

THE OREGON PLAN *for* *Salmon and* *Watersheds*



Stock Assessment of Anadromous Salmonids, 2003

Report Number: OPSW-ODFW-2004-04

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SUMMARY

Objectives for Report Period

During FY 2003 we planned to (1) record all ocean fishery recoveries of coded-wire-tagged (CWT) coho salmon (*Oncorhynchus kisutch*) and chinook salmon (*O. tshawytscha*) that were reported during 2003 (recovered in 2002); (2) monitor and record escapement of CWT fish that returned during 2002 and early 2003; (3) calculate catch distribution, catch contribution, and recovery rate for coho and chinook salmon released for this project; (4) liberate groups of CWT coho and chinook salmon with all major production releases from Oregon Department of Fish and Wildlife (ODFW) hatcheries.

Accomplishments in Report Period

All objectives were accomplished. The 2002 return year recovery data was recorded and previous years recovery data was updated. During the current reporting period (October 1st, 2003 to March 31st, 2004) we marked with an adipose fin clip and a coded-wire tag (Ad+CWT) 3 groups of 25,000 spring chinook salmon and 2 groups of 25,000 coho salmon. During this period we released 3 groups of Ad+CWT coho salmon, and 2 group of Ad+CWT spring chinook salmon that were funded by this project.

Findings in Report Period

The 1999 brood coho salmon released from coastal hatcheries were recovered at an average rate of 2.2%, and ranged from 0.2% to 5.9% across all 7 release groups. The 1999 brood coho salmon released from Columbia River hatcheries were recovered at an average rate of 1.7%, and ranged from 0.0% to 3.7% across all 5 release groups. Recovery rate for the 1997 brood coastal hatchery fall chinook salmon averaged 1.3%, and ranged from 0.4% to 3.4% across all 8 release groups. Recovery rate for the 1997 brood coastal hatchery spring chinook salmon averaged 0.6%, and ranged from 0.1% to 1.9% across all 6 release groups.

INTRODUCTION

Evaluation of hatchery programs requires monitoring of activities both within the hatchery and outside the hatchery. Post release monitoring includes; where, when, and how many hatchery fish are caught or return to spawn. Fishery management plans for commercial and recreational salmon fisheries off the west coast of North America have emphasized the need for information concerning the distribution of salmon stocks in the ocean and the contribution of each of those stocks to various fisheries. Our objectives are to (1) monitor adult production from hatchery releases; (2) evaluate rearing and release strategies that will help to improve the survival rate of hatchery-produced smolts; and (3) establish a comprehensive long-term database that will provide information needed to address issues of biology, allocation, and conservation.

METHODS

The adipose fin clip plus coded-wire-tag (Jefferts et.al. 1963) was chose as the method of marking because its use is well established in the region, there is a region wide sampling program for this mark, and there is an established regional data reporting, storing, and access system. Tagging levels are based on producing

a minimum of 30 actual tag recoveries per group. Based on historic levels of survival, harvest, and sampling, the following levels of tagging should meet that goal; tag 25,000 for groups with expected survivals of 0.5% or higher, and tag 50,000 for groups with expected survivals of 0.5% or lower. These levels generally agree with Reisenbichler and Hartmann (1978) who recommended tagging 25,000 fish per group for estimation of fish contribution. However, the increasing complexity of fisheries management regimes requires much higher levels of tagging (Hankin and Mohr 1990).

Analysis of variance (ANOVA) was used to compare survival and contribution rates. Least significant difference test was used to compare individual means when the ANOVA showed a significant difference. Differences were considered statistically significant at $P \leq 0.05$.

Tagging

- a) Determine groups to be tagged and number of fish to tag. This is a three step process. First, all production releases are identified, based on program intent (ongoing regular smolt production), number of fish released (50,000 or more), and fish of an acceptable size for tagging (at least 2.0 gm/fish). Second, groups with adequate tagging funded by other sources are eliminated from the list. Finally, the number of fish to tag is determined based on the expected survival, generally 25,000 to 50,000 fish per group.
- b) The identified groups of fish are tagged based on the manufactures recommendations and standard techniques for coded-wire tagging (Jenkinson and Bilton 1981).
- c) Pre-release checks of 500 fish per group (PSC 1995) are made at least 4 weeks after tagging (Blankenship 1981).
- d) All release information is reported to the Pacific States Marine Fisheries Commission and is available on their on-line computer database.

Tag Recovery

- a) Snouts collected from marked fish sampled in fisheries, hatcheries, and other recovery areas are frozen and transported to the ODFW Fish Identification head lab in Clackamas, Oregon.
- b) Tags are recovered, read and stored using standard techniques. Oregon tags recovered by other agencies are sent to the Clackamas lab for verification.
- c) All recovery information is reported to the Pacific States Marine Fisheries Commission and is available on their on-line computer database.

RESULTS AND DISCUSSION

Catch information from all ocean fisheries and Oregon freshwater recovery areas is complete through the 2002 return year, with the exception of some hatchery recoveries in 2001 and 2002. This missing data is not available from the PSMCF on-line database but was obtained from the ODFW database. Release and recovery information for 1990 to 2000 broods of Ad+CWT coho salmon released for stock assessment is presented in Appendix Table 1. Release and recovery information for 1988 to 2000 broods of Ad+CWT chinook salmon released for stock assessment is presented in Appendix Table 2. Data for prior brood years is available in the 1994 annual report (Lewis 1994).

In using the recovery data in this report several cautions need to be kept in mind. (1) Spawning ground recoveries of CWT fish are not expanded. Only the number of observed recoveries is available. (2) Most freshwater fisheries outside

of the Columbia Basin are not sampled. A program was begun in 1986 to estimate total catch and escapement of fall chinook salmon from Salmon River hatchery (Boechler and Jacobs 1987). This program addresses these cautions starting with the 1983 brood year. A similar program was started in 1992 for Elk River hatchery fall chinook salmon. (3) The reduced ocean salmon fishing seasons of recent years have the potential to bias estimates of total percent recovery for coastal stocks. Reduced ocean harvest should result in increased freshwater escapement. However, due to the cautions stated above this increased escapement will not be fully documented, especially for coastal stocks.

Ocean Percent Recovery Rate

The average percent ocean recovery of various coho and chinook salmon stocks is presented in Tables 1 and 2, respectively. These data are based on production and production scale experimental groups of Ad+CWT fish. Groups of Ad+CWT fish tagged for specific research experiments and not associated with production scale releases are not included in this data. Percent recovery is calculated as (total estimated recoveries/number of tagged fish released)*100. The stock groups in these tables are based on broodstock and release location. Average percent recovery is the simple average of the brood year percent recovery. Brood year percent recovery is the percent recovery of the Ad+CWT group representing that brood year. When more than one Ad+CWT group is available for a brood year the brood year percent recovery is calculated as the weighted average of the Ad+CWT groups. Percent recoveries are weighted by the total number of fish, both marked and unmarked, associated with each Ad+CWT group.

Table 1. Weighted average percent ocean recovery of coho salmon stocks tagged for stock assessment. Total percent recovery (both ocean and freshwater) is also reported. Percent ocean recovery (1990-1999 brood years) is not significantly different for stock groups followed by the same letter.

Stock Group		Brood Years	Overall average		Percent recovery range	1999 percent recovery	1990 - 1999 brood average		
			% recovery				Ocean	Total	
COLUMBIA RIVER COHO SALMON									
Sandy River	a	1977-1999	1.17	0.01 (1994)	to 4.31 (1985)	0.50	0.18	1.02	
Bonneville	a	1980-1999	0.69	0.02 (2 yrs)	to 3.15 (1986)	0.31	0.17	1.70	
Big Creek	a	1980-1999	0.90	0.01 (1996)	to 4.25 (1986)	0.26	0.11	1.40	
Umatilla River	a	1985-1999	0.41	0.00 (3 yrs)	to 2.47 (1986)	0.02	0.07	0.38	
COASTAL RIVERS COHO SALMON									
Trask River	a	1977-1999	0.70	0.01 (3 yrs)	to 2.39 (1986)	0.31	0.18	2.63	
North Umpqua R.	a	1980-1999	0.94	0.02 (1991)	to 3.97 (1984)	0.10	0.16	0.49	
Nehalem River	a	1977-1999	0.72	0.02 (4 yrs)	to 3.25 (1985)	0.21	0.14	0.96	
Coos River	a	1984-1999	0.77	0.00 (1992)	to 4.31 (1985)	0.11	0.09	0.56	
Coquille River	a	1980-1999	0.41	0.00 (4 yrs)	to 1.84 (1985)	0.01	0.05	0.92	
Rogue River	a	1977-1999	0.91	0.00 (1995)	to 5.98 (1978)	0.02	0.03	3.74	
Salmon River ^a	a	1976-1999	0.54	0.00 (1994)	to 1.99 (1976)	--	0.06 ^a	0.44 ^a	

a = Represents a combination of Salmon River (1990-1996) and Siletz River (1996-1999) stocks.

Overall average percent ocean recovery provides a long-term evaluation of the performance of an individual stock. Overall average percent ocean recovery for coho salmon stocks ranged from 0.07% to 1.17% (Table 1). In general, within the Columbia River, coho released below Bonneville Dam had higher percent ocean

recovery than coho released above Bonneville Dam. Percent ocean recovery, for the 1990 through 1999 broods, generally declined from north coast coho programs to south coast coho programs (Table 1). The range in percent ocean recovery suggests differences between stocks. However, it is not appropriate to use to compare stocks because it represents different sets of brood years for different stocks, and percent recovery varies as much between brood years as between stocks. Therefore, statistical analysis was only performed on stock groups with data for all of the last ten completed brood years (recoveries through age 3). There were no statistically significant differences in percent ocean recovery for the 10 groups of coho salmon compared. Percent ocean recovery is a reflection of both survival and fisheries management. Rogue River coho, the most southern Oregon hatchery coho program, had the lowest percent ocean recovery but the highest total percent recovery for the 1990 to 1999 broods. Ocean fisheries for coho have been very restricted since 1994. Ocean harvest of OPI coho in 1994 to 1999 was predominantly in northern areas.

Table 2. Weighted average percent ocean recovery of chinook salmon stocks tagged for stock assessment. Total percent recovery (both ocean and freshwater) is also reported. Freshwater fisheries are only sampled in the Columbia River, Salmon River and Elk River. Percent ocean recovery (1988-1997 brood years) is not significantly different for stock groups followed by the same letter.

Stock Group	Brood Years	Overall average		Percent recovery range	1997 percent recovery	1988 - 1997 brood average		
		% recovery				Ocean	Total	
FALL CHINOOK SALMON								
Elk River	a	1977-1997	0.88	0.11 (1982) to 3.97 (1983)	1.59	0.65	1.41	
Salmon River	b	1976-80, 82-97	0.66	0.11 (1991) to 1.86 (1976)	0.61	0.43	1.58	
Chetco River	bc	1977-1997	1.02	0.03 (1996) to 2.80 (1985)	0.35	0.30	0.35	
Trask River	bc	1982-1997	0.31	0.15 (1991) to 0.63 (1997)	0.63	0.28	0.50	
Rogue Stock Columbia Rel.	bc	1982-1997	0.86	0.05 (1996) to 2.64 (1982)	0.11	0.27	0.69	
Coos River	cd	1983-85, 87-97	0.28	0.05 (1996) to 1.71 (1985)	0.14	0.16	0.41	
Rogue River ^a		1977-86, 88-89, 91-97	1.20	0.02 (1979) to 7.73 (1983)	0.49	0.36 ^a	0.60 ^a	
Coquille River ^a		1983-88, 90-97	0.62	0.04 (1991) to 3.41 (1985)	0.40	0.31 ^a	0.34 ^a	
Lower Umpqua R. ^a		1991-1997	0.31	0.07 (1996) to 0.45 (1997)	0.45	0.31 ^a	0.35 ^a	
SPRING CHINOOK SALMON								
North Umpqua R.	bc	1976-1997	0.97	0.02 (1991) to 4.64 (1983)	0.38	0.28	0.33	
Rogue River	bc	1980-1997	0.69	0.05 (1996) to 2.99 (1983)	0.26	0.27	1.33	
Trask River	d	1977-1997	0.21	0.02 (2 yrs) to 0.73 (1977)	0.17	0.07	0.15	
Nestucca River ^a		1977-83, 91-97	0.20	0.01 (1982) to 0.97 (1977)	0.11	0.11 ^a	0.24 ^a	
WINTER CHINOOK SALMON								
Trask River ^a		1986-88, 90-97	0.21	0.03 (1987) to 0.48 (1997)	0.48	0.23 ^a	0.43 ^a	

a = Does not include data from all ten years.

Percent ocean recovery for 1999 brood coho salmon was below average for 10 of 11 stocks, and was lower than the 1997 brood ocean recovery rate for 8 of 11 stocks. Estimated harvest, landed catch and non-retention mortality, of coho salmon in OPI ocean fisheries in 2002 was 133,800 (PFMC 2004). This was about half the OPI coho salmon ocean harvest in 2001 (254,800), but is still the second highest harvest since 1993 (PFMC 2004). The 2001 coho salmon ocean exploitation rate, based on OPI abundance was 14% (PFMC 2004).

Overall average percent ocean recovery for fall chinook salmon stocks ranged from 0.3% to 1.2% (Table 2). Percent ocean recovery of 1997 brood fall chinook was higher than the 1996 brood for all stocks, and set 2 new record highs, Trask and Lower Umpqua. However, the 1996 brood had set record lows for 4 of the 9 stocks and the 1997 brood was lower than the overall average for all stocks except the 2 new record highs. In general, the last 10 completed brood years average percent ocean recovery, was higher for south coast fall chinook stocks than for north coast fall chinook stocks. Overall average percent ocean recovery of spring chinook salmon ranged from 0.2% to 1.0% (Table 2). Ocean recovery of the 1997 brood spring chinook higher than the 1996 brood for 3 of 4 stocks, but was less than the overall average for all 4 stocks. Percent ocean recovery for spring chinook was higher for southern stocks. Statistical analysis of percent ocean recovery included both spring and fall chinook. Only 9 of the 14 stocks in Table 2 had data for the last 10 completed brood years (returns through age 5). Trask spring chinook was significantly lower than all other stocks except Coos River fall chinook. Coos stock, was significantly lower than Elk and Salmon River stocks (Table 2).

Percent recovery, ocean and freshwater, of coho salmon stocks released from Columbia River hatcheries show similar patterns (Figure 1). Percent recovery peaked in the 1983, 1986, 1988 and 1998 brood years. Overall, percent recovery of Columbia River hatchery coho salmon shows a decreasing trend from the 1986 peak to the 1990 brood year, and was low but stable from 1990 through 1996. Since the 1996 brood year percent recovery, particularly freshwater, has been increasing and exceeded 5.0% for the 1998 brood year Bonneville hatchery coho. Coastal coho stocks show different patterns in percent recovery than the Columbia River stocks (Figure 2). However, percent recovery of both Columbia River and coastal coho salmon stocks declined from the mid 1980's through mid 1990's, and has been increasing since about the 1995 or 1996 brood year. Improved percent recovery of Rogue River stock coho salmon began earlier than for other coho stocks, started with the 1991 brood year, and reached approximately 8% for the 1998 brood. Trask River stock coho has shown an exceptional increase in percent recoveries since the 1994 brood year. Trask hatchery coho freshwater percent recovery exceeded 10% for the 1998 brood and approached 6% for the 1999 brood (Figure 2).

Percent recovery of spring and fall chinook salmon has generally decreased since the mid 1980's, however, the 1997 brood had slight to moderate increases over recent years for almost all stocks (Figures 3 and 4). Rogue spring chinook have shown an increase in percent recovery since the 1991 brood year. This corresponds to the improved percent recovery seen in Rogue River coho salmon starting with the 1990 brood year. Salmon River fall chinook have shown improved freshwater percent recovery since the 1980 brood. This is partly explained by the improved sampling of the freshwater catch and escapement that began in 1986. The variability in percent ocean recovery of North Umpqua spring chinook is not seen in their freshwater percent recovery (Figure 4). This is an artifact of the freshwater sampling for this stock. Spring chinook adults for the hatchery broodstock are collected at Winchester Dam (several miles below the hatchery) and from fish entering the hatchery. Only returning fish needed for broodstock are collected at the dam, the remainder are allowed to continue up-river. Thus, the number of Ad+CWT fish recovered is fairly consistent, and does not necessarily reflect the number of Ad+CWT fish in the run.

Ocean Recovery By Area

Coho ocean fisheries from Washington to California were closed in 1994 and very limited in 1995 through 1999. Since this would bias the calculation of catch distribution for these years (percent of total ocean catch in each area), this

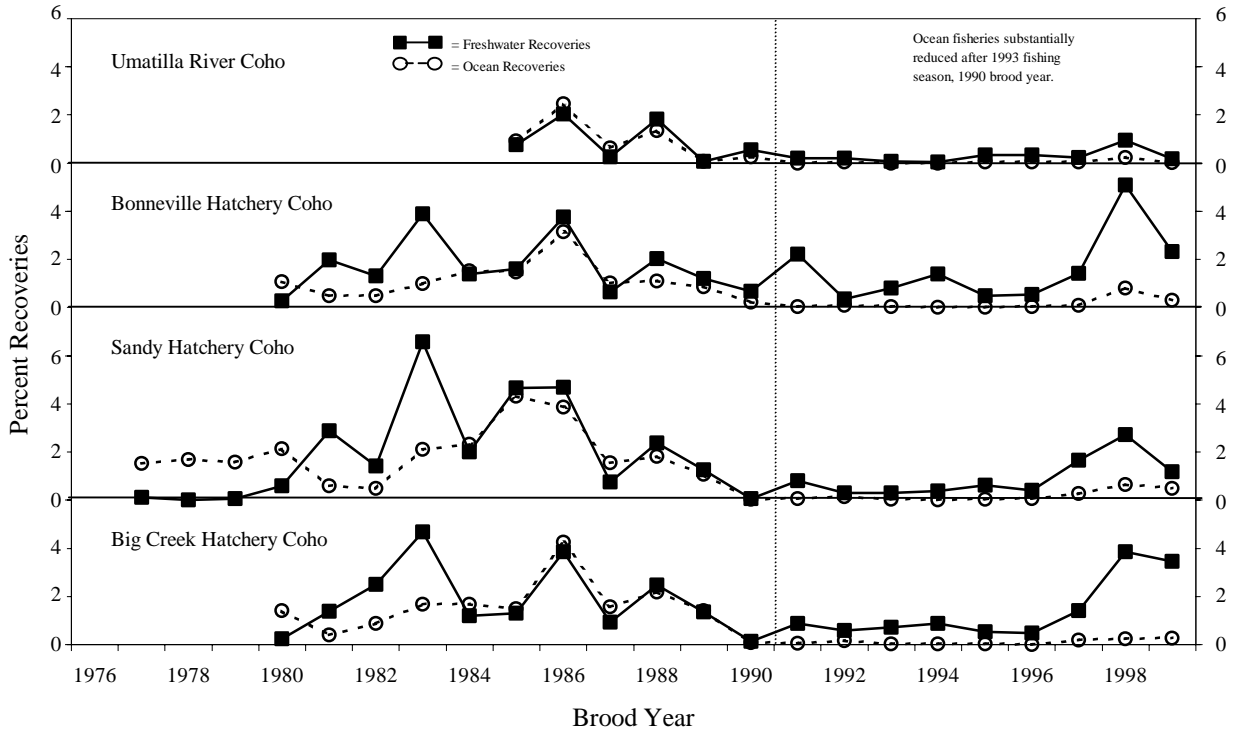


Figure 1. Weighted average percent recovery of Columbia River coho salmon stocks tagged for stock assessment.

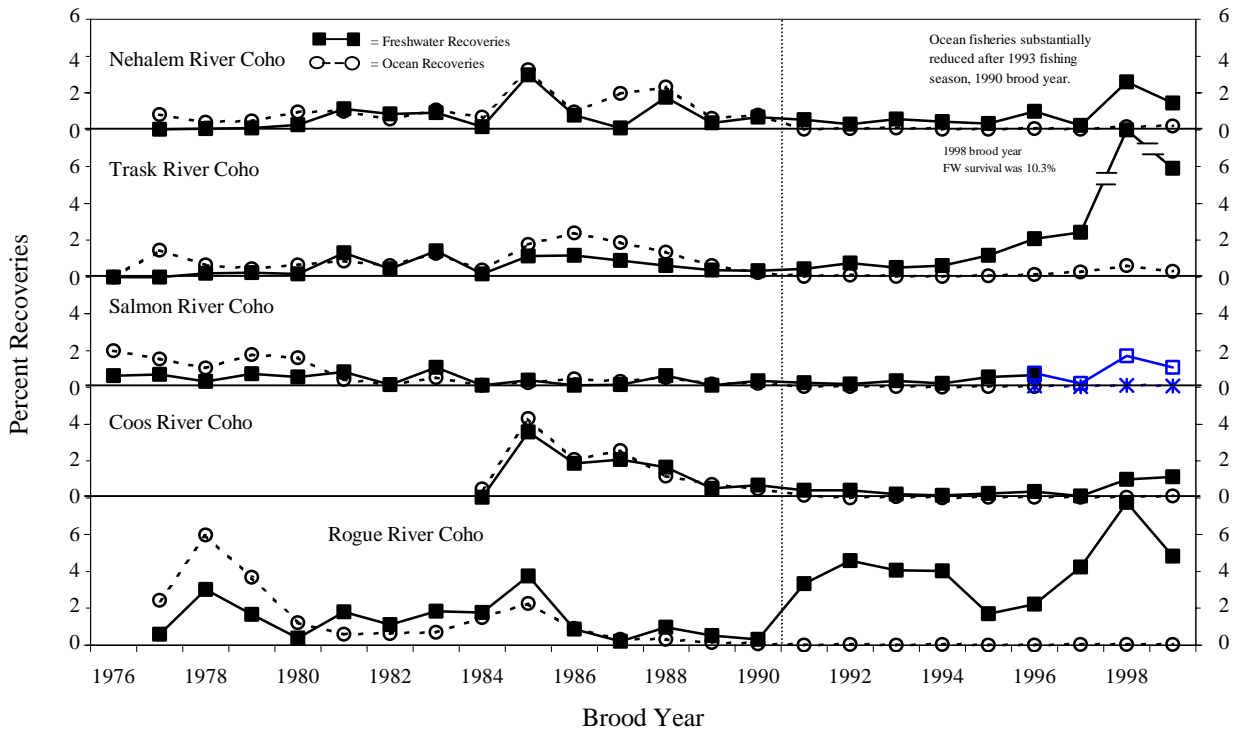


Figure 2. Weighted average percent recovery of coastal rivers coho salmon stocks tagged for stock assessment. Salmon River coho is Salmon River stock for 1975-1996 and Siletz River stock for 1996-1998 brood years.

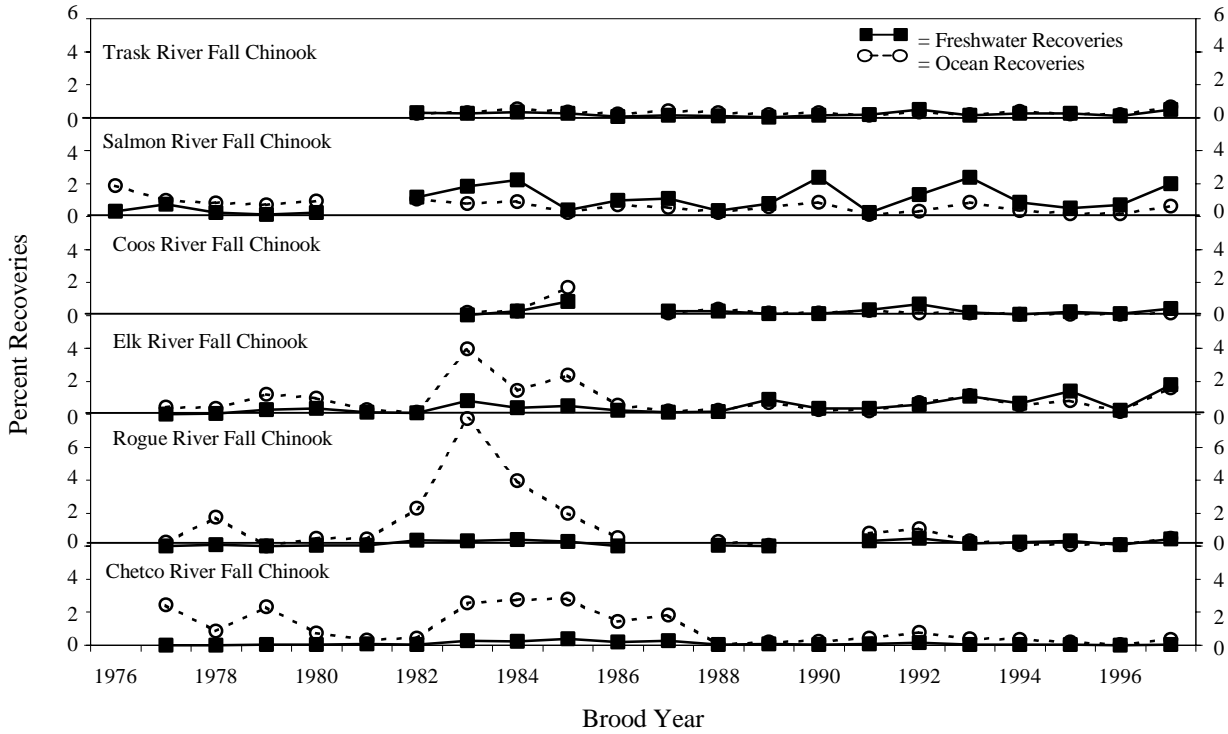


Figure 3. Weighted average percent recovery of fall chinook salmon stocks tagged for stock assessment.

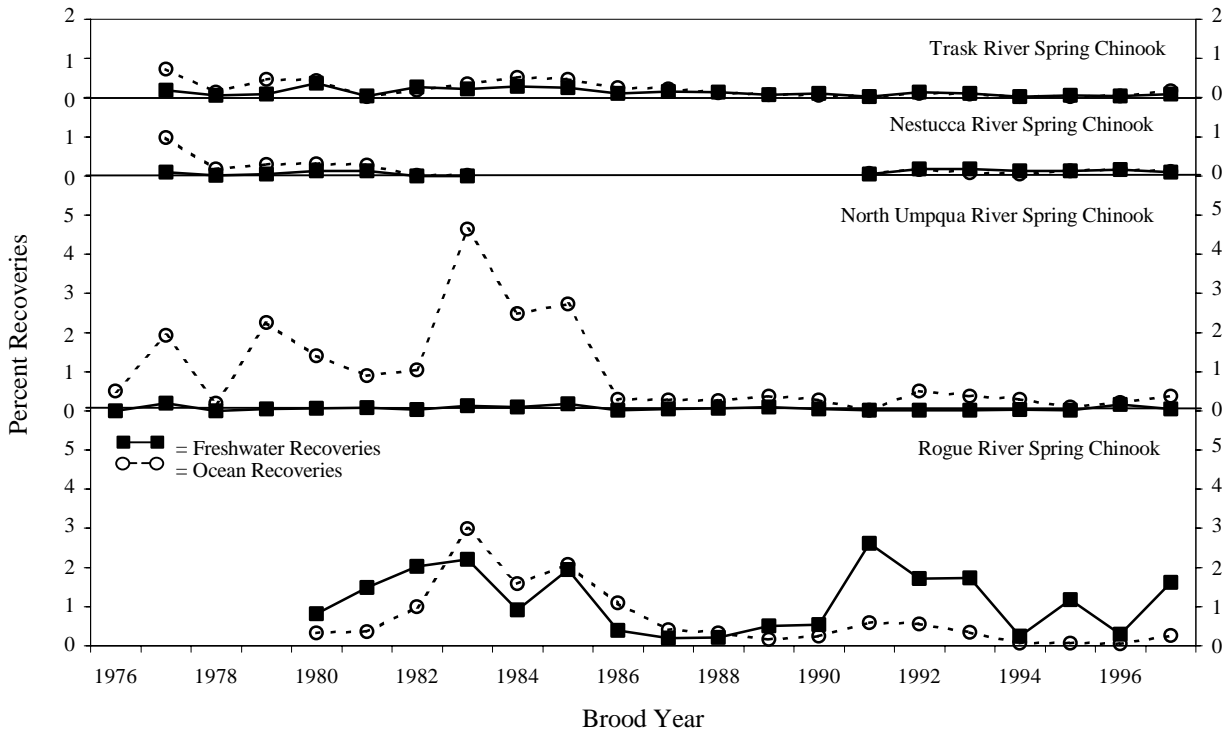


Figure 4. Weighted average percent recovery of spring chinook salmon stocks tagged for stock assessment.

analysis has been changed to percent recovery by area. Average ocean percent recovery by area for coho and chinook salmon stocks is reported in Tables 3 and 4 respectively. Data are based on production and production scale experimental groups of Ad+CWT fish. Groups of Ad+CWT fish tagged for specific experiments and not associated with production scale releases are not included. The stock groups in these tables are based on broodstock and release location. Percent recovery by area is calculated as (total estimated recoveries in an area/number of tagged fish released)*100. Average percent recovery by area is the simple average of the last 10 completed brood years percent recoveries (coho 1990 through 1999, chinook 1988 through 1997). Brood year percent recovery by area is the percent recovery by area of the Ad+CWT group representing that brood year. When more than one Ad+CWT group is available for a brood year the brood year percent recovery is calculated as the weighted average of the Ad+CWT groups. Percent recoveries are weighted by the total number of fish, both marked and unmarked, associated with each Ad+CWT group. Ocean percent recovery by area is strongly influenced by fishing seasons and therefore does not necessarily reflect geographic distribution.

Table 3. Coho salmon average ocean recovery by area. Data are for the last ten completed brood years, 1990 to 1999. AK = Alaska, NCBC = North Central British Columbia, WCVI = West Coast Vancouver Island, GST = Georgia Strait, PS = Puget Sound, WA = Washington Coast, CA = California. Area of release is underlined.

Stock Group	AK	NCBC	WCVI	GST	PS	WA	Oregon Ocean Catch Area ^a					CA
							1&2	3	4	5	6&7	
COLUMBIA RIVER COHO SALMON												
Umatilla River	0.00	0.00	0.00	0.00	0.00	0.03	<u>0.01</u>	0.00	0.01	0.01	0.00	0.01
Bonneville	0.00	0.00	0.01	0.00	0.00	0.08	<u>0.04</u>	0.01	0.02	0.02	0.00	0.01
Sandy River	0.00	0.01	0.01	0.00	0.00	0.09	<u>0.03</u>	0.00	0.02	0.02	0.00	0.00
Big Creek	0.00	0.00	0.01	0.00	0.00	0.05	<u>0.02</u>	0.00	0.01	0.01	0.00	0.00
COASTAL RIVERS COHO SALMON												
Nehalem River	0.00	0.00	0.01	0.00	0.00	0.05	0.02	<u>0.00</u>	0.01	0.01	0.00	0.03
Trask River	0.00	0.00	0.00	0.00	0.00	0.07	0.03	<u>0.01</u>	0.02	0.02	0.00	0.02
Salmon River ^b	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	<u>0.01</u>	0.01	0.00	0.01
North Umpqua River	0.00	0.00	0.01	0.00	0.00	0.02	0.01	0.00	0.03	<u>0.03</u>	0.01	0.05
Coos River	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00	0.01	<u>0.02</u>	0.00	0.03
Coquille River	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	<u>0.01</u>	0.00	0.03
Rogue River	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	<u>0.00</u>	0.02

a = Oregon ocean areas displayed in Figure 5.

b = Represents a combination of Salmon River (1990-1996) and Siletz River (1996-1999) stocks.

Historically about 80% of Oregon hatchery coho salmon were recovered in ocean fisheries from their release location and south (Lewis 1998). Changes in ocean fisheries management have result in a decline in the proportion of ocean recoveries in areas from the release location and south, which averaged 0.51, and ranged from 0.39 to 0.80 for the 1990 to 1999 broods (Table 3, Figure 6). Extremes of the range are Trask River (0.39) and Coquille River (0.80). Although the general pattern is the same, release location determines in which specific fisheries a stock is recovered. Columbia River stocks are recovered more in Washington and less in California ocean fisheries than coastal stocks (Figure 6). Washington recoveries of coastal stocks tends to decrease and California recoveries increase as you move south (Figure 6). Canadian ocean recoveries are mainly in West Coast Vancouver Island fisheries, with very few in North Central British Columbia or Georgia Strait fisheries (Table 3). Washington ocean

recoveries are mainly in coastal, not Puget Sound fisheries. Recoveries in Washington ocean fisheries exceeded recoveries in areas from the release location and south for the Sandy River, Big Creek, and Trask River stocks (Figure 6).

Table 4. Chinook salmon average ocean recovery by area. Data are for the last ten completed brood years, 1988 to 1997. AK = Alaska, NCBC = North Central British Columbia, WCVI = West Coast Vancouver Island, GST = Georgia Strait, PS = Puget Sound, WA = Washington Coast, CA = California. Release area is underlined.

Stock Group	AK	NCBC	WCVI	GST	PS	WA	Oregon Ocean Catch Area ^a					CA
							1&2	3	4	5	6&7	
FALL CHINOOK SALMON												
Rogue Stock Columbia Rel.	0.00	0.00	0.01	0.00	0.00	0.03	<u>0.00</u>	0.01	0.15	0.03	0.00	0.02
Trask River	0.16	0.06	0.03	0.00	0.00	0.00	0.00	<u>0.04</u>	0.00	0.00	0.00	0.00
Salmon River	0.22	0.12	0.05	0.00	0.00	0.00	0.00	0.02	<u>0.01</u>	0.00	0.00	0.00
Lower Umpqua R. ^b	0.16	0.06	0.01	0.00	0.00	0.01	0.00	0.01	0.04	<u>0.02</u>	0.00	0.00
Coos River	0.05	0.04	0.03	0.00	0.00	0.01	0.00	0.01	0.01	<u>0.00</u>	0.00	0.00
Coquille River ^b	0.15	0.07	0.04	0.00	0.00	0.01	0.00	0.00	0.02	<u>0.01</u>	0.00	0.00
Elk River	0.13	0.05	0.04	0.00	0.00	0.02	0.00	0.01	0.08	<u>0.31</u>	0.00	0.00
Rogue River ^b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.04	<u>0.01</u>	0.22
Chetco River	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.02	<u>0.13</u>	0.05
SPRING CHINOOK SALMON												
Trask River	0.02	0.00	0.01	0.00	0.00	0.01	0.00	<u>0.02</u>	0.02	0.00	0.00	0.00
Nestucca River ^b	0.03	0.01	0.01	0.00	0.00	0.01	0.00	<u>0.01</u>	0.03	0.00	0.00	0.00
North Umpqua R.	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.16	<u>0.05</u>	0.00	0.02
Rogue River	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.02	<u>0.01</u>	0.15
WINTER CHINOOK SALMON												
Trask River ^b	0.15	0.04	0.00	0.00	0.00	0.00	0.00	<u>0.03</u>	0.00	0.00	0.00	0.00

a = Oregon ocean areas displayed in Figure 5.

b = Does not include data from all ten years.

Ocean recoveries of Oregon coastal fall chinook salmon splits the stocks into three groups (Table 4 and Figure 7). Trask and Salmon River stocks are almost exclusively recovered in Alaska and British Columbia fisheries. Umpqua, Coos, Coquille, and Elk stocks are recovered more in Oregon and Washington and less in Alaska and British Columbia fisheries than the more northern stocks. Rogue and Chetco stocks are rarely recovered in Alaska and British Columbia fisheries but are recovered in California fisheries more than the prior stocks. These grouping agree with hypothesized migration patterns for Oregon coastal fall chinook salmon (Nicholas and Hankin 1988). Rogue River fall chinook released in the Columbia River were recovered more in Oregon and Washington, and less in California ocean fisheries than Rogue River fall chinook released in the Rogue River (Table 4 and Figure 7). Canadian ocean recoveries of Oregon coastal fall chinook stocks are mainly in North Central British Columbia fisheries and West Coast Vancouver Island fisheries (Table 4). Very few Oregon coastal fall chinook are recovered in the Georgia Strait Fisheries (Table 4). Washington recoveries of Oregon coastal fall chinook are mainly in coastal fisheries with very few in Puget Sound fisheries (Table 4). The large percent recovery of Elk River stock fall chinook in Oregon catch area 5, is an artifact of a late season ocean fishery near the mouth of the Elk River, targeting returning hatchery fish.



Figure 5. Catch areas for Oregon ocean salmon fisheries.

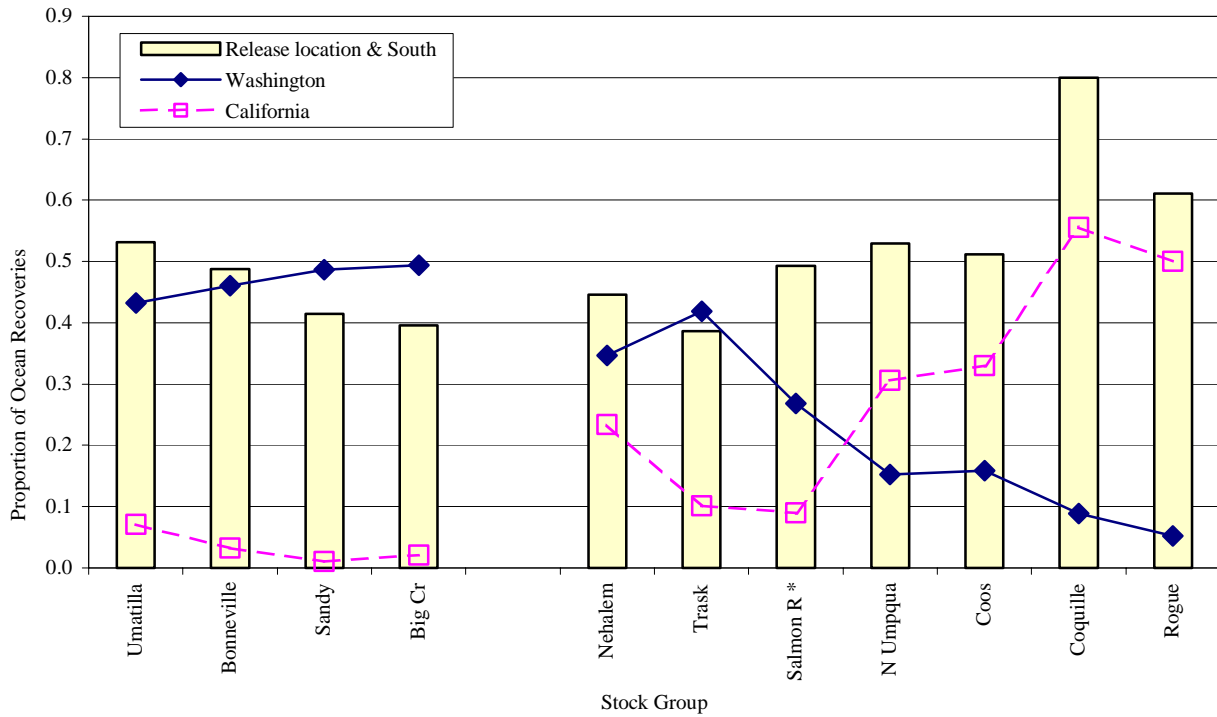


Figure 6. Coho salmon proportion of ocean recoveries in Washington, California, and release location and south. Data is for the 1989 through 1998 brood years. * = Does not contain data for all 10 years.

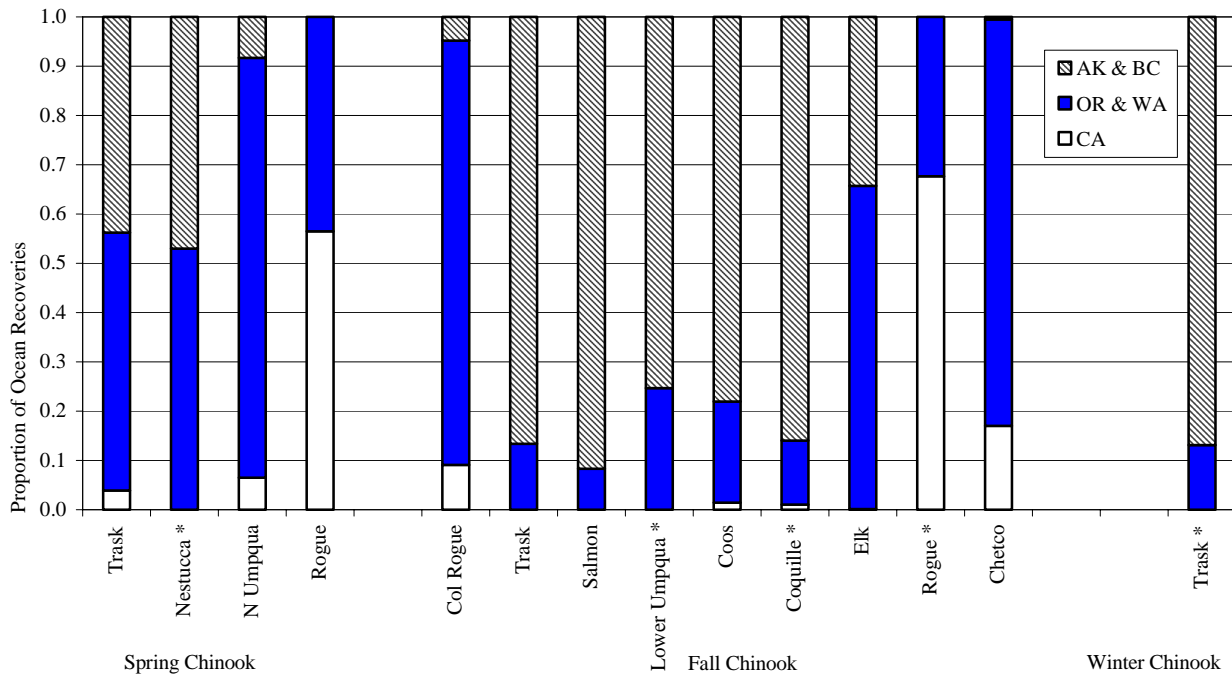


Figure 7. Chinook salmon proportion of ocean recoveries in northern (AK & BC), central (WA & OR), and southern (CA) fisheries. Data is for 1987 through 1996 brood years. * = Does not contain data for all 10 years.

Nicholas and Hankin (1988) classified the migration patterns of the spring chinook salmon stocks in Table 4 as; Trask and Nestucca Rivers north migrating, Umpqua River north and south migrating, and Rogue River south migrating. Ocean recoveries of Ad+CWT fish by area, support these migration classifications (Table 4 and Figure 6). Spring chinook show a shift southward in their actual recovery areas in comparison to fall chinook from the same river. However, the tendency toward north, south, or north and south migration pattern is the same for fall chinook and spring chinook from the same basin (Table 4). The southern shift in actual catch areas may be related to the earlier return of spring chinook salmon to their natal rivers upon maturation. Recovery distribution within Canadian and Washington fisheries for spring chinook is similar to that described for fall chinook. Ocean recoveries by area is very similar for Trask River winter chinook and fall chinook stocks (Table 4).

Freshwater Percent Recovery Rate

The average percent freshwater recovery of various coho and chinook salmon stocks is presented in Tables 5 and 6, respectively. Freshwater percent recovery is calculated in the same way as ocean percent recovery. Calculation of a freshwater recovery rate is dependent on accurate and representative sampling in all freshwater recovery areas. Fish recovered at hatcheries are well sampled. However, the proportion of the returning hatchery fish collected at hatcheries varies based on annual water flow, hatchery trap efficiency, and location of the hatchery in the basin. Freshwater fisheries are sampled in the Columbia Basin and for chinook in a few coastal basins (Salmon River, Elk River and Tillamook Bay in some years). Spawning grounds are sampled to document the number of wild fish spawning and the proportion of hatchery fish in the spawning population. However, this sampling does not allow for estimation of the total number of Ad+CWT fish recovered, only the number of observed recoveries is reported. The one exception to this is for Salmon River fall chinook where a mark-recapture program does provide the means of expanding observed Ad+CWT recoveries to estimates of total Ad+CWT fish present. Thus, differences in freshwater recovery rate for different groups can reflect differences in survival, differences in sampling, or both.

Overall average percent freshwater recovery for hatchery coho salmon ranged from 0.5% to 2.4% (Table 5). Coho 1999 brood year percent freshwater recovery was higher than the long-term average for 7 of the 11 stocks, but was lower than the 1998 brood year for all but 1 stock. However, the 1998 brood percent freshwater recovery had set record highs for 5 of the 11 stocks. Of particular note were 1998 brood Trask stock (5.9%), Rogue Stock (4.8%) and Big Creek stock (3.5%). Historically, freshwater recovery rate tends to be higher for Columbia Basin stocks because Columbia Basin fisheries are sampled. Percent freshwater recovery is substantially higher than percent ocean recovery for 3 of the 4 Columbia River stocks, but for 4 of the 7 coastal stocks percent ocean recovery is similar to or higher than percent freshwater recovery (Figure 8).

Generally freshwater fisheries are sampled in the Columbia Basin and are not sampled in coastal basins. Therefore, the statistical analysis was performed separately for these two areas. Statistical differences in coho percent freshwater recovery are reported in Table 5. Percent freshwater recovery was higher for Columbia Basin coho released below Bonneville dam than for coho released above the dam, and this difference was statistically significant for 2 of the 3 stocks (Table 5). Trask River and Rogue River hatchery coho had significantly higher percent freshwater recovery than all other coastal coho stocks. The differences in the ratio of ocean to freshwater percent recovery shown in Table 8 are most likely the result of differences in hatchery recovery

efficiency, the proportion of migrating coho that enter the trap, and the location of the hatchery trap within the basin.

Table 5. Weighted average percent freshwater (FW) recovery of coho salmon stocks tagged for stock assessment. Total percent recovery is also reported. Percent freshwater recovery (1990-1999 brood) is not significantly different for stocks followed by the same letter (Columbia and Coastal stocks tested separately).

Stock Group		Brood Years	Overall average % recovery	Percent FW recovery range		1999 percent recovery	1990 - 1990 brood average FW Total	
COLUMBIA RIVER COHO SALMON								
Bonneville	A	1980-1999	1.67	0.28 (1980)	to 5.09 (1998)	2.31	1.53	1.70
Big Creek	AB	1980-1999	1.64	0.14 (1990)	to 4.67 (1983)	3.46	1.30	1.40
Sandy River	BC	1977-1999	1.56	0.02 (1978)	to 6.58 (1983)	1.18	0.84	1.02
Umatilla River	C	1985-1999	0.54	0.05 (1994)	to 2.05 (1986)	0.17	0.31	0.38
COASTAL RIVERS COHO SALMON								
Rogue River	a	1977-1999	2.42	0.20 (1987)	to 7.75 (1998)	4.82	3.71	3.74
Trask River	a	1977-1999	1.42	0.00 (1977)	to 10.34 (1998)	5.91	2.46	2.63
Coquille River	b	1980-1999	0.83	0.00 (2 yrs)	to 4.11 (1998)	0.09	0.87	0.92
Nehalem River	b	1977-1999	0.77	0.00 (1977)	to 2.96 (1985)	1.44	0.82	0.96
Salmon River ^a	b	1976-1999	0.52	0.11 (1989)	to 1.72 (1998)	1.10	0.58	0.64
Coos River	b	1984-1999	0.90	0.04 (1984)	to 3.57 (1985)	1.16	0.47	0.56
North Umpqua R.	b	1980-1999	0.49	0.03 (1999)	to 1.99 (1981)	0.03	0.34	0.49

a = Represents a combination of Salmon River (1990-1996) and Siletz River (1996-1999) stocks.

Table 6. Weighted average percent freshwater recovery of chinook salmon stocks tagged for stock assessment. Percent freshwater recovery (1988-1997 brood) is not significantly different for stocks followed by the same letter.

Stock Group		Brood Years	Overall average % recovery	Percent recovery range		1997 percent recovery	1988 - 1997 brood average FW Total	
FALL CHINOOK SALMON								
Salmon River	a	1976-80, 82-97	0.99	0.14 (1979)	to 2.37 (1993)	1.99	1.16	1.58
Elk River	bc	1977-1997	0.51	0.01 (1977)	to 1.81 (1997)	1.81	0.76	1.41
Rogue Stock Columbia Rel.	cd	1982-1997	0.68	0.11 (1995)	to 2.19 (1982)	0.31	0.42	0.69
Coos River	d	1983-85, 87-97	0.28	0.04 (1983)	to 0.84 (1985)	0.43	0.25	0.41
Trask River	d	1982-1997	0.22	0.04 (1989)	to 0.50 (1997)	0.50	0.22	0.50
Chetco River	d	1977-1997	0.10	0.00 (3 yrs)	to 0.40 (1985)	0.04	0.05	0.35
Rogue River ^a		1977-86, 88-89, 91-97	0.20	0.00 (1979)	to 0.48 (1992)	0.46	0.24 ^a	0.60 ^a
Lower Umpqua R. ^a		1991-1997	0.04	0.00 (1992)	to 0.10 (1997)	0.10	0.04 ^a	0.35 ^a
Coquille River ^a		1983-88, 90-97	0.10	0.00 (1991)	to 0.67 (1985)	0.05	0.03 ^a	0.34 ^a
SPRING CHINOOK SALMON								
Rogue River	ab	1980-1997	1.15	0.19 (1987)	to 2.62 (1991)	1.62	1.07	1.33
Trask River	d	1977-1997	0.13	0.02 (1991)	to 0.36 (1980)	0.09	0.08	0.15
North Umpqua R.	d	1976-1997	0.06	0.00 (1978)	to 0.20 (1977)	0.05	0.05	0.33
Nestucca River ^a		1977-83, 91-97	0.09	0.00 (2 yrs)	to 0.18 (1993)	0.09	0.13 ^a	0.24 ^a
WINTER CHINOOK SALMON								
Trask River ^a		1986-88, 90-97	0.19	0.00 (2 yrs)	to 0.48 (1992)	0.35	0.21 ^a	0.43 ^a

a = Does not include data from all ten years.

Overall average percent freshwater recovery for chinook salmon ranged from 0.0% to 1.0% (Table 6). The hatchery chinook 1997 brood year percent freshwater recovery was at or above the long-term average for 9 of 14 stocks, was above the 1996 brood year rate for 11 of 14 stocks, and set 3 record highs. Freshwater fisheries are only sampled in the Columbia Basin, Salmon River and recently started in Elk River. Freshwater recovery rate exceeds ocean recovery rate for 7 of the 13 stocks in Figure 9, and is substantially higher for Salmon River fall chinook and Rogue River spring chinook salmon. Salmon River is the only coastal basin with complete accounting of hatchery returns over the last 10 brood years. Rogue River spring chinook return to the Cole Rivers hatchery trap, which is located at the base of an impassable dam across the Rogue River.

Statistical analysis of percent freshwater recovery included both spring and fall chinook, and the results are reported in Table 6. Only 9 of the 14 stocks in Table 6 had data for all of the last 10 completed brood years (returns through age 5). Unlike percent ocean recovery (Table 2), which was significantly higher for southern stocks versus northern stocks, there is no geographic pattern in percent freshwater recovery (Table 6). Salmon River fall chinook (North migrating stock) and Rogue River spring chinook (South migrating stock) had significantly higher percent freshwater recovery than all other groups except Elk River fall chinook salmon (Table 6). Percent freshwater recovery was not significantly different for Trask River spring and fall chinook stocks.

Freshwater Recovery By Area

Weighted average percent freshwater recovery by area is calculated in the same way as percent ocean recovery by area. Average percent freshwater recovery by area for the last 10 completed brood years is reported in Table 7 for coho salmon and Table 8 for chinook salmon. Freshwater sport harvest is only available for the Columbia River system, for Salmon River (creel begun in 1986), and Elk River (creel begun in 1992). Recoveries on spawning grounds are not expanded for sampling rate and are thus not reported, except for Salmon River chinook where expansions are calculated. The "Other freshwater recoveries" column consists mostly of recoveries in test fisheries and lower river seining projects.

Percent recovery in freshwater harvest of coho released below Bonneville Dam averages about 1/4 of their total freshwater percent recovery (Table 7). Because of the inability to estimate total survival to spawning grounds this data cannot be used to calculate freshwater exploitation rate. Gillnet catch above Bonneville Dam is very low for stocks released below the dam, however, it is about a third of the total gillnet catch of stocks released above the dam (Table 7). Freshwater recovery areas for coastal hatchery coho are essentially only sampled at the hatchery. Salmon River coho do have estimates of sport catch as a side effect of the sampling for fall chinook salmon. Since this sampling does not target coho salmon, recoveries are not expanded in all years. However, this minimum estimate of freshwater catch for Salmon River coho is about 4% of the total estimated freshwater recoveries.

Percent recovery in freshwater harvest of Rogue River stock fall chinook salmon released in the Columbia River is about 1/2 of their percent recovery at the hatchery (Table 8). Coastal chinook salmon are harvested extensively in freshwater fisheries that are generally not sampled. Percent recovery at the hatchery of Salmon River fall chinook is about 1/3 that of Trask River fall chinook (Table 8). However, percent recovery of Salmon River stock in all freshwater areas is 5 times that of Trask stock, because of the sampling program in Salmon River. The high percent recovery on spawning grounds for Salmon River

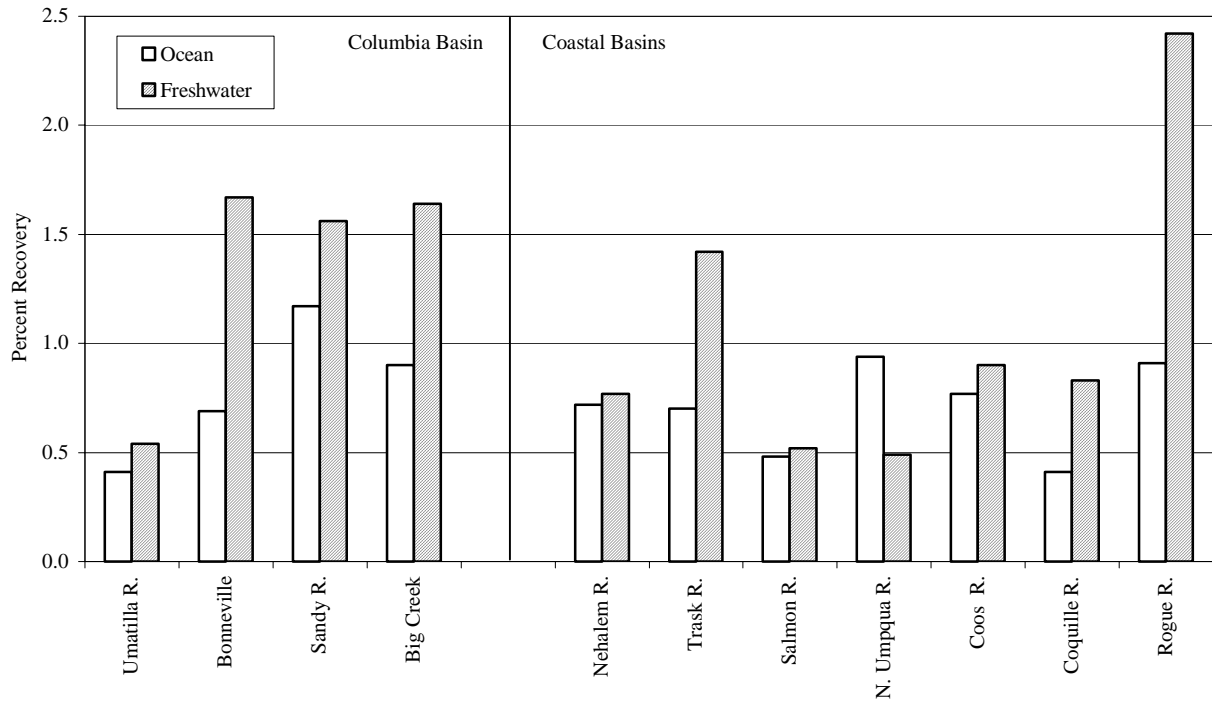


Figure 8. Comparison of overall average ocean and freshwater percent recovery of coho salmon stocks tagged for stock assessment.

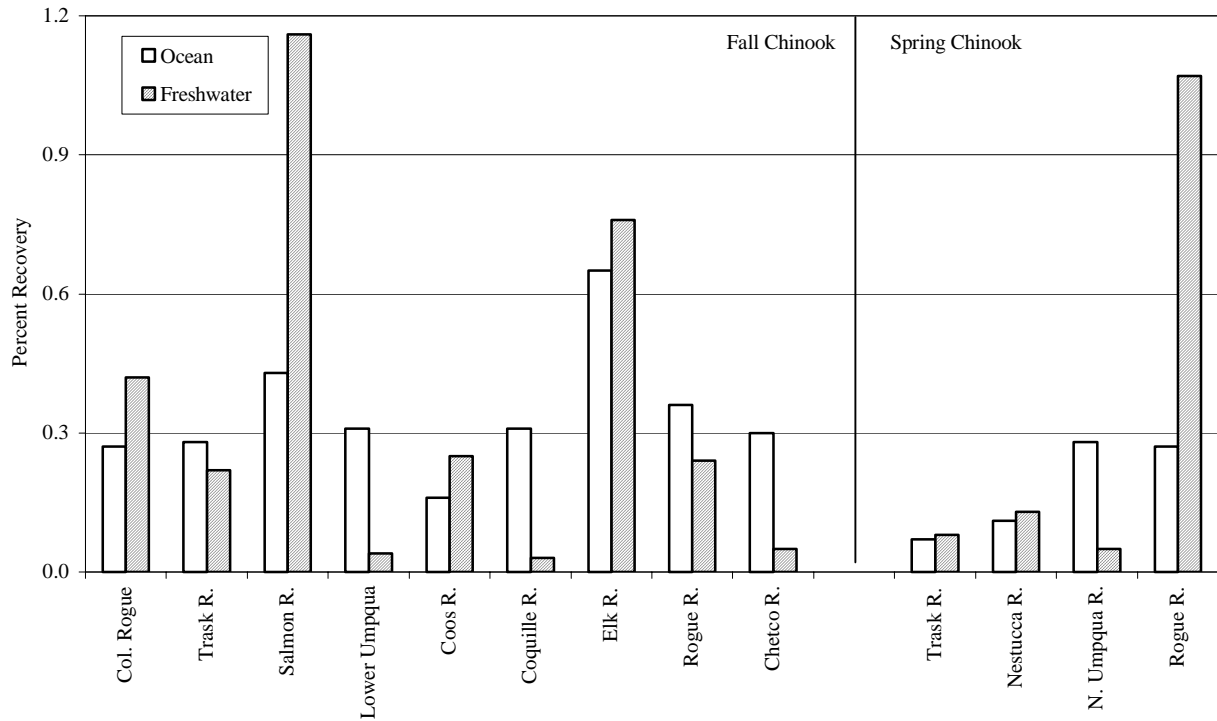


Figure 9. Comparison of overall average ocean and freshwater percent recovery of chinook salmon stocks tagged for stock assessment.

Table 7. Weighted average percent recovery, in various freshwater areas, of coho salmon stocks tagged for stock assessment. Data are for the last ten completed brood years, 1990 to 1999. NA = Data not available.

Stock Group	Estuary & river sport	Gillnet Catch		Tribal ceremonial & subsistence	Hatchery returns	Spawning ground recoveries	Other freshwater recoveries
		Below Bonn.	Above Bonn.				
COLUMBIA RIVER COHO SALMON							
Bonneville	0.16	0.10	0.00	0.00	1.27	NA	0.00
Big Creek	0.10	0.39	0.00	0.00	0.80	NA	0.00
Sandy River	0.11	0.12	0.00	0.00	0.62	NA	0.00
Umatilla River	0.08	0.04	0.02	0.00	0.17	NA	0.00
COASTAL RIVERS COHO SALMON							
Rogue River	NA	0.00	0.00	0.00	3.70	NA	0.00
Trask River	NA	0.00	0.00	0.00	2.41	NA	0.00
Coquille River	NA	0.00	0.00	0.00	0.87	NA	0.00
Nehalem River	NA	0.00	0.00	0.00	0.79	NA	0.00
Salmon River ^a	0.02	0.00	0.00	0.00	0.51	NA	0.00
Coos River	NA	0.00	0.00	0.00	0.47	NA	0.00
North Umpqua R.	NA	0.00	0.00	0.00	0.31	NA	0.00

a = Represents a combination of Salmon River (1990-1996) and Siletz River (1996-1999) stocks.

Table 8. Weighted average percent recovery, in various freshwater areas, of chinook salmon stocks tagged for stock assessment. Data are for the last ten completed brood years, 1988 to 1997. NA = Data not available.

Stock Group	Estuary & river sport	Gillnet Catch		Tribal ceremonial & subsistence	Hatchery returns	Spawning ground recoveries	Other freshwater recoveries
		Below Bonn.	Above Bonn.				
FALL CHINOOK SALMON							
Salmon River	0.42	0.00	0.00	0.00	0.05	0.69	0.00
Elk River ^a	0.25	0.00	0.00	0.00	0.45	NA	0.00
Rogue Stock Columbia Rel.	0.06	0.07	0.00	0.00	0.28	NA	0.00
Coos River	NA	0.00	0.00	0.00	0.25	NA	0.00
Trask River	NA	0.00	0.00	0.00	0.17	NA	0.00
Chetco River	NA	0.00	0.00	0.00	0.01	NA	0.06
Rogue River ^b	NA	0.00	0.00	0.00	0.17	NA	0.01
Lower Umpqua R. ^b	NA	0.00	0.00	0.00	0.02	NA	0.00
Coquille River ^b	NA	0.00	0.00	0.00	0.02	NA	0.00
SPRING CHINOOK SALMON							
Rogue River	NA	0.00	0.00	0.00	1.06	NA	0.00
Trask River	NA	0.00	0.00	0.00	0.07	NA	0.00
North Umpqua R.	NA	0.00	0.00	0.00	0.03	NA	0.00
Nestucca River ^b	NA	0.00	0.00	0.00	0.12	NA	0.00
WINTER CHINOOK SALMON							
Trask River ^b	NA	0.00	0.00	0.00	0.14	NA	0.00

a = Only data for 1989-97 broods is reported since freshwater creel began in 1992.

b = Does not include data from all ten years.

stock fall chinook (Table 8) is partly an artifact of the sampling program. Fish that return to the hatchery in excess of spawning needs are secondarily tagged and

released above the hatchery weir (including Ad+CWT fish) as part of a mark-recapture program. Thus, many fish that would have been recovered at the hatchery are actually recovered on the spawning grounds. The approximate freshwater exploitation rate for Salmon River fall chinook is 37% (estimated from Table 8). Although we are missing spawning ground data for Elk River fall chinook their approximate freshwater exploitation rate is about 33%.

The inadequacies of documenting freshwater returns of coastal chinook creates some interesting results in the spring chinook data. North Umpqua stock, which has the highest overall percent ocean recoveries (Table 2) has the lowest percent freshwater recoveries (Table 8). Rogue and North Umpqua spring chinook programs are both at hatcheries located fairly high in their respective basins. For brood years 1988 to 1997 North Umpqua stock percent ocean recovery was about equal to Rogue River stock (Table 2), however, they had very different percent recovery at the hatchery (Rogue 1.06%, North Umpqua 0.03%, Table 8). This is probably an effect of the difference in adult recapture methods. Rogue stock is recovered at the base of an impassable dam, North Umpqua stock relies on partial collections at Winchester Dam and on fish swim ins at Rock Creek Hatchery.

Oregon Contribution Rate

Contribution rate to Oregon ocean and freshwater fisheries, calculated as (adults caught/1,000 pounds of fish released), is presented in Table 9 for coho salmon and in Table 10 for chinook salmon stocks. The method used to calculate the overall average Oregon contribution rate is the same as that used to calculate overall average percent ocean recovery rate. Contribution rate is a reflection of both survival and catch distribution. Contribution rate, therefore, gives a more complete appraisal of the impact of particular fisheries on specific stocks.

Coho ocean fisheries from Washington to California were closed in 1994 and very limited in 1995 through 1999. Therefore, Oregon ocean contribution rate for all coho salmon stocks was 0.00 for the 1991 brood and was very low for the 1992 through 1996 brood years. The 2002 OPI ocean coho fishery harvested about $\frac{1}{2}$ number of coho retained in 2001, but was still the second largest catch since 1993. These recent harvest rates are still well below historic levels. Thus, the Oregon ocean contribution rate for the 1999 brood year was below the long-term average for all stocks, and lower than the 1998 brood for 9 of 11 stocks (Table 9). Oregon ocean contribution rate for stocks released above Bonneville dam is generally lower than that of stocks released below the dam, but only for Sandy stock was the difference statistically significant (Table 9). Columbia River stocks released below Bonneville dam generally had higher Oregon ocean contribution rates than coastal stocks, and Northern coastal stocks tend to have higher Oregon ocean contribution rates than southern coastal stocks. Statistically Sandy and Bonneville had significantly higher Oregon ocean contribution rates over the last 10 years than Salmon, Coos, Coquille and Rogue stocks. Among coastal stocks North Umpqua, Trask and Nehalem stocks had significantly higher Oregon ocean contributions than Coquille and Rogue stocks.

Oregon ocean contribution rate for 1997 brood chinook salmon stocks was lower than the long-term average for 9 of 14 stocks, set 1 record low and 1 record high, and was higher than the 1996 brood for 11 of 14 stocks (Table 10). Comparisons between stocks are limited because only 9 of the 14 stocks have data for all of the last 10 completed broods (1988 through 1997). Statistically, Elk stock fall chinook, and Rogue stock fall chinook released in the Columbia River had significantly higher Oregon ocean contribution rates than all other stocks, except Chetco River fall chinook (Table 10). There is a trend toward increasing Oregon ocean contribution rates from north to south (Table 10). This results from

Table 9. Weighted average Oregon ocean and freshwater (FW) contribution rate (adults caught/1,000 pounds released) for coho salmon stocks. Oregon ocean contribution rate (1990-1999 brood years) is not significantly different for stock groups followed by the same letter. NA = Data not available.

Stock Group	Brood Years	Average ocean contribution	Oregon ocean contribution range	1999 ocean cont.	1990 - 1999 brood average		
					Ocean	FW	
COLUMBIA RIVER COHO SALMON							
Sandy River	a	1977-1999	120.4	0.0 (2 yrs) to 467.6 (1986)	32.7	10.6	32.6
Bonneville	ab	1980-1999	66.8	0.0 (1991) to 306.3 (1986)	19.4	9.5	32.6
Big Creek	abcd	1980-1999	90.3	0.0 (2 yrs) to 475.2 (1986)	12.4	4.7	57.9
Umatilla R.	bcd	1985-1999	41.0	0.0 (3 yrs) to 278.5 (1986)	3.6	4.6	22.4
COASTAL RIVERS COHO SALMON							
North Umpqua R	abc	1980-1999	58.3	0.0 (1991) to 285.5 (1984)	6.4	7.7	NA
Trask River	abc	1977-1999	50.3	0.0 (3 yrs) to 176.5 (1977)	10.3	7.7	NA
Nehalem River	abcd	1977-1999	51.8	0.0 (3 yrs) to 253.8 (1985)	17.5	6.2	NA
Salmon River ^a	cd	1976-1999	38.0	0.0 (4 yrs) to 165.4 (1979)	3.5	3.4	1.5
Coos River	cd	1984-1999	45.2	0.0 (5 yrs) to 285.0 (1985)	5.3	3.2	NA
Coquille River	d	1980-1999	17.0	0.0 (5 yrs) to 94.1 (1985)	1.4	1.7	NA
Rogue River	d	1977-1999	27.5	0.0 (3 yrs) to 172.6 (1978)	1.1	1.3	NA

a = Represents a combination of Salmon River (1990-1996) and Siletz River (1996-1999) stocks.

Table 10. Weighted average Oregon ocean and freshwater catch contribution rate (adults caught/1,000 pounds released) of chinook salmon stocks. Oregon ocean contribution rate (1988-1997 brood years) is not significantly different for stock groups followed by the same letter. NA = Data not available.

Stock Group	Brood Years	Average ocean contribution	Oregon ocean contribution range	1997 ocean cont.	1988 - 1997 brood average		
					Ocean	FW	
FALL CHINOOK SALMON							
Elk River	a	1977-1997	56.8	4.3 (1982) to 244.2 (1985)	75.2	40.0	20.4 ^b
Rogue Stock Columbia Rel.	a	1982-1997	97.7	3.4 (1996) to 293.6 (1984)	11.2	38.2	21.0
Chetco River	ab	1977-1997	72.9	3.2 (1988) to 194.6 (1985)	33.4	27.2	NA
Trask River	c	1982-1997	5.6	0.0 (2 yrs) to 18.2 (1997)	18.2	6.5	NA
Coos River	c	1983-85, 87-97	12.1	0.0 (2 yrs) to 97.0 (1985)	1.5	5.0	NA
Salmon River	c	1976-80, 82-97	3.6	0.4 (1988) to 8.9 (1993)	8.2	4.1	53.7
Rogue River ^a	1977-86, 88-89, 91-97		49.6	0.0 (1979) to 242.8 (1983)	37.9	15.7 ^a	NA
Lower Umpqua R. ^a	1991-1997		7.8	0.0 (1997) to 17.7 (1992)	0.0	7.8 ^a	NA
Coquille River ^a	1983-88, 90-97		18.8	0.0 (5yrs) to 155.0 (1985)	9.0	4.2 ^a	NA
SPRING CHINOOK SALMON							
North Umpqua R.	bc	1976-1997	38.4	1.4 (1991) to 192.6 (1983)	23.5	15.2	NA
Rogue River	c	1980-1997	25.9	0.4 (1996) to 113.4 (1983)	12.5	10.4	NA
Trask River	c	1977-1997	5.5	0.7 (1977) to 20.5 (1985)	10.9	4.0	NA
Nestucca River ^a	1977-83, 91-97		4.8	0.0 (1982) to 13.9 (1977)	2.4	5.4 ^a	NA
WINTER CHINOOK SALMON							
Trask River ^a	1986-88, 90-97		5.4	0.0 (3 yrs) to 18.1 (1990)	7.1	5.6 ^a	NA

a = Does not include data from all ten years.

b = 1989-97 broods, freshwater creel begun in 1992.

a combination of southern stocks having a higher survival to ocean fisheries, and a higher percent of their ocean recoveries in Oregon fisheries, than northern stocks. Spring chinook salmon exhibit the same trend to higher Oregon ocean contribution rates for central and south coast stocks seen in fall chinook salmon. Oregon ocean contribution rate was not significantly different for Trask River spring and fall chinook stocks.

Oregon Coastal Hatchery Juvenile Salmon Releases

Oregon coastal hatchery release of coho, chinook and steelhead are reported in Tables 11 through 13 respectively. These releases are summarized by year, species, and geographically by Federal ESU and gene conservation area (GCA) as defined by ODFW. Release numbers are reported by three fish size/age categories (unfed fry, fry and fingerlings, smolts). Location of release is reported through three groupings, total releases, off station releases, and out of basin releases. Off station releases are characterized by lack of rearing, acclimation, or adult re-capture at the release site. Fish released in a closed water body, one from which they are assumed not to migrate to the ocean, are not included in Tables 11 through 13. Fish released in a basin other, than that stocks basin of origin are reported as out of basin releases.

Table 11. Coastal hatchery coho releases for calendar years 1994 through 2003, with proposed releases in 2004. Off-station releases are characterized by lack of rearing, acclimation, or adult re-capture at the release site. Fish released in a basin other than the released stocks basin of origin are reported as out of basin.

Release Year	OREGON COAST ESU												SONCC ESU		
	North Coast GCA			Mid Coast GCA			Umpqua Basin GCA			Mid-South Coast GCA			South Coast GCA		
	Unfed Fry	Fry & Fing	Smolts	Unfed Fry	Fry & Fing	Smolts	Unfed Fry	Fry & Fing	Smolts	Unfed Fry	Fry & Fing	Smolts	Unfed Fry	Fry & Fing	Smolts
Total Releases															
1994	0	0	2,091,227	146,827	269,628	2,322,398	589,380	0	283,908	477,508	50,745	273,231	8,511	0	208,161
1995	175	0	1,006,785	24,863	29,062	2,041,184	568,041	0	277,561	386,850	16,250	261,402	8,316	0	210,469
1996	0	0	837,617	52,788	46,108	1,920,975	521,520	0	287,623	325,977	0	110,493	7,667	0	204,363
1997	0	0	773,540	69,766	152,294	1,659,488	47,048	0	277,757	525,274	32,406	96,839	11,752	0	193,506
1998	0	0	405,170	0	66,186	599,262	186,005	0	309,678	70,956	0	136,866	10,290	0	214,121
1999	0	0	403,786	21,904	10,500	146,038	551,139	0	219,047	98,256	0	182,421	0	0	207,154
2000	0	0	406,037	8,436	15,750	20,875	657,271	0	214,901	213,619	0	176,232	0	0	174,181
2001	0	0	399,282	10,532	9,000	247,018	399,251	0	76,851	127,349	0	172,569	0	0	209,736
2002	0	0	406,283	0	0	235,606	416,755	0	115,178	122,464	0	191,207	0	0	208,103
2003	0	0	199,059	0	20,000	241,028	488,930	0	146,170	66,856	0	163,031	0	0	210,892
2004	0	0	200,000	0	20,000	250,000	530,000	0	142,500	75,000	0	170,000	0	0	200,000
Off-Station Releases															
1994	0	0	0	146,827	269,628	887,180	636,909	0	129,253	413,487	50,745	134,743	8,511	0	0
1995	175	0	0	24,863	29,062	367,154	669,379	0	130,153	386,850	0	102,761	8,316	0	0
1996	0	0	0	42,368	46,108	99,407	567,672	0	123,367	281,222	0	33,908	7,667	0	0
1997	0	0	0	41,876	66,186	122,441	47,048	0	134,006	314,956	32,406	11,305	11,752	0	0
1998	0	0	0	0	0	50,821	186,005	0	136,232	70,956	0	36,113	10,290	0	0
1999	0	0	0	21,904	10,500	0	554,805	0	0	98,256	0	34,976	0	0	0
2000	0	0	0	8,436	15,750	425	657,271	0	19,480	213,619	0	32,879	0	0	0
2001	0	0	0	10,532	9,000	1,401	635,032	0	0	127,349	0	28,093	0	0	0
2002	0	0	0	0	0	0	416,755	0	0	122,464	0	32,458	0	0	0
2003	0	0	0	0	20,000	0	450,000	0	24,373	66,856	0	25,517	0	0	0
2004	0	0	0	20,000	0	0	450,000	0	20,000	75,000	0	42,500	0	0	0
Out of Basin Releases															
1994	0	0	0	95,220	59,078	70,484	0	0	0	74,000	0	0	0	0	0
1995	0	0	0	23,488	29,062	365,873	0	0	0	0	0	0	0	0	0
1996	0	0	0	3,830	0	538,090	0	0	0	0	0	0	0	0	0
1997	0	0	0	36,890	0	360,367	0	0	0	16,170	1,500	0	0	0	0
1998	0	0	0	0	0	223,839	0	0	0	0	0	0	0	0	0
1999	0	0	0	20,082	10,500	111,052	0	0	0	0	0	0	0	0	0
2000	0	0	0	7,176	15,750	20,450	0	0	0	0	0	0	0	0	0
2001	0	0	0	9,000	9,000	198,107	0	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	192,945	0	0	0	0	0	0	0	0	0
2003	0	0	0	0	20,000	196,291	0	0	0	0	0	0	0	0	0
2004	0	0	0	20,000	0	200,000	0	0	0	0	0	0	0	0	0

Table 12. Coastal hatchery chinook releases for the years 1994 through 2003, with proposed releases in year 2004. Off-station releases are characterized by lack of rearing, acclimation, or adult re-capture at the release site. Fish released in a basin other than the released stocks basin of origin are reported as out of basin.

Release Year	OREGON COAST ESU												SOUTHERN OREGON ESU		
	Nehalem/Ecola GCA			North-Mid Coast GCA			Umpqua Basin GCA			Mid-South Coast GCA			South Coast GCA		
	Unfed Fry	Fry & Fing	Smolts	Unfed Fry	Fry & Fing	Smolts	Unfed Fry	Fry & Fing	Smolts	Unfed Fry	Fry & Fing	Smolts	Unfed Fry	Fry & Fing	Smolts
Total Releases															
1994	0	0	0	51,483	12,438	815,434	0	234,633	290,386	53,245	1,295,036	539,664	43,496	0	2,164,652
1995	0	0	0	62,327	58,941	854,190	172,990	506,965	353,950	950,527	1,076,570	626,550	98,765	14,394	1,902,669
1996	0	24,969	0	157,223	63,652	824,904	135,214	80,789	625,576	1,756,127	1,106,404	628,972	42,062	0	1,992,827
1997	14,922	0	21,742	529,173	52,106	883,828	0	336,399	202,700	2,135,142	1,111,127	539,413	15,339	258,628	2,008,561
1998	14,245	0	28,514	468,353	40,713	863,069	0	0	298,358	35,745	1,127,010	557,739	19,373	0	1,869,530
1999	19,542	0	26,995	354,543	17,009	866,308	9,056	68,744	401,018	133,932	1,726,605	566,567	74,693	19,476	1,846,996
2000	19,153	0	26,079	618,824	25,725	929,747	61,953	327,161	483,447	71,036	1,858,574	543,833	18,064	27,885	755,975
2001	15,479	0	25,110	260,935	55,123	1,007,233	326,322	175,200	422,422	93,351	2,348,475	533,691	115,329	0	2,126,678
2002	20,000	0	26,240	215,522	54,903	906,549	129,777	489,747	402,778	94,514	2,589,624	523,552	73,952	0	2,179,665
<u>2003</u>	<u>0</u>	<u>0</u>	<u>25,989</u>	<u>256,462</u>	<u>43,413</u>	<u>967,455</u>	<u>275,123</u>	<u>196,680</u>	<u>410,267</u>	<u>114,805</u>	<u>2,520,000</u>	<u>524,273</u>	<u>93,854</u>	<u>54,452</u>	<u>2,137,121</u>
2004	20,000	0	25,000	440,000	55,000	963,000	515,500	200,000	412,000	115,700	2,530,000	517,000	75,950	0	2,147,000
Off-Station Releases															
1994	0	0	0	51,483	12,438	385,727	0	234,633	75,662	53,245	14,382	50,650	43,496	0	424,523
1995	0	0	0	62,327	58,941	342,387	172,990	496,966	51,920	950,527	123,214	31,960	98,765	14,394	230,802
1996	0	24,969	0	157,223	63,652	315,790	135,214	49,240	84,739	1,756,127	137,450	61,381	42,062	0	282,545
1997	14,922	0	21,742	529,173	38,845	352,213	0	322,272	102,348	2,135,142	156,082	64,947	15,339	0	265,213
1998	14,245	0	28,514	468,353	31,780	382,515	0	0	0	35,745	396,704	70,536	19,373	0	158,208
1999	19,542	0	26,995	354,543	17,009	329,485	9,056	68,744	0	133,932	187,329	111,010	74,693	0	164,741
2000	19,153	0	26,079	618,824	25,725	380,987	61,953	327,161	85,207	71,036	228,779	107,764	18,064	0	158,150
2001	15,479	0	25,110	260,935	55,123	439,454	326,322	175,200	0	93,351	238,409	101,243	115,329	0	228,338
2002	20,000	0	26,240	215,522	54,903	338,894	129,777	489,747	0	94,314	69,059	146,801	73,952	0	155,941
<u>2003</u>	<u>0</u>	<u>0</u>	<u>25,989</u>	<u>256,462</u>	<u>43,413</u>	<u>416,642</u>	<u>275,123</u>	<u>196,680</u>	<u>0</u>	<u>114,805</u>	<u>230,000</u>	<u>96,265</u>	<u>93,854</u>	<u>0</u>	<u>153,681</u>
2004	20,000	0	25,000	440,000	55,000	400,000	515,500	200,000	0	115,700	235,000	100,000	21,150	0	150,000
Out of Basin Releases															
1994	0	0	0	33,458	0	182,716	0	0	0	165	0	0	10,676	0	0
1995	0	0	0	62,052	15,369	136,179	0	0	0	432	0	130,413	15,400	0	0
1996	0	24,969	0	145,020	3,696	118,799	0	0	0	150	8,505	101,306	9,906	0	0
1997	14,922	0	21,742	355,558	13,726	110,532	0	0	0	270	0	0	9,293	0	0
1998	14,245	0	28,514	229,139	11,566	116,273	0	0	0	400	0	0	10,000	0	0
1999	19,542	0	26,995	193,166	0	136,261	0	0	0	400	0	0	10,000	0	0
2000	19,153	0	26,079	344,308	25,725	101,784	0	0	0	0	0	0	9,743	0	0
2001	15,479	0	25,110	103,374	16,228	114,347	0	0	0	300	0	0	9,630	0	0
2002	20,000	0	26,240	138,550	16,978	105,237	0	0	0	0	0	0	9,857	0	0
<u>2003</u>	<u>0</u>	<u>0</u>	<u>25,989</u>	<u>128,500</u>	<u>0</u>	<u>116,388</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>9,860</u>	<u>0</u>	<u>0</u>
2004	20,000	0	25,000	205,000	0	125,000	0	0	0	300	0	0	10,000	0	0

Release of hatchery coho smolts, fingerlings, and unfed fry in coastal basins has decreased substantially since 1994 (Table 11). The proposed 2004 coho smolt releases represent reductions of 40% to 90% from the early 1990's releases for all coastal GCAs, except the South Coast GCA which has remained stable at about 200,000 smolts/year (Table 11). There are no planned fry and fingerling releases in 2004, except for one STEP program that releases 20,000 fry in North Fork Depoe Creek. This is a tributary to Depoe Bay, an area with no current wild coho population (Kostow 1995). Unfed fry releases have been eliminated in the North Coast GCA, Mid Coast GCA and South Coast GCA. Proposed unfed fry releases in 2004 are 84% less than 1994 releases in the Mid-South Coast GCAs (Table 11). Proposed 2004 unfed fry releases in the Umpqua Basin GCA are comparable to the actual releases in the early 1990's, and represent a substantial re-introduction / supplementation program. Off station releases of hatchery coho salmon have also been substantially reduced since the early 1990's (Table 11). The remaining proposed off station releases in 2004 include all the unfed fry and fingerling releases, as well as two smolt releases. The off station smolt releases proposed for 2004 are 37,500 in Sevenmile Creek (Coquille Basin), 5,000 in South Slough (Coos Basin) and 20,000 in Calapooya Creek (Umpqua Basin). Out of basin releases have been eliminated in all areas except the Mid Coast GCA. The remaining out of

basin releases are Siletz River stock coho released in Depoe Bay (20,000 fingerling) and Salmon River (200,000 smolts). Releases of excess fry and fingerling coho in closed water bodies are not reported in Table 11. Release of excess hatchery coho in closed water bodies averaged 145,000 for the 1994 through 2003 release years, and ranged from 28,000 to 394,000.

Table 13. Coastal hatchery steelhead releases for years 1994 through 2003, with proposed releases year 2004. Off-station releases are characterized by lack of rearing, acclimation, or adult re-capture at the release site. Fish released in a basin other than the released stocks basin of origin are reported as out of basin.

Release Year	OREGON COAST ESU			KLAMATH MOUNTAIN PROVINCE ESU					
	North-Mid Coast GCA			Cape Blanco to Border GCA			Upper Rogue GCA		
	Unfed Fry	Fry & Fing	Smolts	Unfed Fry	Fry & Fing	Smolts	Unfed Fry	Fry & Fing	Smolts
Total Releases									
1994	199,998	10,602	1,636,409	850	0	51,186	40,949	0	469,295
1995	281,521	0	1,429,555	500	0	52,481	70,397	0	460,271
1996	160,595	17,627	1,429,511	300	0	51,789	60,763	0	614,867
1997	246,789	16,717	1,311,273	325	0	42,895	59,458	0	557,280
1998	83,701	0	1,252,913	400	0	45,425	42,336	0	567,608
1999	202,209	0	1,284,760	306	0	47,622	0	0	416,605
2000	100,180	0	1,334,173	310	0	50,951	0	0	647,161
2001	125,589	0	1,351,966	200	0	71,173	0	0	454,959
2002	69,650	15,461	1,366,568	0	0	49,610	0	0	429,718
<u>2003</u>	<u>158,174</u>	<u>177</u>	<u>1,165,429</u>	<u>300</u>	<u>0</u>	<u>44,449</u>	<u>0</u>	<u>0</u>	<u>499,989</u>
2004	109,100	0	1,430,000	600	0	50,000	0	0	484,000
Off-Station Releases									
1994	189,392	0	1,232,957	850	0	51,186	40,949	0	154,939
1995	169,665	0	891,103	500	0	52,481	70,397	0	88,710
1996	50,121	17,627	890,167	300	0	51,789	60,763	0	190,427
1997	246,789	12,667	836,910	325	0	42,895	59,458	0	170,454
1998	83,701	0	798,906	400	0	45,425	42,336	0	170,334
1999	202,209	0	850,356	306	0	47,622	0	0	96,520
2000	100,028	0	768,177	310	0	50,951	0	0	209,473
2001	120,114	0	899,945	200	0	71,173	0	0	99,368
2002	69,650	15,461	904,423	0	0	49,610	0	0	115,530
<u>2003</u>	<u>158,174</u>	<u>177</u>	<u>761,336</u>	<u>300</u>	<u>0</u>	<u>44,449</u>	<u>0</u>	<u>0</u>	<u>124,594</u>
2004	109,100	0	980,000	600	0	50,000	0	0	132,000
Out of Basin Releases									
1994	13,896	0	683,367	650	0	0	0	0	0
1995	15,954	0	470,324	100	0	0	0	0	0
1996	5,834	0	301,417	0	0	0	0	0	0
1997	4,555	0	259,647	0	0	0	0	0	0
1998	4,537	0	215,689	0	0	0	0	0	0
1999	5,220	0	211,433	0	0	0	0	0	0
2000	5,170	0	221,950	0	0	0	0	0	0
2001	5,916	0	238,537	0	0	0	0	0	0
2002	4,600	0	223,895	0	0	0	0	0	0
<u>2003</u>	<u>1,900</u>	<u>0</u>	<u>178,364</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
2004	1,700	0	180,000	0	0	0	0	0	0

Release of hatchery chinook smolts in coastal basins has remained fairly stable since 1994 (Table 12). Fry and fingerling releases have fluctuated substantially during the last 10 years. There generally has not been a trend to these fluctuations except for an increasing trend in the Mid-South Coast GCA. Unfed fry releases have also fluctuated substantially during the last 10 years with no clear pattern except for an increasing trend in the Umpqua GCA. The two largest coastal chinook programs planned for 2004 are 1.9 million Rogue River spring chinook smolts, and 2.5 million Coos River fall chinook fingerlings. The Nehalem/Ecola GCA has a very small hatchery chinook program in comparison to the other 4 coastal chinook GCAs (Table 12). Off station releases of smolts, and fingerlings have generally been reduced or are at moderate levels in all GCAs, except the North-Mid Coast GCA (Table 12). However, for 2004 there are still

substantial proposed off station releases of hatchery chinook, including unfed fry releases. Out of basin releases of smolts, and fingerlings have been eliminated in the Umpqua Basin, Mid-South Coast, and South Coast GCAs (Table 12). The remaining out of basin releases proposed for 2004 include: Trask River stock fall chinook released in the Necanicum River and in Tillamook Bay tributaries; Elk River stock fall chinook unfed fry released in Euchre Creek and Floras Creek; and Trask River stock spring chinook released in the Wilson River. Releases of excess fry and fingerling chinook in closed water bodies are not reported in Table 12. Release of excess hatchery chinook in closed water bodies averaged 444,000 for the 1994 through 2003 release years, and ranged from 41,000 to 813,000.

Hatchery steelhead juvenile releases on the Oregon Coast are predominately smolts and are mainly released in the North-Mid Coast GCA (Table 13). Fingerling releases were rare during 1994 through 2003, and none are planned for 2004. Unfed fry releases have been reduced dramatically since the early 1990's and have been essentially limited to the North-Mid Coast GCA in recent years (Table 13). Smolt releases have been reduced slightly since 1993, as have off station releases (Lewis 2003). The most dramatic reductions have been in out of basin releases, with planned releases in 2004 only 24% of the smolt and 1% of the un-fed fry actual out of basin releases in 1993 (Lewis 2003). The remaining proposed out of basin releases in 2004 are; 40,000 Nehalem River stock winter steelhead smolts in the Necanicum River, 120,000 Nestucca River stock winter and summer steelhead smolts in the Tillamook Basin, 20,000 Alsea River stock winter steelhead smolts in the Yaquina River, 1,000 Nestucca River stock winter steelhead unfed fry in the Tillamook Basin, 400 Alsea River stock winter steelhead unfed fry in the Yaquina River, and 300 Alsea River stock winter steelhead unfed fry in Big Creek (direct tributary to the Pacific Ocean north of Newport). Releases of excess fry and fingerling steelhead as well as grade out and precocial steelhead in closed water bodies is not reported in Table 13. Release of hatchery steelhead in closed water bodies averaged 383,000 for the 1994 through 2003 release years, and ranged from 236,000 to 622,000.

Oregon Coastal Hatchery Adult Salmon Returns

Collections of salmon and steelhead at ODFW coastal facilities were summarized by species, age (adults versus jacks) and gene conservation area (GCA), as defined by ODFW. Tables 14 through 16 contain the last 10 years adult return information for ODFW hatchery coho, chinook and steelhead. Data from trapping of wild fish and recoveries of fish at hatcheries that did not release that species is also reported, when available.

The number of fish returning to a release facility is influenced by a variety of factors including number of fish released, post-release survival, harvest rate, water flow, homing affinity, and trap efficiency. Because of the number of variables and the interactions between variables, hatchery return rates should not be used as an estimate of survival. They can be used as an index of potential interactions between hatchery and wild adults in freshwater. Actual levels of interaction depend on further variables including run timing, spawning timing, hatchery location, abundance of wild fish, and genetic variables.

Hatchery recoveries of adult coho remained strong in the 2003-04 run year, but were down from the prior two run years in all the coastal GCAs except the Mid-South Coast and Umpqua GCAs (Table 14). Even though hatchery coho jack returns in 2002-03 were higher than in 2001-02, adult returns in 2003-04 were lower than in 2002-03 (Table 14). Only the Mid-South Coast GCA had both increased jack returns in 2002-03 and increased adults in 2003-04. Jack returns in 2003-04 are lower than in 2002-03 in all but the Umpqua GCA. Jack and adult returns in the Mid

Coast GCA are well below those in prior years, but this GCA has had the largest reduction in hatchery coho smolt releases (Table 11). Adult returns in the Umpqua GCA don't reflect actual returns as these fish are mostly collected at Winchester Dam, several miles below the hatchery, and only enough fish for broodstock needs are collected. Counts of hatchery and wild coho passing Winchester Dam on the North Umpqua River provide a better assessment of actual run size.

Table 14. Adult and jack coho collections: at hatcheries that do not release coho; from wild spawning populations; and at coastal hatcheries that release coho. T = Total collected, W = wild coho (based on marks), B = Retained for broodstock.

Run Year	North Coast GCA						Mid Coast GCA						Umpqua Basin GCA						Mid-South Coast GCA						South Coast GCA					
	Non-Coho Hatch		Wild Coho Trapping		Coho Hatcheries		Non-Coho Hatch		Wild Coho Trapping		Coho Hatcheries		Non-Coho Hatch		Wild Coho Trapping		Coho Hatcheries		Non-Coho Hatch		Wild Coho Trapping		Coho Hatcheries		Non-Coho Hatch		Wild Coho Trapping		Coho Hatcheries	
	T	W	T	B	T	W	T	W	T	B	T	W	T	W	T	B	T	W	T	W	T	B	T	W	T	W	T	B	T	W
Adult Returns																														
1994-95	0	--	0	0	10,260	--	0	--	0	0	6,487	--	--	--	13	13	1,069	--	--	--	84	43	1,733	--	8	--	0	0	6,577	370
1995-96	9	--	0	0	11,457	--	0	--	0	0	5,083	--	--	--	7	7	1,210	--	194	--	268	268	244	--	5	--	0	0	8,698	209
1996-97	5	--	0	0	5,456	--	0	--	0	0	9,575	--	--	--	8	8	1,687	--	160	--	144	144	928	--	4	--	0	0	7,922	171
1997-98	0	--	0	0	3,413	--	0	--	0	0	5,647	--	--	--	0	0	431	--	53	--	110	110	221	--	14	--	0	0	7,934	310
1998-99	0	0	0	0	3,903	104	0	0	0	0	8,281	104	--	--	21	21	803	0	0	66	66	301	0	5	4	0	0	2,963	59	
1999-00	63	55	0	0	5,040	44	0	0	0	0	3,622	197	--	--	0	0	970	0	0	63	63	473	60	19	16	0	0	4,350	47	
2000-01	196	196	0	0	4,801	120	0	0	0	0	366	60	--	--	0	0	1,102	0	0	0	0	1,036	0	31	30	0	0	9,276	332	
2001-02	41	34	0	0	22,536	204	0	0	0	0	1,531	130	--	--	0	0	832	0	0	61	61	2,033	0	125	31	0	0	12,738	801	
2002-03	202	199	0	0	14,895	178	28	18	0	0	3,889	427	0	0	258	258	492	266	0	0	138	138	2,337	42	47	12	0	0	11,587	589
2003-04	50	49	0	0	6,488	333	41	39	0	0	1,949	91	0	0	242	242	1,057	243	0	0	132	132	3,474	62	20	20	0	0	6,654	748
Jack Returns																														
1994-95	0	--	0	0	431	--	0	0	0	0	388	--	--	--	0	0	49	--	25	--	0	0	115	--	5	--	0	0	910	32
1995-96	0	--	0	0	589	--	0	0	0	0	910	--	--	--	0	0	43	--	55	--	26	26	96	--	1	--	0	0	767	6
1996-97	0	--	0	0	608	--	0	0	0	0	876	--	--	--	0	0	251	--	42	--	0	0	113	--	1	--	0	0	806	16
1997-98	0	0	0	0	347	0	0	0	0	0	795	0	--	--	0	0	56	4	4	2	2	181	0	1	1	0	0	725	16	
1998-99	0	0	0	0	1,301	16	0	0	0	0	394	13	--	--	0	0	60	0	0	6	6	116	0	0	0	0	0	865	8	
1999-00	1	1	0	0	861	0	0	0	0	0	57	8	--	--	0	0	60	0	0	4	4	144	1	4	4	0	0	993	21	
2000-01	5	5	0	0	6,616	27	0	0	0	0	53	11	--	--	0	0	35	0	0	0	0	1,086	0	17	17	0	0	2,608	118	
2001-02	26	26	0	0	1,655	12	0	0	0	0	70	24	0	0	0	0	11	0	0	2	2	322	0	7	6	0	0	1,168	67	
2002-03	13	13	0	0	2,010	6	5	5	0	0	554	26	0	0	8	8	7	6	0	0	2	2	411	11	9	9	0	0	2,028	253
2003-04	3	3	0	0	254	28	3	3	0	0	35	11	0	0	7	7	45	5	0	0	0	0	334	50	10	7	0	0	1,471	76

Hatchery recoveries of adult chinook in the 2003-04 run year are comparable to the 2002-03 run year, except for in the Mid-South Coast and South Coast GCAs (Table 15). However, the 2003-04 hatchery returns from the Coos Basin fall chinook program are not currently available. As this is the largest hatchery chinook program in the Mid-South Coast GCA, and returns to the other hatchery chinook programs in the GCA were comparable to the prior year, the actual hatchery chinook returns for this GCA are likely comparable to the prior year. The reduced adult hatchery chinook returns in the South Coast GCA are not an artifact and the 2003-04 returns are the second lowest in the ten year period presented in Table 15. There are essentially no recoveries of hatchery chinook in the Nehalem/Ecola GCA, as there are very few hatchery chinook released in this GCA. Chinook salmon jack recoveries at Oregon coastal hatcheries in 2003-04 were comparable to prior years in all but the Mid-South Coast GCA (Table 15). However, as explained above that data is incomplete. As explained for adult coho hatchery returns at Umpqua GCA hatcheries, due to the collection methods the number of adult and jack chinook collected does not necessarily reflect the total returns.

Adult steelhead hatchery returns remained strong in the 2003-04 return year. This is the third year of strong hatchery steelhead returns, and this pattern is also reflected in the number of unmarked "Wild" steelhead collected at ODFW coastal hatcheries (Table 16). Hatchery returns for the Cape Blanco to Border GCA are from the Chetco River smolt releases. There is no adult collection facility

Table 15. Adult and jack chinook collections: at hatcheries that do not release chinook; from wild populations; and at coastal hatcheries that release chinook.

Return Year	Nehalem/Ecola GCA Non-			North-Mid Coast GCA Non-			Umpqua GCA Non-			Mid-South Coast GCA Non-			South Coast GCA Non-		
	Wild Trapping	Chinook hatcheries	Chinook hatcheries	Wild Trapping	Chinook hatcheries	Chinook hatcheries	Wild Trapping	Chinook hatcheries	Chinook hatcheries	Wild Trapping	Chinook hatcheries	Chinook hatcheries	Wild Trapping	Chinook hatcheries	Chinook hatcheries
Adult Returns															
1994-95	0	4	0	0	0	2,028	0	0	868	86	0	2,023	54	303	4,044
1995-96	0	0	0	13	0	1,983	0	0	694	474	0	3,415	49	366	54,571
1996-97	0	2	0	91	0	2,671	12	0	648	305	0	4,028	66	0	26,044
1997-98	0	0	0	75	0	1,273	0	0	300	31	0	2,722	44	13	28,169
1998-99	0	0	0	73	3	1,252	43	0	412	161	0	3,709	21	22	10,336
1999-00	0	0	0	103	82	1,885	0	0	672	122	0	3,789	42	7	16,728
2000-01	0	8	0	118	64	1,889	0	0	850	60	0	3,313	0	103	23,068
2001-02	0	0	0	75	24	2,561	0	0	1,377	165	0	7,444	74	202	24,390
2002-03	0	3	0	43	0	3,144	0	0	716	137	0	8,470	28	125	21,615
2003-04	0	0	0	21	0	3,563	0	0	736	114	0	1,371	0	563	14,204
Jack Returns															
1994-95	0	0	0	0	7	161	0	0	70	35	0	1,543	21	38	559
1995-96	0	0	0	1	6	83	0	0	20	16	0	1,116	2	31	1,436
1996-97	0	0	0	0	0	35	0	0	12	4	0	554	2	0	551
1997-98	0	0	0	0	0	18	0	0	18	0	0	1,132	2	6	729
1998-99	0	0	0	0	2	37	0	0	19	4	0	219	7	32	1,854
1999-00	0	0	0	0	7	122	0	0	147	6	0	1,144	7	1	975
2000-01	0	2	0	0	4	183	0	0	81	4	0	1,373	0	4	1,209
2001-02	0	0	0	0	0	246	0	0	278	18	0	2,637	0	10	846
2002-03	0	0	0	0	0	172	0	0	12	6	0	3,253	1	238	1,616
2003-04	0	0	0	0	0	185	0	0	70	3	0	132	0	26	1,826

Table 16. Adult and jack steelhead collections: at hatcheries that do not release steelhead; from wild populations; and coastal hatcheries that release steelhead. T = Total collected, W = wild coho (based on marks), B = Retained for broodstock.

Run Year	North-Mid Coast GCA						Cape Blanco to Border GCA						Upper Rogue GCA					
	Wild Steelhead Trapping		Non-Steelhead Hatcheries		Steelhead Hatcheries		Wild Steelhead Trapping		Non-Steelhead Hatcheries		Steelhead Hatcheries		Wild Steelhead Trapping		Non-Steelhead Hatcheries		Steelhead Hatcheries	
	T	B	T	W	T	W	T	B	T	W	T	W	T	B	T	W	T	W
Adult Returns																		
1994-95	545	190	4	--	5,816	--	0	0	0	--	90	--	0	0	0	--	7,923	--
1995-96	181	181	2	--	6,166	--	0	0	0	--	130	--	0	0	0	--	9,494	--
1996-97	409	212	6	--	8,610	--	0	0	0	--	89	--	0	0	0	--	10,333	--
1997-98	502	318	0	0	5,249	260	0	0	6	6	98		0	0	0	0	8,486	209
1998-99	697	280	46	1	10,775	297	0	0	0	0	106	31	0	0	0	0	5,905	379
1999-00	1,182	432	26	0	7,509	428	0	0	0	0	104	10	0	0	0	0	6,873	192
2000-01	953	410	28	0	7,450	328	0	0	0	0	104		0	0	0	0	9,143	467
2001-02	1,292	478	93	6	18,034	437	0	0	0	0	97		196	196	0	0	20,292	763
2002-03	1,154	328	87	2	10,247	470	0	0	0	0	95		30	30	0	0	19,027	714
2003-04	1,583	476	32	0	15,518	548	0	0	0	0	97		0	0	0	0	16,744	683
Jack Returns																		
1994-95	0	0	0	--	49	--	0	0	0	--	0	--	0	0	0	--	0	--
1995-96	0	0	0	--	89	--	0	0	0	--	0	--	0	0	0	--	0	--
1996-97	3	0	0	--	149	--	0	0	0	--	0	--	0	0	0	--	0	--
1997-98	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0
1998-99	4	0	0	0	128	0	0	0	0	0	0	0	0	0	0	0	0	0
1999-00	8	1	0	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0
2000-01	29	7	0	0	242	3	0	0	0	0	0	0	0	0	0	0	0	0
2001-02	25	1	0	0	96	0	0	0	0	0	0	0	0	0	0	0	0	0
2002-03	57	0	0	0	233	0	0	0	0	0	0	0	0	0	0	0	0	0
2003-04	50	1	0	0	176	0	0	0	0	0	0	0	0	0	0	0	0	0

in the Chetco River so "hatchery returns" for this program are from broodstock seining efforts in the lower Chetco River. Seining is only done for broodstock needs and therefore, the "hatchery returns" do not reflect total returns. Very few jack steelhead are collected, but for the North-Mid Coast GCA the 2003-04 jack steelhead returns were the third highest for the last 10 years (Table 16). Wild steelhead collected at Siletz Falls account for over 50%, on average, of the total wild steelhead collected in the North-Mid Coast GCA.

Hatchery Salmon Mass Marking

Table 17. Coastal hatchery salmon and steelhead smolt releases in 2003 by mark type. Releases are 2001 brood year coho salmon and 2002 brood year steelhead and chinook salmon. Data in italics is preliminary.

Hatchery	Stock	Release Site	Release Dates		# CWT Groups	Fin Clip	Number Released by Mark Type				Total Release	
			First	Last			Ad+CWT	CWT Only	Ad Only	Unmarked		
Coho Salmon												
Nehalem	N Nehalem	Nehalem R, N Fk	03/01/03	04/14/03	2	AD	50,952	0	50,752	0	101,704	
Trask	Trask R	Trask R	03/17/03	04/11/03	2	AD	52,950	146	43,427	832	97,355	
Salmon River	Siletz R	Salmon R	04/30/03	05/02/03	1	AD	23,904	47	172,293	47	196,291	
	<i>Siletz R</i>	<i>Siletz R</i>			0	AD	0	0	52,737	0	52,737	
Rock Creek	Umpqua R	Rock Cr (N Umpqua)	04/10/03	04/29/03	2	AD	53,133	0	68,555	109	121,797	
<i>Butte Falls</i>	<i>Umpqua R</i>	<i>Calapooya Cr</i>	<i>04/19/03</i>	<i>04/19/03</i>	0	AD ¹	0	0	24,373	0	24,373	
Noble Creek	Coos R	Coos Basin	03/13/03	03/30/03	1	AD	25,653	217	88,981	212	115,063	
Bandon	Coquille R	Coquille Basin	04/09/03	04/16/03	1	AD	25,873	0	21,406	189	47,468	
Cole Rivers	Rogue R	Rogue R-4	04/22/03	04/22/03	2	AD	27,497	28,065	155,279	51	210,892	
							11	259,962	28,475	677,803	1,440	967,680
Spring Chinook Salmon												
Tuffy Creek	Trask River	Wilson R		07/22/03	1	AD	26,372	600	69,214	291	96,477	
Whisky Creek	Trask River	Wilson R		07/24/03		AD	0	0	16,034	3,877	19,911	
Whisky Creek	Trask River	Trask R	06/12/03	07/26/03	0	AD	0	0	47,826	11,567	59,393	
Trask	Trask River	Trask R		07/31/03	1	AD	26,357	396	17,113	71	43,937	
E Fk Trask Pond	Trask River	Trask R		07/29/03		AD	0	0	116,786	492	117,278	
Cedar Creek	Nestucca R	Nestucca R		07/21/03	1	AD	26,168	197	82,695	1,407	110,467	
Rock Creek ²	Umpqua R	Rock Cr (N Umpqua)	02/02/03	02/22/03	1	AD	21,347	1,001	233,362	9,369	265,079	
Rock Creek	Umpqua R	Rock Cr (N Umpqua)	10/14/03	11/07/03	1	AD	24,020	275	117,289	3,604	145,188	
Cole Rivers	Rogue R	Rogue R	08/12/03	10/15/03	4	AD	119,390	54,394	1,744,527	39,449	1,957,760	
							9	243,654	56,863	2,444,846	70,127	2,815,490
Summer Steelhead												
Trask	Nestucca R	Wilson R	04/02/03	04/09/03	0	ADRV	0	0	31,335	4,918	36,253	
Cedar Creek	Nestucca R	Nestucca R		04/09/03	0	ADRV	0	0	41,366	2,875	44,241	
Salmon River	Siletz R	Siletz R	04/02/03	04/03/03	0	AD	0	0	69,725	1,268	70,993	
Rock Creek ²	Umpqua R	Rock Cr (N Umpqua)	03/24/03	03/25/03	0	AD	0	0	73,005	117	73,122	
Rock Creek	Umpqua R	Umpqua R, N Fk		05/07/03	0	ADLM	0	0	33,506	0	33,506	
Cole Rivers	Rogue R	Rogue R-4	05/05/03	05/06/03	0	AD ¹	0	0	218,876	747	219,623	
							0	0	467,813	9,925	477,738	
Winter Steelhead												
Alea	Alea R	Big Elk Cr (Yaquina)		03/31/03	0	AD	0	0	19,522	25	19,547	
Alea	Alea R (H)	Alea R, N Fk		04/10/03	0	ADLM	0	0	89,396	447	89,843	
Alea	Alea R (W)	Alea R, N Fk		04/10/03	0	ADRM	0	0	39,026	315	39,341	
Alea	Siletz R	Palmer Cr (Siletz R)		04/08/03	0	ADLM	0	0	58,344	1,056	59,400	
Cole Rivers 2	Applegate R	Applegate R	04/07/03	04/17/03	0	AD ¹	0	0	124,454	140	124,594	
Cole Rivers 2	Rogue R	Rogue R-4	04/23/03	04/24/03	0	AD ¹	0	0	155,772	0	155,772	
Elk River	Chetco R	Chetco River	03/12/03	04/15/03	0	AD	0	0	44,005	444	44,449	
<i>Coos STEP</i>	<i>Coos R</i>	<i>Coos Basin</i>	<i>04/01/03</i>	<i>04/03/03</i>	0	<i>ADRV</i>	0	0	82,042	563	82,605	
<i>Bandon</i>	<i>Coquille R</i>	<i>Coquille Basin</i>		<i>04/08/03</i>	0	<i>AD</i>	0	0	50,398	0	50,398	
<i>Coquille (STEP)</i>	<i>South Fk Coquille R</i>	<i>Coquille Basin</i>	<i>04/07/03</i>	<i>04/30/03</i>	0	<i>AD</i>	0	0	73,791	0	73,791	
<i>Rock Creek 2</i>	<i>Cow Cr (S Umpqua)</i>	<i>S. Upqua Basin</i>	<i>03/03/03</i>	<i>03/25/03</i>	0	<i>ADLM</i>	0	0	35,084	0	35,084	
<i>Rock Creek</i>	<i>Cow Cr (S Umpqua)</i>	<i>Canyon Cr</i>	<i>04/15/03</i>	<i>05/02/03</i>	0	<i>AD</i>	0	0	43,607	0	43,607	
Nehalem	Fishhawk Lk	Nehalem R, N Fk		04/14/03	0	ADRM	0	0	41,064	97	41,161	
Nehalem	N. Nehalem	Nehalem R, N Fk		04/14/03	0	AD	0	0	48,390	57	48,447	
Nehalem	N. Nehalem	Necanicum R		04/03/03	0	AD	0	0	39,969	47	40,016	
Cedar Creek	Nestucca R (H)	Nestucca R		04/04/03	0	ADLM	0	0	51,061	163	51,224	
Cedar Creek	Nestucca R (W)	Nestucca R	04/21/03	04/22/03	0	ADRM	0	0	49,386	158	49,544	
Trask	Wilson R	Wilson R	04/30/03	05/01/03	0	AD	0	0	28,938	95	29,033	
Hughey Cr Accl.	Nestucca R	Wilson R		04/09/03	0	ADLM	0	0	9,152	834	9,986	
Tuffy Creek	Nestucca R	Kilchis R		04/01/03	0	ADLM	0	0	27,507	2,508	30,015	
Tuffy Creek	Nestucca R	Wilson R, S Fk		04/04/03	0	ADLM	0	0	38,992	3,555	42,547	
Roaring River	Siuslaw R	Siuslaw Basin	04/17/03	04/18/03	0	AD	0	0	57,210	909	58,119	
<i>Eel Lake (STEP)</i>	<i>Ten Mile Lake</i>	<i>Elk Lake Basin</i>		<i>04/01/03</i>	0	<i>ADRV</i>	0	0	13,328	278	13,606	
							0	0	1,220,438	11,691	1,232,129	

1 = Portions of this release group have an additional fin clip.

2 = 2001 brood year.

Coastal hatchery releases of mass marked chinook, coho, and steelhead smolts, by mark type are reported in Table 17. These are the smolts released in 2003 and represent the 2001 brood year coho salmon and 2002 brood year chinook salmon hatchery releases. Mass marking, adipose fin clip only, of coastal hatchery coho salmon began with the 1995 brood year and with the 1998 brood year for spring chinook salmon. Coastal hatchery fall chinook are not mass marked, with a few exceptions, and are thus not reported in Table 17. For mass marked groups, coho, spring chinook and selected fall chinook the number of fish reported in Table 17 in the "Unmarked" column represents poor quality marks or fish missed during marking. Coastal hatchery coho salmon smolts released in 2003 were about 99.9% marked. However, because of double index tagging (fish marked with a CWT but no fin clip) only 96.9% had an externally visible mark, an adipose fin clip (Table 17). Coastal hatchery spring chinook salmon smolts released in 2003 were about 97.5% marked, and 95.5% had an externally visible mark, an adipose fin clip (Table 17). Coastal hatchery summer steelhead releases in 2003 were 97.9% marked and winter steelhead releases in 2003 were 99.1% marked (Table 17).

PLANS FOR FY 2004

In FY 2004 we are planning to mark with Ad+CWT representative samples from all hatchery production groups of coho salmon released from Oregon hatcheries (released during FY 2005) to monitor recovery of hatchery salmon. Exceptions are hatchery fall chinook in the Nestucca River and coho in the Coquille River, where logistical issues currently preclude Ad+CWT marking. We are planning releases of Ad+CWT coho salmon in Coos, Nehalem, Salmon, Trask, and North Umpqua Rivers. We are planning releases of Ad+CWT fall chinook salmon in Chetco, Coos, Coquille, Necanicum, Rogue, Trask, Umpqua, and Yaquina Rivers. We are also planning releases of Ad+CWT spring chinook salmon in Nestucca, North Umpqua, Trask and Wilson Rivers. We will continue to summarize catch and escapement information as data become available. Other sources of funding will pay for Ad+CWT marking of juvenile hatchery coho and spring chinook salmon in the Rogue River, and juvenile hatchery fall chinook salmon in the Elk and Salmon Rivers.

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APPENDIX

Release and Recovery Data for Ad+CWT-Marked Salmon
Released for Stock Assessment

Appendix Table 1. Coho salmon CWT release & recovery data, 1990-2000 broods. Column "Number Released CWT" is Ad+CWT for 1989 to 1994 brood years, and is Ad+CWT plus CWT only for 1995 to 2000 brood years. Source: N = Native; H = Hatchery; M = Mixed. NFH = National Fish Hatchery; AK = Alaska, NCBC = North Central British Columbia, WCVI = West Coast Vancouver Island, GST = Georgia Strait, PS = Puget Sound, WA = Washington Coast, CA = California. Oregon ocean areas are displayed in Figure 5.

STOCK GROUP,			Ocean Catch																							
stock, (source H, N, M),			Release	Number Released		Size	Oregon Areas										Freshwater Recoveries					%				
brood, tagcode Hatchery			Date	CWT	Total	(gm)	AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4	5	6+	Surv.		
ALSEA RIVER																										
Fall Creek (Alsea River):																										
H	1990	074942	Fall Creek	Fall Cr	03/19/92	24,484	204,149	29.60	0	0	6	0	0	16	6	0	4	4	3	25	17	83	0	0	0	0.67
H	1990	074941	Fall Creek	Fall Cr	04/22/92	23,758	840,625	34.40	0	0	0	0	0	14	0	3	7	19	8	33	8	96	0	0	0	0.79
H	1990	074413	Fall Creek	Fall Cr	06/01/92	25,365	453,657	40.90	0	0	0	0	0	0	0	0	1	0	0	0	1	4	0	0	0	0.02
H	1991	076010	Fall Creek	Fall Cr	03/18/93	25,856	148,951	29.07	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0.12
H	1991	076011	Fall Creek	Fall Cr	04/20/93	26,032	141,679	36.28	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0.08
H	1991	076012	Fall Creek	Fall Cr	05/24/93	27,083	239,805	40.49	0	0	4	0	0	0	0	0	0	0	0	0	0	53	0	0	0	0.21
H	1991	076013	Fall Creek	Fall Cr	06/04/93	26,754	410,870	49.84	0	0	0	0	0	0	0	0	0	0	0	0	0	133	0	0	0	0.50
H	1992	070261	Fall Creek	Fall Cr	03/16/94	27,330	146,845	30.23	0	0	0	0	0	0	0	0	0	0	0	0	2	60	0	0	0	0.23
H	1992	070262	Fall Creek	Fall Cr	04/22/94	26,200	246,529	35.43	0	0	0	0	0	2	0	0	0	0	0	0	1	105	0	0	0	0.41
H	1992	070263	Fall Creek	Fall Cr	05/20/94	25,856	244,564	39.78	0	0	6	0	0	4	3	0	0	0	0	0	1	58	0	0	0	0.28
H	1992	070312	Fall Creek	Fall Cr	06/01/94	25,252	290,763	49.84	0	0	6	0	0	5	0	0	0	0	0	0	0	104	0	0	0	0.46
H	1993	075256	Fall Creek	Fall Cr	03/17/95	26,599	148,851	30.24	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0.07
H	1993	075257	Fall Creek	Fall Cr	04/17/95	27,410	299,310	37.49	0	0	0	0	0	2	0	0	0	0	0	0	0	65	0	0	0	0.24
H	1993	075258	Fall Creek	Fall Cr	05/15/95	26,671	199,039	40.86	0	0	18	0	0	0	0	0	0	0	0	3	127	0	0	0	0	0.55
H	1993	075259	Fall Creek	Fall Cr	06/01/95	27,291	399,259	47.25	0	0	0	0	0	0	0	0	0	0	0	0	44	0	0	0	0	0.16
H	1994	070531	Fall Creek	Fall Cr	02/07/96	26,364	518,335	26.56	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0.02
H	1994	070532	Fall Creek	Fall Cr	02/07/96	26,364	518,335	26.56	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0.03
H	1994	070924	Fall Creek	Fall Cr	02/07/96	26,364	518,335	26.56	0	0	0	0	0	0	0	0	0	0	7	1	8	0	0	0	0	0.06
H	1994	075337	Fall Creek	Fall Cr	02/07/96	26,364	518,335	26.56	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0.02
H	1995	091733	Fall Creek	Fall Cr	03/17/97	27,481	148,000	31.72	0	0	0	0	0	1	0	0	0	0	0	0	0	61	0	0	0	0.23
H	1995	091734	Fall Creek	Fall Cr	04/15/97	27,001	250,214	36.58	0	0	0	0	0	6	2	0	0	0	0	0	0	154	0	0	0	0.60
H	1995	091735	Fall Creek	Fall Cr	05/15/97	28,157	249,391	42.39	0	0	0	0	0	7	0	0	0	0	0	0	0	249	0	0	0	0.91
H	1995	091736	Fall Creek	Fall Cr	06/02/97	28,764	300,260	46.28	0	0	0	0	3	5	0	0	0	0	0	0	179	0	0	0	0	0.65
H	1996	092015	Fall Creek	Fall Cr	04/17/98	26,798	99,809	37.18	0	0	0	0	0	0	0	0	4	0	0	0	16	92	0	0	0	0.42
H	1996	092006	Fall Creek	Fall Cr	05/16/98	27,454	78,780	43.20	0	0	0	0	0	0	0	0	0	1	0	0	6	42	0	0	0	0.18
ALSEA RIVER WILD																										
Alsea River & tribs (excluding Fall Creek):																										
N	1991	075953	Fall Creek	Fall Cr	05/15/93	7,795	8,197	39.78	0	0	0	4	0	0	0	0	0	0	0	0	4	0	0	0	0	0.10
N	1992	076035	Fall Creek	Fall Cr	04/26/94	43,889	93,370	34.10	0	0	0	0	0	1	0	0	0	0	2	8	24	0	0	0	0	0.08

Appendix Table 1. Continued.

STOCK GROUP,				Ocean Catch																					
stock, (source H, N, M),		Release Site	Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.			
brood, tagcode	Hatchery			CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+	
BIG CREEK																									
Big Creek:																									
H	1990 075616	Big Creek	Big Cr	06/01/92	26,774	195,943	46.30	0	0	6	0	4	27	0	0	0	0	5	1	66	0	0	0	0.41	
H	1990 075617	Big Creek	Big Cr	06/08/92	27,209	357,982	30.60	0	0	0	0	0	0	0	3	3	0	0	0	21	0	0	0	0.10	
H	1991 071517	Big Creek	Big Cr	06/03/93	27,612	366,320	31.06	0	0	7	0	0	0	0	0	0	0	0	0	158	0	0	0	0.60	
H	1991 071516	Big Creek	Big Cr	06/03/93	27,295	193,856	47.74	0	0	28	5	0	0	0	0	0	0	0	0	396	0	0	0	1.57	
H	1992 070256	Big Creek	Big Cr	06/03/94	25,880	301,630	32.63	0	0	18	0	0	9	3	0	0	0	0	0	72	0	0	0	0.39	
H	1992 070257	Big Creek	Big Cr	06/03/94	25,887	164,360	45.81	0	0	5	0	0	45	10	0	0	0	0	0	293	0	0	0	1.36	
H	1993 070137	Big Creek	Big Cr	04/28/95	27,418	130,654	43.99	0	0	0	0	0	13	2	0	0	0	0	16	166	0	0	0	0.72	
H	1993 070138	Big Creek	Big Cr	05/31/95	26,424	403,203	41.20	0	0	0	0	0	3	5	0	0	0	0	2	197	0	0	0	0.78	
H	1994 070958	Big Creek	Big Cr	05/06/96	28,110	141,056	32.29	0	0	0	0	0	1	0	0	0	0	0	4	88	0	0	0	0.33	
H	1994 070959	Big Creek	Big Cr	06/05/96	27,957	402,510	36.79	0	0	0	0	0	7	0	0	0	0	0	4	301	0	0	0	1.12	
H	1995 070842	Big Creek	Big Cr	04/30/97	27,589	146,067	35.16	0	0	0	0	0	7	2	0	0	0	0	18	206	0	0	0	0.84	
H	1995 070946	Big Creek	Big Cr	05/30/97	27,707	389,635	37.49	0	0	0	0	0	4	0	0	0	0	0	1	120	0	0	0	0.45	
H	1996 092254	Big Creek	Big Cr	04/24/98	24,849	146,064	36.58	0	0	0	0	0	3	3	2	2	0	0	26	196	0	0	0	0.93	
H	1996 092255	Big Creek	Big Cr	05/28/98	26,284	355,130	39.10	0	0	0	0	0	1	0	0	0	0	0	7	79	0	0	0	0.33	
H	1997 092420	Big Creek	Big Cr	04/26/99	26,386	142,730	38.76	0	0	0	0	0	4	7	2	6	4	0	27	365	0	0	--	1.57	
H	1997 092419	Big Creek	Big Cr	05/25/99	26,259	382,612	39.10	0	0	0	0	0	18	8	0	14	15	0	9	349	0	0	--	1.57	
H	1998 092434	Big Creek	Big Cr	04/17/00	25,603	145,353	38.44	0	0	0	0	0	49	7	2	11	2	0	3	110	622	0	--	3.15	
H	1998 092431	Big Creek	Big Cr	05/15/00	25,513	398,106	39.10	0	0	0	0	0	26	15	0	13	2	0	150	924	0	--	--	4.43	
H	1999 092731	Big Creek	Big Cr	04/16/01	27,026	145,147	36.00	0	0	0	0	0	34	12	4	9	2	0	11	122	706	--	--	3.33	
H	1999 092732	Big Creek	Big Cr	05/16/01	26,766	392,038	37.18	0	0	0	0	0	42	7	9	4	7	0	63	902	--	--	--	3.86	
H	2000 093242	Big Creek	Big Cr	04/01/02	26,833	144,690	35.94	0	0	0	0	0	1	0	0	0	0	0	120	--	--	--	--	0.45	
H	2000 093243	Big Creek	Big Cr	05/01/02	27,141	396,208	37.42	0	0	0	0	0	0	0	0	0	0	0	102	--	--	--	--	0.38	
BONNEVILLE																									
Tanner Creek:																									
H	1990 075748	Bonneville	Tanner Cr	04/27/92	26,749	819,660	36.90	0	0	11	0	0	16	13	3	6	9	0	5	7	252	0	0	0	1.20
H	1990 075747	Bonneville	Tanner Cr	04/27/92	28,692	345,410	41.60	0	0	0	0	0	89	26	3	13	5	14	44	60	441	0	0	0	2.42
H	1990 075749	Bonneville	Tanner Cr	06/01/92	27,001	1,011,595	30.60	0	0	0	0	0	3	5	0	0	0	0	2	0	15	0	0	0	0.09
H	1991 071533	Bonneville	Tanner Cr	05/17/93	27,011	344,180	31.94	3	0	6	0	0	2	0	0	0	0	0	10	688	0	0	0	2.62	
H	1991 071534	Bonneville	Tanner Cr	06/08/93	28,042	767,584	33.10	0	0	14	0	0	0	0	0	0	0	0	0	573	0	0	0	2.09	
H	1992 074936	Bonneville	Tanner Cr	04/19/94	26,606	871,511	28.52	0	0	0	0	0	8	3	0	0	0	0	2	6	65	0	0	0	0.32
H	1992 075130	Bonneville	Tanner Cr	05/31/94	11,937	165,957	38.11	0	0	18	0	0	5	3	0	0	0	0	2	86	0	0	0	0.96	
H	1993 075445	Bonneville	Tanner Cr	04/26/95	26,529	274,691	33.35	0	0	0	0	0	8	6	0	0	0	0	4	18	227	0	0	0	0.99
H	1993 075446	Bonneville	Tanner Cr	06/09/95	25,407	1,004,506	40.50	0	0	3	0	0	2	6	0	0	0	0	0	0	200	0	0	0	0.83
H	1994 075413	Bonneville	Tanner Cr	02/12/96	23,615	332,739	29.92	0	0	0	0	0	0	0	0	0	0	0	1	14	0	0	0	0.06	
H	1994 075414	Bonneville	Tanner Cr	06/07/96	25,080	887,011	36.19	0	0	0	0	0	6	2	0	0	0	0	0	472	0	0	0	1.91	
H	1995 091817	Bonneville	Tanner Cr	04/24/97	28,488	332,386	40.49	0	0	0	0	0	10	2	0	0	0	0	11	324	0	0	0	1.22	
H	1995 091819	Bonneville	Tanner Cr	05/12/97	27,842	782,863	31.06	0	0	0	0	0	3	0	0	0	0	0	0	56	0	0	0	0.21	

Appendix Table 1. Continued.

STOCK GROUP,			Ocean Catch																						
stock, (source H, N, M),			Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.			
brood, tagcode	Hatchery	Release Site		CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+	
BONNEVILLE (Continued)																									
Tanner Creek:																									
H	1996 092307	Bonneville	Tanner Cr	04/30/98	20,478	292,480	45.36	0	0	0	0	0	20	4	0	5	1	0	0	4	248	0	0	0	1.38
H	1996 092303	Bonneville	Tanner Cr	06/04/98	21,814	698,556	37.80	0	0	0	0	0	0	0	0	0	0	0	0	0	63	0	0	0	0.29
H	1997 092418	Bonneville	Tanner Cr	04/30/99	25,196	377,983	35.16	0	0	0	0	14	11	1	12	8	0	0	11	529	0	0	--	--	2.33
H	1997 092421	Bonneville	Tanner Cr	06/01/99	25,855	938,448	32.39	0	0	0	0	6	2	0	2	3	0	0	0	298	0	0	--	--	1.20
H	1998 092726	Bonneville	Tanner Cr	05/02/00	26,133	394,966	34.89	0	0	0	0	42	26	6	10	10	0	0	42	824	0	--	--	--	3.67
H	1998 092715	Bonneville	Tanner Cr	06/02/00	26,888	781,116	37.80	0	0	0	0	145	63	16	15	42	0	0	9	1602	0	--	--	--	7.04
H	1999 093012	Bonneville	Tanner Cr	04/30/01	24,631	416,801	35.72	0	0	0	0	41	19	2	12	4	5	0	19	740	--	--	--	--	3.42
H	1999 092733	Bonneville	Tanner Cr	05/31/01	26,292	832,854	32.40	0	0	0	0	41	13	2	13	6	0	0	0	505	--	--	--	--	2.21
H	2000 093345	Bonneville	Tanner Cr	04/01/02	26,933	398,943	34.57	0	0	0	0	0	0	0	0	0	0	0	45	--	--	--	--	--	0.17
H	2000 093014	Bonneville	Tanner Cr	05/01/02	25,439	799,266	31.24	0	0	0	0	0	0	0	0	0	0	0	15	--	--	--	--	--	0.06
COOS RIVER																									
Coos River:																									
M	1990 075610	Noble Creek	Noble Cr	04/27/92	20,645	31,005	38.76	0	0	9	0	0	2	4	2	11	16	3	54	99	44	0	0	0	1.18
M	1991 076006	Butte Falls	Noble Cr	04/09/93	20,792	86,030	42.78	0	0	20	0	4	0	0	0	0	0	0	3	86	0	0	0	0	0.54
M	1992 070247	Butte Falls	Noble Cr	04/13/94	24,986	41,836	35.43	0	0	0	0	0	0	0	0	0	0	0	3	100	0	0	0	0	0.41
M	1993 075250	Noble Creek	Noble Cr	03/30/95	23,877	70,871	34.86	0	0	4	0	0	2	0	0	0	0	0	6	5	41	0	0	0	0.24
M	1994 075332	Noble Creek	Noble Cr	03/26/96	25,348	65,298	37.40	0	0	0	0	3	0	0	0	0	0	0	2	37	0	0	0	0	0.17
M	1995 071356	Cole Rivers	Noble Cr	03/31/97	26,158	70,540	37.17	0	0	0	0	4	0	0	0	0	0	0	30	29	0	0	0	0	0.24
M	1996 092001	Noble Creek	Noble Cr	03/31/98	26,861	73,799	39.10	0	0	0	0	3	0	0	0	3	0	0	1	94	0	0	0	0	0.38
M	1997 091921	Noble Creek	Noble Cr	03/30/99	25,624	118,648	36.28	0	0	0	0	0	0	0	2	2	0	0	6	23	0	0	--	--	0.13
M	1998 092335	Noble Creek	Noble Cr	04/05/00	28,133	122,350	41.24	0	0	0	0	0	0	2	0	8	0	0	61	223	0	--	--	--	1.05
H	1999 092955	Noble Creek	Noble Cr	03/30/01	26,343	119,024	38.77	0	0	0	0	16	0	5	2	5	0	0	112	194	--	--	--	--	1.27
M	2000 093230	Noble Creek	Noble Cr	03/18/02	28,983	126,617	21.46	0	0	0	0	0	0	0	0	0	0	0	68	--	--	--	--	--	0.23
COQUILLE RIVER																									
Coquille River:																									
H	1990 075612	Bandon	Ferry Cr	04/29/92	26,175	49,075	44.00	0	0	0	0	5	0	0	3	5	7	60	39	264	0	0	0	0	1.46
H	1991 076004	Butte Falls	Coquille R	05/06/93	25,565	43,932	39.78	0	0	0	0	0	0	0	0	0	0	0	2	30	0	0	0	0	0.13
H	1992 070245	Bandon	Coquille R	05/06/94	23,398	49,153	43.61	0	0	0	0	0	0	0	0	0	0	0	2	6	0	0	0	0	0.03
H	1993 075248	Butte Falls	Sevenmile Cr	04/09/95	23,819	93,545	37.15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.00
M	1994 075736	Butte Falls	Sevenmile Cr	04/17/96	20,727	23,575	39.03	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	0.03
M	1995 070944	Bandon	Coquille R	04/21/97	22,687	26,299	39.44	0	0	0	0	0	0	0	0	0	0	0	39	44	0	0	0	0	0.37
M	1996 091962	Bandon	Ferry Cr	04/23/98	26,065	57,731	38.44	0	0	0	0	0	0	0	1	3	0	0	51	179	0	0	0	0	0.90
M	1997 091919	Butte Falls	Ferry Cr	04/20/99	27,640	28,751	42.78	0	0	0	0	0	0	0	8	2	0	0	75	461	0	0	--	--	1.98
M	1998 092435	Bandon	Ferry Cr	04/18/00	24,844	26,207	41.61	0	0	0	0	4	0	0	0	9	0	0	606	414	0	--	--	--	4.16
M	1999 092957	Bandon	Ferry Cr	04/27/01	25,688	25,737	37.80	0	0	0	0	0	0	0	3	0	0	0	11	11	--	--	--	--	0.10
M	2000 093235	Bandon	Ferry Cr	04/24/02	29,044	29,632	40.79	0	0	0	0	0	0	0	0	0	0	0	81	--	--	--	--	--	0.28

Appendix Table 1. Continued.

STOCK GROUP,				Ocean Catch																					
stock, (source H, N, M),				Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.		
brood, tagcode	Hatchery	Release Site	Date		CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+
EAST FORK TRASK RIVER																									
Trask River:																									
H	1990 075750	Trask R Pond	EF of SF Trask R	04/15/92	26,139	630,346	35.20	0	0	0	0	0	50	7	0	7	4	10	15	9	52	0	0	0	0.59
H	1991 074923	Trask R Pond	EF of SF Trask R	04/15/93	26,985	683,133	37.17	0	0	3	0	0	0	0	0	0	0	0	0	3	96	0	0	0	0.38
H	1992 075137	Trask R Pond	EF of SF Trask R	04/18/94	25,234	844,161	41.61	0	0	3	0	0	0	2	0	0	0	0	0	4	110	0	0	0	0.47
EEL LAKE																									
Eel Lake:																									
H	1990 075614	Butte Falls	Eel Lk	10/04/91	26,129	100,465	15.75	0	0	0	0	0	3	0	0	0	0	7	27	19	0	0	0	0	0.21
H	1990 075613	Butte Falls	Eel Lk	03/05/92	26,276	83,241	38.80	0	0	0	0	0	3	3	2	9	17	16	30	64	0	0	0	0	0.55
H	1991 076005	Butte Falls	Eel Lk	03/05/93	24,316	120,978	31.06	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04
H	1992 070246	Butte Falls	Eel Lk	03/04/94	26,200	122,950	34.36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
KLASKANINE RIVER																									
Klaskanine River:																									
H	1990 074520	Klaskanine	Klaskanine R, NF	05/11/92	10,874	341,002	33.10	0	0	0	0	0	20	3	2	0	0	0	2	2	22	0	0	0	0.47
H	1990 074644	Klaskanine	Klaskanine R, NF	05/11/92	10,627	340,755	33.10	0	0	0	0	0	14	0	0	1	2	0	0	0	17	0	0	0	0.32
H	1990 074645	Klaskanine	Klaskanine R, NF	05/11/92	9,640	339,701	33.10	0	0	0	0	0	2	3	1	0	3	0	2	0	21	0	0	0	0.33
H	1991 074832	Klaskanine	Klaskanine R, NF	05/16/93	25,977	848,853	33.35	6	0	3	0	1	0	0	0	0	0	0	0	0	74	0	0	0	0.32
H	1992 070362	Klaskanine	Klaskanine R, NF	04/15/94	26,574	831,887	37.48	0	0	7	0	0	5	3	0	0	0	0	0	2	67	0	0	0	0.32
H	1994 075415	Klaskanine	Klaskanine R, NF	04/07/96	24,974	837,355	44.88	0	0	0	0	0	3	3	0	0	0	0	0	16	108	0	0	0	0.52
Kalama River:																									
H	1993 075262	Klaskanine	Klaskanine R, NF	04/04/95	26,279	1,201,313	43.99	0	2	0	0	0	8	3	0	0	0	0	0	28	94	0	0	0	0.51
METHOW RIVER																									
Tanner Creek:																									
H	1998 092721	Winthrop NFH	Methow R (WA)	05/15/00	26,470	199,763	26.68	0	0	0	0	0	29	5	2	9	5	0	0	1	103	0	--	--	0.58
H	1999 093011	Leavenworth NFH	Methow R (WA)	05/15/01	25,576	26,083	23.87	0	0	0	0	0	1	0	0	0	0	0	0	0	4	--	--	--	0.02
H	2000 093326	Winthrop NFH	Methow R (WA)	04/30/02	24,302	25,053	23.26	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	0.00
NEHALEM RIVER																									
Fishhawk Lake (Nehalem River):																									
H	1990 074932	Nehalem	Nehalem R, N Fk	02/14/92	26,918	137,075	23.70	0	0	0	0	0	24	6	3	1	4	12	38	85	71	0	0	0	0.91
H	1990 074935	Nehalem	Nehalem R, N Fk	04/13/92	26,918	626,476	35.20	0	4	35	0	0	69	22	2	17	8	12	69	43	150	0	0	0	1.60
H	1993 075251	Nehalem	Nehalem R, N Fk	01/30/95	26,823	214,335	25.31	0	0	0	0	0	7	0	0	0	0	0	1	26	0	0	0	0	0.13
H	1993 075252	Nehalem	Nehalem R, N Fk	04/15/95	26,559	575,648	31.05	0	0	6	0	0	13	3	0	0	3	0	3	13	191	0	0	0	0.87
H	1996 092003	Nehalem	Nehalem R, N Fk	03/31/98	24,934	76,980	32.63	0	0	0	0	0	6	2	0	4	1	0	0	118	142	0	0	0	1.09
H	1996 092002	Nehalem	Nehalem R, N Fk	04/24/98	24,110	63,749	31.72	0	0	0	0	0	0	0	0	0	1	0	9	62	171	0	0	0	1.01

Appendix Table 1. Continued.

STOCK GROUP,				Ocean Catch																					
stock, (source H, N, M),		Release Site	Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.			
brood, tagcode	Hatchery			CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+	
NEHALEM RIVER (Continued)																									
Fishhawk Lake (Nehalem River):																									
H	1999 092960	Nehalem	Nehalem R, N Fk	03/15/01	24,643	76,472	29.65	0	0	0	0	0	12	2	2	7	10	0	5	120	247	--	--	--	1.64
H	1999 092961	Nehalem	Nehalem R, N Fk	04/16/01	24,777	77,197	32.17	0	0	0	0	0	29	11	7	9	11	0	0	81	264	--	--	--	1.66
North Fork Nehalem & tribs:																									
H	1991 074918	Nehalem	Nehalem R, N Fk	03/03/93	27,486	130,299	26.99	0	0	0	0	0	0	0	0	0	0	0	0	0	46	0	0	0	0.17
H	1991 074920	Nehalem	Nehalem R, N Fk	04/13/93	26,938	565,166	31.06	0	0	6	0	0	0	0	0	0	0	0	0	0	170	0	0	0	0.65
H	1992 070316	Nehalem	Nehalem R, N Fk	02/28/94	26,148	212,527	31.71	3	0	0	0	0	3	3	0	0	0	0	4	6	57	0	0	0	0.29
H	1992 070317	Nehalem	Nehalem R, N Fk	04/15/94	26,169	626,987	31.94	0	0	0	0	0	4	3	0	0	0	0	9	1	88	0	0	0	0.40
H	1994 075339	Nehalem	Nehalem R, N Fk	03/15/96	26,472	136,681	30.53	0	0	0	0	0	1	0	0	0	0	0	4	9	70	0	0	0	0.32
H	1994 075410	Nehalem	Nehalem R, N Fk	04/15/96	25,233	499,838	31.61	0	0	0	0	0	5	0	0	0	0	0	6	113	0	0	0	0	0.49
H	1995 071331	Nehalem	Nehalem R, N Fk	03/14/97	25,458	113,282	31.72	0	0	0	0	0	0	0	0	0	0	0	1	49	0	0	0	0	0.20
H	1995 091732	Nehalem	Nehalem R, N Fk	04/15/97	25,715	462,874	32.87	0	0	0	0	0	0	0	0	0	0	0	6	2	92	0	0	0	0.39
H	1997 091924	Nehalem	Nehalem R, N Fk	03/15/99	26,279	77,743	31.49	0	0	0	0	0	0	2	1	2	2	0	0	6	58	0	0	--	0.27
H	1997 091925	Nehalem	Nehalem R, N Fk	04/15/99	26,780	83,015	35.16	0	0	0	0	0	0	1	0	0	1	0	0	1	60	0	0	--	0.24
H	1998 092723	Nehalem	Nehalem R, N Fk	03/15/00	25,691	78,430	30.24	0	0	0	0	0	13	9	0	3	4	0	5	50	482	0	--	--	2.20
H	1998 092724	Nehalem	Nehalem R, N Fk	04/12/00	26,126	79,036	32.87	0	0	0	0	5	31	2	0	3	7	0	0	36	783	0	--	--	3.32
H	2000 093238	Nehalem	Nehalem R, N Fk	03/15/02	23,521	128,461	29.26	0	0	0	0	0	0	0	0	0	0	0	0	3	--	--	--	--	0.01
H	2000 093239	Nehalem	Nehalem R, N Fk	04/15/02	24,165	127,342	31.45	0	0	0	0	0	0	0	0	0	0	0	0	7	--	--	--	--	0.03
NESTUCCA RIVER																									
Trask River:																									
H	1990 075731	Cedar Creek	Three R	05/21/92	23,847	42,824	42.80	0	0	0	0	0	3	1	4	7	3	0	15	0	39	0	0	0	0.30
NORTH UMPQUA RIVER																									
Cow Creek (South Umpqua):																									
M	2000 093234	Rock Creek	Rock Cr	04/16/02	28,680	54,520	38.05	0	0	0	0	0	0	0	0	0	0	0	0	2	--	--	--	--	0.01
Umpqua River:																									
M	1990 074937	Rock Creek	Rock Cr	04/04/92	26,151	77,713	45.40	0	0	9	0	0	26	5	3	25	23	26	162	8	172	1	0	0	1.76
M	1990 074938	Rock Creek	Rock Cr	05/07/92	25,964	77,480	45.40	0	0	0	0	0	7	0	0	10	14	7	39	0	61	0	0	0	0.53
H	1991 071422	Rock Creek	Rock Cr	04/21/93	25,267	76,916	43.19	0	0	6	0	0	0	0	0	0	0	0	0	0	208	0	0	0	0.85
H	1991 071423	Rock Creek	Rock Cr	05/19/93	25,763	76,685	46.28	0	0	8	0	0	0	0	0	0	0	0	0	0	96	0	0	0	0.40
H	1992 070319	Rock Creek	Rock Cr	04/11/94	27,419	75,382	40.13	0	0	4	0	0	4	0	0	1	0	0	0	5	125	0	0	0	0.51
H	1992 070320	Rock Creek	Rock Cr	05/16/94	26,532	73,758	44.03	0	0	6	0	0	2	3	0	0	0	0	6	0	61	0	0	0	0.29
H	1993 075260	Rock Creek	Rock Cr	04/09/95	25,380	69,180	45.31	0	0	4	0	0	2	2	0	0	0	0	2	33	0	0	0	0	0.17
H	1993 075261	Rock Creek	Rock Cr	05/04/95	25,252	63,313	46.71	0	1	0	0	0	4	0	0	0	1	0	4	0	34	0	0	0	0.17
H	1994 075411	Rock Creek	Rock Cr	04/05/96	23,623	77,743	44.88	0	0	0	0	0	0	0	0	7	0	0	7	2	74	0	0	0	0.38
H	1994 075412	Rock Creek	Rock Cr	05/06/96	25,097	76,075	45.33	0	0	0	0	0	0	0	0	0	0	0	3	1	49	1	0	0	0.22

Appendix Table 1. Continued.

STOCK GROUP,			Ocean Catch																											
stock, (source H, N, M),			Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.								
brood,	tagcode	Hatchery		CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+						
NORTH UMPQUA RIVER (Continued)																														
Umpqua River:																														
H	1995	091811	Rock Creek	Rock Cr	04/04/97	24,700	52,321	45.35	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	4	9	112	0	0	0	0.53
H	1995	091812	Rock Creek	Rock Cr	04/28/97	24,930	52,452	45.35	0	0	0	0	0	0	1	0	0	0	0	5	0	0	5	105	0	0	0	0	0	0.47
H	1996	092004	Rock Creek	Rock Cr	04/01/98	27,017	73,804	45.36	0	0	0	0	0	4	3	1	16	4	0	11	20	180	0	0	0	0	0	0	0.88	
H	1996	092005	Rock Creek	Rock Cr	05/04/98	27,375	69,761	45.82	0	0	0	0	0	6	0	0	0	2	0	0	4	68	0	0	0	0	0	0	0.29	
H	1997	091926	Rock Creek	Rock Cr	04/01/99	28,062	42,896	42.78	0	0	0	0	0	5	3	0	27	4	0	0	7	45	0	0	--	--	--	0.32		
H	1997	091918	Rock Creek	Rock Cr	04/30/99	28,440	71,242	45.35	0	0	0	0	0	15	12	0	34	26	3	0	8	96	0	0	--	--	--	0.68		
H	1998	092725	Rock Creek	Rock Cr	04/10/00	25,578	52,353	46.28	0	0	0	0	0	29	14	4	8	35	0	9	0	79	0	--	--	--	0.70			
H	1998	092661	Butte Falls	Rock Cr	04/28/00	23,718	65,350	45.82	0	0	0	0	0	3	18	0	2	14	0	0	4	37	1	--	--	--	0.33			
M	1999	093208	Rock Creek	Rock Cr	03/29/01	24,929	50,219	36.58	0	0	0	0	0	11	0	2	5	6	0	0	1	7	--	--	--	--	0.13			
M	2000	093236	Rock Creek	Rock Cr	04/16/02	28,954	60,658	38.12	0	0	0	0	0	0	0	0	0	0	0	0	1	--	--	--	--	--	0.00			
ROGUE RIVER																														
Rogue River:																														
H	1990	075615	Cole Rivers	Rogue R	04/30/92	27,154	208,340	42.80	0	0	0	0	0	0	0	0	0	0	0	3	14	5	81	0	0	0	0	0.38		
H	1991	071527	Cole Rivers	Rogue R	04/27/93	51,398	52,721	44.46	0	0	6	0	0	0	0	0	0	0	0	0	144	1507	0	0	0	0	0	3.22		
H	1991	071528	Cole Rivers	Rogue R	04/27/93	51,413	52,576	44.90	0	0	0	0	0	0	0	0	0	0	0	3	151	1567	2	0	0	0	3.35			
H	1991	071526	Cole Rivers	Rogue R	04/27/93	50,706	52,682	47.74	0	0	0	0	0	0	0	0	0	0	0	2	212	1573	0	0	0	0	3.52			
H	1991	075950	Cole Rivers	Rogue R	04/28/93	26,269	26,894	46.75	0	0	0	0	0	0	0	0	0	0	0	5	101	732	0	0	0	0	3.19			
H	1992	076356	Cole Rivers	Rogue R	04/27/94	25,477	26,306	42.79	0	0	0	0	0	3	0	0	0	0	6	0	136	1090	0	0	0	0	4.85			
H	1992	076357	Cole Rivers	Rogue R	04/27/94	25,150	25,904	42.79	0	0	0	0	0	0	0	0	0	0	0	6	106	1071	0	0	0	0	4.70			
H	1992	076358	Cole Rivers	Rogue R	04/27/94	23,816	24,530	42.79	0	0	0	0	0	0	0	0	1	0	0	8	100	1045	0	0	0	0	4.85			
H	1992	076354	Cole Rivers	Rogue R	04/28/94	25,626	26,571	43.20	0	0	0	0	0	1	4	0	1	0	0	14	88	1038	0	0	0	0	4.47			
H	1992	076355	Cole Rivers	Rogue R	04/28/94	25,555	26,497	43.20	0	0	0	0	0	0	0	0	0	0	0	4	88	930	0	0	0	0	4.00			
H	1992	076359	Cole Rivers	Rogue R	04/28/94	24,911	25,622	45.82	0	0	0	0	0	0	0	0	1	0	2	7	91	1085	0	0	0	0	4.76			
H	1992	076360	Cole Rivers	Rogue R	04/28/94	25,712	26,447	45.82	0	0	0	0	0	0	0	0	0	0	3	11	105	1145	0	0	0	0	4.92			
H	1993	070643	Cole Rivers	Rogue R	05/01/95	25,624	25,988	43.61	0	0	0	0	0	0	0	0	0	0	0	4	83	1019	0	0	0	0	4.32			
H	1993	070644	Cole Rivers	Rogue R	05/01/95	26,143	26,514	43.61	0	0	0	0	0	0	0	0	0	0	0	0	80	917	0	0	0	0	3.81			
H	1993	070641	Cole Rivers	Rogue R	05/01/95	25,224	26,220	44.04	0	0	0	0	0	1	0	0	0	0	3	0	93	1014	0	0	0	0	4.40			
H	1993	070642	Cole Rivers	Rogue R	05/01/95	25,529	26,537	44.04	0	0	0	0	0	0	0	0	0	0	0	0	97	872	0	0	0	0	3.80			
H	1993	070646	Cole Rivers	Rogue R	05/02/95	26,783	26,907	43.20	0	0	0	0	0	2	0	0	0	0	3	6	69	1005	0	0	0	0	4.05			
H	1993	070640	Cole Rivers	Rogue R	05/02/95	25,485	26,015	44.91	0	0	0	0	0	0	0	0	0	0	0	0	107	938	1	0	0	0	4.10			
M	1994	071221	Cole Rivers	Rogue R	04/29/96	104,419	107,441	41.98	0	0	0	0	0	0	0	0	0	2	7	7	408	3947	1	0	0	0	4.19			
M	1994	071116	Cole Rivers	Rogue R	04/30/96	96,712	96,922	39.23	0	0	0	0	0	3	0	0	0	0	8	27	301	3454	0	0	0	0	3.92			
M	1995	071044	Cole Rivers	Rogue R	04/29/97	26,907	166,790	43.20	0	0	0	0	0	0	0	0	0	0	0	0	114	350	0	0	0	0	1.72			
H	1996	092263	Cole Rivers	Rogue R	04/27/98	27,950	187,896	45.36	0	0	0	0	0	0	0	0	0	0	0	4	102	522	0	0	0	0	2.25			
H	1997	092541	Cole Rivers	Rogue R	04/28/99	25,859	180,994	44.46	0	0	0	0	0	0	0	0	0	7	0	4	108	986	0	0	--	--	4.27			
M	1998	092910	Cole Rivers	Rogue R	04/26/00	26,262	146,457	43.20	0	0	0	0	0	0	0	0	3	10	0	0	339	1695	0	--	--	--	7.79			

Appendix Table 1. Continued.

STOCK GROUP,			Ocean Catch																						
stock, (source H, N, M),			Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.			
brood, tagcode	Hatchery	Release Site		CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+	
ROGUE RIVER (Continued)																									
Rogue River:																									
M	1999 093150	Cole Rivers	Rogue R	05/01/01	26,956	182,876	44.47	0	0	0	0	0	2	0	0	3	0	0	0	121	1178	--	--	--	4.84
M	2000 093306	Cole Rivers	Rogue R	04/30/02	33,560	174,744	44.82	0	0	0	0	0	0	0	0	0	0	0	0	219	--	--	--	--	0.65
SALMON RIVER																									
Salmon River:																									
H	1990 074922	Salmon River	Salmon R	04/30/92	27,226	255,933	38.10	0	0	6	0	0	11	5	1	15	2	7	11	27	74	0	0	0	0.58
H	1991 076008	Salmon River	Salmon R	05/07/93	25,548	405,164	39.78	0	0	10	0	0	0	0	0	0	0	0	0	0	70	0	0	0	0.31
H	1992 070260	Salmon River	Salmon R	05/04/94	19,553	403,118	42.78	0	0	0	0	0	5	4	0	0	0	0	2	13	25	0	0	0	0.25
H	1993 075253	Salmon River	Salmon R	04/30/95	25,050	316,281	42.35	0	0	8	0	0	2	0	0	0	0	0	0	4	87	0	0	0	0.40
H	1994 075331	Salmon River	Salmon R	04/30/96	25,993	322,200	40.43	0	0	0	0	0	0	0	0	0	0	0	0	8	52	0	0	0	0.23
H	1995 071240	Salmon River	Salmon R	04/30/97	21,356	200,206	50.96	2	0	0	0	0	6	0	0	0	0	0	0	10	109	0	0	0	0.59
H	1996 091960	Salmon River	Salmon R	04/28/98	24,902	118,361	48.77	0	0	0	0	0	6	2	0	7	0	0	0	18	152	0	0	0	0.74
SANDY RIVER																									
Sandy River:																									
H	1990 075720	Sandy	Cedar Cr	05/01/92	28,699	29,130	29.80	0	0	10	0	0	62	30	3	4	3	0	18	3	139	0	0	0	0.95
H	1990 075724	Sandy	Cedar Cr	05/01/92	28,368	28,797	29.80	0	0	3	0	0	71	21	1	12	2	4	10	2	145	0	0	0	0.96
H	1990 075725	Sandy	Cedar Cr	06/02/92	28,377	355,669	30.00	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	0	0.01
H	1990 075726	Sandy	Cedar Cr	06/02/92	27,553	369,409	30.00	0	0	0	0	6	0	0	0	0	0	0	0	0	2	0	0	0	0.03
H	1991 075951	Sandy	Cedar Cr	05/02/93	52,320	247,121	30.44	0	0	27	4	0	0	0	0	0	0	0	5	1	473	0	0	0	0.97
H	1991 071531	Sandy	Cedar Cr	06/02/93	27,473	259,210	30.23	0	0	13	4	0	0	0	0	0	0	0	0	0	219	0	0	0	0.86
H	1991 071532	Sandy	Cedar Cr	06/02/93	27,003	260,055	30.23	0	0	23	0	0	0	0	0	0	0	0	0	0	197	0	0	0	0.81
H	1992 075126	Sandy	Cedar Cr	04/04/94	22,071	54,611	22.68	0	0	0	0	0	11	3	0	0	0	0	0	0	50	0	0	0	0.29
H	1992 074933	Sandy	Cedar Cr	04/04/94	23,758	170,622	24.00	0	0	0	0	0	7	3	2	0	0	0	0	1	49	0	0	0	0.26
H	1992 070239	Sandy	Cedar Cr	05/03/94	48,070	272,188	30.23	0	0	20	0	0	24	0	0	0	0	0	0	1	65	0	0	0	0.23
H	1992 074934	Sandy	Cedar Cr	06/01/94	22,862	59,590	30.44	0	0	29	0	0	25	4	0	0	0	0	0	0	120	0	0	0	0.78
H	1992 075127	Sandy	Cedar Cr	06/01/94	23,046	241,271	30.85	0	0	24	0	0	25	0	0	0	0	0	0	0	109	0	0	0	0.69
H	1993 070552	Sandy	Cedar Cr	04/09/95	50,982	54,686	32.87	0	0	4	0	0	22	0	0	0	0	0	0	12	259	0	0	0	0.58
H	1993 070551	Sandy	Cedar Cr	05/03/95	55,510	57,924	30.04	0	0	0	0	0	6	0	0	0	0	0	0	0	49	0	0	0	0.10
H	1994 070839	Sandy	Cedar Cr	03/27/96	27,601	70,156	30.53	0	0	0	0	0	0	2	0	0	0	0	0	9	36	0	0	0	0.17
H	1994 070840	Sandy	Cedar Cr	03/27/96	27,221	69,120	31.17	0	0	0	0	0	0	0	0	0	0	0	3	7	38	0	0	0	0.18
H	1994 070837	Sandy	Cedar Cr	05/06/96	27,133	124,717	30.53	0	0	0	0	0	0	0	0	0	0	4	0	13	106	0	0	0	0.45
H	1994 070838	Sandy	Cedar Cr	05/06/96	27,393	124,797	31.38	0	0	0	0	0	6	0	0	0	0	0	0	16	131	0	0	0	0.56
H	1995 070843	Sandy	Cedar Cr	04/07/97	27,492	194,817	29.26	0	0	0	0	0	2	0	0	0	0	0	0	4	141	0	0	0	0.53
H	1995 070844	Sandy	Cedar Cr	04/07/97	27,459	195,252	29.45	0	0	0	0	0	6	7	0	0	0	0	0	4	161	0	0	0	0.65
H	1995 091838	Sandy	Cedar Cr	05/05/97	29,337	233,740	30.03	0	0	0	0	0	2	7	0	0	0	0	0	1	211	0	0	0	0.75
H	1996 092332	Sandy	Cedar Cr	04/15/98	29,251	135,391	29.65	0	0	0	0	0	14	5	0	2	0	0	0	14	147	0	0	0	0.62
H	1996 092333	Sandy	Cedar Cr	05/14/98	29,770	120,211	31.28	0	0	0	0	0	11	3	0	0	2	0	0	1	68	0	0	0	0.29

Appendix Table 1. Continued.

STOCK GROUP,				Ocean Catch																						
stock, (source H, N, M),				Release Date	Number Released		Size (gm)	Oregon Areas											Freshwater Recoveries					% Surv.		
brood,	tagcode	Hatchery	Release Site		CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4	5		6+	
SANDY RIVER (Continued)																										
Sandy River:																										
H	1997	092432	Sandy	Cedar Cr	04/15/99	26,383	364,796	30.44	0	0	0	0	0	47	15	0	23	9	0	0	23	476	0	0	--	2.25
H	1997	092433	Sandy	Cedar Cr	05/14/99	27,760	232,964	31.71	0	0	0	0	11	20	0	2	3	0	0	9	351	0	0	--	1.43	
H	1998	092727	Sandy	Cedar Cr	04/18/00	26,254	402,526	30.24	0	0	0	0	80	26	5	10	19	0	0	19	695	0	--	--	3.25	
H	1998	092728	Sandy	Cedar Cr	05/15/00	26,491	332,020	30.77	0	0	0	0	110	35	2	25	32	0	0	11	711	0	--	--	3.50	
H	1999	093218	Sandy	Cedar Cr	04/19/01	26,426	365,588	30.65	0	33	0	0	7	59	23	6	18	24	0	0	11	373	--	--	--	2.10
H	1999	092748	Sandy	Cedar Cr	05/16/01	70,665	70,665	31.13	0	0	0	0	136	41	16	31	30	0	6	7	810	--	--	--	1.52	
H	1999	093221	Sandy	Cedar Cr	05/16/01	26,462	254,724	31.50	0	0	0	0	37	16	0	12	18	0	4	3	208	--	--	--	1.13	
H	2000	093353	Sandy	Cedar Cr	04/18/02	27,633	518,036	30.59	0	0	0	0	0	0	0	0	0	0	0	21	--	--	--	--	0.08	
H	2000	093354	Sandy	Cedar Cr	05/16/02	26,889	316,698	32.33	0	0	0	0	0	0	0	0	0	0	0	8	--	--	--	--	0.03	
SILETZ RIVER																										
Siletz River:																										
H	1990	074921	Salmon River	Rock Cr, L	03/17/92	26,985	403,303	31.30	0	0	0	0	9	4	7	1	10	0	31	7	91	0	0	0	0.59	
H	1990	074919	Salmon River	Siletz R	05/05/92	26,460	376,541	30.90	0	0	0	0	0	0	0	0	0	3	6	0	3	0	0	0	0.05	
H	1991	071519	Salmon River	Rock Cr, L	03/23/93	24,852	371,014	31.06	0	0	4	0	0	0	0	0	0	0	0	0	45	0	0	0	0.20	
H	1991	071520	Salmon River	Siletz R	04/07/93	25,560	374,192	31.06	0	0	3	0	0	0	0	0	0	0	0	0	5	0	0	0	0.03	
H	1992	070259	Salmon River	Rock Cr, L	03/22/94	25,062	420,338	35.16	0	0	0	0	0	0	0	0	0	0	1	34	0	0	0	0	0.14	
H	1992	070258	Salmon River	Rock Cr, L	04/27/94	24,402	400,492	38.11	0	0	0	0	0	0	1	0	0	0	0	0	6	0	0	0	0.03	
H	1993	075254	Salmon River	Rock Cr, L	04/11/95	25,878	312,144	39.75	0	0	0	0	0	0	0	0	0	0	5	0	23	0	0	0	0.11	
SILETZ RIVER, SALMON RIVER RELEASE																										
Siletz River:																										
H	1996	092150	Salmon River	Salmon & Siletz	05/06/98	11,092	112,378	42.79	0	0	0	0	0	0	0	0	0	0	4	6	57	0	0	0	0.60	
H	1996	092151	Salmon River	Salmon R	05/15/98	15,955	162,282	53.36	0	0	0	0	10	0	2	2	0	0	0	16	130	0	0	0	1.00	
H	1997	091923	Salmon River	Salmon R	05/07/99	25,694	85,402	41.45	0	0	0	0	0	0	0	6	5	0	0	4	50	0	0	--	0.25	
H	1998	092722	Salmon River	Salmon R	06/02/00	9,318	9,626	51.54	0	0	0	0	0	0	0	3	6	0	0	8	152	0	--	--	1.81	
H	1999	092959	Salmon River	Salmon R	05/01/01	24,146	173,834	43.20	0	0	0	0	10	0	2	0	6	0	0	2	263	--	--	--	1.17	
H	2000	093237	Salmon River	Salmon R	05/03/02	24,880	167,800	39.37	0	0	0	0	0	0	0	0	0	0	0	43	--	--	--	--	0.17	
SIUSLAW RIVER																										
Tahkenitch Lake:																										
N	1990	075817	Fall Creek	Siuslaw R	02/24/92	26,081	27,360	31.50	0	0	6	0	0	9	11	2	6	2	4	36	2	31	0	0	0	0.42
N	1991	076009	Fall Creek	Siuslaw R	03/22/93	25,013	54,782	27.49	0	0	0	0	0	0	0	0	0	0	0	1	14	0	0	0	0.06	
N	1992	070363	Fall Creek	Siuslaw R	02/17/94	24,585	51,319	28.34	0	0	3	0	0	5	0	0	2	0	0	11	7	8	0	0	0	0.15
N	1993	070763	Fall Creek	Siuslaw R	02/09/95	25,273	54,407	31.48	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.00	
N	1994	075338	Fall Creek	Siuslaw R	03/07/96	25,091	48,758	29.14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
Siuslaw River:																										
H	1995	076113	Fall Creek	Siuslaw R	02/18/97	29,181	45,670	31.28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00

Appendix Table 1. Continued.

STOCK GROUP,			Ocean Catch																						
stock, (source H, N, M),			Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.			
brood, tagcode	Hatchery	Release Site		CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+	
SMITH RIVER																									
Umpqua River:																									
N	1990 075019	Gardiner Cr	Gardiner Cr	03/11/92	14,671	14,671	50.39	0	0	0	0	0	5	5	0	7	8	0	12	0	27	0	0	0	0.44
H	1991 074453	Gardiner Cr	Gardiner Cr	03/17/93	12,140	12,201	45.36	0	5	0	0	0	0	0	0	0	0	0	0	1	19	0	0	0	0.21
Smith River:																									
M	1994 070451	Gardiner Cr	Gardiner Cr	04/08/96	10,336	10,438	56.69	0	0	0	0	0	0	0	0	0	0	0	7	0	38	0	0	0	0.44
M	1995 092125	Gardiner Cr	Gardiner Cr	04/15/97	12,674	12,674	45.35	0	0	0	0	0	3	0	0	0	0	0	0	5	59	0	0	0	0.53
SOUTH UMPQUA RIVER																									
Umpqua River:																									
M	1990 075609	Butte Falls	Umpqua R, S Fk	04/23/92	26,287	133,916	45.40	0	0	2	0	0	13	2	0	11	9	3	27	0	31	0	0	0	0.37
Cow Creek (South Umpqua):																									
M	1991 076007	Butte Falls	Umpqua R, S Fk	05/07/93	27,462	132,234	44.46	0	0	3	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0.09
M	1992 070248	Butte Falls	Umpqua R, S Fk	05/13/94	24,893	129,253	44.46	0	0	0	0	0	5	0	0	0	0	0	0	14	0	0	0	0	0.08
M	1993 075249	Butte Falls	Umpqua R, S Fk	05/10/95	22,051	130,153	43.99	0	0	0	0	0	0	2	0	0	0	0	4	0	34	0	0	0	0.18
M	1994 070533	Butte Falls	Umpqua R, S Fk	05/07/96	21,216	123,367	39.72	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0.08
M	1995 070945	Butte Falls	Umpqua R, S Fk	05/07/97	22,656	134,006	45.82	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0.01
M	1996 091963	Butte Falls	Umpqua R, S Fk	05/08/98	27,952	131,897	44.47	0	0	0	0	0	0	0	0	2	0	0	1	5	0	0	0	0	0.03
M	1997 091920	Butte Falls	Umpqua R, S Fk	05/07/99	28,365	68,472	47.24	0	0	0	0	0	9	0	0	10	11	0	0	4	20	0	0	--	0.19
M	1998 092436	Butte Falls	Umpqua R, S Fk	05/05/00	25,103	62,624	44.04	0	0	0	0	6	2	2	2	5	13	0	3	0	27	0	--	--	0.24
TRASK RIVER																									
Trask River:																									
H	1990 075752	Trask	Trask R	04/20/92	25,404	201,631	43.20	0	0	4	0	0	29	7	1	4	10	0	27	22	102	0	0	0	0.81
H	1990 075751	Trask	Trask R	05/08/92	24,679	205,964	45.40	0	0	0	0	0	5	5	0	3	3	0	29	7	47	0	0	0	0.40
H	1991 074927	Trask	Trask R	04/20/93	27,004	202,093	45.35	0	0	0	0	0	0	0	0	0	0	0	1	3	126	0	0	0	0.48
H	1991 074924	Trask	Trask R	05/10/93	26,597	206,125	46.75	0	0	3	0	0	0	0	0	0	0	0	2	113	0	0	0	0	0.44
H	1992 075138	Trask	Trask R	04/07/94	25,506	205,293	44.90	0	0	0	0	0	32	11	0	0	0	0	2	7	253	0	0	0	1.20
H	1992 075139	Trask	Trask R	05/02/94	25,073	202,255	43.61	0	0	0	0	0	3	0	0	0	0	0	1	115	0	0	0	0	0.47
H	1993 070853	Trask	Trask R	04/07/95	214,790	216,610	44.42	0	5	0	0	0	13	2	7	0	0	0	0	201	902	0	0	0	0.53
H	1994 071137	Trask	Trask R	04/17/96	26,357	201,098	44.44	0	0	0	0	0	3	0	0	0	0	0	0	25	132	0	0	0	0.61
H	1995 071318	Trask	Trask R	04/16/97	23,229	144,533	47.25	0	0	0	0	0	11	0	0	0	0	0	0	41	229	0	0	0	1.21
H	1996 091961	Trask	Trask R	04/16/98	25,297	212,525	45.36	4	0	0	0	0	12	5	1	4	7	0	0	95	432	0	0	0	2.21
H	1997 091917	Trask	Trask R	04/21/99	26,220	189,230	50.39	0	0	0	0	0	19	15	4	22	13	0	0	122	516	0	0	--	2.71
H	1998 092304	Trask	Trask R	04/13/00	26,550	196,385	47.75	0	0	0	0	4	64	36	17	13	23	0	8	736	2007	1	--	--	10.96
H	1999 092954	Trask	Trask R	04/12/01	25,824	194,634	50.97	0	0	0	0	0	43	13	2	11	4	0	6	110	1417	--	--	--	6.22
H	2000 093233	Trask	Trask R	04/15/02	25,786	201,749	46.66	0	0	0	0	0	0	0	0	0	0	0	0	200	--	--	--	--	0.78

Appendix Table 1. Continued.

STOCK GROUP,				Ocean Catch																					
stock, (source H, N, M),		Release Site	Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.			
brood, tagcode	Hatchery			CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+	
TROJAN POND																									
Sandy River:																									
H	1991 076126	Trojan Pond	Columbia R-1	04/30/93	27,809	263,571	32.16	0	0	16	0	0	2	0	0	0	0	0	0	0	41	0	0	0	0.21
TUALATIN RIVER																									
Big Creek:																									
H	1991 076025	Big Creek	Tualatin R	05/03/93	26,885	60,052	30.85	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0.04
H	1992 075154	Big Creek	Tualatin R	05/16/94	26,533	60,239	29.45	0	0	0	0	0	1	4	0	0	0	0	0	0	1	0	0	0	0.02
H	1993 075263	Big Creek	Tualatin R	05/03/95	26,303	59,250	32.61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
H	1994 075334	Big Creek	Tualatin R	05/13/96	26,426	59,919	32.06	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0.09
H	1995 091813	Big Creek	Tualatin R	04/29/97	25,222	60,000	31.72	0	0	0	0	0	1	2	0	0	0	0	0	0	2	0	0	0	0.02
H	1996 092417	Big Creek	Tualatin R	04/27/98	27,506	60,152	32.40	0	0	0	0	0	0	0	0	2	0	0	0	0	15	0	0	0	0.06
UMATILLA RIVER																									
Tanner Creek:																									
H	1990 075622	Cascade	Umatilla R	03/18/92	27,458	244,550	28.70	0	0	4	0	4	19	1	0	3	6	0	18	3	149	0	0	0	0.75
H	1990 075621	Cascade	Umatilla R	03/18/92	27,705	244,615	28.90	0	0	0	0	0	42	8	2	9	12	10	18	1	193	0	0	0	1.06
H	1990 075620	Cascade	Umatilla R	03/20/92	27,908	472,221	29.40	0	0	3	0	0	16	12	0	1	14	4	11	2	134	0	0	0	0.71
H	1991 071522	Cascade	Umatilla R	04/07/93	27,821	218,618	25.92	0	0	0	0	0	0	0	0	0	0	0	0	2	71	0	0	0	0.26
H	1991 071523	Cascade	Umatilla R	04/07/93	27,984	219,266	25.92	0	4	0	0	0	2	0	0	0	0	0	0	0	43	0	0	0	0.18
H	1991 071521	Cascade	Umatilla R	04/09/93	28,273	454,794	25.77	0	0	0	0	0	0	0	0	0	0	0	0	2	54	0	0	0	0.20
H	1992 070337	Cascade	Umatilla R	04/07/94	27,166	418,222	25.06	0	0	5	0	0	6	0	0	0	0	0	0	4	47	0	0	0	0.23
H	1992 070339	Cascade	Umatilla R	04/07/94	27,010	232,778	26.52	0	0	0	0	0	5	6	0	0	0	0	0	3	42	0	0	0	0.21
H	1992 070338	Cascade	Umatilla R	04/07/94	27,452	233,105	26.68	0	0	0	0	0	16	0	0	0	0	0	0	4	62	0	0	0	0.30
H	1993 070559	Cascade	Umatilla R	03/31/95	26,498	497,449	31.26	0	0	0	0	0	0	0	0	0	0	0	0	1	9	0	0	0	0.04
H	1993 070557	Cascade	Umatilla R	04/04/95	26,421	250,970	30.83	0	0	0	0	0	0	0	0	0	0	0	0	1	15	0	0	0	0.06
H	1993 070558	Cascade	Umatilla R	04/04/95	26,381	251,135	30.83	0	0	0	0	0	0	0	0	0	0	0	0	1	22	0	0	0	0.09
H	1994 071150	Oxbow	Umatilla R	03/25/96	26,860	465,769	25.07	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0.02
H	1994 071146	Cascade	Umatilla R	04/03/96	26,319	500,005	24.93	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0.07
H	1994 071145	Cascade	Umatilla R	04/12/96	25,878	511,609	24.13	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0.07
H	1995 071361	Klaskanine	Umatilla R	03/10/97	11,057	31,921	25.06	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0.04
H	1995 071362	Klaskanine	Umatilla R	03/10/97	2,681	8,209	25.06	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0.15
H	1995 071363	Klaskanine	Umatilla R	03/10/97	7,890	22,889	25.06	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.01
H	1995 091805	Klaskanine	Umatilla R	03/10/97	7,903	10,503	25.06	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.03
H	1995 091753	Gnat Creek	Umatilla R	04/05/97	26,822	853,688	29.64	0	0	0	0	0	9	2	0	0	0	0	0	9	112	0	0	0	0.49
H	1996 092308	Oxbow	Umatilla R	03/27/98	26,759	528,360	27.83	0	0	0	0	0	3	0	0	0	0	0	0	2	48	0	0	0	0.20
H	1996 092309	Cascade	Umatilla R	04/02/98	26,791	526,082	27.00	0	0	0	0	0	6	0	1	1	4	0	0	1	72	0	0	0	0.32
H	1996 092313	Cascade	Umatilla R	04/02/98	25,967	525,304	27.00	0	0	0	0	0	11	0	2	5	1	0	0	4	139	0	0	0	0.62
H	1997 092423	Cascade	Umatilla R	03/24/99	26,537	465,314	28.70	0	0	0	0	0	3	2	0	8	0	0	0	7	50	0	0	--	0.26
H	1997 092424	Cascade	Umatilla R	04/02/99	27,136	477,588	25.20	0	0	0	0	0	4	2	0	0	2	0	0	2	80	0	0	--	0.33

Appendix Table 1. Continued.

STOCK GROUP,			Ocean Catch																						
stock, (source H, N, M),			Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.			
brood, tagcode	Hatchery	Release Site		CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+	
UMATILLA RIVER (Continued)																									
Tanner Creek:																									
H	1997 092425	Cascade	Umatilla R	04/02/99	26,753	505,650	25.62	0	0	0	0	0	2	7	0	0	0	0	0	0	44	0	0	--	0.20
H	1998 092717	Pendelton Acc	Umatilla R	03/15/00	26,422	513,288	27.00	0	0	0	0	0	25	2	0	0	5	0	0	37	120	0	--	--	0.72
H	1998 092718	Cascade	Umatilla R	03/15/00	26,068	222,462	27.00	0	0	0	0	14	0	5	2	2	0	0	13	80	0	--	--	--	0.44
H	1998 092719	Cascade	Umatilla R	04/28/00	26,370	798,210	29.84	0	0	0	0	41	7	8	8	21	0	0	36	324	0	--	--	--	1.69
H	1999 093007	Cascade	Umatilla R	03/14/01	26,599	478,739	25.92	0	0	0	0	0	3	2	0	0	0	0	1	18	--	--	--	--	0.09
H	1999 093009	Cascade	Umatilla R	03/14/01	26,058	223,025	25.92	0	0	0	0	0	0	0	0	0	0	0	1	54	--	--	--	--	0.21
H	1999 093008	Cascade	Umatilla R	04/28/01	26,474	745,497	33.11	0	0	0	0	0	3	2	0	4	0	0	0	58	--	--	--	--	0.25
H	2000 093016	Oxbow	Umatilla R	03/07/02	26,629	542,475	29.04	0	0	0	0	0	0	0	0	0	0	0	3	--	--	--	--	--	0.01
H	2000 093010	Cascade	Umatilla R	03/07/02	26,437	27,185	30.79	0	0	0	0	0	0	0	0	0	0	0	11	--	--	--	--	--	0.04
H	2000 093017	Cascade	Umatilla R	04/05/02	26,244	829,698	31.90	0	0	0	0	0	0	0	0	0	0	0	22	--	--	--	--	--	0.08
Umatilla River:																									
H	1995 071360	Oxbow	Umatilla R	04/03/97	24,807	438,153	28.34	3	0	0	0	0	7	0	0	0	6	0	0	1	53	0	0	0	0.28
WAHKEENA POND																									
Sandy River:																									
H	1992 071529	Wahkeena Pond	Columbia R-2	04/30/94	23,472	1,503,732	23.14	0	0	0	0	0	3	0	0	0	0	0	1	2	0	0	0	0	0.03
Tanner Creek:																									
H	1990 074045	Wahkeena Pond	Wahkeena Pond	05/12/92	9,456	633,436	28.90	0	0	5	0	0	4	3	0	0	3	0	5	0	20	0	0	0	0.42
H	1990 074046	Wahkeena Pond	Wahkeena Pond	05/12/92	9,241	633,211	28.90	0	0	0	0	0	10	0	2	4	0	0	0	6	0	0	0	0	0.24
H	1990 074047	Wahkeena Pond	Wahkeena Pond	05/12/92	9,376	633,353	28.90	0	0	0	0	0	13	0	0	0	0	0	2	0	21	0	0	0	0.38
H	1991 073728	Wahkeena Pond	Columbia R-2	04/22/93	11,910	749,707	25.20	0	0	0	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0.32
H	1991 074853	Wahkeena Pond	Columbia R-2	04/22/93	12,535	750,071	25.20	0	0	3	0	0	0	0	0	0	0	0	0	47	0	0	0	0	0.40
WENATCHEE RIVER																									
Tanner Creek:																									
H	1998 092720	Leavenworth NFH	Icicle Cr	05/24/00	26,367	498,716	23.87	0	0	0	0	0	29	26	3	5	12	0	0	0	145	0	--	--	0.83
YAKIMA RIVER																									
Tanner Creek:																									
H	1990 075625	Cascade	Yakima R	03/09/92	27,289	154,219	29.10	0	0	0	0	0	5	2	2	0	4	0	1	0	12	0	0	0	0.10
H	1990 075624	Cascade	Yakima R	03/10/92	27,249	223,344	27.50	0	0	0	0	0	5	6	3	1	0	0	4	0	17	0	0	0	0.13
H	1990 075623	Cascade	Yakima R	03/12/92	28,255	320,244	27.30	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0.02
H	1991 071524	Cascade	Yakima R	03/17/93	27,423	214,419	23.14	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0.07
H	1991 071525	Cascade	Yakima R	03/17/93	27,754	214,601	23.14	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0.01
H	1991 071530	Cascade	Yakima R	03/17/93	28,091	214,821	23.14	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0.07

Appendix Table 1. Concluded.

STOCK GROUP,				Ocean Catch																				
stock, (source H, N, M),				Release Date	Number Released		Size (gm)	Oregon Areas											Freshwater Recoveries					% Surv.
brood, tagcode	Hatchery	Release Site			CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4	5	
YAKIMA RIVER (Continued)																								
Tanner Creek:																								
H	1992 070340	Cascade	Yakima R	05/06/94	25,468	269,107	31.94	0	0	0	0	0	9	4	0	0	0	0	0	13	0	0	0	0.10
H	1992 070341	Cascade	Yakima R	05/06/94	25,985	269,408	31.94	0	0	0	0	10	3	0	0	0	0	0	0	16	0	0	0	0.11
H	1992 070342	Cascade	Yakima R	05/06/94	26,901	172,059	35.99	0	0	6	0	33	6	0	0	0	0	0	0	12	0	0	0	0.21
H	1993 070554	Cascade	Yakima R	04/26/95	22,851	186,464	31.48	0	0	0	0	3	0	0	0	0	0	4	0	13	0	0	0	0.09
H	1993 070555	Cascade	Yakima R	04/26/95	20,031	183,732	31.48	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0.08
H	1993 070556	Cascade	Yakima R	04/26/95	19,133	195,420	31.48	0	0	0	0	5	0	0	0	0	0	0	0	13	0	0	0	0.09
H	1994 071147	Cascade	Yakima R	04/30/96	26,733	193,628	29.92	0	0	0	0	1	0	0	0	0	0	0	0	21	0	0	0	0.08
H	1994 071148	Cascade	Yakima R	04/30/96	26,135	193,275	29.92	0	0	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0.13
H	1994 071149	Cascade	Yakima R	04/30/96	26,538	193,476	29.92	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0.03
H	1996 092310	Cascade	Yakima R	05/16/98	27,046	224,253	41.23	0	0	0	0	13	5	2	0	0	0	0	0	28	0	0	0	0.18
H	1996 092311	Cascade	Yakima R	05/16/98	26,878	224,137	41.23	0	0	0	0	3	0	0	2	0	0	0	1	25	0	0	0	0.12
H	1996 092312	Cascade	Yakima R	05/16/98	26,821	224,082	41.23	0	0	0	0	13	5	0	3	0	0	0	0	45	0	0	0	0.25
H	1997 092426	Cascade	Yakima R	05/17/99	26,593	204,017	26.68	0	0	0	0	11	5	0	12	5	0	0	1	64	0	0	--	0.37
H	1997 092427	Cascade	Yakima R	05/17/99	25,864	247,724	26.68	0	0	0	0	3	11	0	14	9	0	0	0	111	0	0	--	0.57
YAQUINA RIVER																								
Siletz River:																								
H	1993 075255	Salmon River	Yaquina R	04/15/95	25,432	306,402	42.75	0	0	0	0	7	3	0	0	0	0	7	9	250	0	0	0	1.09
H	1994 071224	Salmon River	Yaquina R	04/18/96	19,559	263,167	43.57	0	0	0	0	2	0	0	0	0	0	3	8	132	0	0	0	0.74
H	1994 075416	Salmon River	Yaquina R	05/20/96	21,377	276,214	44.88	0	0	0	0	3	0	0	0	0	0	0	6	31	0	0	0	0.19
H	1995 091714	Salmon River	Yaquina R	05/05/97	20,055	216,654	51.54	0	0	0	0	2	9	0	0	0	0	3	4	83	0	0	0	0.50
H	1995 091713	Salmon River	Yaquina R	05/05/97	20,254	193,889	53.36	0	0	0	0	0	2	0	0	0	0	0	13	92	0	0	0	0.53

Appendix Table 2. Chinook salmon CWT release & recovery data, 1988-2000 broods. Source: N=Native; H=Hatchery; M=Mixed. AK = Alaska, NCBC = North Central British Columbia, WCVI = West Coast Vancouver Island, GST = Georgia Strait, PS = Puget Sound, WA = Washington Coast, CA = California. Oregon ocean areas are displayed in Figure 5.

STOCK GROUP,			Ocean Catch																			%			
stock, (source H, N, M),			Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries								
brood,	tagcode	Hatchery		Release Site	Ad+CWT		Total	AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3		4	5	6+
FALL CHINOOK SALMON																									
ALSEA RIVER																									
Fall Creek (Alsea River):																									
H	1991	075801	Fall Creek	Fall Cr	08/10/92	21,100	101,587	31.10	3	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.23
H	1992	076028	Fall Creek	Fall Cr	08/27/93	23,089	103,583	34.62	53	12	0	0	0	0	0	2	0	0	0	0	0	6	29	43	0.63
H	1994	070416	Fall Creek	Fall Cr	08/18/95	24,562	103,214	38.11	36	23	0	0	0	0	0	3	0	0	0	0	0	2	13	3	0.33
H	1995	071349	Fall Creek	Fall Cr	08/15/96	29,121	100,278	41.17	107	18	0	0	0	2	0	3	0	0	0	0	0	29	67	0	0.78
CHETCO RIVER, JACK CREEK																									
Chetco River:																									
M	1988	074804	Jack Creek	Jack Cr	06/15/89	27,579	98,868	7.56	0	0	0	0	0	0	0	0	5	2	10	5	0	2	1	0	0.09
M	1989	074824	Jack Creek	Jack Cr	07/04/90	27,487	31,255	9.07	0	0	0	0	0	0	0	17	0	4	6	0	1	0	0	0	0.10
M	1990	074925	Jack Creek	Jack Cr	06/28/91	23,514	24,665	8.40	0	0	0	0	0	3	0	0	78	13	29	84	12	19	12	1	0.12
CHETCO RIVER																									
Chetco River:																									
M	1988	074837	Elk River	Chetco R	09/01/89	26,140	33,469	28.89	0	0	0	0	0	0	0	0	9	2	2	20	5	7	1	0	0.18
M	1988	074834	Elk River	Chetco R	09/29/89	27,027	300,746	34.36	0	0	0	0	0	0	0	3	0	3	4	2	0	3	0	0	0.06
M	1988	074835	Elk River	Chetco R	10/04/89	27,823	96,637	38.76	0	0	0	0	0	0	0	0	0	0	7	1	6	1	0	0	0.05
M	1988	074836	Elk River	Chetco R	10/23/89	25,931	32,412	40.86	0	0	25	0	0	0	2	14	5	7	2	12	6	10	0	0	0.34
M	1989	075420	Elk River	Chetco R	09/14/90	25,470	37,990	31.28	0	0	0	0	0	0	3	22	0	6	14	6	11	9	0	0	0.28
M	1989	075422	Elk River	Chetco R	09/17/90	26,922	400,327	34.10	0	0	0	0	3	0	0	19	3	23	0	9	5	11	0	0	0.27
M	1989	075421	Elk River	Chetco R	10/16/90	26,037	35,750	36.28	0	0	0	0	0	0	0	16	0	2	19	1	0	7	0	0	0.17
M	1990	075605	Elk River	Chetco R	09/19/91	25,143	165,654	39.78	0	0	0	0	0	2	0	0	18	0	11	20	0	7	2	1	0.24
M	1990	075606	Elk River	Chetco R	09/20/91	25,648	36,773	33.35	0	0	0	0	0	0	0	28	0	24	15	2	5	2	0	0	0.30
M	1990	075607	Elk River	Chetco R	10/17/91	25,605	191,526	40.13	0	0	2	0	0	1	0	0	12	0	23	11	1	2	2	0	0.25
H	1991	075807	Elk River	Chetco R	10/06/92	22,981	236,360	39.10	0	0	0	0	0	0	0	21	0	54	23	1	0	25	0	0	0.56
H	1991	075808	Elk River	Chetco R	11/05/92	23,236	153,149	41.23	0	0	0	0	0	0	0	15	0	51	14	0	3	14	0	0	0.43
M	1992	076034	Elk River	Chetco R	10/15/93	24,669	357,829	41.23	0	0	0	0	0	0	0	85	3	53	48	1	17	16	0	0	0.92
M	1993	075245	Elk River	Chetco R	10/06/94	25,933	330,254	37.15	0	0	0	0	0	0	0	39	3	53	9	0	2	7	5	0	0.46
M	1994	070123	Elk River	Chetco R	09/28/95	24,971	165,717	41.61	0	0	0	0	2	0	4	14	20	42	0	0	1	5	0	0	0.35
M	1995	071330	Elk River	Chetco R	09/28/96	24,109	226,309	40.43	0	0	0	0	0	0	0	3	35	13	0	2	3	0	0	0	0.23
M	1996	091847	Elk River	Chetco R	09/26/97	25,050	233,621	35.43	0	0	0	0	0	0	0	3	0	4	0	0	0	1	0	0	0.03
M	1997	091858	Elk River	Chetco R	09/30/98	26,994	158,208	37.80	0	0	0	0	2	0	0	5	15	55	17	1	0	11	0	--	0.39
M	1998	091907	Elk River	Chetco R	09/28/99	24,594	164,741	35.43	0	0	0	0	0	0	2	0	0	12	8	0	0	0	--	--	0.09
M	1999	092355	Elk River	Chetco R	09/20/00	24,916	158,150	34.89	0	0	0	0	0	0	0	0	0	2	15	0	2	--	--	--	0.08
M	2000	092939	Elk River	Chetco R	09/19/01	25,587	156,088	35.91	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	0.00

Appendix Table 2. Continued.

STOCK GROUP,				Ocean Catch																		% Surv.			
stock, (source H, N, M),		Release Site	Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries								
brood, tagcode	Hatchery			Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+	
FALL CHINOOK SALMON (Continued)																									
COOS RIVER																									
Coos River:																									
N	1988 074839	Butte Falls	Morgan Cr	09/13/89	25,755	56,029	28.52	12	44	28	0	0	5	0	0	0	0	5	7	21	37	1	1	0.63	
N	1989 075224	Noble Creek	Noble Cr	05/22/90	52,328	272,125	5.78	15	27	0	0	0	2	0	0	6	4	0	0	28	3	11	3	0	0.19
N	1989 075237	Butte Falls	Noble Cr	09/12/90	26,099	63,490	27.65	3	27	35	0	5	2	0	0	22	0	0	19	21	9	5	1	0.57	
M	1990 075529	Priorli Cr	Morgan Cr	06/03/91	52,274	177,232	5.15	11	15	14	0	0	2	0	0	0	0	0	11	2	15	17	0	0.17	
M	1990 074820	Priorli Cr	Morgan Cr	09/27/91	26,732	75,638	45.44	8	12	28	0	0	4	0	0	22	0	0	8	5	14	7	0	0.42	
M	1991 076002	Cole Rivers	Noble Cr	10/02/92	25,335	51,946	36.57	13	16	16	0	0	0	0	17	12	0	0	7	18	50	8	0	0.62	
M	1992 075943	Noble Creek	Noble Cr	05/29/93	52,672	52,848	6.30	34	0	5	0	0	0	0	0	3	3	0	0	83	79	32	12	0	0.48
M	1992 070249	Cole Rivers	Noble Cr	10/08/93	26,724	50,835	42.78	32	3	0	0	0	0	0	4	17	0	0	91	80	69	22	1	1.22	
M	1993 074957	Noble Creek	Noble Cr	06/19/94	55,429	516,882	6.45	33	17	0	0	0	0	0	0	2	0	0	19	37	37	9	0	0.28	
M	1993 075244	Cole Rivers	Morgan Cr	09/22/94	26,153	92,850	50.34	52	37	0	0	0	2	0	5	9	0	0	2	10	11	11	5	2	0.56
M	1994 070352	Noble Creek	Noble Cr	06/11/95	50,812	394,655	5.34	17	12	0	0	0	2	0	0	0	0	0	9	10	15	6	0	0.14	
M	1994 070647	Cole Rivers	Morgan Cr	09/24/95	26,045	103,534	39.78	24	9	2	0	0	4	0	0	0	0	0	5	2	9	4	0	0.23	
M	1995 070821	Noble Creek	Noble Cr	06/19/96	53,620	399,167	8.80	11	10	0	0	0	0	0	1	0	0	0	20	30	68	11	2	0.29	
M	1995 071334	Cole Rivers	Morgan Cr	09/29/96	23,556	94,405	44.44	27	3	0	0	0	0	0	0	0	3	0	7	6	19	7	0	0.31	
M	1996 071141	Noble Creek	Noble Cr	06/14/97	53,725	409,066	7.43	8	2	0	0	0	1	0	0	3	0	0	8	19	24	1	0	0.12	
M	1996 091846	Cole Rivers	Morgan Cr	09/17/97	24,059	98,963	50.39	27	0	0	0	0	0	0	0	5	0	0	1	19	20	3	0	0.31	
M	1997 070922	Noble Creek	Noble Cr	06/27/98	54,163	425,100	9.07	50	5	0	0	0	11	0	0	0	1	0	56	105	75	10	--	0.58	
M	1997 091855	Priorli Cr	Morgan Cr	09/27/98	24,943	103,618	45.36	37	5	0	0	0	3	0	2	3	0	0	14	28	37	11	--	0.56	
M	1998 092026	Noble Creek	Noble Cr	07/08/99	53,453	397,075	12.96	72	30	0	0	0	4	7	5	0	2	0	85	120	98	--	--	0.79	
M	1998 091906	Priorli Cr	Morgan Cr	09/30/99	25,343	91,496	46.28	46	13	3	0	0	11	0	6	7	0	0	34	23	62	--	--	0.81	
M	1999 092027	Noble Creek	Noble Cr	06/19/00	53,409	506,989	9.65	44	10	8	0	0	17	0	6	6	10	0	0	215	197	--	--	--	0.96
M	1999 091915	Priorli Cr	Morgan Cr	09/26/00	29,293	95,480	44.47	36	10	9	0	0	15	0	9	0	0	0	0	47	73	--	--	--	0.68
H	2000 092356	Priorli Cr	Morgan Cr	06/09/01	26,145	153,346	8.12	0	0	0	0	0	0	0	0	0	0	0	0	47	--	--	--	--	0.18
H	2000 092357	Priorli Cr	Morgan Cr	06/09/01	23,453	150,503	8.12	0	0	0	0	0	2	0	0	0	0	0	0	50	--	--	--	--	0.22
H	2000 091938	Cole Rivers	Morgan Cr	09/30/01	28,809	89,156	45.31	0	0	0	0	0	0	0	0	0	4	0	0	58	--	--	--	--	0.22
COQUILLE RIVER																									
Coquille River:																									
M	1988 074802	Cole Rivers	Coquille R	09/07/89	27,609	75,035	39.78	42	74	85	0	0	22	0	0	12	1	0	2	0	7	1	0	0	0.89
M	1990 075611	Bandon	Coquille R	10/07/91	25,570	54,613	37.17	19	5	11	0	0	0	0	0	0	0	0	3	0	13	3	0	0	0.21
M	1991 076003	Bandon	Ferry Cr	09/15/92	26,605	55,787	31.70	4	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0.04
N	1992 070244	Sevenmile	Sevenmile Cr	09/28/93	25,714	53,723	30.23	30	0	0	0	0	0	0	0	16	13	0	0	0	1	2	1	0	0.25
N	1993 075247	Butte Falls	Sevenmile Cr	09/17/94	23,420	50,650	28.87	69	15	2	0	0	0	0	0	10	0	0	0	0	0	3	1	0	0.43
N	1994 075336	Butte Falls	Sevenmile Cr	09/18/95	22,554	31,960	34.36	69	48	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0.54
M	1995 070943	Bandon	Coquille R	09/26/96	21,288	48,529	31.38	12	5	0	0	0	0	0	0	0	0	0	1	4	5	0	0	0.13	
M	1996 091853	Butte Falls	Sevenmile Cr	09/12/97	27,456	54,970	33.35	19	6	3	0	0	0	0	0	0	0	0	1	1	0	2	0	0.12	
M	1997 091902	Butte Falls	Sevenmile Cr	09/29/98	28,204	59,405	33.85	65	18	7	0	0	3	0	0	16	3	0	0	2	2	11	0	--	0.45

Appendix Table 2. Continued.

STOCK GROUP,				Ocean Catch																					
stock, (source H, N, M),		Release Site	Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.			
brood, tagcode	Hatchery			Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+	
FALL CHINOOK SALMON (Continued)																									
COQUILLE RIVER (Continued)																									
Coquille River:																									
M	1988 091914	Butte Falls	Sevenmile Cr	09/09/99	25,928	54,256	28.17	52	17	5	0	0	5	5	2	8	3	0	0	0	2	2	--	--	0.39
M	1999 091916	Cole Rivers	Sevenmile Cr	10/03/00	28,132	96,200	39.10	0	0	0	0	0	3	5	4	14	5	0	0	1	1	--	--	--	0.12
M	2000 092944	Butte Falls	Sevenmile Cr	09/30/01	28,674	95,255	33.55	0	0	0	0	0	0	0	0	0	2	0	0	1	--	--	--	--	0.01
ELK RIVER																									
Elk River:																									
H	1988 074833	Elk River	Elk R	09/29/89	27,315	184,617	34.89	8	5	15	0	0	2	0	0	21	17	0	0	3	11	24	6	0	0.41
H	1989 075423	Elk River	Elk R	10/18/90	25,861	334,809	42.38	4	11	45	0	3	9	0	2	36	78	0	0	49	63	76	35	6	1.61
H	1990 075663	Elk River	Elk R	10/26/91	37,216	38,923	42.78	2	18	15	0	0	3	0	0	0	30	0	0	38	10	33	21	0	0.46
H	1990 075701	Elk River	Elk R	10/26/91	35,168	37,136	44.46	19	9	17	0	0	2	0	0	14	44	1	0	65	19	46	28	1	0.75
H	1990 075702	Elk River	Elk R	10/26/91	33,859	36,472	44.90	14	3	12	0	0	2	0	3	51	42	0	0	26	16	44	39	0	0.74
H	1990 075703	Elk River	Elk R	10/26/91	34,621	35,512	46.75	8	9	19	0	0	0	0	0	50	36	0	0	10	19	44	32	0	0.67
H	1990 075608	Elk River	Elk R	10/26/91	25,494	35,103	47.74	8	8	10	0	0	1	0	0	5	24	0	0	21	13	44	29	2	0.65
H	1990 075704	Elk River	Elk R	10/26/91	34,753	35,688	48.25	10	0	6	0	0	1	0	0	24	19	0	0	5	10	42	81	5	0.58
H	1991 074009	Elk River	Elk R	09/30/92	32,302	43,604	32.86	12	4	12	0	0	0	0	0	3	36	3	0	24	30	48	15	0	0.58
H	1991 074951	Elk River	Elk R	09/30/92	31,716	43,265	33.84	14	7	7	0	0	0	0	4	0	41	1	0	15	20	102	25	4	0.76
H	1991 074953	Elk River	Elk R	09/30/92	34,807	44,497	35.71	12	3	6	0	0	4	0	0	6	34	3	2	9	20	115	24	2	0.69
H	1991 074948	Elk River	Elk R	10/21/92	27,672	34,560	39.44	12	4	0	0	0	0	0	0	9	36	2	0	15	25	38	20	1	0.59
H	1991 074010	Elk River	Elk R	11/01/92	30,898	35,961	42.38	3	4	0	0	0	0	0	0	3	23	1	4	12	11	22	7	1	0.29
H	1991 075806	Elk River	Elk R	11/01/92	11,737	18,905	45.35	0	0	0	0	0	0	0	0	4	19	0	0	9	5	20	4	0	0.52
H	1992 070425	Elk River	Elk R	11/16/93	32,475	37,098	50.39	48	5	0	0	2	0	0	7	74	102	7	0	75	78	58	26	5	1.51
H	1992 070426	Elk River	Elk R	11/17/93	34,191	35,693	51.54	14	8	8	0	0	0	0	0	53	89	11	0	44	61	46	32	5	1.09
H	1992 070424	Elk River	Elk R	11/22/93	35,468	37,902	49.84	3	4	7	3	0	2	0	0	106	56	4	0	23	63	32	26	4	0.98
H	1992 076033	Elk River	Elk R	11/28/93	26,665	36,301	52.73	23	5	0	0	0	0	0	2	40	65	1	0	43	49	43	14	7	1.14
H	1992 070422	Elk River	Elk R	11/29/93	35,509	36,954	52.73	29	3	6	0	0	4	0	1	128	95	4	0	20	50	48	31	3	1.22
H	1992 070423	Elk River	Elk R	11/29/93	36,278	36,967	53.35	58	7	3	0	0	0	0	0	129	132	3	0	48	136	94	31	1	1.82
H	1993 070522	Elk River	Elk R	10/26/94	37,690	44,431	48.72	133	31	5	0	0	3	0	0	29	338	0	0	64	65	158	86	1	2.44
H	1993 075246	Elk River	Elk R	10/26/94	23,419	98,070	48.72	76	31	0	0	0	7	0	3	23	111	3	0	58	51	99	66	2	2.26
H	1993 070521	Elk River	Elk R	10/26/94	38,190	44,589	49.25	132	26	16	0	0	4	0	5	48	223	0	0	117	48	121	85	1	2.16
H	1993 070523	Elk River	Elk R	10/26/94	36,060	42,546	49.25	57	34	0	0	3	2	0	0	30	195	0	0	85	78	97	47	3	1.75
H	1993 070524	Elk River	Elk R	10/26/94	36,155	48,066	49.25	124	28	2	0	0	10	0	0	34	201	0	0	46	75	181	124	6	2.30
H	1993 070525	Elk River	Elk R	10/26/94	39,120	50,898	49.79	117	70	11	0	0	11	0	0	28	223	2	0	26	87	210	105	10	2.31
H	1994 070854	Elk River	Elk R	10/11/95	194,243	325,889	49.84	327	110	3	0	5	23	0	2	36	563	0	3	155	112	602	395	24	1.22
H	1995 070951	Elk River	Elk R	09/15/96	174,479	321,567	36.49	330	83	32	0	0	23	0	8	18	972	2	0	276	579	1315	258	10	2.24
H	1996 092148	Elk River	Elk R	09/14/97	175,967	322,931	30.64	94	19	12	0	0	5	0	1	0	171	0	0	53	112	191	76	0	0.42
H	1997 091857	Elk River	Elk R	10/13/98	25,504	44,455	52.74	71	25	7	0	0	14	2	0	30	134	0	2	60	118	297	32	--	3.13
H	1997 092449	Elk River	Elk R	10/13/98	163,690	283,815	52.74	585	312	98	0	2	172	15	70	218	1187	2	5	390	862	1485	180	--	3.45

Appendix Table 2. Continued.

STOCK GROUP,				Ocean Catch																							
stock, (source H, N, M),				Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.				
brood, tagcode	Hatchery	Release Site			Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+		
FALL CHINOOK SALMON (Continued)																											
ELK RIVER (Continued)																											
Elk River:																											
H	1998	092810	Elk River	Elk R	10/27/99	193,648	350,870	54.64	398	300	93	0	0	320	34	161	397	791	8	30	493	662	646	--	--	2.26	
H	1999	093052	Elk River	Elk R	10/20/00	198,583	328,032	48.46	16	45	41	0	0	50	6	38	100	151	2	7	342	266	--	--	--	0.54	
H	2000	075941	Elk River	Elk R	10/22/01	198,756	330,883	33.13	0	0	0	0	0	0	0	0	0	0	0	0	208	--	--	--	--	0.10	
HUNTER CREEK																											
Hunter Creek & tribs:																											
N	1989	074826	Hunter Creek	Hunter Cr	07/03/90	17,460	17,460	4.32	0	0	4	0	0	1	0	0	22	0	0	0	0	1	2	1	0	0	0.18
M	1992	070355	Elk River	Hunter Cr	12/01/93	19,182	21,357	52.73	3	0	5	0	0	6	0	0	221	29	25	72	10	6	11	2	0	2.07	
M	1993	070759	Elk River	Hunter Cr	10/28/94	25,340	26,867	47.69	3	0	0	0	0	2	0	0	60	37	2	26	0	2	12	3	0	0.58	
M	1994	070932	Elk River	Hunter Cr	10/18/95	23,918	26,944	60.47	0	0	0	0	0	2	0	1	42	26	2	0	0	5	5	4	0	0.39	
M	1995	071355	Elk River	Hunter Cr	10/18/96	21,288	24,115	54.73	3	0	0	0	0	6	0	0	5	9	2	12	1	1	6	0	0	0.21	
NECANICUM RIVER																											
Trask River:																											
H	1997	091862	Nehalem	Necanicum R	08/25/98	27,582	27,900	24.00	91	40	0	0	0	1	0	5	0	0	0	0	0	4	3	--	--	0.52	
H	1998	091912	Nehalem	Necanicum R	08/23/99	25,640	26,995	27.32	68	24	0	0	0	2	0	2	0	0	0	0	0	3	3	--	--	0.40	
H	1999	092712	Nehalem	Necanicum R	08/25/00	25,293	25,989	24.00	12	1	0	0	0	7	0	0	0	0	0	0	0	5	--	--	--	0.16	
H	2000	092943	Nehalem	Necanicum R	09/05/01	22,897	25,110	24.33	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	0.00	
NESTUCCA RIVER																											
Nestucca River:																											
H	1991	074821	Cedar Creek	Three R	07/09/92	25,308	144,550	18.50	0	10	0	0	0	0	0	0	0	0	0	0	5	4	2	0	0	0.08	
H	1992	076027	Cedar Creek	Nestucca R	08/26/93	24,520	115,830	22.68	36	0	0	0	0	0	0	8	0	0	0	0	1	8	26	4	0	0.34	
PISTOL RIVER																											
Pistol River & tribs:																											
N	1988	074805	Pistol River	Pistol R	07/21/89	8,244	10,852	11.33	0	0	10	0	0	0	0	3	3	0	0	0	1	2	0	1	0	0.66	
N	1989	075243	Pistol River	Pistol R	10/02/90	23,817	29,524	37.48	0	0	31	0	0	11	0	2	84	3	4	20	2	7	17	3	0	0.77	
M	1991	071462	Elk River	Pistol R	11/04/92	21,967	22,273	55.31	4	0	4	0	0	4	0	0	77	0	25	27	3	5	11	0	0	0.80	
M	1992	070360	Elk River	Pistol R	12/02/93	18,877	19,480	56.69	0	0	0	0	0	1	0	0	165	27	24	77	7	18	12	1	0	1.81	
M	1993	070760	Elk River	Pistol R	11/01/94	25,368	35,734	41.96	0	0	0	0	0	0	0	0	60	24	8	11	4	4	5	2	0	0.49	
M	1994	071057	Elk River	Pistol R	10/12/95	5,166	6,343	49.30	0	0	0	0	0	0	0	0	5	3	0	0	0	0	0	1	0	0.17	
ROGUR RIVER, COLUMBIA RIVER, BIG CREEK RELEASE																											
Rogue River:																											
H	1988	073346	Big Creek	Big Cr	05/23/89	10,923	10,970	6.39	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.01	
H	1988	073540	Big Creek	Big Cr	05/23/89	10,402	10,446	6.39	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.02	

Appendix Table 2. Continued.

STOCK GROUP,			Ocean Catch																							
stock, (source H, N, M),			Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.				
brood, tagcode	Hatchery	Release Site		Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+		
FALL CHINOOK SALMON (Continued)																										
ROGUR RIVER, COLUMBIA RIVER, BIG CREEK RELEASE (Continued)																										
Rogue River:																										
H	1988	074159	Big Creek	Big Cr	05/23/89	10,117	10,160	6.39	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0.05			
H	1988	074160	Big Creek	Big Cr	05/23/89	10,261	10,305	6.39	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0.03			
H	1988	074161	Big Creek	Big Cr	05/23/89	10,070	10,113	6.39	0	0	0	0	0	0	0	0	0	2	1	2	0	0	0.05			
H	1988	074162	Big Creek	Big Cr	08/21/89	10,409	10,440	35.43	0	0	5	6	0	22	5	10	38	31	0	6	14	62	49	0	2.38	
H	1988	074163	Big Creek	Big Cr	08/21/89	10,779	10,811	35.43	0	0	15	0	0	8	3	20	40	15	6	6	10	27	27	0	1.66	
H	1988	074201	Big Creek	Big Cr	08/21/89	10,556	10,588	35.43	0	0	16	4	0	13	2	10	34	10	3	8	12	63	23	1	1.89	
H	1988	074202	Big Creek	Big Cr	08/21/89	10,808	10,840	35.43	0	0	10	0	0	20	0	11	20	42	6	4	8	43	42	2	1.94	
H	1988	074203	Big Creek	Big Cr	08/21/89	9,914	9,944	35.43	0	0	0	0	0	22	2	7	35	13	0	6	11	50	42	0	1.90	
H	1988	074204	Big Creek	Big Cr	08/21/89	10,452	10,483	35.43	0	2	4	4	0	14	3	7	24	23	0	2	8	40	29	1	1.87	
H	1988	074205	Big Creek	Big Cr	08/21/89	10,300	10,331	35.43	0	0	0	0	0	7	2	5	16	22	3	3	8	69	48	1	1.79	
H	1988	074206	Big Creek	Big Cr	08/21/89	9,635	9,664	35.43	0	2	24	0	0	16	14	17	34	35	2	2	15	61	42	0	2.76	
H	1988	074207	Big Creek	Big Cr	08/21/89	10,382	10,413	35.43	0	0	4	0	0	41	0	11	52	20	3	7	8	36	32	0	2.06	
H	1988	074208	Big Creek	Big Cr	08/21/89	10,326	10,357	35.43	0	0	10	0	0	20	2	10	50	34	6	16	14	60	37	0	2.51	
H	1989	074338	Big Creek	Big Cr	06/05/90	10,067	27,703	7.31	0	0	0	0	0	0	0	0	9	0	0	1	5	4	0	0	0.23	
H	1989	074339	Big Creek	Big Cr	06/05/90	10,132	27,770	7.31	0	0	0	0	0	0	0	0	8	0	0	3	5	3	0	0	0.19	
H	1989	074340	Big Creek	Big Cr	06/05/90	10,040	27,676	7.31	0	0	0	0	0	2	0	0	10	0	0	2	1	0	0	0	0.15	
H	1989	074341	Big Creek	Big Cr	06/05/90	9,859	27,490	7.31	0	0	5	0	0	0	0	0	8	0	0	0	0	1	0	0	0.14	
H	1989	074342	Big Creek	Big Cr	06/05/90	10,058	27,695	7.31	0	0	0	0	0	0	0	0	7	0	0	0	2	8	0	0	0.17	
H	1989	074343	Big Creek	Big Cr	06/05/90	9,904	27,537	7.31	0	0	0	0	0	2	1	0	6	0	0	4	1	0	0	1	0.15	
H	1989	074344	Big Creek	Big Cr	06/05/90	9,841	27,471	7.31	0	0	0	0	0	2	0	0	16	0	0	4	0	2	1	0	0.25	
H	1989	074345	Big Creek	Big Cr	06/05/90	10,167	27,807	7.31	0	0	0	0	0	4	0	0	6	0	0	6	1	1	2	0	0.20	
H	1989	074346	Big Creek	Big Cr	06/05/90	10,547	28,198	7.31	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0.06	
H	1989	074511	Big Creek	Big Cr	08/17/90	10,176	22,184	31.28	0	0	0	0	0	5	2	0	62	3	0	0	10	23	33	4	0	1.40
H	1989	074512	Big Creek	Big Cr	08/17/90	10,387	22,397	31.28	0	0	3	0	0	15	4	5	100	3	0	0	15	28	24	1	0	1.91
H	1989	074513	Big Creek	Big Cr	08/17/90	10,561	22,574	31.28	0	0	3	3	0	16	2	10	90	3	0	2	7	44	44	1	0	2.13
H	1989	074514	Big Creek	Big Cr	08/17/90	10,583	22,596	31.28	0	3	5	0	0	22	0	3	98	0	0	10	12	49	31	1	0	2.21
H	1989	074515	Big Creek	Big Cr	08/17/90	10,392	22,402	31.28	0	0	0	0	0	32	0	4	97	9	0	10	14	45	35	3	0	2.40
H	1989	074516	Big Creek	Big Cr	08/17/90	9,977	21,982	31.28	0	0	0	0	0	14	0	0	63	2	0	6	12	32	17	3	0	1.49
H	1990	075650	Big Creek	Big Cr	07/05/91	51,183	249,042	12.22	0	0	0	0	0	15	3	0	44	7	0	6	24	39	35	6	0	0.35
H	1990	075651	Big Creek	Big Cr	08/12/91	50,783	300,645	25.06	0	0	0	0	0	20	4	0	83	0	0	5	39	96	93	16	0	0.70
H	1990	075652	Big Creek	Big Cr	08/23/91	51,043	236,247	35.71	0	0	0	0	0	15	7	0	214	0	3	14	51	147	183	22	0	1.33
H	1991	075716	Big Creek	Big Cr	08/06/92	52,014	217,625	20.90	0	0	0	0	0	0	0	0	7	0	0	10	10	43	66	0	0	0.26
H	1991	075717	Big Creek	Big Cr	08/14/92	52,017	297,258	23.70	0	0	4	0	0	0	0	0	21	0	0	15	9	74	108	2	0	0.45
H	1991	075653	Big Creek	Big Cr	08/26/92	51,786	248,504	30.60	0	0	4	0	0	0	0	2	39	0	0	2	19	125	208	3	0	0.80
H	1992	075737	Big Creek	Big Cr	08/25/93	51,797	242,691	27.82	2	0	2	4	0	0	0	14	177	9	4	51	45	271	181	11	0	1.51
H	1992	070232	Big Creek	Big Cr	08/25/93	52,453	202,027	27.99	0	0	0	3	0	11	0	28	204	23	3	27	44	274	197	16	0	1.61
H	1993	070755	Big Creek	Big Cr	08/04/94	54,731	553,793	23.97	0	0	0	0	0	0	0	0	48	11	3	14	45	74	104	5	0	0.56

Appendix Table 2. Continued.

STOCK GROUP,				Ocean Catch																							
stock, (source H, N, M),				Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.				
brood, tagcode	Hatchery	Release Site			Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+		
FALL CHINOOK SALMON (Continued)																											
ROGUR RIVER, COLUMBIA RIVER, BIG CREEK RELEASE (Continued)																											
Rogue River:																											
H	1993	070756	Big Creek	Big Cr	08/22/94	54,317	250,878	29.82	0	1	0	0	0	0	1	0	0	89	12	0	36	53	69	119	4	0	0.71
H	1994	070540	Big Creek	Big Cr	08/11/95	26,051	166,503	22.12	0	0	0	0	0	3	0	0	20	16	0	0	5	21	27	1	0	0.37	
H	1994	070541	Big Creek	Big Cr	08/11/95	26,215	166,707	22.23	0	4	0	0	0	0	0	0	18	6	0	0	5	19	27	9	0	0.34	
H	1994	070542	Big Creek	Big Cr	08/29/95	26,881	175,032	29.45	0	0	0	0	0	0	0	0	22	2	0	0	0	20	44	2	0	0.35	
H	1994	070543	Big Creek	Big Cr	08/30/95	26,178	500,356	29.07	0	0	0	0	0	0	0	0	3	23	9	0	0	6	12	18	4	0	0.29
H	1995	071352	Big Creek	Big Cr	08/26/96	26,791	521,952	31.49	0	0	0	0	0	0	2	0	7	8	0	0	1	9	19	0	0	0.17	
ROGUR RIVER, COLUMBIA RIVER, KLASKANINE RIVER RELEASE																											
Rogue River:																											
H	1995	071353	Klaskanine	Klaskanine R, NF	07/31/96	25,322	26,178	20.22	0	0	0	0	0	1	0	0	2	4	0	0	1	19	23	1	0	0.20	
H	1996	092143	Klaskanine	Klaskanine R, NF	10/31/97	9,593	195,247	32.86	0	0	0	0	0	1	0	0	0	0	0	0	0	1	18	2	0	0.23	
H	1996	092144	Klaskanine	Klaskanine R, NF	10/31/97	27,222	408,713	32.86	0	0	1	0	0	0	0	0	2	8	0	3	0	30	69	6	0	0.45	
H	1997	092517	Klaskanine	Klaskanine R, NF	09/30/98	26,701	216,635	25.77	0	0	11	0	0	14	0	14	31	2	0	0	5	66	144	1	--	1.09	
H	1997	092518	Klaskanine	Klaskanine R, NF	11/04/98	26,571	445,342	28.17	0	0	0	0	0	0	0	0	4	0	0	0	0	3	16	0	--	0.09	
H	1998	092760	Klaskanine	Klaskanine R, NF	09/28/99	25,977	208,232	27.49	0	0	2	0	0	22	7	42	71	29	0	11	6	108	164	--	--	1.84	
H	1998	092759	Klaskanine	Klaskanine R, NF	11/03/99	25,124	494,968	32.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	--	--	0.00	
H	1999	093048	Klaskanine	Klaskanine R, NF	08/24/00	27,239	202,783	23.50	0	0	6	0	0	21	8	26	41	51	3	14	62	245	--	--	--	1.75	
H	1999	093049	Klaskanine	Klaskanine R, NF	09/26/00	26,762	205,709	28.89	0	0	2	0	0	31	4	17	8	13	0	5	17	132	--	--	--	0.86	
H	2000	093312	Klaskanine	Klaskanine R, NF	08/23/01	26,898	198,308	23.43	0	0	0	0	0	0	0	3	0	0	0	0	41	--	--	--	--	0.16	
H	2000	093313	Klaskanine	Klaskanine R, NF	09/20/01	27,000	471,605	26.76	0	0	0	0	0	0	0	0	0	0	0	0	13	--	--	--	--	0.05	
ROGUE RIVER																											
Rogue River:																											
H	1988	075140	Indian Cr Pd	Rogue R	08/10/89	25,193	96,458	22.68	0	0	0	0	0	0	0	2	3	0	3	26	0	2	9	0	0		
Lower Rogue:																											
N	1988	075141	Indian Cr Pd	Indian Cr	09/22/89	53,193	69,000	30.23	0	0	0	0	0	0	0	0	12	9	3	12	0	3	18	0	0	0.13	
N	1989	074827	Indian Cr Pd	Lobster Cr	06/25/90	27,025	27,278	9.07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	
N	1989	074828	Indian Cr Pd	Indian Cr	08/22/90	26,908	42,996	26.68	0	0	0	0	0	0	0	0	13	0	0	17	3	6	3	1	0	0.16	
N	1991	075129	Indian Cr Pd	Rogue R	08/24/92	25,476	30,240	30.20	0	0	0	0	0	0	0	0	17	0	1	180	5	58	21	0	0	1.11	
M	1992	076120	Indian Cr Pd	Rogue R	09/23/93	13,638	14,236	38.11	0	0	0	0	0	0	0	0	29	6	5	91	20	34	11	0	0	1.53	
H	1993	070761	Indian Cr Pd	Rogue R	09/01/94	27,081	28,855	27.13	0	0	0	0	0	0	0	0	30	13	3	41	20	10	16	2	0	0.50	
M	1994	075417	Indian Cr Pd	Rogue R	08/31/95	22,910	53,817	28.70	0	0	0	0	0	0	0	0	8	0	3	9	8	29	17	0	0	0.32	
M	1995	075335	Indian Cr Pd	Rogue R	09/10/96	24,037	39,546	34.00	0	0	0	0	0	0	0	0	0	10	0	10	5	55	18	0	0	0.42	
M	1996	092154	Indian Cr Pd	Rogue R	07/16/97	10,559	25,638	22.68	0	0	0	0	0	0	0	0	0	0	3	15	0	13	0	1	0	0.30	
M	1996	092153	Indian Cr Pd	Rogue R	08/08/97	11,176	22,799	28.34	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0.08	
M	1996	092152	Indian Cr Pd	Rogue R	08/26/97	9,898	22,707	34.36	0	0	0	0	0	0	0	0	0	5	0	3	0	5	0	0	0	0.13	

Appendix Table 2. Continued.

STOCK GROUP,				Ocean Catch																										
stock, (source H, N, M),				Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.							
brood, tagcode	Hatchery	Release Site			Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+					
FALL CHINOOK SALMON (Continued)																														
ROGUE RIVER (Continued)																														
Lower Rogue:																														
M	1997	091861	Indian Cr Pd	Rogue R	07/16/98	22,569	23,137	22.68	0	0	0	0	0	0	0	0	0	0	0	0	4	42	9	95	99	7	6	0	--	1.16
M	1997	092636	Indian Cr Pd	Rogue R	07/31/98	24,000	24,672	25.77	0	0	0	0	0	0	0	0	0	0	0	0	16	54	8	39	87	4	21	0	--	0.97
M	1997	092637	Indian Cr Pd	Rogue R	09/11/98	24,531	26,358	37.80	0	0	0	0	0	0	0	6	0	10	22	3	38	80	6	14	2	--	--	--	0.75	
M	1998	091910	Indian Cr Pd	Rogue R	07/15/99	16,483	19,476	22.68	0	0	0	0	0	0	0	0	0	0	0	0	5	42	0	50	5	21	10	--	--	0.81
M	1998	092543	Indian Cr Pd	Rogue R	08/12/99	20,429	21,348	28.34	0	0	0	0	0	0	0	5	2	8	6	28	1	21	25	--	--	--	--	--	0.47	
M	1998	092818	Indian Cr Pd	Rogue R	09/16/99	26,036	27,241	39.44	3	0	0	0	0	0	0	0	0	0	10	23	3	21	9	11	12	--	--	--	0.35	
M	1999	092710	Indian Cr Pd	Rogue R	07/20/00	25,876	27,884	17.51	0	0	0	0	0	0	0	0	0	0	40	39	8	85	23	83	--	--	--	--	1.07	
M	1999	093054	Indian Cr Pd	Rogue R	08/08/00	22,512	24,259	28.35	0	0	0	0	0	0	0	3	3	18	7	36	7	45	--	--	--	--	--	--	0.53	
M	1999	093055	Indian Cr Pd	Rogue R	09/15/00	26,799	28,662	34.89	0	0	0	0	0	0	0	0	0	0	8	3	1	34	8	30	--	--	--	--	0.31	
M	2000	092941	Indian Cr Pd	Rogue R	07/16/01	25,710	27,861	12.96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	--	--	--	--	0.05	
M	2000	090117	Indian Cr Pd	Rogue R	07/26/01	22,940	24,636	18.14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	--	--	--	--	0.32
M	2000	090118	Indian Cr Pd	Rogue R	09/05/01	19,102	19,753	25.20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	--	--	--	--	0.13
SALMON RIVER																														
Salmon River:																														
H	1988	075131	Salmon River	Salmon R	08/14/89	31,653	34,094	33.84	18	23	30	0	0	5	0	2	0	0	0	0	0	17	20	96	29	0	0	0.76		
H	1988	075132	Salmon River	Salmon R	08/14/89	28,922	33,856	33.84	2	10	34	0	0	2	0	2	0	0	0	0	4	5	11	7	0	0	0.27			
H	1988	075133	Salmon River	Salmon R	08/14/89	27,015	33,511	33.84	13	18	45	0	0	0	0	0	0	0	0	0	8	21	47	20	6	0.66				
H	1988	075134	Salmon River	Salmon R	08/14/89	29,325	33,764	33.84	20	46	33	0	0	0	0	2	0	0	0	0	4	15	41	37	9	0.71				
H	1988	075135	Salmon River	Salmon R	08/14/89	28,200	33,335	33.84	14	20	21	0	0	0	0	0	0	0	0	0	58	5	48	31	1	0.71				
H	1988	075136	Salmon River	Salmon R	08/14/89	27,241	33,568	33.84	16	10	35	0	0	0	0	0	0	0	0	0	0	6	56	17	1	0.52				
H	1989	075458	Salmon River	Salmon R	08/14/90	39,099	41,531	28.70	41	97	47	0	0	3	0	12	0	0	0	0	7	42	77	114	4	1.14				
H	1989	075461	Salmon River	Salmon R	08/14/90	41,509	43,010	28.70	42	103	94	0	0	0	0	16	0	0	0	0	59	116	88	140	11	1.61				
H	1989	075462	Salmon River	Salmon R	08/14/90	41,699	41,889	28.70	44	135	75	0	5	0	0	3	6	0	0	0	14	91	53	154	24	1.45				
H	1989	075459	Salmon River	Salmon R	08/15/90	38,685	41,956	28.70	46	81	63	0	0	0	0	2	0	0	0	0	22	41	68	121	8	1.17				
H	1989	075460	Salmon River	Salmon R	08/15/90	42,370	43,097	28.70	59	104	74	0	0	4	0	9	8	0	0	0	53	72	80	159	9	1.49				
H	1990	075705	Salmon River	Salmon R	08/15/91	40,225	42,776	31.06	114	175	59	0	0	6	0	22	0	0	0	0	161	113	274	312	8	3.09				
H	1990	075706	Salmon River	Salmon R	08/15/91	41,394	44,019	31.06	88	159	49	0	0	2	0	12	3	0	1	0	120	167	417	323	33	3.33				
H	1990	075707	Salmon River	Salmon R	08/15/91	37,516	39,896	31.06	104	141	81	0	0	0	0	12	2	0	0	0	75	114	368	292	7	3.20				
H	1990	075708	Salmon River	Salmon R	08/15/91	39,382	41,880	31.06	117	139	77	0	0	0	0	15	1	0	0	0	11	183	380	387	7	3.35				
H	1990	075709	Salmon River	Salmon R	08/15/91	25,592	27,215	31.06	67	58	61	0	0	0	0	0	0	0	0	0	61	66	234	225	11	3.06				
H	1991	071559	Salmon River	Salmon R	08/05/92	36,151	38,888	32.40	13	4	0	0	0	0	0	3	0	0	0	0	0	10	37	18	0	0.24				
H	1991	071560	Salmon River	Salmon R	08/05/92	37,763	39,080	32.40	21	4	6	0	0	0	0	0	0	0	0	0	0	11	21	29	1	0.25				
H	1991	071561	Salmon River	Salmon R	08/05/92	38,597	40,195	32.40	28	0	0	0	0	0	0	0	0	0	0	0	0	29	63	38	0	0.41				
H	1991	071562	Salmon River	Salmon R	08/05/92	39,060	40,335	32.40	12	0	3	0	0	0	0	0	0	47	0	0	0	25	7	47	25	0	0.42			
H	1991	071563	Salmon River	Salmon R	08/05/92	33,341	34,686	32.40	55	10	0	0	0	0	0	0	0	0	0	0	3	22	10	26	0	0.38				
H	1992	070417	Salmon River	Salmon R	08/17/93	34,476	40,325	30.03	72	19	0	0	0	0	0	16	4	0	0	3	86	159	89	119	5	1.66				

Appendix Table 2. Continued.

STOCK GROUP,			Ocean Catch																							
stock, (source H, N, M),			Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.				
brood, tagcode	Hatchery	Release Site		Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+		
FALL CHINOOK SALMON (Continued)																										
SALMON RIVER (Continued)																										
Salmon River:																										
H	1992 070418	Salmon River	Salmon R	08/17/93	32,518	40,711	30.03	70	13	0	0	0	0	0	14	0	0	0	0	0	49	145	122	98	8	1.63
H	1992 070419	Salmon River	Salmon R	08/17/93	33,634	40,652	30.03	72	17	3	0	0	0	0	8	0	0	0	0	0	29	189	141	71	18	1.63
H	1992 070420	Salmon River	Salmon R	08/17/93	28,386	40,658	30.03	41	8	0	0	0	0	0	4	0	0	0	0	0	52	164	116	99	0	1.76
H	1992 070421	Salmon River	Salmon R	08/17/93	40,339	42,829	30.03	80	12	0	0	0	0	0	5	0	0	0	0	0	35	152	137	113	0	1.37
H	1993 070461	Salmon River	Salmon R	08/10/94	37,513	41,109	32.38	184	46	0	0	0	7	0	26	0	0	0	0	0	77	111	247	186	8	2.38
H	1993 070462	Salmon River	Salmon R	08/10/94	38,497	42,187	32.38	211	72	0	0	0	0	0	8	0	0	0	0	0	111	132	292	169	13	2.62
H	1993 070459	Salmon River	Salmon R	08/15/94	32,486	40,990	32.38	238	22	3	0	0	0	0	22	0	0	0	0	0	107	142	453	178	0	3.59
H	1993 070460	Salmon River	Salmon R	08/15/94	36,872	40,992	32.38	263	83	2	0	0	5	0	32	5	0	0	0	0	226	211	467	314	0	4.37
H	1993 070463	Salmon River	Salmon R	08/15/94	38,686	41,296	32.38	233	50	3	0	0	0	0	23	0	0	3	0	0	162	136	405	197	0	3.17
H	1994 070962	Salmon River	Salmon R	08/15/95	172,256	205,215	30.23	378	231	0	0	0	0	0	30	0	0	0	0	0	48	155	659	621	10	1.24
H	1995 071252	Salmon River	Salmon R	08/16/96	171,301	186,780	32.29	197	43	3	0	0	2	0	24	0	0	0	0	0	48	210	400	253	6	0.70
H	1996 092149	Salmon River	Salmon R	08/15/97	194,096	203,986	31.49	238	75	0	0	0	7	1	19	2	0	0	0	0	145	368	724	169	0	0.90
H	1997 092447	Salmon River	Salmon R	08/17/98	179,888	205,489	34.89	694	248	18	0	0	11	0	96	13	4	0	0	0	279	1008	1788	502	--	2.60
H	1998 092817	Salmon River	Salmon R	08/20/99	190,423	198,979	33.84	461	192	0	0	0	13	0	63	14	0	0	0	0	170	598	1211	--	--	1.43
H	1999 093053	Salmon River	Salmon R	08/27/00	196,302	199,089	40.00	219	170	0	0	0	5	1	94	8	0	0	0	0	188	1412	--	--	--	1.08
H	2000 093315	Salmon River	Salmon R	08/25/01	205,725	207,468	32.35	0	0	0	0	0	0	0	0	0	0	0	0	0	199	--	--	--	--	0.10
TRASK RIVER																										
Trask River:																										
H	1988 074212	Trask	Trask/Necanicum	07/17/89	9,414	83,642	9.07	5	0	14	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0.25
H	1988 074213	Trask	Trask/Necanicum	07/17/89	9,981	84,254	9.07	0	8	9	0	0	0	0	0	0	0	0	0	0	0	2	8	0	0	0.27
H	1988 074214	Trask	Trask/Necanicum	07/17/89	9,610	83,854	9.07	2	3	3	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0.14
H	1988 074215	Trask	Trask R	08/16/89	9,403	20,870	19.30	8	15	14	0	0	0	0	0	0	5	0	0	0	0	3	9	0	0	0.57
H	1988 074216	Trask	Trask R	08/16/89	9,192	20,640	19.30	14	5	5	0	0	0	0	0	0	0	0	0	2	2	8	19	3	0	0.63
H	1988 074217	Trask	Trask R	09/20/89	9,721	17,705	32.86	19	53	39	0	0	0	0	7	0	0	0	0	0	1	5	28	0	0	1.56
H	1988 074218	Trask	Trask R	09/20/89	9,813	17,801	32.86	22	33	30	0	0	0	0	14	0	0	0	0	0	2	3	28	1	0	1.36
H	1989 074519	Trask	Trask R	08/13/90	8,883	29,328	16.92	3	14	13	0	0	0	0	2	0	0	0	0	0	0	3	0	2	0	0.42
H	1989 074903	Trask	Trask R	08/13/90	9,002	29,463	16.92	3	17	3	0	0	0	0	0	0	0	0	0	0	0	4	2	4	0	0.37
H	1989 073727	Trask	Trask R	09/18/90	15,189	50,314	29.84	5	0	6	0	0	0	0	0	0	0	0	0	0	0	1	0	5	0	0.11
H	1989 074905	Trask	Trask R	09/18/90	8,666	43,219	29.84	3	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.17
H	1989 074906	Trask	Trask R	09/18/90	9,082	43,672	29.84	5	0	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.13
H	1990 075744	Trask	Trask R	08/16/91	22,288	56,529	18.44	39	12	9	0	0	0	0	0	0	0	0	0	0	0	1	17	11	2	0.41
H	1990 075745	Trask	Trask R	09/17/91	22,474	97,941	31.28	27	29	12	0	0	0	0	9	0	0	0	0	0	0	1	8	10	6	0.45
H	1991 074917	Trask	Trask R	08/03/92	9,878	30,096	13.70	3	1	3	0	0	0	0	2	0	0	0	0	0	0	0	3	8	1	0.21
H	1991 075039	Trask	Trask R	08/03/92	9,858	30,076	13.70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0.10
H	1991 074048	Trask	Trask R	09/16/92	9,489	44,635	27.70	10	10	0	0	0	0	0	10	0	0	0	0	0	0	1	9	17	0	0.60
H	1991 074049	Trask	Trask R	09/16/92	9,630	44,779	27.70	4	4	0	0	0	0	0	3	0	0	0	0	0	0	0	10	13	0	0.35

Appendix Table 2. Continued.

STOCK GROUP,				Ocean Catch																							
stock, (source H, N, M),				Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.				
brood, tagcode	Hatchery	Release Site			Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+		
FALL CHINOOK SALMON (Continued)																											
TRASK RIVER (Continued)																											
Trask River:																											
H	1992	070242	Trask	Trask R	08/17/93	26,168	62,601	17.05	46	0	0	0	0	0	0	16	0	0	0	0	0	1	21	56	4	1	0.55
H	1992	070241	Trask	Trask R	09/20/93	25,593	95,360	31.06	64	4	0	0	0	0	0	27	0	0	0	0	0	0	23	107	13	2	0.94
H	1993	070458	Trask	Trask R	08/15/94	22,304	61,072	21.18	37	4	0	0	0	0	0	0	0	0	0	0	0	13	11	5	1	0.32	
H	1994	075418	Trask	Trask R	08/20/95	24,881	58,217	27.16	62	22	0	0	0	0	12	0	0	0	0	0	0	0	3	36	20	1	0.64
H	1995	070960	Trask	Trask R	08/16/96	24,372	82,655	28.95	24	19	6	0	0	0	2	0	0	0	0	0	0	12	34	12	1	0.45	
H	1996	091850	Trask	Trask R	08/19/97	25,695	66,986	26.99	32	2	0	0	0	0	2	0	0	0	0	0	1	9	12	6	0	0.28	
H	1997	091863	Trask	Trask R	08/16/98	26,289	53,296	25.77	114	18	3	0	0	3	0	27	0	0	0	0	5	59	52	16	--	1.13	
H	1998	091911	Trask	Trask R	08/15/99	26,232	66,190	25.62	55	13	0	0	0	0	5	0	0	0	3	1	18	28	--	--	--	0.47	
H	1999	092711	Trask	Trask R	08/14/00	25,775	61,814	25.34	10	21	0	0	0	0	7	0	0	0	0	5	31	--	--	--	--	0.29	
H	2000	092942	Trask	Trask R	08/11/01	24,121	65,822	24.06	0	0	0	0	0	0	0	0	0	0	0	5	--	--	--	--	--	0.02	
UMPQUA RIVER, LOWER																											
Cow Creek (South Umpqua):																											
N	1991	075761	Rock Creek	Umpqua R	09/02/92	23,457	91,713	39.80	8	5	4	0	0	0	5	4	8	0	0	2	0	1	0	0	0	0.16	
M	1992	076032	Rock Creek	Umpqua R	10/07/93	23,743	103,539	45.35	47	7	2	0	0	1	0	4	30	8	0	0	0	0	0	1	0	0.42	
M	1993	070333	Rock Creek	Umpqua R	10/06/94	25,593	75,662	47.69	34	30	6	0	0	2	0	2	17	5	0	0	1	0	1	0	0	0.39	
M	1994	075117	Rock Creek	Umpqua R	10/04/95	24,598	51,920	46.28	33	16	0	0	0	0	0	9	9	0	0	0	0	10	3	0	0	0.34	
M	1995	070534	Gardiner Cr	Gardiner Cr	05/21/96	31,239	31,549	5.67	45	14	0	0	0	3	0	0	0	2	0	4	5	7	0	0	0	0.26	
M	1995	071118	Gardiner Cr	Winchester Bay	06/29/96	48,758	49,240	22.23	166	113	9	0	0	14	0	7	11	0	0	3	23	13	40	0	0	0.83	
M	1995	070752	Rock Creek	Umpqua R	10/04/96	80,680	84,739	52.19	132	44	5	0	0	9	1	6	11	14	2	3	20	10	5	2	0	0.34	
M	1996	074859	Gardiner Cr	Gardiner Cr	06/25/97	13,901	14,127	7.69	16	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.16	
M	1996	092123	Gardiner Cr	Winchester Bay	06/28/97	71,372	72,978	7.69	18	0	4	0	0	3	2	0	3	7	0	1	0	27	19	0	0	0.12	
Smith River:																											
N	1997	070941	Gardiner Cr	Winchester Bay	07/04/98	24,617	75,381	7.56	85	22	4	0	0	1	0	0	0	0	0	0	3	21	1	--	--	0.56	
N	1998	091908	Gardiner Cr	Winchester Bay	07/03/99	38,632	38,632	11.63	206	92	0	0	0	24	0	8	7	0	0	1	37	6	--	--	--	1.03	
N	1999	093050	Gardiner Cr	Winchester Bay	07/22/00	63,527	85,207	26.68	94	16	4	0	0	25	0	8	22	6	0	39	33	--	--	--	--	0.41	
N	2000	092025	Gardiner Cr	Umpqua R	06/06/01	40,252	41,200	12.49	0	0	0	0	0	0	0	0	0	0	0	1	--	--	--	--	--	0.00	
N	2000	093314	Gardiner Cr	Umpqua R	06/29/01	131,209	134,000	18.84	0	0	0	0	0	0	0	3	0	0	0	9	--	--	--	--	--	0.01	
UMPQUA RIVER, SOUTH FORK																											
Cow Creek (South Umpqua):																											
N	1988	074612	Rock Creek	Cow Cr	05/15/89	25,391	96,328	2.37	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
N	1989	075457	Rock Creek	Umpqua R	05/29/90	54,124	60,000	2.27	2	5	12	0	0	0	0	11	0	0	0	0	1	0	0	0	0	0.06	
N	1990	074243	Umpqua R	Umpqua R, S Fk	05/24/91	59,954	72,619	1.61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	
M	1991	075813	Rock Creek	Umpqua R, S Fk	05/28/92	43,321	98,330	5.19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	
H	1992	076031	Rock Creek	Umpqua R, S Fk	06/03/93	25,753	26,050	7.52	4	0	0	0	0	0	4	4	0	0	0	2	2	0	2	0	0	0.07	
M	1993	070332	Rock Creek	Umpqua R, S Fk	06/23/94	25,741	129,898	4.83	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	

Appendix Table 2. Continued.

STOCK GROUP,			Ocean Catch																					
stock, (source H, N, M),			Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.		
brood, tagcode	Hatchery	Release Site		Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+
FALL CHINOOK SALMON (Continued)																								
UMPQUA RIVER, SOUTH FORK (Continued)																								
Cow Creek (South Umpqua):																								
M	1994	075447	Rock Creek	Umpqua R, S Fk	06/19/95	25,692	200,612	5.58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	
M	1999	093051	Canyonville	Canyon Cr	05/30/00	30,162	74,596	6.89	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0.01	
WINCHUCK RIVER																								
Winchuck River & tribs:																								
N	1988	074803	Winchuck R	Winchuck R	07/15/89	19,908	35,411	10.08	0	0	0	0	0	0	2	3	1	5	6	0	0	1	0.10	
N	1989	074823	Winchuck R	Winchuck R	07/11/90	27,192	40,891	5.15	0	0	0	0	0	0	42	3	0	16	1	1	4	0	0.25	
M	1991	071463	Elk River	Winchuck R	10/26/92	21,731	22,375	53.35	0	0	0	0	0	0	40	0	69	29	0	3	17	0	0.78	
M	1992	070359	Elk River	Winchuck R	10/20/93	9,021	9,537	44.46	0	0	0	0	0	0	40	3	16	9	1	1	8	0	0.86	
YAQUINA RIVER																								
Yaquina River:																								
N	1996	092147	Yaquina Bay	Yaquina R	08/28/97	24,388	123,743	40.49	50	4	3	0	0	0	1	0	0	0	0	0	8	10	3	0.34
N	1997	091856	Yaquina Bay	Yaquina R	08/14/98	26,099	103,831	28.00	177	46	3	0	0	2	0	21	0	0	0	0	47	115	5	1.65
N	1998	091909	Salmon River	Yaquina R	08/17/99	26,032	93,980	22.68	61	65	2	0	0	0	0	0	0	0	1	10	2	--	0.54	
N	1999	092709	Salmon River	Yaquina R	09/14/00	25,331	26,480	30.24	21	1	0	0	0	0	2	0	0	0	0	0	3	--	0.11	
N	2000	092940	Salmon River	Yaquina R	09/27/01	24,216	143,972	28.64	0	0	0	0	0	0	0	0	0	0	1	--	--	--	0.00	
SPRING CHINOOK SALMON																								
COQUILLE RIVER																								
Coquille River:																								
N	1988	074838	Butte Falls	Coquille R	09/15/89	26,442	42,243	37.48	0	0	0	0	0	4	2	0	37	25	0	54	0	2	3	0.49
M	1989	075236	Butte Falls	Coquille R, S Fk	09/13/90	26,044	32,500	45.35	0	0	0	0	0	0	2	24	35	0	0	0	5	5	0	0.27
M	1990	075738	Bandon	Coquille R, S Fk	10/01/91	15,643	15,643	36.87	0	0	0	0	0	0	8	0	0	11	0	0	0	0	0	0.12
N	1991	074854	Butte Falls	Coquille R, S Fk	09/20/92	12,308	13,028	34.10	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0.02
EAST FORK TRASK RIVER																								
Trask River:																								
H	1993	070336	Trask R Pond	Trask & Wilson R	08/17/94	25,561	172,229	42.35	19	6	0	0	0	0	8	11	2	0	0	1	2	47	25	0.48
H	1994	070957	Trask R Pond	Trask R	08/18/95	25,438	91,539	48.25	17	0	0	0	0	0	11	0	4	0	0	0	4	15	42	0.40
H	1995	071138	Trask R Pond	Wilson & Trask R	08/19/96	26,215	199,685	37.71	8	0	0	0	0	0	2	2	0	0	0	0	1	20	5	0.16
H	1996	091814	Trask R Pond	Wilson & Trask R	08/20/97	26,002	194,552	38.76	3	0	4	0	0	0	3	0	0	0	0	0	5	7	5	0.10
H	1997	091816	Trask R Pond	Wilson & Trask R	07/30/98	25,934	206,468	32.40	3	0	3	0	0	0	2	4	0	0	0	1	1	6	6	0.10
H	1998	091904	Trask R Pond	Trask R	08/10/99	25,595	150,875	50.39	35	13	5	0	0	16	3	14	2	2	0	0	1	5	34	0.51
H	1999	092951	Trask R Pond	Trask R	08/09/00	26,716	144,799	44.91	13	1	7	0	0	14	0	7	6	7	0	0	1	32	--	0.33

Appendix Table 2. Continued.

STOCK GROUP,				Ocean Catch																								
stock, (source H, N, M),		Release Site	Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.						
brood, tagcode	Hatchery			Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+				
SPRING CHINOOK SALMON (Continued)																												
NORTH UMPQUA RIVER																												
Umpqua River:																												
H	1988	074727	Rock Creek	Rock Cr	09/12/89	24,652	170,469	50.96	0	0	0	3	0	0	0	0	0	5	15	6	0	0	0	2	1	0	0	0.13
H	1988	074801	Rock Creek	Rock Cr	03/09/90	23,088	157,522	65.73	0	2	4	0	5	12	0	0	51	5	0	15	0	5	14	7	0	0	0.52	
H	1989	075234	Rock Creek	Rock Cr	09/14/90	26,238	156,465	56.00	0	0	4	0	0	0	0	0	11	0	0	0	0	1	1	0	0	0	0.06	
H	1989	075235	Rock Creek	Rock Cr	03/06/91	26,927	153,391	75.59	6	3	5	0	0	9	0	3	156	4	0	3	0	2	33	11	0	0	0.87	
M	1990	074914	Rock Creek	Rock Cr	09/27/91	20,146	162,318	55.99	0	0	0	0	0	4	0	0	21	0	0	5	0	1	6	2	0	0	0.21	
M	1990	074916	Rock Creek	Rock Cr	02/27/92	22,579	165,633	78.20	2	2	15	0	0	2	0	0	47	10	0	2	0	1	7	6	0	0	0.45	
M	1991	075763	Rock Creek	Rock Cr	09/23/92	25,495	149,643	60.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	
M	1991	075762	Rock Creek	Rock Cr	03/01/93	20,432	148,134	78.19	0	0	0	0	0	0	0	4	5	0	0	2	0	2	2	0	0	0	0.07	
H	1992	076030	Rock Creek	Rock Cr	09/17/93	24,502	155,003	58.14	0	0	0	0	0	0	0	0	13	0	0	0	0	0	2	0	0	0	0.06	
H	1992	076029	Rock Creek	Rock Cr	03/13/94	24,170	147,185	76.87	0	0	0	0	0	2	0	2	200	15	2	8	0	3	5	1	0	0	1.03	
H	1993	070357	Rock Creek	Rock Cr	10/10/94	25,150	67,539	57.34	9	0	0	0	4	0	0	1	23	0	0	0	0	1	1	0	0	0	0.16	
H	1993	070358	Rock Creek	Rock Cr	02/17/95	24,029	235,551	76.75	0	0	2	0	0	0	0	0	77	17	0	10	0	0	1	4	0	0	0.46	
H	1994	075448	Rock Creek	Rock Cr	10/02/95	25,512	66,477	57.41	0	0	0	0	0	0	0	0	14	0	0	0	0	0	3	0	0	0	0.07	
H	1994	075863	Rock Creek	Rock Cr	02/05/96	25,240	232,367	74.80	6	0	0	0	0	2	0	0	47	22	0	10	0	0	3	4	0	0	0.38	
H	1995	071332	Rock Creek	Rock Cr	10/02/96	25,849	73,826	56.81	6	0	0	0	0	2	0	1	0	0	0	0	0	0	1	0	0	0	0.04	
H	1995	071333	Rock Creek	Rock Cr	11/19/96	25,360	234,644	32.06	7	3	3	0	0	0	0	0	3	7	0	6	0	0	4	1	0	0	0.13	
H	1996	091849	Rock Creek	Rock Cr	09/28/97	23,652	100,352	56.69	0	0	0	0	0	14	0	0	3	10	0	1	0	1	9	1	0	0	0.16	
H	1996	091848	Rock Creek	Rock Cr	02/06/98	23,538	147,308	75.60	0	0	0	0	0	8	0	0	6	39	2	8	0	13	39	3	0	0	0.50	
H	1997	091859	Rock Creek	Rock Cr	10/02/98	24,965	151,050	57.42	0	0	6	0	0	4	0	4	18	38	0	4	0	3	10	0	--	0	0.35	
H	1997	091860	Rock Creek	Rock Cr	02/12/99	26,526	27,710	68.71	0	0	6	0	0	10	0	17	87	69	4	3	0	3	13	3	--	0	0.87	
H	1998	091928	Rock Creek	Rock Cr	02/09/00	26,872	251,282	67.70	3	0	27	0	0	32	11	21	179	94	6	33	1	0	0	--	--	--	1.57	
H	1998	091927	Rock Creek	Rock Cr	10/03/99	27,340	148,656	56.69	0	0	0	0	0	18	0	20	58	14	2	9	0	0	0	--	--	--	0.50	
H	1999	091937	Rock Creek	Rock Cr	10/02/00	25,972	146,958	52.74	0	0	0	0	0	13	0	4	6	3	0	0	0	2	--	--	--	--	0.11	
H	1999	091936	Rock Creek	Rock Cr	02/15/01	26,645	277,495	61.29	0	0	4	0	0	6	3	7	21	52	0	0	1	0	--	--	--	--	0.35	
M	2000	093231	Rock Creek	Rock Cr	10/22/01	25,442	144,882	55.11	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	0.00	
M	2000	093232	Rock Creek	Rock Cr	02/04/02	26,165	267,495	70.65	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	0.00	
NESTUCCA RIVER																												
Nestucca River:																												
H	1991	074822	Cedar Creek	Nestucca R	07/23/92	26,389	139,112	27.20	0	2	0	0	0	0	0	13	0	0	0	0	0	1	7	5	1	0	0.11	
H	1992	076026	Cedar Creek	Nestucca R	08/18/93	21,947	73,096	41.23	5	0	0	0	0	0	0	0	27	0	0	0	0	3	18	17	0	0	0.33	
H	1993	070530	Cedar Creek	Nestucca R	07/28/94	25,440	102,442	36.85	3	2	0	0	0	2	0	0	13	0	0	0	2	7	28	10	0	0	0.26	
H	1994	075453	Cedar Creek	Nestucca R	07/24/95	25,997	126,327	36.57	5	0	0	0	0	3	0	4	0	0	0	0	0	3	23	7	1	0	0.18	
H	1995	071143	Cedar Creek	Nestucca R	07/23/96	25,702	112,312	33.00	19	0	0	0	0	6	0	2	4	0	0	0	0	4	25	4	0	0	0.25	
H	1996	091815	Cedar Creek	Nestucca R	07/21/97	25,658	120,651	35.99	23	2	4	0	0	7	0	1	4	0	0	0	3	14	18	6	0	0	0.32	
H	1997	091852	Cedar Creek	Nestucca R	07/20/98	26,283	122,222	35.72	5	2	16	0	0	2	2	0	3	0	0	0	7	2	14	0	--	0	0.20	
H	1998	091905	Cedar Creek	Nestucca R	07/19/99	25,844	119,800	32.86	9	12	9	0	0	12	2	3	18	9	0	0	2	11	1	--	--	0	0.34	

Appendix Table 2. Continued.

STOCK GROUP,				Ocean Catch																						
stock, (source H, N, M),				Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.			
brood, tagcode	Hatchery	Release Site	Date		Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+	
SPRING CHINOOK SALMON (Continued)																										
NESTUCCA RIVER (Continued)																										
Nestucca River:																										
H	1999	092953	Cedar Creek	Nestucca R	07/17/00	26,319	113,401	31.72	7	0	12	0	0	18	0	2	10	1	0	0	13	3	--	--	--	0.25
H	2000	093229	Cedar Creek	Nestucca R	07/23/01	26,127	119,664	34.84	0	0	0	0	0	0	0	3	0	0	0	0	1	--	--	--	--	0.02
ROGUE RIVER																										
Rogue River:																										
H	1988	072336	Cole Rivers	Rogue R	08/16/89	10,394	182,209	33.10	0	0	0	0	0	0	0	6	1	3	18	2	6	8	4	0	0	0.46
H	1988	073758	Cole Rivers	Rogue R	08/16/89	10,358	182,296	33.10	0	0	0	0	0	0	0	0	7	0	21	6	9	9	5	0	0	0.55
H	1988	072337	Cole Rivers	Rogue R	08/16/89	10,510	182,208	33.35	0	0	0	0	0	0	0	8	0	7	11	2	4	10	6	0	0	0.46
H	1988	074230	Cole Rivers	Rogue R	09/15/89	9,770	137,843	50.96	0	0	0	0	0	0	0	3	7	0	7	2	3	5	5	0	0	0.70
H	1988	074233	Cole Rivers	Rogue R	09/15/89	10,342	138,066	50.96	0	0	0	0	0	0	0	0	17	0	8	1	2	3	11	0	0	0.41
H	1988	074229	Cole Rivers	Rogue R	09/15/89	9,076	137,697	52.13	0	0	0	0	0	0	0	3	24	0	8	1	9	4	6	0	0	0.61
H	1988	073643	Cole Rivers	Rogue R	10/17/89	9,949	179,190	70.86	0	0	0	0	0	0	0	5	10	3	15	1	7	6	13	0	0	0.94
H	1988	074234	Cole Rivers	Rogue R	10/17/89	10,225	179,210	70.86	0	0	0	0	0	0	0	11	11	0	4	0	1	4	15	0	0	0.45
H	1988	074236	Cole Rivers	Rogue R	10/17/89	10,342	179,105	70.86	0	0	0	0	0	0	0	3	0	0	9	0	5	6	12	0	0	0.34
H	1989	075144	Cole Rivers	Rogue R	08/16/90	9,866	53,869	37.48	0	0	0	0	0	0	0	8	0	0	0	1	5	51	2	0	0	0.68
H	1989	075142	Cole Rivers	Rogue R	08/16/90	9,602	54,581	38.76	0	0	0	0	0	0	0	21	0	0	0	2	0	41	0	0	0	0.67
H	1989	075143	Cole Rivers	Rogue R	08/16/90	9,975	54,010	39.10	0	0	0	0	0	0	0	11	0	0	0	0	1	44	0	0	0	0.56
H	1989	075147	Cole Rivers	Rogue R	09/14/90	10,237	45,339	52.73	0	0	0	0	0	0	0	8	3	0	0	0	1	45	0	0	0	0.56
H	1989	075146	Cole Rivers	Rogue R	09/14/90	10,074	45,167	53.99	0	0	0	0	0	0	0	16	0	0	10	0	1	43	0	0	0	0.69
H	1989	075145	Cole Rivers	Rogue R	09/14/90	9,888	45,155	54.64	0	0	0	0	0	0	0	2	0	0	4	1	3	43	1	0	0	0.55
H	1989	075150	Cole Rivers	Rogue R	10/16/90	9,625	40,845	70.86	0	0	0	0	0	0	0	5	0	0	8	0	0	65	0	0	0	0.81
H	1989	075149	Cole Rivers	Rogue R	10/16/90	9,538	41,112	73.15	0	0	0	0	0	0	0	22	0	0	5	0	2	40	1	0	0	0.73
H	1989	075148	Cole Rivers	Rogue R	10/16/90	9,625	41,218	74.35	0	0	0	0	0	0	0	11	0	0	4	0	1	52	2	0	0	0.73
H	1990	075313	Cole Rivers	Rogue R	08/13/91	10,462	207,311	32.39	0	0	0	0	0	0	0	0	0	0	6	4	33	22	12	0	0	0.74
H	1990	075312	Cole Rivers	Rogue R	08/13/91	10,566	208,244	34.10	0	0	0	0	0	0	0	7	0	0	11	4	35	10	5	0	0	0.68
H	1990	075314	Cole Rivers	Rogue R	08/13/91	9,996	207,326	35.99	0	0	0	0	0	0	0	18	3	0	13	5	19	13	16	0	0	0.87
H	1990	075320	Cole Rivers	Rogue R	09/10/91	9,793	43,167	56.69	0	0	0	0	0	0	0	39	0	0	6	0	11	19	10	1	0	0.88
H	1990	075319	Cole Rivers	Rogue R	09/11/91	10,384	43,342	55.99	0	0	0	0	0	0	0	18	0	0	19	5	5	13	9	0	0	0.66
H	1990	075318	Cole Rivers	Rogue R	09/12/91	10,376	43,256	55.99	0	0	0	0	0	0	0	31	9	0	22	6	20	10	10	0	0	1.04
H	1991	075907	Cole Rivers	Rogue R	08/18/92	10,489	10,637	28.70	0	0	0	0	0	0	0	0	0	0	88	16	4	296	11	0	0	3.96
H	1991	075906	Cole Rivers	Rogue R	08/18/92	10,448	10,536	31.71	0	0	0	0	0	0	0	0	0	0	69	12	10	309	25	0	0	4.14
H	1991	075908	Cole Rivers	Rogue R	08/18/92	10,527	10,576	32.39	0	0	0	0	0	0	0	17	0	0	101	11	7	316	22	0	0	4.50
H	1991	075909	Cole Rivers	Rogue R	09/08/92	10,220	10,364	45.81	0	0	0	0	0	0	0	3	0	61	4	9	266	17	0	0	0	3.52
H	1991	075910	Cole Rivers	Rogue R	09/09/92	10,134	10,609	44.03	0	0	0	0	0	0	0	3	0	52	7	1	220	18	0	0	0	2.97
H	1991	075911	Cole Rivers	Rogue R	09/10/92	10,135	10,574	47.74	0	0	0	0	0	0	0	14	0	4	8	6	160	17	0	0	0	2.10
H	1991	075912	Cole Rivers	Rogue R	10/13/92	10,252	10,597	66.69	0	0	0	0	0	0	0	14	0	22	5	4	189	22	1	0	0	2.55
H	1991	075913	Cole Rivers	Rogue R	10/13/92	10,235	10,542	67.69	0	0	0	0	0	0	0	5	0	39	4	4	199	24	0	0	0	2.69

Appendix Table 2. Continued.

STOCK GROUP,				Ocean Catch																					
stock, (source H, N, M),				Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.		
brood, tagcode	Hatchery	Release Site			Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+
SPRING CHINOOK SALMON (Continued)																									
ROGUE RIVER (Continued)																									
Rogue River:																									
H	1996	070145	Cole Rivers	Rogue R	08/15/97	9,847	215,990	35.43	0	0	0	0	0	0	0	0	0	5	1	4	34	0	0	0.45	
H	1996	070146	Cole Rivers	Rogue R	08/15/97	10,411	281,177	35.60	0	0	0	0	0	0	0	0	0	5	1	5	30	0	0	0.39	
H	1996	070147	Cole Rivers	Rogue R	08/15/97	9,412	280,358	36.93	0	0	0	0	0	0	0	0	0	12	2	5	26	4	0	0.52	
H	1996	092142	Cole Rivers	Rogue R	09/11/97	10,611	192,881	48.82	0	0	0	0	0	0	0	0	0	0	0	1	13	2	0	0.15	
H	1996	092140	Cole Rivers	Rogue R	09/11/97	10,497	192,338	50.79	0	0	0	0	0	0	0	0	0	4	0	1	18	3	0	0.25	
H	1996	092141	Cole Rivers	Rogue R	09/11/97	10,512	193,501	52.01	0	0	0	0	0	0	0	0	0	0	1	0	14	3	0	0.17	
H	1996	092139	Cole Rivers	Rogue R	10/12/97	10,251	56,674	69.13	0	0	0	0	0	0	0	0	0	1	0	0	27	4	0	0.31	
H	1996	092138	Cole Rivers	Rogue R	10/12/97	10,243	56,560	73.38	0	0	0	0	0	0	0	11	0	0	0	0	24	0	0	0.34	
H	1996	070620	Cole Rivers	Rogue R	10/13/97	10,070	56,359	69.34	0	0	0	0	0	0	0	0	0	3	0	2	29	5	0	0.39	
H	1997	092459	Cole Rivers	Rogue R	08/11/98	10,494	245,440	33.85	0	0	0	0	0	0	0	17	0	18	3	67	95	5	--	1.95	
H	1997	092458	Cole Rivers	Rogue R	08/12/98	10,385	245,352	32.87	0	0	0	0	3	0	0	3	0	13	0	57	110	1	--	1.80	
H	1997	092460	Cole Rivers	Rogue R	08/13/98	10,583	245,454	34.10	0	0	0	0	0	0	0	1	0	17	1	71	108	2	--	1.89	
H	1997	092462	Cole Rivers	Rogue R	09/16/98	10,401	200,417	52.74	0	0	0	0	0	0	2	18	4	6	1	30	126	8	--	1.87	
H	1997	092461	Cole Rivers	Rogue R	09/16/98	10,530	199,463	53.36	0	0	0	0	0	0	6	12	0	12	1	43	117	7	--	1.88	
H	1997	092463	Cole Rivers	Rogue R	09/18/98	10,388	199,466	51.54	0	0	0	0	0	0	5	4	0	15	4	27	88	8	--	1.45	
H	1997	092503	Cole Rivers	Rogue R	10/10/98	10,531	54,637	70.87	0	0	0	0	0	0	4	12	0	20	0	32	171	14	--	2.44	
H	1997	092502	Cole Rivers	Rogue R	10/11/98	10,524	54,612	69.78	0	0	0	0	0	0	4	7	18	0	12	2	32	151	25	--	2.39
H	1997	092501	Cole Rivers	Rogue R	10/12/98	10,157	54,551	69.78	0	0	0	0	0	0	10	20	0	7	1	26	149	17	--	2.26	
H	1998	092804	Cole Rivers	Rogue R	08/19/99	10,574	245,820	40.10	0	0	0	0	3	0	0	0	3	0	2	3	6	55	--	--	0.68
H	1998	092805	Cole Rivers	Rogue R	08/19/99	10,464	245,538	40.67	0	0	0	0	0	0	0	9	5	14	6	21	88	--	--	1.37	
H	1998	092806	Cole Rivers	Rogue R	08/19/99	10,351	246,109	41.23	0	0	0	0	0	0	5	6	0	3	16	2	11	70	--	--	1.09
H	1998	092801	Cole Rivers	Rogue R	09/16/99	10,548	152,149	50.28	0	0	0	0	0	0	2	8	0	18	1	6	110	--	--	1.37	
H	1998	092802	Cole Rivers	Rogue R	09/16/99	10,710	151,676	50.67	0	0	0	0	0	0	6	3	0	5	1	8	130	--	--	1.43	
H	1998	092803	Cole Rivers	Rogue R	09/16/99	10,545	151,673	53.61	0	0	0	0	0	0	2	8	0	12	3	7	96	--	--	1.21	
H	1998	092761	Cole Rivers	Rogue R	10/11/99	10,634	54,202	72.45	0	0	0	0	0	0	5	0	45	0	27	5	11	244	--	--	3.17
H	1998	092763	Cole Rivers	Rogue R	10/12/99	10,385	54,328	71.08	0	0	0	0	4	0	0	14	6	2	22	7	14	235	--	--	2.93
H	1998	092762	Cole Rivers	Rogue R	10/12/99	10,610	53,961	71.99	0	0	5	0	0	0	0	36	2	36	3	14	212	--	--	2.90	
H	1999	093046	Cole Rivers	Rogue R	08/17/00	57,467	420,214	51.37	0	0	0	0	0	0	27	75	23	196	28	198	--	--	--	0.95	
H	1999	093044	Cole Rivers	Rogue R	09/15/00	33,988	34,170	62.22	0	0	0	0	0	0	12	32	3	54	8	28	--	--	--	0.40	
H	1999	093045	Cole Rivers	Rogue R	10/13/00	33,570	33,570	81.73	0	0	0	0	0	0	21	21	9	78	13	33	--	--	--	0.52	
H	2000	093263	Cole Rivers	Rogue R	08/17/01	36,017	1,053,904	35.11	0	0	0	0	0	0	0	0	0	0	11	--	--	--	--	0.03	
H	2000	093301	Cole Rivers	Rogue R	09/13/01	33,528	263,782	55.18	0	0	0	0	0	0	2	0	0	0	14	--	--	--	--	0.05	
H	2000	093303	Cole Rivers	Rogue R	10/16/01	34,921	175,034	79.58	0	0	0	0	0	0	0	0	0	0	12	--	--	--	--	0.03	

Appendix Table 2. Continued.

STOCK GROUP,			Ocean Catch																							
stock, (source H, N, M),			Release Date	Number Released		Size (gm)	Oregon Areas										Freshwater Recoveries					% Surv.				
brood, tagcode	Hatchery	Release Site		Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4		5	6+		
SPRING CHINOOK SALMON (Continued)																										
SOUTH UMPQUA RIVER																										
Umpqua River:																										
H	1989	074239	Rock Creek	Umpqua R, S Fk	05/29/90	37,910	39,082	5.67	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00				
H	1989	074240	Rock Creek	Umpqua R, S Fk	05/29/90	36,256	37,377	5.67	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00				
M	1990	075809	Umpqua R	Umpqua R, S Fk	05/23/91	15,076	43,951	1.84	0	0	0	0	1	0	0	0	0	0	0	0	0	0.01				
M	1990	075810	Umpqua R	Umpqua R, S Fk	05/23/91	14,078	42,916	1.84	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00				
M	1991	075718	Rock Creek	Umpqua R, S Fk	05/29/92	46,610	56,753	5.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00				
M	1991	075719	Rock Creek	Umpqua R, S Fk	05/29/92	18,370	22,368	5.10	0	0	0	0	0	0	0	0	0	0	0	1	0	0.01				
H	1992	070449	Rock Creek	Umpqua R, S Fk	05/25/93	81,984	84,825	6.98	0	0	0	0	0	0	4	0	0	0	3	0	1	0.01				
TRASK RIVER																										
Trask River:																										
H	1988	074807	Trask	Trask R	08/16/89	26,588	62,519	27.65	6	6	0	0	0	2	0	0	5	0	0	0	6	17	10	0	0.20	
H	1988	074806	Trask	Trask R	09/20/89	26,076	71,825	43.61	14	4	17	0	0	5	0	0	5	0	0	1	1	14	17	1	0.30	
H	1989	075435	Trask	Trask R	07/16/90	25,504	134,955	16.37	3	0	2	0	0	0	0	8	0	0	0	0	2	6	8	0	0.11	
H	1989	074909	Trask	Trask R	08/13/90	9,087	16,056	34.89	3	0	0	0	0	2	0	0	3	0	0	0	0	7	9	1	0.28	
H	1989	074910	Trask	Trask R	08/13/90	8,752	15,699	34.89	3	2	0	0	0	0	0	0	3	0	0	0	1	4	1	0	0.16	
H	1989	074912	Trask	Trask R	09/17/90	9,514	15,347	57.41	3	0	3	0	0	2	0	8	3	0	0	0	0	4	5	0	0.29	
H	1989	074915	Trask	Trask R	09/17/90	9,294	15,110	57.41	3	0	0	0	0	0	0	4	0	0	0	0	1	1	3	0	0.13	
H	1990	074928	Trask	Trask R	07/15/91	23,757	88,366	23.14	7	0	0	0	0	0	0	7	0	0	0	0	1	10	9	0	0.14	
H	1990	073119	Trask	Trask R	08/15/91	20,670	30,131	35.43	2	0	0	0	0	2	0	3	4	0	0	0	3	12	7	0	0.16	
H	1990	071703	Trask	Trask R	09/17/91	19,762	30,444	59.67	7	0	0	0	0	0	0	7	0	0	0	1	2	16	22	0	0.28	
H	1991	075802	Trask	Trask R	07/14/92	26,396	119,857	20.30	4	0	0	0	0	0	0	3	0	0	0	0	0	2	1	0	0.04	
H	1991	075803	Trask	Trask R	08/03/92	24,521	29,279	28.30	0	3	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0.03	
H	1991	075804	Trask	Trask R	09/16/92	25,554	29,844	49.80	3	0	0	0	0	0	0	0	0	0	0	0	1	12	9	0	0.10	
H	1992	071424	Trask	Trask R	07/14/93	22,528	98,851	18.44	10	2	0	0	0	0	0	0	0	0	0	4	2	4	15	7	0	0.20
H	1992	070348	Trask	Trask R	08/17/93	9,593	14,104	26.99	4	4	0	0	0	0	0	6	3	0	0	4	0	1	8	4	0	0.35
H	1992	070347	Trask	Trask R	08/17/93	9,140	14,074	28.34	2	0	0	0	0	0	0	0	0	0	0	9	1	6	5	4	0	0.30
H	1992	070350	Trask	Trask R	09/15/93	9,147	13,562	38.11	5	0	0	0	0	0	0	5	5	0	0	0	1	1	5	3	2	0.30
H	1992	070349	Trask	Trask R	09/15/93	9,088	13,626	40.13	6	0	0	0	0	0	0	6	7	0	0	0	1	1	6	6	0	0.36
H	1993	070334	Trask	Trask R	08/15/94	19,416	28,259	43.16	6	0	0	0	0	0	0	9	0	0	0	0	1	4	13	10	0	0.22
H	1993	070335	Trask	Trask R	09/15/94	21,132	29,934	52.08	11	0	0	0	0	0	0	0	5	0	0	0	0	1	14	5	0	0.17
H	1994	070427	Trask	Trask R	08/09/95	26,600	29,938	42.38	0	0	0	0	0	0	0	2	6	0	0	0	0	0	1	5	0	0.05
H	1994	070762	Trask	Trask R	08/09/95	20,435	22,821	43.19	3	0	0	0	0	0	0	2	0	0	0	0	0	0	4	6	1	0.08
H	1995	071329	Trask	Trask R	08/15/96	21,506	23,352	42.74	8	0	0	0	0	0	0	2	0	0	0	0	0	1	6	4	0	0.10
H	1995	071239	Trask	Trask R	08/15/96	28,872	31,116	46.27	0	0	0	0	0	0	0	4	2	0	0	0	0	1	11	9	0	0.09
H	1996	091844	Trask	Trask R	08/19/97	22,681	23,657	44.90	6	0	0	0	0	2	0	6	0	0	0	0	0	0	13	1	0	0.12
H	1996	092024	Trask	Trask R	08/19/97	28,738	30,570	49.30	3	0	0	0	0	0	0	4	0	0	0	0	0	2	7	0	0	0.06
H	1997	091854	Trask	Trask R	08/18/98	26,316	38,367	52.14	3	0	3	0	0	7	0	8	22	3	0	0	0	6	18	1	--	0.27

Appendix Table 2. Concluded.

STOCK GROUP,				Ocean Catch																						
stock, (source H, N, M),				Release Date	Number Released		Size (gm)	Oregon Areas											Freshwater Recoveries					% Surv.		
brood,	tagcode	Hatchery	Release Site		Ad+CWT	Total		AK	NCBC	WCVI	GST	PS	WA	1&2	3	4	5	6&7	CA	2	3	4	5		6+	
SPRING CHINOOK SALMON (Continued)																										
TRASK RIVER (Continued)																										
Trask River:																										
H	2000	092956	Trask	Trask R	08/09/01	26,898	147,855	47.64	0	0	0	0	0	0	0	0	0	0	3	--	--	--	--	0.01		
WILSON RIVER																										
Trask River:																										
H	1990	074931	Tuffy Creek	Wilson R	08/07/91	23,524	90,960	38.43	5	0	3	0	0	7	0	44	2	0	0	0	1	2	14	13	0	0.39
H	1991	074825	Tuffy Creek	Wilson & Kilchis	08/05/92	26,516	102,935	36.30	9	0	0	0	0	0	0	3	0	0	0	0	0	0	7	4	0	0.09
H	1992	070353	Tuffy Creek	Wilson R	08/12/93	21,674	88,778	38.43	3	2	0	0	0	0	0	5	12	0	0	4	0	6	11	7	2	0.25
H	1993	070331	Tuffy Creek	Wilson R	08/08/94	19,351	80,402	45.31	11	0	0	0	0	2	0	2	0	0	0	0	0	2	10	18	0	0.23
H	1994	070956	Tuffy Creek	Wilson R	08/17/95	26,639	109,083	34.89	6	0	0	0	0	0	0	4	0	0	0	0	0	0	10	12	0	0.12
H	1998	091903	Tuffy Creek	Wilson R	08/17/99	25,102	104,138	40.49	23	4	3	0	0	1	0	4	7	0	0	0	0	3	47	--	--	0.37
H	1999	092952	Tuffy Creek	Wilson R	08/15/00	26,571	101,784	44.04	11	1	4	0	0	7	3	0	19	2	0	0	0	29	--	--	--	0.29
H	2000	092958	Tuffy Creek	Wilson R	08/13/01	26,411	107,560	43.95	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	0.00
WINTER CHINOOK SALMON																										
TRASK RIVER																										
Trask River:																										
H	1988	073757	Trask	Trask R	10/19/89	5,803	5,891	40.13	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.14
H	1990	074926	Trask	Trask R	09/17/91	26,406	43,562	23.02	29	22	3	0	0	0	0	24	0	0	0	0	0	1	11	12	0	0.39
H	1991	075805	Trask	Trask R	09/15/92	24,619	46,661	21.90	12	4	0	0	0	0	0	8	0	0	0	0	0	5	15	21	0	0.26
H	1992	070243	Trask	Trask R	09/15/93	26,207	51,877	24.38	59	6	0	0	0	0	0	13	0	0	0	0	1	25	92	8	0	0.78
H	1993	070740	Trask	Trask R	08/18/94	27,579	47,598	22.88	64	14	0	0	0	0	0	8	0	0	0	0	0	27	14	44	2	0.64
H	1994	075419	Trask	Trask R	08/09/95	22,074	50,383	19.98	35	2	0	0	0	0	0	0	0	0	0	0	0	4	13	4	0	0.26
H	1995	071319	Trask	Trask R	08/15/96	26,185	35,719	21.17	27	11	0	0	0	0	0	4	0	0	0	0	0	7	39	11	0	0.38
H	1996	091851	Trask	Trask R	08/19/97	25,801	49,100	20.71	9	5	0	0	0	0	0	0	0	0	0	0	0	4	13	15	1	0.20
H	1997	091901	Trask	Trask R	08/18/98	26,707	49,381	23.14	90	23	0	0	0	0	0	10	0	0	0	0	4	21	55	14	--	0.83
H	1998	091913	Trask	Trask R	08/16/99	24,779	38,222	22.56	32	4	0	0	0	0	0	0	0	0	0	0	2	21	14	--	--	0.29
H	1999	092909	Trask	Trask R	08/17/00	26,625	41,900	20.25	15	10	0	0	0	0	0	13	0	0	0	0	1	35	--	--	--	0.29
H	2000	091845	Trask	Trask R	08/14/01	23,780	50,916	19.33	1	0	0	0	0	0	0	0	0	0	0	2	--	--	--	--	0.01	