Coho	Chum		TOTAL
	Fall						Fall					
	Spring	Brights ^{d/}	Spring	Brights ^{d/}	Spring	Brights ^{d/}	Tules	Coho	Chum	TOTAL		
Washington^{g/h/i/}												
Average Price Per Landed Pound ^{e/} (dollars)												
1987-2003	5.17	1.34	1.26	0.48	-	3.73	0.95	0.89	-	-	-	
2004	4.50	1.48	1.08	0.29	-	1.80	0.62	0.25	-	-	-	
2005	3.97	1.54	1.14	0.89	-	1.87	0.56	0.33	-	-	-	
2006	3.94	2.07	1.43	-	-	2.52	1.50	0.60	0.54	-	-	
2007	6.99	2.66	1.31	1.01	-	4.64	1.42	0.83	0.94	-	-	
2008	6.84	2.60	1.28	0.99	-	4.54	1.39	0.82	0.92	-	-	
2009	5.35	1.80	1.14	0.60	-	3.04	0.94	0.58	-	-	-	
2010	5.00	1.95	1.31	0.60	-	3.77	1.14	0.88	-	-	-	
Exvessel Value (thousands of dollars)												
1987-2003	242	671	461	1	1,360	57	1,091	16	-	1,161	2,521	
2004	311	499	398	f/	1,208	189	498	11	-	698	1,906	
2005	244	362	217	f/	824	125	793	11	-	929	1,753	
2006	343	451	295	-	1,089	454	1,359	27	f/	1,840	2,929	
2007	132	240	261	f/	633	f/	1,292	54	f/	1,347	1,980	
2008	320	518	282	f/	1,121	989	1,626	150	f/	2,765	3,886	
2009	317	543	300	f/	1,160	623	827	25	-	1,475	2,636	
2010	542	511	324	1	1,379	1,982	1,734	22	-	3,739	5,118	
Pounds (thousands)												
1987-2003	46	333	369	1	747	37	914	18	-	966	1,713	
2004	69	338	370	f/	777	105	806	43	-	954	1,731	
2005	62	235	191	f/	487	67	1,404	34	-	1,504	1,992	
2006	87	218	207	-	512	180	905	45	f/	1,130	1,642	
2007	18	91	154	f/	263	f/	638	66	f/	705	968	
2008	47	199	219	f/	466	218	1,172	184	f/	1,574	2,040	
2009	59	302	262	1	624	205	880	44	-	1,129	1,753	
2010	108	262	247	2	620	526	1,521	25	-	2,072	2,693	

a/ Excluding pink, sockeye, and steelhead.

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

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

d/ For Washington, this column includes fall brights, tules, and jacks. Price changes may reflect a change in the mix of brights, tules, and jacks rather than annual price changes.

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

f/ Less than \$500 or 500 pounds.

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

h/ Washington prices for years prior to 2000 are based on a combination of Washington and Oregon value information.

i/ Treaty Indian values are primarily mainstem Columbia set gillnet but also include Klickitat dipnet, Drano Lake (Little White Salmon River mouth), and Priest Rapids Pool fisheries.

TABLE IV-10. California, Oregon, and Washington ocean recreational salmon effort in thousands of angler trips and catch in thousands of fish by boat type. (Page 1 of 2)

Year or Avg.	Angler Trips		Chinook Catch ^{a/}		Coho Catch ^{a/}	
	Charter	Private	Charter	Private	Charter	Private
CALIFORNIA						
1981-1985	68.9	78.1	74.6	34.4	1.5	18.3
1986-1990	95.9	144.8	100.1	66.3	5.3	35.1
1991-1995	81.7	131.8	85.9	83.0	3.8	18.7
1996-2000	82.2	112.5	77.5	80.3	b/	0.4
2001	69.9	95.2	43.2	55.6	0.1	1.2
2002	86.6	123.4	85.1	96.9	b/	0.8
2003	59.4	75.3	48.3	46.4	0.1	0.6
2004	97.7	121.0	124.7	96.5	b/	1.4
2005	69.1	103.0	61.3	81.9	b/	0.7
2006	44.9	81.6	35.3	61.0	b/	1.6
2007	31.4	74.5	12.4	35.4	b/	0.7
2008	0.1	0.3	0.0	b/	-	-
2009	0.6	4.7	0.1	0.6	-	b/
2010 ^{c/}	13.1	35.6	4.5	10.2	-	0.2
OREGON^{d/e/}						
1979	73.7	187.7	5.4	13.3	59.8	101.8
1980	79.0	218.9	5.1	11.9	98.3	207.5
1981-1985	45.7	187.9	6.2	26.9	48.0	117.6
1986-1990	56.5	184.6	7.0	28.8	71.6	148.4
1991-1995	18.0	81.8	1.3	8.0	27.1	76.2
1996-2000	5.3	40.3	1.5	9.7	3.4	9.1
2001	18.2	102.3	6.4	20.8	19.3	75.0
2002	15.7	91.9	7.9	39.5	9.0	27.5
2003	23.4	121.1	8.8	31.8	23.7	90.0
2004	21.1	124.6	14.6	41.8	13.1	58.8
2005	9.9	66.1	4.5	23.4	3.1	10.6
2006	8.0	54.4	1.5	10.1	3.6	12.0
2007	11.4	76.9	0.6	6.4	10.6	50.1
2008	1.9	28.5	0.2	1.4	1.0	11.1
2009	12.6	71.9	0.2	1.3	14.2	75.4
2010 ^{c/}	5.0	48.3	0.6	4.4	2.8	15.5

TABLE IV-10. California, Oregon, and Washington ocean recreational salmon effort in thousands of angler trips and catch in thousands of fish by boat type. (Page 2 of 2)

Year or Avg.	Angler Trips		Chinook Catch ^{a/}		Coho Catch ^{a/}	
	Charter	Private	Charter	Private	Charter	Private
	WASHINGTON^{d/g/}					
1979	220.8	89.8	61.1	15.7	227.9	62.4
1980	193.9	86.2	41.1	12.5	288.4	73.1
1981-1985	102.0	69.7	42.6	13.8	113.3	69.2
1986-1990	53.5	59.4	16.0	10.0	78.0	77.6
1991-1995	28.0	45.1	4.5	4.2	41.5	54.8
1991-1995	13.6	20.6	2.7	2.2	17.4	20.8
2001	41.2	72.4	11.9	10.8	66.2	98.2
2002	37.0	57.4	30.9	27.0	30.4	43.7
2003	44.5	75.5	16.0	18.1	53.4	84.9
2004	36.5	73.1	10.3	14.6	37.6	75.1
2005	31.7	58.9	15.9	20.4	19.2	32.6
2006	24.5	39.1	4.0	6.7	16.2	19.9
2007	26.7	45.9	3.1	5.9	33.7	50.1
2008	14.2	22.2	6.0	8.6	8.3	10.5
2009	29.4	69.5	3.1	9.2	47.9	90.0
2010 ^{c/}	26.5	54.4	15.4	21.5	14.1	22.2

a/ Catch numbers may include some illegal harvest.

b/ Fewer than 50 fish.

c/ Preliminary.

d/ Salmon data from surveyed ports only. These generally include Astoria, Garibaldi, Depoe Bay, Newport, Winchester Bay, Coos Bay, and Brookings. Since 1981, Pacific City and Florence have also been included. Gold Beach data are included from 1981-1987. Astoria was not included in 1994.

e/ Numbers do not include angling from the Columbia River jetty.

f/ Numbers do not include angling from the Columbia River jetty or from the late-season state waters Area 4B fishery.

g/ Values for 1982-1985 include some inriver Columbia River fishing after closure of the ocean fishery.

TABLE IV-11. Estimates of California recreational ocean salmon angler trips (thousands) by port area and boat type.

Year or Avg.	Crescent City	Eureka	Fort Bragg	San Francisco	Monterey	State Total
CHARTER TRIPS						
1976-1980	1.5	1.2	2.4	63.5	4.0	72.7
1981-1985	0.7	1.3	1.8	62.1	3.0	68.9
1986-1990	1.0	3.5	4.0	74.3	13.1	95.9
1991-1995	0.4	0.8	2.8	55.7	22.0	81.7
1996-2000	a/	0.7	4.2	55.2	22.1	82.1
2001	a/	1.4	9.7	43.4	15.4	69.9
2002	0.0	1.6	10.7	54.9	19.4	86.6
2003	0.0	1.1	8.2	38.7	11.4	59.4
2004	0.1	1.9	10.7	63.4	21.5	97.7
2005	0.0	0.9	8.9	45.8	13.5	69.1
2006	0.0	0.7	6.9	29.2	8.0	44.9
2007	0.0	1.6	5.4	20.9	3.5	31.4
2008	-	-	0.1	-	-	0.1
2009	0.0	0.6	-	-	-	0.6
2010 ^{b/}	0.0	0.3	1.8	7.5	3.6	13.1
PRIVATE TRIPS						
1976-1980	18.4	22.7	9.3	34.4	6.0	90.8
1981-1985	22.4	21.8	7.8	16.8	9.3	78.1
1986-1990	38.6	34.4	11.4	24.3	36.1	144.8
1991-1995	13.9	14.0	17.6	37.1	49.3	131.9
1996-2000	6.8	10.9	15.0	38.8	40.9	112.5
2001	8.6	14.7	21.1	28.1	22.7	95.2
2002	3.9	16.1	21.1	33.9	48.5	123.4
2003	2.2	12.5	15.5	27.9	17.1	75.3
2004	3.1	20.5	19.8	42.7	35.0	121.0
2005	2.5	13.9	15.4	39.0	32.2	103.0
2006	1.5	14.2	14.1	32.1	19.7	81.6
2007	2.1	16.8	11.7	22.2	21.7	74.5
2008	-	-	0.3	-	-	0.3
2009	1.1	3.6	-	-	-	4.7
2010 ^{b/}	0.2	3.7	4.9	11.6	15.1	35.6
TOTAL TRIPS						
1976-1980	20.0	23.9	11.7	97.9	10.0	163.5
1981-1985	23.1	23.1	9.6	78.9	12.2	147.0
1986-1990	39.6	37.9	15.4	98.6	49.2	240.7
1991-1995	14.3	14.8	20.4	92.8	71.2	213.6
1996-2000	6.8	11.7	19.1	94.0	63.0	194.6
2001	8.6	16.0	30.8	71.5	38.2	165.1
2002	3.9	17.7	31.8	88.8	67.9	210.1
2003	2.2	13.6	23.7	66.6	28.5	134.6
2004	3.2	22.4	30.6	106.1	56.5	218.7
2005	2.5	14.8	24.3	84.8	45.7	172.1
2006	1.5	15.0	21.0	61.4	27.7	126.5
2007	2.1	18.4	17.1	43.1	25.2	105.9
2008	-	-	0.4	-	-	0.4
2009	1.1	4.3	-	-	-	5.4
2010 ^{b/}	0.2	4.0	6.7	19.1	18.7	48.8

a/ Fewer than 50 angler trips.

b/ Preliminary.

TABLE IV-12. Estimates of Oregon recreational ocean salmon angler trips (thousands) by port area and boat type.

Year or Avg.	Astoria	Tillamook	Newport	Coos Bay	Brookings	State Total
CHARTER TRIPS						
1979	18.5	2.8	26.7	22.7	3.0	73.7
1980	26.3	3.7	26.7	19.6	2.8	79.1
1981-1985	10.3	3.0	17.2	11.9	3.3	45.7
1986-1990	7.1	5.3	27.5	13.0	3.6	56.5
1991-1995 ^{a/}	4.3	1.6	7.9	3.5	0.7	18.0
1996-2000	1.3	0.4	2.4	0.6	0.6	5.3
2001	4.3	1.4	8.8	3.0	0.7	18.2
2002	3.1	1.6	7.1	3.5	0.3	15.7
2003	3.9	2.0	13.0	4.0	0.5	23.4
2004	3.0	2.5	11.1	3.8	0.6	21.1
2005	2.3	1.0	3.7	2.6	0.3	9.9
2006	2.1	0.6	3.0	2.0	0.3	8.0
2007	2.6	1.1	5.6	1.9	0.2	11.4
2008	0.7	0.1	0.9	0.1	0.1	1.9
2009	2.7	1.3	8.1	0.3	0.2	12.6
2010 ^{b/}	1.8	0.4	2.8	0.1	0.1	5.0
PRIVATE TRIPS						
1979	24.3	16.3	45.4	52.9	48.8	187.7
1980	20.1	29.3	56.6	65.2	47.7	218.9
1981-1985	15.6	27.1	40.4	51.8	53.0	187.9
1986-1990	10.6	23.7	47.1	48.4	54.8	184.5
1991-1995 ^{a/}	8.5	12.0	17.0	22.4	22.0	82.0
1996-2000	4.1	7.7	3.0	7.6	17.8	40.3
2001	19.0	15.1	14.8	28.1	25.4	102.4
2002	9.0	22.8	10.9	29.9	19.4	91.9
2003	15.4	26.0	26.5	38.9	14.3	121.1
2004	15.6	26.8	27.9	36.7	17.7	124.6
2005	11.0	11.1	9.7	22.1	12.3	66.1
2006	6.2	15.3	7.4	15.2	10.4	54.4
2007	9.8	20.0	15.2	21.0	10.9	76.9
2008	2.9	9.0	4.6	7.3	4.7	28.5
2009	9.5	21.1	21.5	14.1	5.8	71.9
2010 ^{b/}	8.5	13.1	12.2	8.6	5.9	48.3
TOTAL TRIPS						
1979	42.8	19.1	72.1	75.6	51.8	261.4
1980	46.4	33.0	83.3	84.8	50.5	298.0
1981-1985	26.0	30.0	57.5	63.7	56.3	233.5
1986-1990	17.7	29.0	74.6	61.4	58.4	241.0
1991-1995 ^{a/}	12.8	13.6	24.9	26.0	22.7	100.0
1996-2000	5.4	8.1	5.3	8.3	18.4	45.6
2001	23.3	16.5	23.6	31.1	26.1	120.6
2002	12.1	24.4	18.1	33.4	19.7	107.6
2003	19.3	28.0	39.6	42.9	14.8	144.5
2004	18.6	29.3	39.0	40.5	18.3	145.7
2005	13.3	12.1	13.4	24.6	12.6	76.0
2006	8.2	15.9	10.4	17.2	10.6	62.3
2007	12.4	21.0	20.8	23.0	11.1	88.3
2008	3.7	9.1	5.4	7.4	4.8	30.4
2009	12.3	22.4	29.6	14.4	5.9	84.5
2010 ^{b/}	10.3	13.5	15.0	8.6	6.0	53.3

a/ The fishery north of Cape Falcon was closed in 1994, and it is assumed that no trips were taken out of Astoria into the south of Cape Falcon area. No samplers were stationed in Astoria.

b/ Preliminary.

TABLE IV-13. Estimates of Washington recreational ocean salmon angler trips (thousands) by port area and boat type.

Year or Avg.	Neah Bay ^{a/}	La Push	Westport	Ilwaco ^{b/}	State Total
CHARTER TRIPS					
1984 ^{c/}	0.3	-	11.6	18.0	29.9
1985 ^{c/}	2.0	-	42.2	20.7	64.9
1986-1990	2.0	-	35.7	15.9	53.5
1991-1995	0.7	0.1	19.4	7.9	28.0
1996-2000	0.3	0.1	9.7	3.6	13.6
2001	1.4	0.3	25.6	13.9	41.2
2002	1.5	0.4	24.5	10.6	37.0
2003	2.0	0.9	27.3	14.3	44.5
2004	1.9	0.6	22.5	11.4	36.5
2005	1.2	0.6	20.5	9.4	31.7
2006	0.5	0.5	15.4	8.0	24.5
2007	0.6	0.4	15.7	10.1	26.7
2008	0.3	0.2	9.9	3.7	14.2
2009	0.5	0.7	18.5	9.7	29.4
2010 ^{d/}	0.4	0.6	18.4	7.0	26.5
PRIVATE TRIPS					
1984 ^{c/}	8.3	0.2	2.3	36.0	46.8
1985 ^{c/}	15.2	1.5	13.7	19.4	49.8
1986-1990	16.9	2.5	16.6	23.4	59.4
1991-1995	16.4	2.8	18.5	25.4	63.1
1996-2000	8.8	1.6	12.7	12.8	35.8
2001	16.6	3.1	24.1	28.7	72.4
2002	12.2	3.0	16.9	25.3	57.4
2003	18.4	3.5	20.7	32.9	75.5
2004	24.2	3.9	15.7	29.3	73.1
2005	17.2	4.4	14.7	22.6	58.9
2006	12.9	3.6	9.1	13.5	39.1
2007	12.8	2.9	10.2	20.0	45.9
2008	5.3	1.9	8.8	6.3	22.2
2009	16.0	4.4	19.3	29.8	69.5
2010 ^{d/}	11.1	3.2	20.0	20.1	54.4
TOTAL TRIPS					
1984 ^{c/}	8.6	0.2	13.9	54.0	76.7
1985 ^{c/}	17.2	1.5	55.9	40.1	114.7
1986-1990	18.9	2.5	52.3	39.3	113.0
1991-1995	17.1	2.9	37.9	33.3	91.1
1996-2000	9.1	1.6	22.4	16.4	49.4
2001	17.9	3.4	49.7	42.5	113.6
2002	13.7	3.4	41.4	35.9	94.4
2003	20.4	4.4	48.0	47.1	120.0
2004	26.1	4.6	38.2	40.6	109.5
2005	18.5	4.9	35.2	32.1	90.6
2006	13.4	4.1	24.5	21.5	63.6
2007	13.4	3.3	25.9	30.1	72.7
2008	5.6	2.1	18.7	10.0	36.4
2009	16.5	5.1	37.8	39.5	98.9
2010 ^{d/}	11.5	3.8	38.4	27.0	80.8

a/ Does not include effort from the late-season state water Area 4B fishery, when open.

b/ Does not include effort from the Columbia River Jetty.

c/ Values for 1984 and 1985 include some Columbia River fishing after closure of the ocean fishery.

d/ Fewer than 50 angler trips.

d/ Preliminary.

TABLE IV-14. Oregon and Washington recreational salmon, bottomfish, and sturgeon angler trips (thousands) by ocean port area and boat type for the area north of Cape Falcon. (Page 1 of 3)

Year	Columbia River and Buoy 10					Westport			La Push			Neah Bay and Area 4B Add-On		
	Charter	Private	Subtotal	Jetty	Total	Charter	Private	Total	Charter	Private	Total	Charter	Private	Total
SALMON EFFORT														
1984	NA	NA	-	NA	54.0	11.6	2.3	13.9	0.0	0.2	0.2	0.3	8.3	8.6
1985	NA	NA	-	NA	90.3	42.2	13.7	55.9	0.0	1.5	1.5	2.0	15.2	17.2
1986	NA	NA	-	NA	144.3	36.6	14.8	51.4	0.0	1.7	1.7	2.4	17.4	19.8
1987	39.5	130.0	169.5	12.4	181.9	34.1	9.8	43.9	0.0	2.0	2.0	1.9	17.8	19.7
1988	34.5	154.4	188.9	16.9	205.8	23.5	13.9	37.4	0.0	2.8	2.8	2.0	14.8	16.8
1989	40.4	169.2	209.6	22.9	232.5	40.8	18.7	59.5	0.0	1.6	1.6	2.8	25.5	28.3
1990	32.8	128.7	161.5	5.7	167.2	43.4	25.9	69.3	0.0	4.2	4.2	3.0	30.8	33.8
1991	37.9	172.7	210.6	35.5	246.1	28.6	24.2	52.8	0.2	3.3	3.5	1.9	23.5	25.4
1992	22.3	116.6	138.9	28.4	167.3	28.1	25.6	53.7	0.2	2.3	2.5	1.1	18.6	19.7
1993	20.2	103.3	123.5	24.6	148.1	27.4	23.5	50.9	0.1	2.8	2.9	1.6	25.7	27.3
1994	0.5	6.3	6.8	3.6	10.4	-	-	-	-	-	-	-	-	-
1995	9.0	43.4	52.4	8.5	60.9	12.7	9.0	21.7	0.1	1.4	1.5	0.3	9.2	9.5
1996	7.3	26.8	34.1	7.5	41.6	10.3	5.2	15.5	a/	1.3	1.3	0.3	10.6	10.9
1997	8.4	53.0	61.3	7.4	68.7	10.0	7.3	17.3	0.1	0.9	0.9	0.2	4.6	4.8
1998	3.2	30.7	33.9	3.6	37.5	4.5	3.5	8.0	0.0	0.6	0.6	0.1	6.3	6.4
1999	8.7	63.9	72.6	6.2	78.8	11.5	7.6	19.1	0.1	2.9	2.9	0.5	7.6	8.1
2000	9.8	82.2	92.0	7.0	99.0	12.2	7.7	19.8	0.1	1.8	2.0	1.1	10.3	11.4
2001	22.5	165.0	187.5	17.0	204.5	25.6	24.1	49.7	0.3	3.1	3.4	1.4	16.8	18.1
2002	15.2	115.1	130.3	2.8	133.1	44.5	16.9	41.4	0.4	3.0	3.4	1.5	12.2	13.7
2003	19.3	133.3	152.7	7.2	159.8	27.3	20.7	48.0	0.9	3.5	4.4	2.0	18.4	20.4
2004	15.8	113.3	129.2	3.2	132.3	22.5	15.7	38.2	0.6	3.9	4.6	1.9	24.2	26.1
2005	12.0	88.5	100.5	c/	100.5	20.5	14.7	35.2	0.6	4.4	4.9	1.2	17.2	18.5
2006	10.4	59.8	70.2	1.7	71.9	15.4	9.1	24.5	0.5	3.6	4.1	0.5	12.9	13.4
2007	13.6	64.2	77.8	c/	77.8	15.7	10.2	25.9	0.4	2.9	3.3	0.6	12.8	13.4
2008	5.5	40.7	46.1	0.4	46.5	9.9	8.8	18.7	0.2	1.9	2.1	0.3	6.1	6.4
2009	13.1	109.9	122.9	2.6	125.5	18.5	19.3	37.8	0.7	4.4	5.1	0.5	16.0	16.5
2010 ^{b/}	8.9	79.9	88.9	0.1	89.0	18.4	20.0	38.4	0.6	3.2	3.8	0.4	11.1	11.5

TABLE IV-14. Oregon and Washington recreational salmon, bottomfish, and sturgeon angler trips (thousands) by ocean port area and boat type for the area north of Cape Falcon. (Page 2 of 3)

Year	Columbia River and Buoy 10					Westport			La Push			Neah Bay and Area 4B Add-On		
	Charter	Private	Subtotal	Jetty	Total	Charter	Private	Total	Charter	Private	Total	Charter	Private	Total
BOTTOMFISH EFFORT^{d/}														
1984	2.1	0.1	2.2	-	-	12.4	0.5	12.9	0.0	0.0	0.0	1.8	12.3	14.1
1985	1.9	0.2	2.1	-	-	15.3	1.0	16.3	0.0	0.1	0.1	3.0	10.6	13.6
1986	1.7	0.2	1.9	-	-	19.6	0.8	20.4	0.0	0.2	0.2	3.5	11.4	14.9
1987	1.7	0.3	2.0	0.5	2.5	21.1	1.2	22.3	0.0	0.5	0.5	5.6	16.0	21.6
1988	2.1	0.2	2.3	0.8	3.1	24.4	1.1	25.5	0.0	0.7	0.7	5.7	14.8	20.5
1989	1.2	0.6	1.8	1.5	3.3	19.3	1.0	20.3	0.0	0.6	0.6	6.8	16.3	23.1
1990	1.4	0.3	1.7	2.4	4.1	21.8	0.8	22.6	0.0	0.8	0.8	6.4	18.1	24.5
1991	1.3	0.4	1.7	1.8	3.5	23.5	1.1	24.6	0.0	0.9	0.9	5.9	18.2	24.1
1992	1.4	0.5	1.9	2.3	4.1	20.5	2.2	22.7	0.0	1.5	1.5	4.8	19.1	23.9
1993	2.2	0.6	2.8	2.6	5.4	21.5	1.8	23.0	0.1	1.1	1.2	5.1	19.2	24.3
1994	2.7	0.7	3.3	2.7	6.0	26.0	1.7	27.7	0.2	1.9	2.1	4.1	15.0	19.1
1995	1.3	0.9	2.3	2.2	4.4	21.1	1.6	22.7	a/	1.6	1.6	4.1	19.2	23.3
1996 ^{e/f/}	1.2	0.5	1.7	1.7	3.4	21.4	1.2	22.6	0.0	1.6	1.6	4.8	21.0	25.8
1997	1.2	0.7	2.0	2.5	4.4	19.2	1.4	20.6	0.0	2.2	2.2	4.9	22.7	27.7
1998	1.8	0.5	2.3	0.9	3.2	21.5	1.3	22.8	0.0	1.2	1.2	5.1	23.9	29.0
1999	1.0	0.5	1.5	0.5	2.0	17.1	1.2	18.3	0.1	1.0	1.1	4.5	20.3	24.9
2000	1.2	0.6	1.8	0.5	2.3	16.7	0.9	17.6	0.2	1.3	1.5	4.5	20.1	24.6
2001	2.8	0.4	3.2	0.9	4.1	13.9	1.2	15.1	0.3	0.9	1.2	4.7	16.5	21.2
2002	14.3	0.5	1.9	0.8	2.8	14.9	1.2	16.1	0.3	1.2	1.6	4.0	15.7	19.7
2003	2.4	0.5	2.9	0.9	3.8	16.3	1.8	18.2	1.0	2.5	3.6	5.2	21.4	26.6
2004	2.4	0.8	3.2	0.3	3.5	14.8	1.7	16.5	0.4	1.7	2.1	3.5	15.2	18.7
2005	2.5	1.1	3.7	c/	3.7	15.5	1.8	17.3	0.5	2.5	3.0	3.5	18.8	22.4
2006	3.6	1.2	4.9	0.9	5.7	17.7	1.8	19.5	0.3	2.8	3.1	4.4	16.9	21.3
2007	3.1	1.5	4.6	c/	4.6	16.2	1.6	17.7	0.5	2.5	3.0	4.3	15.7	20.0
2008	2.9	2.0	4.9	0.4	5.3	15.5	1.7	17.2	1.0	2.3	3.3	2.3	16.2	18.5
2009	2.1	1.3	3.3	0.3	3.6	13.0	2.2	15.2	0.7	2.7	3.4	1.5	13.6	15.1
2010 ^{b/}	2.9	1.7	4.7	0.5	5.2	11.7	1.8	13.5	0.7	3.6	4.3	1.2	15.4	16.6

TABLE IV-14. Oregon and Washington recreational salmon, bottomfish, and sturgeon angler trips (thousands) by ocean port area and boat type for the area north of Cape Falcon. (Page 3 of 3)

Year	Columbia River and Buoy 10					Westport			La Push			Neah Bay and Area 4B Add-On		
	Charter	Private	Subtotal	Jetty	Total	Charter	Private	Total	Charter	Private	Total	Charter	Private	Total
STURGEON EFFORT^{g/}														
1984	1.7	28.4	30.1	-	30.1	-	-	-	-	-	-	-	-	-
1985	5.0	31.2	36.2	-	36.2	-	-	-	-	-	-	-	-	-
1986	5.7	35.7	41.4	-	41.4	-	-	-	-	-	-	-	-	-
1987	6.0	43.2	49.2	-	49.2	-	-	-	-	-	-	-	-	-
1988	6.2	32.4	38.5	-	38.5	-	-	-	-	-	-	-	-	-
1989	4.3	22.0	26.3	-	26.3	-	-	-	-	-	-	-	-	-
1990	3.9	28.0	31.9	-	31.9	-	-	-	-	-	-	-	-	-
1991	3.6	26.0	29.7	-	29.7	-	-	-	-	-	-	-	-	-
1992	5.0	38.3	43.3	-	43.3	-	-	-	-	-	-	-	-	-
1993	6.1	48.6	54.6	-	54.6	-	-	-	-	-	-	-	-	-
1994	7.5	40.4	47.8	-	47.8	-	-	-	-	-	-	-	-	-
1995	7.7	55.2	62.9	-	62.9	-	-	-	-	-	-	-	-	-
1996	11.1	45.2	56.3	-	56.3	-	-	-	-	-	-	-	-	-
1997	12.2	48.4	60.7	-	60.7	-	-	-	-	-	-	-	-	-
1998	14.2	64.3	78.5	-	78.5	-	-	-	-	-	-	-	-	-
1999	13.2	57.1	70.3	-	70.3	-	-	-	-	-	-	-	-	-
2000	11.6	52.1	63.7	-	63.7	-	-	-	-	-	-	-	-	-
2001	10.8	40.9	51.7	-	51.7	-	-	-	-	-	-	-	-	-
2002	9.9	45.9	55.8	-	55.8	-	-	-	-	-	-	-	-	-
2003	6.6	38.1	44.7	-	44.7	-	-	-	-	-	-	-	-	-
2004	7.4	32.2	39.6	-	39.6	-	-	-	-	-	-	-	-	-
2005	8.7	51.2	59.9	-	59.9	-	-	-	-	-	-	-	-	-
2006	6.7	37.3	44.0	-	44.0	-	-	-	-	-	-	-	-	-
2007	7.9	39.8	47.7	-	47.7	-	-	-	-	-	-	-	-	-
2008	7.5	38.5	46.0	-	46.0	-	-	-	-	-	-	-	-	-
2009	6.1	43.0	49.1	-	49.1	-	-	-	-	-	-	-	-	-
2010 ^{b/}	5.4	31.4	36.8	-	36.8	-	-	-	-	-	-	-	-	-

a/ Fewer than 50 angler trips.

b/ Preliminary.

c/ Columbia River north jetty was not sampled in 2005 and 2007 due to construction limiting access.

d/ Oregon data is a minimum estimate, as the jetty is not sampled, and bottomfish sampling of vessels only occurs when the ocean is open for salmon.

e/ No Oregon bottomfish trips are included.

f/ Includes tuna trips: Ilwaco - 9 charter, 14 private; Westport - 784 charter, 0 private.

g/ Annual sturgeon angler trips for the lower Columbia River from the western tip of Puget Island to mouth.

TABLE IV-15. Buoy 10^{ab/} and Area 4B add-on recreational salmon angler trips and catch by boat type. (Page 1 of 2)

Year or Avg.	Angler Trips			Chinook Catch			Coho Catch			Pink Catch	
	Charter	Private	Jetty	Charter	Private	Jetty	Charter	Private	Jetty	Charter	Private
OREGON BUOY 10											
1987-1990	4,002	38,619	4,029	793	6,415	29	3,292	18,348	690	0	0
1991-1995	1,528	21,547	4,555	122	1,318	30	1,625	14,520	1,389	0	0
1996-2000	626	15,760	1,832	126	2,712	3	206	3,764	353	0	0
2001	1,616	54,444	4,115	47	5,578	10	1,481	56,403	523	0	0
2002	512	39,943	1,589	31	10,728	-	2	3,058	52	0	0
2003	991	45,461	2,315	47	7,903	-	624	28,518	526	0	0
2004	66	33,092	1,170	19	9,191	-	17	7,585	47	0	0
2005	135	33,051	935	18	6,875	6	51	4,785	36	0	0
2006	37	24,194	1,457	1	1,350	-	-	2,800	-	0	0
2007	156	19,983	793	6	2,511	-	38	4,841	97	0	0
2008	198	19,020	-	43	5,608	-	69	4,487	-	0	0
2009	182	39,425	1,684	1	3,550	16	164	27,000	466	0	0
2010 ^{c/}	82	30,159	710	2	4,537	11	8	5,171	22	0	0
WASHINGTON BUOY 10											
1987-1990	10,678	71,927	6,567	1,907	14,398	68	8,353	40,415	1,627	1	11
1991-1995	4,162	41,770	5,908	466	3,710	42	5,178	31,681	1,426	0	16
1996-2000	1,957	23,952	1,045	393	3,999	24	950	6,305	82	0	0
2001	2,765	62,944	-	-	6,791	-	3,282	70,349	-	0	0
2002	1,001	40,927	485	232	8,424	26	98	3,023	-	0	0
2003	216	39,844	-	22	8,344	-	139	24,633	-	0	0
2004	685	33,805	-	45	6,791	-	139	7,381	-	0	0
2005	183	20,879	-	5	2,383	-	34	1,972	-	0	0
2006	421	14,597	-	5	351	-	8	879	-	0	0
2007	711	14,421	-	33	1,226	-	343	3,037	-	0	0
2008	804	12,445	-	154	2,544	-	436	3,581	-	0	0
2009	389	31,123	-	4	2,369	-	312	20,185	-	0	0
2010 ^{c/}	106	21,241	-	7	2,250	-	11	2,767	-	0	0

TABLE IV-15. Buoy 10^{a/b/} and Area 4B add-on recreational salmon angler trips and catch by boat type. (Page 2 of 2)

Year or Avg.	Angler Trips			Chinook Catch			Coho Catch			Pink Catch	
	Charter	Private	Jetty	Charter	Private	Jetty	Charter	Private	Jetty	Charter	Private
TOTAL BUOY 10											
1987-1990	14,680	110,547	10,596	2,700	20,812	98	11,645	58,763	2,317	1	11
1991-1995	5,690	63,317	10,463	588	5,029	72	6,803	46,201	2,814	0	16
1996-2000	2,583	39,712	2,877	519	6,710	27	1,157	10,070	435	0	0
2001	4,381	117,388	4,115	47	12,369	10	4,763	126,752	523	0	0
2002	1,513	80,870	2,074	263	19,152	26	100	6,081	52	0	0
2003	1,207	85,305	2,315	69	16,247	0	763	53,151	526	0	0
2004	751	66,897	1,170	64	15,982	0	156	14,966	47	0	0
2005	318	53,930	935	23	9,258	6	85	6,757	36	0	0
2006	458	38,791	1,457	6	1,701	0	8	3,679	0	0	0
2007	867	34,404	793	39	3,737	0	381	7,878	97	0	0
2008	1,002	31,465	0	197	8,152	0	505	8,068	0	0	0
2009	571	70,548	1,684	5	5,919	16	476	47,185	466	0	0
2010 ^{c/}	188	51,400	710	9	6,787	11	19	7,938	22	0	0
TOTAL AREA 4B ADD-ON^{d/}											
1989-1990	1,084	10,941	-	62	375	-	2,095	18,021	-	36	212
1991-1995	429	6,852	-	12	153	-	725	9,188	-	73	970
1996	36	1,511	-	-	5	-	61	2,266	-	0	0
1997	136	1,788	-	-	4	-	65	1,429	-	139	412
1998	71	6,296	-	5	98	-	125	7,937	-	0	3
1999 ^{e/}	-	-	-	-	-	-	-	-	-	0	0
2000	373	3,046	-	-	8	-	614	3,796	-	0	0
2001-2005 ^{f/}	-	-	-	-	-	-	-	-	-	0	0
2006 ^{e/}	-	-	-	-	-	-	-	-	-	0	0
2007 ^{f/}	-	-	-	-	-	-	-	-	-	0	0
2008	-	782	-	-	11	-	-	137	-	0	0
2009 ^{f/}	-	-	-	-	-	-	-	-	-	0	0
2010 ^{f/}	-	-	-	-	-	-	-	-	-	0	0

a/ Starting in 2000, includes catch upstream from the Astoria-Megler Bridge to the new boundary line from Tongue Point, Oregon to Rocky Point, Washington. Prior to 2000 includes only downstream from the Astoria-Megler Bridge.

b/ Prior to 1987, data on charter and private anglers were combined. Total Buoy 10 catch and effort data prior to 1987 are provided in Table B-21.

c/ Preliminary.

d/ There was no Area 4B add-on fishery prior to 1989.

e/ There was no Area 4B add-on fishery opening because the Area 4 ocean quota was not attained.

f/ There was no Area 4B add-on fishery planned.

TABLE IV-16. Estimates of California coastal community and state personal income impacts in thousands of real (inflation adjusted, 2010) dollars of the troll and recreational ocean salmon fishery for major port areas.^{a/}

Year or Avg.	Crescent City	Eureka	Fort Bragg	San Francisco	Monterey	Coastal Community Total ^{b/}	State Total
OCEAN TROLL^{c/}							
1976-1980	6,638	16,860	16,532	21,687	9,309	71,026	91,313
1981-1985	3,362	4,056	9,492	17,918	6,105	40,933	50,963
1986-1990	1,264	3,130	16,648	32,327	12,090	65,458	80,336
1991-1995	10	149	1,046	12,166	6,931	20,302	24,465
1996-2000	11	177	739	12,736	7,722	21,385	22,626
2001	15	301	993	10,433	2,207	13,947	14,477
2002	263	503	3,581	14,898	4,012	23,256	24,705
2003	212	37	14,534	15,143	2,388	32,314	35,939
2004	1,862	411	7,121	22,370	5,035	36,799	37,573
2005	139	418	5,185	12,911	6,776	25,428	26,064
2006	-	-	2,359	6,101	927	9,388	9,693
2007	316	785	3,244	7,742	1,578	13,666	13,910
2008	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-
2010 ^{d/e/}	-	34	1,689	135	153	2,011	2,090
RECREATIONAL							
1976-1980	1,288	1,493	870	13,068	875	17,593	19,734
1981-1985	1,411	1,454	697	11,573	924	16,058	18,075
1986-1990	2,390	2,491	1,215	14,143	3,800	24,039	28,014
1991-1995	867	933	1,409	11,963	5,729	20,901	24,541
1996-2000	402	739	1,439	11,994	5,268	19,842	23,084
2001	344	748	2,018	7,280	2,930	13,320	14,330
2002	154	832	2,134	9,146	4,505	16,771	18,008
2003	87	626	1,612	6,616	2,177	11,118	11,908
2004	131	1,050	2,090	10,713	4,221	18,205	19,469
2005	99	664	1,690	8,078	3,067	13,599	14,571
2006	59	656	1,393	5,468	1,846	9,421	10,151
2007	83	856	1,124	3,877	1,343	7,283	7,909
2008	-	-	25	-	-	25	30
2009	44	221	-	-	-	265	310
2010 ^{d/}	8	185	410	1,540	1,087	3,230	3,515

a/ Per pound and per day estimates of income impacts provided from output of the Fishery Economic Assessment Model (FEAM). These are the income impacts associated with expenditures in the troll or recreational sectors. There is no differentiation between money new to the area and money which would otherwise have been expended in other sectors. It is assumed that all fish landed at a port is processed in the port area. Values through 1995 are based on a 1992 run of the FEAM using 1989 U.S. Forest Service IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 U.S. Forest Service IMPLAN data. Beginning in 2001 values are based on a 2003 run of the FEAM using 1998 U.S. Forest Service IMPLAN data.

b/ Total personal income impacts on coastal areas. Totals do not include impacts of one coastal area on another.

c/ Excluding pink salmon.

d/ Preliminary.

e/ Eureka impacts from fish caught in the Fort Bragg area fishery and landed in Eureka.

TABLE IV-17. Estimates of Oregon coastal community and state personal income impacts in thousands of real (inflation adjusted, 2010) dollars of the troll and recreational ocean salmon fishery for major port areas.^{a/}

Year or Avg.	Astoria	Tillamook	Newport	Coos Bay	Brookings	Coastal Community Total ^{b/}	State Total
OCEAN TROLL^{c/}							
1976-1980	4,261	5,485	12,867	19,801	8,232	50,646	68,668
1981-1985	1,380	1,776	4,165	7,345	3,188	17,854	24,264
1986-1990	637	3,715	8,269	15,940	3,021	31,583	42,653
1991-1995	89	693	2,838	1,379	140	5,139	6,928
1996-2000	147	290	3,004	1,734	418	5,594	6,816
2001	370	755	5,656	2,972	610	10,364	12,615
2002	1,058	896	4,839	4,278	774	11,846	14,347
2003	1,035	938	6,256	5,687	670	14,586	17,648
2004	872	698	6,174	6,718	1,438	15,900	17,183
2005	722	1,202	5,137	5,088	1,204	13,353	14,429
2006	942	586	1,541	415	361	3,846	4,126
2007	277	393	640	1,866	742	3,919	4,206
2008	394	193	-	-	69	656	691
2009 ^{d/}	161	151	133	18	40	503	537
2010 ^{d/}	898	260	1,304	885	349	3,695	3,968
RECREATIONAL							
1979	3,572	1,140	5,432	5,500	2,647	18,292	23,583
1980	4,313	1,895	5,997	5,764	2,573	20,542	26,456
1981-1985	2,106	1,698	4,055	4,136	2,878	14,872	19,307
1986-1990	1,441	1,803	5,612	4,088	2,996	15,940	20,752
1991-1995	979	788	1,785	1,593	1,125	6,269	8,130
1996-2000	379	435	428	472	908	2,622	3,456
2001	1,360	732	1,729	1,449	1,011	6,281	7,699
2002	793	1,040	1,363	1,589	745	5,529	6,805
2003	1,157	1,202	2,726	1,985	584	7,655	9,416
2004	1,040	1,307	2,518	1,876	722	7,462	9,189
2005	754	539	856	1,166	482	3,797	4,653
2006	541	635	672	834	410	3,092	3,799
2007	760	862	1,304	1,043	420	4,389	5,395
2008	218	340	283	283	182	1,305	1,607
2009 ^{d/}	766	930	1,880	561	231	4,368	5,377
2010 ^{d/}	586	522	819	325	220	2,473	3,033

a/ Per pound and per day estimates of income impacts provided by the FEAM. These are the income impacts associated with expenditures in the troll or recreational sectors. There is no differentiation between money new to the area and money which would otherwise have been expended in other sectors. It is assumed that all fish landed at a port is processed in the port area. Values through 1995 are based on a 1992 run of the FEAM using 1989 U.S. Forest Service IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 U.S. Forest Service IMPLAN data. Beginning in 2001 values are based on a 2003 run of the FEAM using 1998 U.S. Forest Service IMPLAN data.

b/ Total personal income impacts on coastal areas. Totals do not include impacts of one coastal area on another.

c/ Excluding pink salmon.

d/ Preliminary.

TABLE IV-18. Estimates of Washington coastal community and state personal income impacts in thousands of real (inflation adjusted, 2010) dollars of the troll and recreational ocean salmon fishery for major port areas.^{a/}

Year or Avg.	Neah Bay	La Push	Westport	Ilwaco ^{b/}	Coastal Community		State Total
					Total ^{c/d/}	Puget Sound	
OCEAN TROLL^{eff/}							
1976-1980	6,154	8,402	16,657	5,965	37,178	8,280	59,311
1981-1985	1,209	490	4,564	1,092	7,355	1,767	11,561
1986-1990	669	176	2,097	456	3,398	1,023	5,567
1991-1995 ^{g/}	492	109	700	50	1,354	198	1,992
1996-2000	166	3	200	19	388	102	533
2001	303	0	631	42	976	0	1,056
2002	626	81	1,098	183	1,988	0	2,191
2003	1,135	192	937	137	2,401	43	2,784
2004	836	264	1,039	101	2,240	26	2,588
2005	684	409	1,052	130	2,275	1	2,570
2006	508	412	395	265	1,580	34	1,870
2007	224	227	929	115	1,496	20	1,663
2008	146	176	550	130	1,001	12	1,167
2009	296	305	1,063	74	1,737	34	1,981
2010	319	502	3,792	82	4,695	-	4,904
RECREATIONAL							
1976-1980	2,267	1,125	22,551	11,039	36,981	-	49,203
1981-1985	1,371	140	8,873	4,560	14,944	-	19,914
1986-1990	1,052	120	5,035	2,714	8,922	-	11,820
1991-1995	559	109	3,108	1,576	5,352	-	7,037
1996-2000	296	80	1,455	712	2,543	-	3,337
2001	765	156	5,689	3,604	10,214	-	11,932
2002	651	166	5,240	2,869	8,926	-	10,429
2003	946	265	5,902	3,823	10,936	-	12,793
2004	1,109	235	4,815	3,155	9,314	-	10,920
2005	760	238	4,394	2,555	7,947	-	9,306
2006	499	209	3,244	1,987	5,939	-	6,951
2007	508	162	3,329	2,596	6,596	-	7,712
2008	220	97	2,190	925	3,432	-	4,011
2009	593	260	4,178	2,859	7,891	-	9,229
2010	428	214	4,183	2,001	6,826	-	7,976

a/ Per pound and per recreational day estimates of income impacts provided by the FEAM. These are the income impacts associated with expenditures in the troll or recreational sectors. There is no differentiation between money new to the area and money which would otherwise have been expended in other sectors. It is assumed that all fish landed at a port is processed in the port area. Values through 1995 are based on a 1992 run of the FEAM using 1989 U.S. Forest Service IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 U.S. Forest Service IMPLAN data. Beginning in 2001 values are based on a 2003 run of the FEAM using 1998 U.S. Forest Service IMPLAN data.

b/ Recreational values exclude recreational shorebased effort from the Columbia River north jetty.

c/ Total personal income impacts on coastal areas. Totals do not include impacts of one coastal area on another.

d/ Through 1993, commercial values include a very small amount of fish landed in Washington coastal areas not included in the major port groups.

e/ Excluding pink salmon.

f/ All commercial values in this table are based on preliminary information available at the start of each year's Salmon Review.

g/ The non-Indian commercial and recreational fisheries were closed north of Cape Falcon in 1994. Some commercial catch taken south of Cape Falcon was landed in the Puget Sound area.

TABLE IV-19. Local personal income impacts in real (inflation adjusted, 2010) dollars of the inriver commercial salmon fishery on Oregon and Washington Columbia River communities.^{a/}

	Non-Indian - Gillnet ^{b/}						Treaty Indian - All Gears ^{c/}						Columbia River Total
	Chinook			Chinook			Chinook			Chinook			
	Spring	Brights ^{d/}	Tules	Coho	Chum	TOTAL	Spring	Brights ^{d/}	Tules	Coho	Chum	TOTAL	
Oregon													
1987-2003	983	2,606	262	1,921	3	5,775	13	1,103	78	11	e/	1,205	6,980
2004	2,154	1,429	304	1,733	1	5,621	359	1,467	353	55	-	2,234	7,855
2005	647	1,036	181	1,895	e/	3,758	-	547	83	1	-	631	4,390
2006	1,169	1,344	88	1,269	e/	3,870	1	728	14	30	-	773	4,643
2007	1,390	736	e/	510	e/	2,636	121	707	e/	31	-	859	3,494
2008 ^{f/}	1,253	1,996	188	1,293	e/	4,730	584	1,805	196	103	-	2,688	7,418
2009 ^{f/}	787	1,801	271	2,020	e/	4,880	267	1,259	139	54	-	1,719	6,599
2010 ^{f/}	3,324	1,775	398	1,439	2	6,938	1,064	912	241	44	-	2,260	9,199
Washington^{f/g/h/}													
1987-2003	438	1,120		871	2	2,430	128	2,242		36	-	2,406	4,836
2004	565	1,135		888	e/	2,589	419	1,668		60	-	2,148	4,737
2005	450	803		438	e/	1,691	272	2,743		49	-	3,064	4,755
2006	630	908		555	-	2,094	908	3,005		78	e/	3,992	6,085
2007	224	454		413	e/	1,092	1	2,601		129	e/	2,731	3,823
2008	547	980		541	1	2,068	1,767	3,631		354	e/	5,752	7,821
2009	554	1,118		602	1	2,276	1,184	2,168		72	-	3,424	5,700
2010	955	1,028		613	4	2,599	3,626	4,119		50	-	7,795	10,394
Columbia River													
1987-2003	1,421	3,988		2,791	5	8,205	140	3,424		47	e/	3,611	11,815
2004	2,720	2,868		2,622	1	8,210	779	3,488		115	-	4,382	12,592
2005	1,097	2,020		2,333	e/	5,450	-	3,372		50	-	3,695	9,145
2006	1,799	2,340		1,825	-	5,963	909	3,748		108	-	4,765	10,728
2007	1,614	1,191		923	e/	3,728	122	3,308		160	-	3,589	7,317
2008 ^{f/}	1,800	3,164		1,834	1	6,798	2,351	5,632		457	-	8,440	15,238
2009 ^{f/}	1,342	3,191		2,622	1	7,156	1,452	3,566		126	-	5,143	12,299
2010 ^{f/}	4,278	3,201		2,051	6	9,537	4,689	5,271		95	-	10,055	19,592

a/ Excluding pink, sockeye, and steelhead. Values through 1995 are based on a 1992 run of the FEAM using 1989 U.S. Forest Service IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 U.S. Forest Service IMPLAN data. Beginning in 2001 values are based on a 2003 run of the FEAM using 1998 U.S. Forest Service

b/ Mainstem below Bonneville and Select Areas (Youngs Bay, Tongue Point, Blind Slough, and Deep River).

c/ Treaty Indian values do not include direct sales to consumers.

d/ For Washington and the Columbia River this column includes fall brights, tules, and jacks.

e/ Less than \$500.

f/ Preliminary. (All Washington values in this table are based on preliminary information available when each year's Salmon

g/ Washington income impacts for years prior to 2000 are based on a combination of Washington and Oregon value

h/ Treaty Indian values are primarily mainstem Columbia set gillnet but also include Klickitat dipnet, Drano Lake (Little White Salmon River mouth), and Priest Rapids Pool fisheries.

TABLE IV-20. Local personal income impacts in real (inflation adjusted, 2010) dollars of the Buoy 10 recreational fishery in Oregon and Washington and the Area 4B add-on fishery in Washington.

Year	Total Angler Trips (thousands)	Income Impacts (thousands of dollars)		
		Oregon	Washington	Total
BUOY 10 (including bank fishing)				
1987-1990	136	2,664	4,645	7,308
1991-1995	79	1,515	2,578	4,093
1996-2000	45	971	1,328	2,299
2001	126	2,507	2,646	5,153
2002	84	1,686	1,585	3,271
2003	89	1,998	1,383	3,380
2004	69	1,339	1,269	2,608
2005	55	1,339	738	2,076
2006	41	1,001	572	1,573
2007	36	829	621	1,450
2008	32	767	572	1,339
2009	73	1,622	1,122	2,744
2010 ^{b/}	52	1,210	735	1,945
AREA 4B ADD-ON ^{c/}				
1989-1990	12	-	658	658
1991-1995	6	-	384	384
1996-2000	3	-	138	138
2001	-	-	-	-
2002	-	-	-	-
2003	-	-	-	-
2004	-	-	-	-
2005	-	-	-	-
2006	-	-	-	-
2007	-	-	-	-
2008	1	-	30	30
2009	-	-	-	-
2010 ^{b/}	-	-	-	-

a/ Values through 1995 are based on a 1992 run of the FEAM using 1989 U.S. Forest Service IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 U.S. Forest Service IMPLAN data. Beginning in 2001 values are based on a 2003 run of the FEAM using 1998 U.S. Forest Service IMPLAN data.

b/ Preliminary

c/ There were no Area 4B add-on fisheries prior to 1989.

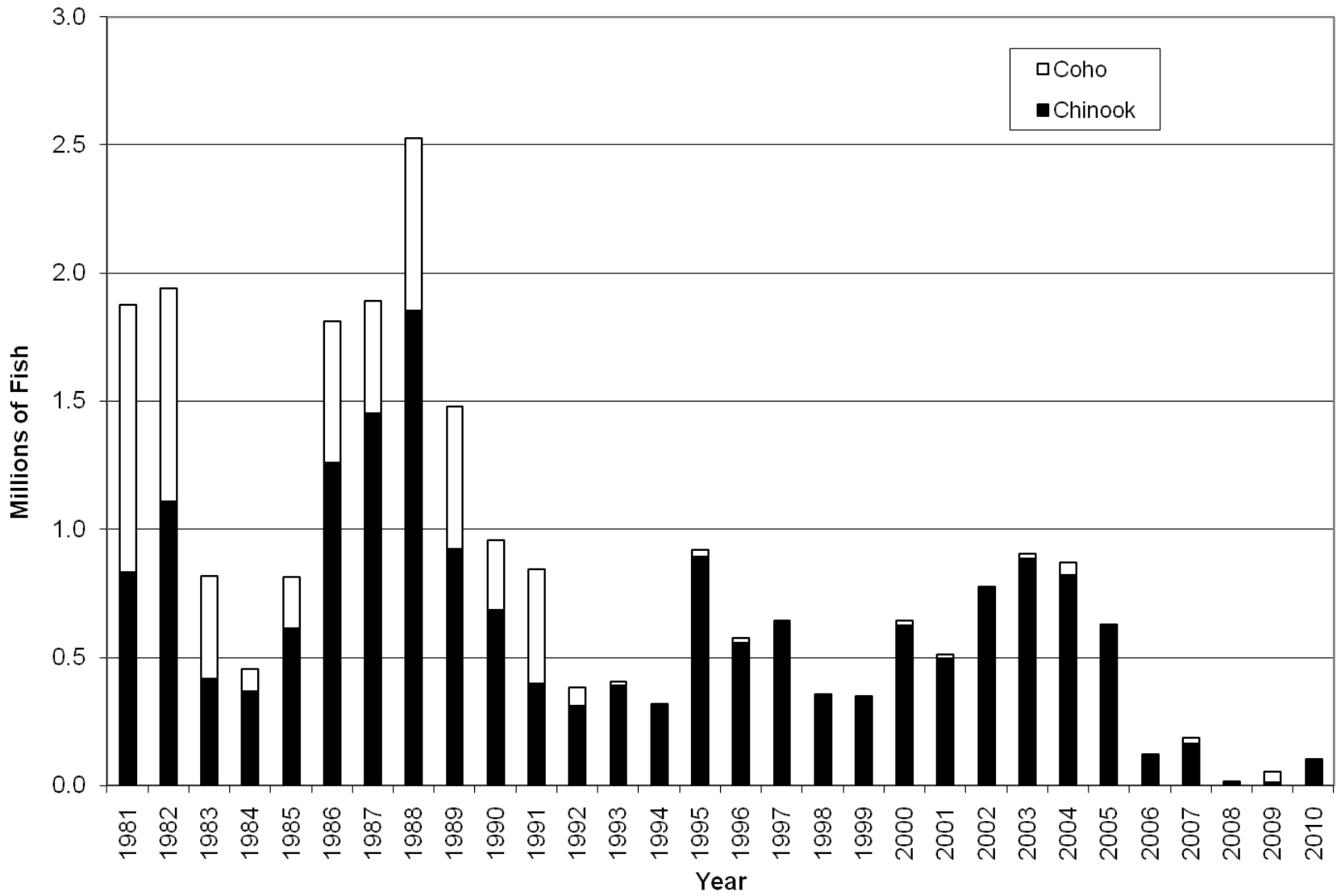


Figure IV-1. West Coast ocean non-Indian commercial Chinook and coho harvest.

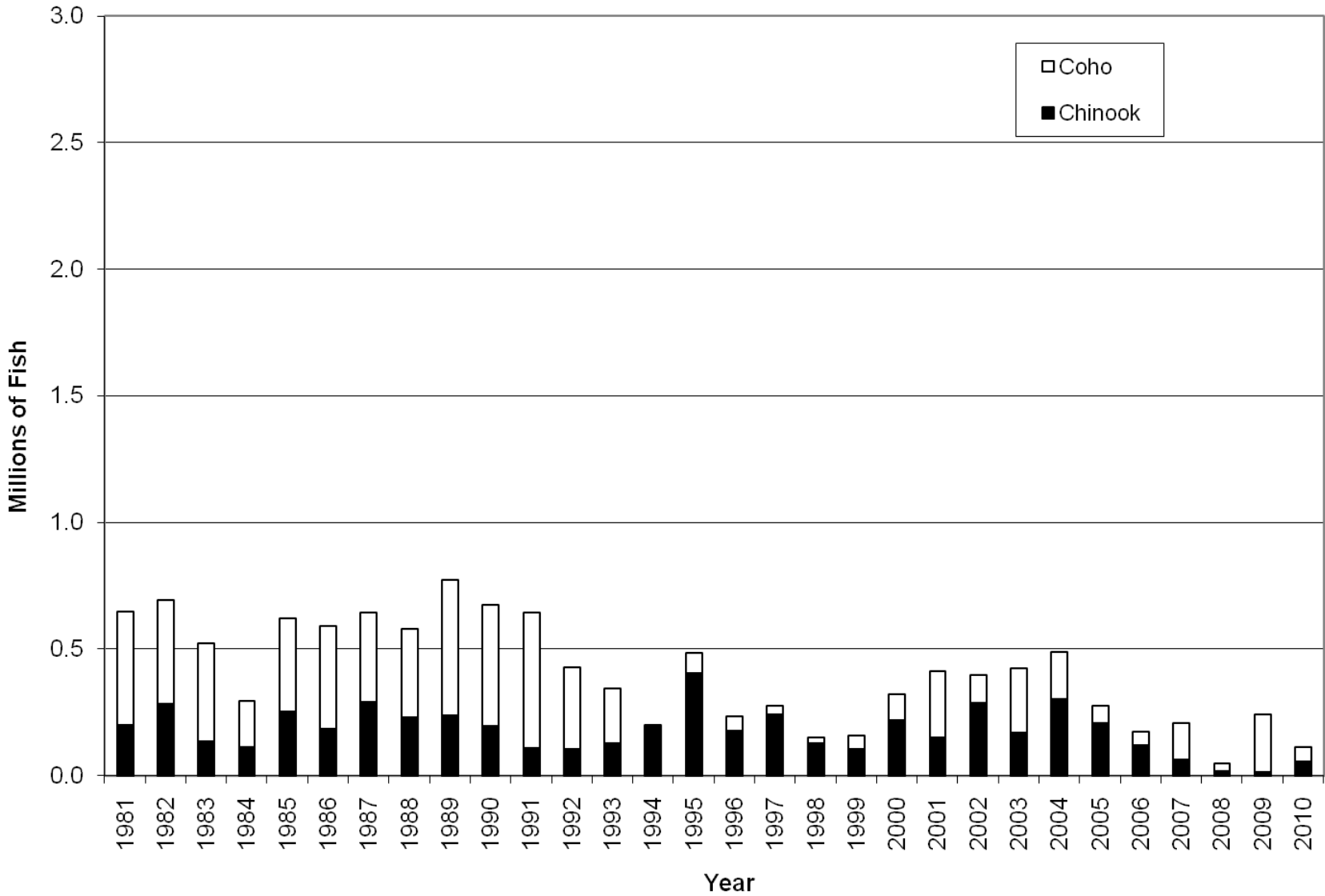


Figure IV-2. West Coast ocean recreational Chinook and coho harvest.

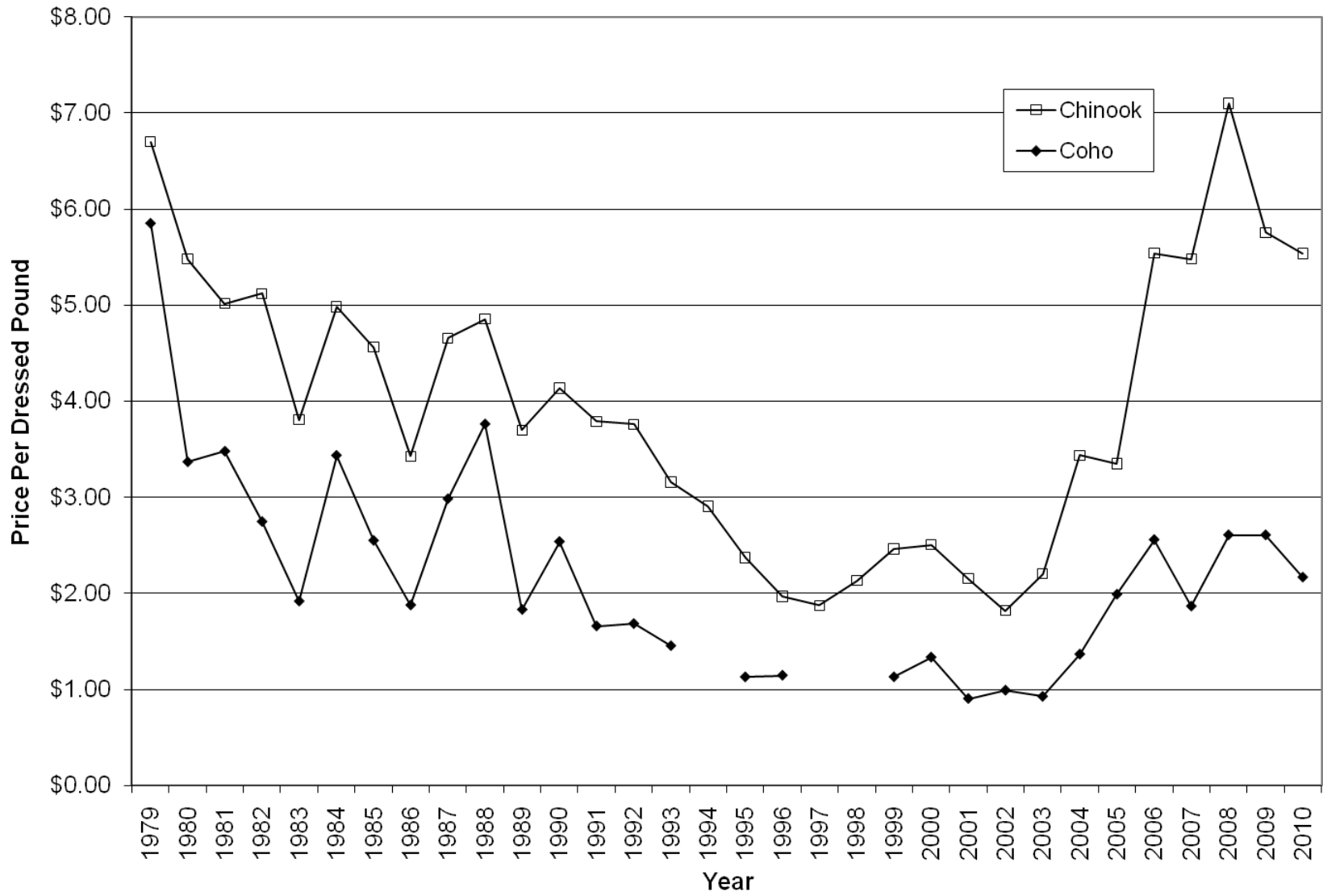


Figure IV-3. West Coast non-Indian ocean commercial salmon annual exvessel prices (inflation adjusted, 2010 dollars).

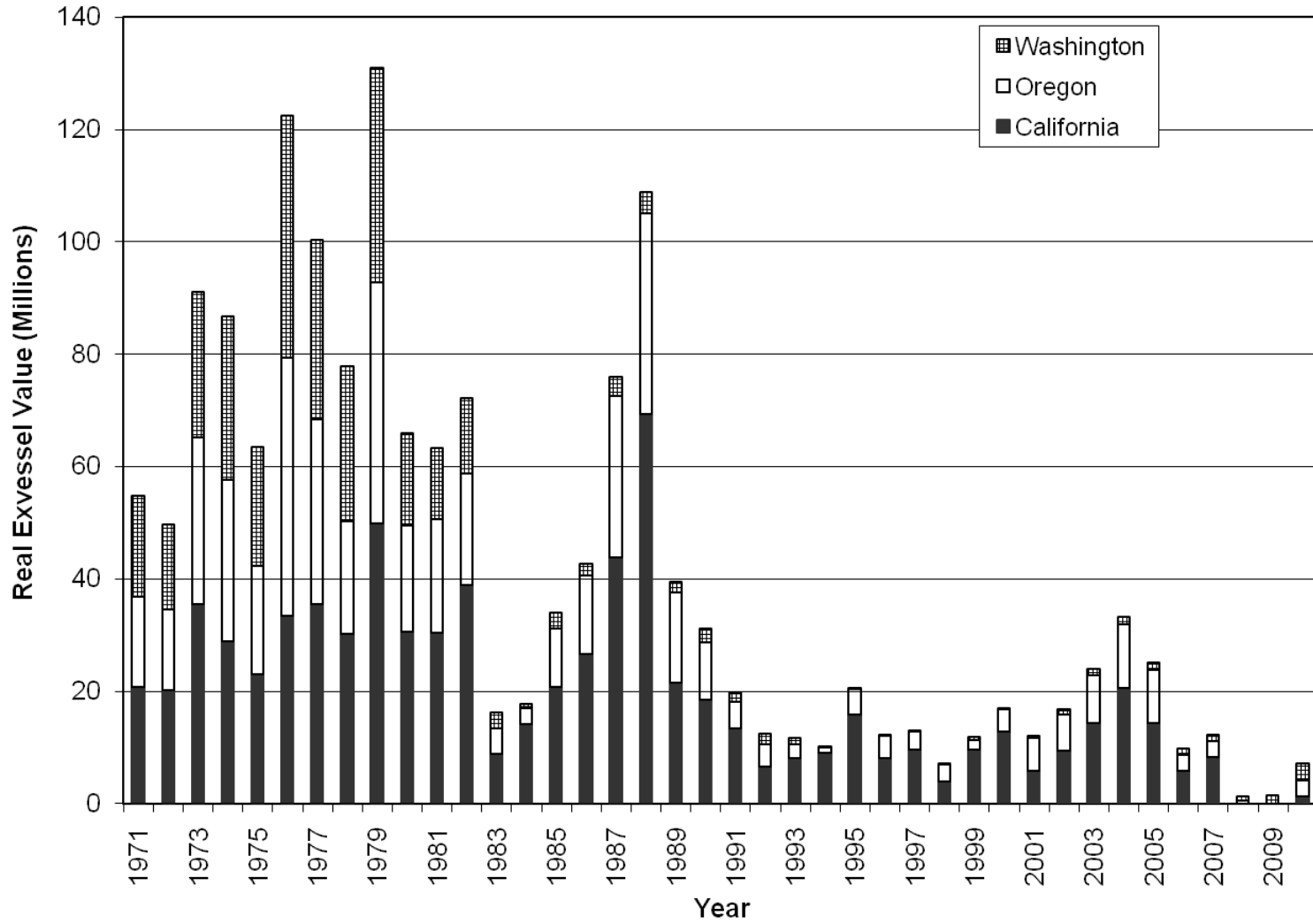


Figure IV-4. Exvessel value of West Coast non-Indian ocean commercial Chinook and coho landings by state of landing (inflation adjusted, 2010 dollars).

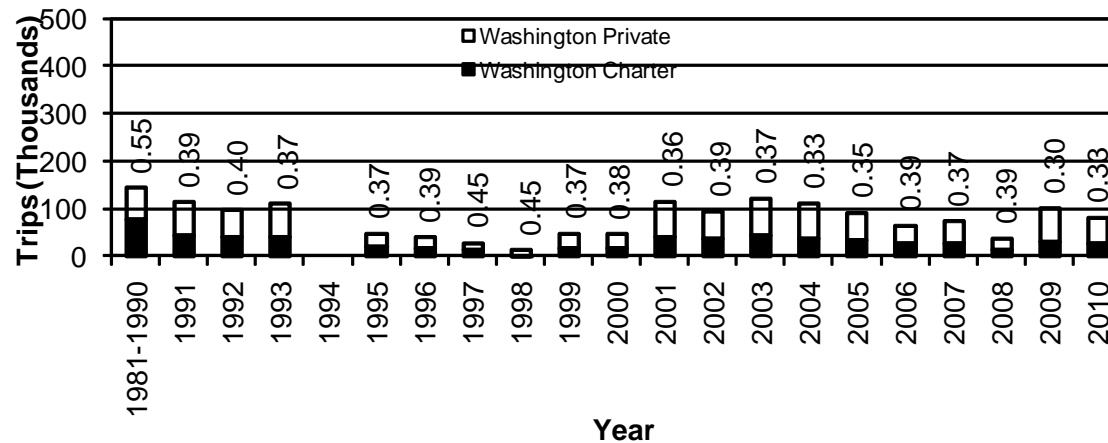
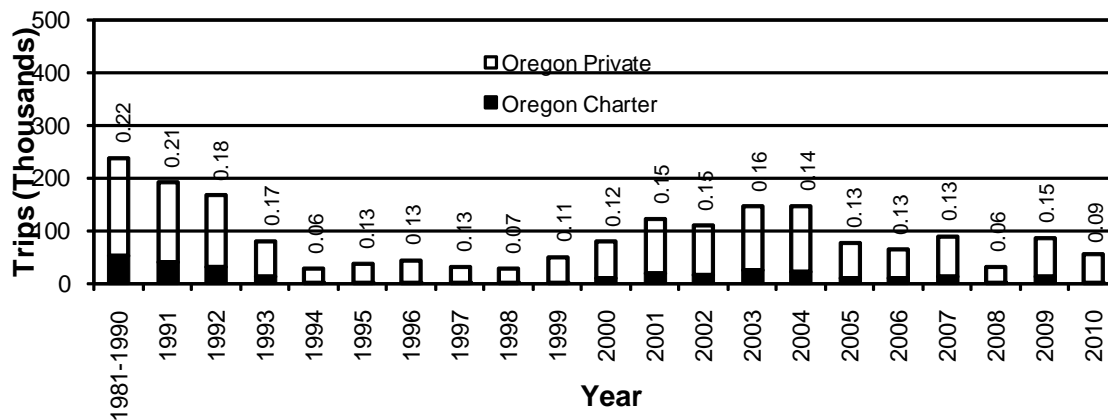
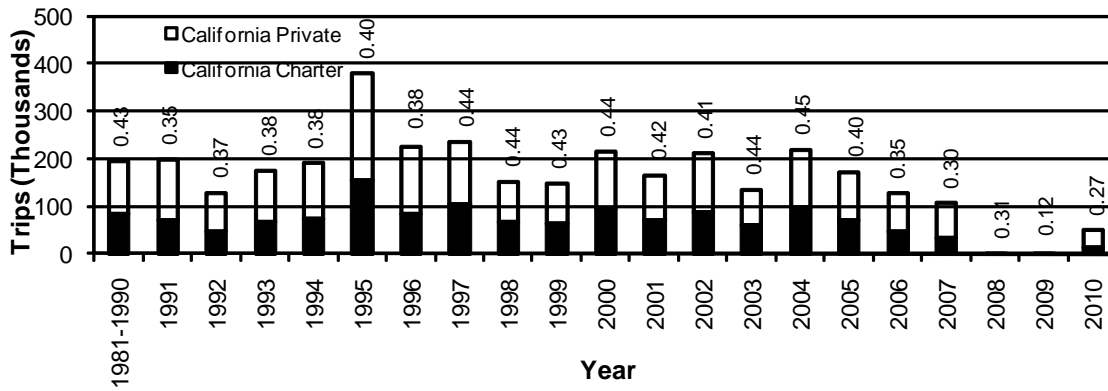


Figure IV-5. Total recreational ocean salmon trips for California, Oregon, and Washington, with proportion of charter trips shown above each bar.