CZES Coastal Zone and Estuarine Studies

Migrational Characteristics and Survival of Juvenile Salmonids Entering the Columbia River Estuary in 1981

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September 1982

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Columbia River Estuary, Jones Beach (RKM 75) for

1977 Through 1981

ABSTRACT

National Marine Fisheries Service (NMFS) under funding from the Bonneville Power Administration conducted a study related to migrational behavior and survival of juvenile salmonids entering the Columbia River estuary. Beach and purse seines were used to sample at Jones Beach (RKm 75) from March through November 1981. The total salmonid catch was approximately 200,000 fish, of which 3.3% were marked.

Migration peaks for hatchery yearling chinook and coho salmon and steelhead trout occurred during early May whereas three peaks were recorded for subyearling chinook salmon during April, May, and July. Movement rates were slowest for three groups: (1) those that had wintered in the system, (2) yearling chinook salmon released in March and April, and (3) small subyearling chinook salmon released throughout the spring and summer. Movement rates to the estuary generally increased with increasing river flow and fish size.

Survival rates to the estuary were increased by transportation. Estimated survival rates of transported groups (relative to controls) increased proportionately with the numbers of dams bypassed--averaging 56% for one dam and 311% for eight dams.

The Jones Beach sampling provided survival estimates to other agencies for nutrition, rearing density, and chemical treatment studies.

INTRODUCTION

Returns of adult salmon and steelhead to the Columbia and Snake Rivers have declined to critical levels during the last decade. One of the most significant factors in this decline is failure of juveniles (smolts) to successfully migrate to the ocean. Dams and their reservoirs are major obstacles to the seaward migration of smolts. In recent years, increased electrical power requirements have necessitated more generating capacity resulting in decreased water flow during the peak migration of juvenile salmonids. Consequently, migration time is extended and more fish are passing through the turbines at each dam, thus decreasing the survival of juveniles (Raymond 1979). Fishery agencies with the cooperation of power entities have responded by: (1) increasing and improving production at hatcheries, (2) improving turbine bypass systems for smolts, (3) transporting juvenile salmon past dams by truck and barge to downstream sites, and (4) recommending minimum flows during the period of the spring smolt migration.

In 1977, National Marine Fisheries Service (NMFS) personnel reestablished an estuarine sampling station at Jones Beach in the upper Columbia River estuary at River Kilometer (RKm) 75 to assist in evaluating some of the above activities taken to increase survival of smolts (Figure 1).

Timing, survival, and migratory behavior of juvenile salmonids from various sites were examined each year through 1980 (Figure 2). Although valuable information relative to smolt behavior and survival was obtained, additional data were needed to more precisely evaluate juvenile survival and migrational behavior in relation to other actions recommended to increase smolt survival.

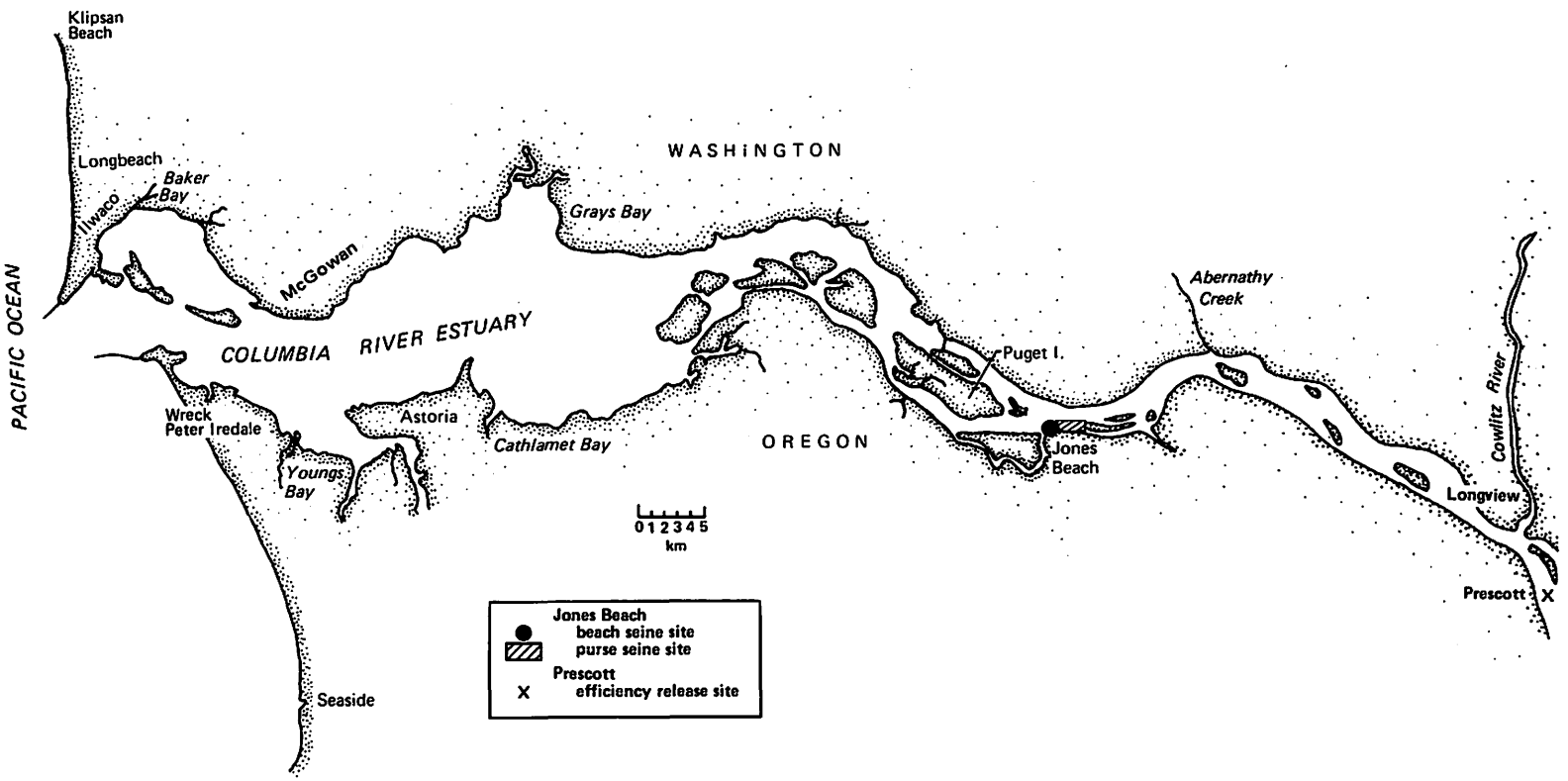
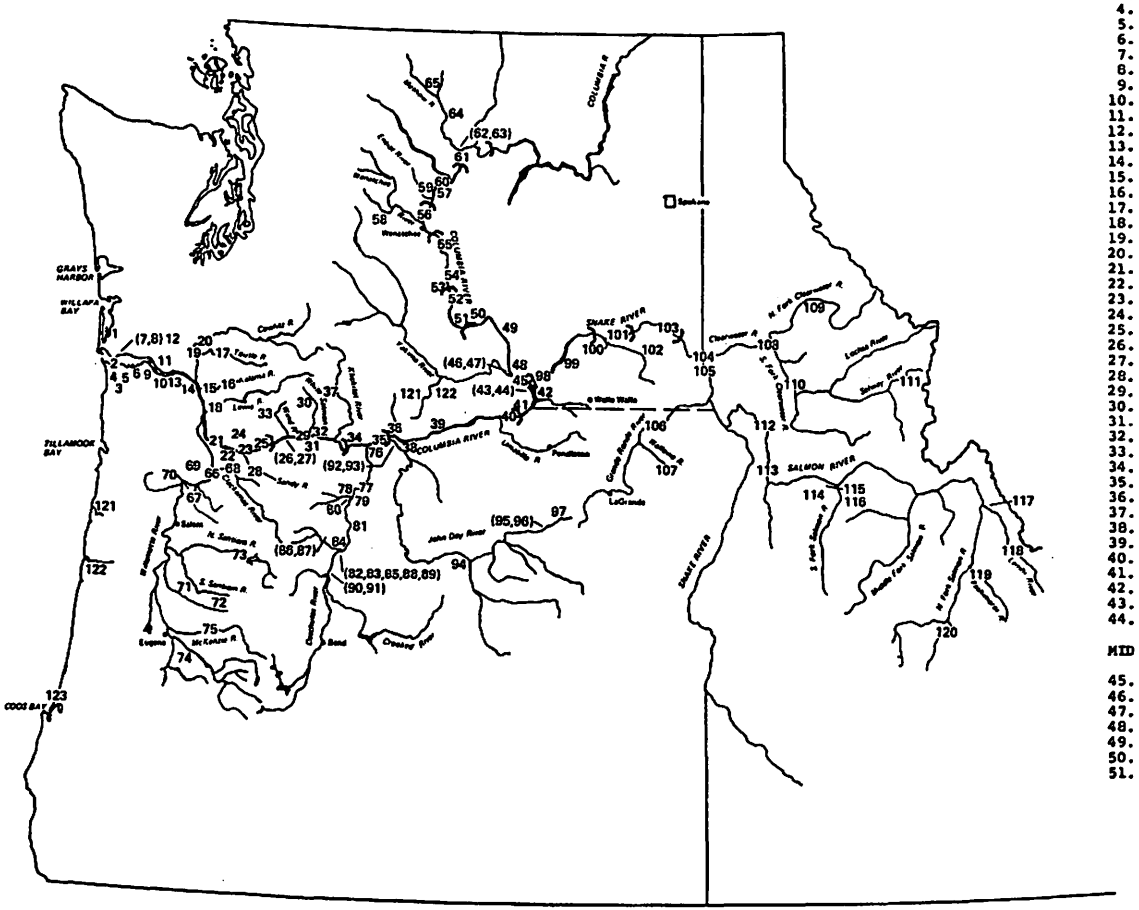


Figure 1.--Map of lower Columbia River and estuary; Jones Beach sampling site and Prescott release site are indicated at Rkm 75 and 115, respectively.



LEGEND

Release site	RKM
LOWER COLUMBIA R & TRIBS.	
1. Chinook R Pd	11
2. Hammond Ore	13
3. Tucker Cr	29
4. Stavebolt Cr	34
5. Klaskanine R	37
6. Big Cr	49
7. Grays R@RM 13	57
8. Grays R@RM 21	68
9. Jones Beach	75
10. Beaver Terminal	84
11. Abernathy Cr	91
12. Elokomin R	94
13. Rainier Ore	109
14. Prescott Ore	115
15. Kalama R@RM 6	127
16. Kalama R@RM 15	141
17. Green R	160
18. Lewis R	.163
19. Cowlitz R@RM 47	184
20. Cowlitz R@RM 50	189
21. Dalton Pt	206
22. Washougal R@RM 10	213
23. Skamania Light	219
24. Washougal R@RM 15	221
25. Beacon Rock	227
26. Blw Bonn D	230
27. Tanner Cr	231
28. Sandy R	235
29. Lit Wh Sal R@RM 2	261
30. Lit Wh Sal R@RM 5	268
31. Spring Cr Hat	269
32. Big Wh Rear Pd	273
33. Wind R	275
34. The Dalles D	306
35. John Day D	347
36. Towal Wash	351
37. Klickitat R	358
38. Blalock	375
39. Patterson Slough	448
40. McNary D	470
41. Port Kelly	501
42. Walla Walla R@ Mo	507
43. Casey Pd	516
44. Villiard Slough	521
MID COLUMBIA R & TRIBS.	
45. Pasco Wash	522
46. Yakima R@Mo	539
47. Richland Wash	540
48. Ringold Hat	568
49. Wh Bluffs	596
50. Vernita Brid	629
51. Pr Rapid Spaw Ch	639
52. Crab Cr	660
53. Wanapum D	669
54. Vantage Brid	674
55. Rock Island D	725
56. Rocky Reach D	761
57. Turtle Rock Pd	768
58. Icicle Cr	789
59. Entiat R	790
60. Chelan Hat	813
61. Wells Spaw Ch	828
62. Methow R@Mo	838
63. Pateros Ferry	839
64. Methow R@RM 28	883
65. Methow R@Hat	919
WILLAMETTE R & TRIBS.	
66. Willamette Falls	207
67. Mollalla R	220
68. Clackamas R	247
69. Tualatin R@Scogg	304
70. Mill Cr	308
71. S Santiam@Spt Ld	411
72. S Santiam@Foster	416
73. N Santiam@Minto	452
74. M Fk Willam@Dexter	491
75. McKenzie@Leaburg	492
DESCHUTES R & TRIBS.	
76. Deschutes R@Mo	330
77. Sherars Falls-Mo	363
78. Deschutes R@RM 43	395
79. Oak Spring Hat	404
80. Maupin Trap RM 50	408
81. Wm Sp R-Shor Fall	425
82. Dry Cr-Wm SP R	446
83. Deschutes R@RM 84	463
84. Warm Spring Trap	464
85. Pelton D-Wm Sp R	473
86. Warm Spring R	479
87. Warm Spring R@Hat	485
88. Deschutes R@RM 100	489
89. Beaver Cr-WmSp R	494
90. Rnd Butte Ladder	503
91. Rnd Butte Hat	506
JOHN DAY R	
92. John Day R@Mo	349
93. John Day R@RM 16	374
94. John Day@Spray Ore	623
95. N Fk John D@RM 60	744
96. M Fk John D@RM 32	749
97. John D@Granite Cr	788
SNAKE R & TRIBS.	
98. Ice Harbor D	537
99. Fishhook Park	557
100. Texas Rapids	630
101. Lit Goose D	634
102. Tucannon R	691
103. Lo Granite D	693
104. Clarkston Wash	742
105. Asotin Id	754
106. Grand Ronde R	793
107. Wallowa Hat	940
CLEARWATER R & TRIBS.	
108. N Fk Clearwater	809
109. Clear Cr	868
110. S Fk Clearwater	1003
111. Lochsa R	1026
SALMON R & TRIBS.	
112. Salmon R@RM 53	908
113. Salmon R@RM 85	959
114. Rapid R Hat	967
115. Lit Sal R	974
116. S Fk Salmon R	1153
117. Lemhi R@Mo	1239
118. Lemhi R	1294
119. Pahsimeroi R	1311
120. Upper Salmon R	1446
YAKIMA R	
121. Satus Cr	651
122. Dry Cr	681
OUTSIDE COLUMBIA RIVER BASIN	
123. Siletz R	
124. Yaquina Bay	
125. Coos Bay Ore	

Figure 2.--Map of release sites for marked fish in Columbia River systems. Index numbers correspond to location and Rkm as indicated on legend.

The initial funds were provided by the Pacific Northwest Regional Commission (PNRC). In 1981, the Bonneville Power Administration (BPA) began funding the sampling in the estuary. The current objectives of this sampling are:

1. Define migration timing and movement rate of various stocks of salmonids from release location to the estuary.

2. Obtain comparative capture percentages for marked groups to evaluate relative smolt survival in relation to:

   a. mitigation hatcheries;

   b. bypass systems at dams;

   c. transportation programs;

   d. fish size, release site, and date;

   e. adult recoveries and;

   f. river flows and electrical power production.

3. Amass information on which to partially base management and regulatory practices which will restore, enhance, and protect the fishery resources of the Columbia River.

This report summarizes sampling activities for 1981 and includes an evaluation of catch data from 1977 to 1981.

EXPERIMENTAL AREA AND METHODOLOGY

The Columbia River at Jones Beach (RKm 75) is about 1.6 km wide and has a central ship channel that is dredged to a depth of 14 m. This location is considered by hydrologists to be the "entrance" to the estuary. The gradually sloped sandy beach and debris-free channel make the site ideal for sampling with both beach and purse seines.

Catches at Jones Beach of marked fish released at many locations throughout the Columbia River system (Figure 2) provided the majority of the data contained in this report.

Equipment and Sampling Procedures

Purse seining was done in water about 9 m deep at the north edge of the ship channel near the upstream tip of Puget Island. The seine was 206 m long and 11 m deep with mesh of 1 to 2 cm stretched measure (Johnsen and Sims 1973). Beach seining was done on the Oregon shore where the water depth was about 6 m at the outer end of the net sweep. The net was 95 m long and 5 m deep with mesh of 1 to 2 cm (Sims and Johnsen 1974). Variations in the amount of water strained by the seines was minimized in relation to water velocity because the nets moved with the river current as each set was made.

From 1977 through 1980, sampling began in March and ended in September except for 1977 and 1978 when sampling continued through the winter and into the following spring. In 1981, sampling at Jones Beach began in March and terminated in December. Seining effort varied weekly depending on the number of migrants present. Initial fishing effort was 4 sets/day, 3 days/week with the beach seine and 2 sets/day, 2 days/week with the purse seine. In May and June, the nets were fished 6 or 7 days/week with an average of 10 sets/day for the beach seine and 4 sets/day for the purse seine. From July to September, the effort reverted to the initial level (Appendix Table A1). Generally, sampling began at sunrise and continued for 7 hours.

Physical Data

Surface water temperatures were measured daily at Jones Beach to $\pm$ 0.5 °C. Average daily river flow at Bonneville Dam was obtained from the U.S.

Army Corps of Engineers[1/]. Weekly turbidity measurements for the Columbia River downstream from the Cowlitz River were obtained from NMFS personnel at the Prescott Field Station[2/].

Fish Processing

Fish were examined at a permanent fish processing facility on shore; they were anesthetized with ethyl p-aminobenzoate (benzocaine), enumerated by species, and examined for identifying marks. Fork lengths were measured from a subsample of each species. Juvenile chinook salmon were separated into subyearling and yearling categories on the basis of length frequency distributions of fork length; some overlap in age determination occurred and was verified by recovery of marked fish of known age, however, this method generally proved satisfactory. The fish were released after processing. Marks, species, fork length (mm), sampling gear, sampling site, time, and date were recorded for each marked fish. Salmonids with an excised adipose fin, indicating the presence of an implanted coded wire tag (CWT), were passed through a detector to estimate tag retention percentages for each species. When less than 100 CWT per species were captured per day, they were sacrificed for tag identification; when more than 100 CWT per species were caught, subsamples were taken. The data were expanded to represent that portion of the catch that was released.

Samples for other research programs were collected from fish with CWT: (1) gill tissues (Na^+-K^+ ATPase analysis)for the NMFS smoltification study [3/] and (2) scales for Oregon Department of Fish and Wildlife

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1/ U.S. Army Corps of Engineers, NPD, Reservoir Control, 210 Custom House, Portland, OR 97208.

2/ Robert McConnell, NMFS, P.O. Box 1051, Longview, WA 98632. Measurements adjacent to or 8 km downstream from the mouth of the Cowlitz River.

3/ Waldo Zaugg, NMFS, Cook, WA 98605.

(ODFW)[4/] and Washington Department of Game (WDG)[5/]. Sex determinations of coho salmon were made for the U.S. Fish and Wildlife Service[6/] and adult cutthroat trout were jaw tagged and released for WDG.[5/].

Portions of the daily catch at Jones Beach were freeze branded; 80% of the yearling chinook salmon, coho salmon, and steelhead and 40% of the subyearling chinook salmon were branded 3 days/week from 1 May to 23 June. Recaptures of these branded fish determined the rate of multiple recapture for each species.

Analysis Procedures

Migration Timing

Migrational timing at Jones Beach for subyearling chinook salmon was based on beach seine catches. Purse seine catches were used for migrational timing of yearling chinook salmon, coho salmon, and steelhead. Catches of marked fish were expanded to represent a standard effort of 10 beach seine and 5 purse seine sets daily.

Movement Rates

Movement rates of marked groups to the estuary were calculated using distance traveled and travel time from the date of release at the hatchery to the date of capture of the median fish at Jones Beach. Seasonal average rates for freshwater migration were calculated for each species, using index groups from particular hatcheries for each year.

4/ Ron Youker, ODFW, Oregon State University, Corvallis, OR 97331.

5/ John Loch, WDG, 1351 Kalama River Rd., Kalama, WA 98625.

6/ Percy Washington, USFWS, Naval Support Activity, Bldg. 204, Seattle, WA 98115.

Relative Survival

Relative survival estimates for marked groups released by various fishery agencies were made by comparing catch rates at Jones Beach:

$$\frac{[\%\ \text{Catch (treatment)} - \%\ \text{catch (control)}]}{\%\text{Catch (control)}} \times 100 = \%\ \text{difference of survival}$$

Variation in Catches

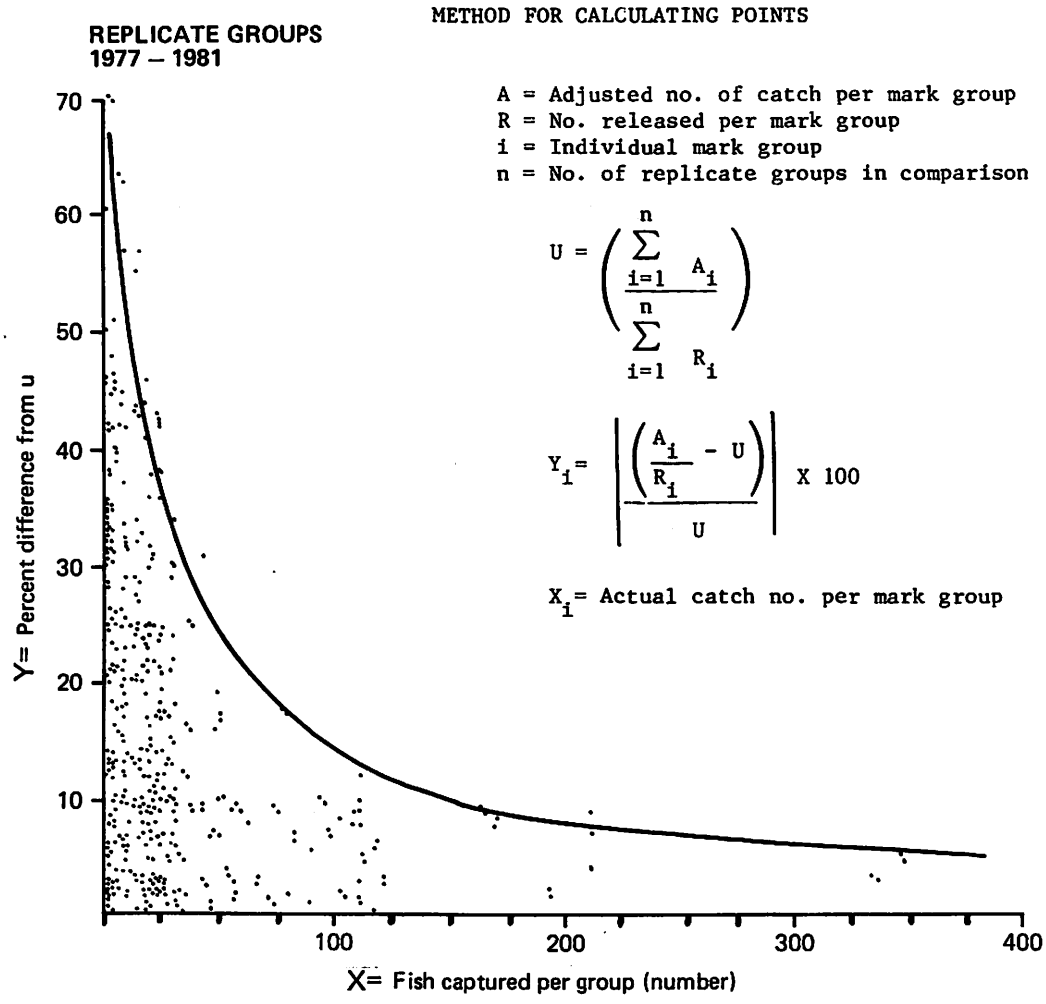
To evaluate gear efficiency (CPUE) in relation to river flow, comparisons were made for mark groups from the same stock and size migrating at different river flows. Only those groups released downstream from Bonneville Dam were used because of the variation in survival affected by flow conditions at dams (Raymond 1979). We examined each species separately and found no significant differences, then combined the data. An inverse relationship between catch percent and flow was apparent in 27 of 35 observations (Appendix Table A2). The average effect of change in river flow on catch percentages was a 1,000 m^3/s (35,300 ft^3/s) increase in flow results in a 21% decrease in catch percentage. Since only 35 comparisons could be made and variation between comparisons was large, the catch/flow relationship is not yet well defined. As the data base increases this measure for the average affect of flow on catch percentages will improve, and an adjustment of catch percentages to reflect river flow changes will be possible.

Evaluation of the overall consistency of Jones Beach catch percentages was made using the G statistic [modification of chi-square for small sample size (Sokal and Rohlf 1969)] to establish the validity of the hypothesis: H_o = no difference in catch percentages of identical groups (replicates) released with different marks as opposed to the alternative hypothesis, H_A = there were significant differences between catch percentages of replicate groups. Homogeneity of catch percentages was found in 161 of 180 comparisons at the 95% rejection level.

To simplify analysis procedures, we developed an empirical method for comparing catch percentages. Catch percentages of replicate mark groups were averaged (U), then the difference between this average and each individual catch percentages was calculated (Y) and plotted against actual number of fish captured (X). Figure 3 shows that variation between catch percentages of relicate groups is large (as high as 71% difference) when 25 or fewer fish were captured, and small (12% difference or less) when 100 or more fish were captured. The curve on Figure 3 represents the 95% level of confidence. We recommend that researchers plot catch percentage differences for treatment and control groups on Figure 3 to ascertain whether observed differences are greater than normally observed between replicate groups. For example, to evaluate the difference between two stocks of steelhead from Hagerman Hatchery released at the Pahsimeroi River:

Treatment	No. released	No. captured		U	Xi	Yi
		Actual	Adjusted			
Stock A	38,400	13	19	0.00072	13	31
Stock B	49,600	30	44		30	23

Both data points fall inside the range for replicate groups in Figure 3, thus we conclude difference in survival to the estuary for Stocks A and B could not be detected. G statistic evaluation provides the same conclusion, but would be time consuming to calculate if more than two groups were compared. The empirical evaluation takes into account the variation that has affected consistency of sampling in the past (including random variation), consequently it provides a more precise evaluation.



METHOD FOR CALCULATING POINTS

A = Adjusted no. of catch per mark group
R = No. released per mark group
i = Individual mark group
n = No. of replicate groups in comparison

$$U = \left(\frac{\sum_{i=1}^{n} A_i}{\sum_{i=1}^{n} R_i} \right)$$

$$Y_i = \left| \frac{\left(\frac{A_i}{R_i} - U \right)}{U} \right| \times 100$$

X_i = Actual catch no. per mark group

Figure 3.--Differences between catch percentages for replicate mark groups compared to number in catch.

RESULTS OF SAMPLING IN 1981 RELATED TO DATA SINCE 1977

Numbers of marked and unmarked fish captured in 1981 were similar to 1980 but substantially less than 1977-79 (Figure 4). Effort levels throughout the peak migration period were similar for all 5 years, but river flows were substantially higher in 1980 and 1981, and the eruption of Mount St. Helens decreased catches in 1980 (Dawley et al. 1981).

The sampling at Jones Beach from March through December 1981, (1199 beach seine sets and 379 purse seine sets) resulted in catches of: 123,483 subyearling chinook salmon; 16,541 yearling chinook salmon; 37,633 coho salmon; and 12,312 steelhead (Appendix Tables A3 and A4). Catch percentages of marked fish groups were generally below 0.5% of the number released (Appendix B); marked fish recaptured included 4,808 CWT and 1,696 external marks (Table 1). Recapture of fish sampled and marked at Jones Beach was less than 0.6%.

In 1981, water temperatures at Jones Beach ranged from 8°C in March to 21°C in August and were similar to temperature patterns observed in other years (Appendix Table A5). Turbidity levels ranged from 2.5 to 20 Jackson Turbidity Units (JTU) during the spring and summer migration period--not substantially different than in years prior to the eruption of Mount St. Helens during May of 1980.

Migration Timing

Temporal distributions of migrations of salmon and steelhead (Figure 5) were similar to 1980 (Appendix Table A6). The major differences were that 25% fewer steelhead were caught during their peak migration period, and a sudden decrease in catch rates of coho salmon and steelhead did not occur as was observed in 1980 coincident with increased river turbidity following the eruption of Mount St. Helens.

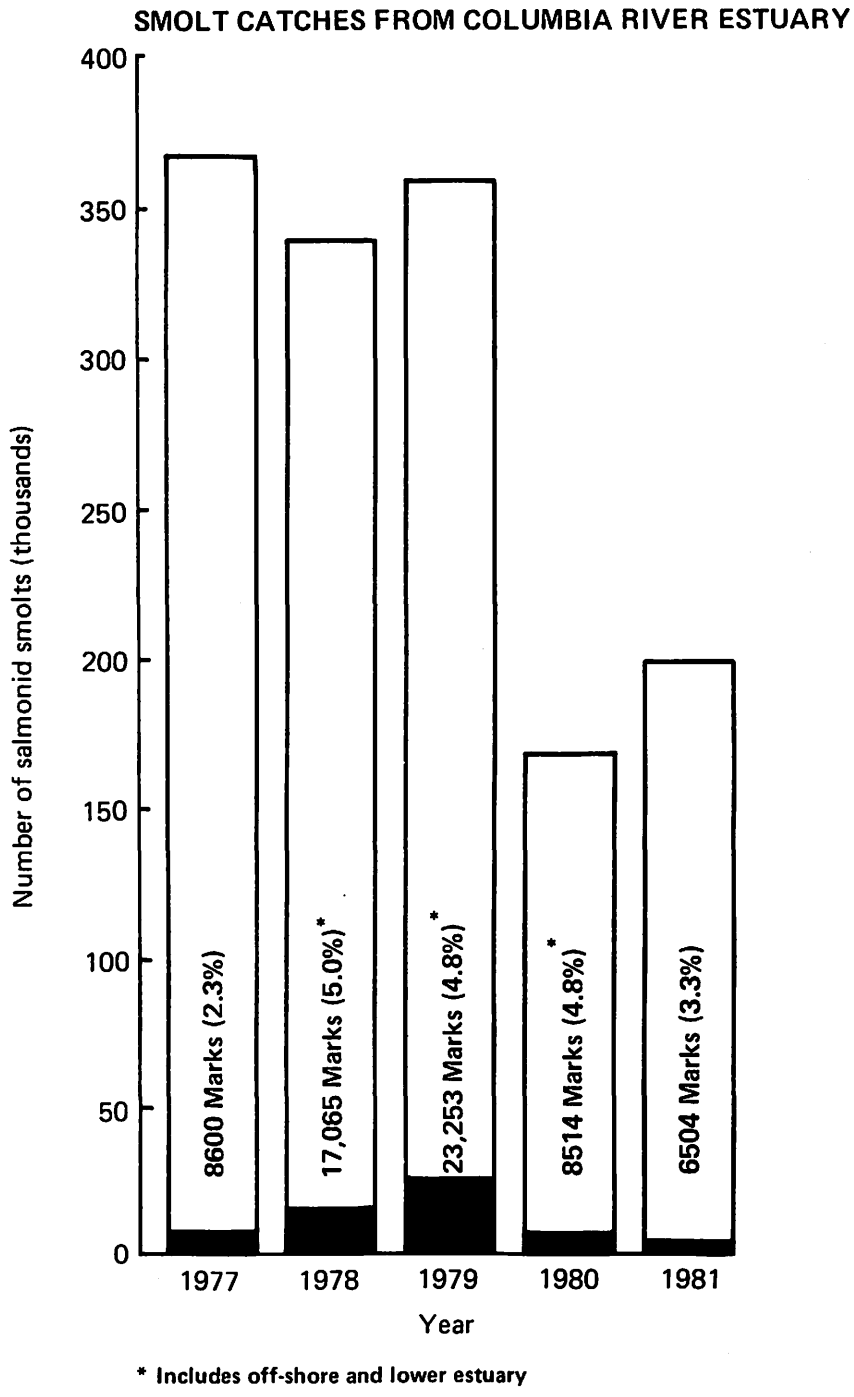


Figure 4.--Numbers of marked (darkened area) and unmarked salmonids captured at Jones Beach, 1977-81. Percentage of marked fish in total catch is shown in parenthesis.

Table 1.--Numbers of marked juvenile salmonids captured in the Columbia River estuary (Rkm 75) during 1981.

Species	Coded wire tags (CWT)[a]	Ad clip (no CWT)	Brands	Fin clips	Total
Chinook salmon-subyearlings	3,232	232	304	4	3,772
Chinook salmon-yearlings	464	49	31	471	1,015
Coho salmon	830	60	18	22	930
Steelhead	282	47	76	382	787
Sockeye salmon	0	0	0	0	0
Total	4,808	388	429	879	6,504

a/ Retention of CWT was lowest for steelhead (83%) and highest for subyearling chinook and coho salmon (93%).

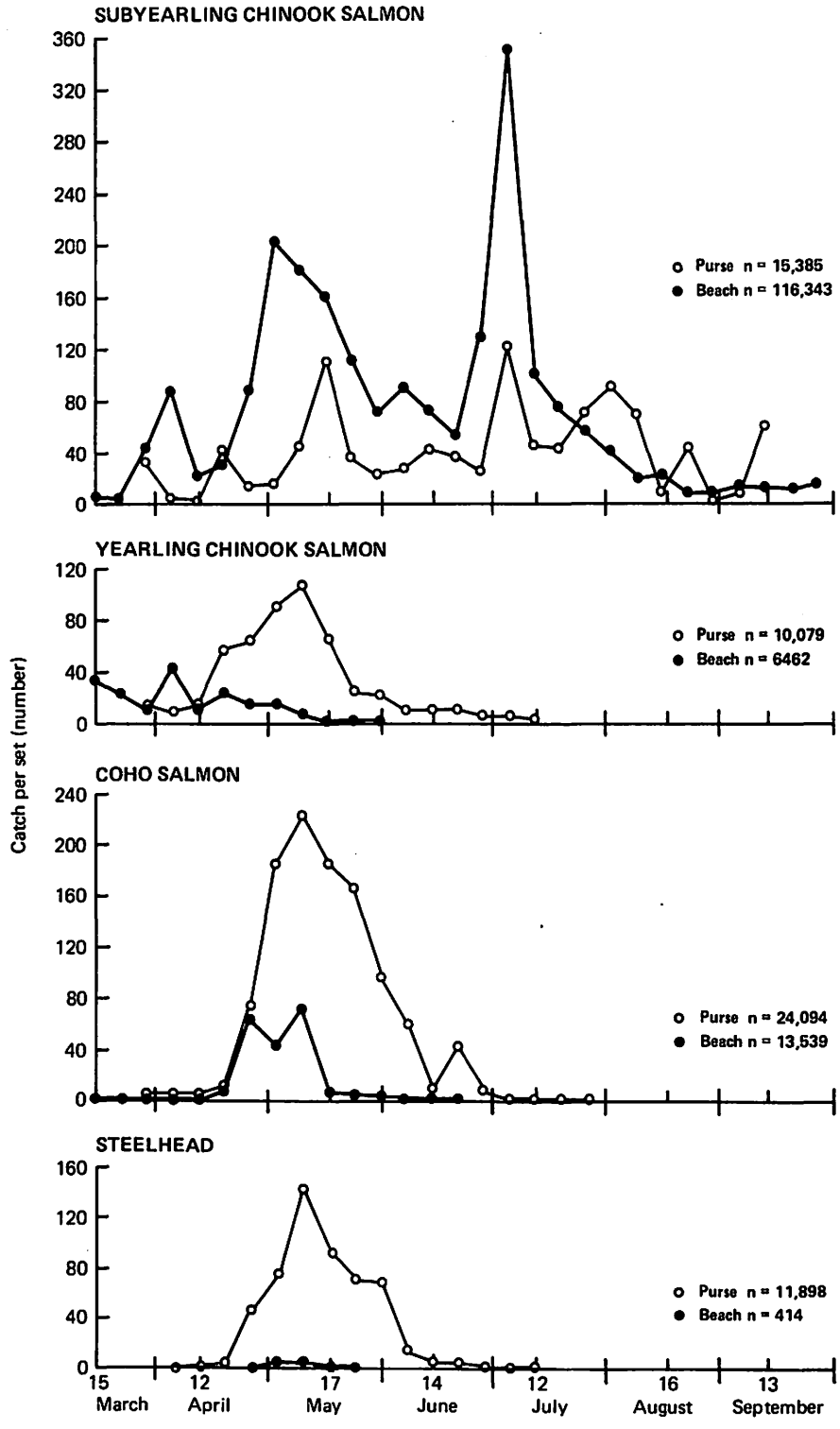


Figure 5.--Weekly catch per set averages for subyearling chinook, yearling chinook, and coho salmon and steelhead caught by beach and purse seines at Jones Beach in 1981.

Subyearling Chinook Salmon

Subyearling chinook salmon became prevalent in catches the last week in March coincidentally with mark recoveries from the March release at Spring Creek Hatchery; beach seine catch per set (CPS) peaked at 88 and had decreased to about 25 fish by mid-April. A second peak CPS of 200 fish occurred during the first week in May, which related to April and May fall chinook salmon releases from Spring Creek and Bonneville Hatcheries. Catches decreased in late May and June coincident with the sudden increase in river flow (Appendix Table A7). Fish groups from Kalama Falls, Little White Salmon, and Klickitat Hatcheries were the principal groups passing during this period. Catch percentages for marked fish from these groups were substantially below those of previous years except for the Little White Salmon group released in 1980, which was about equal to 1981 (Table 2).

In early July, a CPS of 350 fish coincided with the passage of marked fish from Washougal and Cowlitz Hatcheries; the CPS decreased to about 15 fish in early August (Appendix Table A3).

Yearling Chinook Salmon

In mid-March, beach seine CPS averaged 35. Through the first week in April it fluctuated between 12 and 44 and then decreased (Appendix Table A3).

Initial purse seine CPS (late March) was 15; it began to increase during the third week of April (Appendix Table A4). Peak CPS (164) occurred during the second week of May and declined to 22 by the first week in June; the last fish was caught on 30 July 1981.

Coho Salmon

Coho salmon juvenile catches began in late April and peaked at 224 CPS during the second week in May. The migration was essentially complete by mid-June; however, a few fish were captured in late June and early July from the sequential release studies at Washougal and Cascade Hatcheries.

Steelhead

Steelhead were present in catches by the first week in April, peaked at 144 CPS during the second week in May, and were completely absent from catches by mid-July.

Movement Rates

Movement rates of CWT groups ranged from less than 1 km/day to greater than 80 km/day. The fastest moving groups were steelhead captured at Lower Granite and McNary Dams. These fish were subsequently tagged and released at various sites in the Columbia River (Appendix B). Extremely fast movement rates (greater than 200 km/day) were measured for some groups released in Idaho, but these data were no doubt affected by transportation of the fish from Lower Granite and McNary Dams to downstream of Bonneville Dam. The slowest movement rates measured were for: (1) individuals that resided in the Columbia River or its tributaries over winter and migrated in the spring (Appendix Table A8), but do not necessarily represent group movement rate due to lack of catch data from the 1980-81 winter; (2) yearling chinook salmon released in March and April; and (3) groups of fall chinook salmon released at a small size (119 and 100/lb)[7/] during May and June from Kalama Falls and Lower Kalama Hatcheries, respectively.

[7/] Number per pound was used throughout this report because that unit of measure is in common usage at all salmon and steelhead hatcheries in the Columbia River system.

Though movement rates for subyearling chinook salmon generally increase with fish size (Dawley et al. 1978), both increasing and decreasing trends of daily mean length were observed within various marked groups (Figures 6 and 7). Previous observations of smolt behavior by Shapovalov and Taft (1954) and Salo and Bayliff (1958) indicate that the larger fish within a population migrated faster than the smaller fish.

The movement rate of subyearling chinook salmon appears directly correlated with river flow. A comparison of movement rates of fish from Little White Salmon, Kalama Falls, and Klickitat Hatcheries with flows occurring during migrations from 1977-1981 indicated a positive correlation. [($r = 0.85$, $r = 0.88$, and $r = 0.38$, respectively (Table 2)]. Below average flows observed in 1977 (Appendix Table A7) may have caused decreased movement rates for fall chinook salmon which substantially increased the duration of migration between release site and the estuary. For example, migration period (days, from date of release to date of median catch) for groups passing Jones Beach in August 1977 increased an average of 170% over the longest migration period measured in 1978 through 1981 (Table 3); average river flows during July and August 1977 were 21% less than the least flow during 1978-1981.

Sims[8/] found that during normal flow, subyearling chinook salmon of similar size that migrated the greatest distance moved fastest. However, in 1977 when river flow was below average the marked group that migrated the farthest (Klickitat fall chinook salmon--283 km) displayed the longest migration period as well as a very slow movement rate.

Movement rates of subyearling chinook salmon also tend to increase in relation to elevated gill Na^+-K^+ ATPase levels at time of release (Zaugg 1981).

8/ Carl W. Sims. NOAA, NMFS, Northwest and Alaska Fisheries Center, Coastal Zone and Estuarine Studies, 2725 Montlake Blvd. E., Seattle, WA 98112. Unpublished report, July 1977.

Table 2.--Correlation between flow and movement rate of fall chinook salmon for Little White Salmon NFH, Kalama Falls, and Klickitat Hatchery groups, 1977 to 1981.

Release date	Size (no./lb)	Catch (%)	Date of med. recapt.	Flow $1,000 m^3/s$	Mov. rate (km/day)
			Little White Salmon NFH		
15 May 77	122	0.11	21 Jun	3.2	5
25 May 78	125	0.35	8 Jun	7.3	13
22 Jun 79	123	0.22	4 Jul	3.7	16
10 Jun 80	101	0.07	19 Jun	8.5	21
05 Jun 81	94	0.07	11 Jun	10.8	27
				Correlation coefficient	r=0.85
			Kalama Falls Hatchery		
22 Jun 77	113	0.67	26 Jul	2.6	2
22 Jun 77	76	0.19	14 Jul	2.8	3
12 Jul 78	108	0.63	3 Aug	6.4	3
22 Jun 79	180	1.43	27 Jul	3.4	2
13 Jun 80	115	0.24	11 Jul	4.9	2
22 May 81	119	0.12	31 May	10.1	7
				Correlation coefficient	r=0.88
			Klickitat Hatchery		
03 Jun 77	92	0.28[a/]	18 Aug	2.9	4
06 Jun 78	87	0.17	2 Jul	5.7	14
01 Jun 79	80	0.13	7 Jun	5.6	52
27 May 80	85	0.07	8 Jun	8.3	25
05 Jun 81	78	0.03	18 Jun	9.9	29
				Correlation coefficient	r=0.38

a/ No purse seine effort during this period. Purse seine catches for other years averaged 55% of the total catch of Klicktat fall chinook salmon.

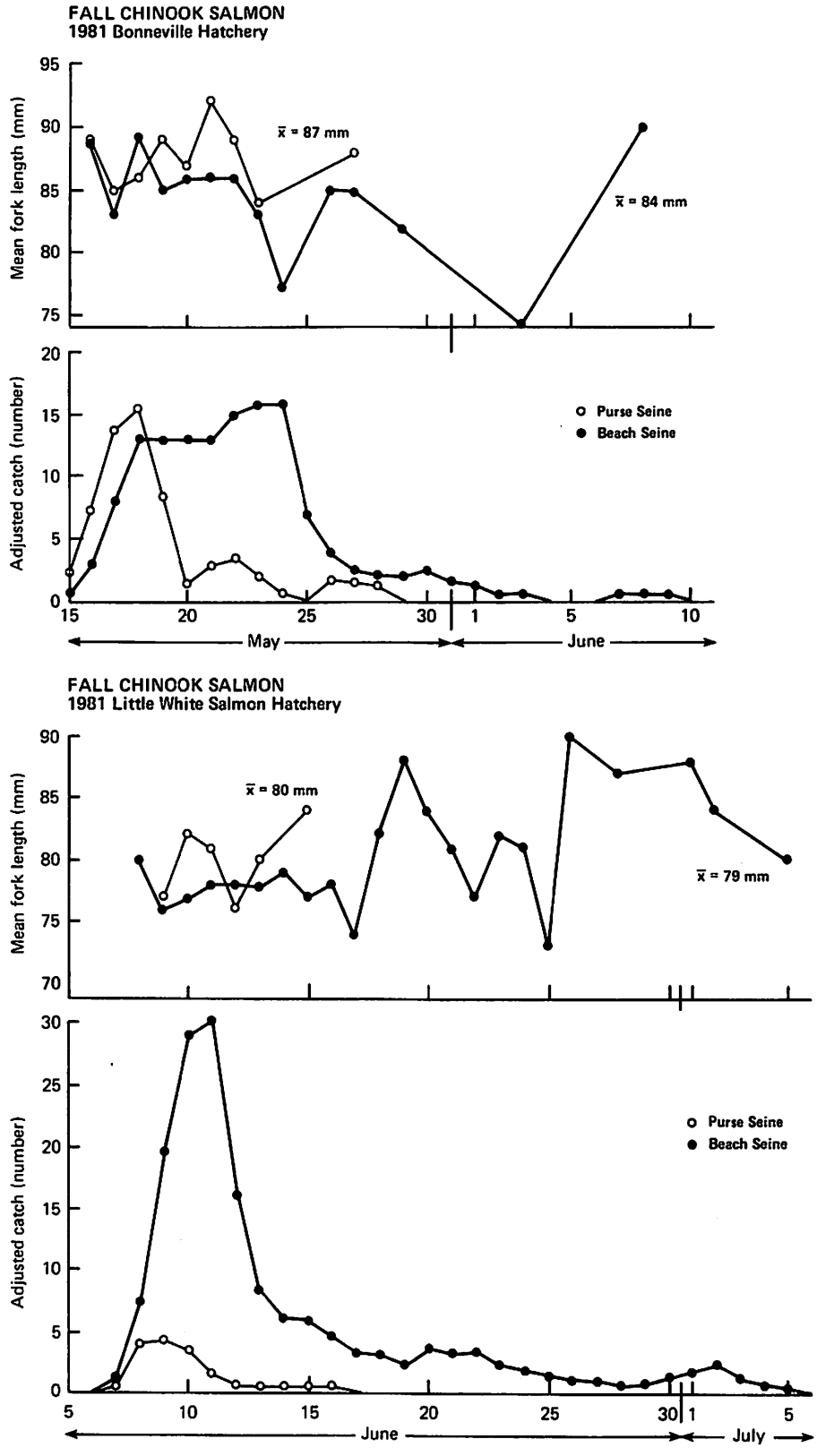


Figure 6.--Daily catch and mean fork lengths for beach and purse seines catches of two marked groups of subyearling chinook salmon at Jones Beach.

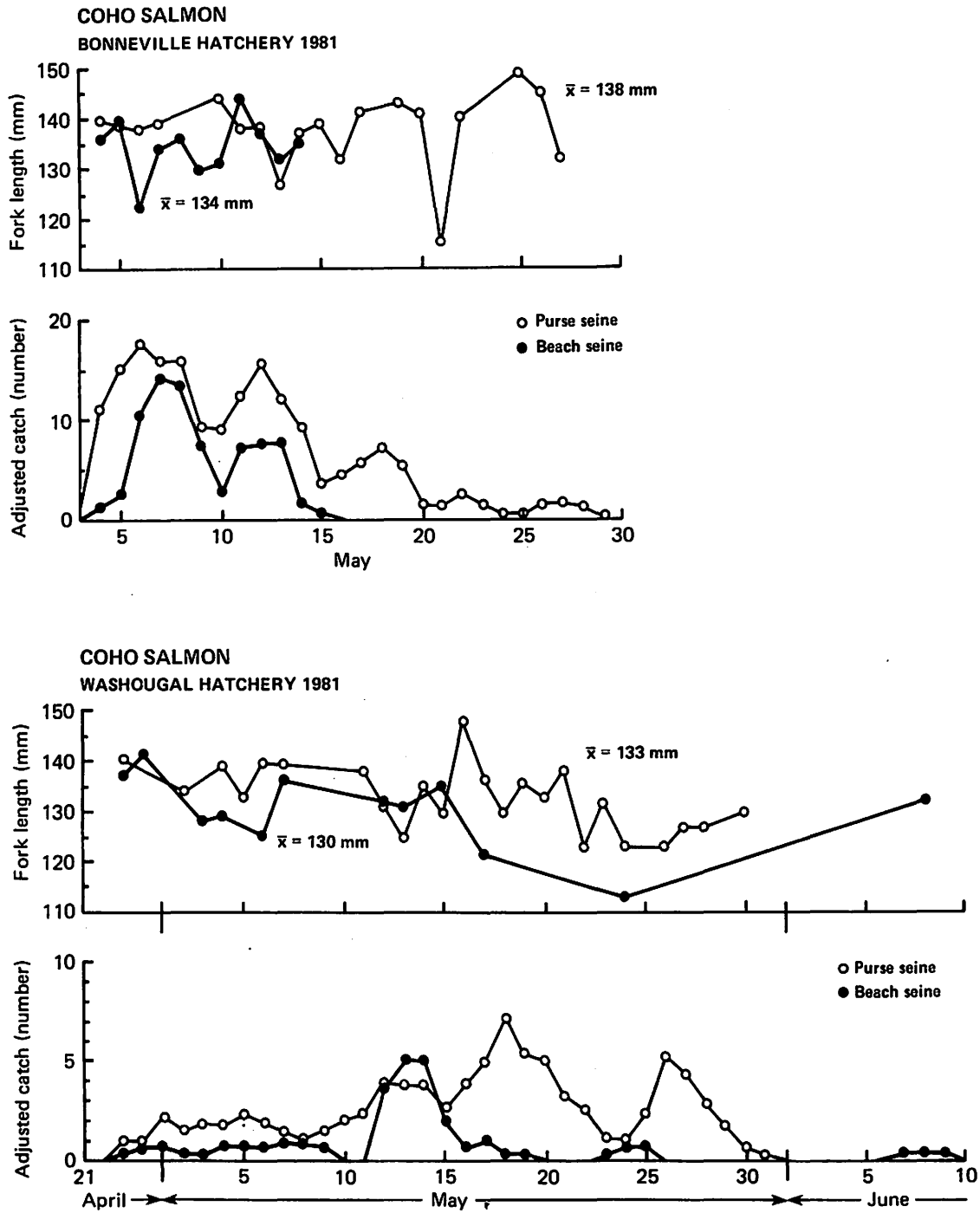


Figure 7.--Daily catch and mean fork lengths for beach and purse seine catches of two marked groups of coho salmon at Jones Beach.

Table 3.--River flow in relation to migration time from various hatcheries to Jones Beach for fall chinook salmon; 1977 compared to 1978 to 1981.

			1977				1978-1981		
Release site/source	Average size at release (no./lb)	Distance of migration (km)	Date of median recapt.	Migration period days to median fish recapt.	Movement[a/] rate km/day	River[b/] flow (kcms)	Migration period days to median fish recapt. (range)	Movement[a/] rate km/day (range)	River[b/] flow kcms (range)
Klickitat	84	283	18 Aug	76	4	2.9	6-20	14-47	5.6-8.3
Spring Creek-March	112	194	5 May	48	4	4.0	9-24	8-22	4.0-7.1
Spring Creek-April	77	194	1 May	23	8	4.0	13-14	14-15	5.4-7.8
Spring Creek-May	53	194	31 May	7	28	4.2	4-6	32-49	6.5-8.0
Little White	113	186	21 Jun	37	5	3.2	7-14	13-27	3.7-10.8
Bonneville (early)	79	156	20 May	15	10	3.7	7-8	19-22	6.8-6.9
Washougal	74	146	9 Aug	42	3	2.7	9-22	7-16	4.4-5.4
Cowlitz	95	114	20 Jun	31	4	3.2	8-36	3-14	3.3-6.4
Toutle	125	85	5 Aug	61	1	3.1	16-25	3-5	3.6-5.7
Kalama Falls	110	66	26 Aug	34	2	2.6	9-22	3-7	3.4-10.1

a/ Groups released over more than a 7-day period were not included.

b/ Seven day average of total river flow at Bonneville Dam during week of median fish recapture.

Because of the various factors affecting movement rates, seasonal averages using index groups for each species (Appendix Table A9) should only be used for general comparisons between years.

Size Characteristics

Generally unmarked fish captured in mid-river with the purse seine were 5 to 20 mm larger than those captured near shore with the beach seine (Figure 8). Mean fork lengths of marked fish captured in mid-river were also consistently larger than their marked counterparts captured near shore (Appendix B); indicating that generally the larger fish of each species tend to migrate more towards the center of the river.

Weekly mean fork lengths of subyearling chinook salmon captured throughout the sampling period fluctuated in relation to the fish size of major hatchery release populations (Figure 8). There was a shift from beach seine catches to purse seine catches with increased size; those groups released at a large size (less than 60/lb) were usually caught in greater percentages by purse seine than by beach seine. However, RKm of release site and degree of smoltification sometimes had an overriding effect on this tendency.

Certain groups which migrated over a long period (3 months) showed an increase in size attributable to riverine growth (Dawley et al. 1980).

Survival Estimates for Selected Hatchery Stocks

Survival estimates for fall chinook salmon from the hatchery to Jones Beach during 1978 and 1979 were presented by Dawley et al. (1979, 1980). The estimates from 1980 data were affected by the Mount St. Helens eruption (18 May 1980). In 1981, there was such wide variation in the calculated survival that the estimates are questionable. We intend to continue making

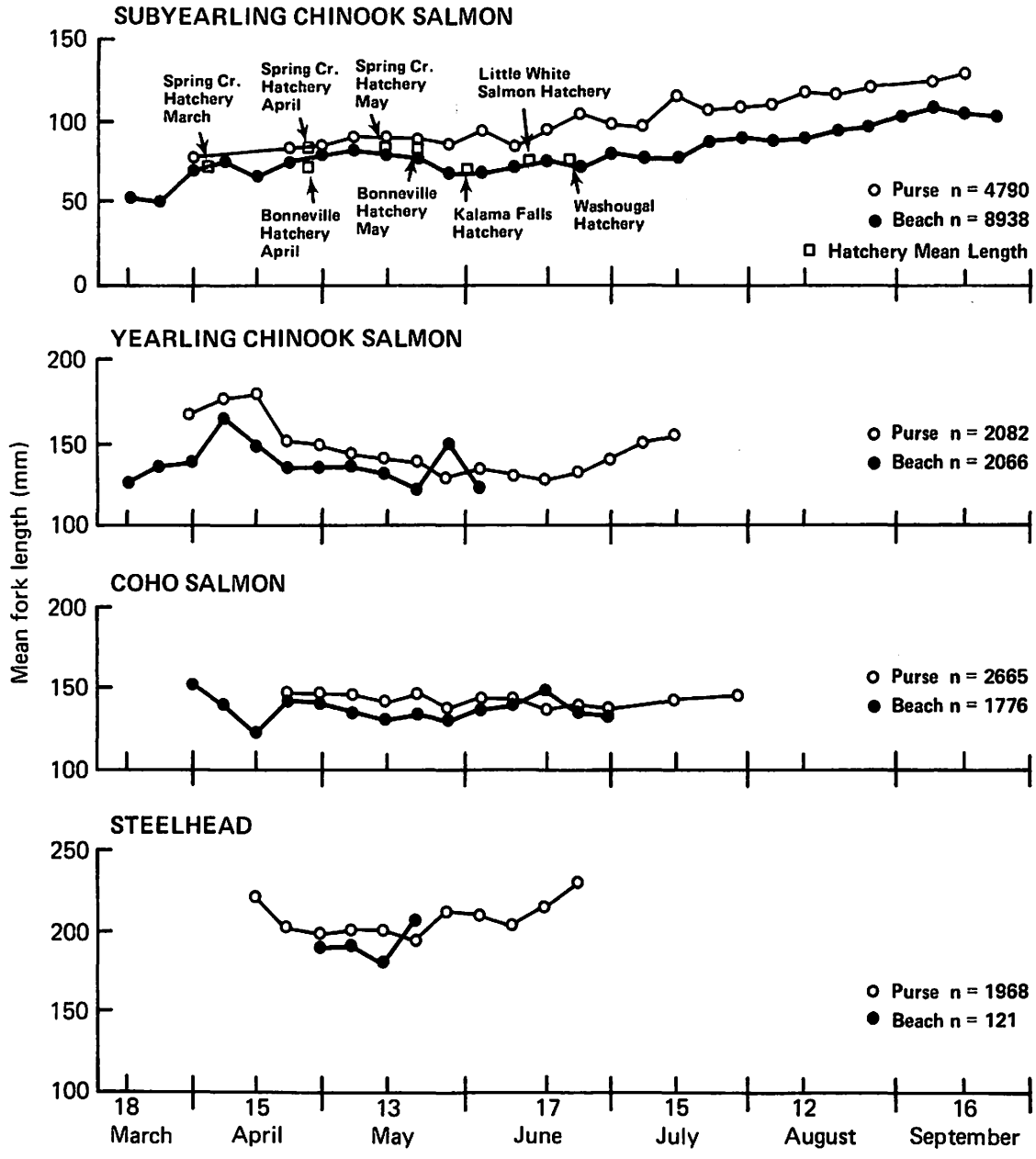


Figure 8.--Weekly mean fork lengths of subyearling chinook, yearling chinook, and coho salmon and steelhead caught in beach and purse seines at Jones Beach in 1981.

these estimates in 1982 then compare 1978 through 1982 using adult return information.

Relative Survival Between Groups

Catch data presented in Appendix B have been used by many researchers to evaluate survival differences of various experimental groups during their migration to Jones Beach in the Columbia River as well as to better understand migration behavior of the smolts (Appendix Table 10). We examined the data for relative survival trends (1977-1981) correlated with effects of fish size at release, transportation past dams, nutrition, rearing density, and chemical treatments; the significant observations are presented. The conclusions reported herein are based on recoveries at Jones Beach. The prime researchers may come to different conclusions based upon their knowledge of all the factors relating to their research.

Effects of Fish Size

There appears to be a positive relationship between survival to the estuary and increased body size at the time of release for spring chinook, fall chinook, and coho salmon and steelhead. Estuarine catch data indicate that the smaller individuals from certain release populations are missing from the migrant populations passing Jones Beach. Length frequency distributions for yearling and subyearling chinook salmon, coho salmon, and steelhead compared before and after migration are presented in Appendix Figures A1, A2, A3, and A4; in each figure, Group A is a mark group that showed a size shift after migration with proportionately fewer of the smaller fish in the catch; Group B is a mark group that showed little or no size shift.

Gear selectivity appears unrelated to observations of size shift within the population after freshwater migration. Beach seine efficiency for subyearling chinook salmon is inversely correlated with size, which tends to make the observed loss of smaller fish conservative (Dawley et al. 1981). Changes of purse seine efficiency within the size range of yearling fish appears to be insignificant based on the following: (1) in several instances length distribution of purse seine catches correlate well with length distributions prior to hatchery release (Appendix Figures A2, A3, and A4; Group B)--if the shift in length distribution was associated with selectivity it should be apparent in all groups observed; and (2) substantial numbers of subyearling fish as small as 60 mm were captured in the purse seine (Figure 5).

Spring chinook salmon groups graded for size and marked for size/survival research at various hatcheries in the Willamette and Deschutes River systems showed higher catch percentages (at Jones Beach) in relation to increased weight in 7 of 10 experiments (Table 4).

A minimum fork length threshold for survival is hypothesized for steelhead smolts by Buchanan (1981). Buchanan reported a release threshold minimum of 180 mm for steelhead of Willamette River origin. However, our observations indicate that this threshold size may not be the same for steelhead of Snake River origin. In some of the Snake River groups, individuals as small as 110 mm migrated successfully to Jones Beach. There seemed to be no size selective mortality for a group of Dworshak steelhead ranging in size from 110 mm to 240 mm (Figure 9).

Similar threshold data are being compiled by Percy Washington for coho salmon 10/.

10/Percy Washington, Phd thesis in preparation, University of Washington College of Fisheries, Seattle, Washington.

Table 4.--Jones Beach catches for spring chinook salmon smolts related to size at time of release from hatcheries.

Release site/source	Release date (day/mo/yr)	Juvenile[a/] catches at Jones Beach (no.)	(%)	Average size at release (no./lb)	(g)
Leaburg, OR/					
McKenzie Hat.	15 Mar 80	18	0.153	3	151
" "	"	13	0.112	4	113
" "	"	13	0.079	11	41
" "	16 Mar 81	11	0.078	4	113
" "	"	4	0.029	6	76
" "	"	11	0.075	9	50
Minto, OR/					
Marion Fks. Hat.	16-24 Mar 81	10	0.053	14	30
" " "	"	10	0.041	14	30
" " "	"	7	0.025	20	20
Dexter Pd./Oakridge Hat.	20 Mar 79	32	0.173	12	38
(Oakridge stock)	"	40	0.178	14	32
Dexter Pd./Oakridge Hat.	20 Mar 79	36	0.299	6	76
(Dexter Stock)	"	50	0.282	8	57
Dexter Pd./Oakridge Hat.	10 Mar 80	15	0.145	4	113
(Oakridge stock)	"	25	0.202	8	58
Dexter Pd./Oakridge Hat.	10 Mar 80	20	0.148	9	50
(Dexter stock)	"	18	0.134	16	28
Dexter Pd./Oakridge Hat.	16 Mar 81	12	0.096	4	113
(Oakridge stock)	"	9	0.063	7	65
Dexter Pd./Oakridge Hat.	16 Mar 81	14	0.104	7	65
(Dexter stock)	"	17	0.133	9	50
Round Butte Hat.	31 May 81	31	0.183	24	19
" " "	"	33	0.122	28	16
" " "	"	34	0.121	32	14

a/ Actual number captured beach and purse seine and adjusted percent captured.

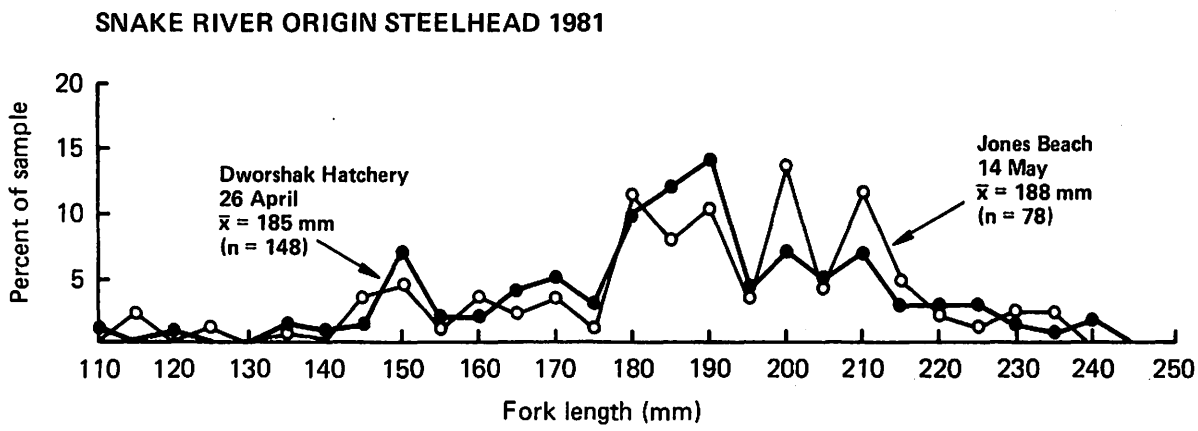


Figure 9.--Fork lengths of Snake River steelhead before and after migration showing little change in length frequencies for the portion of the population less than 180 mm.

Effects of Transportation

Relative survival differences for marked fish groups transported by truck or barge past dams in the Columbia River system, (1977-1981) were calculated from catch percentages at Jones Beach (transport groups with 10 or fewer fish captured were not used). Highly variable catch percentages were observed for transported groups which moved rapidly passed Jones Beach (2 days or less for 50% of the catch). We hypothesize that those fish migrate so rapidly from release sites close to the sampling site that wide dispersion in the river did not occur. If the majority of individuals within a group passed during nonfishing hours, a limited catch percentage resulted. If the majority passed during fishing hours, an inflated catch percentage resulted. Consequently, the catch did not represent the number of individuals passing Jones Beach. Transported fish groups from which 50% of the catch was made in 2 days or less evoked catch percentages smaller than control groups in 5 of 11 instances, and estimated survival increase for 2 of these 11 groups were greater than 1800%. In all but 5 of 34 instances, transported groups from which 50% of the catch was attained in longer than 2 days had higher catch percentages than the controls. Only two group had estimated survival increases greater than 300%, and the control for these groups migrated through eight reservoirs and dams which the transported groups bypassed.

In summary, we examined effects from transportation for all marked groups recovered at Jones Beach with the exceptions of those from which 50% of the catch was made in 2 days or less and groups from which 10 or fewer fish were recovered. Survival estimates generally increased with the number

of dams bypassed; the average increase for one dam bypassed was 56% (10 transport groups) and for eight dams 311% (7 transport groups) (Table 5).

Effects of Nutrition

In 1980 and 1981, relative survival comparisons were made from Jones Beach catches for a diet study using fall chinook salmon at Bonneville Hatchery. In both years, catch percentages of replicate groups were higher for one diet than for the other; the differences were statistically significant at the 95% level (G - statistic) for 1980 groups. Catch percentages for groups reared in 1981 with a third diet formulation varied significantly, and comparison to catch rates of the other diets was not meaningful (Table 6).

Statistically significant differences in relative survival were not observed for coho salmon smolts reared with various diets and released from Sandy Hatchery (1977-1981) (Table 6).

Effects of Rearing Density

Differences in catch percentages of coho salmon reared at high to low pond loading densities from Eagle Creek Hatchery were not statistically significant at the 95% level (G-statistic), nor were groups of spring chinook and coho salmon from the Cowlitz and Sandy Hatcheries released in previous years (Table 7).

Effects of Chemical Treatments

We found no significant differences, using the G-statistic, in catch rate of groups involved with prophylactic treatments or chemical cues for homing following freshwater migration to Jones Beach (Table 8).

Table 5.--Survival differences between fish groups transported past dams and those not transported; from catch percentages at Jones Beach, Oregon, 1977-1981.[a]

Release site/ source	Date (Da, mo, yr)	Jones Beach catch[b] (No.)	Jones Beach catch[b] (Adj. %)	Dams bypassed (No.)	Estimated survival change from control (%)
	Spring chinook salmon				
Pasco/Carson Hat. Upstream[c] (Control)	23 Apr 79	33	0.107		
Carson Hat. (Downstream Release)	3 May	28	0.090	3	-16
Below Bonneville Dam (Transport)	21 Apr-7 May	126	0.102	4	-5
Entiat Hat.	25-26 Apr 78	43	0.049		
Vernita Bridge (Transport)	2 May	13	0.102	4	108
Kooskia Hat. (Control)[d]	12 Apr 78	61	0.073		
Below Bonneville Dam (Transport)	26-28 Apr	83	0.067	8	-8
Kooskia Hat. (Control)[d]	16 Apr 80	14	0.044		
Below Bonneville Dam (Transport)	14 Apr	26	0.072	8	63
Leavenworth Hat. (Control)[e]	25 Apr 78	67	0.090		
Leavenworth Hat.; Hauled 4 h (Treatment)	25 Apr	47	0.070	0	-22
Below Priest Rapids (Transport)	8 May	80	0.115	3	28
Leavenworth Hat. (Control)[e]	26 Apr 79	104	0.142		
Leavenworth Hat.; Hauled 4 h (Treatment)	26 Apr	86	0.115	0	-19
Below Priest Rapids (Transport)[e]	15 May	164	0.209	3	47
Leavenworth Hat. (Control)[c]	24 Apr-1 May 80	30	0.032		
White Bluffs (Transport)	24 Apr-1 May	41	0.085	3	168
Dalton Point (Transport)	24 Apr-3 May	141	0.115	7	262
Pateros Ferry/Leavenworth Hat.[e] (Control)	5-13 May 80	23	0.041		
Below Priest Rapids Dam (Transport)	22-27 May	48	0.090	5	120
Richland, WA (Transport)	22-29 May	40	0.074	5	80
Round Butte Hat.[f]	22 May 78	91	0.218		
Below Bonneville Dam (Transport)	30 May	110	0.215	2	-1
Round Butte Hat.[f]	23-31 May 79	240	0.282		
Below Bonneville Dam (Transport)	30 May	149	0.338	2	20
Foster, OR/S. Santiam Hat.[f] (Control)	13 Mar 78	26	0.084		
Below Willamette Falls (Transport)	13 Mar	67	0.237	1	182

Table 5.--Continued.

Release site/ source	Date (Da, mo, yr)	Jones Beach catch[b/] (No.)	Jones Beach catch[b/] (Adj. %)	bypassed (No.)	Estimated survival change from control (%)
Foster, OR/S. Santiam Hat [f/]					
(Control)	7 Nov 78	8	0.009		
Below Willamette Falls (Transport)	7 Nov	18	0.018	1	100
Foster, OR/Oakridge Hat.[f/]					
(Control)	21 Mar 78	94	0.168		
Below Willamette Falls (Transport)	23 Mar	151	0.265	1	58
Foster, OR/S. Santiam Hat.[f/]					
(Control)	14 Mar	42	0.184		
Below Willamette Falls (Transport)	14 Mar	66	0.271	1	47
Winthrop Hat. (Control)[e/]	20 Apr 79	34	0.055		
Methow R.; Hauled 4 h (Treatment)	24 Apr	16	0.033	0	-40
Below Priest Rapids Dam (Transport)	16 May	73	0.111	5	101
	Fall chinook salmon				
Above Willamette Falls/Aumsville[f/]					
(Control)	4 Apr 77	209	0.434		
Below Willamette Falls (Transport)	4 Apr	504	0.557	1	28
Asotin, WA/Hagerman Hat.[g/]					
(Control)	21 May 79	3	0.012		
Below Bonneville Dam (Transport)	20 May	74	0.177	8	1,375
Asotin, WA/Hagerman Hat.[g/]					
(Control)	3 May 80	6	0.023		
Below Bonneville Dam (Transport)	6 Jun	34	0.084	8	265
Asotin, WA/Hagerman Hat.[g/]					
(Control)	26 May 81	21	0.066		
Below Bonneville Dam (Transport)	28 May	67	0.132	8	100
Kooskia Hat. (Control)[d/]	29 May 79	31	0.058		
Below Bonneville Dam (Transport)	3-20 May	38	0.102	8	76
Above Willamette Falls/S. Santiam[f/] Hat. (Control)	1 Jun 78	96	0.154		
Below Willamette Falls (Transport)	1 Jun	64	0.187	1	22
Spring Creek Hat. (Control)[g/]	8 Apr 77	215	0.404		
Below Bonneville Dam (Transport)	8 Apr	304	0.558	1	38

Table 5.--Continued.

Release site/ source	Date (Da, mo, yr)	Jones Beach catch[b/] (No.)	(Adj. %)	Dams bypassed (No.)	Estimated survival change from control (%)
Spring Creek Hat. (Control)[g/]	18 Apr 78	175	0.232		
Below Bonneville Dam (Transport)	20 Apr	201	0.247	1	6
Rock Creek/Spring Creek Hat.[g/] (Upstream Control)	21 Apr 81	66	0.045		
Spring Creek Hat. (Downstream release)	15 Apr	113	0.126	2	181
" " " "	5 May	105	0.171	2	276
	Coho salmon				
Pasco, WA/Carson Hat. (Control)[c/]	3 May 78	47	0.139	4	
Below Bonneville Dam (Transport)	1-4 May	23	0.053		-62
Willard Hat.[g/]	24 May-8 Jun 78	13	0.053		
Below Bonneville Dam (Transport)		21	0.084	1	58
Willard Hat.[g/]	14-23 May 80	21	0.033		
Below Bonneville Dam (Transport)	24-25 May	29	0.039	1	18
	Steelhead				
Icicle Cr. (Chelan Hat.)[h/]	26 Apr 79	55	0.106		
Below Bonneville Dam	28 Apr	80	0.139	1	31
Dworshak Hat.[d/]	17 Apr-29 Apr 80	140	0.125		
Below Bonneville Dam (Transport)	29 Apr-2 May	95	0.510	8	304
Methow R. (Wells channel)[h/]	27 Apr-8 May 78	17	0.058		
Ringold Hat.	5 May	11	0.079	5	36
Methow R. (Wells channel)[h/]	9-14 May 79	13	0.042		
Below Bonneville Dam	12 May	12	0.155	9	269

a/ Transport groups with time period from first to median fish capture at Jones Beach 2 days or less were not included in analysis.
b/ Actual number captured, beach and purse seine; adjusted percent captured comparisons not made for actual catch less than 10 transport fish. Mark groups were combined where possible to exceed the minimum.
c/ National Marine Fisheries Service.
d/ Idaho Department of Fish and Game.
e/ Washington Department of Fisheries.
f/ Oregon Department of Fish and Wildlife.
g/ United States Fish and Wildlife Service.
h/ Washington Department of Game.

Table 6.--Catches of marked fish from nutrition studies.

Tag (Ag/D1/D2)[a]	Release site (source)	Date (da/mo/yr)	Juvenile catches at Jones Beach[b] No.	%
	FALL CHINOOK SALMON			
	Bonneville Hatchery			
07/21/33	OMP 2	27MY80	12	0.042
34	OMP 2		14	0.047
35	OMP 4		24	0.086
36	OMP 4		26	0.096
07/23/41	OMP 2	12MY81	45	0.111
42	OMP 2		45	0.100
43	OMP 4		59	0.137
44	OMP 4		55	0.128
45	Presscake		41	0.098
46	Presscake		58	0.146
	COHO SALMON			
	Sandy Hatchery			
09/05/13	herring 8%	06MY77	23	0.076
06/06	herring 4% soy 4%		24	0.086
07	herring 6% soy 2%		26	0.091
08	soy 8%		25	0.085
09	herring 2% soy 6%		24	0.081
09/16/44	soy 6% herring 2%	02my78	25	0.091
45	herring 8%		14	0.051
46	soy 4% herring 4%		16	0.063
47	soy 2% herring 6%		26	0.102
48	soy 8%		18	0.072
09/16/49	menhaden oil 6%	04MY78	21	0.080
50	soy oil 6%		24	0.096
51	herring oil 6%		19	0.074
52	anchovy oil 6%		22	0.085
07/17/49	anchovy oil 6%	01MY79	28	0.133
50	menhaden oil 6%		25	0.114
51	soy 6%		32	0.151
52	herring 6%		28	0.121
07/20/31	OMP 4	01MY80	16	0.142
33	OMP 4		15	0.135
32	OMP 2 fresh & frozen		16	0.129
34	OMP 2 fresh & frozen		17	0.143
35	OMP 2 acid		12	0.082
36	OMP 2 acid		20	0.160
37	OMP 2 frozen		13	0.108
38	OMP 2 frozen		20	0.143

Table 6.--Continued.

Tag (Ag/D1/D2)[a]	Release site (source)	Date (da/mo/yr)	Juvenile catches at Jones Beach[b] No.	%
	COHO SALMON			
	Sandy Hatchery			
07/22/55	OMP 2 frozen	01MY81	21	0.120
57	OMP 2 frozen		16	0.082
56	OMP 2 acid		20	0.086
58	OMP 2 acid		12	0.060
59	Presscake		34	0.135
62	Presscake		25	0.111
60	OMP 4		17	0.083
63	OMP 4		18	0.071
61	OMP 2 frozen & fresh		20	0.089
07/23/01	OMP 2 frozen & fresh		22	0.093

a/ Binary tag AG=agency code; D1=data 1 and D2=data 2.

b/ Number is actual catch; % represents adjust catch.

Table 7.--Catch percentages of marked fish from rearing density studies, 1977-1981.

Tag (Ag/D1/D2)	Release site (source)	Density	Date (da/mo/yr)	Juvenile catches at Jones Beach a/ No.	%
		SPRING CHINOOK SALMON			
13/13/01	Cowlitz Hat.	(low)	08MR77	12	0.092
04		(low)		12	0.132
09/14		(med)		31	0.119
11/04		(med)		24	0.097
09/11		(high)		44	0.152
12		(high)		36	0.113
63/16/12	Cowlitz Hat.	(low)	08MR78	34	0.320
13		(low)		27	0.293
17/17		(med low)		70	0.308
18		(med low)		64	0.329
11		(med high)		77	0.408
12		(med high)		85	0.488
09		(high)		124	0.453
10		(high)		109	0.383
		COHO SALMON			
09/05/14	Sandy Hat.	(low)	27AP77	8	0.075
09/06/01		(low)		7	0.053
09/05/15		(med)		8	0.060
09/06/03		(med)		6	0.057
02		(high)		6	0.048
04		(high)		10	0.101
05/08/27	Eagle Cr. Hat.	(low)	22AP81	62	0.186
28		(med)		136	0.219
26		(high)		180	0.185

a/ Actual catch and adjusted percentage catch, purse seine plus beach seine.

Table 8.--Catch percentages of marked fish from chemical treatment studies, 1977-1981.

Tag (Ag/D1/D2)	Chemical treatment	Release site (source)	Species	Release date (da/mo/yr)	Juvenile catches at Jones Beach a/ No.	%
Hemorrhagic Septicemia Vaccine						
63/16/02	Vaccine	Klickitat Hat	Sp. Chinook	31MR78	76	0.070
01	Control				73	0.060
Erythromycin Treatment						
63/18/15	Erythromycin	Cowlitz Hat.	Sp. Chinook	23AP79	34	0.194
16					36	0.195
17	Control				35	0.200
18	Control				34	0.191
05/04/38	Erythromycin	Carson Hat.	Sp. Chinook		50	0.088
37	Control			28AP80	38	0.067
Vibrio Vaccine						
10/21/18	Vaccine	McCall Hat.	Sp. Chinook	06AP81	18	0.055
28	Control				19	0.050
10/21/36	Vaccine	Rapid R. Hat.	Sp. Chinook	12AP81	3	0.011
37	Control			12AP81	7	0.031
7/16/11	Vaccine	Round Butte Hat.	Sp. Chinook	31MY78	33	0.122
12	Control				34	0.121
05/44/01	Vaccine	Spring Cr. Hat.	F. Chinook	08AP77	216	0.350
45/01	Control				207	0.360
05/60/01	Vaccine	Spring Cr. Hat.	F. Chinook	18AP78	153	0.200
62/01	Control				175	0.230
05/20/04	Vaccine	Willard Hat.	Coho	03MY77	20	0.055
21/04	Control				21	0.047
10/22/41	Vaccine	Niagara Spr. Hat.	Steelhead	30MR81	32	0.121
42	Control				19	0.073
Morpholine						
10/21/25	Morpholine	Hayden Pd.	Sp. Chinook	01AP80	2	0.012
26	Control				4	0.019
10/22/22	Morpholine	Hayden Pd.	Sp. Chinook	8AP81	7	0.022
21	Control				7	0.021
05/42/01	Morpholine	Big White Pd.	F. Chinook	18AP77	333	0.492
/41/01	Control	(Spring Cr)			358	0.558
Enteric Red Mouth Vaccine						
05/04/34	Vaccine	Spring Cr.	F. Chinook	20AP79	196	0.261
44	Control				281	0.257

a/ Actual catch and adjusted percentage catch, purse seine plus beach seine.

Juvenile Catches Compared to Adult Recoveries

Compilation of adult recovery information to help verify precision of estuarine survival observations is in process. We expect to have a preliminary statistical evaluation in the annual report for estuarine sampling in 1982.

Incidental Catch

Nonsalmonid species were a large part of our catch in 1981 (Appendix Tables A11 and A12). Increases in catch of northern squawfish, Ptychocheilus oregonensis; suckers, Catostomus sp.; sculpins, Cottus asper; and pea mouth, Mylocheilus caurinus, were noted in 1980 and were associated with the eruption of Mount St. Helens. Catches of northern squawfish and peamouth continued to increase in 1981. The increased catches in 1980 and 1981 have a poor correlation to river flow, and it appears that resident populations of these species may be increasing.

SUMMARY AND CONCLUSIONS

NMFS and BPA cooperated in a study of juvenile salmonid migrants entering the Columbia River estuary during 1981. The objectives were: (1) define migration timing and movement rates; (2) obtain catch percentages for marked groups to evaluate smolt survival to the estuary, and compare to adult returns; and (3) amass information on which concepts may be developed to restore, enhance, and protect the salmonid resources of the Columbia River. Marked fish recoveries were the basis for evaluations to meet these objectives.

Beach and purse seines were used for sampling at Jones Beach (RKm75); 10 and 4 sets daily (respectively) during May and June; fewer sets were

made during March, April, July, August, September, and November. Total catch was 132,483 subyearling chinook salmon; 16,541 yearling chinook salmon; 37,633 coho salmon; and 12,312 steelhead. About 3.3% of the fish were marked.

Variation in Catch Percentages

Increased river flow generally caused a decrease in catch per unit effort (CPUE). The average of the observations was a 21% decrease in catch percentage with a 1,000 m^3/s (35,300 ft^3/s) increase of river flow; continued data collection is required to assess the effect of flow over a wide range of river flow volumes.

G statistic analysis of catch percentages for replicate mark groups (1977-1981) indicates good consistency; in 161 of 180 comparisons no significant difference was found at the 5% reject level. We concluded that catch percentages of marked fish were consistent with the total population of marked fish passing Jones Beach at any particular time. The range of variation for catch percentage was identified in relation to number of fish recovered (Figure 3) and may be used to evaluate the significance of differences between catch percentage of treatment and control fish groups.

Migration Characteristics

Peaks of migration past Jones Beach for hatchery reared yearling chinook and coho salmon and steelhead occurred during the first 2 weeks of May. Three peaks of migration occurred for subyearling chinook salmon: about 5 April, 3 May, and 5 July. Fastest movement rates were measured for fish groups collected and marked at fish trapping facilities during

migration. Slowest rates were: (1) individuals that resided over winter in the Columbia River system; (2) yearling chinook salmon released in March and April; and (3) groups of small subyearling chinook salmon released throughout the spring and summer. Fish captured in mid-river were generally larger than those captured near shore. There was no consistent daily increase or decrease in fork lengths of marked fish within individual groups.

In general, we concluded that: (1) fluctuations in catch and average fork lengths of unmarked subyearling chinook salmon were directly attributable to magnitude, time, and fish size of hatchery releases; (2) movement rates to the estuary generally increased with increasing river flows; and (3) movement rates increased with fish size, however, within a single population the larger fish were not always the earliest migrants nor the smaller fish the latest.

Size Relative to Survival

Changes in size composition of marked fish populations migrating from release site to Jones Beach indicated that larger fish probably have better survival during migration to the estuary than smaller fish of the same population. Verification of this conclusion by adult return data is needed. Minimum fork length thresholds for survival of steelhead smolts have been hypothesized; however, differences in fork lengths of fish captured at Jones Beach indicate threshold size may fluctuate between stocks of steelhead migrating from various locations in the Columbia River system.

Transportation Relative to Survival

Estimated survival rates of transported groups (relative to controls) increased with the number of dams bypassed; averaging 56% for 1 dam and 311% for eight dams. We concluded that transportation increased smolt survival. However, data from Jones Beach sampling can not be used to evaluate some transportation research projects because of the rapid migration of the transported fish groups past the sampling site.

Nutrition, Rearing Density, and Chemical Treatments Relative to Survival

Estimates of survival at Jones Beach for most treatment groups from nutrition, rearing density, or chemical treatment research were not statistically different from those of controls.

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APPENDIX A

MISCELLANEOUS TABLES AND FIGURES IN RELATION TO MIGRATION OF JUVENILE SALMONIDS

Table A1.--Sampling effort at Jones Beach, by weekly intervals, 1977-1981.

Date (No./Day)	1977 Beach No. sets	1977 Beach Fished days No.	1977 Purse No. sets	1977 Purse Fished days No.	1978 Beach No. sets	1978 Beach Fished days No.	1978 Purse No. sets	1978 Purse Fished days No.	1979 Beach No. sets	1979 Beach Fished days No.	1979 Purse No. sets	1979 Purse Fished days No.	1980 Beach No. sets	1980 Beach Fished days No.	1980 Purse No. sets	1980 Purse Fished days No.	1981 Beach No. sets	1981 Beach Fished days No.	1981 Purse No. sets	1981 Purse Fished days No.
1/1 - 1/7	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	-	-	-	-
1/8 - 1/14	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	-	-	-	-
1/15 - 1/21	0	0	0	0	2	1	0	0	2	1	1	1	0	0	0	0	-	-	-	-
1/22 - 1/28	0	0	0	0	1	1	0	0	1	1	1	1	0	0	0	0	-	-	-	-
1/29 - 2/4	0	0	0	0	2	1	0	0	1	1	0	0	0	0	0	0	-	-	-	-
2/5 - 2/11	0	0	0	0	2	1	0	0	1	1	1	1	0	0	0	0	-	-	-	-
2/12 - 2/18	0	0	0	0	2	1	0	0	2	1	1	1	0	0	0	0	-	-	-	-
2/19 - 2/25	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	-	-	-	-
2/26 - 3/4	0	0	0	0	1	1	0	0	2	1	1	1	0	0	0	0	-	-	-	-
3/5 - 3/11	0	0	0	0	15	3	0	0	2	1	1	1	4	1	0	0	-	-	-	-
3/12 - 3/18	0	0	0	0	17	3	9	3	9	3	3	3	18	4	4	2	3	1	0	0
3/19 - 3/25	0	0	0	0	39	4	5	1	9	3	3	3	27	5	5	3	16	4	0	0
3/26 - 4/1	0	0	0	0	50	5	11	3	23	6	5	3	34	5	7	4	25	4	8	3
4/2 - 4/8	0	0	0	0	58	6	15	3	32	6	8	4	38	5	11	5	27	4	10	4
4/9 - 4/15	6	2	0	0	70	7	15	3	36	6	11	4	39	5	15	5	36	5	14	5
4/16 - 4/22	37	6	0	0	50	5	15	3	51	6	24	5	39	5	15	5	41	5	18	5
4/23 - 4/29	47	7	0	0	56	6	34	7	58	6	27	6	41	5	19	5	64	7	13	5
4/30 - 5/6	62	7	9	3	60	6	28	6	58	7	31	7	45	6	19	6	67	7	21	6
5/7 - 5/13	60	7	5	3	55	6	29	6	52	6	26	6	56	6	22	6	69	7	18	5
5/14 - 5/20	63	7	0	0	57	6	25	6	53	7	29	7	46	5	17	5	67	7	28	7
5/21 - 5/27	67	7	0	0	55	6	28	6	61	7	25	6	22	5	15	5	66	6	24	6
5/28 - 6/3	70	7	8	3	48	5	23	5	52	6	28	6	43	6	15	5	66	7	26	7
6/4 - 6/10	67	7	16	3	50	5	24	5	60	7	29	7	54	6	22	5	67	7	26	7
6/11 - 6/17	68	7	0	0	48	5	20	4	63	7	33	7	59	6	19	6	67	7	25	6
6/13 - 6/24	70	7	0	0	50	5	20	4	64	7	31	7	58	6	16	5	63	7	22	5
6/25 - 7/1	70	7	0	0	47	5	24	5	57	6	25	6	60	6	16	5	69	7	14	4
7/2 - 7/8	46	5	0	0	34	4	3	2	47	5	15	3	38	4	10	4	49	6	11	4
7/9 - 7/15	66	7	0	0	50	5	9	3	57	6	19	4	52	6	16	6	54	7	15	5
7/16 - 7/22	50	5	0	0	49	5	8	3	55	6	13	3	48	5	14	5	40	5	11	5
7/23 - 7/29	50	5	0	0	49	5	9	3	54	6	9	3	50	5	6	3	40	5	11	4
7/30 - 8/5	70	7	0	0	50	5	9	3	54	6	9	3	41	5	8	3	40	5	12	5
8/6 - 8/12	67	7	0	0	29	3	9	3	55	6	9	3	48	5	7	3	40	5	10	4
8/13 - 8/19	69	7	0	0	29	3	8	3	46	5	13	4	48	5	8	3	30	4	4	2
8/20 - 8/26	68	7	0	0	30	3	6	2	46	5	5	2	48	5	7	3	34	5	1	1
8/27 - 9/2	50	5	0	0	45	5	1	1	35	4	2	1	37	4	5	2	25	5	2	2
9/3 - 9/9	40	4	0	0	44	5	1	1	35	4	2	1	39	5	4	2	15	4	1	1
9/10 - 9/16	49	5	0	0	29	3	0	0	24	3	2	1	38	4	4	2	15	5	3	3
9/17 - 9/23	50	5	0	0	9	1	1	1	3	1	1	1	29	5	1	1	9	3	0	0
9/24 - 9/30	37	4	0	0	19	2	2	1	3	1	1	1	11	2	2	1	3	1	0	0
10/1 - 10/7	3	1	0	0	6	1	1	1	0	0	0	0	0	0	0	0	-	-	-	-
10/8 - 10/14	3	1	0	0	7	1	0	0	0	0	0	0	0	0	0	0	-	-	-	-
10/15 - 10/21	3	1	0	0	7	1	0	0	0	0	0	0	0	0	0	0	-	-	-	-
10/22 - 10/28	3	1	0	0	5	2	0	0	0	0	0	0	0	0	0	0	-	-	-	-
10/29 - 11/4	3	1	0	0	4	1	1	1	0	0	0	0	0	0	0	0	-	-	-	-
11/5 - 11/11	3	1	0	0	20	3	9	3	0	0	0	0	0	0	0	0	-	-	6	3
11/12 - 11/18	2	1	0	0	13	3	5	3	0	0	0	0	0	0	0	0	-	-	10	4
11/19 - 11/25	2	1	0	0	7	2	2	1	0	0	0	0	0	0	0	0	-	-	7	3
11/26 - 12/2	2	1	0	0	2	1	1	1	0	0	0	0	0	0	0	0	-	-	2	4
12/3 - 12/9	2	1	0	0	3	1	2	1	0	0	0	0	0	0	0	0	-	-	3	2
12/10 - 12/16	0	0	0	0	5	1	2	1	0	0	0	0	0	0	0	0	-	-	-	-
12/17 - 12/23	3	2	0	0	2	1	0	0	0	0	0	0	0	0	0	0	-	-	-	-
12/24 - 12/31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-

Table A2.--Mark groups used to evaluate effects of flow on catch percentage at Jones Beach.[a/]

Release site	Stock or treatment	1977 Catch (%)[b/]	1977 Flow[c/] (kcms)	1978 Catch (%)	1978 Flow (kcms)	1979 Catch (%)	1979 Flow (kcms)	1980 Catch (%)	1980 Flow (kcms)	1981 Catch (%)	1981 Flow (kcms)
					Subyearling chinook salmon						
Bonneville Hat.	Well water production	0.44	4.0			0.17	6.8	0.08	8.2	0.12	6.9
Bonneville Hat.	Tanner Cr. production					0.17	6.8	0.08	8.2	0.09	6.6
Washougal Hat.	Production	0.20	2.7	0.27	5.3	0.44	4.4	0.33	6.8	0.24	7.2
Kalama Falls Hat.	Production	0.70	2.6	0.63	6.4	1.40	3.4	0.24	4.9	0.12	10.1
Toutle Hat.	Production	0.66	3.1	0.56	5.7	0.76	3.6				
Lo. Kalama Hat.	Production			0.14	7.3			0.19	8.4	0.13	9.9
Cowlitz Hat.	Production	0.04	3.2	0.42	6.4			0.37	3.3	0.38	7.2
					Yearling chinook salmon						
McKenzie Hat.	Production 4/lb							0.11	4.0	0.08	4.6
McKenzie Hat.	Production 9-11/lb							0.08	4.8	0.08	4.3
Carson Hat.	Production					0.09	7.6	0.07	8.0		
Eagle Cr. Hat.	Production			0.07	7.4	0.11	6.9				
Marion Fks. Hat. @ Minto	Carson Stock			0.06	6.7	0.08	7.6			0.03	5.4
Marion Fks. Hat. @ Minto	Santiam Stock 12-14/lb			0.84	6.7					0.04	5.4
Oakridge Hat. @ Dexter	Oakridge stock 4/lb							0.15	3.8	0.10	4.6
" "	" 7-8/lb							0.20	4.0	0.06	4.3
" "	Dexter Stock 6-7/lb					0.30	5.1			0.10	4.3
" "	" 8-9/lb					0.28	5.1	0.15	4.0	0.13	4.6
S. Santiam Hat.	Production			0.81	7.2			0.18	4.0		
					Coho salmon						
Washougal Hat.	May release					0.14	7.3	0.14	8.0	0.11	6.1
" "	June release					0.17	5.0	0.09	10.1		
" "	July release					0.50	3.6	0.27	4.9		
Toutle Hat.	May release					0.14	6.9	0.19	6.8		
Cascade Hat.	May release					0.08	6.9	0.08	6.8	0.11	6.1
Cascade Hat.	June release					0.15	5.0			0.10	10.8
Cascade Hat.	July release					0.45	3.6			0.13	7.1
Sandy Hat.	Menhaden diet			0.08	7.4	0.11	6.9				
"	Soy diet			0.10	7.4	0.15	6.9				
"	Herring diet			0.07	7.4	0.12	6.9				
"	Anchovy diet			0.09	7.4	0.13	6.9				

		Year	May		June		July	
Washougal Hat.	Serial release	1979	0.14	7.3	0.17	5.0	0.50	3.6
Toutle Hat.	" "	1979	0.14	6.9	0.30	5.0	0.53	3.6
Cascade Hat.		1979	0.08	6.9	0.15	5.0	0.45	3.6
Washougal Hat.		1980	0.14	8.0	0.27	4.9		
Washougal Hat.		1981	0.11	6.1	0.09	10.1		
Cascade Hat.		1981	0.11	6.1	0.10	10.8	0.13	7.1

a/ Groups used were only those released downstream of Bonneville due to variation in survival associated with proportion of spill to turbine discharge at dams, also, only those released at the same size from the same site. Prescott release groups and others with rapid movement rates were not used due to variability.

b/ Adjusted percent catch all years.

c/ Seven day average of total river flow at Bonneville Dam during the week of median fish recapture for all years.

Table A3.--A summary of beach seine catches at Jones Beach, 18 March - 30 September, 1981.

Date (Mo./Day)	No. sets	CHINOOK Subyearling Total catch (No.)	CHINOOK Subyearling Catch per set (No.)	CHINOOK Yearling Total catch (No.)	CHINOOK Yearling Catch per set (No.)	COHO (juv.) Total catch (No.)	COHO (juv.) Catch per set (No.)	STEELHEAD (juv.) Total catch (No.)	STEELHEAD (juv.) Catch per set (No.)
1/1 - 1/7	0	-	-	-	-	-	-	-	-
1/8 - 1/14	0	-	-	-	-	-	-	-	-
1/15 - 1/21	0	-	-	-	-	-	-	-	-
1/22 - 1/28	0	-	-	-	-	-	-	-	-
1/29 - 2/4	0	-	-	-	-	-	-	-	-
2/5 - 2/11	0	-	-	-	-	-	-	-	-
2/12 - 2/18	0	-	-	-	-	-	-	-	-
2/19 - 2/25	0	-	-	-	-	-	-	-	-
2/26 - 3/4	0	-	-	-	-	-	-	-	-
3/5 - 3/11	0	-	-	-	-	-	-	-	-
3/12 - 3/18	3	14	5	104	35	0	0	0	0
3/19 - 3/25	16	67	4	388	24	0	0	0	0
3/26 - 4/1	25	1,085	43	352	14	11	0	1	0
4/2 - 4/8	27	2,368	88	1,179	44	78	3	2	0
4/9 - 4/15	36	837	23	441	12	78	2	5	0
4/16 - 4/22	41	1,300	32	965	24	313	8	5	0
4/23 - 4/29	64	6,149	96	1,021	16	3,979	62	45	1
4/30 - 5/6	67	13,759	205	1,198	18	2,871	43	126	2
5/7 - 5/13	69	12,515	181	568	8	4,915	71	114	2
5/14 - 5/20	67	10,931	163	60	1	494	7	34	1
5/21 - 5/27	58	6,489	112	80	1	235	4	51	1
5/28 - 6/3	66	4,869	74	77	1	301	5	22	0
6/4 - 6/10	67	6,044	90	11	0	100	2	2	0
6/11 - 6/17	67	5,186	77	11	0	103	2	2	0
6/18 - 6/24	63	3,561	56	1	0	38	1	3	0
6/25 - 7/1	69	8,970	130	2	0	8	0	0	0
7/2 - 7/8	49	17,293	353	1	0	1	0	0	0
7/9 - 7/15	54	5,426	100	1	0	12	0	2	0
7/16 - 7/22	40	2,956	74	1	0	1	0	0	0
7/23 - 7/29	40	2,283	57	1	0	1	0	0	0
7/30 - 8/5	40	1,660	42	0	0	0	0	0	0
8/6 - 8/12	40	705	18	0	0	0	0	0	0
8/13 - 8/19	30	699	23	0	0	0	0	0	0
8/20 - 8/26	34	356	10	0	0	0	0	0	0
8/27 - 9/2	25	213	8	0	0	0	0	0	0
9/3 - 9/9	15	194	13	0	0	0	0	0	0
9/10 - 9/16	15	232	15	0	0	0	0	0	0
9/17 - 9/23	9	132	15	0	0	0	0	0	0
9/24 - 9/30	3	50	17	0	0	0	0	0	0
10/1 - 12/31	0	-	-	-	-	-	-	-	-
1981 Total	1,199	116,343		6,462		13,539		414	

Table A4.--A summary of purse seine catches at Jones Beach, 30 March - 30 September, 1981.

Date (Mo./Day)	No. sets	CHINOOK Subyearling Total catch (No.)	CHINOOK Subyearling Catch per set (No.)	CHINOOK Yearling Total catch (No.)	CHINOOK Yearling Catch per set (No.)	COHO (juv.) Total catch (No.)	COHO (juv.) Catch per set (No.)	STEELHEAD (juv.) Total catch (No.)	STEELHEAD (juv.) Catch per set (No.)
1/1 - 1/7	0	-	-	-	-	-	-	-	-
1/8 - 1/14	0	-	-	-	-		-	-	-
1/15 - 1/21	0	-	-	-	-	-	-	-	-
1/22 - 1/28	0	-	-	-	-	-	-	-	-
1/29 - 2/4	0	-	-	-	-	-	-	-	-
2/5 - 2/11	0	-	-	-	-	-	-	-	-
2/12 - 2/18	0	-	-	-	-	-	-	-	-
2/19 - 2/25	0	-	-	-	-	-	-	-	-
2/26 - 3/4	0	-	-	-	-	-	-	-	-
3/5 - 3/11	0	-	-	-	-	-	-	-	-
3/12 - 3/18	0	-	-	-	-	-	-	-	-
3/19 - 3/25	0	-	-	-	-	-	-	-	-
3/26 - 4/1	8	241	30	119	15	6	1	2	0
4/2 - 4/8	10	35	3	107	11	9	1	3	0
4/9 - 4/15	14	5	0	194	14	29	2	26	2
4/16 - 4/22	18	753	42	999	55	191	11	98	5
4/23 - 4/29	13	161	12	829	64	967	74	640	49
4/30 - 5/6	21	342	16	1,914	91	3,860	184	1,573	75
5/7 - 5/13	18	815	45	1,969	109	4,023	224	2,596	144
5/14 - 5/20	28	3,170	113	1,799	64	5,221	186	2,548	91
5/21 - 5/27	26	935	36	675	26	4,313	166	1,836	71
5/28 - 6/3	26	610	23	560	22	2,496	96	1,863	72
6/4 - 6/10	26	721	28	247	9	1,564	60	367	14
6/11 - 6/17	25	1,050	42	307	12	170	7	144	6
6/18 - 6/24	22	856	39	216	10	972	42	143	6
6/25 - 7/1	14	368	26	85	6	128	9	38	3
7/2 - 7/8	11	1,344	122	29	7	4	0	3	0
7/9 - 7/15	15	696	46	22	1	97	6	11	1
7/16 - 7/22	11	499	45	5	0	12	1	1	0
7/23 - 7/29	11	755	69	2	0	27	2	1	0
7/30 - 8/5	12	1,076	90	1	0	5	0	5	0
8/6 - 8/12	10	680	68	0	0	0	0	0	0
8/13 - 8/19	4	41	10	0	0	0	0	0	0
8/20 - 8/26	1	42	42	0	0	0	0	0	0
8/27 - 9/2	2	2	1	0	0	0	0	0	0
9/3 - 9/9	1	12	12	0	0	0	0	0	0
9/10 - 9/16	3	176	59	0	0	0	0	0	0
9/17 - 9/23	0	-	-	-	-	-	-	-	-
9/24 - 9/30	0	-	-	-	-	-	-	-	-
10/1 - 11/4	0	-	-	-	-	-	-	-	-
11/5 - 11/11	6	118	20	0	0	0	0	0	0
11/12 - 11/18	10	313	31	0	0	0	0	0	0
11/19 - 11/25	7	269	38	0	0	0	0	0	0
11/26 - 12/2	4	48	12	0	0	0	0	0	0
12/3 - 12/9	3	7	1	0	0	0	0	0	0
12/10 - 12/31	0	-	-	-	-	-	-	-	-
1981 Total	380	16,140		10,079		24,094		11,898	

Table A5.--Water temperature of the Columbia River at Jones Beach. 1977-1981 in weekly intervals (°c).

Date (Mo./day)	1977	1978	1979	1980	1981
1/1 - 1/7	-	4	-	-	-
1/8 - 1/14	-	-	-	-	-
1/15 - 1/21	-	-	-	-	-
1/22 - 1/28	-	6	-	-	-
1/29 - 2/4	-	5	-	-	-
2/5 - 2/11	-	6	-	-	-
2/12 - 2/18	-	6	-	-	-
2/19 - 2/25	-	7	-	-	-
2/26 - 3/4	-	8	-	-	-
3/5 - 3/11	-	6	6	7	-
3/12 - 3/18	-	7	6	6	8
3/19 - 3/25	-	8	7	5	8
3/26 - 4/1	-	10	8	7	9
4/2 - 4/8	-	11	8	8	9
4/9 - 4/15	-	10	8	9	9
4/16 - 4/22	-	10	9	10	9
4/23 - 4/29	8	11	11	12	10
4/30 - 5/6	10	11	12	14	12
5/7 - 5/13	10	12	12	14	12
5/14 - 5/20	13	13	13	14	13
5/21 - 5/27	13	13	15	14	13
5/28 - 6/3	13	14	14	14	15
6/4 - 6/10	15	17	15	14	15
6/11 - 6/17	17	17	16	14	15
6/18 - 6/24	18	17	16	16	15
6/25 - 7/1	19	17	17	17	16
7/2 - 7/8	19	17	18	18	17
7/9 - 7/15	19	18	19	18	18
7/16 - 7/22	20	19	20	19	18
7/23 - 7/29	20	21	20	19	19
7/30 - 8/5	22	20	21	20	20
8/6 - 8/12	22	21	20	20	21
8/13 - 8/19	23	21	20	20	21
8/20 - 8/26	22	19	20	19	21
8/27 - 9/2	20	19	21	20	20
9/3 - 9/9	20	18	19	18	20
9/10 - 9/16	19	18	19	19	20
9/17 - 9/23	18	17	20	18	19
9/24 - 9/30	17	17	19	18	18
10/1 - 10/7	16	16	-	-	-
10/8 - 10/14	15	16	-	-	14
10/15- 10/21	14	-	-	-	14
10/22- 10/28	-	15	-	-	13
10/29- 11/4	11	12	-	-	12
11/5 - 11/11	11	10	-	-	12
11/12- 11/18	9	8	-	-	12
11/19- 11/25	7	6	-	-	10
11/26- 12/2	8	5	-	-	8
12/3 - 12/9	7	6	-	-	8
12/10- 12/16	-	5	-	-	-
12/17- 12/23	5	5	-	-	-
12/24- 12/31	-	2	-	-	-

Table A6.--Weekly catch per set averages for yearling chinook and coho salmon and steelhead (purse seine) and subyearling chinook salmon (beach seine) at Johes Beach, 1977-1981.

Date (Mo/day)	Beach seine: Subyearling chinook catch per set 1977	1978	1979	1980	1981	Purse seine: Yearling chinook catch per set 1978	1979	1980	1981	Juvenile coho catch per set 1978	1979	1980	1981	Juvenile steelhead catch per set 1978	1979	1980	1981
1/1 - 1/7	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/8 - 1/14	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/15 - 1/21	-	0	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-
1/22 - 1/28	-	2	1	-	-	-	0	-	-	-	0	-	-	-	0	-	-
1/29 - 2/4	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/5 - 2/11	-	2	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-
2/12 - 2/18	-	2	3	-	-	-	0	-	-	-	0	-	-	-	0	-	-
2/19 - 2/25	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/26 - 3/4	-	3	2	-	-	-	0	-	-	-	0	-	-	-	0	-	-
3/5 - 3/11	-	10	3	24	-	-	0	-	-	-	0	0	-	-	0	0	-
3/12 - 3/18	-	4	7	54	5	2	1	2	-	0	0	0	-	0	0	0	-
3/19 - 3/25	-	10	15	60	4	2	3	3	-	0	0	0	-	0	0	0	-
3/26 - 4/1	-	48	94	50	43	7	2	6	15	0	0	0	1	0	0	0	0
4/2 - 4/8	-	31	34	14	88	10	11	12	11	1	0	0	1	1	0	0	0
4/9 - 4/15	75	31	27	37	23	25	32	35	14	11	1	0	2	4	1	1	2
4/16 - 4/22	124	15	33	64	32	47	47	49	55	23	5	2	11	9	12	7	5
4/23 - 4/29	100	87	67	79	96	36	94	53	64	74	22	30	74	22	24	66	49
4/30 - 5/6	222	119	129	95	205	45	83	83	91	79	50	125	184	76	40	110	75
5/7 - 5/13	866	110	190	161	181	106[a]	60	110[a]	109[a]	195	91	152	224	82	82	197[a]	144[a]
5/14 - 5/20	1099	96	141	112	163	58	93[a]	53	64	211[a]	142	208[a]	186[a]	161[a]	85[a]	104	91
5/21 - 5/27	661[a]	121	111	54[b]	112	57	68	25[b]	26	119	165	54[b]	166	105	48	26[b]	71
5/28 - 6/3	479	580	180	87	74	43	121	11	22	100	175[a]	48	96	63	46	11	72
6/4 - 6/10	272	482	298	98	90[a]	27	56	15	9	99	148	41	60	17	19	8	14
6/11 - 6/17	153	634[a]	89	89[a]	77	28	20	15	12	37	100	15	7	5	8	4	6
6/18 - 6/24	99	298	285	103	56	14	12	14	10	23	27	6	42	2	6	6	6
6/25 - 7/1	134	434	345	57	130	10	1	3	6	11	11	9	9	0	2	1	3
7/2 - 7/8	103	179	362[a]	184	353	2	2	0	7	1	5	5	0	0	1	0	0
7/9 - 7/15	230	95	203	121	100	8	0	0	1	1	53	15	6	0	0	0	1
7/16 - 7/22	97	90	366	104	74	4	0	0	0	1	7	2	1	0	0	0	0
7/23 - 7/29	217	72	340	70	57	1	0	0	0	0	1	5	2	0	0	0	0
7/30 - 8/5	155	63	342	75	42	0	0	0	0	0	0	0	0	0	0	0	0
8/6 - 8/12	106	23	237	48	18	0	0	0	0	0	0	0	0	0	0	0	0
8/13 - 8/19	59	62	131	49	23	0	0	0	0	0	0	0	0	0	0	0	0
8/20 - 8/26	63	44	119	50	10	0	0	0	0	0	0	0	0	0	0	0	0
8/27 - 9/2	32	41	83	40	8	0	0	0	0	0	0	0	0	0	0	0	0
9/3 - 9/9	43	18	72	24	13	0	0	0	0	0	0	0	0	0	0	0	0
9/10 - 9/16	23	23	75	33	15	-	0	0	0	-	0	0	0	-	0	0	0
9/17 - 9/23	13	23	75	21	15	0	0	0	0	0	0	0	0	0	0	0	0
9/24 - 9/30	14	17	35	20	17	0	0	0	0	0	0	0	0	0	0	0	0
10/1 - 10/7	20	15	-	-	-	1[c]	-	-	-	0	-	-	-	0	-	-	-
10/8 - 10/14	16	12	-	-	-	-	-	-	-	0	-	-	-	0	-	-	-
10/15 - 10/21	18	11	-	-	-	-	-	-	-	0	-	-	-	0	-	-	-
10/22 - 10/28	46	7	-	-	-	-	-	-	-	0	-	-	-	0	-	-	-
10/29 - 11/4	13	8	-	-	-	2[c]	-	-	-	0	-	-	-	0	-	-	-
11/5 - 11/11	1	11	-	-	-	10[c]	-	-	9[c]	0	-	-	-	0	-	-	-
11/12 - 11/18	0	3	-	-	-	7[c]	-	-	37[c]	0	-	-	-	0	-	-	-
11/19 - 11/25	0	2	-	-	-	8[c]	-	-	40[c]	0	-	-	-	0	-	-	-
11/26 - 12/2	2	2	-	-	-	6[c]	-	-	24[c]	0	-	-	-	0	-	-	-
12/3 - 12/9	3	4	-	-	-	9[c]	-	-	2[c]	0	-	-	-	0	-	-	-
12/10 - 12/16	-	4	-	-	-	2[c]	-	-	-	0	-	-	-	0	-	-	-
12/17 - 12/23	2	1	-	-	-	-	-	-	-	0	-	-	-	0	-	-	-
12/24 - 12/31	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

a/ Median recapture

b/ Inital affects from Mt. St. Helens.

c/ Catches of spring chinook and fall chinook salmon released in the fall as subyearlings. 6-24/1b.

Table A7.--Total (weekly average) river and spillway flow at Bonneville Dam for 1977-1981. 1/

Date (mo/day)	1977 Total (kcms)	1977 Spill (kcms)	1978 Total (kcms)	1978 Spill (kcms)	1979 Total (kcms)	1979 Spill (kcms)	1980 Total (kcms)	1980 Spill (kcms)	1981 Total (kcms)	1981 Spill (kcms)
3/5 - 3/11	3.7	.04	4.7	.84	4.7	1.00	4.8	1.07	4.7	1.04
3/12 - 3/18	4.0	.28	4.8	.82	4.9	.88	5.0	1.01	4.5	.70
3/19 - 3/25	3.5	-	5.3	1.29	5.1	1.02	4.0	.14	4.5	.72
3/26 - 4/1	3.5	.44	6.5	2.34	5.7	1.60	3.8	-	4.9	.92
4/2 - 4/8	2.9	-	7.2	3.14	5.3	1.20	3.8	.95	4.9	.83
4/9 - 4/15	3.1	-	7.1	3.17	5.7	1.54	4.0	.97	4.6	.68
4/16 - 4/22	3.1	-	6.5	2.44	5.1	1.07	4.8	1.18	4.3	.84
4/23 - 4/29	3.3	-	6.7	2.54	5.1	.97	5.9	1.95	5.4	1.31
4/30 - 5/6	4.0	.41	7.8	3.65	6.2	2.04	7.4	3.14	6.9	2.84
5/7 - 5/13	4.0	.20	7.4	3.39	7.6	3.34	8.0	3.68	6.5	2.36
5/14 - 5/20	3.7	-	6.8	4.72	6.9	2.71	6.8	2.60	6.1	1.99
5/21 - 5/27	4.4	1.09	7.9	3.84	7.3	3.09	7.2	3.00	6.6	2.04
5/28 - 6/3	4.2	.54	6.7	2.56	6.8	2.64	8.2	4.00	10.1	5.26
6/4 - 6/10	3.9	.27	7.3	3.17	5.6	1.62	8.3	4.13	11.1	6.46
6/11 - 6/17	4.0	.43	7.7	3.60	5.0	1.20	8.4	4.27	10.8	6.01
6/18 - 6/24	3.2	.05	6.4	2.39	4.7	.88	8.5	4.26	9.9	5.07
6/25 - 7/1	3.1	.08	6.4	2.39	4.4	.56	6.8	2.53	8.2	3.39
7/2 - 7/8	2.4	-	5.7	1.56	3.7	.17	5.2	1.19	7.2	2.20
7/9 - 7/15	2.8	-	6.4	2.37	3.6	.43	4.9	1.18	7.1	2.27
7/16 - 7/22	2.9	-	5.3	1.46	3.8	.34	4.5	.62	6.0	1.33
7/23 - 7/29	2.6	-	4.7	.99	3.4	.13	3.9	.64	5.7	1.07
7/30 - 8/5	3.1	-	4.2	.81	3.3	-	3.7	.07	5.4	.75
8/6 - 8/12	2.7	-	3.7	.52	3.4	-	3.6	.30	5.1	.93
8/13 - 8/19	2.9	-	3.5	.04	2.9	-	3.4	-	4.7	.43
8/20 - 8/26	2.7	-	3.5	-	3.2	.14	3.2	-	4.0	.04
8/27 - 9/2	2.5	-	3.9	.62	3.1	.08	3.4	.04	3.7	.03
9/3 - 9/9	3.0	-	4.4	1.29	3.0	.04	3.0	.04	3.4	.04
9/10 - 9/16	2.9	-	4.5	.90	3.1	.04	2.8	.04	3.0	.04
9/17 - 9/23	2.9	-	4.5	.88	3.0	-	3.1	.04	3.4	.04
9/24 - 9/30	3.2	-	3.9	.43	2.7	-	3.2	-	3.1	-

1/ KCMS = 1,000 m^3/s = 35,300 ft^3/s

Table A8.--Marked juvenile salmonids released in 1980 and captured during 1981.

Release information				Individuals recaptured by month							
		Date	Size	Recaptures	Recapture 1981						
(Ag/D1/D2)	Site	(day/mo)	(#/lb)	1980	MR	AP	MY	JN	JL	AU	SE
				Chinook salmon							
07/17/34	Tanner Cr	11NO	14	0	1	0	0	0	0	0	0
63/21/05	Kalama R@RM 15	1JN	157	163	0	1	0	0	0	0	0
63/20/21	Lewis R	1JL	195	171	0	0	1	0	0	0	0
63/22/07	Lewis R	1JN	310	74	0	1	0	0	0	0	0
63/21/60	Lewis R	1JL	150	197	2	0	0	0	0	0	0
07/22/47	N Santiam@Minto	5NO	20	0	0	4	0	0	0	0	0
07/22/48	N Santiam@Minto	6-7NO	19	0	0	1	4	0	0	0	0
07/22/18	McKenzie@Leaburg	5NO	11	0	0	1	0	0	0	0	0
07/22/21	McKenzie@Leaburg	5NO	15	0	0	4	0	0	0	0	0
07/22/24	M Fk Willam@Dexter	6NO	11	0	0	1	0	0	0	0	0
07/23/06	M Fk Willam@Dexter	5NO	28	0	0	1	0	0	0	0	0
10/21/27	S Fk Clearwater	16SE	25	0	0	0	4	2	0	0	0
63/21/53	Washougal R@RM 15	1JN	99	609	0	1	0	0	0	0	0
				Steelhead							
07/22/01	Wallowa Hat	21AP	11	10	0	0	1	0	0	0	0

Table A9.--Average and range of migration rates for selected groups of marked juvenile salmon and steelhead, 1977-1981. River flow during the period 28 May through June was higher during 1981 than previous years (see Table A7).

	Chinook salmon									Coho salmon				Steelhead			
	Subyearling					Yearling											
	1977	1978	1979	1980	1981	1978	1979	1980	1981	1978	1979	1980	1981	1978	1979	1980	1981
	Release site to RKm 75[a]																
Average (km/day)	7	16	21	19	18	20	17	23	20	16	20	18	23	21	32	29	34
Range (km/day)	2-27	5-39	2-48	2-48	4-32	6-35	5-37	7-44	9-46	6-26	7-57	8-37	7-53	3-39	10-61	12-43	18-52
No. mark groups	10	13	14	10	12	11	13	10	7	6	8	7	5	7	6	4	3
	RKm 75 to RKm 16[b]																
Average (km/day)	-	4[c]	11[c]	25	-	15	15	28	-	26	22	28	-	44	-	43	-
Range (km/day)	-	2-59	1-59	2->59	-	8-59	6-59	5->59	-	16-59	12-59	20-30	-	31-59	-20->59		-
No. mark groups	-	14	9	33	-	8	5	38	-	4	3	8	-	3	0	24	-
	RKm 75 to ocean[d]																
Average (km/day)	-	6	10	21	-	1	5	13	-	-	25	11	-	-	-	21	-
Range (km/day)	-	1-20	1-50	1-99	-	-	1-13	1-68	-	-	-	2-44	-	-	-	1-62	-
No. mark groups	-	23	31	26	-	1	10	18	-	0	1	12	-	-	0	10	-

a/ Averaged from mark groups which represent large releases 1978 - 1981; calculated using date of median fish recapture.

b/ Averaged from mark groups captured in substantial numbers in 1978 and 79 but all groups weighted by catch for 1980; calculated using dates of median fish recapture excluding periods with low effort.

c/ Dates of median fish recapture at RKm 16 adjusted for effort.

d/ Averaged for all groups recaptured in the ocean, calculated from date of 1st recapture in the ocean.

Table A10.--Uses of Jones Beach catch data; reports, publications, and research projects.

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Hanson, H. and S. Cramer.
1980. Bonneville Hatchery evaluation. ODFW Annual Progress Report. 24.

Hanson, H. and R. Ewing, J. Martin.
1979. Bonneville Hatchery evaluation. ODFW Annual Progress Report. 22.

Table A10.--Continued.

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Table A11.--Catch composition of beach seine samples at Jones Beach, March through September 1981.

Species	Numbers of individuals (no. of sets)								Catch per unit of effort
	Mar (37)	Apr (184)	May (289)	Jun (284)	Jul (209)	Aug (141)	Sep (54)	Total (1,199)	
Chin.-subyearling *Oncorhynchus tshawytscha*	766	14,792	42,991	21,407	32,895	2,816	676	116,343	97.0
Chin.-yearling *Oncorhynchus tshawytscha*	732	4,016	1,678	32	4	0	9	6,462	5.4
Coho-juvenile *Oncorhynchus kisutch*	2	5,368	7,780	374	15	0	0	13,539	11.3
Sockeye-juvenile *Oncorhynchus nerka*	0	2	95	7	26	2	0	132	0.1
Chum-juvenile *Oncorhynchus keta*	2	7	0	1	0	0	0	10	0.0
Steelhead-juvenile *Salmo gairdneri*	1	90	309	12	2	0	0	414	0.3
Coastal cutthroat trout *Salmo clarki*	7	53	55	0	2	31	40	188	0.2
Threespine stickleback *Gasterosteus aculeatus*	398	1,932	3,117	4,110	23,621	21,525	6,162	60,865	50.8
American shad-juvenile yearling *Alosa sapidissima*	13	108	5,421	2,893	1,079	183	47	9,744	8.1
American shad-juvenile subyearling *Alosa sapidissima*	0	0	0	0	10	13,560	9,502	23,072	19.2
Eulachon *Thaleichthys pacificus*	1	9	0	1	0	0	0	11	0.0
Starry flounder *Platichthys stellatus*	104	187	174	171	222	203	96	1,157	1.0
Carp *Cyprinus carpio*	11	38	63	98	10	4	1	225	0.2
Sucker *Catostomus* sp.	27	60	109	82	159	266	34	737	0.6
Crappie *Pomoxis* sp.	3	16	50	10	4	67	3	153	0.1
Redside shiner *Richardsonius balteatus*	0	0	2	5	18	2	0	27	0.0
Sand roller *Percopsis transmontana*	0	0	0	3	0	0	0	3	0.0
Leopard dace *Rhinichthys falcatus*	0	0	1	1	0	0	0	2	0.0
Killifish *Fundulus* sp.	0	0	0	0	1	0	0	1	0.0
Largemouth bass *Micropterus salmoides*	0	3	1	1	1	1	0	7	0.0
Peamouth *Mylocheilus caurinus*	20	279	3,847	2,603	3,168	3,239	361	13,517	11.3
Northern squawfish *Ptychocheilus oregonensis*	0	1	209	718	468	272	86	1,754	1.5
Mountain whitefish *Prosopium williamsoni*	0	0	1	26	47	47	5	126	0.1
Prickly sculpin *Cottus asper*	14	22	38	187	70	26	3	360	0.3
Pacific lamprey-adult *Lampetra tridentata*	0	0	2	0	0	0	0	2	0.0
Steelhead-adult *Salmo gairdneri*	4	15	13	44	12	3	0	91	0.8
Chinook salmon-adult *Oncorhynchus tshawytscha*	1	3	13	18	3	2	18	58	0.5
Chinook salmon-jack *Oncorhynchus tshawytscha*	0	0	2	108	32	1	4	147	0.1
Coho salmon-adult *Oncorhynchus kisutch*	0	0	0	0	0	0	4	4	0.0
Coho salmon-jack *Oncorhynchus kisutch*	0	0	0	0	1	0	2	3	0.0
Sockeye salmon-adult *Oncorhynchus nerka*	0	0	1	112	2	0	0	115	0.1
American shad-adult *Alosa sapidissima*	0	0	9	1	1	5	0	16	0.0
Goldfish *Carassius auratus*	0	0	1	2	0	0	0	3	0.0
Yellow perch *Perca flavescens*	1	5	9	6	4	1	0	26	0.0
White sturgeon *Acipenser transmontanus*	0	0	0	2	19	2	0	23	0.0

Table A12.--Catch composition of purse seine samples at Jones Beach, March through December 1981.

Species	Numbers of individuals (no. of sets)											Catch per unit of effort
	Mar (5)	Apr (58)	May (109)	Jun (97)	Jul (52)	Aug (24)	Sep (5)	Oct (0)	Nov (24)	Dec (5)	Total (379)	
Chin.-subyearling *Oncorhynchus tshawytscha*	200	995	5,775	3,092	4,037	1,096	190	-	726	0	16,111	42.5
Chin.-yearling *Oncorhynchus tshawytscha*	64	2,184	6,838	934	59	0	0	-	16	0	10,085	26.6
Coho-juvenile *Oncorhynchus kisutch*	4	1,198	18,514	4,233	143	2	0	-	0	0	24,094	63.6
Sockeye-juvenile *Oncorhynchus nerka*	0	3	1,115	256	27	5	0	-	0	0	1,406	3.7
Steelhead-juvenile *Salmo gairdneri*	0	769	10,227	881	21	0	0	-	0	0	11,898	31.4
Chum-juvenile *Oncorhynchus keta*	0	1	0	0	0	0	0	-	0	0	1	0.0
Coastal cutthroat trout *Salmo clarki*	0	24	46	0	0	3	0	-	0	0	73	0.2
Threespine stickleback *Gasterosaus aculeatus*	0	41	142	84	179	55	4	-	19	0	524	1.4
American shad-juvenile yearling *Alosa sapidissima*	0	4	89	45	12	6	1	-	1,233	111	1,501	4.0
Eulachon *Thaleichthys pacificus*	0	13	1	0	0	0	0	-	0	0	14	0.0
Starry flounder *Platichthys stellatus*	0	4	8	0	1	0	0	-	6	0	19	0.1
Carp *Cyprinus carpio*	0	0	4	8	1	0	0	-	0	0	13	0.0
Sucker *Catostomus* sp.	0	1	24	23	3	0	0	-	0	0	51	0.1
Crappie *Pomoxis* sp.	0	0	2	0	0	0	0	-	1	0	3	0.0
Bluegill *Lepomis macrochirus*	0	0	1	0	0	0	0	-	0	0	1	0.0
Largemouth bass *Micropterus salmoides*	0	0	1	0	0	0	0	-	0	0	1	0.0
Peamouth *Mylocheilus caurinus*	0	8	834	1,030	134	30	0	-	201	0	2,237	5.9
Northern squawfish *Ptychocheilus oregonensis*	0	0	15	14	11	2	0	-	0	0	42	0.1
Prickly sculpin *Cottus asper*	0	0	2	0	0	0	0	-	0	0	2	0.0
Pacific lamprey-adult *Lampetra tridentata*	0	0	4	3	0	1	0	-	0	0	8	0.0
Steelhead-adult *Salmo gairdneri*	0	22	19	3	1	0	0	-	0	0	45	0.1
Chinook salmon-adult *Oncorhynchus tshawytscha*	0	0	1	0	1	0	0	-	0	0	2	0.0
Chinook salmon-jack *Oncorhynchus tshawytscha*	0	0	3	1	0	0	0	-	0	0	4	0.0
Sockeye salmon-adult *Oncorhynchus nerka*	0	0	0	3	0	0	0	-	0	0	3	0.0
American shad-adult *Alosa sapidissima*	0	1	56	21	37	1	0	-	0	0	116	0.3

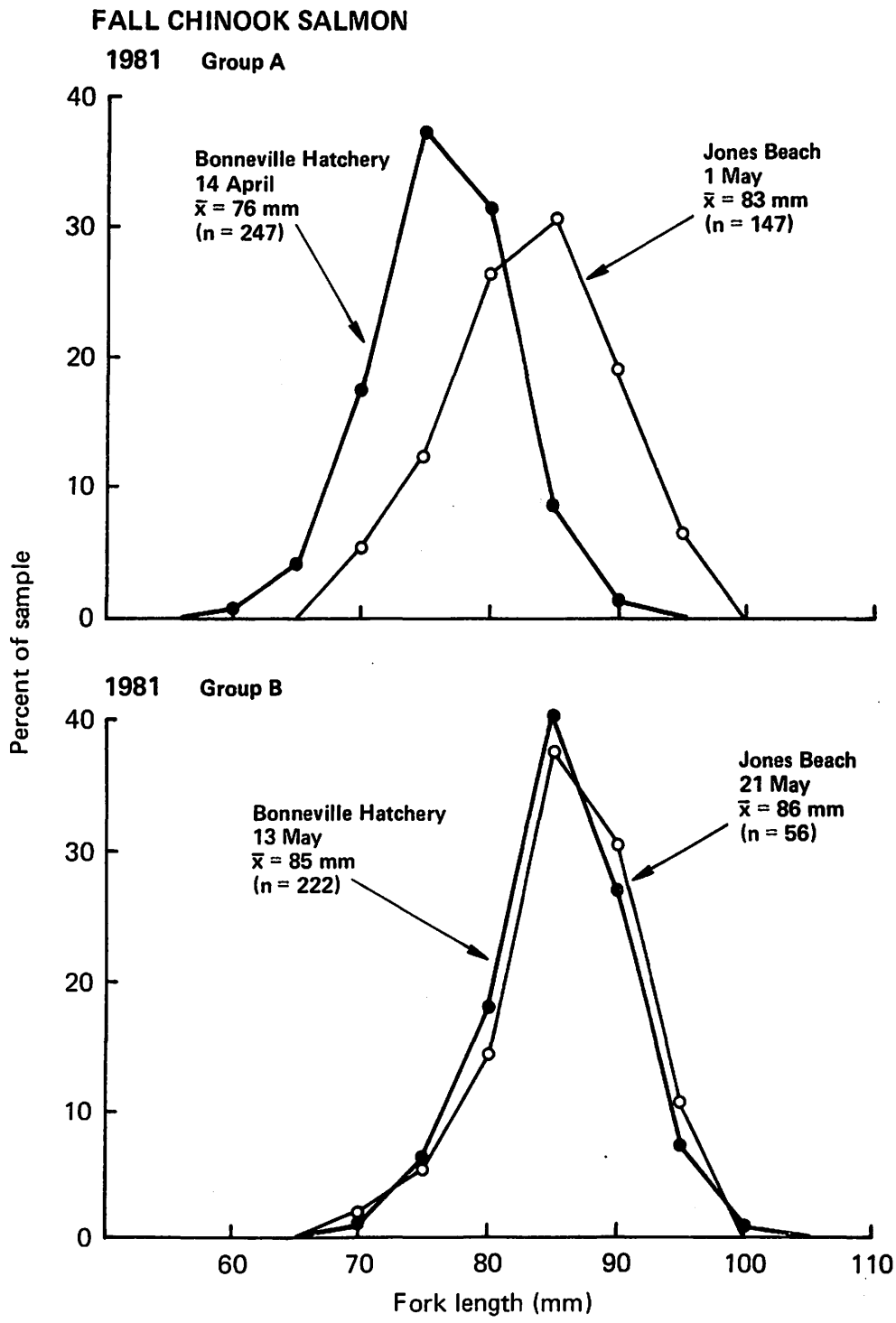

Figure A1.--Fork lengths of fall chinook salmon before and after migration. Group A showing size shift; Group B no size shift.

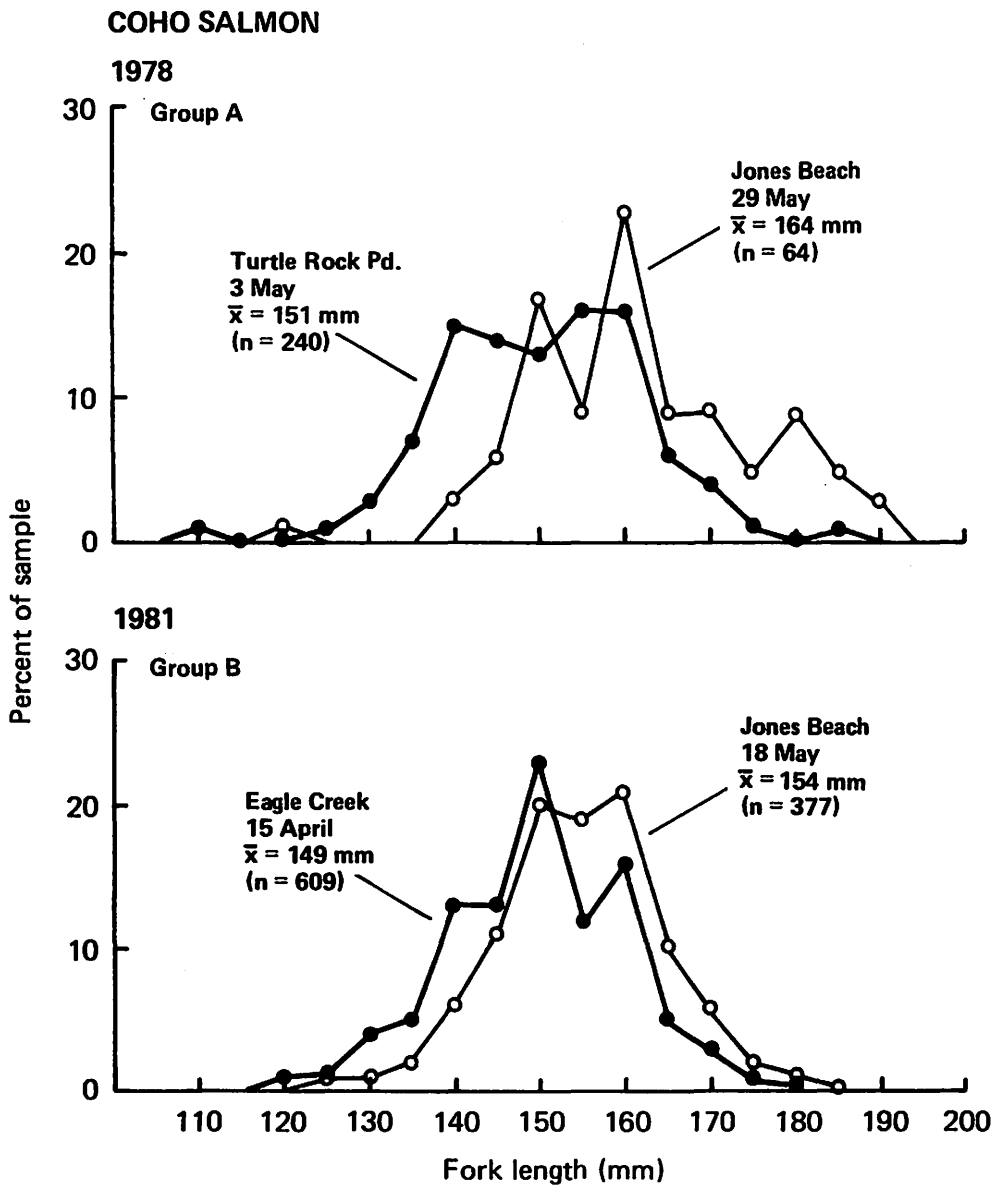

Figure A2.--Fork lengths of coho salmon before and after migration. Group A showing size shift; Group B no size shift.

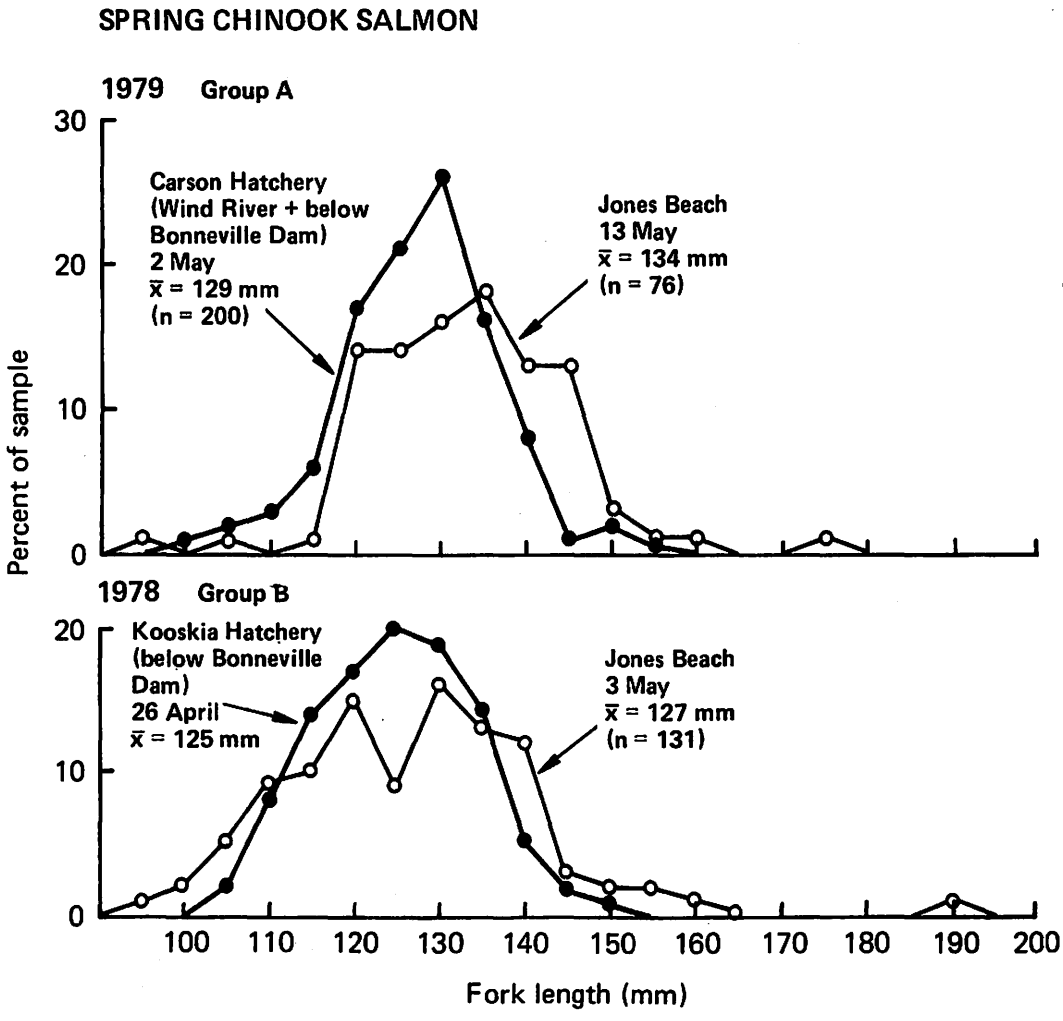

Figure A3.--Fork lengths of spring chinook salmon before and after migration. Group A showing size shift; Group B no size shift.

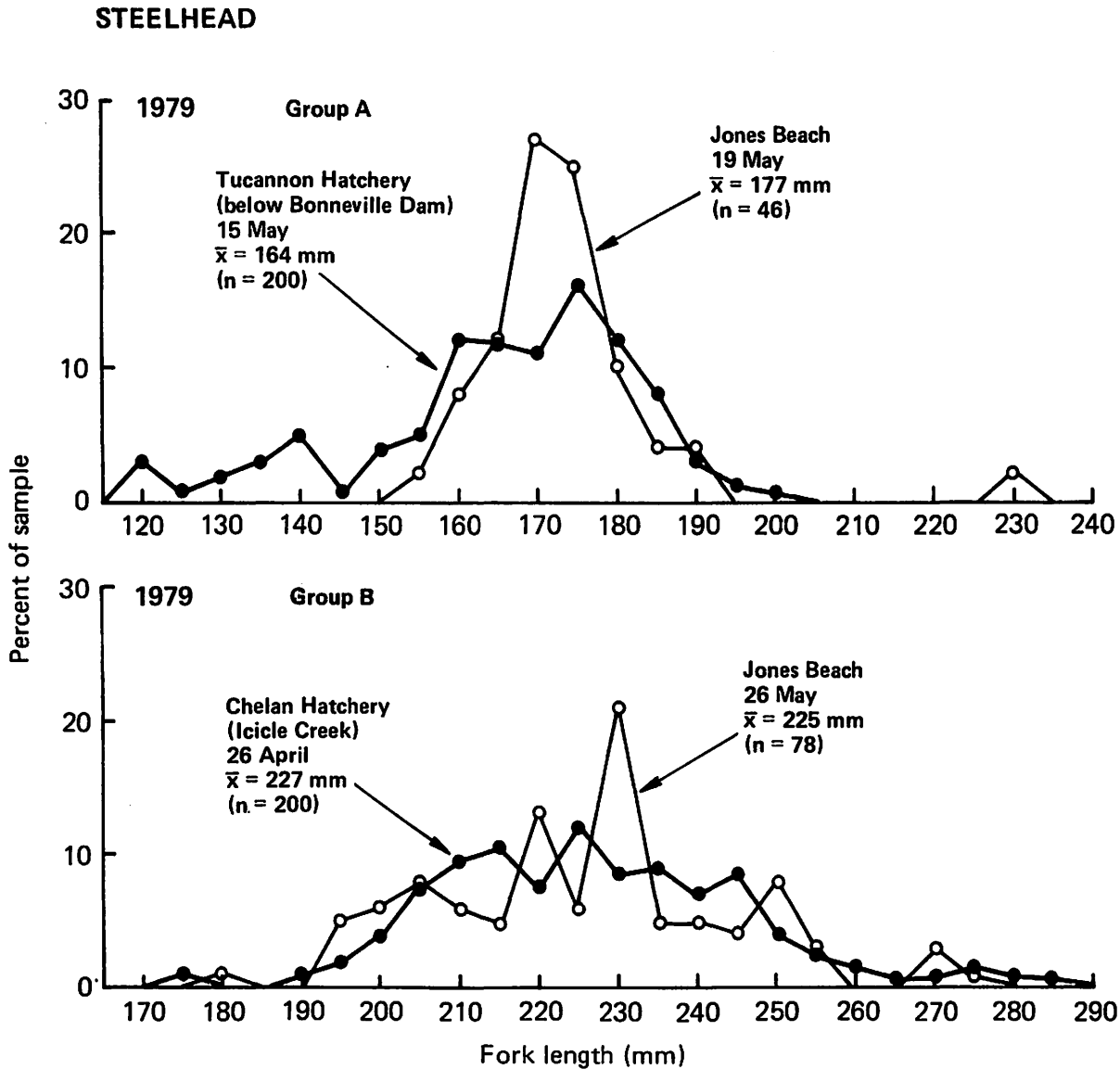

Figure A4.--Fork lengths of steelhead before and after migration; Group A showing size shift; Group B showing no size shift.

APPENDIX B

MARK RELEASE AND CAPTURE INFORMATION,

COLUMBIA RIVER ESTUARY, JONES BEACH (RKM 75)

FOR 1977 THROUGH 1981

Sockeye Salmon

Coho Salmon

Yearling Chinook Salmon

Steelhead

Subyearling Chinook Salmon

LEGEND

MARK - Binary wire tag: recaptures are listed with a six digit number, the first two digits being agency code; second two-data one; and third two-data two.
NO TAG: represents fish with excised adipose fin with no detectable tag.
LET GO: represents fish with excised adipose fin with a detectable tag that were measured then released.
BLNK TAG: represents fish with a blank tag.

Brand: the first two letters indicate location on fish, the next one or two characters indicate the configuration of the brand and the final number indicates rotation of the brand; e.g.: LA K 2. Codes for location, brand, and rotation are listed on the following pages.

Clip: recaptures with clips exclusively are indicated by the common letter abbreviations listed on the following page.

*: Asterisk indicates that other marks are associated with this fish group and are listed in OTHER MARKS.

NO. MKD THOUS - thousands of fish released with observable mark.
RELEASE DATE - day, month, year
RECAPT. SITE LOCATION - examples: C075.0S 4010.2S

C-Columbia River
075.0-Distance from mouth of River in km
S-South, Middle or North part of river cross section.

4-Ocean
010-Coastal location (1-10 where Tillamook, OR.=1; Westport, WASH.=10)
2-Distance from shore 0-5; where km=no.x 8
S-Set facing South or North.

GEAR CODE - B for beach seine; P for purse seine.
RECAPTURES - recapture number , ACTUAL and ADJUSTED (to represent 7 day/wk fishing effort, 10 sets/day for the beach seine and 5 sets/day for the purse seine). Recapture rates (%) = RECAPT. NO./NO. MKD x 100.
RECAPTURE DATE/MED. FISH - date on which the median fish was recaptured, using the adjusted catch figures.
AVG. LEN. - average fork length in mm of the fish captured on or within 3 days before and after the date of median fish recapture.
MVMT RATE - movement rate is the distance from release point to recapture point divided by the number of days from 1st day of release to date of median fish recapture. Movement rate to all ocean sites computed as if recaptured at Rkm 0.
OTHER MARKS - secondary marks on the same fish group will be listed but NO. MKD is only accurate for primary mark listed under MARK.
HAND ADJUSTMENT: a) In some instances, selection of the subsample for AD clipped fish was made using fork length; when this occurred adjustment for the catch was weighted by fork length as well as effort and % of subsample. b) When date of 1st fish recaptured was the day following the release date adjustment was made by hand and did not include correction for non-fishing days prior to first fish recapture.
RECOVERED (yr): indicates the year of recovery if different from the year of release.
Abbreviations: abbreviated terms used in HATCH/ORIGIN, RELEASE SITE and PURPOSE OF RELEASE are listed on the following page.

Cont.

TAGS

Color	Abbr.
Red	RD
Green	GN
Blue	BL
Gray	GY
Brown	BR
Yellow	YW
Oxide Yellow	XY
Oxide Red	XR
Light Blue	LB
Light Green	LG
Pink	PK
Purple	PU
Orange	OR
Tan	TN
White	WH
Black	BK
Oxide Brown	XB
Chrome Yellow	CY
Medium Green	MG
Gold	GD
Dark Green	DG
Dark Red	DR
Medium Orange	MO
Mixed	MX
Metallic Grey	GM

Rare Earth (element)	Abbr.
Cerium	CE
Dysprosium	DY
Erbium	ER
Gadolinium	GD
Holmium	HO
Lanthanum	LA
Neodymium	ND
Praseodymium	PR
Samarium	SM
Terbium	TB
Ytterbium	YB

BRANDS

Location	Abbr.
Left anterior	LA
Left dorsal	LD
Left posterior	LP
Right anterior	RA
Right dorsal	RD
Right posterior	RP

Brand	Abbr.
+	+
+O	+O
+F	+F
+J	+J
+K	+K
+L	+L
+N	+N
+P	+P
+R	+R
+T	+T
+U	+U
+Y	+Y
+Z	+Z
OO	OO
101	01
1-1	1-
10	10
12	12
13	13
17	17
2	2
2C	2C
2J	2J
2L	2L
2T	2T
2X	2X
3	3
3C	3C
3J	3J
3L	3L
3T	3T
3X	3X
4	4
5	5
52	52
9	9
	AN
	AR
	B1
	B2
	B4
	B8
	D
T	DT
E	E
C	EC
	EP
F	F

BRANDS

Brand	Abbr.
G	G
	GL
H	H
	HE
I+	I+
IC	IC
I△	ID
IF	IF
IH	IH
IJ	IJ
IK	IK
IL	IL
IM	IM
IN	IN
IR	IR
IS	IS
IT	IT
IU	IU
IV	IV
IX	IX
IY	IY
IZ	IZ
J	J
K	K
	KE
L	L
O	O
P	P
	PI
)(	PP
R	R
S	S
	SP
	SQ
	SU
T	T
	TI
	TT
U	U
U	UP
V	V
W	W
WG	WG
X3	X3
Y	Y
Z	Z

Rotation	Abbr.
0°-Upright	1
90° to right	2
180° to right	3
270° to right	4

CLIPS

Clips	Abbr.
Dorsal	DO
Adipose	AD
Anal	AN
Top Cau.	TC
Bottom Cau.	BC
Left Vent.	LV
Right Vent.	RV
Left Pect.	LP
Right Pect.	RP
Left Max.	LM
Right Max.	RM

ABBREVIATIONS FOR HATCH/ORIGIN, RELEASE SITE AND PURPOSE OF RELEASE

NOTE: use no periods

Above to Abv
Below to Blw
Bonneville to Bonn
Bridge to Brid
Channel to Ch
Chinook to Chin
Columbia to Col
Composition to Comp
Condition to Cond
Creek to Cr
Dam to D
East to E
Enteric Red Mouth to ERM
Entrance to Entr
Evaluation to Eval
Fall to F
Fork to Fk
Forks to Fks
Grading to Grad
Hatchery to Hat
Idaho to Id
Imprinting to Impr
Landing to Ld
Little to Lit
Lower to Lo
Mid-river to Mid R
Middle to M
Mouth to Mo
Niagara Springs Hatchery to Niagara Springs
North to N
Oregon to Ore
Oregon City Falls to OCF
Oregon Moist Pellet to OMP
Points to Pt
Priest to Pr
Production to Prod
Rapids to Rapid
Rearing to Rear
Release to Rel
Reservoir to Res
River to R
Round Butte to Rnd Butte
Salmon to Sal
Sportsman's Landing to Spt Ld
Salt Water to Sw
South to S
Spawning to Spaw
Springs to Spring
Stock to Stk
Survival to Surv
Tailrace to Tail
Transport to Trans
Vaccine to Vacc
Washington to Wash
West to W
Willamette to Willam

SOCKEYE SALMON

RELEASE AND RECAPTURE INFORMATION - COLUMBIA RIVER ESTUARY

REPORT DATE

SORT SEQUENCE : SPECIES.SOURCE.RELEASE KM(-).START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: SOCKEYE

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE	NO. MKD	RECAPT. SITE	GEAR CODE	RECAPTURES ACTUAL		RECAPTURES ADJUSTED		RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS	MM /LB	THOUS	R. KM		NO.	%	NO.	%					
LA H 1	MCNARY D	MCNARY RES	17AP78-05MY78		1.1	C075.0M	P	2	0.175	3	0.221	03MY	12MY	13MY	115	16
*	MCNARY CONTROL		(WHRDYWRD)													
WHRDYWRD	MCNARY D	MCNARY RES	17AP78-05MY78		2.1	C075.0M	P	1	0.047	1	0.050	03MY	03MY	03MY	180	25
*	MCNARY CONTROL		(LAH1.2)													
LA S 1	MCNARY D	MCNARY RES	22MY78-01JN78		2.0	C075.0M	P	1	0.050	2	0.074	10JN	10JN	10JN	110	21
*	MCNARY CONTROL		(WHRDORRD)													
LA X3 1	MCNARY D	MCNARY RES	03MY79-19MY79		2.5	C075.0M	P	1	0.040	1	0.042	16MY	16MY	16MY	95	31
*	TRANSPORT FOREBAY CONTROL		(WHRDPKLG;BONN.REL.322													
LA X3 3	MCNARY D	MCNARY RES	18MY79-29MY79		2.3	C075.0M	P	3	0.132	5	0.214	25MY	26MY	06JN	122	50
*	TRANSPORT FOREBAY CONTROL		(WHRDPKLG)													
LA S 1	MCNARY D	MCNARY TAIL	11AP79-03JL79		4.2	C075.0M	P	4	0.095	5	0.116	22MY	08JN	23JN	117	7
*	TRANSPORT TAILRACE CONTRL		(BLACK:LA51)													
LA S 2	MCNARY D	MCNARY TAIL	14MY79-31MY79		1.4	C075.0M	P	1	0.071	1	0.076	01JN	01JN	01JN	130	22
*	TRANSPORT TAILRACE CONTRL		(WHRDLGYW)													
LA S 3	MCNARY D	MCNARY TAIL	04JN79-21JN79		2.4	C075.0M	P	5	0.211	6	0.262	22JN	24JN	28JN	102	20
*	TRANSPORT TAILRACE CONTRL		(WHRDLGYW)													
LA H 2	MCNARY D	MCNARY TAIL	14MY80-09JN80		2.3	C075.0M	P	2	0.087	6	0.255	24MY	24MY	24MY	122	39
*	TAILRACE CONTROL		CWT CEND.LAH.2													
RA V 1	MCNARY D	BLW BONN D	21AP78-19MY78		3.1	C075.0M	P	7	0.228	9	0.301	04MY	06MY	01JN	122	10
*	MCNARY TRANSPORT		(WHGMWH,RAV1)													
RA V 2	MCNARY D	BLW BONN D	22MY78-08JN78		3.8	C075.0M	P	1	0.027	2	0.040	09JN	09JN	09JN	105	9
*	MCNARY TRANSPORT		(WHPKYWYW,RAV2)			C016.0N	P	2	0.054			02JN	02JN	02JN	110	19
RA 3 1	MCNARY D	BLW BONN D	16AP79-02JL79		3.9	C075.0M	P	1	0.026	1	0.033	08JN	08JN	08JN	105	3
*	TRANSPORT EVAL	TRUCK	(WH;RA31)													
RA R 2	MCNARY D	BLW BONN D	08MY79-16MY79		1.3	C075.0M	P	1	0.075	1	0.097	19MY	19MY	19MY	115	14
*	TRANSPORT EVAL	BARGE	(WHRDYWLG)													
WHRDLGPK	MCNARY D	BLW BONN D	14MY79-06JL79		5.7	C016.0N	P	1	0.018			25JN	25JN	25JN	105	5
*	TRANSPORT EVAL	TRUCK	(RA32;RA33;RA34)													
RA R 3	MCNARY D	BLW BONN D	25MY79		0.4	C075.0M	P	3	0.751	4	1.094	23MY	23MY	23MY	98	-77
*	TRANSPORT EVAL	BARGE	(WHRDYWPK;RAR3)													
RA 3 3	MCNARY D	BLW BONN D	04JN79-21JN79		4.6	C016.0N	P	2	0.044			22JN	22JN	22JN	106	12
*	TRANSPORT EVAL	TRUCK	(WHRDLGPK)													
RA 3 4	MCNARY D	BLW BONN D	25JN79-06JL79		0.4	C016.0N	P	1	0.243			25JN	25JN	25JN	105	214
*	TRANSPORT EVAL	TRUCK	(WHRDLGPK)													
RA V 2	MCNARY D	DALTON PT	14MY80-13JN80		3.4	C016.0N	P	1	0.030			16JN	16JN	16JN	104	6
*	TRUCK TRANSPORT		CWT DY.RAV.2													

COHO SALMON

RELEASE AND RECAPTURE INFORMATION - COLUMBIA RIVER ESTUARY

REPORT DATE PAGE NO. 2

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: COHO

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
624702	ANADROMOUS INC. DIET EXPERIMENT	COOS BAY ORE	19JL80			19.9	4001.3S	P	1	0.006			31AU	31AU	31AU	201	0
624802	ANADROMOUS INC. DIET EXPERIMENT	COOS BAY ORE	21JL80			19.9	4002.1N	P	1	0.006			01SE	01SE	01SE	187	0

Computer P.O. 4

REPORT DATE PAGE NO. 3

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: COHO

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
091653	BIG CR HAT STOCK COMP.COWLITZ STK.	TUALATIN R@SCOGG	08MY78	153	15	71.7	C075.0S	B	5	0.007	8	0.011	30MY	03JN	28JN	150	9
							C075.0M	P	75	0.105	106	0.148	18MY	04JN	21JN	154	8
							C016.0N	P	27	0.038			22MY	01JN	22JN	147	12
091654	BIG CR HAT STOCK COMP. COL. STOCK	TUALATIN R@SCOGG	08MY78	153	16	68.8	C075.0S	B	1	0.002	1	0.002	06JN	06JN	06JN	155	8
							C075.0M	P	86	0.125	110	0.160	10MY	25MY	14JN	147	13
							C016.0N	P	14	0.021			17MY	26MY	12JN	152	16
							C009.0N	B	3	0.005			30MY	30MY	30MY	148	13
							C007.0S	B	1	0.002			31MY	31MY	31MY	150	13
071915	BIG CR HAT WILL. R. COHO STUDY	TUALATIN R@SCOGG	01MY79-03MY79		20	74.6	C075.0S	B	1	0.002	1	0.002	21MY	21MY	21MY	135	11
							C075.0M	P	77	0.104	92	0.124	16MY	04JN	13JL	138	7
							C018.0S	P	1	0.002			30MY	30MY	30MY	144	10
							C016.0N	P	4	0.006			21MY	26MY	11JN	150	12
							C014.0S	P	1	0.002			25MY	25MY	25MY	41	12
071916	BIG CR HAT WILL. R. COHO STUDY	TUALATIN R@SCOGG	01MY79-03MY79		19	81.2	C075.0S	B	1	0.002	1	0.002	01JN	01JN	01JN	145	7
							C075.0M	P	56	0.069	72	0.089	18MY	30MY	22JN	144	8
							C016.0N	P	2	0.003			26MY	26MY	22JN	140	12
071808	BIG CR HAT GENETIC	BIG CR	20AP79		18	0.8	C029.0S	P	1	0.129			17MY	17MY	17MY	148	1
071819	BIG CR HAT GENETIC	BIG CR	20AP79		18	1.4	C029.0S	P	1	0.074			18MY	18MY	18MY	144	1
071822	BIG CR HAT GENETIC	BIG CR	20AP79		18	0.4	C016.0N	P	1	0.241			26MY	26MY	26MY	155	1
							C014.0S	P	1	0.241			16MY	16MY	16MY	129	1
071903	BIG CR HAT COHO TIME RELEASE	BIG CR	07MY79		19	28.5	C029.0S	P	2	0.008			18MY	18MY	18MY	140	2
							C014.0S	P	1	0.004			16MY	16MY	16MY	136	4
071904	BIG CR HAT COHO TIME RELEASE	BIG CR	07JN79		18	26.5	C016.0N	P	1	0.004			11JN	11JN	11JN	135	8
071906	BIG CR HAT COHO TIME RELEASE	BIG CR	07JN79		19	25.3	C016.0N	P	2	0.008			11JN	11JN	11JN	135	8
071901	BIG CR HAT COHO TIME RELEASE	BIG CR	05JL79		19	27.7	C016.0N	P	1	0.004			13JL	13JL	13JL	130	4
071956	BIG CR HAT RELEASE TIME STUDY	BIG CR	06JN80		19	28.5	C075.0M	P	1	0.004	3	0.012	21JN	21JN	21JN	114	-1
071954	BIG CR HAT RELEASE TIME STUDY	BIG CR	07JL80		18	27.9	C016.0N	P	4	0.015			09JL	09JL	10JL	141	16
							4002.2S	P	1	0.004			01SE	01SE	01SE	256	1
071957	BIG CR HAT RELEASE TIME STUDY	BIG CR	07JL80		19	27.6	C016.0N	P	5	0.019			09JL	10JL	11JL	128	11
							4001.3S	P	2	0.008			31AU	31AU	31AU	266	1

SPECIES: COHO

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LA PP 2	CARSON HAT	PASCO WASH	03MY78	134	17	44.0	C075.OM	P	47	0.107	61	0.139	04MY	19MY	31MY	143	28
*	CONTROL		(WHORLGOR,LAPP2)				C016.ON	P	7	0.016			19MY	23MY	26MY	146	25
							C007.OS	B	1	0.003			18MY	18MY	18MY	140	34
LA ID 1	CARSON HAT	JOHN DAY D	09MY78	135		31.4	C075.OM	P	33	0.105	41	0.131	16MY	20MY	26MY	145	25
	TURBINE MANIPULATION						C016.ON	P	3	0.010			26MY	26MY	26MY	135	19
LA ID 2	CARSON HAT	JOHN DAY D	09MY78	135		31.5	C075.OS	B	1	0.004	1	0.004	17MY	17MY	17MY	130	34
	TURBINE MANIPULATION						C075.OM	P	36	0.115	44	0.140	17MY	19MY	31MY	142	27
							C016.ON	P	6	0.020			25MY	25MY	07JN	145	21
LA ID 3	CARSON HAT	JOHN DAY D	09MY78	135		32.3	C075.OM	P	22	0.069	27	0.084	17MY	20MY	25MY	146	25
	TURBINE MANIPULATION						C016.ON	P	4	0.013			25MY	25MY	07JN	150	21
							C007.OS	B	1	0.004			18MY	18MY	18MY	135	38
LP ID 1	CARSON HAT	JOHN DAY D	10MY78	135		47.8	C075.OM	P	10	0.021	12	0.025	17MY	18MY	01JN	135	34
	TURBINE TEST-CONTROL						C016.ON	P	1	0.003			19MY	19MY	19MY	125	37
RA ID 1	CARSON HAT	JOHN DAY D	22MY78	135		33.0	C075.OM	P	28	0.085	39	0.118	24MY	31MY	16JN	141	30
	TURBINE MANIPULATION						C016.ON	P	1	0.004			02JN	02JN	02JN	130	30
RA ID 2	CARSON HAT	JOHN DAY D	22MY78	135		33.1	C075.OS	B	1	0.004	1	0.005	05JN	05JN	05JN	165	19
	TURBINE MANIPULATION						C075.OM	P	16	0.049	22	0.066	23MY	31MY	07JN	142	30
							C016.ON	P	6	0.019			01JN	01JN	02JN	143	33
							C007.OS	B	1	0.004			31MY	31MY	31MY	145	38
RA ID 3	CARSON HAT	JOHN DAY D	22MY78	135		33.0	C075.OM	P	12	0.037	16	0.049	27MY	30MY	01JN	142	34
	TURBINE MANIPULATION						C016.ON	P	4	0.013			01JN	01JN	02JN	137	33
RP ID 1	CARSON HAT	JOHN DAY D	23MY78	135		48.5	C075.OM	P	15	0.031	21	0.043	30MY	31MY	06JN	142	34
	TURBINE TEST-CONTROL						C016.ON	P	2	0.005			07JN	07JN	08JN	147	22
							C007.OS	B	1	0.003			31MY	31MY	31MY	135	42
RA L 2	CARSON HAT	BLW BONN D	01MY78	134	17	28.9	C075.OS	B	2	0.007	3	0.011	08MY	12MY	13MY	125	14
*	TEST		(WHORBLOR,RAL2)				C075.OM	P	7	0.025	9	0.033	02MY	15MY	17MY	136	11
							C016.ON	P	3	0.011			08MY	12MY	23MY	145	19
							C007.OS	B	1	0.004			18MY	18MY	18MY	120	13
RA L 1	CARSON HAT	BLW BONN D	04MY78	134	17	29.7	C075.OS	B	4	0.014	6	0.019	15MY	15MY	20MY	136	14
*	TEST		(WHORORXY,RAL1)				C075.OM	P	10	0.034	13	0.043	09MY	15MY	18MY	133	14
							C018.OS	P	1	0.004			22MY	22MY	22MY	135	12
							C016.ON	P	1	0.004			19MY	19MY	19MY	145	14
LD IJ 1	CARSON HAT	BLW BONN D	18MY78	130		31.5	C075.OS	B	2	0.007	2	0.008	23MY	23MY	23MY	135	31
	ESTUARY EFFICIENCY						C075.OM	P	11	0.035	14	0.045	23MY	26MY	02JN	140	19
							C016.ON	P	1	0.004			26MY	26MY	26MY	130	27
LD IJ 2	CARSON HAT	BLW BONN D	18MY78	130		33.1	C075.OS	B	7	0.022	8	0.026	22MY	23MY	31MY	136	31
	ESTAURY EFFICIENCY						C075.OM	P	10	0.031	13	0.040	22MY	23MY	31MY	143	31
							C016.ON	P	5	0.016			25MY	25MY	05JN	140	31
LD IJ 3	CARSON HAT	BLW BONN D	18MY78	130		32.4	C075.OS	B	13	0.041	15	0.048	22MY	23MY	25MY	138	31
	ESTUARY EFFICIENCY						C075.OM	P	14	0.044	19	0.059	22MY	23MY	31MY	141	31
							C016.ON	P	7	0.022			23MY	26MY	26MY	141	27

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SPECIES: COHO

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
131601	GRAYS R HAT	GRAYS R@RM 13	29AP77		17	41.9	C075.08	B	1	0.003	1	0.003	03MY	03MY	03MY	130	-3
	EARLY LATE STOCK EVALU.																
631648	GRAYS R HAT	GRAYS R@RM 13	01MY78		19	47.1	C075.0M	P	1	0.003	1	0.003	25MY	25MY	25MY	165	-0
	STOCK-PROD. EVALUATION						C016.0N	P	14	0.030			28AP	16MY	21JL	142	3
							C007.0S	B	1	0.003			18MY	18MY	18MY	135	3
631661	GRAYS R HAT	GRAYS R@RM 13	01MY78		19	48.8	C075.0M	P	3	0.007	6	0.012	30MY	29MY	30MY	148	-0
	STOCK PROD. EVALUATION						C016.0N	P	15	0.031			01MY	17MY	05JN	141	3
							C007.0S	B	2	0.005			09MY	09MY	18MY	140	6
631753	GRAYS R HAT	GRAYS R@RM 13	18AP79		18	50.9	C029.0S	P	1	0.002			18MY	18MY	18MY	151	1
	DIET STUDY						C016.0N	P	1	0.002			07MY	07MY	07MY	145	2
631952	GRAYS R HAT	GRAYS R@RM 13	09AP80		18	104.7	C016.0N	P	19	0.019			25AP	01MY	21MY	138	2
631953	GRAYS R HAT	GRAYS R@RM 13	09AP80		18	103.6	C016.0N	P	20	0.020			24AP	06MY	21MY	135	2

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	PURPOSE OF RELEASE		OTHER MARKS														
LA E 3	JOHN DAY D	BLALOCK SHORE	01MY78			0.3	C075.0S	B	1	0.294	1	0.403	08MY	08MY	08MY	120	43
	TIMING AND EFFICIENCY																
LA E 2	JOHN DAY D	BLALOCK SHORE	02MY78			0.3	C075.0M	P	1	0.345	1	0.424	17MY	17MY	17MY	220	20
	TIMING AND EFFICIENCY																
LA HE 4	JOHN DAY D	BLALOCK SHORE	12JN78			0.4	C075.0M	P	1	0.252	2	0.377	17JN	17JN	17JN	145	60
	TIMING AND EFFICIENCY																

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SPECIES: COHO

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
LD IT 1	JONES BEACH RECAPTURE RATES	JONES BEACH MID R	03MY79			0.3	C016.0N	P	1	0.349			11MY	11MY	11MY	145	7
RD IT 2	JONES BEACH MIGRATIONAL TIMING THROUGH ESTUARY	JONES BEACH MID R	12MY80	140		0.3	C075.0M	P	1	0.292	1	0.391	14MY	14MY	14MY	135	0

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SPECIES: COHO

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
631652	KLICKITAT HAT PROD. EVALUATION	KLICKITAT R	28AP78	143	14	57.8	C075.0S	B	1	0.002	1	0.003	28AP	28AP	28AP	140	283
							C075.0M	P	36	0.063	47	0.081	21AP	16MY	10JN	145	16
							C016.0N	P	4	0.007			05MY	08MY	25MY	147	34
631653	KLICKITAT HAT PROD. EVALUATION	KLICKITAT R	04MY78	143	13	59.8	C075.0S	B	1	0.002	1	0.003	16MY	16MY	16MY	155	24
							C075.0M	P	23	0.039	31	0.052	01MY	02JN	17JN	145	10
							C016.0N	P	3	0.006			02JN	12JN	12JN	145	9
631751	KLICKITAT HAT HATCHERY EVAL.	KLICKITAT R	14MY79		14	60.0	C075.0M	P	46	0.077	62	0.103	26AP	19MY	12JL	148	57
							C016.0N	P	1	0.002			21MY	21MY	21MY	130	49

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SPECIES: COHO

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LA H 1	MCNARY D	MCNARY RES	17AP78-05MY78			13.2	C075.OM	P	12	0.032	14	0.107	08MY	11MY	17MY	156	17
*	MCNARY CONTROL		(WHRDYWRD)				C016.ON	P	3	0.023			08MY	12MY	12MY	157	18
							C007.OS	B	1	0.008			09MY	09MY	09MY	180	21
LA H 2	MCNARY D	MCNARY RES	08MY78-19MY78			3.6	C075.OM	P	6	0.169	7	0.205	17MY	23MY	31MY	166	27
*	MCNARY CONTROL		(WHRDYWRD)				C016.ON	P	1	0.029			26MY	26MY	26MY	175	26
LA S 1	MCNARY D	MCNARY RES	22MY78-01JN78			3.4	C075.OM	P	6	0.178	8	0.238	01JN	06JN	10JN	140	27
*	MCNARY CONTROL		(WHRDORRD)				C016.ON	P	1	0.030			01JN	01JN	01JN	135	46
LA S 2	MCNARY D	MCNARY RES	05JN78-12JN78			1.6	C075.OM	P	1	0.062	2	0.092	17JN	17JN	17JN	130	34
*	MCNARY CONTROL		(WHRDORRD)				C016.ON	P	1	0.062			22JN	22JN	22JN	130	27
LA S 2	MCNARY D	MCNARY TAIL	14MY79-31MY79			0.4	C075.OM	P	1	0.224	1	0.262	21MY	21MY	21MY	155	56
*	TRANSPORT TAILRACE CONTRL		(WHRDLGYW)														
LA S 3	MCNARY D	MCNARY TAIL	04JN79-21JN79			0.1	C016.ON	P	1	1.299			22JN	22JN	22JN	125	25
*	TRANSPORT TAILRACE CONTRL		(WHRDLGYW)														
LA S 4	MCNARY D	MCNARY TAIL	25JN79-05JL79			0.0	C016.ON	P	1	#.###			14JN	14JN	14JN	140	-40
*	TRANSPORT TAILRACE CONTRL		(WHRDLGYW)														
LA H 1	MCNARY D	MCNARY TAIL	08AP80-12MY80			0.2	C016.ON	P	1	0.565			16MY	16MY	16MY	109	12
*	TAILRACE CONTROL		CWT ERLA.LAH.1														
LA K 2	MCNARY D	MCNARY TAIL	01JN81			0.4	C075.OM	P	3	0.832	4	1.188	06JN	07JN	08JN	154	66
RA V 1	MCNARY D	BLW BONN D	21AP78-19MY78			16.9	C075.OM	P	16	0.095	20	0.116	25AP	13MY	22MY	151	7
*	TRUCK TRANSPORT		(WHGMWH,RAV1)				C016.ON	P	2	0.012			25MY	25MY	25MY	137	6
RA V 2	MCNARY D	BLW BONN D	22MY78-08JN78			5.5	C075.OM	P	12	0.220	16	0.297	24MY	03JN	10JN	145	13
*	TRUCK TRANSPORT		(WHPKYWYW,RAV2)														
RA R 2	MCNARY D	BLW BONN D	08MY79-16MY79			0.2	C075.OM	P	1	0.409	2	0.753	13MY	13MY	13MY	125	31
*	TRANSPORT EVAL BARGE		(WHRDYWLG)														
RA 3 2	MCNARY D	BLW BONN D	14MY79-31MY79			0.6	C016.ON	P	1	0.169			26MY	26MY	26MY	125	18
*	TRANSPORT EVAL TRUCK		(WHRDLGPK)														
WHRDLGPK	MCNARY D	BLW BONN D	14MY79-06JL79			0.9	C016.ON	P	1	0.115			26MY	26MY	26MY	125	18
*	TRANSPORT EVAL TRUCK		(RA32;RA33:RA34)														
RA R 3	MCNARY D	BLW BONN D	25MY79			0.3	C075.OM	P	1	0.295	1	0.302	31MY	31MY	31MY	110	26
*	TRANSPORT EVAL BARGE		(WHRDYWPK;RAR3)														
RA 2 1	MCNARY D	BLW BONN D	22AP80-18MY80			0.0	C016.ON	P	1	2.326			02MY	02MY	02MY	125	21
*	BARGE TRANSPORT		CWT ERPR.RA2,1														
RA V 1	MCNARY D	DALTON PT	09AP80-12MY80			0.1	C016.ON	P	1	0.764			06MY	06MY	06MY	135	7
*	TRUCK TRANSPORT		CWT NDSM.RAV.1														
RA V 2	MCNARY D	DALTON PT	14MY80-13JN80			1.4	4005.4N	P	1	0.070			07JN	07JN	07JN	170	8
*	TRUCK TRANSPORT		CWT DY.RAV.2														

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: COHO

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
RD T 1	NEHALEM HAT	THE DALLES RES	07MY80-15MY80			27.6	C075.OM	P	8	0.030	20	0.073	16MY	19MY	23MY	141	19
							C016.ON	P	6	0.022			06MY	13MY	19MY	143	48
RD T 2	NEHALEM HAT	THE DALLES RES	07MY80-15MY80			29.4	C075.OM	P	12	0.041	23	0.078	05MY	16MY	23MY	139	26
							C016.ON	P	3	0.011			16MY	19MY	20MY	137	24

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SPECIES: COHO

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	 /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	 %	RECAPTURES ADJUSTED NO.	 %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
603125	ORE AQUA@SPGFLD HATCHERY EVAL.	YAGUINA BAY	15MR80			12.0	4005.3N	P	1	0.009			07JN	07JN	07JN	227	0
603149	ORE AQUA@SPGFLD GENETIC STUDY	YAGUINA BAY	28JN80		24	14.5	4001.2N	P	1	0.007			31AU	31AU	31AU	236	0
603339	ORE AQUA@SPGFLD HATCHERY EVAL.	YAGUINA BAY	30JN80		22	20.0	4001.3S	P	1	0.005			31AU	31AU	31AU	224	0
603336	ORE AQUA@SPGFLD DENSITY REAR. STUDY	YAGUINA BAY	05AU80		18	16.3	4001.3S	P	1	0.007			31AU	31AU	31AU	206	0

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SPECIES: COHO

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	 /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	 %	RECAPTURES ADJUSTED NO.	 %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
RD IX 3	ROCKY REACH D SPILLWAY TEST	ROCKY REACH RES	16MY80			23.6	C075.0M	P	1	0.005	2	0.008	05JN	05JN	05JN	130	34

SPECIES: COHO

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
090514	SANDY HAT	SANDY R	27AP77	135	16	24.9	C075.0S	B	1	0.005	1	0.005	08JN	08JN	08JN	153	3
	POND DENSITY LOW						C075.0M	P	7	0.029	17	0.070	11MY	03JN	10JN	170	3
090515	SANDY HAT	SANDY R	27AP77	133	18	24.5	C075.0S	B	1	0.005	1	0.005	22MY	22MY	22MY	143	6
	POND DENSITY MED						C075.0M	P	7	0.029	13	0.055	31MY	08JN	10JN	167	4
090601	SANDY HAT	SANDY R	27AP77	136	16	25.8	C075.0M	P	7	0.028	14	0.053	11MY	07JN	09JN	166	4
	POND DENSITY LOW																
090602	SANDY HAT	SANDY R	27AP77	132	18	20.1	C075.0M	P	6	0.030	10	0.048	08JN	08JN	09JN	169	4
	POND DENSITY HIGH																
090603	SANDY HAT	SANDY R	27AP77	134	17	22.9	C075.0S	B	1	0.005	1	0.005	22MY	22MY	22MY	143	6
	POND DENSITY MED						C075.0M	P	5	0.022	12	0.052	31MY	01JN	10JN	160	5
090604	SANDY HAT	SANDY R	27AP77	133	18	23.4	C075.0S	B	2	0.009	2	0.010	14MY	15MY	24MY	128	9
	POND DENSITY HIGH						C075.0M	P	8	0.035	21	0.091	31MY	04JN	08JN	155	4
090513	SANDY HAT	SANDY R	06MY77	141	15	60.6	C075.0M	P	23	0.038	45	0.076	31MY	07JN	10JN	162	5
	HERRING 8%																
090606	SANDY HAT	SANDY R	06MY77	141	15	57.2	C075.0S	B	3	0.006	3	0.006	23MY	24MY	08JN	140	9
	HERRING 4% SOY 4%						C075.0M	P	21	0.037	45	0.080	31MY	07JN	09JN	158	5
090607	SANDY HAT	SANDY R	06MY77	142	15	58.8	C075.0S	B	1	0.002	1	0.002	08JN	08JN	08JN	158	5
	HERRING 6% SOY 2%						C075.0M	P	25	0.043	52	0.089	31MY	07JN	10JN	162	5
091644	SANDY HAT	SANDY R	02MY78	147	14	33.2	C075.0S	B	4	0.013	4	0.013	10MY	11MY	17MY	145	18
	HERRING 2% SOY 6%						C075.0M	P	21	0.064	26	0.078	08MY	13MY	19MY	150	15
							C016.0N	P	6	0.019			12MY	12MY	23MY	160	22
							C007.0S	B	2	0.007			18MY	18MY	18MY	150	14
091645	SANDY HAT	SANDY R	02MY78	146	14	34.0	C075.0S	B	1	0.003	1	0.004	10MY	10MY	10MY	150	20
	HERRING 8%						C075.0M	P	13	0.039	16	0.047	08MY	11MY	17MY	160	18
							C016.0N	P	7	0.021			10MY	12MY	15MY	151	22
091646	SANDY HAT	SANDY R	02MY78	147	14	32.5	C075.0M	P	16	0.050	20	0.063	08MY	12MY	24MY	149	16
	HERRING 4% SOY 4%						C016.0N	P	4	0.013			12MY	12MY	19MY	152	22
							C007.0S	B	1	0.004			18MY	18MY	18MY	135	14
091647	SANDY HAT	SANDY R	02MY78	147	14	33.6	C075.0M	P	26	0.078	34	0.102	06MY	11MY	31MY	152	18
	HERRING 6% SOY 2%						C016.0N	P	6	0.018			10MY	12MY	12MY	150	22
							C007.0S	B	1	0.003			09MY	09MY	09MY	105	33
091648	SANDY HAT	SANDY R	02MY78	148	14	33.7	C075.0S	B	1	0.003	1	0.003	03MY	03MY	03MY	160	160-
	SOY 8%						C075.0M	P	17	0.051	23	0.069	08MY	14MY	17MY	152	13
							C016.0N	P	4	0.012			12MY	12MY	12MY	151	22
091649	SANDY HAT	SANDY R	04MY78	144	15	34.0	C075.0S	B	3	0.009	4	0.013	09MY	14MY	15MY	170	16
	MENHADEN 6%						C075.0M	P	18	0.053	23	0.067	08MY	13MY	31MY	150	18
							C016.0N	P	5	0.015			12MY	12MY	17MY	150	27
091650	SANDY HAT	SANDY R	04MY78	145	14	33.3	C075.0M	P	24	0.073	32	0.096	08MY	13MY	19MY	151	18
	SOY 6%						C016.0N	P	4	0.013			12MY	12MY	17MY	150	27
091651	SANDY HAT	SANDY R	04MY78	145	14	34.4	C075.0M	P	19	0.056	25	0.074	09MY	12MY	16MY	150	20
	HERRING 6%						C016.0N	P	5	0.015			12MY	12MY	17MY	143	27
091652	SANDY HAT	SANDY R	04MY78	146	15	33.0	C075.0S	B	1	0.004	1	0.004	17MY	17MY	17MY	160	12
							C075.0M	P	21	0.064	26	0.081	08MY	11MY	09JN	153	23
	ANCHOVY 6%						C016.0N	P	7	0.022			12MY	12MY	12MY	152	27
071749	SANDY HAT	SANDY R	01MY79		19	27.5	C075.0S	B	4	0.015	4	0.017	08MY	10MY	16MY	138	18
	ANCHOVY 6%						C075.0M	P	24	0.088	32	0.116	06MY	13MY	25MY	142	13

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071749	SANDY HAT	SANDY R	01MY79		19	27.5	C029.0S	P	5	0.019			17MY	18MY	18MY	139	12
	ANCHOVY 6%																
071750	SANDY HAT	SANDY R	01MY79		20	27.4	C075.0S	B	2	0.008	2	0.009	07MY	08MY	09MY	135	23
	MENHADEN 6%						C075.0M	P	23	0.084	29	0.105	06MY	19MY	13JN	135	9
							C029.0S	P	2	0.008			18MY	18MY	18MY	143	12
071751	SANDY HAT	SANDY R	01MY79		19	27.5	C075.0S	B	1	0.004	2	0.006	11MY	11MY	11MY	140	16
	SOY 6%						C075.0M	P	31	0.113	40	0.145	07MY	17MY	29MY	135	10
							C029.0S	P	1	0.004			17MY	17MY	17MY	133	13
071752	SANDY HAT	SANDY R	01MY79		19	27.9	C075.0S	B	3	0.011	3	0.012	09MY	10MY	17MY	133	18
	HERRING 6%						C075.0M	P	25	0.090	30	0.109	05MY	15MY	23MY	145	11
							C029.0S	P	2	0.008			18MY	18MY	18MY	137	12
							C016.0N	P	1	0.004			07MY	07MY	07MY	145	36
							C014.0S	P	1	0.004			16MY	16MY	16MY	135	15
090608	SANDY HAT	SANDY R	06MY77	140	15	60.0	C075.0S	B	1	0.002	1	0.002	08JN	08JN	08JN	143	0
	DIET COMP SOY 8%						C075.0M	P	24	0.041	49	0.083	31MY	07JN	10JN	157	0
090609	SANDY HAT	SANDY R	06MY77	141	15	60.2	C075.0S	B	2	0.004	2	0.004	17MY	18MY	06JN	139	0
	DIET COMP HERRING2% SOY 6%						C075.0M	P	22	0.037	46	0.077	31MY	07JN	10JN	163	0
072031	SANDY HAT	SANDY R	01MY80		18	25.2	C075.0S	B	2	0.008	4	0.017	07MY	24MY	24MY	140	7
	OMP4						C075.0M	P	14	0.056	31	0.125	10MY	19MY	28MY	144	9
							C016.0N	P	4	0.016			08MY	13MY	16MY	135	18
072032	SANDY HAT	SANDY R	01MY80		17	25.5	C075.0S	B	4	0.016	7	0.027	08MY	17MY	24MY	131	10
	OMP2 FROZEN & FRESH PROTEIN						C075.0M	P	12	0.047	26	0.102	08MY	19MY	29MY	146	9
							C016.0N	P	2	0.008			13MY	13MY	19MY	133	18
072033	SANDY HAT	SANDY R	01MY80		18	25.2	C075.0S	B	7	0.028	9	0.037	06MY	08MY	17MY	141	23
	OMP4						C075.0M	P	8	0.032	25	0.098	10MY	19MY	24MY	145	9
							C016.0N	P	2	0.008			13MY	13MY	20MY	157	18
072034	SANDY HAT	SANDY R	01MY80		18	25.2	C075.0M	P	17	0.068	36	0.143	09MY	18MY	24MY	142	9
	OMP2 FROZEN & FRESH PROTEIN						C016.0N	P	4	0.016			09MY	13MY	21MY	147	18
072035	SANDY HAT	SANDY R	01MY80		18	25.9	C075.0S	B	3	0.012	4	0.014	07MY	08MY	09MY	141	23
	OMP2 ACID PROTEIN						C075.0M	P	9	0.035	17	0.068	08MY	18MY	28MY	142	9
							C016.0N	P	5	0.020			13MY	13MY	20MY	148	18
072036	SANDY HAT	SANDY R	01MY80		18	24.5	C075.0S	B	2	0.009	2	0.011	07MY	15MY	16MY	137	11
	OMP2 ACID PROTEIN						C075.0M	P	18	0.074	36	0.149	08MY	18MY	28MY	144	9
							C016.0N	P	3	0.013			13MY	13MY	20MY	143	18
							4009.1N	P	1	0.005			04SE	04SE	04SE	299	2
072037	SANDY HAT	SANDY R	01MY80		19	26.0	C075.0M	P	13	0.050	28	0.108	10MY	18MY	28MY	142	9
	OMP2 FROZEN PROTEIN						C016.0N	P	2	0.008			12MY	12MY	13MY	145	20
							4003.2S	P	1	0.004			30MY	30MY	30MY	135	8
072038	SANDY HAT	SANDY R	01MY80		19	26.5	C075.0S	B	5	0.019	8	0.030	08MY	11MY	13MY	136	16
	OMP2 FROZEN PROTEIN						C075.0M	P	15	0.057	30	0.113	10MY	13MY	28MY	143	9
							C016.0N	P	2	0.008			16MY	16MY	20MY	140	15
RD T 1	SANDY HAT	PRESCOTT ORE	15MY78-16MY78	147		30.2											
	ESTUARY EFFICIENCY						C075.0S	B	69	0.228	76	0.252	16MY	18MY	24MY	142	13
							C075.0M	P	4	0.014	5	0.016	17MY	18MY	24MY	152	13
							C016.0N	P	3	0.010			25MY	26MY	26MY	148	9

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072255	SANDY HAT	SANDY R	01MY81		19	27.6	C075.0S	B	3	0.011	3	0.012	07MY	07MY	07MY	129	26
	DIET:FROZEN WET FISH IN OMP-2						C075.0M	P	18	0.066	30	0.108	05MY	10MY	28MY	139	17
072256	SANDY HAT	SANDY R	01MY81		19	27.3	C075.0S	B	9	0.033	9	0.034	06MY	07MY	12MY	132	26
	DIET:ACIDIFIED WET FISH IN OMP-2						C075.0M	P	11	0.041	14	0.052	05MY	13MY	21MY	138	13
072257	SANDY HAT	SANDY R	01MY81		18	28.9	C075.0S	B	2	0.007	2	0.008	07MY	08MY	10MY	129	22
	DIET:FROZEN WET FISH IN OMP-2						C075.0M	P	14	0.049	21	0.074	04MY	07MY	19MY	137	26
072258	SANDY HAT	SANDY R	01MY81		19	28.0	C075.0S	B	2	0.008	2	0.008	07MY	08MY	09MY	138	22
	DIET:ACIDIFIED WET FISH IN OMP-2						C075.0M	P	10	0.036	15	0.052	04MY	07MY	18MY	132	26
072259	SANDY HAT	SANDY R	01MY81	133	18	29.9	C075.0S	B	17	0.057	17	0.058	06MY	08MY	14MY	134	22
	DIET:PRESS CAKE						C075.0M	P	17	0.057	23	0.077	05MY	12MY	27MY	139	14
072260	SANDY HAT	SANDY R	01MY81	132	18	28.1	C075.0S	B	5	0.018	5	0.019	05MY	07MY	12MY	137	26
	DIET:OMP-4						C075.0M	P	12	0.043	18	0.064	06MY	07MY	11MY	140	26
072261	SANDY HAT	SANDY R	01MY81	134	18	29.8	C075.0S	B	8	0.027	8	0.028	04MY	07MY	12MY	135	26
	DIET:OMP-2						C075.0M	P	12	0.041	18	0.061	05MY	10MY	16MY	143	17
072262	SANDY HAT	SANDY R	01MY81	133	18	27.8	C075.0S	B	13	0.047	13	0.048	06MY	09MY	13MY	133	20
	DIET:PRESS CAKE						C075.0M	P	12	0.044	17	0.063	05MY	10MY	20MY	139	17
072263	SANDY HAT	SANDY R	01MY81	132	19	29.7	C075.0S	B	8	0.027	8	0.028	07MY	11MY	13MY	136	16
	DIET:OMP-4						C075.0M	P	10	0.034	13	0.043	05MY	18MY	26MY	142	9
072301	SANDY HAT	SANDY R	01MY81	134	18	28.9	C075.0S	B	9	0.032	9	0.032	07MY	08MY	13MY	135	22
	DIET:OMP-2						C075.0M	P	13	0.045	17	0.061	05MY	14MY	26MY	130	12

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072015	SILETZ H	SILETZ R	15MR80		15	26.0	4005.3N	P	1	0.004			07JN	07JN	07JN	230	0
	COASTAL STOCK ACCESSMENT																

REPORT DATE 1/20/82
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RA HE 3	THE DALLES O	JOHN DAY O	31MY77			0.1	C075.0M	P	1	1.429	2	2.525	08JN	08JN	08JN	140	34
	TIME & SURV																

SPECIES: COHO

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631911	TOUTLE HAT SIZE & TIME OF RELEASE	GREEN R	07MY79		18	42.4	C075.OS	B	8	0.019	10	0.025	14MY	17MY	18MY	140	9
							C075.OM	P	38	0.090	47	0.112	15MY	20MY	09JN	139	7
							C029.OS	P	6	0.015			17MY	17MY	18MY	144	13
							C016.ON	P	1	0.003			21MY	21MY	21MY	145	10
631912	TOUTLE HAT SIZE & TIME OF RELEASE	GREEN R	07MY79		18	34.7	C075.OS	B	6	0.018	7	0.021	15MY	17MY	24MY	143	9
							C075.OM	P	34	0.039	41	0.119	15MY	19MY	02JN	140	7
							C029.OS	P	7	0.021			17MY	17MY	18MY	143	13
							C016.ON	P	1	0.003			26MY	26MY	26MY	150	8
631758	TOUTLE HAT SIZE & TIME OF RELEASE	GREEN R	07JN79		18	39.8	C075.OS	B	1	0.003	1	0.004	16JN	16JN	16JN	140	9
							C075.OM	P	106	0.267	121	0.306	10JN	12JN	26JN	139	17
							C016.ON	P	9	0.023			14JN	15JN	22JN	138	18
631913	TOUTLE HAT SIZE & TIME OF RELEASE	GREEN R	07JN79		20	40.5	C075.OS	B	2	0.005	2	0.006	12JN	12JN	12JN	142	17
							C075.OM	P	101	0.250	114	0.281	11JN	13JN	25JN	136	14
							C016.ON	P	6	0.015			14JN	15JN	15JN	137	18
631928	TOUTLE HAT SIZE & TIME OF RELEASE	GREEN R	06JL79		18	39.8	C075.OS	B	5	0.013	6	0.016	12JL	13JL	16JL	138	12
							C075.OM	P	104	0.262	217	0.545	11JL	13JL	20JL	138	12
							C016.ON	P	5	0.013			13JL	13JL	17JL	136	21
631929	TOUTLE HAT SIZE & TIME OF RELEASE	GREEN R	06JL79		18	41.1	C075.OS	B	1	0.003	1	0.003	11JL	11JL	11JL	130	17
							C075.OM	P	95	0.231	201	0.488	02JL	13JL	18JL	138	12
							C016.ON	P	5	0.013			13JL	13JL	17JL	136	21
							4005.0	P	1	0.003			16JL	16JL	16JL	135	15
631931	TOUTLE HAT SIZE AND TIME AT RELEASE	GREEN R	07MY80		18	38.6	C075.OS	B	10	0.026	17	0.044	15MY	18MY	19MY	135	8
							C075.OM	P	33	0.086	68	0.175	13MY	17MY	19MY	141	9
							C016.ON	P	4	0.011			16MY	20MY	20MY	135	11
632058	TOUTLE HAT SIZE AND TIME AT RELEASE	GREEN R	07MY80		20	39.5	C075.OS	B	4	0.011	7	0.018	15MY	18MY	19MY	137	8
							C075.OM	P	27	0.069	58	0.147	14MY	17MY	19MY	139	9
							C016.ON	P	4	0.011			20MY	20MY	21MY	143	11
632028	TOUTLE HAT	GREEN R	19MY80			0.0	C075.OS	B	1	#.###	1	#.###	06MY	06MY	06MY	134	-6
							C075.OM	P	2	#.###	3	#.###	07MY	08MY	09MY	127	-7

SPECIES: COHO

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
631645	TURTLE ROCK PD PROD. EVALUATION	TURTLE ROCK PD	02MY78	151	12	95.9	C075.OS	B	1	0.002	1	0.002	25MY	25MY	25MY	145	30
							C075.OM	P	56	0.059	78	0.082	22MY	29MY	16JN	161	26
							C016.ON	P	7	0.008			23MY	01JN	21JL	153	25
							C007.OS	B	1	0.002			31MY	31MY	31MY	150	26
LD 52 1	TURTLE ROCK PD CONTROL	ROCKY REACH RES	13MY80			24.2	C075.OM	P	7	0.029	15	0.062	23MY	04JN	19JN	161	31
RD 52 1	TURTLE ROCK PD CONTROL	ROCKY REACH RES	13MY80			24.1	C075.OM	P	5	0.021	11	0.046	31MY	04JN	11JN	148	31
LD IX 3	TURTLE ROCK PD SPILLWAY TEST	ROCKY REACH RES	16MY80			27.2	C075.OM	P	3	0.012	5	0.017	09JN	10JN	11JN	151	27
LD IH 2	TURTLE ROCK PD SPILLWAY TEST	ROCKY REACH RES	19MY80			25.0	C075.OM	P	8	0.033	14	0.058	02JN	05JN	09JN	159	40
							4005.2N	P	1	0.005			07JN	07JN	07JN	160	40
RD IH 2	TURTLE ROCK PD SPILLWAY TEST	ROCKY REACH RES	19MY80			27.2	C075.OM	P	3	0.012	5	0.018	05JN	05JN	10JN	165	40
							4002.2N	P	1	0.004			01SE	01SE	01SE	256	7
LD 52 2	TURTLE ROCK PD SPILLWAY TEST	ROCKY REACH TAIL	13MY80			25.5	C075.OM	P	10	0.040	19	0.077	23MY	29MY	11JN	159	43
RD 52 2	TURTLE ROCK PD SPILLWAY TEST	ROCKY REACH TAIL	13MY80			22.4	C075.OM	P	5	0.023	11	0.050	28MY	01JN	11JN	170	36
LD IX 2	TURTLE ROCK PD CONTROL	ROCKY REACH TAIL	16MY80			27.2	C075.OM	P	5	0.019	10	0.036	29MY	04JN	19JN	158	36
RD IX 2	TURTLE ROCK PD CONTROL	ROCKY REACH TAIL	16MY80			24.8	C075.OM	P	2	0.009	5	0.020	29MY	01JN	02JN	155	43
LD IH 3	TURTLE ROCK PD CONTROL	ROCKY REACH TAIL	19MY80			28.0	C075.OM	P	4	0.015	7	0.027	02JN	04JN	06JN	157	43
RD IH 3	TURTLE ROCK PD CONTROL	ROCKY REACH TAIL	19MY80			25.4	C075.OM	P	6	0.024	10	0.041	03JN	05JN	10JN	158	40
RA IY 1	TURTLE ROCK PD DRAFT TUBE	ROCK ISLAND D	13MY79			79.3	C075.OM	P	47	0.060	57	0.073	25MY	31MY	08JN	137	36
							C018.OS	P	2	0.003			30MY	30MY	30MY	135	42
RA IY 2	TURTLE ROCK PD TAILRACE CONTROL	ROCK ISLAND D	13MY79			101.4	C075.OS	B	2	0.002	2	0.003	05JN	05JN	05JN	135	28
							C075.OM	P	76	0.075	86	0.085	22MY	01JN	12JN	132	34
RA IY 4	TURTLE ROCK PD TURBINE TEST	ROCK ISLAND D	13MY79			101.8	C075.OM	P	76	0.075	90	0.089	25MY	31MY	18JN	138	36
RA IL 1	TURTLE ROCK PD TURBINE TEST	ROCK ISLAND D	15MY79			101.5	C075.OM	P	71	0.070	78	0.078	29MY	01JN	19JN	131	38
RA IL 2	TURTLE ROCK PD DRAFT TUBE CONTROL	ROCK ISLAND D	15MY79			102.7	C075.OS	B	1	0.001	1	0.002	05JN	05JN	05JN	120	31
							C075.OM	P	77	0.075	87	0.085	29MY	01JN	12JN	132	38
RA IL 4	TURTLE ROCK PD TAILRACE CONTROL	ROCK ISLAND D	15MY79			102.5	C075.OS	B	2	0.002	2	0.003	02JN	03JN	04JN	122	34
							C075.OM	P	90	0.088	99	0.098	29MY	01JN	12JN	134	38
RA IY 1	TURTLE ROCK PD BYPASS STUDIES	ROCK ISLAND D	24MY81			5.0	C075.OM	P	2	0.041	3	0.059	06JN	07JN	07JN	157	46
RA IY 2	TURTLE ROCK PD BYPASS STUDIES	ROCK ISLAND D	25MY81			5.0	C075.OM	P	1	0.021	2	0.031	07JN	07JN	07JN	166	50
LA IY 1	TURTLE ROCK PD BYPASS STUDIES	ROCK ISLAND D	27MY81			5.0	C075.OM	P	2	0.040	3	0.053	05JN	06JN	12JN	170	65
LA IY 2	TURTLE ROCK PD BYPASS STUDIES	ROCK ISLAND D	28MY81			5.0	C075.OM	P	1	0.021	1	0.030	19JN	19JN	19JN	166	30
LA IN 2	TURTLE ROCK PD BYPASS STUDIES	ROCK ISLAND D	01JN81			1.0	C075.OM	P	1	0.101	2	0.160	25JN	25JN	25JN	0	27

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: COHO

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
LA IN 4	TURTLE ROCK PD BYPASS STUDIES	ROCK ISLAND D	01JN81			1.0	C075.0M	P	1	0.101	1	0.133	11JN	11JN	11JN	178	65
LA X3 1	TURTLE ROCK PD OVAL FLUME	PASCO WASH	01MY77			16.6	C075.0M	P	3	0.019	10	0.058	31MY	03JN	08JN	142	14
RA X3 1	TURTLE ROCK PD OVAL FLUME	PASCO WASH	01MY77			16.6	C075.0M	P	1	0.007	3	0.020	31MY	31MY	31MY	180	15

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SPECIES: COHO

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
072155	VANDERVELT PD HATCHERY CONTRIBUTION	TUCKER CR	11AP80		12	45.0	C016.0N	P	1	0.003			06MY	06MY	06MY	133	1
							4001.3S	P	1	0.003			31MY	31MY	31MY	227	1

SPECIES: COHO

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
131404	WASHOUGAL HAT PNRC UPPER COL	KLICKITAT R R EVALU.	06AP77-30AP77		13	60.5	C075.0S	B	1	0.002	1	0.002	05MY	05MY	05MY	152	10
							C075.0M	P	3	0.005	15	0.026	11MY	13MY	03JN	175	8
631923	WASHOUGAL HAT SIZE & TIME OF RELEASE	WASHOUGAL R@RM 15	07MY79		17	74.4	C075.0S	B	9	0.013	11	0.015	14MY	15MY	22MY	140	18
							C075.0M	P	72	0.097	93	0.125	08MY	21MY	22JN	143	10
							C029.0S	P	2	0.003			18MY	18MY	18MY	142	17
							C018.0S	P	3	0.005			30MY	30MY	30MY	137	9
							C016.0N	P	2	0.003			21MY	21MY	29MY	130	15
							C014.0S	P	1	0.002			16MY	16MY	16MY	152	23
631924	WASHOUGAL HAT SIZE & TIME OF RELEASE	WASHOUGAL R@RM 15	07MY79		16	80.7	C075.0S	B	18	0.023	23	0.030	14MY	15MY	04JN	136	18
							C075.0M	P	69	0.086	88	0.110	13MY	21MY	12JN	143	10
							C029.0S	P	4	0.005			17MY	17MY	18MY	139	19
							C018.0S	P	1	0.002			30MY	30MY	30MY	130	9
631925	WASHOUGAL HAT SIZE & TIME OF REL.	WASHOUGAL R@RM 15	07JN79		20	73.0	C075.0S	B	9	0.013	11	0.016	11MY	16JN	17JN	129	16
							C075.0M	P	111	0.153	124	0.171	13JN	17JN	30JN	136	15
							C018.0S	P	1	0.002			30MY	30MY	30MY	140	-24
							C016.0N	P	7	0.010			15JN	22JN	02JL	137	14
631926	WASHOUGAL HAT SIZE & TIME OF REL.	WASHOUGAL R@RM 15	07JN79		20	82.9	C075.0S	B	12	0.015	14	0.017	12JN	15JN	19JN	133	18
							C075.0M	P	107	0.130	120	0.145	03JN	14JN	13JL	137	21
							C016.0N	P	12	0.015			14JN	15JN	25JN	135	26
631927	WASHOUGAL HAT SIZE & TIME REL.	WASHOUGAL R@RM 15	06JL79		20	81.0	C075.0S	B	14	0.018	18	0.022	13JN	15JL	19JL	133	16
							C075.0M	P	183	0.226	398	0.492	13JN	13JL	20JL	136	21
							C016.0N	P	1	0.002			13JL	13JL	13JL	145	29
631934	WASHOUGAL HAT SIZE & TIME OF REL.	WASHOUGAL R@RM 15	06JL79		20	82.1	C075.0S	B	4	0.005	5	0.006	12JL	13JL	14JL	130	21
							C075.0M	P	187	0.228	399	0.487	11JL	13JL	20JL	136	21
							C016.0N	P	8	0.010			13JL	13JL	19JL	143	29
632039	WASHOUGAL HAT TIMING,COWLITZ STOCK	WASHOUGAL R@RM 15	08MY80		18	99.6	C075.0S	B	29	0.030	42	0.043	14MY	17MY	19MY	135	16
							C075.0M	P	53	0.054	102	0.102	13MY	17MY	14JN	138	16
							C016.0N	P	1	0.002			21MY	21MY	21MY	133	16
							4009.1N	P	1	0.002			04SE	04SE	04SE	308	2
							4006.2N	P	1	0.002			08SE	08SE	08SE	311	2
							4004.2N	P	1	0.002			27MY	27MY	27MY	125	11
632040	WASHOUGAL HAT TIMING,COWLITZ STOCK	WASHOUGAL R@RM 15	08MY80		18	98.7	C075.0S	B	11	0.012	18	0.019	13MY	17MY	19MY	136	16
							C075.0M	P	57	0.058	106	0.108	12MY	17MY	28MY	140	16
							C016.0N	P	7	0.008			16MY	19MY	21MY	140	19
							4010.3S	P	1	0.002			05SE	05SE	05SE	305	2
							4008.1N	P	1	0.002			06SE	06SE	06SE	309	2
							4005.1S	P	1	0.002			28MY	28MY	28MY	141	11
							4004.2S	P	1	0.002			07JL	07JL	07JL	150	4
							4003.1S	P	1	0.002			02SE	02SE	02SE	258	2
632037	WASHOUGAL HAT TIMING,COWLITZ STOCK	WASHOUGAL R@RM 15	09JN80		18	97.3	C075.0S	B	14	0.015	17	0.018	16JN	16JN	19JN	136	21
							C075.0M	P	39	0.041	73	0.076	13JN	15JN	18JN	137	24
							C016.0N	P	19	0.020			16JN	18JN	19JN	138	23
							4010.3S	P	1	0.002			10JL	10JL	10JL	182	7
							4004.3S	P	1	0.002			28AU	28AU	28AU	274	3
							4004.1S	P	1	0.002			07JL	07JL	07JL	182	8
632038	WASHOUGAL HAT TIMING,COWLITZ STOCK	WASHOUGAL R@RM 15	09JN80		18	97.8	C075.0S	B	16	0.017	20	0.021	14JN	15JN	18JN	140	24

SPECIES: COHO

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632038	WASHOUGAL HAT TIMING,COWLITZ STOCK	WASHOUGAL R@RM 15	09JN80		18	97.8	C075.0M	P	49	0.051	93	0.096	13JN	14JN	19JN	139	29
							C016.0N	P	14	0.015			16JN	16JN	19JN	137	29
							4004.3S	P	1	0.002			28AU	28AU	28AU	286	3
							4004.1S	P	1	0.002			07JL	07JL	07JL	168	8
631954	WASHOUGAL HAT TIMING,COWLITZ STOCK	WASHOUGAL R@RM 15	07JL80		19	106.7	C075.0S	B	13	0.013	18	0.018	11JL	13JL	17JL	132	24
							C075.0M	P	113	0.106	267	0.251	10JL	12JL	15JL	140	29
							C016.0N	P	35	0.033			14JL	15JL	18JL	136	26
							4001.3S	P	1	0.001			31AU	31AU	31AU	227	4
631955	WASHOUGAL HAT TIMING,COWLITZ STOCK	WASHOUGAL R@RM 15	07JL80		18	107.0	C075.0S	B	11	0.011	16	0.016	10JL	13JL	15AU	139	24
							C075.0M	P	107	0.101	258	0.242	18JN	12JL	25JL	138	29
							C016.0N	P	42	0.040			11JL	15JL	18JL	130	26
							4008.2N	P	1	0.001			06SE	06SE	06SE	224	3
							4006.2S	P	1	0.001			08SE	08SE	08SE	243	3
							4005.2S	P	1	0.001			29AU	29AU	29AU	215	4
							4004.3N	P	1	0.001			28AU	28AU	28AU	216	4
							4003.1N	P	2	0.002			02SE	02SE	02SE	210	4
							4001.3S	P	3	0.003			31AU	31AU	31AU	216	4
632150	WASHOUGAL HAT COL R EVAL TIMING STUDY	WASHOUGAL R@RM 15	30AP81		18	51.8	C075.0S	B	11	0.022	12	0.024	30AP	13MY	09JN	133	11
							C075.0M	P	34	0.066	44	0.085	02MY	19MY	30MY	135	8
632202	WASHOUGAL HAT COL R EVAL TIMING STUDY	WASHOUGAL R@RM 15	30AP81		18	52.0	C075.0S	B	16	0.031	16	0.032	29AP	11MY	15MY	130	13
							C075.0M	P	30	0.058	42	0.081	29AP	13MY	27MY	132	11
632151	WASHOUGAL HAT COL R EVAL TIMING STUDY	WASHOUGAL R@RM 15	27MY81		20	52.9	C075.0S	B	8	0.016	9	0.017	31MY	01JN	09JN	130	29
							C075.0M	P	27	0.052	38	0.072	30MY	02JN	10JN	130	24
632203	WASHOUGAL HAT COL R EVAL TIMING STUDY	WASHOUGAL R@RM 15	27MY81		20	52.4	C075.0S	B	8	0.016	9	0.017	31MY	01JN	02JN	132	29
							C075.0M	P	27	0.052	38	0.073	31MY	01JN	07JN	131	29

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SPECIES: COHO

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	PURPOSE OF RELEASE		OTHER MARKS														
050638	WILLARD HAT	YAKIMA R@MO	24OC79-30OC79		36	76.6	C075.0M	P	2	0.003	5	0.006	29MY	02JN	03JN	120	1
	CONTRIBUTION		RECOVERED 1980														
							C016.0N	P	1	0.002			16MY	16MY	16MY	140	1
							4001.2S	P	1	0.002			31AU	31AU	31AU	264	1
055101	WILLARD HAT	LIT WH SAL R@RM 5	18AP77	116	23	10.3	C075.0M	P	1	0.010	1	0.012	09JN	09JN	09JN	128	4
*	CONTROL TRANSPORT		(055201,LDU3)														
055201	WILLARD HAT	LIT WH SAL R@RM 5	18AP77	116	23	10.3	C075.0S	B	1	0.010	2	0.018	26MY	26MY	26MY	125	5
*	CONTROL TRANSPORT		(055101,LDU3)														
052004	WILLARD HAT	LIT WH SAL R@RM 5	02MY77-04MY77		22	88.3	C075.0S	B	6	0.007	9	0.011	24MY	28MY	25JN	136	7
	VIBRIO VACCINATED						C075.0M	P	14	0.016	38	0.044	01JN	04JN	10JN	126	6
052104	WILLARD HAT	LIT WH SAL R@RM 5	02MY77-04MY77		21	93.8	C075.0S	B	5	0.006	5	0.006	22MY	05JN	14JN	128	6
	VIBRIO CONTROL						C075.0M	P	16	0.018	38	0.041	31MY	03JN	10JN	133	6
WHRDLB	WILLARD HAT	LIT WH SAL R@RM 5	24MY78		24	19.9	C075.0M	P	9	0.046	13	0.065	01JN	05JN	10JN	123	16
	CONTROL						C016.0N	P	3	0.016			02JN	05JN	05JN	121	21
							C007.0S	B	1	0.006			06JN	06JN	06JN	130	20
WHORLBYW	WILLARD HAT	LIT WH SAL R@RM 5	08JN78		21	19.8	C075.0S	B	1	0.006	2	0.009	16JN	16JN	16JN	140	24
	CONTROL						C075.0M	P	3	0.016	6	0.031	17JN	23JN	28JN	120	13
							C016.0N	P	1	0.006			23JN	23JN	23JN	135	17
050359	WILLARD HAT	LIT WH SAL R@RM 5	23MY80			42.4	C075.0S	B	3	0.008	5	0.013	30MY	30MY	30MY	150	28
	NMFS HOMING,CONTROL #2						C075.0M	P	9	0.022	19	0.045	28MY	02JN	05JN	127	19
050654	WILLARD HAT	LIT WH SAL R@RM 5	23MY80			51.5	C075.0S	B	3	0.006	5	0.011	30MY	31MY	05JN	129	24
	NMFS HOMING,CONTROL #3						C075.0M	P	3	0.006	6	0.013	29MY	02JN	05JN	131	19
050358	WILLARD HAT	LIT WH SAL R@RM 2	14MY80			43.0	C075.0S	B	1	0.003	3	0.007	19MY	19MY	19MY	0	37
	NMFS HOMING,CONTROL #1						C075.0M	P	2	0.005	5	0.013	19MY	20MY	28MY	133	31
055301	WILLARD HAT	BLW BONN D	22AP77	116	24	19.8	C075.0S	B	1	0.006	1	0.006	09MY	09MY	09MY	126	9
*	BARGE TRANSPORT		(055301,LDU1)				C075.0M	P	1	0.006	2	0.009	10JN	10JN	10JN	133	3
LD U 1	WILLARD HAT	BLW BONN D	22AP77	116	24	19.8	C075.0S	B	3	0.016	3	0.017	07MY	23MY	24MY	124	5
*	BARGE TRANSPORT		(055301,LDU1)				C075.0M	P	1	0.006	3	0.017	31MY	31MY	31MY	180	4
WHORYWGN	WILLARD HAT	BLW BONN D	08JN78		21	19.8	C075.0S	B	6	0.031	8	0.041	12JN	12JN	12JN	127	39
	TEST						C075.0M	P	3	0.016	5	0.025	10JN	14JN	19JN	115	26
							C016.0N	P	6	0.031			14JN	14JN	23JN	135	36
WHORYWOR	WILLARD HAT	BLW BONN D	08JN78		21	19.7	C075.0S	B	3	0.016	4	0.022	13JN	14JN	16JN	131	26
	TEST						C075.0M	P	9	0.046	16	0.080	12JN	16JN	20JN	125	19
							C016.0N	P	3	0.016			14JN	14JN	16JN	123	36
050660	WILLARD HAT	BLW BONN D	24MY80			33.7	C075.0S	B	2	0.006	4	0.013	30MY	01JN	02JN	129	19
	NMFS HOMING BARGE #2						C075.0M	P	1	0.003	5	0.014	31MY	31MY	31MY	140	22
050650	WILLARD HAT	BLW BONN D	25MY80			47.9	C075.0S	B	6	0.013	8	0.018	28MY	29MY	05JN	131	39
	NMFS HOMING,TEST #3						C075.0M	P	2	0.005	3	0.007	05JN	06JN	09JN	131	13
							4010.3S	P	1	0.003			05SE	05SE	05SE	283	2
050655	WILLARD HAT	BLW BONN D	25MY80			51.4	C075.0S	B	8	0.016	11	0.021	28MY	28MY	29MY	129	52
	NMFS HOMING,ALTERNATE TEST #1						C075.0M	P	10	0.020	21	0.041	27MY	02JN	09JN	126	19
050651	WILLARD HAT	DALTON PT	21MY80			50.8	C075.0S	B	2	0.004	4	0.009	24MY	25MY	28MY	129	33
	NMFS HOMING,TEST #4						C075.0M	P	3	0.006	6	0.012	27MY	04JN	05JN	133	9
							4003.2S	P	1	0.002			30MY	30MY	30MY	140	22
050652	WILLARD HAT	BEAVER TERMINAL	22MY80			51.7	C075.0S	B	21	0.041	66	0.128	23MY	23MY	24MY	123	9
	NMFS HOMING,TEST #6						4006.3S	P	1	0.002			29MY	29MY	29MY	115	11
							4005.3N	P	1	0.002			28MY	28MY	28MY	127	13

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: COHO

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
WHORORLB	WILLARD HAT	STAVEBOLT CR	13MY78		26	20.3	C007.0S	B	2	0.010			22MY	22MY	25MY	135	3
	CONTROL																
WHORRDOR	WILLARD HAT	STAVEBOLT CR	25MY78		24	22.3	C016.0N	P	1	0.005			01JN	01JN	01JN	115	3
	CONTROL						C007.0S	B	2	0.009			31MY	31MY	06JN	120	4
WHORRDYW	WILLARD HAT	STAVEBOLT CR	07JN78		21	18.6	C007.0S	B	1	0.006			13JN	13JN	13JN	120	4
	TEST																
WHORLGYW	WILLARD HAT	HAMMOND ORE	25MY78		24	19.9	C007.0S	B	1	0.006			06JN	06JN	06JN	120	0
	TEST																
WHORWHOR	WILLARD HAT	HAMMOND ORE	25MY78		26	19.9	C007.0S	B	1	0.006			31MY	31MY	31MY	120	1
	TEST																
WHRDYW	WILLARD HAT	HAMMOND ORE	25MY78		26	19.7	C075.0S	B	2	0.011	3	0.014	19MY	02JN	03JN	130	-7
	TEST						C075.0M	P	12	0.062	15	0.078	20MY	01JN	10JN	131	-8
WHORORRD	WILLARD HAT	HAMMOND ORE	26MY78		24	19.9	C009.0N	B	1	0.006			11MY	11MY	11MY	120	0
	TEST																
WHRDPK	WILLARD HAT	HAMMOND ORE	08JN78		21	19.6	C016.0N	P	1	0.006			14JN	14JN	14JN	150	-0
	TEST																
050653	WILLARD HAT	HAMMOND ORE	23MY80			50.6	4006.3N	P	1	0.002			29MY	29MY	29MY	120	0
	NMFS HOMING,TEST #5						4003.2S	P	1	0.002			30MY	30MY	30MY	157	1

YEARLING CHINOOK SALMON

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	 /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	 %	RECAPTURES ADJUSTED NO.	 %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
091613	AUMSVILLE PD TURBINE MORT.	ABV WILLAM FALLS	02AP77-04AP77	72		43.1	C016.0N	P	1	0.003			12MY	12MY	12MY	155	0

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	 /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	 %	RECAPTURES ADJUSTED NO.	 %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
034202	BIG CR HAT HOMING	BIG CR	23MY80	70		43.9	C016.0N	P	3	0.007			16JN	20JN	23JN	100	1
034002	BIG CR HAT HOMING	ASTORIA BRID WA	12MY80-19MY80	75		49.5	C016.0N	P	1	0.003			22MY	22MY	22MY	90	0

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
071626	BONNEVILLE HAT RELEASE TIMING	MILL CR	08NO78-09NO78 RECOVERED 1979	108	23	51.5	C075.0S	B	6	0.012	22	0.043	26MR	27MR	07AP	135	0
							C075.0M	P	2	0.004	14	0.027	16MR	16MR	15MY	150	0
							C014.0S	P	1	0.002			16MY	16MY	16MY	118	0
071917	BONNEVILLE HAT STOCK EVAL;COWLITZ STOCK	MILL CR	09NO78 RECOVERED 1979	110	22	48.2	C075.0S	B	7	0.015	32	0.068	06MR	22MR	25AP	150	0
							C075.0M	P	3	0.007	14	0.029	26MR	26MR	17MY	130	0
071918	BONNEVILLE HAT STOCK EVAL;COWLITZ STOCK	MILL CR	09NO78 RECOVERED 1979	111	23	51.1	C075.0S	B	4	0.008	8	0.015	28MR	30MR	04MY	152	0
							C075.0M	P	4	0.008	5	0.010	17AP	15MY	21MY	122	0
							C016.0N	P	1	0.002			04MY	04MY	04MY	145	0
071656	BONNEVILLE HAT TULE STOCK	TANNER CR	30OC78 RECOVERED 1979		12	50.9	C075.0S	B	6	0.012	16	0.032	21MR	06AP	01MY	145	0
071658	BONNEVILLE HAT UPPER RIVER BRIGHTS	TANNER CR	30OC78 RECOVERED 1979		20	44.8	C075.0S	B	4	0.009	20	0.045	28FE	28FE	25AP	135	0
071659	BONNEVILLE HAT TULE STOCK	TANNER CR	30OC78 RECOVERED 1979		14	37.8	C075.0S	B	4	0.011	12	0.033	26MR	27MR	18AP	140	0
071660	BONNEVILLE HAT UPPER RIVER BRIGHTS	TANNER CR	30OC78 RECOVERED 1979		24	44.4	C075.0S	B	6	0.014	22	0.050	16FE	17FE	04MY	105	0
							C029.0S	P	1	0.003			18MY	18MY	18MY	109	0
071657	BONNEVILLE HAT TULE STOCK	TANNER CR	13MR79		7	47.9	C075.0S	B	91	0.191	170	0.356	21MR	11AP	30AP	171	5
							C075.0M	P	14	0.030	18	0.037	17AP	25AP	14MY	182	4
							C029.0S	P	1	0.003			18MY	18MY	18MY	208	3
							4005.0	P	1	0.003			21JN	21JN	21JN	265	2
071661	BONNEVILLE HAT UPPER RIVER BRIGHTS	TANNER CR	13MR79		8	32.7	C075.0S	B	47	0.144	88	0.269	26MR	11AP	01MY	172	5
							C075.0M	P	15	0.046	44	0.134	23MR	16AP	05SE	184	5
071735	BONNEVILLE HAT LATE FALLS-UPRIVER BRIGHTS	TANNER CR	20NO79 RECOVERED 1980		12	51.2	C075.0S	B	4	0.008	7	0.014	24MR	23AP	17MY	100	0
							C075.0M	P	1	0.002	1	0.003	29AP	29AP	29AP	141	0
071914	BONNEVILLE HAT TULES	TANNER CR	20NO79 RECOVERED 1980		9	48.7	C075.0S	B	3	0.007	15	0.031	10MR	10MR	31MR	147	0
							C016.0N	P	1	0.003			01MY	01MY	01MY	150	0
071733	BONNEVILLE HAT UPRIVER-BRIGHTS	TANNER CR	13MR80		7	49.3	C075.0S	B	53	0.108	113	0.230	18MR	30MR	25AP	184	9
							C075.0M	P	17	0.035	45	0.092	02AP	18AP	25AP	182	4
							C016.0N	P	4	0.009			24AP	28AP	30AP	166	5
							4003.1S	P	1	0.003			30MY	30MY	30MY	223	3
071736	BONNEVILLE HAT TULE STOCK	TANNER CR	13MR80		6	48.1	C075.0S	B	42	0.088	78	0.162	18MR	07AP	28AP	186	6
							C075.0M	P	10	0.021	29	0.062	17MR	08AP	30AP	181	6
							C016.0N	P	1	0.003			24AP	24AP	24AP	204	.5
071734	BONNEVILLE HAT LATE FALLS-UPRIVER BRIGHTS	TANNER CR	11NO80 RECOVERED 1981		14	51.3	C075.0S	B	1	0.002	4	0.007	19MR	19MR	19MR	169	0

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
131204	CARSON HAT	ENTIAT R	15AP77			99.1	C075.0M	P	6	0.007	17	0.017	11MY	13MY	09JN	193	26
LA AN 1	CARSON HAT	PASCO WASH	23AP79		20	39.1	C075.0S	B	1	0.003	2	0.006	12MY	12MY	12MY	145	24
*	CONTROL-NATURAL		(WHLBGM;LAAN1)				C075.0M	P	27	0.070	34	0.087	06MY	13MY	20MY	138	22
							C018.0S	P	1	0.003			30MY	30MY	30MY	140	14
							C016.0N	P	2	0.006			21MY	21MY	26MY	135	18
WHLBGM	CARSON HAT	PASCO WASH	23AP79		20	39.1	C075.0M	P	5	0.013	6	0.016	07MY	18MY	21MY	139	18
*	CONTROL-NATURAL		(WHLBGM;LAAN1)														
141111	CARSON HAT TIME OF RELEASE	WIND R	15MR77		21	94.5	C075.0S	B	3	0.004	4	0.005	25AP	04MY	07MY	131	4
							C075.0M	P	1	0.002	2	0.003	05MY	05MY	05MY	102	4
141211	CARSON HAT TIME OF RELEASE	WIND R	15AP77-28AP77		18	203.3	C075.0S	B	1	0.001	1	0.001	10MY	10MY	10MY	143	8
							C075.0M	P	3	0.002	11	0.006	11MY	11MY	11MY	126	8
140303	CARSON HAT TIME OF RELEASE	WIND R	15SE76 RECOVERED 1977		45	89.8	C075.0S	B	1	0.002	8	0.009	14AP	13AP	14AP	80	-0
LA AN 4	CARSON HAT	WIND R	03MY79		20	41.0	C075.0S	B	7	0.018	10	0.025	10MY	12MY	16MY	128	22
*	CONTROL-NATURAL		(WHLBGN;LAAN4)				C075.0M	P	19	0.047	24	0.058	07MY	14MY	20MY	132	18
							C029.0S	P	1	0.003			18MY	18MY	18MY	125	16
WHLBGN	CARSON HAT	WIND R	03MY79		20	41.0	C075.0M	P	2	0.005	3	0.008	07MY	12MY	13MY	120	22
*	CONTROL-NATURAL		(WHLBGN;LAAN4)				C029.0S	P	2	0.005			17MY	17MY	18MY	133	18
							C016.0N	P	2	0.005			21MY	21MY	29MY	130	14
050437	CARSON HAT CONTROL	WIND R	28AP80		19	82.1	C075.0S	B	27	0.033	35	0.043	05MY	08MY	12MY	129	20
							C075.0M	P	11	0.014	19	0.023	02MY	07MY	12MY	130	22
							C016.0N	P	14	0.018			08MY	12MY	19MY	143	18
							4006.3S	P	1	0.002			29MY	29MY	29MY	169	9
050438	CARSON HAT ERYTHROMYCIN AS EGGS	WIND R	28AP80		19	88.8	C075.0S	B	25	0.029	31	0.035	06MY	08MY	10MY	136	20
							C075.0M	P	25	0.029	47	0.053	05MY	06MY	12MY	132	25
							C016.0N	P	12	0.014			06MY	13MY	21MY	129	17
							4009.1S	P	1	0.002			04JN	04JN	04JN	160	7
							4006.3N	P	1	0.002			29MY	29MY	29MY	166	9
035702	CARSON HAT	WIND R	12MY80 117			37.5	C075.0M	P	2	0.006	7	0.019	19MY	19MY	19MY	119	29
*	CONTROL		CWT 035702,LAS,2				C016.0N	P	3	0.009			20MY	20MY	21MY	117	32
LA S 2	CARSON HAT	WIND R	12MY80 117			37.5	C075.0M	P	5	0.014	12	0.033	15MY	18MY	19MY	122	33
*	CONTROL		CWT 035702,LAS,2				C016.0N	P	9	0.025			21MY	21MY	22MY	125	29
RA Y 1	CARSON HAT	BLW BONN D	21AP79		20	38.3	C075.0S	B	14	0.037	17	0.044	26AP	03MY	09MY	129	13
*	TEST-TRUCK		(WHLBWHLB;RAY1)				C075.0M	P	22	0.058	27	0.071	30AP	05MY	14MY	131	11
							C029.0S	P	2	0.006			17MY	17MY	18MY	140	8
							C016.0N	P	1	0.003			21MY	21MY	21MY	140	7
							C014.0S	P	1	0.003			16MY	16MY	16MY	155	9
WHLBWHLB	CARSON HAT	BLW BONN D	21AP79		20	38.3	C075.0S	B	2	0.006	2	0.006	25AP	01MY	02MY	125	16
*	TEST-TRUCK		(WHLBWHLB;RAY1)				C075.0M	P	3	0.008	4	0.011	27AP	03MY	04MY	130	13
							C016.0N	P	4	0.011			04MY	04MY	04MY	145	16
RA Y 4	CARSON HAT	BLW BONN D	28AP79		20	36.3	C075.0S	B	3	0.009	4	0.010	03MY	04MY	05MY	135	26
*	TEST-BARGE		(WHLBBL;RAY4)				C075.0M	P	24	0.067	28	0.078	01MY	06MY	17MY	126	19
							C029.0S	P	1	0.003			18MY	18MY	18MY	130	10
							C016.0N	P	2	0.006			04MY	04MY	07MY	120	36
WHLBBL	CARSON HAT	BLW BONN D	28AP79		20	36.3	C075.0S	B	2	0.006	2	0.007	03MY	06MY	07MY	127	19
*	TEST-BARGE		(WHLBBL;RAY4)														

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
WHLBBL	CARSON HAT	BLW BONN D	28AP79		20	36.3	C075.OM	P	1	0.003	1	0.004	04MY	04MY	04MY	120	26
*	TEST-BARGE		(WHLBBL;RAY4)				C016.ON	P	1	0.003			04MY	04MY	04MY	145	36
RA T 1	CARSON HAT	BLW BONN D	04MY79		20	40.4	C075.OS	B	12	0.030	16	0.041	09MY	11MY	18MY	133	22
*	TEST-SINGLE IMPRINT		(WHLBYWYW;RAT1)				C075.OM	P	17	0.043	23	0.058	07MY	14MY	26MY	137	16
							C029.OS	P	2	0.005			18MY	18MY	18MY	130	14
WHLBYWYW	CARSON HAT	BLW BONN D	04MY79		20	40.4	C075.OS	B	4	0.010	6	0.016	10MY	11MY	11MY	133	22
*	TEST-SINGLE IMPRINT		(WHLBYWYW;RAT1)				C075.OM	P	4	0.010	5	0.012	10MY	15MY	16MY	126	14
							C029.OS	P	3	0.008			18MY	18MY	18MY	138	14
							C016.ON	P	1	0.003			21MY	21MY	21MY	140	13
RA T 2	CARSON HAT	BLW BONN D	07MY79		19	39.8	C075.OS	B	6	0.016	8	0.021	11MY	14MY	17MY	129	22
*	TRUCK TEST-SEQUENTIAL IMPRINT		(WHLBYWXY;RAT2)				C075.OM	P	8	0.021	9	0.024	09MY	15MY	17MY	126	19
WHLBYWXY	CARSON HAT	BLW BONN D	07MY79		19	39.8	C075.OS	B	2	0.006	2	0.006	10MY	11MY	16MY	125	39
*	TRUCK TEST-SEQUENTIAL IMPRINT		(WHLBYWXY;RAT2)				C075.OM	P	2	0.006	4	0.010	12MY	12MY	13MY	127	31
							C029.OS	P	3	0.008			17MY	17MY	18MY	121	20
							C016.ON	P	1	0.003			11MY	11MY	11MY	140	53
035802	CARSON HAT	DALTON PT	12MY80	117		36.3	C016.ON	P	1	0.003			20MY	20MY	20MY	121	24
*	TEST #1 SINGLE IMPRINT		CWT 035802,RAL,1														
RA L 1	CARSON HAT	DALTON PT	12MY80	117		36.3	C075.OS	B	2	0.006	4	0.012	16MY	19MY	19MY	122	19
*	TEST #1 SINGLE IMPRINT		CWT 035802,RAL,1				C075.OM	P	16	0.045	32	0.088	16MY	17MY	19MY	126	26
							C016.ON	P	16	0.045			19MY	21MY	21MY	125	21
035902	CARSON HAT	DALTON PT	14MY80	117		41.5	C075.OM	P	1	0.003	3	0.009	19MY	19MY	19MY	121	26
*	TEST #2 SEQUENTIAL IMPRINT		CWT 035902,RAL,2				C016.ON	P	3	0.008			20MY	21MY	22MY	113	27
RA L 2	CARSON HAT	DALTON PT	14MY80	117		41.5	C075.OM	P	10	0.025	20	0.050	16MY	17MY	23MY	116	44
*	TEST #2 SEQUENTIAL IMPRINT		CWT 035902,RAL,2				C016.ON	P	9	0.022			19MY	21MY	21MY	125	27
RA T 3	CARSON HAT	HAMMOND ORE	08MY79		21	38.6	C075.OM	P	1	0.003	1	0.004	15MY	15MY	15MY	120	-8
*	TRUCK TEST-SEQUENTIAL IMPRINT		(WHLBXR;RAT3)														
RA L 3	CARSON HAT	HAMMOND ORE	15MY80	117		43.2	C016.ON	P	1	0.003			19MY	19MY	19MY	133	-0
*	TEST #3 SEQUENTIAL IMPRINT		CWT 036002,RAL,3														

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
130911	COWLITZ HAT	COWLITZ R@RM 50	08MR77		4	88.1	C075.OS	B	44	0.050	133	0.152	14AP	15AP	28MY	195	3
	DENSITY STUDY																
130912	COWLITZ HAT	COWLITZ R@RM 50	08MR77		4	88.7	C075.OS	B	36	0.041	100	0.113	14AP	15AP	27MY	189	3
	DENSITY STUDY																
130914	COWLITZ HAT	COWLITZ R@RM 50	08MR77		4	61.8	C075.OS	B	30	0.049	71	0.115	14AP	17AP	26AP	200	3
	DENSITY STUDY						C075.OM	P	1	0.002	2	0.004	05MY	05MY	05MY	184	2
131104	COWLITZ HAT	COWLITZ R@RM 50	08MR77		4	61.7	C075.OS	B	24	0.039	59	0.097	14AP	16AP	23AP	184	3
	DENSITY STUDY																
131301	COWLITZ HAT	COWLITZ R@RM 50	08MR77		3	28.7	C075.OS	B	12	0.042	26	0.092	15AP	17AP	10MY	206	3
	DENSITY STUDY																
131304	COWLITZ HAT	COWLITZ R@RM 50	08MR77		3	28.0	C075.OS	B	12	0.043	37	0.132	14AP	15AP	25AP	185	3
	DENSITY STUDY																
631612	COWLITZ HAT	COWLITZ R@RM 50	08MR78		4	28.2	C075.OS	B	28	0.100	84	0.298	13MR	01AP	25AP	220	5
	DENSITY STUDY		HAND ADJUSTED				C075.OM	P	6	0.022	6	0.021	19AP	23AP	04MY	215	3
							C016.ON	P	1	0.004			20AP	20AP	20AP	200	4
							C007.OS	B	1	0.004			19AP	19AP	19AP	220	4
631613	COWLITZ HAT	COWLITZ R@RM 50	08MR78		5	27.8	C075.OS	B	24	0.087	75	0.270	13MR	31MR	20AP	221	5
	DENSITY STUDY		HAND ADJUSTED				C075.OM	P	3	0.011	6	0.023	17AP	21AP	08MY	215	3
							C016.ON	P	2	0.008			28AP	28AP	01MY	207	3
631709	COWLITZ HAT	COWLITZ R@RM 50	08MR78		5	89.4	C075.OS	B	101	0.113	353	0.395	13MR	28MR	15MY	198	5
	DENSITY STUDY		HAND ADJUSTED				C075.OM	P	23	0.026	52	0.058	16MR	22AP	13MY	212	3
							C016.ON	P	8	0.009			20AP	28AP	05JN	185	3
							C009.ON	B	2	0.003			25AP	25AP	25AP	240	4
							C007.OS	B	1	0.002			09MY	09MY	09MY	235	3
							4005.O	P	1	0.002			03AU	03AU	03AU	110	1
631710	COWLITZ HAT	COWLITZ R@RM 50	08MR78		6	88.0	C075.OS	B	91	0.104	303	0.344	17MR	29MR	02MY	207	5
	DENSITY STUDY		HAND ADJUSTED				C075.OM	P	18	0.021	34	0.039	21MR	20AP	01JN	192	3
							C016.ON	P	14	0.016			20AP	01MY	10MY	201	3
							C007.OS	B	3	0.004			17AP	17AP	17AP	215	5
631711	COWLITZ HAT	COWLITZ R@RM 50	08MR78		5	58.3	C075.OS	B	61	0.105	204	0.350	13MR	29MR	20AP	219	5
	DENSITY STUDY		HAND ADJUSTED				C075.OM	P	16	0.028	34	0.058	21MR	16AP	10MY	227	3
							C016.ON	P	5	0.009			20AP	05MY	17MY	212	3
631712	COWLITZ HAT	COWLITZ R@RM 50	08MR78		5	57.0	C075.OS	B	79	0.139	269	0.472	13MR	30MR	27AP	210	5
	DENSITY STUDY		HAND ADJUSTED				C075.OM	P	6	0.011	9	0.016	10AP	12AP	10MY	225	3
							C016.ON	P	9	0.016			20AP	12MY	24JL	180	3
							C009.ON	B	1	0.002			11AP	11AP	11AP	235	5
							C007.OS	B	1	0.002			17AP	17AP	17AP	195	5
631717	COWLITZ HAT	COWLITZ R@RM 50	08MR78		6	71.3	C075.OS	B	54	0.076	193	0.271	13MR	06AP	26AP	210	5
	DENSITY STUDY		HAND ADJUSTED				C075.OM	P	16	0.023	24	0.037	05AP	21AP	13MY	208	3
							C016.ON	P	10	0.015			20AP	01MY	23MY	195	3
							C009.ON	B	1	0.002			14AP	14AP	14AP	210	5
							C007.OS	B	1	0.002			17AP	17AP	17AP	235	5
631718	COWLITZ HAT	COWLITZ R@RM 50	08MR78		5	69.4	C075.OS	B	54	0.078	220	0.317	15MR	31MR	02MY	199	5
	DENSITY STUDY		HAND ADJUSTED				C075.OM	P	10	0.015	8	0.012	05AP	24AP	01MY	198	2
							C016.ON	P	12	0.018			20AP	28AP	03MY	197	3
							C009.ON	B	1	0.002			11AP	11AP	11AP	250	5

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
631718	COWLITZ HAT DENSITY STUDY	COWLITZ R@RM 50	08MR78		5	69.4	C007.0S	B	1	0.002			27AP	27AP	27AP	225	4
631815	COWLITZ HAT ERYTHROMYCIN	COWLITZ R@RM 50	23AP79		5	23.0	C075.0S	B	7	0.031	9	0.039	26AP	01MY	11MY	183	14
							C075.0M	P	27	0.118	35	0.155	26AP	30AP	29MY	195	16
							C029.0S	P	1	0.005			17MY	17MY	17MY	154	7
							C016.0N	P	2	0.009			04MY	04MY	11MY	195	16
							4005.0	P	1	0.005			14MY	14MY	14MY	170	9
631816	COWLITZ HAT ERYTHROMYCIN	COWLITZ R@RM 50	23AP79		7	24.5	C075.0S	B	7	0.029	8	0.033	30AP	03MY	09MY	143	11
							C075.0M	P	29	0.119	40	0.162	26AP	29AP	02JL	178	19
							C016.0N	P	3	0.013			04MY	04MY	11MY	170	16
631817	COWLITZ HAT ERYTHROMYCIN CONTROL	COWLITZ R@RM 50	23AP79		5	24.1	C075.0S	B	10	0.042	13	0.056	27AP	30AP	07MY	183	16
							C075.0M	P	25	0.104	35	0.144	25AP	28AP	14JN	195	23
							C016.0N	P	3	0.013			04MY	07MY	07MY	198	12
631818	COWLITZ HAT ERYTHROMYCIN CONTROL	COWLITZ R@RM 50	23AP79		7	24.3	C075.0S	B	8	0.033	10	0.044	27AP	01MY	07MY	177	14
							C075.0M	P	26	0.107	36	0.147	26AP	29AP	17MY	187	19
							C029.0S	P	3	0.013			17MY	17MY	17MY	154	7
							C016.0N	P	3	0.013			04MY	04MY	04MY	168	16
631942	COWLITZ HAT COL. RIVER FALL CHIN EVAL	COWLITZ R@RM 50	27JN79-16OC79 RECOVERED 1980		85	143.6	C075.0S	B	9	0.007	21	0.015	10MR	15MR	30AP	90	0
631951	COWLITZ HAT COL RIVER FALL CHIN EVAL	COWLITZ R@RM 50	27JN79-16OC79 RECOVERED 1980		85	11.1	C075.0S	B	6	0.055	21	0.194	10MR	11MR	24AP	115	0
							C075.0M	P	2	0.019	5	0.049	18AP	19AP	05MY	129	0
							C016.0N	P	1	0.010			05MY	05MY	05MY	139	0
632137	COWLITZ HAT 5% EVAL DELAYED	COWLITZ R@RM 50	21MR81-01AP81		9	20.7	C075.0S	B	14	0.068	35	0.170	25MR	01AP	02MY	151	10
							C075.0M	P	3	0.015	7	0.036	02AP	21AP	25AP	174	4

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
100348	DECKER FLATS EVALUATION	UPPER SALMON R	03AP79-05AP79		21	122.0	C075.0M	P	37	0.031	47	0.039	27AP	05MY	19MY	140	43
							C016.0N	P	2	0.002			07MY	07MY	07MY	155	42

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SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LA E 2	DESCHUTES R	WMSP R-SHER FALL	25MR79-07AP79			0.2	C075.0M	P	1	0.575	1	0.674	04MY	04MY	04MY	130	9
*	WILD FISH CONTRIB		DESCHUTES(7-18/33)														
LA KE 2	DESCHUTES R	WMSP R-SHER FALL	09MR80-13MR80 103			0.7	C075.0M	P	1	0.137	2	0.228	09MY	09MY	09MY	150	6
*	STOCK EVAL		CWT 072152,2671 FISH														
LA KE 3	DESCHUTES R	WMSP R-SHER FALL	19MR80-28MR80 104			0.7	C075.0M	P	1	0.135	2	0.239	16MY	16MY	16MY	150	6
*	STOCK EVAL		CWT 072152,2671 FISH														
LD GL 2	DESCHUTES R	MAUPIN TRAP RM 50	20MY79-02JN79			0.0	4005.0	P	1	#.###			21JN	21JN	21JN	140	12
*	WILD FISH CONTRIB		DESCHUTES(7-18/38)														
RA 13 2	DESCHUTES R	DESCHUTES@RM 43	28AP80-09MY80 124			0.0	C075.0M	P	1	3.449	2	6.186	10MY	10MY	10MY	140	27
*	STOCK EVAL		CWT 071846,902 FISH														

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SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
071737	DEXTER PD	M FK WILLAM@DEXTER	07N078		9	23.0	C075.0M	P	2	0.009	15	0.068	23MR	24MR	05AP	140	1
	IMPR HATCH PROD GRAD/TIME		RECOVERED 1979														
090504	DEXTER PD	MILL CR	11MR77		10	50.2	C075.0S	B	19	0.038	53	0.106	14AP	16AP	22AP	157	6
	SIZE X TIME RELEASE						C075.0M	P	2	0.004	7	0.014	11MY	11MY	11MY	178	4

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SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
090610	EAGLE CR HAT STOCK EVALUATION	CLACKAMAS R	29AP77		14	85.8	C075.0S	B	3	0.004	5	0.007	12MY	21MY	21MY	140	8
091658	EAGLE CR HAT STOCK EAVALUATION	CLACKAMAS R	24AP78 HAND ADJUSTED	157	15	97.2	C075.0M	P	53	0.055	68	0.070	29AP	12MY	02JN	145	10
							C016.0N	P	27	0.028			03MY	12MY	22MY	144	13
071747	EAGLE CR HAT STOCK EVAL (PNRC)	CLACKAMAS R	01MY79		13	46.2	C075.0S	B	1	0.003	1	0.003	15MY	15MY	15MY	125	12
							C075.0M	P	38	0.083	46	0.100	07MY	17MY	12JN	138	11
							C029.0S	P	3	0.007			18MY	18MY	18MY	140	13
							C016.0N	P	4	0.009			11MY	11MY	21MY	172	23
071748	EAGLE CR HAT STOCK EVAL (PNRC)	CLACKAMAS R	01MY79		13	48.3	C075.0M	P	50	0.104	61	0.126	05MY	16MY	05JN	142	11
							C029.0S	P	1	0.003			17MY	17MY	17MY	188	14
							C016.0N	P	2	0.005			21MY	21MY	21MY	132	12
							4005.0	P	1	0.003			21JN	21JN	21JN	160	5

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
631604	ELOKOMIN HAT STOCK EVALUATION	ELOKOMIN R	16JN77 RECOVERED 1978		103	145.0	C075.0S	B	1	0.001	3	0.002	22MR	22MR	22MR	190	0

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
631725	ENTIAT HAT PROD. EVALUATION	ENTIAT R	25AP78 HAND ADJUSTED	150	10	87.8	C075.0M	P	37	0.043	51	0.058	13MY	19MY	31MY	148	30
							C016.0N	P	10	0.012			16MY	17MY	26MY	145	35
RD AN 3	ENTIAT HAT TEST (4 HR. SPILL)	ENTIAT R	26AP78	135		35.8	C075.0M	P	6	0.017	9	0.027	15MY	23MY	30MY	137	26
							C016.0N	P	2	0.006			17MY	17MY	22MY	145	37
LD AN 1	ENTIAT HAT TEST-NO SPILL	ROCKY REACH RES	14AP78	135		39.2	C075.0M	P	11	0.029	15	0.038	10MY	16MY	24MY	155	21
							C018.0S	P	1	0.003			22MY	22MY	22MY	115	20
							C016.0N	P	4	0.011			17MY	22MY	01JN	130	20
							C007.0S	B	1	0.003			18MY	18MY	18MY	115	22
LD AN 2	ENTIAT HAT TEST (4 HR. SPILL)	ROCKY REACH RES	01MY78	135		31.7	C075.0M	P	3	0.010	4	0.013	06MY	26MY	02JN	135	27
							C016.0N	P	2	0.007			01JN	01JN	22JN	140	24
LD AN 3	ENTIAT HAT TEST (8 HR. SPILL)	ROCKY REACH RES	15MY78	135		33.0	C075.0M	P	7	0.022	10	0.030	03MY	05JN	16JN	143	33
							C016.0N	P	1	0.004			08JN	08JN	08JN	150	31
LD AN 4	ENTIAT HAT CONTROL	VERNITA BRID	02MY78	135		16.6	C075.0M	P	13	0.079	17	0.102	17MY	23MY	09JN	126	26
							C016.0N	P	3	0.019			17MY	01JN	05JN	135	20
							C007.0S	B	1	0.007			18MY	18MY	18MY	110	39
RD AN 1	ENTIAT HAT CONTROL	VERNITA BRID	15MY78 INACCURATE REL. NUMB.	135	*	8.5	C075.0M	P	2	0.024	3	0.035	31MY	02JN	03JN	125	31
							C016.0N	P	1	0.012			05JN	05JN	05JN	120	29
RD AN 4	ENTIAT HAT CONTROL	VERNITA BRID	15MY78 INACCURATE REL. NUMB.	135	*	8.5	C016.0N	P	5	0.059			02JN	07JN	08JN	122	27
RD AN 2	ENTIAT HAT CONTROL	VERNITA BRID	25MY78	135		17.6	C075.0M	P	4	0.023	6	0.035	05JN	09JN	10JN	130	37

SPECIES: YEARLING CHINOOK

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050421	HAGERMAN HAT SNAKE R STOCK	ASOTIN ID	21MY79 RECOVERED 1980	75	92	46.0	C075.0S	B	1	0.003	2	0.004	26MR	26MR	26MR	214	1

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SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
100321	HAYDEN PD	LEMHI R	22SE77		14	84.1	C016.ON	P	1	0.002			20AP	20AP	20AP	135	2
	AGE "0" RELEASE VS AGE"1"RELEASE		RECOVERED 1978														
100322	HAYDEN PD	LEMHI R	23MR78	187	6	15.0	C075.OM	P	5	0.034	14	0.093	07AP	14AP	10MY	205	58
	AGE "0"RELEASE VS AGE"1" RELEASE		HAND ADJUSTED														
050454	HAYDEN PD	LEMHI R	04AP79-07AP79		15	58.2	C075.OM	P	5	0.009	6	0.010	02MY	08MY	23MY	170	36
	IDENTIFI EVAL REAR TECH						C016.ON	P	1	0.002			11MY	11MY	11MY	185	35
102125	HAYDEN PD	LEMHI R	01AP80-03AP80		26	40.1	C075.OM	P	2	0.005	4	0.012	05MY	05MY	05MY	123	36
	MORPHORLENE						C016.ON	P	5	0.013			30AP	06MY	13MY	123	37
102126	HAYDEN PD	LEMHI R	03AP80-04AP80		26	41.2	C075.OM	P	4	0.010	8	0.019	02MY	04MY	16MY	127	39
	CONTROL						C016.ON	P	2	0.005			16MY	16MY	16MY	123	30
							4005.1S	P	1	0.003			28MY	28MY	28MY	160	23
102221	HAYDEN PD	LEMHI R	08AP81		19	50.0	C075.OM	P	7	0.015	10	0.021	07MY	18MY	31MY	137	30
	CONTROL																
102222	HAYDEN PD	LEMHI R	08AP81		19	51.0	C075.OM	P	7	0.014	11	0.022	03MY	08MY	14MY	134	41
	IMPRINTED W/MORPHOLINE																

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
RA IK 2	ICE HARBOR D	FISHOOK PARK	24AP78-28AP78			2.0	C075.OM	P	1	0.051	2	0.077	06MY	06MY	06MY	115	40
	TIMING & EFFICIENCY																
RA IK 3	ICE HARBOR D	FISHOOK PARK	01MY78-06MY78			3.1	C075.OM	P	1	0.033	1	0.035	10MY	10MY	10MY	130	54
	TIMING & EFFICIENCY																
LD IS 2	ICE HARBOR D	FISHOOK PARK	30AP79-05MY79			3.9	C075.OM	P	2	0.052	3	0.088	14MY	02JL	03JL	240	8
	FOREBAY CONTROL																
LD IS 3	ICE HARBOR D	FISHOOK PARK	05MY79-12MY79			3.9	C075.OM	P	3	0.077	3	0.085	17MY	21MY	06JN	155	30
	FOREBAY CONTROL						C016.ON	P	2	0.051			21MY	21MY	29MY	125	34
LD IS 4	ICE HARBOR D	FISHOOK PARK	14MY79-18MY79			3.8	C075.OS	B	1	0.027	1	0.028	31MY	31MY	31MY	130	28
	FOREBAY CONTROL																
RD IS 1	ICE HARBOR D	FISHOOK PARK	21MY79-24MY79			0.9	C075.OM	P	2	0.228	2	0.250	01JN	02JN	03JN	137	40
	FOREBAY CONTROL																

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SPECIES: YEARLING CHINOOK

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	PURPOSE OF RELEASE		OTHER MARKS													
LP HE 1	JOHN D/DESCHUTE	BLALOCK	S/WM SP TR 23SE79-01MY80		0.2	C016.ON	P	2	0.939			08MY	08MY	09MY	160	0
*			(TWO SOURCES)71830													
LA HE 3	JOHN D/DESCHUTE	BLALOCK	S/WM SP TR 18MR80-11MY80		0.6	C075.OM	P	1	0.159	2	0.265	09MY	09MY	09MY	125	6
*	JOHN DAY EFFICIENCY/WM		SP RIVER EV 348 W CWT 072149/J.D.			C016.ON	P	1	0.159			13MY	13MY	13MY	145	6
RA HE 1	JOHN D/DESCHUTE	BLALOCK	S/WM SP TR 18AP80-25AP80		1.0	C075.OM	P	1	0.105	1	0.153	08MY	08MY	08MY	130	15
*	JOHN DAY EFFICIENCY/WM		SP RIVER EV 309 W CWT 072149/J.D.													
RA HE 3	JOHN D/DESCHUTE	BLALOCK	S/WM SP TR 08MY80-23MY80		2.0	C016.ON	P	1	0.050			16MY	16MY	16MY	145	45
*	JOHN DAY EFFICIENCY/WM		SP RIVER EV 932 W CWT 072149/J.D.													

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	RECAPTURES ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS													
LA E 2	JOHN DAY D	BLALOCK SHORE	24MY77-26MY77		4.3	C075.OM	P	1	0.024	2	0.042	08JN	08JN	08JN	180	20
	EFFICIENCY															
RA E 1	JOHN DAY D	BLALOCK SHORE	12MY78		0.5	C075.OM	P	2	0.394	2	0.484	17MY	17MY	17MY	172	60
	TIMING AND EFFICIENCY															
RA E 2	JOHN DAY D	BLALOCK SHORE	13MY78		0.4	C075.OM	P	2	0.454	2	0.532	18MY	19MY	19MY	177	50
	TIMING AND EFFICIENCY															
RP E 4	JOHN DAY D	BLALOCK SHORE	19MY78		0.2	C075.OM	P	1	0.493	1	0.626	26MY	26MY	26MY	155	43
	TIMING AND EFFICIENCY					C016.ON	P	3	1.478			25MY	25MY	25MY	138	60
LP SP 1	JOHN DAY D	BLALOCK SHORE	08MY79		0.2	C075.OM	P	1	0.491	1	0.516	16MY	16MY	16MY	150	38
	EFFICIENCY															
RP HE 3	JOHN DAY D	BLALOCK MID R	10MY80		0.4	C016.ON	P	1	0.224			16MY	16MY	16MY	150	60
	EFFICIENCY REL															
RA SP 1	JOHN DAY D	BLALOCK SHORE	21MY80		0.4	C016.ON	P	1	0.249			06MY	06MY	06MY	132	-23
	EFFICIENCY REL															

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
071940	JOHN DAY R WILD STOCK EVAL.	JOHN D@GRANITE CR	07JN79-01JL79 RECOVERED 1980		50	8.0	C075.0M	P	1	0.013	2	0.021	05JN	05JN	05JN	104	1
070106	JOHN DAY R WILD STOCK EVAL.	N FK JOHN D@RM 60	10JN79	75		9.5	C075.0S	B	2	0.021	3	0.027	07MY	28JN	29JN	116	37
							C075.0M	P	1	0.011	1	0.012	17JN	17JN	17JN	110	96

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
131105	KALAMA FALLS HA STOCK EVALUATION	KALAMA R@RM 15	20MR77		7	60.2	C075.0S	B	96	0.160	274	0.456	14AP	15AP	03MY	163	3
631639	KALAMA FALLS HA	KALAMA R@RM 15	22JN77 RECOVERED 1978		113	145.7	C075.0S	B	2	0.002	2	0.002	22MR	23MR	14AP	220	0
631655	KALAMA FALLS HA	KALAMA R@RM 15	23JN77 RECOVERED 1978		76	97.4	C075.0S	B	3	0.004	23	0.024	17JA	15MR	27MR	95	0
							C075.0M	P	1	0.002	1	0.002	03MY	03MY	03MY	130	0
631719	KALAMA FALLS HA SNAKE RIVER EGG BANK	KALAMA R@RM 15	28OC77 HAND ADJUSTED RECOVERED 1978		19	87.5	C075.0S	B	8	0.010	10	0.011	27MR	04AP	27AP	150	0
							C075.0M	P	2	0.003	3	0.003	25AP	08MY	08MY	130	0
							C016.0N	P	1	0.002			05MY	05MY	05MY	125	0
							C007.0S	B	1	0.002			04MY	04MY	04MY	160	0
631705	KALAMA FALLS HA STOCK EVALUATION	KALAMA R@RM 15	23MR78 HAND ADJUSTED		5	51.5	C075.0S	B	68	0.133	119	0.231	27MR	09AP	25AP	160	4
							C075.0M	P	10	0.020	17	0.033	27MR	21AP	29AP	195	3
							C016.0N	P	6	0.012			20AP	26AP	01MY	142	4
631746	KALAMA FALLS HA	KALAMA R@RM 15	12JL78 RECOVERED 1979	68	108	150.5	C075.0S	B	2	0.002	5	0.004	06AP	06AP	06AP	116	0
631747	KALAMA FALLS HA ATPASE RELEASE	KALAMA R@RM 15	15SE78 RECOVERED 1979		34	140.9	C075.0S	B	8	0.006	16	0.012	02AP	08AP	23AP	123	0
631957	KALAMA FALLS HA COL RIVER FALL CHIN EVAL	KALAMA R@RM 15	22JN79-13JL79 RECOVERED 1980		180	209.7	C075.0S	B	1	0.001	2	0.001	15AP	15AP	15AP	105	0
632105	KALAMA R	KALAMA R@RM 15	01JN80 RECOVERED 1981		157	100.4	C075.0S	B	1	0.001	2	.003	13AP	13AP	13AP	124	0

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
631609	KLICKITAT HAT	RINGOLD HAT	13MR78		10	98.5	C075.OS	B	6	0.007	7	0.007	06AP	08AP	08AP	195	20
	PROD. EVALUATION		HAND ADJUSTED				C075.OM	P	39	0.040	71	0.072	07AP	27AP	10JN	166	10
							C016.ON	P	8	0.009			28AP	03MY	21JN	155	11
131103	KLICKITAT HAT	KLICKITAT R	30AP77		7	100.3	C075.OS	B	3	0.003	3	0.004	08MY	09MY	30MY	166	31
	PNRC UPER COL R EVALU.						C075.OM	P	5	0.005	18	0.018	11MY	11MY	11MY	157	26
631601	KLICKITAT HAT	KLICKITAT R	31MR78		10	144.9	C075.OS	B	23	0.016	36	0.025	07AP	08AP	27AP	146	20
	VACC.CONTR.PROD. EVAL		HAND ADJUSTED				C075.OM	P	50	0.035	51	0.035	17AP	21AP	08MY	149	12
							C016.ON	P	25	0.018			20AP	01MY	12MY	152	11
631602	KLICKITAT HAT	KLICKITAT R	31MR78		10	146.3	C075.OS	B	21	0.015	25	0.017	11AP	22AP	03MY	147	14
	TEST VAC. SEPTICEM		HAND ADJUSTED				C075.OM	P	55	0.038	78	0.053	10AP	27AP	19MY	148	11
							C016.ON	P	44	0.031			20AP	01MY	22MY	145	11
							C009.ON	B	1	0.001			02MY	02MY	02MY	140	11
							C007.OS	B	1	0.001			04MY	04MY	04MY	155	10
631608	KLICKITAT HAT	KLICKITAT R	31MR78		10	91.6	C075.OS	B	73	0.080	137	0.150	03AP	11AP	04MY	170	26
	PROD EVALUATION		HAND ADJUSTED				C075.OM	P	16	0.018	29	0.032	12AP	23AP	31MY	180	12
							C016.ON	P	19	0.021			21AP	28AP	08MY	164	12
631663	KLICKITAT HAT	KLICKITAT R	06JN78		87	136.3	C075.OM	P	1	0.001	1	0.001	09JN	09JN	09JN	135	0
	PRODUCTION EVAL.		RECOVERED 1979				C016.ON	P	1	0.001			06SE	06SE	06SE	295	0
631733	KLICKITAT HAT	KLICKITAT R	27MR79		7	106.3	C075.OS	B	2	0.002	2	0.003	19JN	28JN	29JN	270	3
	STOCK EVAL COWLITZ						C075.OM	P	92	0.087	125	0.118	10AP	24AP	08JN	176	10
							C016.ON	P	8	0.008			26AP	07MY	19SE	162	8
							4005.O	P	1	0.001			15AU	15AU	15AU	340	2
631732	KLICKITAT HAT	KLICKITAT R	30MR79		10	94.6	C075.OS	B	15	0.016	22	0.023	12AP	19AP	27AP	158	14
	STOCK EVAL. KLICKITAT						C075.OM	P	30	0.032	39	0.041	18AP	01MY	20MY	157	9
							C016.ON	P	6	0.007			04MY	04MY	07MY	155	10
631734	KLICKITAT HAT	KLICKITAT R	30MR79		10	103.3	C075.OS	B	18	0.018	27	0.027	10AP	17AP	10JN	167	16
	STOCK EVAL WIND R						C075.OM	P	62	0.060	85	0.082	05AP	27AP	27MY	162	10
							C016.ON	P	12	0.012			26AP	04MY	07MY	159	10
							4005.O	P	1	0.001			14MY	14MY	14MY	180	8
631750	KLICKITAT HAT	KLICKITAT R	30MR79		10	94.2	C075.OS	B	19	0.021	28	0.031	06AP	17AP	01MY	183	16
	STOCK EVAL WELLS						C075.OM	P	68	0.073	94	0.100	09AP	24AP	06JN	188	11
							C016.ON	P	7	0.008			26AP	04MY	11MY	178	10

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
101314	KOOSKIA HAT	LOCHSA R	20AP78		30	52.7	C075.OS	B	2	0.004	3	0.006	06MY	06MY	06MY	117	59
*	AGE"1" RELEASE		(LDSU1:10,685)				C075.OM	P	22	0.042	30	0.058	03MY	22MY	17JN	137	30
							C016.ON	P	10	0.019			12MY	17MY	22JN	140	37
LD SU 1	KOOSKIA HAT	LOCHSA R	20AP78		30	10.7	C075.OS	B	1	0.010	1	0.013	12MY	12MY	12MY	145	43
*	AGE "1" RELEASE		(101314)				C075.OM	P	11	0.103	15	0.138	06MY	14MY	23MY	131	40
							C016.ON	P	3	0.029			17MY	26MY	01JN	115	28
100217	KOOSKIA HAT	CLEAR CR	20AP77-30AP77			60.0	C075.OM	P	8	0.014	30	0.050	06MY	12MY	31MY	149	36
100218	KOOSKIA HAT	CLEAR CR	20AP77-30AP77			60.0	C075.OM	P	1	0.002	3	0.006	31MY	31MY	31MY	103	19
100330	KOOSKIA HAT	CLEAR CR	12AP78	125	26	83.8	C075.OS	B	1	0.002	1	0.002	06MY	06MY	06MY	120	33
*	INDENTIFICATION-AGE		(LAPP2;40,000)				C075.OM	P	34	0.041	35	0.042	25AP	10MY	09JN	133	27
			HAND ADJUSTED				C016.ON	P	6	0.008			03MY	05MY	17MY	106	37
							C009.ON	B	1	0.002			30MY	30MY	30MY	90	18
LA PP 2	KOOSKIA HAT	CLEAR CR	12AP78	125	26	40.0	C075.OM	P	18	0.046	25	0.063	01MY	12MY	20MY	130	26
*	IDENTIFICATION-AGE 1		(100330)				C016.ON	P	8	0.021			05MY	12MY	22MY	107	28
100329	KOOSKIA HAT	CLEAR CR	15MY78		41	51.0	C075.OM	P	35	0.069	57	0.113	30MY	15JN	30JN	120	26
*			(LASU3)				C016.ON	P	3	0.006			16JN	19JN	22JN	121	24
LA SU 3	KOOSKIA HAT	CLEAR CR	15MY78			11.0	C075.OM	P	7	0.064	10	0.094	20MY	12JN	20JN	117	28
*			(100329)				C016.ON	P	2	0.019			17MY	17MY	01JN	90	426
050532	KOOSKIA HAT	CLEAR CR	16AP80		22	61.3	C075.OM	P	14	0.023	27	0.044	29AP	04MY	23MY	123	44
							C016.ON	P	5	0.009			01MY	06MY	06MY	121	43
100519	KOOSKIA HAT	CLEAR CR	07AP81		15	17.9	C075.OM	P	2	0.012	4	0.023	29AP	29AP	14MY	126	36
	AGE AT RELEASE-STOCK EVAL																
102219	KOOSKIA HAT	CLEAR CR	07AP81		13	37.7	C075.OS	B	1	0.003	1	0.003	11JN	11JN	11JN	216	12
	AGE AT RELEASE-STOCK EVAL						C075.OM	P	2	0.006	4	0.012	23AP	24AP	07MY	158	47
102220	KOOSKIA HAT	CLEAR CR	08AP81		16	38.6	C075.OM	P	4	0.011	7	0.020	29AP	03MY	15MY	124	32
	AGE AT RELEASE-STOCK EVAL																
RD IJ 1	KOOSKIA HAT	BLW BONN D	21AP77	130	20	48.0	C075.OS	B	2	0.005	2	0.005	06MY	07MY	08MY	117	10
	BARGE TRANSPORT						C075.OM	P	4	0.009	20	0.042	04MY	09MY	11MY	138	9
RA L 1	KOOSKIA HAT	BLW BONN D	26AP78	125	25	37.0	C075.OS	B	9	0.025	10	0.029	02MY	04MY	08MY	125	19
*	TEST		(WHRDLB,RAL1)				C075.OM	P	13	0.036	16	0.045	01MY	02MY	12MY	112	26
							C016.ON	P	7	0.019			03MY	08MY	19MY	136	18
RA L 2	KOOSKIA HAT	BLW BONN D	26AP78	125	25	36.9	C075.OS	B	8	0.022	9	0.026	02MY	06MY	09MY	132	16
*	TEST		(WHRDPK,RAL2)				C075.OM	P	14	0.038	17	0.046	01MY	03MY	12MY	116	22
							C016.ON	P	5	0.014			03MY	08MY	12MY	136	18
WHRDLB	KOOSKIA HAT	BLW BONN D	26AP78	125	25	37.0	C075.OM	P	4	0.011	5	0.014	31MY	31MY	07JN	135	4
*	TEST		(WHRDLB,RAL1)				C007.OS	B	1	0.003			05MY	05MY	05MY	115	25
RA L 3	KOOSKIA HAT	BLW BONN D	28AP78	125	25	35.4	C075.OS	B	6	0.017	7	0.020	02MY	05MY	06MY	121	22
*	TEST		(WHRDPK,RAL3)				C075.OM	P	14	0.040	16	0.046	01MY	04MY	12MY	121	26
							C016.ON	P	10	0.029			05MY	08MY	17MY	133	21
RA L 4	KOOSKIA HAT	BLW BONN D	28AP78	125	25	37.1											
*	TEST		(WHRDXY,RAL4)				C075.OS	B	9	0.024	10	0.023	03MY	06MY	09MY	133	19
							C075.OM	P	6	0.017	8	0.021	01MY	07MY	10MY	136	17

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
RA L 4	KOOSKIA HAT	BLW BONN D	28AP78	125	25	37.1	C018.0S	P	1	0.003			10MY	10MY	10MY	110	18
*	TEST		(WHRDXY,RAL4)														
							C016.0N	P	9	0.025			05MY	10MY	17MY	120	18
							C007.0S	B	2	0.006			04MY	04MY	18MY	105	37
WHRDXY	KOOSKIA HAT	BLW BONN D	28AP78	125	25	37.1	C075.0M	P	9	0.025	11	0.031	24MY	02JN	10JN	125	4
*	TEST		(WHRDXY,RAL4)														
							C016.0N	P	2	0.006			02JN	02JN	02JN	130	6
							C007.0S	B	2	0.006			22MY	22MY	26MY	110	9
050529	KOOSKIA HAT	BLW BONN D	23AP80-05MY80		22	62.3	C075.0S	B	8	0.013	10	0.017	06MY	07MY	09MY	128	11
	NMFS BARGE TRANSPORT STUDY						C075.0M	P	18	0.029	34	0.055	28AP	05MY	10MY	125	13
							C016.0N	P	18	0.029			28AP	08MY	20MY	125	14

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LD IL 2	LEAVENWORTH HAT	PATEROS FERRY	05MY80			15.0	C075.0M	P	5	0.034	9	0.057	27MY	05JN	11JN	145	25
	SYSTEMS TEST																
RD IL 2	LEAVENWORTH HAT	PATEROS FERRY	05MY80			13.9	C075.0M	P	2	0.015	3	0.022	09JN	09JN	10JN	152	22
	SYSTEMS TEST																
LD F 1	LEAVENWORTH HAT	PATEROS FERRY	10MY80			16.4	C075.0M	P	6	0.037	10	0.059	28MY	10JN	11JN	143	25
	SYSTEMS TEST																
RD F 1	LEAVENWORTH HAT	PATEROS FERRY	10MY80			15.3	C075.0M	P	2	0.014	3	0.022	28MY	29MY	06JN	160	40
	SYSTEMS TEST																
LD IY 3	LEAVENWORTH HAT	PATEROS FERRY	13MY80			15.3	C075.0M	P	7	0.046	13	0.088	28MY	11JN	14JN	146	26
	SYSTEMS TEST																
RD IY 3	LEAVENWORTH HAT	PATEROS FERRY	13MY80			13.4	C075.0M	P	1	0.008	1	0.012	06JN	06JN	06JN	160	32
	SYSTEMS TEST																
131213	LEAVENWORTH HAT	ICICLE CR	13AP77	132		104.0	C075.0M	P	5	0.005	11	0.011	31MY	02JN	09JN	154	14
	CONTROL HAUL																
131211	LEAVENWORTH HAT	ICICLE CR	19AP77	132		99.6	C075.0S	B	1	0.002	1	0.002	13JN	13JN	13JN	178	13
	CONTROL TRANSPORTATION						C075.0M	P	4	0.005	7	0.008	31MY	07JN	09JN	139	15
631702	LEAVENWORTH HAT	ICICLE CR	25AP78	140	15	95.2	C075.0M	P	67	0.071	86	0.090	28AP	22MY	28JN	148	26
	PROD. EVAL.	CONTROL TRANS	HAND ADJUSTED				C016.0N	P	16	0.017			26AP	22MY	02JN	156	29
631703	LEAVENWORTH HAT	ICICLE CR	25AP78	140	15	94.4	C075.0M	P	47	0.050	66	0.070	09MY	23MY	06JN	146	26
CONTROLLED HAUL			HAND ADJUSTED				C016.0N	P	16	0.017			17MY	22MY	05JL	152	29
631809	LEAVENWORTH HAT	ICICLE CR	26AP79		16	97.5	C075.0S	B	1	0.002	1	0.002	22MY	22MY	22MY	130	27
	HATCHERY EVAL						C075.0M	P	103	0.106	136	0.140	12MY	29MY	08JN	145	22
							C018.0S	P	3	0.004			30MY	30MY	30MY	125	23
							C016.0N	P	2	0.003			26MY	26MY	07JN	140	26
631810	LEAVENWORTH HAT	ICICLE CR	26AP79		16	100.4	C075.0M	P	86	0.086	115	0.115	17MY	28MY	05JN	144	22
	HAULING STUDY						C029.0S	P	1	0.001			17MY	17MY	17MY	179	36
							C018.0S	P	2	0.002			30MY	30MY	30MY	148	23
							C016.0N	P	1	0.001			14JN	14JN	14JN	150	16
036102	LEAVENWORTH HAT	ICICLE CR	24AP80-01MY80	129		96.6	C075.0M	P	1	0.002	2	0.002	12JN	12JN	12JN	155	15
*	HOMING,FALL CONTROL		CWT 036102,LAPP,2				4007.1S	P	1	0.002			06JN	06JN	06JN	158	18
LA PI 1	LEAVENWORTH HAT	ICICLE CR	24AP80	129		32.8	C075.0M	P	4	0.013	10	0.030	16MY	20MY	27MY	125	27
*	HOMING,SPRING CONTROL		CWT 034602,LAPI,1				C016.0N	P	2	0.007			16MY	16MY	19MY	128	35
LA PP 2	LEAVENWORTH HAT	ICICLE CR	24AP80-01MY80	129		96.6	C075.0M	P	15	0.016	29	0.030	23MY	29MY	11JN	138	20
*	HOMING,FALL CONTROL		CWT 036102,LAPP,2				C016.0N	P	2	0.003			13MY	13MY	16MY	147	41
							4006.3S	P	1	0.002			29MY	29MY	29MY	135	22
							4006.3N	P	1	0.002			29MY	29MY	29MY	127	22
							4006.1S	P	1	0.002			29MY	29MY	29MY	142	22
LA PI 2	LEAVENWORTH HAT	ICICLE CR	27AP80	129		32.9	C075.0M	P	6	0.019	13	0.041	16MY	27MY	03JN	141	24
*	HOMING,SPRING CONTROL		CWT 034702,LAPI,2				C016.0N	P	1	0.004			16MY	16MY	16MY	150	41
LA PI 4	LEAVENWORTH HAT	ICICLE CR	01MY80			33.1	C075.0M	P	4	0.013	8	0.025	23MY	28MY	05JN	147	26
*	HOMING,SPRING CONTROL		CWT 035102,LAPI,4														
LD IH 1	LEAVENWORTH HAT	VANTAGE BRID	11MY79			49.8	C075.0S	B	2	0.005	2	0.005	02JN	03JN	19JN	155	26
	TURBINE MORTALITY CONTROL						C075.0M	P	83	0.167	100	0.202	27MY	30MY	17JN	146	32
							C016.0N	P	5	0.011			29MY	04JN	04JN	148	27
RD IZ 4	LEAVENWORTH HAT	VANTAGE BRID	11MY79			55.9	C075.0M	P	94	0.169	125	0.224	22MY	29MY	09JN	150	33
	TURBINE MORTALITY CONTROL																
LD IZ 1	LEAVENWORTH HAT	VANTAGE BRID	12MY79			62.6	C075.0M	P	95	0.152	117	0.187	22MY	30MY	09JN	144	33
	TURBINE MORTALITY CONTROL																

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LD IZ 1	LEAVENWORTH HAT	VANTAGE BRID	12MY79			62.6	C018.0S	P	1	0.002			30MY	30MY	30MY	155	36
	TURBINE MORTALITY CONTROL																
RD IZ 2	LEAVENWORTH HAT	VANTAGE BRID	12MY79			50.0	C075.0M	P	94	0.189	118	0.237	23MY	30MY	09JN	144	33
	TURBINE MORTALITY CONTROL						C018.0S	P	2	0.005			30MY	30MY	30MY	135	36
							C016.0N	P	4	0.009			29MY	29MY	29MY	145	39
RD IH 1	LEAVENWORTH HAT	WANAPUM D	13MY79			38.4	C075.0S	B	1	0.003	1	0.003	05JN	05JN	05JN	150	26
	TURBINE MORTALITY TEST						C075.0M	P	91	0.237	112	0.293	25MY	30MY	27JN	152	35
RD IZ 1	LEAVENWORTH HAT	WANAPUM D	13MY79			49.0	C075.0S	B	2	0.005	2	0.005	05JN	24JN	25JN	190	14
	TURBINE MORTALITY TEST						C075.0M	P	99	0.203	123	0.251	22MY	30MY	16JN	147	35
							C016.0N	P	3	0.007			29MY	04JN	07JN	152	30
							4005.0	P	1	0.003			08JN	08JN	08JN	155	25
LD IZ 2	LEAVENWORTH HAT	WANAPUM D	14MY79			52.4	C075.0S	B	2	0.004	2	0.005	05JN	05JN	05JN	152	27
	TURBINE MORTALITY TEST						C075.0M	P	81	0.155	98	0.188	27MY	31MY	17JN	147	35
							C016.0N	P	2	0.004			29MY	29MY	04JN	145	44
							C014.0S	P	1	0.002			31MY	31MY	31MY	145	39
RD IZ 3	LEAVENWORTH HAT	WANAPUM D	14MY79			62.5	C075.0M	P	100	0.161	129	0.207	23MY	30MY	12JN	143	37
	TURBINE MORTALITY TEST						C016.0N	P	1	0.002			11JN	11JN	11JN	155	23
131212	LEAVENWORTH HAT	BLW PR RAPID D	01MY77	132		101.4	C075.0M	P	7	0.007	12	0.013	08JN	07JN	08JN	142	15
	TRANSPORT																
631704	LEAVENWORTH HAT	BLW PR RAPID D	08MY78-09MY78	140	15	94.6	C075.0M	P	80	0.085	109	0.115	20MY	24MY	03JN	147	35
	HAULING STUDY,P.R. REL		HAND ADJUSTED				C016.0N	P	35	0.037			22MY	25MY	05JN	155	37
							C009.0N	B	2	0.003			30MY	30MY	30MY	155	29
631808	LEAVENWORTH HAT	BLW PR RAPID D	15MY79		16	94.8	C075.0S	B	2	0.003	2	0.003	01JN	08JN	09JN	140	23
	HAULING STUDY						C075.0M	P	162	0.171	195	0.206	19MY	30MY	18JN	147	38
							C018.0S	P	2	0.003			30MY	30MY	30MY	155	41
							C016.0N	P	6	0.007			26MY	29MY	11JN	165	44
LD IL 3	LEAVENWORTH HAT	BLW PR RAPID D	20MY80			15.2	C075.0M	P	5	0.033	9	0.062	29MY	03JN	06JN	142	40
	SYSTEMS TEST																
RD IL 3	LEAVENWORTH HAT	BLW PR RAPID D	20MY80			14.8	C075.0S	B	1	0.007	1	0.008	27JN	27JN	27JN	180	15
	SYSTEMS TEST						C075.0M	P	3	0.021	7	0.047	27MY	29MY	03JN	120	63
LD F 2	LEAVENWORTH HAT	BLW PR RAPID D	22MY80			16.2	C075.0M	P	3	0.019	6	0.036	02JN	04JN	06JN	148	43
	SYSTEMS TEST																
RD F 2	LEAVENWORTH HAT	BLW PR RAPID D	22MY80			15.5	C075.0M	P	13	0.084	22	0.140	02JN	05JN	10JN	147	40
	SYSTEMS TEST																
LD IY 2	LEAVENWORTH HAT	BLW PR RAPID D	27MY80			15.3	C075.0M	P	16	0.105	25	0.162	05JN	07JN	11JN	139	51
	SYSTEMS TEST																
RD IY 2	LEAVENWORTH HAT	BLW PR RAPID D	27MY80			13.2	C075.0M	P	7	0.053	11	0.082	05JN	06JN	07JN	147	56
	SYSTEMS TEST																
034902	LEAVENWORTH HAT	WH BLUFFS	24AP80	129		32.6	C016.0N	P	1	0.004			13MY	13MY	13MY	135	31
*	HOMING.CHANNEL	MIGRANTS TEST #1	CWT 034902,LAPP,1				4005.1S	P	1	0.004			28MY	28MY	28MY	131	17
035002	LEAVENWORTH HAT	WH BLUFFS	24AP80	129		35.4	C075.0M	P	1	0.003	2	0.005	15MY	15MY	15MY	131	25
*	HOMING.CHANNEL	MIGRANTS TEST #1	CWT 035002,LAS,1				C016.0N	P	1	0.003			13MY	13MY	13MY	166	31
LA PP 1	LEAVENWORTH HAT	WH BLUFFS	24AP80	129		32.6	C075.0M	P	13	0.040	26	0.079	08MY	17MY	28MY	140	23
*	HOMING.CHANNEL	MIGRANTS TEST #1	CWT 034902,LAPP,1				C016.0N	P	5	0.016			06MY	13MY	16MY	140	31
							4005.3S	P	1	0.004			28MY	28MY	28MY	162	17
LA S 1	LEAVENWORTH HAT	WH BLUFFS	24AP80	129		35.4	C075.0M	P	15	0.043	28	0.078	09MY	16MY	11JN	145	24
*	HOMING.CHANNEL	MIGRANTS TEST #1	CWT 035002,LAS,1														

SPECIES: YEARLING CHINOOK

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	PURPOSE OF RELEASE		OTHER MARKS														
LA S 1	LEAVENWORTH HAT	WH BLUFFS	24AP80	129		35.4	C016.0N	P	10	0.029			09MY	13MY	16MY	133	31
*	HOMING.CHANNEL	MIGRANTS TEST #1	CWT 035002,LAS,1				4005.3N	P	1	0.003			28MY	28MY	28MY	120	17
LA PI 3	LEAVENWORTH HAT	WH BLUFFS	01MY80			32.0	C075.0M	P	12	0.038	29	0.090	16MY	22MY	28MY	138	25
*	HOMING.CHANNEL	MIGRANTS TEST #1	CWT 034802,LAPI,3														
LD IL 1	LEAVENWORTH HAT	RICHLAND WASH	22MY80			15.9	C075.0M	P	4	0.026	10	0.064	27MY	30MY	06JN	141	58
	SYSTEMS TEST																
RD IL 1	LEAVENWORTH HAT	RICHLAND WASH	22MY80			13.7	C075.0M	P	6	0.044	10	0.077	27MY	05JN	07JN	143	33
	SYSTEMS TEST						4008.2S	P	1	0.008			05JN	05JN	05JN	153	38
LD F 3	LEAVENWORTH HAT	RICHLAND WASH	26MY80			16.3	C075.0M	P	6	0.037	10	0.065	02JN	05JN	06JN	148	47
	SYSTEMS TEST																
RD F 3	LEAVENWORTH HAT	RICHLAND WASH	26MY80			15.8	C075.0M	P	8	0.051	13	0.081	05JN	05JN	06JN	143	47
	SYSTEMS TEST																
LD IY 1	LEAVENWORTH HAT	RICHLAND WASH	29MY80			15.4	C075.0M	P	10	0.065	15	0.098	06JN	06JN	10JN	141	58
	SYSTEMS TEST						C016.0N	P	1	0.007			20JN	20JN	20JN	150	24
RD IY 1	LEAVENWORTH HAT	RICHLAND WASH	29MY80			13.9	C075.0M	P	6	0.044	9	0.067	05JN	07JN	09JN	143	52
	SYSTEMS TEST																
034302	LEAVENWORTH HAT	DALTON PT	24AP80	129		32.4	C016.0N	P	1	0.004			02MY	02MY	02MY	132	24
*	HOMING:PEN HOLDING TEST #3		CWT 034302,RA9,1														
RA 9 1	LEAVENWORTH HAT	DALTON PT	24AP80	129		32.4	C075.0S	B	5	0.016	7	0.021	29AP	05MY	08MY	135	12
*	HOMING:PEN HOLDING TEST #3		CWT 034302,RA9.1				C075.0M	P	9	0.028	16	0.051	28AP	02MY	10MY	126	16
							C016.0N	P	5	0.016			07MY	09MY	19MY	133	13
RA IK 1	LEAVENWORTH HAT	DALTON PT	24AP80	129		33.0	C075.0S	B	8	0.025	12	0.036	01MY	05MY	07MY	133	12
*	HOMING.CHANNEL	MIGRANTS TEST #2	CWT 035202,RAIK,1				C075.0M	P	14	0.043	27	0.082	02MY	05MY	10MY	123	12
							C016.0N	P	12	0.037			05MY	07MY	16MY	124	15
RA 9 2	LEAVENWORTH HAT	DALTON PT	27AP80	129		32.7	C075.0S	B	9	0.028	14	0.043	01MY	04MY	09MY	138	19
*	HOMING,PEN HOLDING TEST #3		CWT 034402,RA9,2				C075.0M	P	6	0.019	12	0.036	30AP	04MY	05MY	134	19
							C016.0N	P	4	0.013			06MY	08MY	12MY	140	17
RA IK 2	LEAVENWORTH HAT	DALTON PT	27AP80			32.8	C075.0S	B	23	0.071	33	0.102	03MY	06MY	08MY	128	15
*	HOMING.CHANNEL	MIGRANTS TEST #2	CWT 035302,RAIK,2				C075.0M	P	6	0.019	10	0.032	05MY	09MY	12MY	135	11
							C016.0N	P	7	0.022			05MY	07MY	13MY	133	19
035402	LEAVENWORTH HAT	DALTON PT	01MY80			32.6	C075.0M	P	2	0.007	4	0.013	05MY	05MY	06MY	138	33
*	HOMING.CHANNEL	MIGRANTS TEST #2	CWT 035402,RAIK,3														
RA 9 3	LEAVENWORTH HAT	DALTON PT	01MY80			32.5	C075.0S	B	18	0.056	24	0.074	05MY	07MY	10MY	131	22
*	HOMING.PEN HOLDING TEST #3		CWT 034502,RA9,3				C075.0M	P	9	0.028	18	0.056	05MY	05MY	08MY	131	33
							C016.0N	P	6	0.019			05MY	06MY	16MY	134	38
RA IK 3	LEAVENWORTH HAT	DALTON PT	01MY80			32.6	C075.0S	B	24	0.074	31	0.095	05MY	07MY	12MY	133	22
*	HOMING.CHANNEL	MIGRANTS TEST #2	CWT 035402,RAIK,3				C075.0M	P	8	0.025	17	0.053	05MY	06MY	19MY	127	26
							C016.0N	P	7	0.022			08MY	09MY	21MY	133	24
							4006.3S	P	1	0.004			29MY	29MY	29MY	156	7

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
010105	LEWIS R	LEWIS R	15MY79-30MY79		300	29.8	C075.0M	P	1	0.004	2	0.006	17JN	17JN	17JN	69	0
	WILDSTOCK SEINED TAG REL IN RIVER		RECOVERED 1980														
631910	LEWIS R	LEWIS R	25MY79-08JN79		250	30.7	C075.0S	B	1	0.004	1	0.004	23AP	23AP	23AP	117	0
	WILDSTOCK SEINED TAG REL. IN RIVER		RECOVERED 1980														
631859	LEWIS R	LEWIS R	13JL79-26JL79		200	23.4	C075.0S	B	2	0.009	5	0.022	17MR	17MR	29AP	110	0
	WILDSTOCK SEINED TAG REL. IN RIVER		RECOVERED 1980				4003.1S	P	1	0.005			30MY	30MY	30MY	160	0
632207	LEWIS R	LEWIS R	01JN80		310	26.2	C075.0S	B	1	0.004	1	0.005	25AP	25AP	25AP	128	0
			RECOVERED 1981														
632021	LEWIS R	LEWIS R	01JL80		195	63.0	C075.0S	B	1	0.002	1	0.002	10MY	10MY	10MY	128	0
	WILD REARED 3 MONTHS		RECOVERED 1981														
632160	LEWIS R	LEWIS R	01JL80		150	103.7	C075.0S	B	2	0.002	6	0.007	19MR	20MR	30MR	105	0
			RECOVERED 1981														

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SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
631920	LEWIS R HAT	LEWIS R	05SE79		28	51.7	C075.0S	B	1	0.002	2	0.005	28AP	27AP	28AP	115	0
	COL. R. F. CH. EVAL REARED 3 MONTH		RECOVERED 1980														

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SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LO IU 1	LIT GOOSE D	LIT GOOSE TAIL	02MY77			19.3	C075.0M	P	1	0.006	3	0.017	31MY	31MY	31MY	140	19
	BACKROL RELEASE																
LA PI 1	LIT GOOSE D	LIT GOOSE TAIL	11AP78-21AP78			17.2	C075.0M	P	11	0.065	14	0.082	28AP	04MY	06MY	123	24
*	TAILRACE CONTROL		(WHORPK)														
WHORPK	LIT GOOSE D	LIT GOOSE TAIL	11AP78-28AP78			36.8	C007.0S	B	1	0.003			12MY	12MY	12MY	135	20
*	TAILRACE CONTROL		(LAPI1,2)														
LA PI 2	LIT GOOSE D	LIT GOOSE TAIL	24AP78-28AP78			9.7	C075.0M	P	2	0.021	3	0.031	06MY	07MY	13MY	135	43
*	TAILRACE CONTROL		(WHORPK)				C016.0N	P	8	0.083			08MY	08MY	12MY	120	44
LA PI 3	LIT GOOSE D	LIT GOOSE TAIL	01MY78-06MY78			4.5	C075.0M	P	3	0.067	4	0.100	06MY	13MY	13MY	132	47
*	TAILRACE CONTROL		(WHYWBRBR)				C016.0N	P	1	0.023			17MY	17MY	17MY	155	39
LA PI 4	LIT GOOSE D	LIT GOOSE TAIL	12MY78-05JN78			5.1	C075.0M	P	2	0.040	3	0.057	31MY	02JN	03JN	125	27
*	CONTROL		(WHORGNRD,WHYWBRBR)				C016.0N	P	7	0.138			01MY	01JN	12JN	130	31
LA P 1	LIT GOOSE D	TEXAS RAPIDS	24AP80-02MY80			11.6	C075.0M	P	5	0.044	10	0.084	05MY	09MY	03JN	128	37
*	TAILRACE CONTROL		CWT ER				C016.0N	P	6	0.052			06MY	13MY	13MY	122	32
LA P 2	LIT GOOSE D	TEXAS RAPIDS	06MY80-15MY80			6.6	C075.0M	P	3	0.046	5	0.083	10MY	16MY	23MY	115	56
*	TAILRACE CONTROL		CWT ER				C016.0N	P	1	0.016			13MY	13MY	13MY	121	88
LA P 3	LIT GOOSE D	TEXAS RAPIDS	17MY80-30MY80			3.7	C075.0M	P	1	0.028	1	0.041	06JN	06JN	06JN	115	28
*	TAILRACE CONTROL		CWT ER														
RA AN 1	LIT GOOSE D	BLW BONN D	25AP77-17JN77			41.7	C075.0S	B	2	0.005	2	0.005	29MY	29MY	13JN	150	5
*	TRUCK TRANS FW		(WHORGN,RAAN1)														
RA AN 2	LIT GOOSE D	BLW BONN D	25AP77-15JN77			43.3	C075.0M	P	1	0.003	5	0.011	03JN	03JN	03JN	105	4
*	TRUCK TRANS W/SALT		(WHYWYW,RAAN2)														
RA J 1	LIT GOOSE D	BLW BONN D	10AP78-06MY78			45.0	C075.0S	B	1	0.003	1	0.003	13JN	13JN	13JN	220	2
*	FRESHWATER TRANSPORT		(WHRDOR,RAJ1)				C075.0M	P	34	0.076	50	0.111	14AP	28AP	08MY	128	9
							C016.0N	P	6	0.014			28AP	28AP	12MY	127	12
RA J 2	LIT GOOSE D	BLW BONN D	12AP78-05MY78			45.3	C075.0S	B	2	0.005	3	0.006	28AP	28AP	28AP	112	10
*	SALTWATER TRANSPORT		(WHRDLG,RAJ2)				C075.0M	P	21	0.047	35	0.079	17AP	21AP	08MY	135	17
							C016.0N	P	18	0.040			21AP	01MY	12MY	138	11
							C007.0S	B	1	0.003			31MY	31MY	31MY	130	5
WHRDOR	LIT GOOSE D	BLW BONN D	08MY78-12MY78			4.4	C016.0N	P	7	0.160			26AP	28AP	14JN	122	-20
*	FRESHWATER TRANSPORT		(RAJ3)														
RA J 4	LIT GOOSE D	BLW BONN D	11MY78-02JN78			3.3	C075.0M	P	5	0.150	7	0.208	05MY	19MY	20MY	126	19
*	SALT WATER TRANSP.		(WHORGNYW,WHRDLG)														
RA J 3	LIT GOOSE D	BLW BONN D	12MY78-30MY78			6.0	C075.0S	B	1	0.017	1	0.024	22MY	22MY	22MY	140	16
*	FRESH WATER TRANSP.		(WHRD,WHRDOR)				C075.0M	P	4	0.067	5	0.076	27AP	11MY	22MY	145	-154

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SPECIES: YEARLING CHINOOK

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	PURPOSE OF RELEASE		OTHER MARKS														
RD U 3	LIT WH SAL HAT	LIT WH SAL R@RM 2	02MY77	138		52.4	C075.0S	B	1	0.002	1	0.002	25JN	25JN	25JN	100	3
	STOCK IDENTIFICATION						C075.0M	P	1	0.002	4	0.007	11MY	11MY	11MY	151	21

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LA K 1	LO GRANITE D	CLARKSTON WASH	25AP77-06MY77			16.0	C075.0M	P	1	0.007	3	0.021	31MY	31MY	31MY	123	19
*	CONTROL TRANS		(WHYWGN,WHYWOR)														
RA K 2	LO GRANITE D	CLARKSTON WASH	25AP77			0.0	C075.0M	P	1	3.572	3	#.###	31MY	31MY	31MY	132	19
*	CONTROL TRANSPORT		(WHYWGN)														
WHYWGN	LO GRANITE D	CLARKSTON WASH	25AP77-13JN77			34.6	C075.0S	B	2	0.006	2	0.006	31MY	31MY	31MY	3	19
*	CONTROL TRANSPORT		(RAK2,LAK1,2,3,4)				C075.0M	P	3	0.009	8	0.024	31MY	31MY	08JN	131	19
LA IN 1	LO GRANITE D	CLARKSTON WASH	09AP79-19AP79			11.3	C075.0S	B	1	0.009	1	0.013	23AP	23AP	23AP	120	48
	FOREBAY CONTROL						C075.0M	P	13	0.115	16	0.145	27AP	03MY	25MY	125	28
							C029.0S	P	1	0.009			18MY	18MY	18MY	140	18
							C016.0N	P	3	0.027			04MY	07MY	26MY	155	26
LA IN 2	LO GRANITE D	CLARKSTON WASH	21MY79-04JN79			9.3	C075.0M	P	12	0.129	14	0.148	30MY	03JN	22JN	121	51
	FOREBAY CONTROL																
LA IS 1	LO GRANITE D	CLARKSTON WASH	09AP80-18AP80			5.7	C075.0S	B	1	0.018	1	0.025	24AP	24AP	24AP	105	44
	FOREBAY RELEASE						C075.0M	P	1	0.018	1	0.027	29AP	29AP	29AP	110	33
LA IS 2	LO GRANITE D	CLARKSTON WASH	21AP80-06MY80			15.0	C075.0M	P	3	0.020	5	0.033	10MY	15MY	05JN	110	28
	FOREBAY RELEASE						C016.0N	P	1	0.007			13MY	13MY	13MY	132	33
LA IS 3	LO GRANITE D	CLARKSTON WASH	09MY80-16MY80			3.0	C075.0M	P	1	0.033	2	0.079	03JN	03JN	03JN	150	27
	FOREBAY RELEASE						C016.0N	P	1	0.033			16MY	16MY	16MY	140	104
LA IS 4	LO GRANITE D	CLARKSTON WASH	23MY80-02JN80			5.4	C075.0M	P	4	0.075	6	0.112	06JN	07JN	09JN	123	44
	FOREBAY RELEASE																
LA P 2	LO GRANITE D	CLARKSTON WASH	01MY81			0.6	C075.0M	P	1	0.175	2	0.344	11MY	11MY	11MY	147	67
	EFFICIENCY:TRUCK																
LA P 3	LO GRANITE D	CLARKSTON WASH	05MY81-09MY81			0.7	C075.0M	P	1	0.150	1	0.214	19MY	19MY	19MY	106	48
	EFFICIENCY;TRUCK																
LA S 2	LO GRANITE D	CLARKSTON WASH	05MY81-09MY81			0.7	C075.0M	P	1	0.152	1	0.208	31MY	31MY	31MY	156	26
	EFFICIENCY:TRUCK																
LA P 4	LO GRANITE D	CLARKSTON WASH	11MY81-21MY81			1.7	C075.0M	P	1	0.060	1	0.065	21MY	21MY	21MY	105	67
	FOREBAY INDEXING																
LA P 1	LO GRANITE D	GRANITE ROCK	22AP81-27AP81			8.1	C075.0M	P	3	0.038	4	0.055	07MY	11MY	13MY	145	33
	EFFICIENCY																
LA P 1	LO GRANITE D	LO GRANITE RES	05AP78-15AP78			14.3	C075.0M	P	8	0.056	11	0.075	21AP	01MY	11MY	108	24
*	FOREBAY CONTROL		(WHRDWH)				C016.0N	P	7	0.049			20AP	26AP	08MY	128	33
WHRDWH	LO GRANITE D	LO GRANITE RES	05AP78-29AP78			31.7	C075.0M	P	1	0.004	1	0.004	10MY	10MY	10MY	150	18
*			(LAP1,2,3)				C007.0S	B	1	0.004			06JN	06JN	06JN	110	11
LA P 2	LO GRANITE D	LO GRANITE RES	18AP78-27AP78			15.2	C075.0M	P	9	0.060	12	0.077	27AP	06MY	13MY	162	35
*	FOREBAY CONTROL		(WHRDWH)				C016.0N	P	2	0.014			12MY	12MY	25MY	130	28
LA P 3	LO GRANITE D	LO GRANITE RES	29AP78			2.1	C075.0M	P	1	0.047	1	0.066	22MY	22MY	22MY	150	27
*	FOREBAY CONTROL		(WHRDWH)				C016.0N	P	1	0.047			12MY	12MY	12MY	145	53
LA P 4	LO GRANITE D	LO GRANITE RES	02MY78-01JN78			14.4	C075.0M	P	17	0.118	25	0.171	13MY	27MY	17JN	130	25
*	FOREBAY CONTROL		(WHRDWHRD,LAP4)				C016.0N	P	3	0.021			26MY	05JN	05JN	107	20
LA K 1	LO GRANITE D	LO GRANITE RES	21AP79-04MY79			17.3	C075.0M	P	16	0.093	19	0.109	02MY	07MY	18MY	122	39
*	FOREBAY CONTROL		(WHRDYWGM)				C029.0S	P	2	0.012			17MY	17MY	18MY	135	26
							C018.0S	P	1	0.006			30MY	30MY	30MY	125	17
							C016.0N	P	2	0.012			04MY	04MY	21MY	105	53
							C014.0S	P	1	0.006			16MY	16MY	16MY	135	27
LA K 2	LO GRANITE D	LO GRANITE RES	09MY79-16MY79			7.2	C075.0M	P	14	0.196	17	0.236	16MY	18MY	09JN	111	69
*	FOREBAY CONTROL BARGE		(WHRDYWGM)														

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LA K 2	LO GRANITE D	LO GRANITE RES	09MY79-16MY79			7.2	C016.0N	P	1	0.014			21MY	21MY	21MY	135	57
*	FOREBAY CONTROL BARGE		(WHRDYWGM)														
LA IS 3	LO GRANITE D	LO GRANITE TAIL	27AP78-29AP78			6.0	C075.0M	P	4	0.068	5	0.084	09MY	12MY	26MY	133	41
*	TAILRACE CONTROL		(WHPKPK,LAIS3)														
LA B2 1	LO GRANITE D	LO GRANITE TAIL	02MY78-10MY78			2.3	C016.0N	P	1	0.044			26MY	26MY	26MY	105	28
*	TAILRACE CONTROL		(WHORYW,LAB21)														
WHORYW	LO GRANITE D	LO GRANITE TAIL	02MY78-10MY78			2.3	C007.0S	B	2	0.088			31MY	31MY	06JN	120	24
*	TAILRACE CONTROL		(WHORYW,LAB21)														
LA K 3	LO GRANITE D	LO GRANITE TAIL	24AP79-04MY79			19.8	C075.0S	B	1	0.006	1	0.006	27JN	27JN	27JN	190	10
*	TAIL RACE CONTROL		(WHRDYWLB)				C075.0M	P	16	0.081	19	0.098	02MY	14MY	25MY	137	31
							C029.0S	P	1	0.006			18MY	18MY	18MY	135	28
							C016.0N	P	1	0.006			29MY	29MY	29MY	140	19
WHRDYWLB	LO GRANITE D	LO GRANITE TAIL	24AP79-18MY79			25.5	C075.0M	P	1	0.004	1	0.004	02MY	02MY	02MY	145	77
*	TAILRACE CONTROL		(LAK3;LAK4)														
LA K 4	LO GRANITE D	LO GRANITE TAIL	08MY79-18MY79			5.8	C075.0M	P	13	0.226	17	0.292	07MY	20MY	14JN	125	51
*	TAIL RACE CONTROL		(WHRDYWLB)														
LA IU 1	LO GRANITE D	LIT GOOSE TAIL	04MY81			5.3	C075.0M	P	3	0.057	4	0.066	14MY	15MY	16MY	129	51
RA F 2	LO GRANITE D	BLW BONN D	26AP77-17JN77			45.4	C075.0M	P	1	0.003	6	0.015	06MY	06MY	06MY	135	16
*	TRUCK TRANS		(WHYWOR,WHYWLB)														
RA F 3	LO GRANITE D	BLW BONN D	29AP77-11MY77			41.1	C075.0M	P	1	0.003	6	0.016	06MY	06MY	06MY	137	22
*	AIR TRANS		(WHYXRD,WHORRD,WHORWH)														
RA 3 1	LO GRANITE D	BLW BONN D	04MY77			10.5	C075.0M	P	6	0.058	21	0.200	11MY	11MY	11MY	130	22
*	BARGE TRANS		(WHGWLG)														
RA 3 2	LO GRANITE D	BLW BONN D	29MY77			4.3	C075.0M	P	2	0.047	7	0.153	31MY	31MY	31MY	127	78
*	BARGE TRANS		(WHYWLG)														
RA W 1	LO GRANITE D	BLW BONN D	06AP78-26AP78			33.6	C075.0S	B	5	0.015	8	0.025	15AP	23AP	27MY	140	9
*	FRESHWATER TRANSPORT		(WHRDGN,RAW1)				C075.0M	P	14	0.042	23	0.068	12AP	28AP	01MY	131	7
							C016.0N	P	5	0.015			21AP	01MY	01MY	115	9
WHRDGN	LO GRANITE D	BLW BONN D	06AP78-26AP78			33.6	C075.0S	B	1	0.003	2	0.006	18AP	18AP	18AP	140	13
*	FRESHWATER TRANSPORT		(WHRDGN,RAW1)				C016.0N	P	2	0.006			26AP	26AP	26AP	137	11
RA W 3	LO GRANITE D	BLW BONN D	11AP78-28AP78			41.6	C075.0S	B	4	0.010	4	0.011	18AP	19AP	27AP	133	19
*	BARGE TRANSPORT		(WHRDRD,RAW3)				C075.0M	P	32	0.077	43	0.103	17AP	25AP	04MY	115	11
							C016.0N	P	7	0.017			21AP	01MY	25MY	142	11
WHRDRD	LO GRANITE D	BLW BONN D	11AP78-28AP78			41.6	C075.0S	B	3	0.008	4	0.011	17AP	20AP	25AP	125	17
*	BARGE TRANSPORT		(WHRDRD,RAW3)				C016.0N	P	1	0.003			28AP	28AP	28AP	110	13
RA IS 1	LO GRANITE D	BLW BONN D	13AP78-30MY78			39.1	C075.0S	B	1	0.003	2	0.006	24AP	23AP	24AP	105	16
*	24 HR. FRSHWATER TRANSPORT		(WHORBL,RAIS1)				C075.0M	P	33	0.085	55	0.140	17AP	20AP	02JN	122	22
							C016.0N	P	2	0.006			20AP	20AP	01MY	127	31
WHORBL	LO GRANITE D	BLW BONN D	13AP78-30MY78	HAND		39.1	C075.0S	B	1	0.003	2	0.006	18AP	18AP	18AP	145	31
*	24 HR. FRSHWATER TRANSPORT		(WHORBL,RAIS1)	ADJUSTED			C075.0M	P	15	0.039	21	0.054	17AP	02MY	02JN	145	8
RA IS 2	LO GRANITE D	BLW BONN D	18AP78-25MY78			41.1	C075.0S	B	1	0.003	2	0.005	24AP	23AP	24AP	95	31
*	24 HR. SALTWATER TRANSPORT		(WHORDR,RAIS2)				C075.0M	P	25	0.061	42	0.103	17AP	21AP	31MY	126	52
							C016.0N	P	11	0.027			20AP	28AP	02JN	127	21
WHORDR	LO GRANITE D	BLW BONN D	18AP78-25MY78	HAND		41.1	C075.0S	B	2	0.005	2	0.006	20AP	05MY	05MY	140	52
*	24 HR. SALTWATER TRANSPORT		(WHORDR,RAIS2)	ADJUSTED			C075.0M	P	11	0.027	18	0.044	17AP	26AP	26MY	123	19

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS													
RA W 2	LO GRANITE D	BLW BONN D	01MY78-02JN78		10.2	C075.0M	P	3	0.030	4	0.044	20MY	22MY	03JN	130	7
*	FRESHWATER TRANSPORT		(WHRDBL,RAW2)			C016.0N	P	11	0.108			28AP	25MY	05JN	120	9
RA W 4	LO GRANITE D	BLW BONN D	01MY78-31MY78		14.9	C075.0S	B	2	0.014	2	0.017	25AP	30MY	31MY	95	5
*	BARGE TRANSPORT		(WHRDRDOR,RAW4)			C075.0M	P	18	0.121	24	0.164	10MY	22MY	30MY	138	7
						C016.0N	P	15	0.101			17MY	01JN	08JN	105	7
WHRDBL	LO GRANITE D	BLW BONN D	01MY78-02JN78		10.2	C075.0M	P	2	0.020	2	0.021	25MY	26MY	01JN	110	6
*	FRESHWATER TRANSPORT		(WHRDBL,RAW2)			C016.0N	P	1	0.010			05JN	05JN	05JN	95	6
WHRDRDOR	LO GRANITE D	BLW BONN D	01MY78-31MY78		14.9	C075.0M	P	5	0.034	8	0.052	10MY	14MY	30MY	130	12
*	BARGE TRANSPORT		(WHRDRDOR,RAW4)													
RA F 1	LO GRANITE D	BLW BONN D	23AP79-07MY79		16.7	C075.0S	B	1	0.007	1	0.007	02MY	02MY	02MY	110	17
*	BARGE TEST		(WHRDYWOR)			C075.0M	P	9	0.055	10	0.060	02MY	06MY	03JN	129	12
						C029.0S	P	2	0.013			17MY	17MY	18MY	130	8
						C018.0S	P	1	0.007			30MY	30MY	30MY	130	6
						C016.0N	P	4	0.025			04MY	04MY	07MY	146	19
WHRDYWOR	LO GRANITE D	BLW BONN D	23AP79-19MY79		27.3	C075.0M	P	5	0.019	6	0.023	27AP	07MY	19MY	130	11
*	BARGE TEST		(RAF1:RAF2)													
RA F 2	LO GRANITE D	BLW BONN D	09MY79-19MY79		10.7	C075.0S	B	1	0.010	1	0.010	16MY	16MY	16MY	115	22
*	BARGE TEST		(WHRDYWOR)			C075.0M	P	17	0.160	22	0.206	15MY	19MY	23MY	114	16
						C029.0S	P	1	0.010			18MY	18MY	18MY	150	22
RA Z 1	LO GRANITE D	BLW BONN D	20AP81-25MY81		20.0	C075.0S	B	1	0.003	1	0.008	11JL	11JL	11JL	209	2
*	NMFS BARGE REL		CWT CEYB			C075.0M	P	1	0.003	1	0.006	23MY	23MY	23MY	104	5
RA Z 2	LO GRANITE D	BLW BONN D	20AP81-25MY81		20.0	C075.0S	B	1	0.003	1	0.006	15MY	15MY	15MY	117	6
*	NMFS BARGE REL		CWT CEYB			C075.0M	P	4	0.011	7	0.035	07MY	08MY	28MY	150	9
RA W 1	LO GRANITE D	BEACON ROCK	20AP80-29AP80		16.2	C075.0M	P	12	0.074	22	0.136	25AP	28AP	06MY	115	19
*	BARGE RELEASE		CWT HOPR			C016.0N	P	4	0.025			30AP	01MY	07MY	125	19
RA W 2	LO GRANITE D	BEACON ROCK	01MY80-10MY80		24.5	C075.0M	P	3	0.013	6	0.026	08MY	18MY	19MY	100	9
*	BARGE RELEASE		HOPR 11191,DYPR 13289			C016.0N	P	6	0.025			08MY	03MY	20MY	121	26
RA F 1	LO GRANITE D	DALTON PT	25AP77-15JN77		43.1	C075.0S	B	2	0.005	2	0.005	06MY	17MY	18MY	120	6
*	TRUCK TRANS		(WHDRYX,RAF1)			C075.0M	P	1	0.003	3	0.007	04MY	03MY	04MY	138	16
WHYWOR	LO GRANITE D	DALTON PT	25AP77-17JN77		11.2	C075.0M	P	3	0.027	7	0.062	04MY	04MY	09JN	0	15
*	TRUCK TRANS		(RAF2)(2651 REL LDK1)													
RA 2C 1	LO GRANITE D	DALTON PT	08AP80-22AP80		11.9	C075.0S	B	1	0.009	1	0.011	23AP	23AP	23AP	110	9
*	TRUCK TRANSPORT #1		CWT CETB(451 DUMP BLAL			C075.0M	P	1	0.009	2	0.021	25AP	25AP	25AP	105	.8
RA 3L 1	LO GRANITE D	DALTON PT	08AP80-22AP80		12.1	C075.0M	P	1	0.009	2	0.020	25AP	25AP	25AP	135	8
*	TRUCK TRANSPORT #2		CWT ND			C016.0N	P	2	0.017			25AP	25AP	30AP	114	11
RA 3T 1	LO GRANITE D	DALTON PT	08AP80-22AP80		14.7	C075.0M	P	2	0.014	4	0.028	22AP	24AP	25AP	115	8
*	TRUCK TRANSPORT		CWT PRTB(1352 DUMP BLA													
RA 2J 1	LO GRANITE D	DALTON PT	09AP80-22AP80		12.6	C075.0M	P	5	0.040	8	0.063	23AP	24AP	05MY	125	9
*	TRUCK TRANSPORT #3		CWT LAPR(146 DUMP BLAL			C016.0N	P	1	0.008			28AP	28AP	28AP	115	10
RA 2C 3	LO GRANITE D	DALTON PT	23AP80-30AP80		11.8	C016.0N	P	1	0.009			05MY	05MY	05MY	135	16
*	TRUCK TRANSPORT #1		CWT CETB													
RA 2J 3	LO GRANITE D	DALTON PT	23AP80-30AP80		13.8	C075.0M	P	5	0.037	9	0.063	30AP	02MY	03MY	133	15
*	TRUCK TRANSPORT #3		CWT LAPR			C016.0N	P	5	0.037			28AP	01MY	01MY	125	24
RA 3L 3	LO GRANITE D	DALTON PT	23AP80-30AP80		14.4	C016.0N	P	2	0.014			30AP	30AP	01MY	135	27
*	TRUCK TRANSPORT #2		CWT ND													
RA 3T 3	LO GRANITE D	DALTON PT	23AP80-30AP80		15.1	C075.0M	P	2	0.014	4	0.026	28AP	29AP	01MY	107	22
*	TRUCK TRANSPORT		CWT PRTB													

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS													
RA 3T 3	LO GRANITE D	DALTON PT	23AP80-30AP80		15.1	C016.0N	P	4	0.027			05MY	06MY	06MY	137	15
*	TRUCK TRANSPORT		CWT PRTB													

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
090505	MARION FKS HAT SIZE X TIME RELEASE	N SANTIAM@MINTO	18MR77		17	46.3	C075.OS	B	5	0.011	11	0.024	15AP	19AP	22AP	155	12
							C075.OM	P	1	0.003	4	0.008	11MY	11MY	11MY	133	7
091659	MARION FKS HAT STOCK EVALUATION	N SANTIAM@MINTO	09NO77 HAND ADJUSTED	109	3	46.0	C075.OM	P	5	0.011	7	0.015	21AP	09MY	19MY	165	0
			RECOVERED 1978				C016.ON	P	2	0.005			01MY	01MY	12MY	135	1
091660	MARION FKS HAT STOCK EVALUATION	N SANTIAM@MINTO	09NO77 HAND ADJUSTED	110	25	47.8	C075.OM	P	6	0.013	10	0.021	12AP	19AP	02MY	141	0
			RECOVERED 1978														
091661	MARION FKS HAT STOCK EVALUATION CARSON	N SANTIAM@MINTO	13MR78-14MR78 HAND ADJUSTED	129	16	48.6	C075.OS	B	2	0.005	2	0.004	17AP	19AP	19AP	160	10
							C075.OM	P	15	0.031	22	0.045	14AP	25AP	20MY	147	9
							C016.ON	P	14	0.029			21AP	01MY	22MY	141	9
091662	MARION FKS HAT STOCK EVALUATION CARSON	N SANTIAM@MINTO	13MR78-14MR78 HAND ADJUSTED	129	17	45.9	C075.OS	B	3	0.007	4	0.009	05AP	05AP	02MY	172	16
							C075.OM	P	19	0.042	26	0.057	17AP	24AP	03MY	142	9
							C016.ON	P	9	0.020			01MY	01MY	25MY	150	9
091663	MARION FKS HAT STOCK EVALUATION CARSON	N SANTIAM@MINTO	13MR78-14MR78 HAND ADJUSTED	129	15	50.2	C075.OS	B	4	0.008	7	0.014	06AP	06AP	12JN	192	15
							C075.OM	P	13	0.026	21	0.042	12AP	21AP	08MY	146	10
							C016.ON	P	3	0.006			08MY	17MY	25MY	130	7
091701	MARION FKS HAT SANTIAM STOCK	N SANTIAM@MINTO	13MR78-15MR78 HAND ADJUSTED	139	12	49.1	C075.OS	B	3	0.007	3	0.006	04AP	27AP	01MY	175	16
							C075.OM	P	25	0.051	33	0.067	07AP	28AP	23MY	148	8
							C016.ON	P	15	0.031			28AP	05MY	05JN	140	8
091702	MARION FKS HAT SANTIAM STOCK	N SANTIAM@MINTO	13MR78-15MR78 HAND ADJUSTED	139	13	49.6	C075.OS	B	3	0.007	4	0.008	04AP	AP	17AP	155	12
							C075.OM	P	19	0.039	40	0.081	10AP	19AP	10MY	166	10
							C016.ON	P	1	0.003			03MY	03MY	03MY	140	9
091703	MARION FKS HAT SANTIAM STOCK	N SANTIAM@MINTO	13MR78-15MR78 HAND ADJUSTED	139	12	50.1	C075.OS	B	2	0.004	2	0.004	12AP	18AP	18AP	165	11
							C075.OM	P	20	0.040	43	0.086	10AP	28AP	31MY	136	9
							C016.ON	P	6	0.012			28AP	01MY	25MY	137	9
071727	MARION FKS HAT CARSON STOCK	N SANTIAM@MINTO	06NO78 RECOVERED 1979	114	21	43.9	C075.OM	P	10	0.023	25	0.057	28MR	13AP	17MY	131	0
071728	MARION FKS HAT CARSON STOCK	N SANTIAM@MINTO	07NO78 RECOVERED 1979	110	25	49.0	C075.OM	P	8	0.017	9	0.020	17AP	02MY	12JN	124	0
071725	MARION FKS HAT CARSON STOCK	N SANTIAM@MINTO	03AP79-05AP79		16	49.7	C075.OS	B	1	0.003	1	0.003	30AP	30AP	30AP	140	14
							C075.OM	P	31	0.063	38	0.078	30AP	09MY	16JN	143	10
							C016.ON	P	4	0.009			04MY	04MY	07MY	143	14
071726	MARION FKS HAT CARSON STOCK	N SANTIAM@MINTO	03AP79-05AP79		16	49.6	C075.OM	P	21	0.043	26	0.052	01MY	14MY	19JN	143	9
							C029.OS	P	1	0.003			17MY	17MY	17MY	139	10
							C016.ON	P	3	0.007			11MY	21MY	21MY	140	9
071729	MARION FKS HAT CARSON STOCK	N SANTIAM@MINTO	03AP79-05AP79		16	45.0	C075.OS	B	1	0.003	1	0.003	03MY	03MY	03MY	125	13
							C075.OM	P	36	0.081	44	0.099	17AP	07MY	09JN	142	11
							C016.ON	P	4	0.009			07MY	07MY	07MY	140	13
071730	MARION FKS HAT WILLAM RIVER STOCK	N SANTIAM@MINTO	03AP79-05AP79		19	48.2	C075.OS	B	2	0.005	2	0.005	02MY	03MY	03MY	138	13
							C075.OM	P	27	0.057	37	0.077	01MY	12MY	25MY	138	10
							C016.ON	P	3	0.007			07MY	07MY	11MY	135	13
							C014.OS	P	1	0.003			16MY	16MY	16MY	133	10
071731	MARION FKS HAT WILLAM RIVER STOCK	N SANTIAM@MINTO	03AP79-05AP79		16	49.4	C075.OM	P	35	0.071	45	0.091	25AP	07MY	19MY	141	11
							C016.ON	P	1	0.003			07MY	07MY	07MY	150	13
071732	MARION FKS HAT WILLAM RIVER STOCK	N SANTIAM@MINTO	03AP79-05AP79		17	50.6	C075.OM	P	37	0.074	47	0.094	20AP	08MY	21MY	136	11
							C029.OS	P	1	0.002			17MY	17MY	17MY	159	10
							C016.ON	P	12	0.024			04MY	07MY	21MY	148	13

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
072247	MARION FKS HAT COMPARE N SANTIAM AND CARSON STOCK	N SANTIAM@MINTO	05NO80 RECOVERED 1981		20	50.0	C075.OM	P	4	0.009	10	0.020	11AP	16AP	25AP	145	0
072248	MARION FKS HAT COMPARE N SANTIAM AND CARSON STOCK	N SANTIAM@MINTO	06NO80-07NO80 RECOVERED 1981		19	50.0	C075.OM	P	5	0.011	8	0.017	14AP	02MY	24MY	144	0
072251	MARION FKS HAT CARSON STOCK COMPARISON STUDY	N SANTIAM@MINTO	16MR81-23MR81		14	47.1	C075.OM	P	7	0.015	11	0.024	01MY	08MY	27MY	148	7
072253	MARION FKS HAT N SANTIAM STOCK COMPARISON STUDY	N SANTIAM@MINTO	16MR81-24MR81		14	42.2	C075.OS	B	1	0.003	2	0.005	20AP	20AP	20AP	140	11
							C075.OM	P	9	0.022	15	0.036	13AP	02MY	26MY	168	8
072254	MARION FKS HAT N SANTIAM STOCK COMPARISON STUDY	N SANTIAM@MINTO	16MR81-18MR81		20	48.3	C075.OS	B	1	0.003	2	0.004	09AP	09AP	09AP	148	16
							C075.OM	P	6	0.013	10	0.021	16AP	04MY	13MY	148	8
072250	MARION FKS HAT CARSON STOCK COMPARISON STUDY	N SANTIAM@MINTO	17MR81-20MR81		14	49.7	C075.OM	P	7	0.015	13	0.028	20AP	26AP	23MY	137	9
072249	MARION FKS HAT CARSON STOCK COMPARISON STUDY	N SANTIAM@MINTO	18MR81-20MR81		15	50.3	C075.OS	B	1	0.002	1	0.003	25AP	25AP	25AP	147	10
							C075.OM	P	9	0.018	17	0.035	29AP	01MY	27MY	146	9
072252	MARION FKS HAT N SANTIAM STOCK COMPARISON STUDY	N SANTIAM@MINTO	23MR81-24MR81		14	39.7	C075.OM	P	10	0.026	21	0.053	20AP	25AP	22MY	148	11

SORT SEQUENCE : SPECIES.SOURCE.RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE 1ST FISH	MED. FISH	DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
100323	MCCALL HAT	S FK SALMON R	08AP78		40	72.2	C075.0S	B	2	0.003	2	0.004	01JN	11JN	12JN	150	17
	S. FORK PRESERVATION						C075.0M	P	33	0.046	44	0.061	12MY	26MY	17JN	138	22
							C016.0N	P	2	0.003			26MY	26MY	16JN	120	24
100325	MCCALL HAT	S FK SALMON R	12AP79-18AP79		14	116.2	C075.0M	P	32	0.028	42	0.037	02MY	24MY	14JN	159	26
	SUMMER CHINOOK EVALUATION						C016.0N	P	3	0.003			11MY	21MY	07JN	150	29
102117	MCCALL HAT	S FK SALMON R	06AP81		39	40.5	C075.0S	B	1	0.003	1	0.003	10MY	10MY	10MY	134	32
	CONTROL						C075.0M	P	16	0.040	22	0.054	02MY	23MY	07JN	147	20
102118	MCCALL HAT	S FK SALMON R	06AP81		39	40.9	C075.0M	P	18	0.045	22	0.055	13MY	30MY	06JN	145	20
	VICCINATED-VIBRIO																
102128	MCCALL HAT	S FK SALMON R	06AP81		39	47.6	C075.0M	P	19	0.040	24	0.050	11MY	27MY	06JN	143	21
	PLACEBO																

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE 1ST FISH	MED. FISH	DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
072049	MCKENZIE HAT	MCKENZIE@LEABURG	09NO79		6	31.6	C075.0S	B	1	0.004	3	0.009	28MR	28MR	28MR	165	1
	GRADING AND PRODUCTION		RECOVERED 1980														
072050	MCKENZIE HAT	MCKENZIE@LEABURG	09NO79		7	28.4	C075.0S	B	1	0.004	4	0.015	12MR	12MR	12MR	175	1
	GRADING AND PRODUCTION		RECOVERED 1980				C075.0M	P	1	0.004	2	0.008	15AP	15AP	15AP	140	1
072052	MCKENZIE HAT	MCKENZIE@LEABURG	09NO79		15	33.8	C075.0S	B	3	0.009	8	0.023	20MR	30MR	07AP	140	1
	GRADING AND PRODUCTION		RECOVERED 1980														
072048	MCKENZIE HAT	MCKENZIE@LEABURG	15MR80		3	31.1	C075.0S	B	2	0.007	6	0.018	24MR	23MR	24MR	176	52
	GRADING AND PRODUCTION						C075.0M	P	16	0.052	42	0.135	01AP	12AP	19MY	225	15
072051	MCKENZIE HAT	MCKENZIE@LEABURG	15MR80		4	29.4	C075.0S	B	3	0.011	4	0.016	15AP	17AP	22AP	225	13
	GRADING AND PRODUCTION						C075.0M	P	10	0.034	28	0.096	01AP	13AP	03MY	223	14
							C016.0N	P	1	0.004			18AP	18AP	18AP	206	14
072053	MCKENZIE HAT	MCKENZIE@LEABURG	15MR80		11	34.9	C075.0S	B	2	0.006	3	0.008	16AP	17AP	01MY	212	13
	GRADING AND PRODUCTION						C075.0M	P	11	0.032	25	0.071	09AP	19AP	03MY	161	12
							C016.0N	P	2	0.006			06MY	06MY	06MY	162	9
072218	MCKENZIE HAT	MCKENZIE@LEABURG	05NO80		11	32.4	C075.0M	P	1	0.004	2	0.006	01AP	01AP	01AP	131	1
			RECOVERED 1980														
072221	MCKENZIE HAT	MCKENZIE@LEABURG	05NO80		15	37.9	C075.0M	P	4	0.011	9	0.025	07AP	17AP	21AP	149	1
072217	MCKENZIE HAT	MCKENZIE@LEABURG	16MR81		6	30.2	C075.0M	P	4	0.014	9	0.029	11AP	15AP	18AP	207	14
	EFFECTS OF GRADING AND SELECTIVE R																
072220	MCKENZIE HAT	MCKENZIE@LEABURG	16MR81		4	35.6	C075.0S	B	1	0.003	2	0.006	11AP	11AP	11AP	245	16
	EFFECTS OF GRADING AND SELECTIVE R						C075.0M	P	10	0.029	25	0.072	30MR	05AP	24AP	232	21
072222	MCKENZIE HAT	MCKENZIE@LEABURG	16MR81		9	36.0	C075.0S	B	1	0.003	3	0.008	06AP	06AP	06AP	184	20
	EFFECTS OF GRADING AND SELECTIVE R						C075.0M	P	10	0.028	24	0.067	10AP	22AP	29AP	171	11

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LD IM 1	MCNARY D	PORT KELLY ORE	01MY80			0.6	C075.0M	P	1	0.157	2	0.261	09MY	09MY	09MY	140	53
	EFFICIENCY REL																
LD IM 2	MCNARY D	PORT KELLY ORE	05MY80			1.5	C075.0M	P	1	0.067	2	0.119	10MY	10MY	10MY	150	85
	EFFICIENCY REL						C016.0N	P	1	0.067			13MY	13MY	13MY	144	61
LD 3 1	MCNARY D	PORT KELLY ORE	06MY80			1.9	C075.0M	P	3	0.160	4	0.221	13MY	14MY	14MY	135	53
	EFFICIENCY REL						C016.0N	P	1	0.054			13MY	13MY	13MY	152	69
LD 3 2	MCNARY D	PORT KELLY WASH	07MY80			1.9	C075.0M	P	2	0.107	5	0.281	19MY	20MY	23MY	121	33
	EFFICIENCY REL																
LD 3 3	MCNARY D	PORT KELLY ORE	08MY80			1.4	C075.0M	P	1	0.071	2	0.125	16MY	16MY	16MY	137	53
	EFFICIENCY REL																
LD 3 4	MCNARY D	PORT KELLY WASH	09MY80			1.9	C075.0M	P	1	0.054	3	0.180	19MY	19MY	19MY	125	43
	EFFICIENCY REL																
LA 2X 4	MCNARY D	PORT KELLY ORE	15MY80			1.4	C075.0M	P	1	0.070	2	0.132	23MY	23MY	23MY	140	53
	EFFICIENCY REL																
LA ID 3	MCNARY D	PORT KELLY WASH	20MY80			1.4	C075.0M	P	3	0.221	6	0.475	27MY	27MY	28MY	126	61
	EFFICIENCY REL																
LA ID 4	MCNARY D	PORT KELLY ORE	21MY80-22MY80			1.9	C075.0M	P	2	0.108	4	0.193	28MY	28MY	28MY	115	61
	EFFICIENCY REL																
LA 5 1	MCNARY D	PORT KELLY WASH	23MY80			1.6	C075.0M	P	4	0.248	9	0.534	27MY	27MY	29MY	137	107
	EFFICIENCY REL																
LA 5 3	MCNARY D	PORT KELLY WASH	28MY80			1.2	C016.0N	P	1	0.087			21MY	21MY	21MY	147	-68
	EFFICIENCY REL																
LA 5 4	MCNARY D	PORT KELLY ORE	29MY80			1.1	C075.0M	P	1	0.096	2	0.158	05JN	05JN	05JN	135	61
	EFFICIENCY REL																
LA H 1	MCNARY D	MCNARY RES	17AP78-05MY78			10.5	C075.0S	B	1	0.010	2	0.015	09JN	09JN	09JN	70	8
*	MCNARY CONTROL		(WHRDYWRD)				C075.0M	P	8	0.077	10	0.091	29AP	11MY	17MY	133	17
							C016.0N	P	2	0.020			08MY	08MY	08MY	155	22
LA H 2	MCNARY D	MCNARY RES	17AP78-05MY78			10.6	C075.0M	P	9	0.085	12	0.112	16MY	19MY	23MY	142	13
*	MCNARY CONTROL		(WHRDYWRD)				C016.0N	P	2	0.019			25MY	25MY	25MY	135	12
LA S 1	MCNARY D	MCNARY RES	22MY78-01JN78			5.1	C075.0M	P	12	0.234	17	0.330	30MY	01JN	10JN	149	40
*	MCNARY CONTROL		(WHRDORRD)				C016.0N	P	1	0.020			01JN	01JN	01JN	160	46
WHRDORRD	MCNARY D	MCNARY RES	22MY78-12JN78			10.2	C075.0M	P	1	0.010	2	0.018	30MY	30MY	30MY	150	50
*	CONTROL		(LAS1,2)														
LA S 2	MCNARY D	MCNARY RES	05JN78-12JN78			5.1	C075.0M	P	4	0.079	7	0.132	16JN	19JN	23JN	131	29
*	MCNARY CONTROL		(WHRDORRD)														
LA X3 1	MCNARY D	MCNARY RES	03MY79-19MY79			14.3	C075.0M	P	2	0.015	3	0.022	15MY	26MY	27MY	140	18
*	TRANSPORT FOREBAY CONTROL		(5053 REL KM230)(WHRDP				C029.0S	P	4	0.029			17MY	17MY	18MY	142	32
							C016.0N	P	1	0.008			11MY	11MY	11MY	195	58
WHRDPKLG	MCNARY D	MCNARY RES	03MY79-29MY79			24.7	C075.0M	P	1	0.005	1	0.005	16MY	16MY	16MY	115	31
*	TRANSPORT FOREBAY CONTROL		(LAX31:5053RELKM230)(L				C029.0S	P	1	0.005			17MY	17MY	17MY	107	32
LA X3 3	MCNARY D	MCNARY RES	18MY79-29MY79			10.4	C075.0M	P	8	0.077	11	0.104	25MY	04JN	07JN	139	24
*	TRANSPORT FOREBAY CONTROL		(WHRDPKLG)														
LA 5 1	MCNARY D	MCNARY TAIL	11AP79-03JL79			19.0	C075.0S	B	1	0.006	2	0.009	03JL	03JL	03JL	210	5
*	TRANSPORT TAILRACE CONTRL		(BLACK;LA51)				C075.0M	P	17	0.090	23	0.120	20AP	21MY	08JN	150	10
							C016.0N	P	1	0.006			26MY	26MY	26MY	140	10
LA 5 2	MCNARY D	MCNARY TAIL	14MY79-31MY79			10.1	C075.0M	P	23	0.229	28	0.275	21MY	31MY	08JN	140	23
*	TRANSPORT TAILRACE CONTRL		(WHRDLGYW)														

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LA 5 2	MCNARY D	MCNARY TAIL	14MY79-31MY79			10.1	C018.0S	P	2	0.020			30MY	30MY	30MY	140	28
*	TRANSPORT TAILRACE CONTRL		(WHRDLGYW)														
WHRDLGYW	MCNARY D	MCNARY TAIL	14MY79-05JL79			12.2	C018.0S	P	1	0.009			30MY	30MY	30MY	146	28
*	TAILRACE CONTROL		(LA52;LA53;LA54)														
LA 5 3	MCNARY D	MCNARY TAIL	04JN79-21JN79			1.9	C075.0M	P	2	0.104	3	0.138	30AP	01MY	07JN	125	-11
*	TRANSPORT TAILRACE CONTRL		(WHRDLGYW)														
LA H 1	MCNARY D	MCNARY TAIL	08AP80-12MY80			32.5	C075.0M	P	25	0.077	48	0.150	25AP	06MY	19MY	132	14
*	TAILRACE CONTROL		CWT ERLA,LAH,1				C016.0N	P	7	0.022			06MY	13MY	21MY	158	13
							4009.2S	P	1	0.004			04JN	04JN	04JN	132	8
LA H 2	MCNARY D	MCNARY TAIL	14MY80-09JN80			14.1	C075.0M	P	7	0.050	15	0.106	23MY	27MY	03JN	132	30
*	TAILRACE CONTROL		CWT CEND,LAH,2				4007.1S	P	2	0.015			06JN	06JN	06JN	162	20
							4006.3S	P	2	0.015			29MY	29MY	29MY	135	31
LA R 1	MCNARY D	MCNARY TAIL	14MY81			1.2	C075.0S	B	1	0.082	1	0.083	21MY	21MY	21MY	151	56
							C075.0M	P	3	0.245	4	0.296	21MY	28MY	10JN	156	28
LA R 3	MCNARY D	MCNARY TAIL	18MY81			2.1	C075.0M	P	3	0.144	4	0.196	27MY	27MY	28MY	132	44
LA R 4	MCNARY D	MCNARY TAIL	21MY81			2.0	C075.0M	P	3	0.148	4	0.190	28MY	29MY	01JN	139	49
RA V 1	MCNARY D	BLW BONN D	21AP78-19MY78			22.8	C075.0M	P	36	0.158	45	0.199	03MY	07MY	20MY	151	10
*	MCNARY TRANSPORT		(WHGMWH,RAV1)				C016.0N	P	19	0.084			26AP	08MY	23MY	140	13
							C007.0S	B	1	0.005			09MY	09MY	09MY	144	12
RA V 2	MCNARY D	BLW BONN D	22MY78-08JN78			9.3	C075.0M	P	29	0.314	39	0.420	04MY	09JN	10JN	124	9
*	MCNARY TRANSPORT		(WHPKYWYW,RAV2)				C016.0N	P	10	0.109			25MY	02JN	12JN	132	19
RA 3 1	MCNARY D	BLW BONN D	16AP79-02JL79			23.2	C075.0M	P	18	0.078	26	0.113	19AP	29AP	11JN	167	12
*	TRANSPORT EVAL	TRUCK	(WH;RA31)				C029.0S	P	1	0.005			18MY	18MY	18MY	150	6
WH	MCNARY D	BLW BONN D	16AP79-02JL79			23.2	C075.0M	P	16	0.070	21	0.090	19AP	27AP	17JN	158	14
*	TRANSPORT EVAL	TRUCK	(WH;RA31)														
RA R 1	MCNARY D	BLW BONN D	24AP79-04MY79			7.7	C075.0S	B	1	0.014	2	0.028	12MY	12MY	12MY	145	9
*	TRANSPORT EVAL	BARGE	(WHRDYWLG)				C075.0M	P	4	0.053	4	0.055	25AP	02MY	04MY	140	19
							C016.0N	P	4	0.053			04MY	07MY	07MY	160	16
							4005.0	P	1	0.014			05JL	05JL	05JL	210	3
WHRDYWLG	MCNARY D	BLW BONN D	24AP79-22MY79			35.1	C075.0M	P	11	0.032	17	0.049	27AP	28AP	25MY	166	39
*	TRANSPORT EVAL	BARGE	LAR3;RAR1;RAR2)				C016.0N	P	1	0.003			21MY	21MY	21MY	145	8
RA R 2	MCNARY D	BLW BONN D	08MY79-16MY79			18.4	C075.0S	B	1	0.006	1	0.006	07JN	07JN	07JN	235	5
*	TRANSPORT EVAL	BARGE	(WHRDYWLG)				C075.0M	P	3	0.017	4	0.023	14MY	19MY	23MY	140	14
RA 3 2	MCNARY D	BLW BONN D	14MY79-31MY79			10.1	C075.0M	P	10	0.099	14	0.141	30AP	26MY	06JN	135	13
*	TRANSPORT EVAL	TRUCK	(WHRDLGPK)														
WHRDLGPK	MCNARY D	BLW BONN D	14MY79-06JL79			19.6	C075.0M	P	18	0.092	21	0.105	17MY	06JN	21JN	127	7
*	TRANSPORT EVAL	TRUCK	(RA32;RA33;RA34)				C016.0N	P	1	0.006			25JN	25JN	25JN	120	5
LA R 3	MCNARY D	BLW BONN D	20MY79-22MY79			9.1	C075.0M	P	1	0.012	1	0.013	04MY	04MY	04MY	140	-9
*	TRANSPORT EVAL	BARGE	(WHRDYWLG)														
RA R 3	MCNARY D	BLW BONN D	25MY79			5.0	C075.0M	P	4	0.080	7	0.140	23MY	25MY	25MY	138	155
*	TRANSPORT EVAL	BARGE	(WHRDYWPK:RAR3)				C018.0S	P	1	0.020			30MY	30MY	30MY	110	42
							C016.0N	P	3	0.060			26MY	26MY	26MY	121	214
WHRDYWPK	MCNARY D	BLW BONN D	25MY79			5.0	C075.0S	B	1	0.020	1	0.021	01AU	01AU	01AU	134	2
*	TRANSPORT EVAL	BARGE	(WHRDYWPK:RAR3)				C016.0N	P	1	0.020			03AU	03AU	03AU	120	3

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
RA 3 3	MCNARY D	BLW BONN D	04JN79-21JN79			8.9	C075.0M	P	17	0.191	19	0.208	06JN	07JN	14JN	130	52
*	TRANSPORT EVAL	TRUCK	(WHRDLGPK)														
							C016.0N	P	3	0.034			07JN	22JN	22JN	147	12
							4005.0	P	1	0.012			04SE	04SE	04SE	215	2
RA 3 4	MCNARY D	BLW BONN D	25JN79-06JL79			0.5	C075.0S	B	1	0.185	1	0.241	30AP	30AP	30AP	160	-2
*	TRANSPORT EVAL	TRUCK	(WHRDLGPK)				C075.0M	P	1	0.185	3	0.553	06JL	06JL	06JL	135	14
RA 2 1	MCNARY D	BLW BONN D	22AP80-18MY80			32.4	C075.0M	P	20	0.062	45	0.138	25AP	28AP	19MY	148	26
*	BARGE TRANSPORT		CWT ERPR,RA2,1				C016.0N	P	11	0.034			01MY	12MY	22MY	125	11
							4005.4S	P	1	0.004			07JN	07JN	07JN	200	5
RA 2 2	MCNARY D	BLW BONN D	21MY80-30MY80			11.6	C075.0S	B	1	0.009	3	0.025	24MY	24MY	24MY	160	52
*	BARGE TRANSPORT		CWT LATB,RA2,2				C016.0N	P	1	0.009			21MY	21MY	21MY	110	214
							4005.3S	P	1	0.009			28MY	28MY	28MY	151	32
NDSM	MCNARY D	DALTON PT	09AP80-12MY80			33.6	4004.1S	P	1	0.003			07JL	07JL	07JL	245	2
*	TRUCK TRANSPORT		CWT NDSM,RAV,1														
RA V 1	MCNARY D	DALTON PT	09AP80-12MY80			33.6	C075.0S	B	4	0.012	8	0.023	21AP	21AP	22AP	153	11
*	TRUCK TRANSPORT		CWT NDSM,RAV,1				C075.0M	P	34	0.102	71	0.211	17AP	22AP	05JN	162	10
							C016.0N	P	7	0.021			21AP	06MY	16MY	140	7
							4003.1S	P	1	0.003			06JL	06JL	06JL	245	2
RA V 2	MCNARY D	DALTON PT	14MY80-13JN80			7.3	C075.0M	P	22	0.302	42	0.572	23MY	23MY	23MY	138	15
*	TRUCK TRANSPORT		CWT DY,RAV,2				4003.2S	P	1	0.014			30MY	30MY	30MY	160	13

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
071738	OAKRIDGE HAT	M FK WILLAM@DEXTER	07NO78		8	24.0	C075.0S	B	1	0.005	3	0.012	30MR	30MR	30MR	190	1
	IMPR HATCH PROD TIME/GRAD		RECOVERED 1979														
071739	OAKRIDGE HAT	M FK WILLAM@DEXTER	07NO78		15	28.9	C075.0S	B	1	0.004	8	0.029	19MR	19MR	19MR	180	1
	IMPR HATCH PROD GRAD/TIME		RECOVERED 1979				C075.0M	P	1	0.004	1	0.004	18AP	18AP	18AP	169	1
071740	OAKRIDGE HAT	M FK WILLAM@DEXTER	07NO78		25	29.4	C075.0S	B	1	0.004	3	0.010	07AP	07AP	07AP	135	1
	IMPR HATCH PROD GRAD/TIME		RECOVERED 1979				C075.0M	P	1	0.004	1	0.004	01MY	01MY	01MY	140	1
071741	OAKRIDGE HAT	M FK WILLAM@DEXTER	19MR79-20MR79		14	32.0	C075.0S	B	4	0.013	6	0.019	12AP	14AP	19AP	151	16
	IMPR HATCH PROD GRAD/TIME						C075.0M	P	36	0.113	51	0.159	10AP	21AP	31MY	152	13
							C016.0N	P	1	0.004			04MY	04MY	04MY	170	10
071742	OAKRIDGE HAT	M FK WILLAM@DEXTER	20MR79		8	29.5	C075.0S	B	2	0.007	3	0.011	17AP	17AP	17AP	165	15
	IMPR HATCH PROD GRAD/TIME						C075.0M	P	48	0.163	80	0.271	19MR	21AP	30AP	176	13
071743	OAKRIDGE HAT	M FK WILLAM@DEXTER	20MR79		12	30.2	C075.0S	B	5	0.017	6	0.019	19AP	20AP	02MY	136	13
	IMPR HATCH PROD GRAD/TIME						C075.0M	P	27	0.090	46	0.154	11AP	20AP	10MY	150	13
							C016.0N	P	2	0.007			04MY	04MY	04MY	160	11
071744	OAKRIDGE HAT	M FK WILLAM@DEXTER	20MR79		6	32.8	C075.0S	B	5	0.016	9	0.028	13AP	14AP	25AP	191	17
	IMPR HATCH PROD GRAD/TIME						C075.0M	P	31	0.095	89	0.271	04AP	10AP	25AP	200	20
071925	OAKRIDGE HAT	M FK WILLAM@DEXTER	05NO79-08NO79		6	14.9	C075.0M	P	2	0.014	5	0.032	15AU	17AU	17AU	107	-4
	GRADING AND PRODUCTION																
072041	OAKRIDGE HAT	M FK WILLAM@DEXTER	05NO79		29	30.8	C075.0S	B	2	0.007	4	0.014	19MR	20MR	25MR	131	1
	GRADING AND PRODUCTION		RECOVERED 1980				C016.0N	P	1	0.004			25AP	25AP	25AP	139	1
072043	OAKRIDGE HAT	M FK WILLAM@DEXTER	05NO79		16	31.3	C075.0S	B	4	0.013	11	0.036	12MR	18MR	28MR	149	1
	GRADING AND PRODUCTION		RECOVERED 1980				C075.0M	P	1	0.004	2	0.006	09AP	09AP	09AP	170	1
072045	OAKRIDGE HAT	M FK WILLAM@DEXTER	05NO79		14	30.9	C075.0S	B	3	0.010	8	0.028	14MR	15MR	08AP	141	1
	GRADING AND PRODUCTION		RECOVERED 1980				C075.0M	P	3	0.010	7	0.022	08AP	13AP	23AP	150	1
072047	OAKRIDGE HAT	M FK WILLAM@DEXTER	05NO79		9	31.3	C075.0S	B	2	0.007	3	0.011	25MR	26MR	02AP	151	1
	GRADING AND PRODUCTION		RECOVERED 1980														
072040	OAKRIDGE HAT	M FK WILLAM@DEXTER	10MR80-11MR80		16	30.9	C075.0S	B	3	0.010	7	0.023	20MR	27MR	14AP	170	24
	GRADING AND PRODUCTION						C075.0M	P	15	0.049	34	0.111	07AP	16AP	24AP	163	11
							C016.0N	P	2	0.007			23AP	23AP	24AP	166	11
072042	OAKRIDGE HAT	M FK WILLAM@DEXTER	10MR80-11MR80		9	30.7	C075.0S	B	5	0.017	9	0.029	19MR	27MR	15AP	190	24
	GRADING AND PRODUCTION						C075.0M	P	15	0.049	36	0.119	02AP	14AP	22AP	172	12
							C016.0N	P	4	0.014			18AP	18AP	18AP	158	12
							4005.3S	P	1	0.004			07JN	07JN	07JN	215	5
072044	OAKRIDGE HAT	M FK WILLAM@DEXTER	10MR80		8	30.7	C075.0S	B	7	0.023	14	0.047	21MR	06AP	29AP	195	15
	GRADING AND PRODUCTION						C075.0M	P	18	0.059	47	0.155	31MR	15AP	28AP	184	12
072046	OAKRIDGE HAT	M FK WILLAM@DEXTER	10MR80		4	29.0	C075.0S	B	7	0.025	17	0.060	19MR	30MR	07AP	195	21
	GRADING AND PRODUCTION						C075.0M	P	8	0.028	25	0.085	26MR	10AP	17AP	217	13
							C016.0N	P	1	0.004			18AP	18AP	18AP	171	12
							4006.4S	P	1	0.004			29MY	29MY	29MY	276	6
072306	OAKRIDGE HAT	M FK WILLAM@DEXTER	05NO80		28	30.1	C075.0M	P	1	0.004	2	0.006	01AP	01AP	01AP	155	1
	PRODUCTION		RECOVERED 1981														
072224	OAKRIDGE HAT	M FK WILLAM@DEXTER	06NO80		11	27.8	C075.0M	P	1	0.004	2	0.007	01AP	01AP	01AP	171	1
	PRODUCTION		RECOVERED 1981														
072225	OAKRIDGE HAT	M FK WILLAM@DEXTER	16MR81		7	26.6	C075.0S	B	2	0.008	2	0.008	05JN	09JN	10JN	320	5
	OAKRIDGE STOCK GRADING AND SELECTIVITY						C075.0M	P	7	0.027	15	0.055	16AP	21AP	24AP	145	12
072303	OAKRIDGE HAT	M FK WILLAM@DEXTER	16MR81		4	31.2	C075.0S	B	1	0.004	3	0.010	06AP	06AP	06AP	193	20
	OAKRIDGE STOCK GRADING AND SELECTI																

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
072303	OAKRIDGE HAT	M FK WILLAM@DEXTER	16MR81		4	31.2	C075.0M	P	11	0.036	27	0.086	01AP	13AP	20AP	215	15
	OAKRIDGE STOCK GRADING AND SELECTI																
072305	OAKRIDGE HAT	M FK WILLAM@DEXTER	16MR81		7	29.9	C075.0S	B	1	0.004	1	0.005	09JL	09JL	09JL	0	4
	DEXTER STOCK GRADING AND SELECTIVE						C075.0M	P	13	0.044	29	0.099	30MR	19AP	24AP	180	12
072307	OAKRIDGE HAT	M FK WILLAM@DEXTER	16MR81		9	31.7	C075.0M	P	17	0.054	42	0.133	03AP	14AP	21AP	171	14
	DEXTER STOCK GRADING AND SELECTIVE																
071919	OAKRIDGE HAT	S SANTIAM@FOSTER	21MR79		9	31.7	C075.0S	B	3	0.010	5	0.018	10AP	13AP	17AP	147	15
	EVAL FALL&SPR RELEASES						C075.0M	P	21	0.067	31	0.099	05AP	18AP	25AP	160	12
							C016.0N	P	2	0.007			04MY	04MY	04MY	165	9
071920	OAKRIDGE HAT	S SANTIAM@FOSTER	21MR79		8	32.9	C075.0S	B	5	0.016	6	0.018	19AP	20AP	31MY	169	11
	EVAL FALL&SPR RELEASES						C075.0M	P	27	0.083	49	0.150	09AP	12AP	27AP	192	16
071921	OAKRIDGE HAT	S SANTIAM@FOSTER	21MR79		9	32.4	C075.0S	B	7	0.022	13	0.042	05AP	11AP	20AP	178	16
	EVAL FALL&SPR RELEASES						C075.0M	P	31	0.096	57	0.175	05AP	12AP	27AP	193	16
							4005.0	P	1	0.004			03JL	03JL	03JL	220	4
071943	OAKRIDGE HAT	S SANTIAM@FOSTER	07NO79		9	32.0	C075.0S	B	4	0.013	9	0.028	26MR	28MR	28MR	155	0
	LOCATION TIME & SIZE OF RELEASE		RECOVERED 1980				C075.0M	P	1	0.004	1	0.005	23AP	23AP	23AP	166	0
071922	OAKRIDGE HAT	BLW WILLAM FALLS	23MR79		9	34.3	C075.0S	B	26	0.076	49	0.143	28MR	08AP	26JN	181	8
	EVAL FALL&SPR RELEASES						C075.0M	P	19	0.056	32	0.092	04AP	19AP	02MY	168	5
							C016.0N	P	1	0.003			04MY	04MY	04MY	140	4
071923	OAKRIDGE HAT	BLW WILLAM FALLS	23MR79		10	34.5	C075.0S	B	29	0.085	57	0.165	30MR	09AP	23AP	187	8
	EVAL FALL&SPR RELEASES						C075.0M	P	31	0.090	52	0.151	05AP	23AP	06MY	174	4
							C016.0N	P	2	0.006			04MY	04MY	04MY	160	4
071924	OAKRIDGE HAT	BLW WILLAM FALLS	23MR79		8	35.4	C075.0S	B	22	0.063	39	0.111	03AP	12AP	21AP	182	7
	EVAL FALL&SPR RELEASES						C075.0M	P	24	0.068	47	0.133	06AP	22AP	02MY	172	4
							C016.0N	P	4	0.012			26AP	04MY	11MY	152	4
071944	OAKRIDGE HAT	BLW WILLAM FALLS	08NO79		10	34.8	C075.0S	B	2	0.006	4	0.013	03AP	04AP	04AP	142	0
	LOCATION TIME & SIZE OF RELEASE		RECOVERED 1980				C075.0M	P	2	0.006	7	0.021	03AP	04AP	04AP	152	0

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
100327	PAHSIMEROI R	PAHSIMEROI R	13MY78	107	41	100.8	C075.0M	P	24	0.024	38	0.038	26MY	16JN	17JN	119	36
	UPRIVER EVALUTAION						C016.0N	P	6	0.006			01JN	05JN	21JN	95	56

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
632017	PR RAPID SPAW C COL RIVER FALL	PR RAPID SPAW CH CHIN EVAL	28JN79 RECOVERED 1980		77	82.2	C075.OM	P	1	0.002	1	0.002	23AP	23AP	23AP	157	1

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
100207	RAPID R HAT	RAPID R HAT	07MR77			126.9	C075.OS	B	1	0.001	1	0.001	14JN	14JN	14JN	138	9
							C075.OM	P	5	0.004	19	0.016	06MY	30MY	31MY	142	11
LD R 1	RAPID R HAT	RAPID R HAT	15MR77			50.0	C075.OM	P	1	0.003	4	0.008	11MY	11MY	11MY	135	16
100206	RAPID R HAT	RAPID R HAT	01AP77-30AP77			128.0	C075.OM	P	7	0.006	29	0.023	06MY	12MY	08JN	146	22
100214	RAPID R HAT EVALUATION=IDENT	RAPID R HAT	27MR78 HAND ADJUSTED		14	127.9	C075.OS	B	1	0.001	1	0.001	25AP	25AP	25AP	125	31
							C075.OM	P	27	0.022	35	0.027	21AP	01MY	23MY	128	25
							C016.ON	P	8	0.007			26AP	01MY	12MY	122	27
							C009.ON	B	1	0.001			14AP	14AP	14AP	85	53
100415	RAPID R HAT CONTRIBUTION-EVALUATION	RAPID R HAT	15MR79-15AP79		15	127.0	C075.OS	B	1	0.001	1	0.001	03JN	03JN	03JN	155	11
							C075.OM	P	29	0.023	35	0.028	20AP	03MY	19MY	136	18
							C016.ON	P	2	0.002			11MY	11MY	21MY	140	17
100424	RAPID R HAT CONTRIBUTION-EVALUATION	RAPID R HAT	15MR79-15AP79		15	122.0	C075.OS	B	2	0.002	2	0.002	19AP	20AP	13JN	131	25
							C075.OM	P	46	0.038	56	0.046	24AP	05MY	25MY	136	17
							C016.ON	P	2	0.002			04MY	04MY	04MY	137	19
102113 *	RAPID R HAT	RAPID R HAT	05NO79-28AP80 39204 WITH LA IU 1		14	39.2	C016.ON	P	1	0.003			16MY	16MY	16MY	133	1
102114 *	RAPID R HAT	RAPID R HAT	05NO79-28AP80 21804 WITH LA IU 1		14	43.2	C075.OM	P	1	0.003	2	0.005	06MY	06MY	06MY	142	1
							C016.ON	P	5	0.012			28AP	06MY	16MY	146	1
LA IU 1 *	RAPID R HAT	RAPID R HAT	05NO79-10AP80 CWT'S 102113,39204 FIS			61.0	C075.OM	P	10	0.017	19	0.031	25AP	29AP	09MY	146	1
							C016.ON	P	3	0.005			28AP	02MY	06MY	125	1
RA IU 1	RAPID R HAT MIGRATION HOMING CONTROL	RAPID R HAT	15AP80		14	10.3	C075.OM	P	9	0.088	16	0.154	25AP	08MY	05JN	144	39
							C016.ON	P	1	0.010			05MY	05MY	05MY	130	48
102236	RAPID R HAT VACCINATED-VIBRIO	RAPID R HAT	12AP81		15	49.0	C075.OM	P	3	0.007	5	0.011	01MY	07MY	12MY	122	36
102237	RAPID R HAT PLACEBO	RAPID R HAT	12AP81		15	44.3	C075.OM	P	7	0.016	13	0.031	29AP	01MY	12MY	127	47
102238	RAPID R HAT CONTROL	RAPID R HAT	12AP81		15	51.9	C075.OM	P	10	0.020	20	0.039	14AP	01MY	11MY	149	47
LA IU 3 *	RAPID R HAT MIGRATION HOMING TRANSPORT	BLW BONN D	09AP80-15AP80 (102115)13 K DUMPED AT		14	39.2	C075.OS	B	9	0.023	15	0.039	17AP	21AP	01MY	132	13
							C075.OM	P	7	0.018	14	0.035	21AP	30AP	06MY	140	7
							C016.ON	P	10	0.026			30AP	06MY	09MY	145	8
							4005.1S	P	1	0.003			28MY	28MY	28MY	157	5

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
100328	RED R HAT EVALUATION	S FK CLEARWATER	21SE78 RECOVERED 1979		34	37.0	C075.0M	P	6	0.017	7	0.020	02MY	20MY	06JN	120	1
102112	RED R HAT	S FK CLEARWATER	25SE79-27SE79 RECOVERED 1980			43.8	C075.0S	B	1	0.003	1	0.003	06JN	06JN	06JN	126	1
							C075.0M	P	5	0.012	9	0.022	03MY	17MY	09JN	125	1
							C016.0N	P	7	0.016			05MY	06MY	16MY	115	1
							4005.3S	P	1	0.003			07JN	07JN	07JN	137	1
102127	RED R HAT	S FK CLEARWATER	16SE80 RECOVERED 1981		25	49.5	C075.0M	P	6	0.013	9	0.018	05MY	14MY	05JN	126	1

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
RA R 1	RIGGINS TRAP TIMING & EFFICIENCY	SALMON R@RM 85	14MR78-23MR78			2.6	C075.0M	P	2	0.078	4	0.159	21AP	21AP	21AP	112	23
RA R 2	RIGGINS TRAP TIMING & EFFICIENCY	SALMON R@RM 85	24MR78-26MR78			2.8	C075.0S	B	1	0.037	1	0.043	20AP	20AP	20AP	105	33
							C075.0M	P	1	0.037	1	0.043	28AP	28AP	28AP	110	25
RA R 3	RIGGINS TRAP TIMING & EFFICIENCY	SALMON R@RM 85	27MR78-29MR78			1.0	C075.0M	P	1	0.096	3	0.239	14AP	14AP	14AP	110	49
RA R 4	RIGGINS TRAP TIMING & EFFICIENCY	SALMON R@RM 85	30MR78-01AP78			3.4	C075.0M	P	2	0.059	2	0.070	08MY	09MY	10MY	112	22
							C016.0N	P	1	0.030			01MY	01MY	01MY	109	29
RD R 1	RIGGINS TRAP TIMING & EFFICIENCY	SALMON R@RM 85	02AP78-04AP78			1.2	C075.0M	P	4	0.338	6	0.487	21AP	23AP	09MY	112	42
RD R 2	RIGGINS TRAP TIMING & EFFICIENCY	SALMON R@RM 85	05AP78-08AP78			1.1	C075.0M	P	1	0.089	1	0.106	09MY	09MY	09MY	120	26
							C016.0N	P	2	0.178			12MY	12MY	17MY	102	25
RD R 4	RIGGINS TRAP TIMING & EFFICIENCY	SALMON R@RM 85	17AP78-23AP78			1.5	C075.0M	P	2	0.134	3	0.187	05MY	05MY	05MY	125	49
LA R 1	RIGGINS TRAP TIMING & EFFICIENCY	SALMON R@RM 85	24AP78-28AP78			1.3	C075.0M	P	5	0.381	6	0.480	24AP	11MY	13MY	110	52
LA R 2	RIGGINS TRAP TIMING & EFFICIENCY	SALMON R@RM 85	29AP78-01MY78			4.1	C075.0M	P	4	0.099	5	0.131	12MY	14MY	22MY	108	59
LA R 3	RIGGINS TRAP TIMING & EFFICIENCY	SALMON R@RM 85	02MY78-03MY78			1.1	C016.0N	P	1	0.089			22MY	22MY	22MY	105	47

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
130304	RINGOLD HAT PNRC UPPER COL R EVALU.	RINGOLD HAT	07AP77		4	72.8	C075.0S	B	1	0.002	4	0.006	25MY	25MY	25MY	216	10
							C075.0M	P	1	0.002	7	0.010	12MY	12MY	12MY	203	14

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
072310	RND BUTTE HAT DESCHUTES RESEARCH	DESCHUTES@RM 181	10MR81		7	30.0	C075.0S	B	2	0.007	3	0.010	21AP	22AP	10JN	158	13
							C075.0M	P	8	0.027	18	0.062	07AP	24AP	04MY	179	12
071653	RND BUTTE HAT	RND BUTTE HAT	09AP79		9	39.5	C075.0S	B	5	0.013	6	0.016	20AP	25AP	01MY	156	27
							C075.0M	P	28	0.071	34	0.086	18AP	30AP	29MY	159	21
							C016.0N	P	9	0.023			04MY	04MY	11MY	161	20
072153	RND BUTTE HAT	RND BUTTE HAT	01MY80-30JN80		20	3.5	C075.0M	P	2	0.057	4	0.108	12JN	13JN	13JN	135	10
							4008.2N	P	1	0.029			05JN	05JN	05JN	131	14
091602	RND BUTTE HAT STOCK EVAL&TIME&RELEASE	RND BUTTE LADDER	02MY77	97	40	29.5	C075.0S	B	2	0.007	2	0.007	12JN	15JN	16JN	128	10
071609	RND BUTTE HAT	RND BUTTE LADDER	22MY78	106	36	66.5	C075.0M	P	91	0.137	144	0.218	30MY	11JN	01JL	122	21
*	HTCY.STOCK EVALUATION		(071609,YWPIG)				C016.0N	P	17	0.026			01JN	19JN	30JN	122	17
071611	RND BUTTE HAT	RND BUTTE LADDER	31MY78	111	28	46.4	C075.0S	B	1	0.003	2	0.004	07JL	07JL	07JL	125	12
*	HTCY.EVAL+VIBRIO IMM.		(071611,RDPIG)				C075.0M	P	32	0.069	55	0.118	06JN	13JN	01JL	122	33
							C016.0N	P	18	0.039			12JN	19JN	03JL	128	26
071612	RND BUTTE HAT	RND BUTTE LADDER	31MY78	108	32	46.2	C075.0M	P	34	0.074	56	0.121	07JN	16JN	01JL	125	27
*	HTCY EVAL +NON-VIBRIO IMM.		(071612,RDPIG)				C016.0N	P	23	0.050			16JN	22JN	07JL	126	22
071615	RND BUTTE HAT	RND BUTTE LADDER	31MY78	118	24	26.1	C075.0M	P	31	0.119	48	0.183	06JN	11JN	23JN	121	39
*	HATCHERY EVAL +LRGE GRD GROUP		(071615,ORPIG)				C016.0N	P	7	0.027			12JN	21JN	23JN	131	23
071654	RND BUTTE HAT HTCY EVAL + VIBRIO IMM.	RND BUTTE LADDER	04DC78 RECOVERED 1979		13	24.4	C075.0M	P	1	0.005	15	0.062	27ND	27ND	27ND	195	8
							C075.0M	P	1	0.005	2	0.007	27AP	27AP	27AP	165	1
							C016.0N	P	1	0.005			07MY	07MY	07MY	145	1
071655	RND BUTTE HAT HAT EVAL +NONVIBRIO IMN	RND BUTTE LADDER	04DC78 RECOVERED 1979		13	25.0	C075.0M	P	2	0.008	3	0.012	23AP	23AP	02MY	167	1
071824	RND BUTTE HAT HATCH EVAL & TIME RELEASE	RND BUTTE LADDER	01MR79		91	13.2	C075.0M	P	30	0.227	35	0.267	19MY	06JN	19JN	126	4
							C016.0N	P	1	0.008			07JN	07JN	07JN	105	5
091601	RND BUTTE HAT STOCK EVAL & TIME RELEASE	DESCHUTES@RM 100	02MY77	97	40	31.8	C075.0S	B	2	0.007	5	0.016	25MY	25MY	08JN	113	18
091603	RND BUTTE HAT STOCK EVAL&TIME&RELEASE	DESCHUTES@RM 100	13JN77	112	25	34.4	C075.0S	B	4	0.012	6	0.018	11JN	01JL	02JL	129	15
							C075.0M	P	2	0.006	2	0.008	09JN	09JN	09JN	123	69
091614	RND BUTTE HAT SIZE/TIME/RELEASE	DESCHUTES@RM 100	13JN77	121	23	53.7	C075.0S	B	1	0.002	1	0.003	14JL	14JL	14JL	133	13
091615	RND BUTTE HAT SIZE/TIME/RELEASE	DESCHUTES@RM 100	13JN77	115	26	58.1	C075.0S	B	5	0.009	6	0.011	05JL	10JL	14JL	133	15
071826	RND BUTTE HAT HATCH EVAL & TIME RELEASE	DESCHUTES@RM 100	23MY79		25	48.9	C075.0S	B	1	0.003	1	0.003	10JN	10JN	10JN	150	23
							C075.0M	P	132	0.271	156	0.320	27MY	03JN	22JN	126	38
							C018.0S	P	2	0.005			30MY	30MY	30MY	125	67
							C016.0N	P	5	0.011			29MY	11JN	22JN	130	25
071825	RND BUTTE HAT HATCH EVAL & TIME RELEASE	DESCHUTES@RM 100	30MY79-31MY79		22	50.2	C075.0S	B	1	0.002	1	0.003	23JN	23JN	23JN	145	17
							C075.0M	P	106	0.212	120	0.239	04JN	08JN	02JL	127	46
							C016.0N	P	7	0.014			07JN	14JN	22JN	125	32
071949	RND BUTTE HAT HATCHERY EVAL.	DESCHUTES@RM 100	14AP80		8	28.2	C075.0M	P	15	0.054	27	0.096	22AP	29AP	16MY	181	28
							C016.0N	P	13	0.047			25AP	06MY	09MY	163	21
071950	RND BUTTE HAT HATCHERY EVAL.	DESCHUTES@RM 100	14AP80		8	30.0	C075.0M	P	8	0.027	15	0.049	23AP	04MY	07MY	170	21
							C016.0N	P	11	0.037			23AP	06MY	06MY	165	21
071951	RND BUTTE HAT HATCHERY EVAL.	DESCHUTES@RM 100	14AP80-15AP80		8	29.1	C075.0M	P	7	0.025	13	0.043	25AP	06MY	10MY	177	19
							C016.0N	P	11	0.038			01MY	06MY	08MY	167	21

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
072311	RND BUTTE HAT HATCHERY EVAL	DESCHUTES@RM 100	02MR81-05MY81		9	24.3	C075.OS	B	2	0.009	2	0.009	02MY	12JN	13JN	246	4
							C075.OM	P	3	0.013	6	0.027	23AP	30AP	04MY	179	7
072309	RND BUTTE HAT HATCHERY EVAL	DESCHUTES@RM 100	20AP81		5	28.9	C075.OS	B	2	0.007	2	0.008	07MY	05JN	06JN	268	9
							C075.OM	P	10	0.035	18	0.061	01MY	03MY	16MY	188	32
071610	RND BUTTE HAT HATCHERY STOCK EVAL	BLW BONN D	30MY78 (071610,BLPIG)	107	33	71.5	C075.OS	B	10	0.014	15	0.022	01JN	06JN	09JN	99	22
*							C075.OM	P	100	0.140	137	0.193	01JN	03JN	14JN	111	39
							C016.ON	P	43	0.061			02JN	05JN	30JN	105	36
071827	RND BUTTE HAT HATCH EVAL & TIME RELEASE	BLW BONN D	30MY79		22	49.7	C075.OS	B	11	0.023	13	0.027	01JN	03JN	07JN	118	39
							C075.OM	P	138	0.278	154	0.311	01JN	02JN	07JN	123	52
							C016.ON	P	10	0.021			04JN	04JN	04JN	122	43
091604	RND BUTTE HAT STOCK EVALUATION	DESCHUTES@RM 100	13JN77	112	25	33.4	C075.OS	B	2	0.006	2	0.007	29JN	30JN	30JN	128	28

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
090507	S SANTIAM HAT SMOLT SURVIVAL TEST	S SANTIAM@FOSTER	15NO76 RECOVERED 1977		9	97.6	C075.OS	B	1	0.002	3	0.004	15AP	14AP	15AP	136	0
090509	S SANTIAM HAT SMOLT SURVIVAL TEST	S SANTIAM@FOSTER	18MR77		11	98.6	C075.OS	B	43	0.044	107	0.109	14AP	17AP	28AP	156	11
091627	S SANTIAM HAT SITE COMP. ALSO HTCY STOCK EVAL.	S SANTIAM@FOSTER	07NO77 HAND ADJUSTED RECOVERED 1978	139	13	28.7	C075.OS	B	1	0.004	1	0.003	11AP	11AP	11AP	140	0
							C075.OM	P	1	0.004	1	0.005	02MY	02MY	02MY	155	0
							C016.ON	P	2	0.007			28AP	28AP	05MY	145	0
091629	S SANTIAM HAT SITE COMP. ALSO HTCY STOCK EVAL.	S SANTIAM@FOSTER	07NO77 RECOVERED 1978	144	11	28.7	C075.OM	P	1	0.004	1	0.005	28AP	28AP	28AP	140	0
071926	S SANTIAM HAT SMOLT SURVIVAL (EFFECTS OF RELEASE	S SANTIAM@FOSTER	07NO78 RECOVERED 1979	165	8	31.6	C075.OS	B	2	0.007	23	0.074	28FE	01MR	16MR	190	0
							C075.OM	P	1	0.004	1	0.004	17AP	17AP	17AP	168	0
071927	S SANTIAM HAT FALL REL. EVAL.	S SANTIAM@FOSTER	07NO78 RECOVERED 1979	161	8	32.7	C075.OM	P	1	0.004	1	0.004	02MY	02MY	02MY	165	0
071928	S SANTIAM HAT SMOLT SURVIVAL (EFFECTS OF RELEASE	S SANTIAM@FOSTER	07NO78 RECOVERED 1979	167	7	21.1	C075.OS	B	1	0.005	7	0.032	14MR	14MR	14MR	160	0
072020	S SANTIAM HAT LOCATION TIME & SIZE OF RELEASE	S SANTIAM@FOSTER	05NO79-06NO79 RECOVERED 1980		9	33.0	C075.OM	P	2	0.007	4	0.013	15AP	15AP	15AP	163	0
072021	S SANTIAM HAT LOCATION TIME & SIZE OF RELEASE	S SANTIAM@FOSTER	05NO79-06NO79 RECOVERED 1980		9	34.8	C075.OM	P	1	0.003	2	0.007	21AP	20AP	21AP	187	0
072022	S SANTIAM HAT LOCATION TIME & SIZE OF RELEASE	S SANTIAM@FOSTER	05NO79-06NO79 RECOVERED 1980		10	34.2	C075.OM	P	1	0.003	2	0.005	22AP	22AP	22AP	223	0
071945	S SANTIAM HAT LOCATION TIME & SIZE OF RELEASE	S SANTIAM@FOSTER	14MR80		6	29.4	C075.OS	B	8	0.028	20	0.068	20MR	23MR	03AP	208	38
							C075.OM	P	15	0.051	42	0.144	26MR	11AP	23AP	208	12
							C016.ON	P	2	0.007			18AP	18AP	23AP	172	11
071946	S SANTIAM HAT LOCATION TIME & SIZE OF RELEASE	S SANTIAM@FOSTER	14MR80		5	29.9	C075.OS	B	7	0.024	16	0.055	21MR	25MR	10AP	216	31
							C075.OM	P	12	0.041	30	0.102	28MR	14AP	17AP	177	11
							C016.ON	P	1	0.004			18AP	18AP	18AP	227	11
091622	S SANTIAM HAT FALL/SPRG.REL COMP..ABOVE & BELO	S. SANTIAM @ DEXTER	13MR78-15MR78 HAND ADJUSTED	164	8	29.5	C075.OS	B	1	0.004	5	0.017	31MR	31MR	31MR	160	7
							C075.OM	P	4	0.014	7	0.024	12AP	15AP	03MY	150	4
091626	S SANTIAM HAT SITE COMP. ALSO HTCY. STOCK EVAL	S. SANTIAM @ FOSTER	13MR78-15MR78 HAND ADJUSTED	172	7	14.9	C075.OS	B	3	0.021	7	0.047	24MR	25MR	04AP	220	9
							C075.OM	P	8	0.054	11	0.074	05AP	14AP	27AP	188	4
							C016.ON	P	1	0.007			15MY	15MY	15MY	165	3
090508	S SANTIAM HAT SMOLT SURVIVAL TEST	BLW WILLAM FALLS	15NO76 RECOVERED 1977		11	103.0	C075.OS	B	17	0.017	55	0.053	14AP	15AP	25AP	134	0
							C075.OM	P	1	0.001	3	0.003	04MY	03MY	04MY	170	0
090510	S SANTIAM HAT SMOLT SURVIVAL TEST	BLW WILLAM FALLS	17MR77		12	88.9	C075.OS	B	71	0.080	171	0.193	14AP	17AP	28AP	155	4
091630	S SANTIAM HAT SITE COMP. ALSO HTCY. STOCK EVAL	BLW WILLAM FALLS	08NO77 HAND ADJUSTED RECOVERED 1978	141	11	25.9	C075.OS	B	1	0.004	2	0.007	27MR	26MR	27MR	150	0
							C075.OM	P	3	0.012	4	0.015	17AP	17AP	28AP	130	0
091631	S SANTIAM HAT SITE COMP. ALSO HTCY. STOCK EVAL	BLW WILLAM FALLS	08NO77 HAND ADJUSTED RECOVERED 1978	143	12	29.0	C075.OS	B	2	0.007	2	0.027	20MR	21MR	09AP	140	0
							C075.OM	P	1	0.004	2	0.007	10AP	10AP	10AP	170	0
							C016.ON	P	1	0.004			05MY	05MY	05MY	175	0
091632	S SANTIAM HAT SITE COMP. ALSO HTCY. STOCK EVAL	BLW WILLAM FALLS	08NO77 HAND ADJUSTED RECOVERED 1978	150		29.6	C075.OS	B	4	0.014	9	0.030	24MR	27MR	10AP	202	0
							C075.OM	P	4	0.014	6	0.020	31MR	17AP	25AP	145	0
							C016.ON	P	1	0.004			21AP	21AP	21AP	125	0
091623	S SANTIAM HAT FALL/SPRG REL COMP..ABOVE &BELOW	BLW WILLAM FALLS	13MR78-15MR78 HAND ADJUSTED	153	10	26.9	C075.OS	B	20	0.075	57	0.212	20MR	04AP	20AP	171	6
							C075.OM	P	10	0.038	22	0.082	05AP	14AP	24AP	160	4
091621	S SANTIAM HAT FALL/SPRING RELEASE COMPARISON	S SANTIAN @ FOSTER	13MR78 HAND ADJUSTED	154	10	25.0	C075.OS	B	2	0.008	10	0.041	27MR	02AP	03AP	160	7
							C075.OM	P	8	0.032	18	0.072	07AP	13AP	21AP	162	4

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
091623	S SANTIAM HAT	BLW WILLAM FALLS	13MR78-15MR78	153	10	26.9	C016.0N	P	1	0.004			21AP	21AP	21AP	140	5
	FALL/SPRG REL COMP..ABOVE &BELOW																
091624	S SANTIAM HAT	BLW WILLAM FALLS	13MR78-15MR78	150	10	24.6	C075.0S	B	14	0.057	26	0.106	27MR	04AP	14AP	174	6
	SITE COMP. ALSO HTCY.STOCK EVAL		HAND ADJUSTED				C075.0M	P	11	0.045	24	0.098	27MR	14AP	25AP	164	4
091625	S SANTIAM HAT	BLW WILLAM FALLS	13MR78-15MR78	166	8	13.4	C075.0S	B	9	0.068	18	0.134	27MR	30MR	17AP	185	5
	SITE COMP.ALSO HTCY. STOCK EVAL		HAND ADJUSTED				C075.0M	P	3	0.023	7	0.056	10AP	14AP	21AP	180	4
							C016.0N	P	1	0.008			26AP	26AP	26AP	145	4
071929	S SANTIAM HAT	BLW WILLAM FALLS	07NO78	166	8	32.6	C075.0S	B	2	0.007	4	0.013	05AP	06AP	06AP	149	0
	SMOLT SURVIVAL (EFFECTS OF RELEASE		RECOVERED 1979				C075.0M	P	1	0.004	1	0.004	18AP	18AP	18AP	135	0
071930	S SANTIAM HAT	BLW WILLAM FALLS	07NO78	169		32.8	C075.0S	B	3	0.010	6	0.018	14AP	15AP	19AP	140	0
	SMOLT SURVIVAL (EFFECTS OF RELEASE		RECOVERED 1979				C075.0M	P	4	0.013	6	0.020	10AP	19AP	30AP	146	0
072018	S SANTIAM HAT	BLW WILLAM FALLS	05NO79-06NO79		9	34.8	C075.0S	B	2	0.006	4	0.011	19MR	20MR	08AP	137	0
	LOCATION TIME & SIZE OF RELEASE		RECOVERED 1980				C075.0M	P	1	0.003	3	0.009	18AP	18AP	18AP	131	0
072019	S SANTIAM HAT	BLW WILLAM FALLS	05NO79-06NO79		8	35.0	C075.0S	B	3	0.009	5	0.014	26MR	27MR	10AP	152	0
	LOCATION TIME & SIZE OF RELEASE		RECOVERED 1980				C075.0M	P	1	0.003	3	0.010	07AP	06AP	07AP	132	0
071947	S SANTIAM HAT	BLW WILLAM FALLS	13MR80-14MR80		6	32.1	C075.0S	B	20	0.063	43	0.135	18MR	31MR	21AP	211	7
	LOCATION TIME & SIZE OF RELEASE						C075.0M	P	16	0.050	39	0.121	01AP	11AP	21AP	197	4
							C016.0N	P	1	0.004			30AP	30AP	30AP	184	4
071948	S SANTIAM HAT	BLW WILLAM FALLS	13MR80-14MR80		6	28.5	C075.0S	B	22	0.078	55	0.193	17MR	20MR	22AP	201	19
	LOCATION TIME & SIZE OF RELEASE						C075.0M	P	8	0.029	27	0.094	19MR	03AP	17MY	220	6
							C016.0N	P	1	0.004			19MY	19MY	19MY	280	3
							4010.1N	P	1	0.004			03JN	03JN	03JN	200	2
							4008.1S	P	1	0.004			05JN	05JN	05JN	240	2

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
RD HE 1	THE DALLES D	JOHN DAY D	13JN77-16JN77			0.9	C075.0S	B	1	0.111	1	0.111	25JN	25JN	25JN	114	23
	OUTFALL EVAL																

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
631640	TOUTLE HAT	GREEN R	23JN77		117	132.5	C075.0S	B	1	0.001	1	0.001	22MR	22MR	22MR	190	0
			RECOVERED 1978 HAND ADJUSTED				C016.0N	P	1	0.001			15MY	15MY	15MY	165	0
631854	TOUTLE HAT	GREEN R	17JN79		160	144.1	C075.0S	B	1	0.001	5	0.004	14MR	14MR	14MR	110	0
	COL. RIVER FALL CHIN EVAL		COMBINED W 631941		RECOVERED 1980												
631941	TOUTLE HAT	GREEN R	17JN79		160	144.1	C075.0S	B	1	0.001	3	0.003	21MR	21MR	21MR	100	0
	COL. R. F. CH. EVAL		COMBINED W 631854		RECOVERED 1980												

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
050627	WARM SPRING HAT	WARM SPR R@HAT	07AP80-14AP80			168.0	C075.0S	B	2	0.002	3	0.002	09MY	09MY	09MY	149	13
	WARM SPRINGS NFH CONTRIBUTION						C075.0M	P	49	0.030	94	0.057	24MR	08MY	10JN	147	13
							C016.0N	P	46	0.028			30AP	07MY	21MY	145	16
							4005.1N	P	1	0.001			28MY	28MY	28MY	146	9
050628	WARM SPRING HAT	WARM SPR R@HAT	07AP80-14AP80			10.9	C075.0M	P	5	0.046	9	0.086	28AP	08MY	13MY	135	13
	WARM SPRINGS NFH CONTRIBUTION						C016.0N	P	3	0.028			12MY	13MY	13MY	133	13
050822	WARM SPRING HAT	WARM SPR R@HAT	02AP81	155	8	66.7	C075.0M	P	20	0.030	41	0.062	11AP	15AP	23MY	173	32
	PRODUCTION REL																
050824	WARM SPRING HAT	WARM SPR R@HAT	02AP81	155	8	32.3	C075.0S	B	1	0.004	2	0.007	14AP	14AP	14AP	164	34
	PRODUCTION REL						C075.0M	P	3	0.010	6	0.020	14AP	15AP	01MY	187	32
050823	WARM SPRING HAT	WARM SPR R@HAT	09AP81-16AP81	140	18	170.2	C075.0M	P	48	0.029	71	0.042	29AP	07MY	29MY	149	15
	PRODUCTION REL																
050825	WARM SPRING HAT	WARM SPR R@HAT	09AP81	140	20	86.0	C075.0M	P	16	0.019	23	0.027	25AP	13MY	31MY	149	12
	PRODUCTION REL																

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
071830	WARM SPRING R	WARM SPRING TRAP	23SE79-01DE79			4.2	C016.ON	P	1	0.024			02MY	02MY	02MY	145	1
*	WILD FISH CONTRIB.		(LPHE1-4;RPHE1) RECOVERED 1980														

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
631803	WASHOUGAL HAT	WASHOUGAL R@RM 15	26JN78		62	151.4	C075.OS	B	2	0.002	2	0.002	25AP	09MY	10MY	110	0
	PRODUCTION EVAL.		RECOVERED 1979				C075.OM	P	3	0.002	4	0.003	27AP	29AP	02MY	134	0
632153	WASHOUGAL HAT	WASHOUGAL R@RM 15	01JN80 RECOVERED 1981		99	314.6	C075.OS	B	1	0.001	2	0.001	13AP	13AP	13AP	120	0

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE	NO. MKD	RECAPT. SITE	GEAR CODE	RECAPTURES ACTUAL		RECAPTURES ADJUSTED		RECAPTURE DATE 1ST	MED.	LAST	AVG LEN	MVMT RATE
	PURPOSE OF RELEASE		OTHER MARKS	MM	/LB THOUS	R. KM		NO.	%	NO.	%	FISH	FISH	FISH	MM	KM/DAY
131203	WELLS SPAW CH	WELLS TAIL	17JA77-29AP77	13	89.3	C075.0S	B	1	0.002	1	0.002	19JN	19JN	19JN	163	5
	LATE RELEASE EVALUATION					C075.0M	P	1	0.002	2	0.002	08JN	08JN	08JN	161	5
631643	WELLS SPAW CH	WELLS TAIL	16MY78	9	132.7	C075.0S	B	1	0.001	1	0.001	03AU	03AU	03AU	85	10
	PROD. EVALUATION					C075.0M	P	43	0.033	67	0.051	30MY	05JN	30JN	179	38
						C016.0N	P	15	0.012			01JN	22JN	24JL	162	22
631654	WELLS SPAW CH	BLW PR RAPID D	02JN77	34	99.1	C075.0S	B	17	0.018	18	0.018	06JN	11JN	28JN	93	63
	STOCK EVALUATION					C075.0M	P	18	0.019	29	0.030	08JN	08JN	10JN	104	94
131102	WELLS SPAW CH	KLICKITAT R	30AP77	9	49.5	C075.0M	P	9	0.019	35	0.072	11MY	11MY	12MY	183	26

SORT SEQUENCE : SPECIES,SOURCE.RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE	NO. MKD	RECAPT. SITE	GEAR CODE	RECAPTURES ACTUAL		RECAPTURES ADJUSTED		RECAPTURE DATE 1ST	MED.	LAST	AVG LEN	MVMT RATE
	PURPOSE OF RELEASE		OTHER MARKS	MM	/LB THOUS	R. KM		NO.	%	NO.	%	FISH	FISH	FISH	MM	KM/DAY
RA W 3	WHITEBIRD TRAP	SALMON R@RM 53	11AP77		9.2	C075.0M	P	1	0.011	2	0.022	05MY	05MY	05MY	120	35
	STOCK EVAL.															

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
050353	WILLARD HAT TIME & SIZE	LIT WH SAL R@RM 5	01NO78 RECOVERED 1979	104	34	35.7	C075.OS	B	1	0.003	3	0.008	02AP	02AP	02AP	115	0
050354	WILLARD HAT TIME & SIZE	LIT WH SAL R@RM 5	01NO78 RECOVERED 1979	104	34	37.0	C075.OS	B	1	0.003	15	0.041	16FE	16FE	16FE	100	0
050349	WILLARD HAT YEARLING	LIT WH SAL R@RM 5	19AP79		23	31.1	C075.OS	B	12	0.039	14	0.045	30AP	01MY	04MY	121	16
							C075.OM	P	8	0.026	11	0.035	27AP	30AP	01MY	115	18
							C016.ON	P	2	0.007			07MY	07MY	11MY	135	14
050350	WILLARD HAT	LIT WH SAL R@RM 5	19AP79		22	31.2	C075.OS	B	10	0.033	11	0.036	26AP	01MY	03MY	125	16
							C075.OM	P	2	0.007	3	0.010	27AP	28AP	30AP	135	21
050351	WILLARD HAT	LIT WH SAL R@RM 5	19AP79		24	33.0	C075.OS	B	6	0.019	7	0.022	30AP	03MY	05MY	125	14
							C075.OM	P	4	0.013	4	0.014	26AP	27AP	02MY	110	24
050352	WILLARD HAT LATE FALL CHINOOK REL.	LIT WH SAL R@RM 2	01NO78 RECOVERED 1979	104	39	35.6	C075.OS	B	2	0.006	17	0.048	06MR	06MR	05AP	105	0

SPECIES: YEARLING CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
130701	WINTHROP HAT CONTROL TRANS	METHOW R@HAT	12AP77		12	99.2	C075.OM	P	4	0.005	9	0.009	31MY	07JN	10JN	159	15
631723	WINTHROP HAT PROD. EVALUATION	METHOW R@HAT	25AP78		14	80.5	C075.OM	P	19	0.024	25	0.031	19MY	25MY	19JN	152	28
							C016.ON	P	6	0.008			23MY	26MY	02JN	155	29
631724	WINTHROP HAT HAULING STUDY	METHOW R@HAT	26AP78		14	86.7	C075.OS	B	1	0.002	2	0.002	30JN	30JN	30JN	80	13
							C075.OM	P	31	0.036	43	0.051	16MY	24MY	20JN	157	30
							C016.ON	P	7	0.009			25MY	01JN	30JN	112	25
							C009.ON	B	1	0.002			30MY	30MY	30MY	155	27
631731	WINTHROP HAT HAULING STUDY	METHOW R@HAT	10MY78-11MY78		14	91.4	C075.OM	P	99	0.109	130	0.142	22MY	27MY	16JN	154	50
							C016.ON	P	21	0.023			23MY	01JN	05JN	143	41
631811	WINTHROP HAT HATCHERY EVAL	METHOW R@HAT	20AP79		12	86.2	C075.OM	P	34	0.040	47	0.055	16MY	27MY	18JN	158	23
							C018.OS	P	1	0.002			30MY	30MY	30MY	151	23
							C016.ON	P	1	0.002			29MY	29MY	29MY	165	23
631812	WINTHROP HAT HAULING STUDY	METHOW R@HAT	24AP79		14	67.3	C075.OS	B	1	0.002	2	0.003	13AU	13AU	13AU	250	8
							C075.OM	P	15	0.023	20	0.030	22MY	30MY	12JN	156	23
							C016.ON	P	1	0.002			26MY	26MY	26MY	150	28
131113	WINTHROP HAT CONTROL HAUL	METHOW R@RM 28	13AP77	15	11	93.5	C075.OM	P	3	0.004	7	0.008	31MY	07JN	10JN	170	15
130513	WINTHROP HAT TRANSPORT	BLW PR RAPID D	04MY77-06MY77		11	95.6	C075.OM	P	9	0.010	22	0.024	31MY	31MY	09JN	166	21
631820	WINTHROP HAT HAULING STUDY	BLW PR RAPID D	16MY79		13	77.6	C075.OM	P	73	0.095	86	0.111	29MY	01JN	22JN	156	35
							C016.ON	P	2	0.003			07JN	07JN	11JN	165	28

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LA 4 1	CHELAN HAT	ICICLE CR	03MY78		6	24.1	C075.0M	P	24	0.100	33	0.136	16MY	21MY	12JN	210	40
*	CONTROL		(WHORYWOR,LA41)														
LA 4 2	CHELAN HAT	ICICLE CR	03MY78-23MY78		6	23.8	C075.0M	P	25	0.106	32	0.133	17MY	22MY	06JN	217	38
*			(WHORYWGN,WHORLGOR)				C016.0N	P	2	0.009			17MY	17MY	26MY	220	55
LA 4 3	CHELAN HAT	ICICLE CR	03MY78		5	22.0	C075.0M	P	17	0.078	21	0.098	18MY	25MY	06JN	227	32
*	CONTROL		(WHORBLOR,LA43)				C016.0N	P	2	0.010			25MY	25MY	25MY	202	35
WHORLGOR	CHELAN HAT	ICICLE CR	03MY78		6	11.4	C075.0M	P	2	0.018	2	0.019	01JN	01JN	01JN	221	25
*	CONTROL		(WHORYWGN,LA42)														
WHORYWOR	CHELAN HAT	ICICLE CR	03MY78		6	24.1	C075.0M	P	1	0.005	1	0.006	19MY	19MY	19MY	235	45
*	CONTROL		(WHORYWOR,LA41)														
LA AN 1	CHELAN HAT	ICICLE CR	26AP79			24.0	C075.0M	P	7	0.030	10	0.041	18MY	23MY	29MY	236	26
*	HOMING-NATURAL		(LAAN1;WHLBYW)														
LA AN 2	CHELAN HAT	ICICLE CR	26AP79		5	19.2	C075.0M	P	3	0.016	4	0.023	23MY	24MY	29MY	222	26
*	HOMING-NATURAL		(LAAN2;WHLBPK)														
LA AN 3	CHELAN HAT	ICICLE CR	26AP79			24.2	C075.0M	P	8	0.034	11	0.047	18MY	26MY	07JN	238	24
*	HOMING-NATURAL		(LAAN3;WHLBLG)														
WHLBLG	CHELAN HAT	ICICLE CR	26AP79			24.2	C075.0M	P	11	0.046	13	0.054	15MY	28MY	03JN	222	22
*	HOMING-NATURAL		(LAAN3;WHLBLG)														
WHLBPK	CHELAN HAT	ICICLE CR	26AP79		5	19.2	C075.0M	P	11	0.058	13	0.067	17MY	30MY	13JN	223	21
*	HOMING-NATURAL		(LAAN2;WHLBPK)														
WHLBYW	CHELAN HAT	ICICLE CR	26AP79			24.0	C075.0M	P	15	0.063	21	0.088	15MY	27MY	09JN	243	23
*	HOMING-NATURAL		(LAAN1;WHLBYW)				C029.0S	P	1	0.005			18MY	18MY	18MY	249	35
							C018.0S	P	1	0.005			30MY	30MY	30MY	232	23
							C014.0S	P	1	0.005			16MY	16MY	16MY	219	39
RA IY 1	CHELAN HAT	ROCK ISLAND D	11MY79			58.9	C075.0M	P	30	0.051	43	0.074	23MY	28MY	07JN	193	38
	TAILRACE CONTROL																
RA IY 2	CHELAN HAT	ROCK ISLAND D	11MY79			58.6	C075.0M	P	37	0.064	57	0.098	25MY	26MY	06JN	191	43
	TURBINE TEST																
RA IY 4	CHELAN HAT	ROCK ISLAND D	11MY79			58.9	C075.0M	P	20	0.034	30	0.052	23MY	26MY	31MY	183	43
	DRAFT TUBE CONTROL																
RA 2 1	CHELAN HAT	BLW BONN D	05MY78		7	22.8	C075.0S	B	1	0.005	1	0.007	08MY	08MY	08MY	210	52
*	TEST		(WHRDPK,RA21)				C075.0M	P	15	0.066	19	0.084	08MY	09MY	22MY	201	39
							C016.0N	P	33	0.145			08MY	08MY	12MY	195	71
RA 2 2	CHELAN HAT	BLW BONN D	05MY78		6	21.7	C075.0M	P	15	0.070	19	0.089	06MY	08MY	02JN	202	52
*	TEST		(WHRDLB,RA22)				C016.0N	P	33	0.153			08MY	08MY	23MY	196	71
							C007.0S	B	1	0.005			09MY	09MY	09MY	195	56
RA 2 3	CHELAN HAT	BLW BONN D	05MY78		6	23.6	C075.0S	B	2	0.009	3	0.012	08MY	08MY	08MY	180	52
*	TEST		(WHORYWLB,RA23)				C075.0M	P	19	0.081	25	0.105	08MY	09MY	23MY	211	39
							C016.0N	P	29	0.124			08MY	08MY	25MY	202	71
RA Y 1	CHELAN HAT	BLW BONN D	28AP79		4	23.3	C075.0M	P	28	0.121	36	0.153	30AP	09MY	10JN	227	14
*	BARGE 10 DAY TEST		(RAY1;WHLBWH)				C029.0S	P	1	0.005			18MY	18MY	18MY	185	10
							C016.0N	P	1	0.005			21MY	21MY	21MY	200	9
RA Y 2	CHELAN HAT	BLW BONN D	28AP79		4	24.3	C075.0M	P	7	0.029	7	0.030	01MY	02MY	08MY	216	39
*	BARGE 2 DAY TEST		(RAY2;WHLBRD)														
RA Y 3	CHELAN HAT	BLW BONN D	28AP79		5	22.8	C075.0S	B	1	0.005	1	0.005	02MY	02MY	02MY	200	39
*	BARGE 4 HOUR TEST		(RAY3;WHLBOR)				C075.0M	P	11	0.049	14	0.063	01MY	10MY	16MY	238	13

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
WHLBOR	CHELAN HAT	BLW BONN D	28AP79		5	22.8	C075.0S	B	1	0.005	1	0.006	04MY	04MY	04MY	219	26
*	BARGE 4 HOUR TEST		(RAY3;WHLBOR)				C075.0M	P	8	0.036	9	0.040	30AP	01MY	17MY	205	52
							C016.0N	P	1	0.005			04MY	04MY	04MY	220	36
WHLBRD	CHELAN HAT	BLW BONN D	28AP79		4	24.3	C075.0M	P	14	0.058	17	0.069	30AP	30AP	01MY	212	78
*	BARGE 2 DAY TEST		(RAY2;WHLBRD)				C016.0N	P	2	0.009			04MY	04MY	04MY	262	36
							C014.0S	P	1	0.005			25MY	25MY	25MY	247	8
WHLBWH	CHELAN HAT	BLW BONN D	28AP79		4	23.3	C075.0M	P	10	0.043	13	0.055	30AP	02MY	19MY	212	39
*	BARGE 10 DAY TEST		(RAY1;WHLBWH)				C029.0S	P	1	0.005			17MY	17MY	17MY	201	11

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
RD IT 2	COLUMBIA RIVER MIGRATION RATE	JONES BEACH SHORE	30AP81	195		0.0	C075.0M	P	1	4.167	2	7.853	07MY	07MY	07MY	190	0

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
131408	COWLITZ TROUT H	COWLITZ R@RM 47	15MY77			30.0	C075.0S	B	1	0.004	3	0.011	28MY	28MY	28MY	168	8
							C075.0M	P	4	0.014	14	0.048	31MY	01JN	03JN	195	6
631760	COWLITZ TROUT HAT STOCK EVALUATION	COWLITZ R@RM 50	30MY78-31MY78	6		24.0	C075.0M	P	30	0.126	47	0.197	02JN	03JN	26JN	206	29
							C016.0N	P	9	0.038			05JN	05JN	05JN	200	29

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
LVRP	Deschutes R.	Deschutes RM100	AP81	5		27.0	46.5M		2	0.007			4MY	25MY	26MY	221	

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
050842	DRY CR CONTRIBUTION	DRY CR	13AP81-01MY81	166		2.7	C075.0M	P	2	0.075	3	0.103	12MY	30MY	31MY	204	13

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
100349	DWORSHAK HAT	PAHSIMEROI R	18AP78		9	33.6	C075.0M	P	23	0.069	33	0.099	10MY	25MY	07JN	182	33
	HOMING EVALUATION						C016.0N	P	1	0.003			12MY	12MY	12MY	185	54
RD X3 1	DWORSHAK HAT	PAHSIMEROI R	04FE80-27AP80		5	5.4	C075.0M	P	1	0.019	2	0.028	15MY	15MY	15MY	200	12
	TIMING AND MIGRATION RATES																
RA SU 1	DWORSHAK HAT	PAHSIMEROI R	28MR80-27AP80		5	5.0	C016.0N	P	1	0.020			24AP	24AP	24AP	145	48
	TIMING AND MIGRATION RATES																
LA SU 1	DWORSHAK HAT	PAHSIMEROI R	23AP80-27AP80		5	5.1	C075.0M	P	1	0.020	2	0.038	23MY	23MY	23MY	200	41
	TIMING AND MIGRATION RATES																
RD IU 2	DWORSHAK HAT	LEMHI R	22AP80		5	10.6	C075.0M	P	2	0.019	5	0.044	21MY	22MY	18JN	165	41
	TIMING AND MIGRATION																
LA SU 4	DWORSHAK HAT	LEMHI R@MO	24AP80		5	10.1	C075.0M	P	2	0.020	4	0.038	28AP	29AP	10JN	200	233
	TIMING AND MIGRATION																
102252	DWORSHAK HAT	S FK CLEARWATER	04MY81		9	39.3	C075.0M	P	36	0.092	51	0.130	11MY	13MY	04JN	186	103
	SYSTEM II,MINERALS ADDED																
102253	DWORSHAK HAT	S FK CLEARWATER	04MY81		9	41.3	C075.0M	P	49	0.119	69	0.167	11MY	12MY	31MY	181	116
	SYSTEM III,NO MINERALS																
101315	DWORSHAK HAT	CLEAR CR	24AP78		10	48.2	C075.0S	B	1	0.003	1	0.003	06JN	06JN	06JN	180	18
*	CLEAR CREEK SITE EVALUATION		(LDSU4:11,375)				C075.0M	P	56	0.117	68	0.141	03MY	09MY	30MY	203	53
							C016.0N	P	3	0.007			08MY	08MY	26MY	222	61
102341	DWORSHAK HAT	CLEAR CREEK	29AP81		9	41.4	C075.0M	P	25	0.061	35	0.086	07MY	16MY	31MY	178	47
	RELEASE LOCATION																
101307	DWORSHAK HAT	N FK CLEARWATER	07AP77			30.0	C075.0S	B	1	0.004	1	0.005	11MY	11MY	11MY	162	22
							C075.0M	P	3	0.011	18	0.061	10MY	09MY	11MY	176	23
101309	DWORSHAK HAT	N FK CLEARWATER	07AP77			30.9	C075.0M	P	3	0.010	11	0.034	11MY	11MY	11MY	173	22
101310	DWORSHAK HAT	N FK CLEARWATER	07AP77			60.2	C075.0S	B	2	0.004	2	0.005	11MY	12MY	13MY	141	21
							C075.0M	P	7	0.012	20	0.034	04MY	10MY	31MY	208	22
101311	DWORSHAK HAT	N FK CLEARWATER	07AP77			61.7	C075.0M	P	7	0.012	22	0.037	04MY	11MY	11MY	181	22
101313	DWORSHAK HAT	N FK CLEARWATER	07AP77			62.2	C075.0M	P	5	0.009	14	0.023	05MY	11MY	31MY	183	22
LD S 2	DWORSHAK HAT	N FK CLEARWATER	07AP77			10.0	C075.0M	P	1	0.011	2	0.021	05MY	05MY	05MY	227	26
	BARGE TRANSPORT																
RD IS 1	DWORSHAK HAT	N FK CLEARWATER	07MY77			0.8	C075.0M	P	1	0.133	4	0.464	11MY	11MY	11MY	167	184
RD IJ 1	DWORSHAK HAT	N FK CLEARWATER	08MY77		9	17.2	C075.0M	P	18	0.105	66	0.385	04MY	11MY	12MY	173	245
	BARGE TRANSPORT																
LD IU 2	DWORSHAK HAT	N FK CLEARWATER	14AP78			6.1	C075.0M	P	4	0.066	5	0.079	04MY	06MY	17MY	205	33
100231	DWORSHAK HAT	N FK CLEARWATER	21AP78		7	100.6	C075.0M	P	80	0.080	108	0.108	03MY	14MY	17JN	183	32
*	CONTROL		(LAPP2:30,000)				C016.0N	P	6	0.006			08MY	12MY	05JN	195	38
							C007.0S	B	1	0.001			18MY	18MY	18MY	235	30
LA PP 2	DWORSHAK HAT	N FK CLEARWATER	21AP78		7	30.0	C075.0M	P	44	0.147	53	0.176	01MY	12MY	03JN	182	35
*	NORMAL HATCHERY PROD.		(100231)				C016.0N	P	7	0.024			08MY	12MY	26MY	211	38
050425	DWORSHAK HAT	N FK CLEARWATER	06AP79	190	8	42.5	C075.0M	P	3	0.008	3	0.009	02MY	14MY	01JN	191	19
	AGE AT RELEASE II						C029.0S	P	1	0.003			17MY	17MY	17MY	211	19

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
100533	DWORSHAK HAT	N FK CLEARWATER	18MY79-01MY80	150	12	2.4	C075.0M	P	18	0.056	21	0.064	30MY	30MY	02JN	154	61
*	1YR MIGR-2YR REARING PROG		LDSU3, 30.1k in 1979				C075.0M	P	3	0.010	5	0.017	10MY	11MY	16MY	242	1
RA SU 2	DWORSHAK HAT	N FK CLEARWATER	18MY79-01MY80	150	12	32.5	C075.0M	P	10	0.031	12	0.036	30MY	30MY	01JN	160	61
*	1YR MIGR-2YR REARING PROG		(2417 IN 1980,477 W LD														
050455	DWORSHAK HAT	N FK CLEARWATER	17AP80		8	59.1	C075.0S	B	2	0.004	4	0.006	05MY	05MY	05MY	188	41
							C075.0M	P	57	0.097	102	0.172	25AP	06MY	02JN	188	39
							C016.0N	P	9	0.016			30AP	02MY	16MY	187	53
102162	DWORSHAK HAT	N FK CLEARWATER	17AP80		6	46.9	C075.0M	P	29	0.062	48	0.102	29AP	06MY	14MY	196	39
							C016.0N	P	10	0.022			30AP	06MY	16MY	193	42
RA 4 4	DWORSHAK HAT	N FK CLEARWATER	18AP80		8	10.0	C016.0N	P	1	0.010			05MY	05MY	05MY	195	47
	TIMING AND MIGRATION																
LD IU 1	DWORSHAK HAT	N FK CLEARWATER	22AP80	141	17	5.1	C016.0N	P	1	0.020			08MY	08MY	08MY	150	50
	TIMING AND MIGRATION																
LD IU 2	DWORSHAK HAT	N FK CLEARWATER	22AP80	71	10	5.0	C075.0M	P	3	0.061	6	0.112	29AP	03MY	10MY	175	67
	TIMING AND MIGRATION						C016.0N	P	1	0.021			16MY	16MY	16MY	180	33
LD IU 4	DWORSHAK HAT	N FK CLEARWATER	22AP80	198	6	5.0	C075.0M	P	9	0.181	15	0.307	29AP	02MY	10MY	202	73
	TIMING AND MIGRATION																
102161	DWORSHAK HAT	N FK CLEARWATER	25AP80		9	49.2	C075.0M	P	36	0.074	71	0.144	03MY	09MY	19MY	201	52
							C016.0N	P	10	0.021			06MY	06MY	09MY	184	72
LA X3 3	DWORSHAK HAT	N FK CLEARWATER	29AP80		7	10.1	C075.0M	P	2	0.020	3	0.031	10MY	11MY	14MY	192	61
	TIMING AND MIGRATION						C016.0N	P	1	0.010			16MY	16MY	16MY	195	47
RA DT 3	DWORSHAK HAT	N FK CLEARWATER	29AP80		7	10.0	C075.0M	P	2	0.021	3	0.032	07MY	07MY	07MY	210	92
	TIMING AND MIGRATION																
LD SU 3	DWORSHAK HAT	N FK CLEARWATER	01MY80		5	0.5	4007.1S	P	1	0.210			06JN	06JN	06JN	160	22
*	MIGRATION HOMING TEST		(100533)														
102251	DWORSHAK HAT	N FK CLEARWATER	04MY81		9	38.2	C075.0M	P	6	0.016	8	0.020	12MY	18MY	28MY	204	52
	AGE 1 REL																
RA Z 1	DWORSHAK HAT	BLW BONN D	28AP78	188	7	20.7	C075.0M	P	15	0.073	19	0.093	01MY	02MY	17MY	197	39
*	TEST		(WHRDXY,RAZ1)				C016.0N	P	2	0.010			05MY	05MY	08MY	197	31
RA Z 2	DWORSHAK HAT	BLW BONN D	28AP78	188	7	24.0	C075.0M	P	22	0.092	24	0.101	03MY	04MY	10MY	196	26
*	TEST		(WHRDYW,RAZ2)				C016.0N	P	1	0.005			08MY	08MY	08MY	205	21
WHRDXY	DWORSHAK HAT	BLW BONN D	28AP78	188	7	20.7	C075.0M	P	1	0.005	1	0.006	25MY	25MY	25MY	80	6
*	TEST		(WHRDXY,RAZ1)														
WHRDYW	DWORSHAK HAT	BLW BONN D	28AP78	188	7	24.0	C075.0M	P	3	0.013	3	0.015	04MY	01JN	02JN	180	5
*	TEST		(WHRDYW,RAZ2)				C007.0S	B	1	0.005			23MY	23MY	23MY	155	9
100534	DWORSHAK HAT	BLW BONN D	14MY79-17MY79	150	12	32.4	C075.0M	P	43	0.133	56	0.174	20MY	20MY	23MY	153	26
	BARGED VS NATURAL MIGR						C016.0N	P	3	0.010			21MY	21MY	21MY	138	31
102119	DWORSHAK HAT	BLW BONN D	29AP80-02MY80		6	40.0	C075.0S	B	3	0.008	5	0.014	05MY	05MY	05MY	178	26
*			8486 WITH LD41				C075.0M	P	72	0.180	155	0.388	03MY	05MY	17MY	191	26
							C016.0N	P	19	0.048			06MY	06MY	09MY	194	31
LD 4 1	DWORSHAK HAT	BLW BONN D	29AP80		6	8.5	C075.0M	P	20	0.236	44	0.515	03MY	05MY	08MY	196	26
*			CWT 102119				C016.0N	P	5	0.059			05MY	06MY	07MY	195	31
LD SU 4	DWORSHAK HAT	CLEAR CR	24AP78		10	11.4	C075.0M	P	14	0.124	20	0.173	03MY	14MY	03JN	195	40
	CLEAR CREEK SITE EVALUATION		(101315)				C016.0N	P	1	0.009			12MY	12MY	12MY	210	47

SPECIES: STEELHEAD

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	PURPOSE OF RELEASE		OTHER MARKS														
090611	EAGLE CR HAT	CLACKAMAS R	02MY77		8	81.1	C075.0S	B	3	0.004	3	0.005	13MY	22MY	08JN	143	9
	STOCK EVALUATION						C075.0M	P	18	0.023	52	0.065	11MY	01JN	10JN	183	6
091656	EAGLE CR HAT	CLACKAMAS R	24AP78	176	6	44.1	C075.0S	B	1	0.003	1	0.004	08MY	08MY	08MY	140	12
	STOCK EVAL (PNRC)						C075.0M	P	52	0.118	75	0.170	29AP	15MY	07JN	192	8
							C016.0N	P	29	0.066			01MY	12MY	05JN	186	13
							C009.0N	B	1	0.003			02MY	02MY	02MY	135	30
							C007.0S	B	1	0.003			04MY	04MY	04MY	210	24
071745	EAGLE CR HAT	CLACKAMAS R	01MY79		7	78.0	C075.0S	B	1	0.002	1	0.002	06JN	06JN	06JN	180	5
	STOCK EVAL (PNRC)						C075.0M	P	99	0.127	125	0.161	08MY	19MY	18JN	184	10
							C018.0S	P	1	0.002			30MY	30MY	30MY	178	8
							C016.0N	P	1	0.002			21MY	21MY	21MY	190	12
							C014.0S	P	1	0.002			16MY	16MY	16MY	189	16

SPECIES: STEELHEAD

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	PURPOSE OF RELEASE		OTHER MARKS														
LA SU 2	HAGERMAN HAT	PAHSIMEROI R	09FE79-14FE79	220	5	5.2	C075.0M	P	2	0.039	3	0.051	23MY	24MY	30MY	215	12
*	COLD WATER CONDITION EARLY RELEASE CLEARWATER (050422)																
RA SU 3	HAGERMAN HAT	PAHSIMEROI R	09FE79-14FE79	220	5	11.7	C075.0M	P	1	0.009	1	0.011	04MY	04MY	04MY	175	15
*	COLD WATER CONDITION EARLY RELEASE (050422)																
050422	HAGERMAN HAT	PAHSIMEROI R	01AP79-31MY79	220	5	60.0	C075.0M	P	20	0.034	25	0.043	10MY	29MY	05JN	220	21
*	COLD WATER COND EARLY REL(VOLUNTAR DNFH (RASU3,LASU2)																
050423	HAGERMAN HAT	PAHSIMEROI R	12AP79-23AP79	230	4	56.3	C075.0M	P	16	0.029	20	0.037	10MY	25MY	12JN	265	29
*	COLD WATER COND LATE REL		DNFH(LAIU4;RAIU2)				C018.0S	P	1	0.002			30MY	30MY	30MY	100	27
							C016.0N	P	1	0.002			29MY	29MY	29MY	250	28
050424	HAGERMAN HAT	PAHSIMEROI R	12AP79-17AP79	190	7	41.4	C075.0M	P	5	0.013	6	0.014	19MY	31MY	04JN	205	25
*	COLD WATER COND(LATE REL.)		DNFH(LAIU3;RAIU3)														
LA IU 3	HAGERMAN HAT	PAHSIMEROI R	12AP79-17AP79	190	7	5.2	C075.0M	P	2	0.039	2	0.046	30MY	06JN	07JN	170	22
*	COLD WATER CONDITIONING		(PART OF 41569 W/05042														
LA IU 4	HAGERMAN HAT	PAHSIMEROI R	12AP79-23AP79	230	4	10.4	C075.0M	P	1	0.010	1	0.013	19MY	19MY	19MY	260	33
*	COLD WATER CONDITION LATE RELEASE		CLEARWATER (050423)														
RA IU 3	HAGERMAN HAT	PAHSIMEROI R	12AP79-17AP79	190	7	10.3	C075.0M	P	1	0.010	1	0.015	10MY	10MY	10MY	230	44
*	COLD WATER COND		CLEARWATER (5-4/24)														
050636	HAGERMAN HAT	PAHSIMEROI R	04FE80-27AP80		4	40.5	C075.0M	P	15	0.038	28	0.069	05MY	10MY	23MY	212	13
*	EVAL. OF COLD WATER CONDITIONING		10077 WITH LD DT 1				C016.0N	P	3	0.008			13MY	16MY	16MY	222	13
050637	HAGERMAN HAT	PAHSIMEROI R	04FE80-27AP80		4	33.9	C075.0S	B	1	0.003	1	0.004	09MY	09MY	09MY	213	13
*	EVAL. OF COLD WATER CONDITIONING		8490 WITH RD DT 1				C075.0M	P	25	0.074	41	0.121	09MY	12MY	23MY	222	13
							C016.0N	P	10	0.030			06MY	13MY	16MY	218	13
050635	HAGERMAN HAT	PAHSIMEROI R	21AP80-27AP80		5	36.6	C075.0M	P	7	0.020	14	0.037	10MY	11MY	19MY	220	62
*	EVAL. OF COLD WATER CONDITIONING		9145 WITH LA DT 3				C016.0N	P	3	0.009			13MY	16MY	16MY	225	52
							4008.3S	P	1	0.003			05JN	05JN	05JN	230	29
LA DT 3	HAGERMAN HAT	PAHSIMEROI R	27AP80			9.1	C075.0M	P	1	0.011	2	0.022	17MY	17MY	17MY	250	62
*	COLD WATER COND.		CWT 050635,36600 FISH				4009.4S	P	1	0.011			04JN	04JN	04JN	240	34
LD DT 1	HAGERMAN HAT	PAHSIMEROI R	27AP80			10.1	C075.0M	P	4	0.040	7	0.070	10MY	16MY	23MY	192	65
*	COLD WATER COND.		CWT 050636,40487 FISH				C016.0N	P	1	0.010			13MY	13MY	13MY	220	81
							4009.4S	P	1	0.010			04JN	04JN	04JN	246	34
RD DT 1	HAGERMAN HAT	PAHSIMEROI R	27AP80			8.5	C075.0M	P	2	0.024	4	0.043	10MY	10MY	10MY	227	95
*	COLD WATER COND.		CWT 050637,33932 FISH				C016.0N	P	1	0.012			09MY	09MY	09MY	215	108
102239	HAGERMAN HAT	PAHSIMEROI R	01AP81		4	49.6	C075.0M	P	30	0.061	44	0.089	03MY	13MY	20JN	239	29
	CONTROL																
102240	HAGERMAN HAT	PAHSIMEROI R	01AP81		7	38.4	C075.0M	P	13	0.034	19	0.049	01MY	12MY	31MY	206	30
	STOCK REL																

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	PURPOSE OF RELEASE		OTHER MARKS	MM /LB	THOUS	R. KM		NO.	%	NO.	%					
RA IK 4	ICE HARBOR D	FISHOOK PARK	08MY78-13MY78		3.3	C075.0M	P	1	0.031	1	0.043	22MY	22MY	22MY	165	34
	TIMING & EFFICIENCY					C016.0N	P	2	0.061			25MY	25MY	25MY	167	32
LA IK 1	ICE HARBOR D	FISHOOK PARK	15MY78-20MY78		2.8	C075.0M	P	1	0.036	1	0.049	02JN	02JN	02JN	175	27
	TIMING & EFFICIENCY															
LA IK 2	ICE HARBOR D	FISHOOK PARK	22MY78-26MY78		1.9	C075.0M	P	1	0.054	1	0.073	07JN	07JN	07JN	180	30
	TIMING & EFFICIENCY															
LD IS 3	ICE HARBOR D	FISHOOK PARK	05MY79-12MY79		1.2	C075.0M	P	1	0.085	1	0.110	19MY	19MY	19MY	200	34
	FOREBAY CONTROL															
LD IS 4	ICE HARBOR D	FISHOOK PARK	14MY79-18MY79		1.2	C075.0M	P	1	0.082	2	0.150	27MY	27MY	27MY	140	37
	FOREBAY CONTROL															

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	PURPOSE OF RELEASE		OTHER MARKS	MM /LB	THOUS	R. KM		NO.	%	NO.	%					
LA E 3	JOHN DAY D	BLALOCK SHORE	01MY78		0.3	C075.0M	P	1	0.339	2	0.512	06MY	06MY	06MY	185	60
	TIMING AND EFFICIENCY															
LA E 2	JOHN DAY D	BLALOCK SHORE	02MY78		0.7	C075.0M	P	1	0.142	1	0.169	09MY	09MY	09MY	210	43
	TIMING AND EFFICIENCY															
LA E 4	JOHN DAY D	BLALOCK SHORE	04MY78		0.6	C016.0N	P	2	0.355			08MY	08MY	08MY	210	90
	TIMING AND EFFICIENCY															
LP E 4	JOHN DAY D	BLALOCK SHORE	11MY78		0.5	C016.0N	P	1	0.186			19MY	19MY	19MY	180	45
	TIMING AND EFFICIENCY															
RA E 1	JOHN DAY D	BLALOCK SHORE	12MY78		0.6	C075.0M	P	1	0.176	1	0.216	17MY	17MY	17MY	197	60
	TIMING AND EFFICIENCY															
RA E 2	JOHN DAY D	BLALOCK SHORE	13MY78		0.6	C075.0M	P	3	0.522	4	0.620	18MY	19MY	19MY	203	50
	TIMING AND EFFICIENCY															
RP E 1	JOHN DAY D	BLALOCK SHORE	16MY78		0.3	C016.0N	P	3	0.873			22MY	23MY	26MY	170	51
	TIMING AND EFFICIENCY															
RP E 2	JOHN DAY D	BLALOCK SHORE	17MY78		0.3	C075.0M	P	1	0.365	1	0.464	23MY	23MY	23MY	180	50
	TIMING AND EFFICIENCY															
RD E 1	JOHN DAY D	BLALOCK SHORE	26MY78		0.4	C075.0M	P	1	0.281	1	0.295	01JN	01JN	01JN	210	50
	TIMING AND EFFICIENCY															
RD E 2	JOHN DAY D	BLALOCK SHORE	27MY78		0.5	C075.0M	P	1	0.192	1	0.271	22MY	22MY	22MY	205	-59
	TIMING AND EFFICIENCY															
LD SP 1	JOHN DAY D	BLALOCK SHORE	07MY79-09MY79		1.7	C075.0M	P	3	0.174	5	0.301	12MY	12MY	15MY	171	60
	EFFICIENCY															
LA SP 3	JOHN DAY D	BLALOCK SHORE	20MY79		0.3	C075.0M	P	1	0.302	2	0.581	26MY	26MY	26MY	215	50
	EFFICIENCY															
RA SP 3	JOHN DAY D	BLALOCK SHORE	23MY79		0.2	C075.0M	P	2	1.299	3	1.894	29MY	29MY	29MY	187	50
	EFFICIENCY															
LD SP 4	JOHN DAY D	BLALOCK SHORE	27MY79		0.1	C075.0M	P	1	0.758	1	0.815	04JN	04JN	04JN	152	38
	EFFICIENCY															
LP SP 4	JOHN DAY D	BLALOCK SHORE	30MY79-31MY79		0.2	C075.0M	P	1	0.530	1	0.569	04JN	04JN	04JN	155	60
	EFFICIENCY															
RA HE 1	JOHN DAY D	BLALOCK SHORE	24AP80		0.9	C075.0M	P	2	0.233	3	0.385	01MY	09MY	10MY	175	20
	EFFICIENCY REL															
RD HE 1	JOHN DAY D	BLALOCK SHORE	25AP80		0.7	C016.0N	P	1	0.136			02MY	02MY	02MY	180	51
	EFFICIENCY REL															
RP HE 1	JOHN DAY D	BLALOCK SHORE	28AP80		1.2	C075.0M	P	3	0.260	6	0.529	03MY	04MY	09MY	212	50
	EFFICIENCY REL															
LA HE 1	JOHN DAY D	BLALOCK SHORE	29AP80		0.8	C075.0M	P	1	0.131	1	0.190	08MY	08MY	08MY	187	33
	EFFICIENCY REL															
RA HE 2	JOHN DAY D	BLALOCK MID R	02MY80		0.6	C075.0M	P	2	0.344	3	0.537	08MY	09MY	09MY	157	43
	EFFICIENCY REL					C016.0N	P	1	0.172			09MY	09MY	09MY	172	51
RD HE 2	JOHN DAY D	BLALOCK SHORE	03MY80		1.1	C016.0N	P	1	0.094			09MY	09MY	09MY	200	60
	EFFICIENCY REL															
RP HE 2	JOHN DAY D	BLALOCK MID R	04MY80		1.0	C075.0M	P	2	0.203	4	0.364	10MY	10MY	10MY	187	50
	EFFICIENCY REL															
LA HE 2	JOHN DAY D	BLALOCK MID R	05MY80		1.1	C075.0M	P	2	0.186	4	0.334	10MY	10MY	10MY	190	60
	EFFICIENCY REL															
LP HE 2	JOHN DAY D	BLALOCK MID R	07MY80		1.5	C075.0M	P	1	0.066	2	0.108	12MY	12MY	12MY	230	60
	EFFICIENCY REL															

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
LP HE 2	JOHN DAY D EFFICIENCY REL	BLALOCK MID R	07MY80			1.5	C016.0N	P	1	0.066			13MY	13MY	13MY	182	60
RA HE 3	JOHN DAY D EFFICIENCY REL	BLALOCK SHORE	08MY80			1.4	C075.0M	P	1	0.071	2	0.140	17MY	17MY	17MY	185	33
LA HE 3	JOHN DAY D EFFICIENCY REL	BLALOCK SHORE	11MY80			0.7	C075.0M	P	1	0.154	2	0.276	10MY	10MY	10MY	207	-299
RA SP 1	JOHN DAY D TIME & SURV.	JOHN DAY TAIL	25MY77-28MY77			0.4	C075.0M	P	2	0.496	5	1.242	31MY	01JN	08JN	170	39
RA HE 4	JOHN DAY D OUTFALL EVAL	JOHN DAY TAIL	07JN77-08JN77			0.2	C075.0M	P	1	0.447	3	1.451	31MY	31MY	31MY	210	-38

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
RA IT 4	JONES BEACH MIGRATIONAL TIMING THROUGH ESTUARY	JONES BEACH MID R	06JN80	196		0.1	C075.0S	B	1	1.370	1	1.614	10JN	10JN	10JN	215	0

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE	NO. MKD	RECAPT. SITE	GEAR CODE	RECAPTURES ACTUAL		RECAPTURES ADJUSTED		RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN	MVMT RATE
	PURPOSE OF RELEASE		OTHER MARKS	MM	/LB THOUS	R. KM		NO.	%	NO.	%				MM	KM/DAY
131407	KLICKITAT HAT	KLICKITAT R	01MY77			30.0	C075.0M P	3	0.011	9	0.029	11MY	30MY	08JN	223	10

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE	NO. MKD	RECAPT. SITE	GEAR CODE	RECAPTURES ACTUAL		RECAPTURES ADJUSTED		RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN	MVMT RATE
	PURPOSE OF RELEASE		OTHER MARKS	MM	/LB THOUS	R. KM		NO.	%	NO.	%				MM	KM/DAY
LA PI 1	LIT GOOSE D	LIT GOOSE TAIL	11AP78-21AP78		3.0	C075.0M P		3	0.101	3	0.118	28AP	04MY	17MY	195	24
*	TAILRACE CONTROL		(WHORPK)													
LA PI 2	LIT GOOSE D	LIT GOOSE TAIL	24AP78-28AP78		2.2	C075.0M P		2	0.093	3	0.118	01JN	09JN	10JN	202	12
*	TAILRACE CONTROL		(WHORPK)													
LA PI 3	LIT GOOSE D	LIT GOOSE TAIL	01MY78-06MY78		4.4	C075.0M P		2	0.046	3	0.066	09MY	15MY	16MY	195	40
*	TAILRACE CONTROL		(WHYWBRBR)													
LA PI 4	LIT GOOSE D	LIT GOOSE TAIL	12MY78-05JN78		20.8	C075.0M P		5	0.025	7	0.032	30MY	31MY	07JN	197	29
*	CONTROL		(WHORGNRD,WHYWBRBR)													
LA P 1	LO GRANITE	LO GRANITE TAIL	24AP80-02MY80		5.0	C075.0M P		5	0.100	8	0.161	09MY	10MY	13MY	186	35
*	TAILRACE CONTROL		CWT ER,19273 FISH													
LA P 2	LO GRANITE	LO GRANITE TAIL	06MY80-15MY80		10.8	C075.0M P		5	0.047	9	0.088	10MY	30MY	10JN	200	23
*	TAILRACE CONTROL		CWT ER,19273 FISH													
LA P 3	LO GRANITE	LO GRANITE TAIL	17MY80-30MY80		3.4	C075.0M P		1	0.030	2	0.068	27MY	26MY	27MY	210	62
*	TAILRACE CONTROL		CWT ER,19273 FISH													
RA AN 2	LIT GOOSE D	BLW BONN D	25AP77-15JN77		22.9	C075.0M P		24	0.105	33	0.144	04MY	09JN	09JN	197	3
*	TRUCK TRANS W/SALT		(WHYWYW,RAAN2)													
WHYWYW	LIT GOOSE D	BLW BONN D	25AP77-15JN77		22.9	C075.0M P		1	0.005	1	0.006	09JN	09JN	09JN	3	3
*	TRUCK TRANS W/SALT		(WHYWYW,RAAN2)													
RA AN 1	LIT GOOSE D	BLW BONN D	02MY77-20JN77		24.3	C075.0S B		3	0.013	3	0.013	28MY	23MY	29MY	191	6
*	TRUCK TRANS FW		(WHORGN,RAAN1)			C075.0M P		10	0.042	52	0.215	05MY	07MY	31MY	195	31
RA J 1	LIT GOOSE D	BLW BONN D	10AP78-06MY78		17.6	C075.0S B		1	0.006	1	0.007	18MY	18MY	18MY	155	4
*	FRESHWATER TRANSPORT		(WHRDOR,RAJ1)			C075.0M P		25	0.143	34	0.195	04MY	07MY	13MY	181	6
						C016.0N P		5	0.029			08MY	08MY	08MY	187	8
RA J 2	LIT GOOSE D	BLW BONN D	12AP78-05MY78		16.0	C075.0M P		5	0.032	7	0.042	06MY	08MY	18MY	192	6
*	SALTWATER TRANSPORT		(WHRDLG,RAJ2)			C016.0N P		5	0.032			21AP	08MY	22MY	202	8
WHRDOR	LIT GOOSE D	BLW BONN D	08MY78-12MY78		9.3	C075.0M P		2	0.022	3	0.033	08MY	15MY	16MY	195	22
*	FRESHWATER TRANSPORT		(RAJ3)													
RA J 4	LIT GOOSE D	BLW BONN D	11MY78-02JN78		16.8	C075.0M P		59	0.353	77	0.458	12MY	19MY	05JN	181	19
*	SALT WATER TRANSP.		(WHORGNYW,WHRDLG)			C016.0N P		19	0.114			19MY	25MY	26MY	177	15
RA J 3	LIT GOOSE D	BLW BONN D	12MY78-30MY78		19.3	C075.0M P		94	0.488	114	0.594	10MY	18MY	02JN	185	26
*	FRESH WATER TRANSP.		(WHRD,WHRDOR)			C016.0N P		6	0.032			12MY	16MY	02JN	171	53
WHRD	LIT GOOSE D	BLW BONN D	15MY78-30MY78		10.0	C075.0M P		1	0.011	1	0.013	19MY	19MY	19MY	186	39
*	FRESHWATER TRANSPORT		(RAJ3)													
WHORGNYW	LIT GOOSE D	BLW BONN D	16MY78-02JN78		11.3	C075.0M P		3	0.027	3	0.030	18MY	18MY	18MY	205	78
*	SALTWATER TRANSPORTATION		(RAJ4)			C007.0S B		1	0.009			22MY	22MY	22MY	175	37

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LA K 1	LO GRANITE D	CLARKSTON WASH	25AP77-06MY77			11.2	C075.0M	P	7	0.063	26	0.231	04MY	09MY	31MY	205	48
*	CONTROL TRANS		(WHYWGN,WHYWOR)														
WHYWGN	LO GRANITE D	CLARKSTON WASH	25AP77-15JN77			32.7	C075.0M	P	4	0.013	13	0.040	31MY	31MY	31MY	209	19
*	TRUCK TRANS		(LAK1,2,3,4)														
LA K 2	LO GRANITE D	CLARKSTON WASH	10MY77-19MY77			8.3	C075.0M	P	1	0.013	3	0.040	31MY	31MY	31MY	157	32
*	CONTROL TRANS		(WHYWGN)														
LA K 3	LO GRANITE D	CLARKSTON WASH	23MY77-03JN77			10.4	C075.0S	B	1	0.010	1	0.011	10JL	10JL	10JL	204	14
*	CONTROL TRANS		(WHYWGN)														
LA IN 1	LO GRANITE D	CLARKSTON WASH	09AP79-19AP79			8.2	C075.0M	P	9	0.110	12	0.151	24AP	28AP	14MY	181	35
	FOREBAY CONTROL																
LA IN 2	LO GRANITE D	CLARKSTON WASH	21MY79-04JN79			19.6	C075.0M	P	31	0.159	38	0.193	27MY	31MY	20JN	211	67
	FOREBAY CONTROL																
LA IS 2	LO GRANITE D	CLARKSTON WASH	21AP80-06MY80			5.1	C075.0M	P	9	0.176	16	0.305	05MY	10MY	15MY	201	35
	FOREBAY RELEASE						C016.0N	P	1	0.020			16MY	16MY	16MY	177	29
LA IS 4	LO GRANITE D	CLARKSTON WASH	23MY80-02JN80			8.3	C075.0M	P	2	0.025	3	0.037	06JN	07JN	09JN	187	44
	FOREBAY RELEASE						4008.3S	P	1	0.013			05JN	05JN	05JN	257	56
LA P 2	LO GRANITE D	CLARKSTON WASH	01MY81			1.7	C075.0M	P	3	0.175	4	0.234	29MY	30MY	31MY	199	23
	EFFICIENCY;TRUCK																
LA S 1	LO GRANITE D	CLARKSTON WASH	01MY81			2.2	C075.0M	P	3	0.137	5	0.241	11MY	11MY	12MY	188	67
	EFFICIENCY;TRUCK																
LA P 3	LO GRANITE D	CLARKSTON WASH	05MY81-09MY81			5.5	C075.0M	P	10	0.181	13	0.238	12MY	21MY	31MY	191	42
	EFFICIENCY;TRUCK																
LA S 2	LO GRANITE D	CLARKSTON WASH	05MY81-09MY81			6.8	C075.0M	P	13	0.191	16	0.241	12MY	19MY	31MY	199	48
	EFFICIENCY;TRUCK																
LA P 4	LO GRANITE D	CLARKSTON WASH	11MY81-21MY81			11.2	C075.0M	P	1	0.009	1	0.013	31MY	31MY	31MY	194	33
	FOREBAY INDEXING																
LA Y 1	LO GRANITE D	CLARKSTON WASH	23MY81-30MY81			7.3	C075.0M	P	12	0.164	16	0.224	31MY	01JN	08JN	207	74
	FOREBAY INDEXING																
LA P 1	LO GRANITE D	LO GRANITE RES	05AP78-15AP78			1.5	C075.0M	P	1	0.067	1	0.078	28AP	28AP	28AP	120	27
*	FOREBAY CONTROL		(WHRDWH)				C016.0N	P	1	0.067			17MY	17MY	17MY	215	16
LA P 2	LO GRANITE D	LO GRANITE RES	18AP78-27AP78			3.6	C075.0M	P	10	0.276	12	0.326	03MY	08MY	23MY	170	31
*	FOREBAY CONTROL		(WHRDWH)				C016.0N	P	1	0.028			25MY	25MY	25MY	165	18
LA P 3	LO GRANITE D	LO GRANITE RES	29AP78			2.4	C075.0M	P	1	0.042	1	0.050	09MY	09MY	09MY	175	62
*	FOREBAY CONTROL		(WHRDWH)				C016.0N	P	1	0.042			08MY	08MY	08MY	180	76
LA P 4	LO GRANITE D	LO GRANITE RES	02MY78-01JN78			35.6	C075.0M	P	81	0.228	125	0.353	09MY	26MY	14JN	180	26
*	FOREBAY CONTROL		(WHRDWHRD,LAP4)				C016.0N	P	3	0.009			16MY	19MY	25MY	192	40
LA K 1	LO GRANITE D	LO GRANITE RES	21AP79-04MY79			5.5	C075.0M	P	2	0.037	3	0.053	10MY	10MY	10MY	195	33
*	FOREBAY CONTROL BARGE		(WHRDYWGM)														
LA K 2	LO GRANITE D	LO GRANITE RES	09MY79-16MY79			11.8	C075.0M	P	11	0.094	14	0.120	15MY	20MY	30MY	185	57
*	FOREBAY CONTROL BARGE		(WHRDYWGM)														
LA B2 1	LO GRANITE D	LO GRANITE TAIL	02MY78-10MY78			11.2	C075.0M	P	14	0.125	16	0.146	09MY	17MY	19MY	195	41
*	TAILRACE CONTROL		(WHORYW,LAB21)				C016.0N	P	5	0.045			12MY	19MY	19MY	183	40
							C007.0S	B	1	0.009			18MY	18MY	18MY	195	43
WHORYW	LO GRANITE D	LO GRANITE TAIL	02MY78-10MY78			11.2	C075.0M	P	3	0.027	4	0.032	10MY	13MY	23MY	212	56
*	TAILRACE CONTROL		(WHORYW,LAB21)				C007.0S	B	1	0.009			16MY	16MY	16MY	210	49
LA K 3	LO GRANITE D	LO GRANITE TAIL	24AP79-04MY79			6.3	C075.0S	B	1	0.016	1	0.021	30AP	30AP	30AP	165	103
*	TAILRACE CONTROL		(WHRDYWLB)														

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LA K 3	LO GRANITE D	LO GRANITE TAIL	24AP79-04MY79			6.3	C075.0M	P	3	0.048	4	0.067	04MY	05MY	13MY	170	56
*	TAILRACE CONTROL		(WHRDYWLB)														
LA K 4	LO GRANITE D	LO GRANITE TAIL	08MY79-18MY79			14.8	C075.0M	P	9	0.061	11	0.075	10MY	19MY	04JN	195	56
*	TAILRACE CONTROL		(WHRDYWLB)				C029.0S	P	1	0.007			18MY	18MY	18MY	195	66
RA F 2	LO GRANITE D	BLW BONN D	26AP77-17JN77			42.8	C075.0S	B	1	0.003	1	0.003	13MY	13MY	13MY	160	9
*			(WHYWLB,WHYWOR)				C075.0M	P	6	0.015	31	0.073	05MY	11MY	03JN	171	10
RA 3 1	LO GRANITE D	BLW BONN D	04MY77-05MY77			10.1	C075.0M	P	18	0.178	63	0.623	11MY	11MY	11MY	188	22
*	BARGE TRANSPORT		(WHYWLG)														
RA 3 2	LO GRANITE D	BLW BONN D	26MY77-27MY77			10.2	C075.0M	P	42	0.412	137	1.339	31MY	31MY	31MY	203	31
*	BARGE TRANS		(WHYWLG)														
RA 3 3	LO GRANITE D	BLW BONN D	02JN77-03JN77			10.1	C075.0S	B	2	0.020	2	0.022	08JN	08JN	08JN	245	26
*	BARGE TRANSPORT		(WHYWLG)				C075.0M	P	2	0.020	4	0.035	08JN	07JN	08JN	185	31
RA W 1	LO GRANITE D	BLW BONN D	06AP78-26AP78			4.6	C075.0M	P	4	0.087	7	0.150	14AP	05MY	27MY	180	5
*	TRUCK FW		(WHRDGN,RAW1)														
RA W 3	LO GRANITE D	BLW BONN D	11AP78-28AP78			6.7	C075.0M	P	17	0.255	20	0.304	19AP	03MY	05JN	176	7
*	BARGE TRANSPORT		(WHRDRD,RAW3)				C016.0N	P	1	0.015			17MY	17MY	17MY	185	6
WHRDRD	LO GRANITE D	BLW BONN D	11AP78-28AP78			6.7	C016.0N	P	1	0.015			20AP	20AP	20AP	120	24
*	BARGE TRANSPORT		(WHRDRD,RAW3)														
RA W 2	LO GRANITE D	BLW BONN D	01MY78-02JN78			43.3	C075.0S	B	1	0.003	1	0.003	17MY	17MY	17MY	155	10
*	TRUCK FW		(WHRDBL,RAW2)				C075.0M	P	68	0.158	83	0.193	04MY	18MY	05JN	187	9
							C016.0N	P	28	0.065			05MY	23MY	26MY	177	10
RA W 4	LO GRANITE D	BLW BONN D	01MY78-31MY78			37.1	C075.0S	B	1	0.003	2	0.005	13MY	13MY	13MY	215	13
*	BARGE TRANSPORT		(WHRDRDOR,RAW4)				C075.0M	P	108	0.292	153	0.412	10MY	24MY	03JN	187	7
							C016.0N	P	14	0.038			12MY	12MY	05JN	175	19
WHRDBL	LO GRANITE D	BLW BONN D	01MY78-02JN78			43.3	C075.0M	P	4	0.010	5	0.012	03MY	05MY	19MY	188	39
*	FRESHWATER TRANSPORT		(WHRDBL,RAW2)														
WHRDRDOR	LO GRANITE D	BLW BONN D	01MY78-31MY78			37.1	C075.0M	P	4	0.011	5	0.014	23MY	23MY	23MY	173	7
*	BARGE TRANSPORT		(WHRDRDOR,RAW4)														
RA F 1	LO GRANITE D	BLW BONN D	23AP79-07MY79			7.6	C075.0M	P	4	0.053	6	0.075	27AP	28AP	02MY	175	31
*	BARGE TEST		(WHRDYWOR)														
WHRDYWOR	LO GRANITE D	BLW BONN D	29AP79-19MY79			33.6	C014.0S	P	2	0.006			16MY	16MY	16MY	225	13
*	TEST		(RAF1;RAF2)														
RA F 2	LO GRANITE D	BLW BONN D	09MY79-19MY79			22.9	C075.0M	P	25	0.110	32	0.139	14MY	19MY	21MY	184	16
*	BARGE TEST		(WHRDYWOR;WHYWOR)				C029.0S	P	1	0.005			18MY	18MY	18MY	180	22
							C018.0S	P	1	0.005			30MY	30MY	30MY	215	10
RA W 1	LO GRANITE D	BEACON ROCK	20AP80-29AP80			2.1	C075.0M	P	7	0.341	14	0.665	29AP	05MY	10MY	198	10
*	BARGE TRANSPORT		CWT HOPR,12496 FISH				C016.0N	P	4	0.195			06MY	06MY	06MY	198	13
RA W 2	LO GRANITE D	BEACON ROCK	01MY80-10MY80			28.4	C075.0M	P	15	0.053	26	0.092	07MY	10MY	15MY	215	17
*	BARGE TRANSPORT		HOPR 12496, DYPR 1800				C016.0N	P	6	0.022			09MY	16MY	20MY	174	14
							4009.4S	P	1	0.004			04JN	04JN	04JN	220	6
							4008.3N	P	1	0.004			05JN	05JN	05JN	231	6
							4006.3S	P	1	0.005			29MY	29MY	29MY	123	8
RA F 1	LO GRANITE D	DALTON PT	25AP77-17JN77			40.9	C075.0M	P	13	0.032	39	0.095	06MY	07MY	09JN	193	11
*	TRUCK TRANS SW		(WHORYX,RAF1)														
WHYWBL	LO GRANITE D	TONGUE PT	09MY77			2.2	C075.0M	P	1	0.047	5	0.212	03JN	03JN	03JN	193	-1
*	AIR TRANS		(WHYWBL,RAF4)														

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE	NO. MKD	RECAPT. SITE	GEAR CODE	RECAPTURES ACTUAL		RECAPTURES ADJUSTED		RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS	MM /LB	THOUS	R. KM		NO.	%	NO.	%					
LD AN 1	MCNARY D	PORT KELLY ORE	28AP80		0.6	C016.0N	P	1	0.161			06MY	06MY	06MY	210	61
	EFFICIENCY REL.															
LD IM 1	MCNARY D	PORT KELLY ORE	01MY80		1.7	C075.0M	P	1	0.059	1	0.085	08MY	08MY	08MY	165	61
	EFFICIENCY REL					C016.0N	P	1	0.059			16MY	16MY	16MY	197	32
LD IM 2	MCNARY D	PORT KELLY ORE	05MY80		0.7	C075.0M	P	1	0.153	2	0.250	12MY	12MY	12MY	195	61
	EFFICIENCY REL															
LD 3 1	MCNARY D	PORT KELLY WASH	06MY80		1.2	C075.0M	P	1	0.085	1	0.126	06JN	06JN	06JN	195	14
	EFFICIENCY REL.															
LD 3 3	MCNARY D	PORT KELLY ORE	08MY80		1.0	C016.0N	P	1	0.104			16MY	16MY	16MY	215	61
	EFFICIENCY REL.															
LA 2X 2	MCNARY D	PORT KELLY ORE	13MY80		1.2	4008.4S	P	1	0.083			05JN	05JN	05JN	205	21
	EFFICIENCY REL.															
LA 5 4	MCNARY D	PORT KELLY ORE	29MY80		0.9	C075.0M	P	1	0.114	1	0.170	09JN	09JN	09JN	170	39
	EFFICIENCY REL.															
LA B2 3	MCNARY D	PORT KELLY ORE	03JN80		0.2	C075.0M	P	1	0.496	1	0.741	10JN	10JN	10JN	185	61
	EFFICIENCY REL.															
LA H 1	MCNARY D	MCNARY RES	17AP78-05MY78		1.9	C075.0M	P	4	0.216	5	0.260	08MY	11MY	19MY	191	17
*	MCNARY CONTROL		(WHRDYWRD)													
LA H 2	MCNARY D	MCNARY RES	08MY78-19MY78		8.1	C075.0M	P	10	0.125	13	0.160	16MY	23MY	01JN	204	27
*	MCNARY CONTROL		(WHRDYWRD)			C016.0N	P	1	0.013			25MY	25MY	25MY	200	27
LA S 1	MCNARY D	MCNARY RES	22MY78-01JN78		4.9	C075.0M	P	4	0.083	6	0.131	30MY	31MY	07JN	198	45
*	MCNARY CONTROL		(WHRDORRD)			C016.0N	P	2	0.042			05JN	05JN	07JN	197	33
LA X3 1	MCNARY D	MCNARY RES	03MY79-19MY79		6.2	C075.0M	P	5	0.081	7	0.108	12MY	14MY	15MY	200	37
*	TRANSPORT FOREBAY CONTROL		(2064 REL KM230)(WHRDP													
LA X3 3	MCNARY D	MCNARY RES	18MY79-29MY79		1.9	C075.0M	P	2	0.105	3	0.166	25MY	26MY	09JN	200	50
*	TRANSPORT FOREBAY CONTROL		(WHRDPKLG)													
LA 5 1	MCNARY D	MCNARY TAIL	11AP79-03JL79		5.4	C075.0M	P	16	0.294	22	0.408	26AP	12MY	09JN	185	13
*	TRANSPORT TAILRACE CONTRL		(BLACK:LA51)			C029.0S	P	1	0.019			18MY	18MY	18MY	185	12
LA 5 2	MCNARY D	MCNARY TAIL	14MY79-31MY79		2.6	C075.0M	P	5	0.191	5	0.210	21MY	31MY	06JN	205	23
*	TRANSPORT TAILRACE CONTRL		(WHRDLGYW)													
LA H 1	MCNARY D	MCNARY TAIL	08AP80-12MY80		15.3	C075.0M	P	12	0.079	22	0.142	25AP	08MY	14MY	192	13
*	TAILRACE CONTROL		CWT ERLA,LAH,1			C016.0N	P	7	0.046			06MY	13MY	16MY	213	13
LA H 2	MCNARY D	MCNARY TAIL	14MY80-09JN80		6.0	C075.0M	P	1	0.017	3	0.049	24MY	24MY	24MY	170	39
*	TAILRACE CONTROL		CWT CEND,LAH,2													
LA W 4	MCNARY D	MCNARY TAIL	11MY81		0.5	C075.0M	P	3	0.554	4	0.693	12MY	16MY	20MY	161	79
LA R 3	MCNARY D	MCNARY TAIL	18MY81		1.1	C075.0M	P	1	0.093	1	0.132	27MY	27MY	27MY	260	44
LA R 4	MCNARY D	MCNARY TAIL	21MY81		1.1	C075.0M	P	1	0.089	1	0.109	28MY	28MY	28MY	197	56
LA IF 1	MCNARY D	MCNARY TAIL	26MY81		2.5	C075.0M	P	1	0.040	1	0.055	31MY	31MY	31MY	193	79
RA V 1	MCNARY D	BLW BONN D	21AP78-19MY78		12.1	C075.0M	P	50	0.413	62	0.512	03MY	18MY	24MY	206	6
*	MCNARY TRANSPORT		(WHGMWH,RAV1)			C016.0N	P	4	0.034			12MY	12MY	25MY	192	10
						C007.0S	B	1	0.009			18MY	18MY	18MY	205	8
RA V 2	MCNARY D	BLW BONN D	22MY78-08JN78		8.7	C075.0M	P	1	0.012			01JN	01JN	01JN	190	16
*	MCNARY TRANSPORT		(WHPKYWYW,RAV2)													

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE	NO. MKD	RECAPT. SITE	GEAR CODE	RECAPTURES ACTUAL		RECAPTURES ADJUSTED		RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS	MM /LB	THOUS	R. KM		NO.	%	NO.	%					
RA V 2	MCNARY D	BLW BONN D	22MY78-08JN78		8.7	C075.0M	P	55	0.635	68	0.785	01MY	01JN	12JN	194	16
*	MCNARY TRANSPORT		(WHPKYWYW,RAV2)			C016.0N	P	6	0.070			25MY	25MY	05JN	175	71
RA 3 1	MCNARY D	BLW BONN D	16AP79-02JL79		9.2	C075.0M	P	11	0.120	16	0.179	29AP	13MY	10JN	204	6
*	TRANSPORT EVAL TRUCK		(WH;RA31)													
WH	MCNARY D	BLW BONN D	16AP79-02JL79		9.2	C075.0M	P	3	0.033	4	0.041	27AP	30AP	01MY	191	11
*	TRANSPORT EVAL TRUCK		(WH;RA31)													
RA R 1	MCNARY D	BLW BONN D	24AP79-04MY79		6.1	C075.0M	P	2	0.033	2	0.036	02MY	06MY	07MY	215	13
*	TRANSPORT EVAL BARGE		(WHRDYWLG)													
WHRDYWLG	MCNARY D	BLW BONN D	24AP79-22MY79		16.8	C075.0M	P	1	0.006	1	0.007	04MY	04MY	04MY	202	16
*	TRANSPORT EVAL BARGE		(LAR3;RAR1;RAR2)													
RA 3 2	MCNARY D	BLW BONN D	04MY79-31MY79		4.9	C075.0M	P	7	0.143	9	0.183	25MY	31MY	01JN	218	6
*	TRANSPORT EVAL TRUCK		(WHRDLGPK)													
WHRDLGPK	MCNARY D	BLW BONN D	04MY79-06JL79		6.2	C075.0M	P	2	0.033	2	0.035	01JN	01JN	01JN	225	6
*	TRANSPORT EVAL TRUCK		(RA32;RA33;RA34)			C029.0S	P	1	0.017			17MY	17MY	17MY	181	15
RA R 2	MCNARY D	BLW BONN D	08MY79-16MY79		5.8	C075.0M	P	2	0.035	3	0.051	10MY	10MY	10MY	221	78
*	TRANSPORT EVAL BARGE		(WHRDYWLG)													
LA R 3	MCNARY D	BLW BONN D	20MY79-22MY79		4.9	C075.0M	P	1	0.021	1	0.025	18MY	18MY	18MY	165	-77
*	TRANSPORT EVAL BARGE		(WHRDYWLG)													
RA R 3	MCNARY D	BLW BONN D	25MY79		1.4	C075.0M	P	4	0.291	8	0.547	12MY	24MY	25MY	201	-154
*	TRANSPORT EVAL BARGE		(WHRDYWPK;RAR3)			C016.0N	P	1	0.073			29MY	29MY	29MY	200	53
RA 3 3	MCNARY D	BLW BONN D	04JN79-21JN79		1.2	C075.0M	P	3	0.244	4	0.311	10JN	11JN	25JN	220	22
*	TRANSPORT EVAL TRUCK		(WHRDLGPK)													
RA 3 4	MCNARY D	BLW BONN D	25JN79-06JL79		0.0	C075.0M	P	1	#.###	2	#.###	25MY	25MY	25MY	190	-4
*	TRANSPORT EVAL TRUCK		(WHRDLGPK)													
RA 2 1	MCNARY D	BLW BONN D	22AP80-18MY80		21.4	C075.0S	B	1	0.005	2	0.009	05MY	05MY	05MY	210	12
*	BARGE TRANSPORT		CWT ERPR,RA2,1			C075.0M	P	31	0.145	61	0.284	25AP	04MY	17MY	194	13
						C016.0N	P	19	0.089			30AP	06MY	06MY	199	15
RA 2 2	MCNARY D	BLW BONN D	21MY80-30MY80		9.0	C075.0M	P	2	0.023	7	0.081	31MY	01JN	02JN	187	14
*	BARGE TRANSPORT		CWT LATB,RA2,2			4009.2S	P	1	0.012			04JN	04JN	04JN	205	15
RA V 1	MCNARY D	DALTON PT	09AP80-12MY80		14.3	C075.0M	P	57	0.398	104	0.727	17AP	07MY	28MY	205	5
*	TRUCK TRANSPORT		CWT NDSM,RAV,1			C016.0N	P	8	0.056			06MY	06MY	09MY	205	7
RA V 2	MCNARY D	DALTON PT	14MY80-13JN80		8.0	C075.0M	P	14	0.175	25	0.313	16MY	23MY	06JN	185	15
*	TRUCK TRANSPORT		CWT DY,RAV,2			C016.0N	P	1	0.013			16JN	16JN	16JN	182	6
						4009.3N	P	1	0.013			04JN	04JN	04JN	208	9

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
632003	NACHES SKAMANIA STOCK	YAKIMA R@MO	09AP80-27MY80		6	43.8	C075.0M	P	17	0.039	26	0.060	29AP	10MY	10JN	187	15
							C016.0N	P	5	0.012			30AP	09MY	16MY	187	17

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
100235	NIAGARA SPRINGS	PAHSIMEROI R	05AP77-10AP77			59.3	C075.0M	P	2	0.004	5	0.009	31MY	01JN	10JN	223	22
100236	NIAGARA SPRINGS	PAHSIMEROI R	05AP77-10AP77			55.4	C075.0M	P	5	0.010	12	0.023	31MY	31MY	09JN	216	22
100343	NIAGARA SPRINGS IDENTIFI. HATCHERY RESEAR	PAHSIMEROI R	19MR79 RECOVERED 1980 →		6	56.0	C075.0M	P	12	0.022	17	0.030	10MY	15MY	30MY	223	22
							C016.0N	P	1	0.002			13MY	13MY	13MY	258	1
100344	NIAGARA SPRINGS IDENTIFI HATCH. RESEARCH	PAHSIMEROI R	04MY79		6	60.1	C075.0M	P	18	0.030	23	0.040	19MY	30MY	02JL	232	48
							C029.0S	P	1	0.002			18MY	18MY	18MY	258	92
							C018.0S	P	1	0.002			30MY	30MY	30MY	232	50
							C016.0N	P	1	0.002			26MY	26MY	26MY	210	59
102156	NIAGARA SPRINGS	PAHSIMEROI R	06AP80-16AP80		6	49.9	C075.0S	B	1	0.003	2	0.004	05MY	05MY	05MY	228	43
							C075.0M	P	25	0.051	42	0.085	29AP	10MY	12JN	233	36
							C016.0N	P	10	0.021			02MY	06MY	16MY	216	43
102157	NIAGARA SPRINGS	PAHSIMEROI R	07AP80-17AP80		6	50.3	C075.0M	P	31	0.062	53	0.107	29AP	10MY	19JN	239	37
							C016.0N	P	2	0.004			13MY	13MY	16MY	245	36
102241	NIAGARA SPRINGS VACCINATED-VIBRIO	PAHSIMEROI R	30MR81		5	37.6	C075.0M	P	32	0.086	45	0.121	03MY	22MY	04JN	220	23
102242	NIAGARA SPRINGS PLACEBO	PAHSIMEROI R	30MR81		5	38.0	C075.0M	P	19	0.051	28	0.073	03MY	12MY	20JN	239	29
102243	NIAGARA SPRINGS	PAHSIMEROI R	01AP81		5	38.5	C075.0M	P	20	0.052	31	0.082	03MY	11MY	06JN	222	31
100345	NIAGARA SPRINGS HOMING EVALUATION	PAHSIMEROI R	07AP78		14	24.9	C075.0M	P	4	0.017	6	0.026	23MY	26MY	27MY	163	25
							C016.0N	P	1	0.005			15MY	15MY	15MY	185	34
100346	NIAGARA SPRINGS HOMING EVALUATION	PAHSIMEROI R	07AP78		14	19.2	C075.0M	P	4	0.021	7	0.037	23MY	27MY	27MY	168	25
100347	NIAGARA SPRINGS HOMING EVALUATION	PAHSIMEROI R	07AP78		14	30.6	C075.0M	P	10	0.033	17	0.055	23MY	27MY	14JN	175	25
							C016.0N	P	2	0.007			05JN	05JN	12JN	180	22

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
RA R 2	PAHSIMEROI R	PAHSIMEROI R	15MR77			15.0	C075.0S B		2	0.014	4	0.029	16AP	17AP	23AP	203	37
							C075.0M P		3	0.021	15	0.099	05MY	05MY	06MY	183	24

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
071627	PATTERSON SLOUG REARING STUDY	WALLOWA HAT	03AP81-15AP81	6		37.0	C075.0M P		12	0.033	19	0.051	31MY	16JN	30JL	222	12

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LA PI 2	RIGGINS TRAP	SALMON R@RM 85	16MY77-22MY77			0.9	C075.0M	P	1	0.111	3	0.358	31MY	31MY	31MY	195	59
	TIME & SURV																
RA R 1	RIGGINS TRAP	SALMON R@RM 85	14MR78-23MR78			0.0	C016.0N	P	1	#.###			10MY	10MY	10MY	197	17
	TIMING & EFFICIENCY																
LA R 2	RIGGINS TRAP	SALMON R@RM 85	29AP78-01MY78			1.1	C075.0M	P	1	0.093	1	0.098	10MY	10MY	10MY	165	80
	TIMING & EFFICIENCY																
LA R 3	RIGGINS TRAP	SALMON R@RM 85	02MY78-03MY78			1.8	C075.0M	P	1	0.055	1	0.066	19MY	19MY	19MY	210	52
	TIMING & EFFICIENCY						C016.0N	P	1	0.055			19MY	19MY	19MY	205	55
LA R 4	RIGGINS TRAP	SALMON R@RM 85	09MY78-11MY78			0.3	C075.0M	P	1	0.382	1	0.518	20MY	20MY	20MY	175	80
	TIMING & EFFICIENCY																

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LA X3 1	RINGOLD HAT	RINGOLD HAT	01AP78-30AP78			15.0	C075.0M	P	5	0.034	7	0.048	14AP	11MY	19JN	210	12
							C016.0N	P	2	0.014			17MY	17MY	26JN	215	12
631707	RINGOLD HAT	RINGOLD HAT	15AP78-15MY78		7	40.7	C075.0M	P	20	0.050	25	0.061	06MY	17MY	19JN	215	15
	STOCK EVALUATION						C016.0N	P	8	0.020			03MY	12MY	25MY	190	20
							C007.0S	B	1	0.003			06JN	06JN	06JN	195	11
631804	RINGOLD HAT	RINGOLD HAT	18AP79-27AP79		7	129.8	C075.0M	P	68	0.053	89	0.069	27AP	17MY	04JN	201	17
	PROD EVAL						C016.0N	P	2	0.002			04MY	04MY	11MY	215	34
							C014.0S	P	1	0.001			16MY	16MY	16MY	202	20
130801	RINGOLD HAT	KALAMA R@RM 15	15AP77		6	48.2	C075.0M	P	1	0.003	3	0.006	14AP	14AP	14AP	265	0
	PROD. EVALUATION		RECOVERED 1978														

SORT SEQUENCE : SPECIES.SOURCE.RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
LVRM	Rnd Butte/Deschutes	Willam/S. Santiam	28AP81		4	52.5	46.5M		3	0.06			24MY	28MY	1JN	251	
LVRMR	Rnd Butte Hat	Deschutes RM100	29AP81		4	25.3	46.5M		1	0.04			9JU	9JU	9JU	237	
RV	Rnd Butte/Wind/Skamania		AP81			238.0	46.5S		2	0.002			17MY	22MY	26MY	203	
LPRV	Rnd Butte Hat	Deschutes @ RM100	AP81		5	27.0	46.5M		2	0.007			4MY	12MY	20MY	224	
LV	Rnd Butte	S. Santiam/ McKenzie/ Skamania/Lewis	20AP81				46.5S		5	0.004			2MY	6MY	18MY	227	
						132.0	46.5M		105	0.080			24AP	12MY	22JN	217	

SORT SEQUENCE : SPECIES.SOURCE.RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
631855	SKAMANIA HAT	KLICKITAT R	17AP80-22AP80		7	24.6	C075.0M	P	28	0.114	50	0.206	01MY	10MY	03JN	200	12
							C016.0N	P	6	0.025			02MY	09MY	16MY	201	16
632018	SKAMANIA HAT SKAMANIA STOCK	WIND R	24AP80-30AP80			75.0	C075.0S	B	1	0.002	1	0.002	08MY	08MY	08MY	199	14
							C075.0M	P	55	0.074	97	0.130	30AP	10MY	24MY	195	13
							C016.0N	P	17	0.023			06MY	13MY	19MY	198	14
							4009.4S	P	2	0.003			04JN	04JN	04JN	222	6
							4008.4S	P	1	0.002			05JN	05JN	05JN	211	6
631660	SKAMANIA HAT STOCK PROD. EVALUATION	WASHOUGAL R@RM 15	01AP78-31AP78	187	7	23.7	C075.0M	P	14	0.060	19	0.082	08MY	18MY	10JN	214	3
							C016.0N	P	4	0.017			08MY	12MY	22JN	130	5
131406	SKAMANIA HAT	WASHOUGAL R@RM 10	01AP77			30.0	C075.0S	B	1	0.004	1	0.005	12MY	12MY	12MY	182	3
							C075.0M	P	7	0.024	27	0.090	04MY	07MY	11MY	203	4

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
RM	S.Santiam/Rd Butte	Willam/Deschutes	AP81	5		45.0	46.5M		9	0.021			14AP	17MY	18JN	246	
RMRV	S.Santiam Hat	MFK Willam@Dexter	13AP81			25.0	46.5M		1	0.04			24MY	24MY	24MY	223	
LM	S.Santiam/Rnd Butte	S.Santiam/ Deschutes	AP81	5		420.0	46.5M		19	0.45			1AP	23MY	31JN	228	
LMLV	S.Santiam Hat	Lo McKenzie R.	13AP81 16AP81	5		25.0	46.5M		3	0.012			1MY	24MY	27MY	229	
LVRED	S.Santiam Hat	Upper McKenzie	27AP81 29AP81			40.0	46.5M		1	0.003			26MY	26MY	26MY	247	

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
RA HE 3	THE DALLES D OUTFALL EVAL	JOHN DAY TAIL	31MY77-02JN77			0.3	C075.0M	P	1	0.329	2	0.582	08JN	08JN	08JN	195	34

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE		NO. MKD	RECAPT. SITE	GEAR CODE	RECAPTURES ACTUAL		RECAPTURES ADJUSTED		RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS	MM	/LB	THOUS	R. KM		NO.	%	NO.	%					
LA DT 1	TUCANNON HAT	GRAND RONDE R	30AP78-10MY78	190	7	53.3	C075.0S	B	1	0.002	1	0.003	18MY	18MY	18MY	150	40
*			(WHYWPKLB,WHYWORPK)				C075.0M	P	46	0.087	63	0.119	10MY	21MY	27MY	187	34
							C016.0N	P	1	0.002			16JN	16JN	16JN	180	17
WHYWORPK	TUCANNON HAT	GRAND RONDE R	30AP78	190	7	21.7	C075.0M	P	2	0.010	3	0.013	20MY	20MY	20MY	192	36
*	TEST		LADT1														
621608	TUCANNON HAT	GRAND RONDE R	04MY81-15MY81			106.8	C075.0M	P	25	0.024	36	0.034	11MY	16MY	06JN	174	60
*	IDENT BROOD STOCK,FOR NEW LYONS FE		(LA T2,621608)														
LA T 2	TUCANNON HAT	GRAND RONDE R	04MY81-15MY81			106.8	C075.0M	P	26	0.025	37	0.035	03MY	15MY	28MY	169	65
*	IDENT BROOD STOCK,FOR NEW LYONS FE		(LA T2,621608)														
LA AN 4	TUCANNON HAT	TUCANNON R	15MY79		10	24.8	C075.0M	P	1	0.005	1	0.006	14MY	14MY	14MY	225	-615
*	CONTROL-NATURAL		(WHLBYWRD;LAAN4)														
WHLBYWRD	TUCANNON HAT	TUCANNON R	15MY79		10	24.8	C075.0M	P	2	0.009	2	0.010	30MY	07JN	08JN	158	27
*	CONTROL-NATURAL		(WHLBYWRD;LAAN4)														
LA PP 2	TUCANNON HAT	WALLA WALLA R@MO	15MY80-18MY80	171		16.9	C075.0M	P	1	0.006	2	0.015	03JN	03JN	03JN	160	23
*	HATCHERY EVAL.		CWT GDLA,LAPP,2														
RA 9 1	TUCANNON HAT	BLW BONN D	17MY78	190	7	18.1	C075.0M	P	28	0.155	37	0.206	20MY	20MY	02JN	194	52
*	TEST		(WHORYWYW,RA91)				C016.0N	P	7	0.039			22MY	23MY	26MY	185	36
RA 9 2	TUCANNON HAT	BLW BONN D	17MY78	190	7	18.5	C075.0M	P	11	0.060	15	0.079	20MY	21MY	24MY	188	39
*	TEST		(WHORYWRD,RA92)				C016.0N	P	1	0.006			23MY	23MY	23MY	200	36
WHORYWRD	TUCANNON HAT	BLW BONN D	17MY78	190	7	18.5	C007.0S	B	2	0.011			31MY	31MY	31MY	120	16
*	TEST		(WHORYWRD,RA92)														
WHORYWYW	TUCANNON HAT	BLW BONN D	17MY78	190	7	18.1	C075.0M	P	3	0.017	4	0.021	20MY	21MY	24MY	193	39
*	TEST		(WHORYWYW,RA91)														
RA T 4	TUCANNON HAT	BLW BONN D	17MY79		9	20.7	C075.0M	P	74	0.358	96	0.462	19MY	19MY	22MY	179	78
*	TEST BARGE-100% SP WCT		(WHLBXY:RAT4)				C029.0S	P	3	0.015			17MY	17MY	18MY	203	201
RA Y 4	TUCANNON HAT	BLW BONN D	17MY79		8	22.1	C075.0S	B	1	0.005	1	0.006	07MY	07MY	07MY	130	-15
*	TEST-BARGE 20% SP 80% TUC		(WHLBPKLB:RAY4)				C075.0M	P	39	0.177	51	0.234	10MY	19MY	20MY	177	78
							C016.0N	P	1	0.005			29MY	29MY	29MY	200	18
WHLBPKLB	TUCANNON HAT	BLW BONN D	17MY79		8	22.1	C075.0M	P	28	0.127	36	0.164	19MY	19MY	30MY	178	78
*	TEST-BARGE 20% SP 80% TUC		(WHLBPKLB;RAY4)														
WHLBXY	TUCANNON HAT	BLW BONN D	17MY79		9	20.7	C075.0M	P	16	0.078	21	0.103	19MY	19MY	26MY	177	78
*	TEST BARGE-100% SP WCT		(WHLBXY:RAT4)														
RA L 1	TUCANNON HAT	DALTON PT	09AP80	164		21.7	C075.0S	B	5	0.024	9	0.040	15AP	21AP	22AP	162	11
*	HOMING STUDY		CWT PRYB,RAL1				C075.0M	P	19	0.088	36	0.167	21AP	29AP	17MY	169	7
							C016.0N	P	3	0.014			06MY	06MY	09MY	181	7
LASMLAPR	TUCANNON HAT	DALTON PT	08MY80	172		19.7	4009.3S	P	1	0.006			04JN	04JN	04JN	211	7
*	HOMING STUDY		(2 DIFF. TAGS EA FISH)														
RA L 3	TUCANNON HAT	DALTON PT	08MY80	172		19.7	C075.0M	P	2	0.011	3	0.017	14MY	22MY	23MY	190	9
*	HOMING STUDY		(2 DIFF. TAGS EA FISH)				C016.0N	P	7	0.036			13MY	13MY	13MY	178	38
DYLA	TUCANNON HAT	DALTON PT	12JN80	171		19.0	C016.0N	P	6	0.032			16JN	16JN	16JN	189	47
*	TEST #3 ATPASE		CWT DYLA,RAL,2														
RA L 2	TUCANNON HAT	DALTON PT	12JN80	171		19.0	C075.0M	P	1	0.006	2	0.011	14JN	14JN	14JN	180	66
*	TEST #3 ATPASE		CWT DYLA,RAL,2														

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE		NO. MKD	RECAPT. SITE	GEAR CODE	RECAPTURES ACTUAL		RECAPTURES ADJUSTED		RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS	MM	/LB	THOUS	R. KM		NO.	%	NO.	%					
091636	WALLOWA HAT	WALLOWA HAT	30AP78-12MY78		10	84.4	C075.0M	P	2	0.003	4	0.005	30MY	29MY	30MY	177	30
	WALLOWA STOCK EVAL		RECOVERED 1979				C075.0M	P	13	0.016	15	0.019	30MY	01JN	23JN	206	1
			RECOVERED 1980				C075.0M	P	1	0.002	1	0.002	29AP	29AP	29AP	202	0
			RECOVERED 1978				C016.0N	P	1	0.002			16JN	16JN	16JN	180	20
090613	WALLOWA HAT	WALLOWA HAT	08MY78		6	67.0	C075.0M	P	30	0.045	50	0.076	23MY	30MY	07JN	221	39
	HTCY. STOCK EVAL PNRC						C007.0S	B	1	0.002			12JN	12JN	12JN	200	27
071614	WALLOWA HAT	WALLOWA HAT	16MY79-05AP80		15	51.7	C075.0M	P	3	0.006	3	0.007	30MY	05JN	16JN	170	43
	HATCHERY EVAL-EARLY REL		RECOVERED 1979				C075.0M	P	10	0.020	18	0.036	08MY	10MY	25JN	220	1
			RECOVERED 1980				4008.4S	P	1	0.002			05JN	05JN	05JN	237	1
072201	WALLOWA HAT	WALLOWA HAT	21AP80		11	25.3	C075.0M	P	10	0.040	19	0.075	10MY	24MY	27JN	176	26
			recovered 1981				C075.0M	P	1	0.004	1	0.006	31MY	31MY	31MY	245	1
							C016.0N	P	1	0.004			16MY	16MY	16MY	178	37
072202	WALLOWA HAT	WALLOWA HAT	03AP81-08AP81		5	55.2	C075.0M	P	12	0.022	17	0.031	11MY	21MY	31MY	215	18
	STOCK EVAL PNRC																

SORT SEQUENCE : SPECIES.SOURCE.RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
050439	WARM SPRING HAT EVAL & CONTRIB.	WARM SPR R@HAT	10MY79 RECOVERED 1980	15		87.4	C075.0M	P	28	0.033	34	0.039	19MY	10JN	27JN	189	13
							C075.0M	P	5	0.006	8	0.010	21AP	13MY	10JN	288	0
							C016.0N	P	1	0.002			26MY	26MY	26MY	180	29

SORT SEQUENCE : SPECIES.SOURCE.RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
RA L 2	WELLS SPAW CH CONTROL	METHOW R@HAT	27AP78 (WHORLGYW,RAL2)	219	5	19.9	C075.0M	P	8	0.041	11	0.054	12MY	23MY	30MY	195	32
							C016.0N	P	1	0.006			08MY	08MY	08MY	250	82
LA PP 1	WELLS SPAW CH CONTROL	METHOW R@HAT	08MY78 (WHORORXY,LAPP1)	219	5	20.3	C075.0S	B	1	0.005	1	0.007	06MY	06MY	06MY	130	-421
							C075.0M	P	5	0.025	7	0.034	04MY	31MY	05JN	258	37
WHORORXY	WELLS SPAW CH CONTROL	METHOW R@HAT	08MY78 (WHORORXY.LAPP1)	219	5	20.3	C075.0M	P	3	0.015	4	0.020	24MY	26MY	03JN	222	47
LA IJ 3	WELLS SPAW CH CONTROL-NATURAL	METHOW R@HAT	09MY79 (WHLBPKLG;LAIJ3)		5	18.3	C075.0S	B	2	0.011	2	0.012	05JN	05JN	05JN	217	31
							C075.0M	P	5	0.028	7	0.040	25MY	26MY	10JN	220	50
RA IJ 1	WELLS SPAW CH CONTROL-NATURAL	METHOW R@MO	14MY79 (WHLBPKYW:RAIJ1)		7	20.1	C075.0M	P	6	0.030	7	0.036	29MY	30MY	06JN	211	48
LA ID 1	WELLS SPAW CH TURBINE MORTALITY	WELLS RES	12AP78		5	10.1	C075.0M	P	3	0.030	4	0.041	06MY	08MY	17MY	222	29
LA ID 3	WELLS SPAW CH TURBINE MORTALITY	WELLS RES	13AP78		5	10.1	C075.0M	P	3	0.030	3	0.034	18MY	19MY	01JN	227	21
RA ID 1	WELLS SPAW CH TURBINE MORTALITY	WELLS RES	14AP78		5	10.2	C075.0M	P	2	0.020	3	0.027	13MY	14MY	31MY	220	25
							C016.0N	P	3	0.030			10MY	12MY	23MY	225	29
LD P 1	WELLS SPAW CH TURBINE CONTROL	WELLS RES	04MY79			10.0	C075.0M	P	2	0.021	2	0.025	19MY	20MY	21MY	200	47
							C016.0N	P	1	0.011			29MY	29MY	29MY	215	33
LD P 3	WELLS SPAW CH TURBINE CONTROL	WELLS RES	04MY79			10.0	C075.0M	P	1	0.010	1	0.011	01JN	01JN	01JN	225	27
RD P 1	WELLS SPAW CH TURBINE TEST	WELLS RES	04MY79			10.0	C075.0M	P	4	0.041	5	0.055	21MY	25MY	30MY	212	36
RD P 3	WELLS SPAW CH TURBINE TEST	WELLS RES	04MY79			9.7	C075.0M	P	2	0.021	2	0.025	21MY	21MY	21MY	222	44
LD Y 1	WELLS SPAW CH SPILLWAY TEST	WELLS RES	01MY80			13.5	C075.0M	P	1	0.008	1	0.010	14MY	14MY	14MY	193	58
RD Y 1	WELLS SPAW CH SPILLWAY TEST	WELLS RES	01MY80			13.1	C075.0M	P	1	0.008	1	0.011	14MY	14MY	14MY	170	58
RD Y 2	WELLS SPAW CH TURBINE TEST	WELLS RES	01MY80			13.6	C075.0M	P	1	0.008	2	0.014	23MY	23MY	23MY	230	34
							C016.0N	P	1	0.008			16MY	16MY	16MY	158	54
LD K 3	WELLS SPAW CH TURBINE TEST	WELLS RES	03MY80			14.3	C075.0M	P	1	0.007	2	0.013	16MY	16MY	16MY	192	58
RD K 1	WELLS SPAW CH SPILLWAY TEST	WELLS RES	03MY80			12.0	C075.0M	P	4	0.034	10	0.086	16MY	19MY	19MY	185	47
RD K 3	WELLS SPAW CH TURBINE TEST	WELLS RES	03MY80			13.6	C075.0M	P	1	0.008	2	0.013	16MY	16MY	16MY	195	58
LA ID 2	WELLS SPAW CH CONTROL	WELLS TAIL	12AP78		5	10.1	C075.0M	P	3	0.030	3	0.035	18MY	18MY	19MY	224	21
LA ID 4	WELLS SPAW CH CONTROL	WELLS TAIL	13AP78		5	10.1	C075.0M	P	2	0.020	3	0.029	05MY	06MY	06MY	227	33
RA ID 2	WELLS SPAW CH CONTROL	WELLS TAIL	14AP78		5	10.3	C075.0M	P	1	0.010	1	0.011	24MY	24MY	24MY	225	19

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LD IJ 3	WELLS SPAW CH TURBINE TEST	WELLS RES	05MY80			13.2	C075.0M	P	1	0.008	2	0.013	05JN	05JN	05JN	180	24
RD IJ 2	WELLS SPAW CH SPILLWAY TEST	WELLS RES	05MY80			11.7	C075.0M	P	2	0.018	4	0.033	23MY	23MY	23MY	182	42
RD IJ 3	WELLS SPAW CH TURBINE TEST	WELLS RES	05MY80			11.2	C075.0M	P	1	0.009	2	0.016	16MY	16MY	16MY	210	69
LD Y 3	WELLS SPAW CH CONTROL	WELLS TAIL	01MY80			13.0	C075.0M	P	2	0.016	4	0.028	16MY	16MY	16MY	190	50
							C016.0N	P	1	0.008			16MY	16MY	16MY	195	54
RD Y 3	WELLS SPAW CH CONTROL	WELLS TAIL	01MY80			12.3	C075.0M	P	1	0.009	1	0.011	14MY	14MY	14MY	150	58
LD K 2	WELLS SPAW CH CONTROL	WELLS TAIL	03MY80			13.1	C075.0M	P	2	0.016	6	0.048	19MY	20MY	21MY	167	44
RD K 2	WELLS SPAW CH CONTROL	WELLS TAIL	03MY80			13.8	C075.0M	P	1	0.008	2	0.013	16MY	16MY	16MY	200	58
RA L 3	WELLS SPAW CH	RINGOLD HAT	05MY78	219	5	17.6	C075.0M	P	11	0.063	14	0.079	16MY	18MY	23MY	239	38
*	TEST		(WHORORRD,RAL3)				C016.0N	P	3	0.018			17MY	17MY	19MY	226	46
							C007.0S	B	2	0.012			18MY	18MY	18MY	215	43
RA L 1	WELLS SPAW CH	BLW BONN D	05MY78	219	5	20.0	C075.0M	P	5	0.026	7	0.034	08MY	08MY	13MY	223	52
*	TEST		(WHORYWLG,RAL1)				C016.0N	P	21	0.106			08MY	08MY	12MY	210	71
							C007.0S	B	2	0.011			09MY	09MY	18MY	220	56
RA L 4	WELLS SPAW CH	BLW BONN D	5MY78	219	5	19.1	C075.0M	P	20	0.105	26	0.135	08MY	08MY	17MY	220	-8
*	TEST		(WHORGNOR,RAL4)				C016.0N	P	15	0.079			08MY	10MY	26MY	208	-13
WHORGNOR	WELLS SPAW CH	BLW BONN D	5MY78	219	5	19.1	C075.0M	P	3	0.016	4	0.019	08MY	10MY	19MY	245	-9
*	TEST		(WHORGNOR,RAL4)				C016.0N	B	1	0.006			10MY	10MY	10MY	220	-13
RA T 2	WELLS SPAW CH	BLW BONN D	28AP79		6	17.2	C075.0S	B	2	0.012	2	0.014	30AP	01MY	02MY	170	52
*	TEST-BARGE		(WHLBLA;RAT2)				C075.0M	P	24	0.140	31	0.183	30AP	30AP	06MY	205	78
WHLBLA	WELLS SPAW CH	BLW BONN D	28AP79		6	17.2	C075.0S	B	2	0.012	2	0.014	30AP	30AP	01MY	191	78
*	TEST-BARGE		(WHLBLA;RAT2)				C075.0M	P	6	0.035	8	0.050	30AP	30AP	01MY	208	78
RA T 1	WELLS SPAW CH	BLW BONN D	12MY79		5	9.7	C075.0M	P	11	0.113	14	0.148	30AP	15MY	11JN	202	52
*	TEST-TRUCK		(WHLBLB;RAT1)														
WHLBLB	WELLS SPAW CH	BLW BONN D	12MY79		5	9.7	C075.0M	P	1	0.011	1	0.013	21MY	21MY	21MY	254	17
*	TEST-TRUCK		(WHLBLB;RAT1)				C029.0S	P	1	0.011			17MY	17MY	17MY	265	40

SPECIES: STEELHEAD

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
RA W 1	WHITEBIRD TRAP TIME & SURV	SALMON R@RM 53	15MR77-30MY77			1.9	C075.0M	P	1	0.054	3	0.173	31MY	31MY	31MY	225	11

SUBYEARLING CHINOOK SALMON

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
053003	ABERNATHY SCDC GENETIC STUDY	ABERNATHY CR	26MY77	130	21	136.4	C075.0S	B	1	0.001	2	0.002	27MY	27MY	27MY	98	16
056202	ABERNATHY SCDC GENETIC STUDY	ABERNATHY CR	26MY77	130	21	136.4	C075.0S	B	2	0.002	4	0.003	27MY	27MY	27MY	128	16
055801	ABERNATHY SCDC CONTRIBUTION,HTCY. EVAL.	ABERNATHY CR	18AP78	83	69	150.4	C075.0S	B	75	0.050	104	0.070	19AP	23AP	26MY	86	3
							C075.0M	P	26	0.018	52	0.035	19AP	20AP	10JN	90	8
							C016.0N	P	17	0.012			01MY	26MY	05JN	110	2
							C009.0N	B	8	0.006			25AP	25AP	11MY	88	12
							C007.0S	B	14	0.010			27AP	27AP	09MY	87	9
050125	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	2	0.086	16MY	16MY	16MY	110	16
050130	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	2	0.086	16MY	16MY	16MY	107	16
050134	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	2	0.086	16MY	16MY	16MY	100	16
050136	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0S	B	1	0.051	1	0.061	19MY	19MY	19MY	100	4
050138	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	2	0.101	3	0.171	16MY	16MY	16MY	100	16
050145	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C016.0N	P	1	0.051			26MY	26MY	26MY	110	7
050149	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C016.0N	P	1	0.051			02JN	02JN	02JN	90	4
050151	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	1	0.064	23MY	23MY	23MY	105	2
050152	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	1	0.062	17MY	17MY	17MY	105	8
050155	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C016.0N	P	1	0.051			05JN	05JN	05JN	80	4
050156	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C016.0N	P	1	0.051			17MY	17MY	17MY	125	37
050163	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	1	0.067	19JN	19JN	19JN	120	0
050220	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C016.0N	P	1	0.051			19MY	19MY	19MY	145	19
050224	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	1	0.062	17MY	17MY	17MY	118	8
050227	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	3	0.151	4	0.211	16MY	17MY	26MY	110	8
050230	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	1	0.054	25MY	25MY	25MY	100	2
050231	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	2	0.101	3	0.146	16MY	17MY	19MY	105	8
050236	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	1	0.064	26MY	26MY	26MY	95	1
050237	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	2	0.086	16MY	16MY	16MY	125	16

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
050238	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	25	23	2.0	4005.0	P	1	0.051			03AU	03AU	03AU	200	1
050244	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	1	0.062	17MY	17MY	17MY	126	8
050245	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	2	0.086	16MY	16MY	16MY	130	16
050247	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	1	0.062	17MY	17MY	17MY	135	8
							C016.0N	P	1	0.051			05JN	05JN	05JN	80	4
050248	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	2	0.101	3	0.147	16MY	16MY	17MY	105	16
050251	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C075.0M	P	1	0.051	1	0.071	27JN	27JN	27JN	105	0
050253	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C016.0N	P	1	0.051			05JN	05JN	05JN	90	4
050260	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	4005.0	P	1	0.051			03AU	03AU	03AU	200	1
050263	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C016.0N	P	1	0.051			23MY	23MY	23MY	100	9
050319	ABERNATHY SCDC GENETICS	ABERNATHY CR	15MY78	125	23	2.0	C016.0N	P	1	0.051			05JL	05JL	05JL	95	1
055301	ABERNATHY SCDC CONTRIBUTION,HTCY. EVAL.	ABERNATHY CR	15MY78	93	44	147.7	C075.0S	B	23	0.016	29	0.020	16MY	19MY	31MY	93	4
							C075.0M	P	7	0.005	10	0.008	16MY	16MY	19MY	97	16
							C016.0N	P	37	0.026			19MY	01JN	16JN	100	4
							C009.0N	B	1	0.001			30MY	30MY	30MY	115	5
050450	ABERNATHY SCDC EVAL & CONTRIB	ABERNATHY CR	17AP79-17MY79		118	63.4	C075.0S	B	28	0.045	37	0.059	19AP	30AP	07JN	81	1
							C075.0M	P	32	0.051	38	0.060	18AP	17MY	12JN	94	1
							C029.0S	P	1	0.002			18MY	18MY	18MY	89	2
							C018.0S	P	1	0.002			30MY	30MY	30MY	102	2
							C016.0N	P	7	0.012			04JN	07JN	15JN	98	1
050451	ABERNATHY SCDC EVAL & CONTRIB	ABERNATHY CR	17AP79-15MY79		43	48.9	C075.0S	B	22	0.045	28	0.058	19AP	30AP	01JN	81	1
							C075.0M	P	13	0.027	15	0.032	18AP	18MY	22JN	87	1
							C029.0S	P	1	0.003			17MY	17MY	17MY	102	2
							C016.0N	P	2	0.005			21MY	21MY	18JN	110	2
050644	ABERNATHY SCDC HATCHERY CONT. 2 1/2%	ABERNATHY CR	08AP80-14MY80			35.2	C075.0S	B	12	0.035	20	0.058	09AP	16MY	19MY	88	0
							C075.0M	P	6	0.018	11	0.033	16MY	17MY	17MY	107	0
							C016.0N	P	4	0.012			21MY	22MY	22MY	105	2
050646	ABERNATHY SCDC HATCHERY CONT. 5%	ABERNATHY CR	08AP80-14MY80			112.5	C075.0S	B	33	0.030	49	0.044	09AP	16MY	19MY	89	0
							C075.0M	P	9	0.009	18	0.016	09AP	16MY	03JL	127	0
							C016.0N	P	2	0.002			22MY	22MY	23MY	97	2
050744	ABERNATHY SCDC CONTRIBUTION	ABERNATHY CR	15AP81-26MY81		165	22.4	C075.0S	B	4	0.018	6	0.029	18AP	20AP	18MY	97	3
							C075.0M	P	7	0.032	10	0.044	15MY	26MY	27MY	117	0
050745	ABERNATHY SCDC CONTRIBUTION	ABERNATHY CR	15AP81-26MY81		165	74.1	C075.0S	B	40	0.054	54	0.073	17AP	22AP	10JN	95	2
							C075.0M	P	8	0.011	12	0.017	24AP	27MY	04JN	112	0

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
091612	AUMSVILLE PD TURBINE MORTALITY	ABV WILLAM FALLS	02AP77-04AP77		76	44.6	C075.0S	B	105	0.236	190	0.425	10MY	19MY	02JN	87	3
							C075.0M	P	1	0.003	1	0.003	09JN	09JN	09JN	98	2
091613	AUMSVILLE PD TURBINE MORTALITY	ABV WILLAM FALLS	02AP77-04AP77		72	43.1	C075.0S	B	103	0.239	190	0.442	11MY	18MY	04JN	88	3
091606	AUMSVILLE PD CONTRIBUTION AND SURVIVAL	BLW WILLAM FALLS	02AP77-04AP77		73	92.0	C075.0S	B	238	0.259	525	0.571	12MY	21MY	12JN	88	3
091607	AUMSVILLE PD CONTRIBUTION AND SURVIVAL	BLW WILLAM FALLS	02AP77-04AP77		70	43.6	C075.0S	B	122	0.281	230	0.529	11MY	19MY	02JN	87	3
							C075.0M	P	1	0.003	2	0.005	08JN	08JN	08JN	103	2
091611	AUMSVILLE PD CONTRIBUTION AND SURVIVAL	BLW WILLAM FALLS	02AP77-04AP77		76	46.5	C075.0S	B	140	0.302	252	0.542	09MY	18MY	31MY	87	3
							C075.0M	P	3	0.007	6	0.014	11MY	12MY	10JN	63	3

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
091609	BIG CR HAT DIET STUDY	BIG CR	15MY77		76	162.0	C075.0S	B	1	0.001	2	0.002	25JL	25JL	25JL	118	0
091610	BIG CR HAT DIET STUDY	BIG CR	15MY77		94	143.9	C075.0S	B	2	0.002	2	0.002	29JN	10JL	11JL	103	0
071704	BIG CR HAT DIET-COMP-AB GROUP	BIG CR	12MY78	83	70	105.2	C016.0N	P	44	0.042			17MY	05JN	23JN	89	1
							C009.0N	B	5	0.005			30MY	30MY	15JN	90	2
							C007.0S	B	9	0.009			18MY	18MY	13JN	84	7
071705	BIG CR HAT DIET-COMP-OMP GROUP	BIG CR	12MY78	79	82	106.4	C016.0N	P	41	0.039			17MY	05JN	30JN	86	1
							C009.0N	B	1	0.001			15JN	15JN	15JN	100	1
							C007.0S	B	5	0.005			31MY	06JN	06JN	83	2
071844	BIG CR HAT COL R FALL CHIN EVAL	BIG CR	21MY79		81	224.9	C018.0S	P	3	0.002			30MY	30MY	30MY	84	3
							C016.0N	P	34	0.016			04JN	18JN	17JL	98	1
							C014.0S	P	4	0.002			25MY	25MY	25MY	84	9
							4005.0	P	3	0.002			28JN	28JN	03JL	100	1
072160	BIG CR HAT STOCK EVAL.	BIG CR	13MY80-23MY80		77	143.4	C016.0N	P	5	0.004			20MY	23MY	18JL	88	3
							4005.0	P	4	0.003			17JN	17JN	12JL	90	1

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	RECAPTURES ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
071626	BONNEVILLE HAT RELEASE TIMING @ WILLAM R. COWLI	MILL CR	08NO78-09NO78	108	23	51.5	C075.OM	P	1	0.002	8	0.015	13DE	13DE	13DE	150	7
LD ID 4	BONNEVILLE HAT EVALUATION OF THE DALLES SLUICEWAY	THE DALLES D	14MY79			35.5	C075.OS	B	12	0.034	15	0.044	20MY	21MY	23MY	87	33
							C075.OM	P	13	0.037	17	0.048	20MY	22MY	26MY	90	29
							C018.OS	P	1	0.003			30MY	30MY	30MY	100	18
LD T 1	BONNEVILLE HAT BONN DAM SLUICEWAY EVAL	BONN RES	13JN79		58	51.3	C075.OS	B	57	0.112	62	0.121	17JN	20JN	27JN	89	23
							C075.OM	P	45	0.088	50	0.098	16JN	18JN	28JN	95	32
							C016.ON	P	16	0.032			18JN	22JN	02JL	98	24
LD T 2	BONNEVILLE HAT BONN DAM SLUICEWAY EVAL	BONN TAIL	13JN79		57	51.3	C075.OS	B	46	0.090	50	0.098	16JN	20JN	26JN	88	22
							C075.OM	P	35	0.069	39	0.077	16JN	18JN	24JN	96	31
							C016.ON	P	7	0.014			22JN	22JN	22JN	100	24
LD T 3	BONNEVILLE HAT BONN DAM SLUICEWAY EVAL	BONN TAIL	13JN79		58	51.4	C075.OS	B	48	0.094	52	0.101	17JN	20JN	26JN	86	22
							C075.OM	P	55	0.108	61	0.120	16JN	18JN	28JN	96	31
							C016.ON	P	10	0.020			22JN	22JN	02JL	100	24
091605	BONNEVILLE HAT HATCHERY EVALUATION	TANNER CR	05MY77	78	91	183.2	C075.OS	B	407	0.223	793	0.436	11MY	20MY	27JN	87	10
							C075.OM	P	2	0.002	5	0.003	31MY	01JN	08JN	93	6
071656	BONNEVILLE HAT TULE	TANNER CR SNAKE R EGG	30OC78		12	50.9	C075.OS	B	11	0.022	50	0.098	06NO	09NO	12DE	135	16
							C075.OM	P	1	0.002	7	0.014	13NO	13NO	13NO	160	11
071658	BONNEVILLE HAT UPRIVER BRIGHTS	TANNER CR SNAKE R. EG	30OC78	119	20	44.8	C075.OS	B	13	0.029	47	0.104	06NO	08NO	17NO	130	17
							C075.OM	P	1	0.003	4	0.010	06NO	06NO	06NO	130	22
071659	BONNEVILLE HAT TULE	TANNER CR SNAKE R. EG	30OC78		14	37.8	C075.OS	B	8	0.022	45	0.119	08NO	05DE	12DE	117	4
071660	BONNEVILLE HAT UPRIVER BRIGHTS	TANNER CR SNAKE R. EG	30OC78	119	24	44.4	C075.OS	B	9	0.021	32	0.073	06NO	08NO	15NO	126	17
							C075.OM	P	7	0.016	28	0.062	06NO	08NO	17NO	132	17
071608	BONNEVILLE HAT BONNEVILLE HAT EVAL	TANNER CR	01MY79		78	96.6	C075.OS	B	113	0.118	143	0.148	06MY	09MY	05JN	80	20
							C075.OM	P	15	0.016	18	0.019	06MY	08MY	25JN	87	22
							C029.OS	P	1	0.002			17MY	17MY	17MY	92	13
							C016.ON	P	14	0.015			29MY	07JN	02JL	103	6
							4005.O	P	1	0.002			28JN	28JN	28JN	100	4
071842	BONNEVILLE HAT COL R FALL CHIN EVAL	TANNER CR	01MY79-29MY79		88	287.9	C075.OS	B	426	0.148	510	0.178	05MY	02JN	26JN	82	5
							C075.OM	P	73	0.026	86	0.030	04MY	02JN	13JL	91	5
							C029.OS	P	4	0.002			18MY	18MY	18MY	94	12
							C018.OS	P	1	0.001			30MY	30MY	30MY	94	7
							C016.ON	P	43	0.015			04JN	18JN	04JL	98	4
							4005.O	P	4	0.002			28JN	28JN	03JL	98	4
071843	BONNEVILLE HAT COL R F. CHIN EVAL	TANNER CR	21MY79		80	15.1	C075.OS	B	10	0.067	12	0.082	26MY	31MY	07JN	82	16
							C075.OM	P	1	0.007	2	0.013	26MY	26MY	26MY	70	31
							C016.ON	P	4	0.027			07JN	14JN	28JN	100	9
							4005.O	P	1	0.007			03JL	03JL	03JL	95	5
071613	BONNEVILLE HAT BONNEVILLE HATCHERY EVAL	TANNER CR	29MY79		47	95.6	C075.OS	B	90	0.095	106	0.112	01JN	03JN	22JN	88	31
							C075.OM	P	50	0.053	58	0.061	01JN	02JN	06JL	98	39
							C016.ON	P	16	0.017			04JN	07JN	22JN	100	24
							4005.O	P	2	0.003			28JN	28JN	03JL	100	7
072157	BONNEVILLE HAT STOCK EVAL.	TANNER CR	22MY80-28MY80		75	121.1	C075.OS	B	52	0.043	90	0.075	17MY	02JN	02JL	80	14
							C075.OM	P	4	0.004	11	0.010	24MY	25MY	03JN	80	52
							C016.ON	P	9	0.008			16JN	19JN	24JN	88	8

SPECIES: SUB-YEAR CHINOOK

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072133	BONNEVILLE HAT OMP 2	TANNER CR	27MY80		70	50.5	C075.OS	B	12	0.024	21	0.042	31MY	03JN	02JL	83	22
							C016.ON	P	2	0.004			20JN	20JN	02JL	87	9
072134	BONNEVILLE HAT OMP 2	TANNER CR	27MY80		69	50.0	C075.OS	B	14	0.029	23	0.047	31MY	03JN	11JN	82	22
							4005.O	P	1	0.003			17JN	17JN	17JN	87	11
072135	BONNEVILLE HAT OMP 4	TANNER CR	27MY80		67	48.1	C075.OS	B	22	0.046	37	0.077	31MY	03JN	11JN	83	22
							C075.OM	P	2	0.005	4	0.009	03JN	04JN	16JN	70	20
							C016.ON	P	2	0.005			18JN	18JN	19JN	85	10
072136	BONNEVILLE HAT OMP 4	TANNER CR	27MY80		68	49.4	C075.OS	B	25	0.051	42	0.086	13MY	03JN	07JN	81	22
							C075.OM	P	1	0.003	5	0.010	31MY	31MY	31MY	82	39
							C016.ON	P	2	0.005			09JL	09JL	10JL	108	5
072207	BONNEVILLE HAT LATE FALLS-UPRIVER BRIGHTS	TANNER CR	30JN80		83	100.7	C075.OS	B	10	0.010	16	0.016	07JL	21JL	13AU	94	7
							C075.OM	P	28	0.028	89	0.089	07JL	14JL	13AU	96	11
							C016.ON	P	32	0.032			09JL	15JL	25JL	96	14
							4008.1N	P	1	0.001			21JL	21JL	21JL	100	10
072156	BONNEVILLE HAT REARED WELL WATER	TANNER CR	24AP81	76	73	130.0	C075.OS	B	141	0.109	146	0.113	28AP	01MY	21MY	83	22
							C075.OM	P	7	0.006	10	0.008	29AP	03MY	22MY	73	17
072329	BONNEVILLE HAT REARED TANNER CR WATER	TANNER CR	12MY81	85	68	75.7	C075.OS	B	39	0.052	47	0.062	16MY	22MY	03JN	86	16
							C075.OM	P	18	0.024	22	0.030	16MY	18MY	27MY	86	26
072341	BONNEVILLE HAT DIET:OMP-2	TANNER CR	12MY81	82	69	50.8	C075.OS	B	31	0.062	37	0.073	16MY	22MY	30MY	84	16
							C075.OM	P	14	0.028	19	0.038	16MY	17MY	27MY	85	31
072342	BONNEVILLE HAT DIET:OMP-2	TANNER CR	12MY81	83	72	51.6	C075.OS	B	40	0.078	45	0.088	17MY	20MY	07JN	84	20
							C075.OM	P	5	0.010	6	0.012	16MY	18MY	22MY	85	26
072343	BONNEVILLE HAT DIET:OMP-4	TANNER CR	12MY81	82	75	53.2	C075.OS	B	43	0.081	53	0.099	16MY	22MY	08JN	84	16
							C075.OM	P	16	0.031	20	0.038	16MY	18MY	27MY	88	26
072344	BONNEVILLE HAT DIET:OMP-4	TANNER CR	12MY81	84	68	51.8	C075.OS	B	45	0.087	52	0.101	17MY	22MY	01JN	84	16
							C075.OM	P	10	0.020	14	0.027	17MY	18MY	27JN	87	26
072345	BONNEVILLE HAT DIET:PRESS CAKE	TANNER CR	12MY81	81	76	51.0	C075.OS	B	35	0.069	41	0.081	15MY	21MY	07JN	84	17
							C075.OM	P	6	0.012	8	0.017	17MY	18MY	18MY	83	26
072346	BONNEVILLE HAT DIET:PRESS CAKE	TANNER CR	12MY81	84	68	50.9	C075.OS	B	46	0.091	58	0.114	17MY	22MY	02JN	85	16
							C075.OM	P	12	0.024	16	0.032	17MY	18MY	26MY	85	26
072358	BONNEVILLE HAT REARED WELL WATER	TANNER CR	28MY81		45	102.8	C075.OS	B	40	0.039	42	0.041	30AP	02JN	06JN	95	31
							C075.OM	P	23	0.023	33	0.032	31MY	03JN	27JN	99	26
072506	BONNEVILLE HAT ACCELERATED GROUP BRIGHTS/WILD	TANNER CR	12JN81		64	99.6	C075.OS	B	104	0.105	120	0.121	16JN	23JN	05JL	91	14
							C075.OM	P	14	0.015	36	0.037	18JN	03JL	13JL	101	7
072507	BONNEVILLE HAT BRIGHTS/WILD	TANNER CR	30JL81		35	102.2	C075.OS	B	30	0.030	61	0.060	04AU	10AU	23SE	102	14
							C075.OM	P	28	0.028	106	0.104	03AU	09AU	12AU	111	16
07/21/38	Bonneville Hat. Tule	Tanner Cr.	09NO81		11	51.5	C075.M	P	3	.006	19	.037	13NO	14NO	15NO	157	
07/21/42	Bonneville Hat. Brights	Tanner Cr.	09NO81		11	50.7	C075.M	P	3	.006	14	.028	12NO	13NO	15NO	152	
07/21/39	Bonneville Hat. Tule	Tanner Cr.	09NO81		9	50.0	C075.M	P	5	.010	23	.046	12NO	15NO	19NO	170	
07/21/41	Bonneville Hat. Brights	Tanner Cr.	09NO81		9	49.8	C075.M	P	3	.006	19	.038	13NO	14NO	15NO	157	

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SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
RD U 3	BONNEVILLE HAT	PRESCOTT ORE	16MY79	91	64	25.1	C075.0S	B	52	0.207	75	0.299	18MY	19MY	07JN	89	13
	SURVIVAL AND EFFICIENCY						C075.0M	P	5	0.020	6	0.023	18MY	23MY	12JN	97	6
							C016.0N	P	1	0.004			22JN	22JN	22JN	100	3
							4005.0	P	1	0.004			03JL	03JL	03JL	130	2
LP U 3	BONNEVILLE HAT	PRESCOTT ORE	02JN80	82		26.0	C075.0S	B	41	0.158	54	0.207	31MY	05JN	14JN	83	13
	SURVIVAL AND EFFICIENCY																
LP U 4	BONNEVILLE HAT	PRESCOTT ORE	02JN80	78		26.3	C075.0S	B	22	0.084	31	0.117	03JN	04JN	19JN	82	20
	SURVIVAL AND EFFICIENCY,HELD 4 DAY						C075.0M	P	4	0.016	10	0.037	03JN	03JN	03JN	81	40
RD U 2	BONNEVILLE HAT	PRESCOTT ORE	01MY81-04MY81 (similar to 7 21 56)	80	82	25.2	C075.0S	B	28	0.111	29	0.116	29AP	04MY	30MY	82	13
	SURVIVAL AND EFFICIENCY																
LD U 1	BONNEVILLE HAT	PRESCOTT ORE	16MY81-20MY81 (similar to 7 23 29)	85	69	25.0	C075.0S	B	45	0.181	57	0.228	18MY	23MY	10JN	87	6
	SURVIVAL AND EFFICIENCY																
							C075.0M	P	13	0.053	13	0.052	18MY	22MY	23MY	88	7

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	PURPOSE OF RELEASE		OTHER MARKS														
RA T 1	CASCADE HAT	THE DALLES RES	22JL80-07AU80			112.2	C075.0S	B	1	0.001	2	0.002	01AU	01AU	01AU	100	23

SPECIES: SUB-YEAR CHINOOK

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LA HE 1	COLUMBIA RIVER INDEXING EFFICIENCY	BLALOCK MID R	03JL81			1.3	C075.0M	P	1	0.077	3	0.205	10JL	10JL	10JL	137	43
LA SP 1	COLUMBIA RIVER INDEXING EFFICIENCY	BLALOCK MID R	06JL81			0.7	C075.0M	P	3	0.417	6	0.854	10JL	13JL	29JL	115	43
RA SP 1	COLUMBIA RIVER INDEXING EFFICIENCY	BLALOCK MID R	13JL81			1.2	C075.0M	P	1	0.084	3	0.233	21JL	21JL	21JL	126	38
RA SP 3	COLUMBIA RIVER INDEXING EFFICIENCY	BLALOCK MID R	20JL81			2.2	C075.0M	P	1	0.047	3	0.125	30JL	30JL	30JL	122	30

SPECIES: SUB-YEAR CHINOOK

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RD U 2	COWLITZ HAT STOCK IDENTIFICATION	COWLITZ R@RM 50	20MY77	83	76	50.5	C075.0S	B	21	0.042	21	0.043	04JN	20JN	29JL	96	4
631802	COWLITZ HAT PROD. EVALUATION	COWLITZ R@RM 50	19JN78	65	133	146.0	C075.0S	B	272	0.187	461	0.316	23JN	05JL	18OC	81	7
							C075.0M	P	39	0.027	147	0.101	23JN	29JL	14AU	96	3
							C050.0N	P	3	0.003			28JL	28JL	28JL	101	4
							C045.0S	B	1	0.001			28SE	28SE	28SE	100	1
							C016.0N	P	13	0.009			23JN	01AU	15SE	102	4
							C007.0S	B	1	0.001			13JL	13JL	13JL	85	8
							4005.0	P	6	0.005			03AU	03AU	03AU	100	4
631715	COWLITZ HAT DENSITY STUDY	COWLITZ R@RM 50	28SE 77 RECOVERED 1978		12	84.4	C075.0S	B	1	0.002	1	0.002	04AP	04AP	04AP	175	
631942	COWLITZ HAT COL RIVER FALL CHIN EVAL	COWLITZ R@RM 50	27JN79 1/ 1/ 23.2k released 16OC79		85	120.4	C075.0S	B	247	0.205	349	0.290	03JL	02AU	19SE	89	3
							C075.0M	P	31	0.026	100	0.083	02JL	03AU	05SE	92	3
							C043.0N	P	1	0.001			10SE	10SE	10SE	100	2
							C016.0N	P	16	0.133			03AU	11SE	19SE	112	2
631951	COWLITZ HAT COL RIVER FALL CHIN EVAL	COWLITZ R@RM 50	27JN79-16OC79		85	11.1	C075.0S	B	2	0.019	2	0.018	02AU	22AU	23AU	85	2
632255	COWLITZ HAT 5% EVAL	COWLITZ R@RM 50	12JN81-28JN81		77	121.3	C075.0S	B	174	0.144	256	0.211	14JN	05JL	23SE	76	5
							C075.0M	P	21	0.018	44	0.037	15JN	01JL	03AU	85	6
632156	COWLITZ HAT 5% EVAL	COWLITZ R@RM 50	27JN81-28JN81		86	153.2	C075.0S	B	487	0.318	724	0.473	29JN	05JL	08SE	76	14
							C075.0M	P	7	0.005	30	0.020	29JN	30JN	04AU	85	38
632154	COWLITZ HAT TRUCK OUT OF VOLCANO AREA	LOWER RIVERS	03JN80-18JN80		129	114.1	C075.0S	B	64	0.057	103	0.090	03JL	15AU	17SE	98	0
							C075.0M	P	2	0.002	7	0.006	19AU	19AU	20AU	98	0
							C016.0N	P	36	0.032			18JN	16JL	19AU	78	1
							4005.0	P	2	0.002			21JL	21JL	21JL	90	1
632159	COWLITZ HAT TRUCK OUT OF VOLCANO AREA	LOWER RIVERS	18JN80-19JN80		119	40.9	C075.0S	B	15	0.037	26	0.064	09JL	05AU	27AU	89	0
							C016.0N	P	11	0.027			24JN	10JL	17JL	75	2
							4005.0	P	2	0.005			13AU	13AU	13AU	103	1

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070201	DESCHUTES R DESCHUTES R. EVAL OF WILD CHINOO	DESCHUTES@RM 100	03AP78-21AP78			1.0	C016.0N	P	1	0.103			07JL	07JL	07JL	110	5
070205	DESCHUTES R DESCHUTES R. EVAL OF WILD CHINOO	DESCHUTES@RM 100	03AP78-31JL78			4.0	C016.0N	P	1	0.025			19JN	19JN	19JN	105	6
070204	DESCHUTES R DESCHUTES RIVER EVAL OF WILD CHI	DESCHUTES@RM 100	17AP78-31JL78			33.3	C075.0S	B	2	0.006	3	0.010	07JL	07JL	07JL	100	5
							C075.0M	P	5	0.015	33	0.099	01JL	08JL	04AU	107	5
							C016.0N	P	3	0.009			21JL	24JL	26JL	120	5
072145	DESCHUTES R WILD STOCK EVAL.	DESCHUTES@RM 100	14AP80-06JN80	69		23.2	C075.0M	P	3	0.013	8	0.035	23JN	07JL	15JL	125	5
							C016.0N	P	2	0.009			24JN	24JN	25JL	101	7
							4005.0	P	1	0.005			14AU	14AU	14AU	125	4
071837	DESCHUTES R	DRY CR-WARM SP R	08AP79-14JL79			20.1	C075.0M	P	3	0.015	10	0.049	08AU	08AU	17AU	110	3
*	WILD FISH CONTRIB		(RAG1-4;RAP1-4;RDG1-3;				4005.0	P	1	0.005			28JN	28JN	28JN	115	5
RA G 4	DESCHUTES R	DRY CR-WM SP R	20MY79-02JN79			2.0	C075.0M	P	2	0.103	3	0.144	24JN	11JL	12JL	115	7
*	WILD FISH CONTRIB		DESCHUTES(7-18/37)														
071835	DESCHUTES R	WMSP R-SHER FALL	11MR79-14JL79			12.7	C075.0M	P	6	0.048	8	0.062	17JN	28JN	02JL	122	3
*	WILD FISH CONTRIB		DESCHUTES(LAE2.3;RAE1-														
RA E 4	DESCHUTES R	WMSP R-SHER FALL	20MY79-02JN79			3.0	C075.0M	P	1	0.034	3	0.100	06JL	06JL	06JL	107	7
*	WILD FISH CONTRIB		DESCHUTES(7-18/35)														
RD E 1	DESCHUTES R	WMSP R-SHER FALL	03JN79-16JN79			1.9	C075.0M	P	1	0.052	3	0.156	06JL	06JL	06JL	105	11
*	WILD FISH CONTRIB		DESCHUTES(7-18/35)														
072146	DESCHUTES R WILD STOCK EVAL.	WMSP R-SHER FALL	01AP80-06JN80	80		11.9	C075.0M	P	1	0.009	3	0.025	12JL	12JL	12JL	132	3
							C016.0N	P	3	0.026			09JL	14JL	22JL	109	4
RA GL 1	DESCHUTES R	MAUPIN TRAP RM 50	11MR79-24MR79			0.0	C075.0M	P	1	#.###	1	#.###	23JN	23JN	23JN	105	3
*	WILD FISH CONTRIB		DESCHUTES(7-18/28)														
071836	DESCHUTES R	SHERARS FALLS-MO	11MR79-14JL79			4.9	C075.0M	P	3	0.062	3	0.069	16JN	17JN	18JN	97	3
*	WILD FISH CONTRIB		(LDTI1.2;LPTI1.2;RATI1				4005.0	P	1	0.021			03JL	03JL	03JL	110	3
RD TI 1	DESCHUTES R	SHERARS FALLS-MO	08AP79-21AP79			0.4	C075.0M	P	1	0.224	1	0.240	19JN	19JN	19JN	115	4
*	WILD FISH CONTRIB		DESCHUTES(7-18/36)														
LP TI 1	DESCHUTES R	SHERARS FALLS-MO	03JN79-16JN79			0.6	C075.0S	B	1	0.175	1	0.195	22JN	22JN	22JN	85	15
*	WILD FISH CONTRIB		DESCHUTES(7-18/36)														
072147	DESCHUTES R WILD STOCK EVAL.	SHERARS FALLS-MO	01AP80-06JN80	73		5.2	C075.0M	P	1	0.020	2	0.038	17MY	17MY	17MY	85	6

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071737	DEXTER PD CONTRIBUTION BY SIZE AT REL	M FK WILLAM@DEXTER	07NO78	9		23.0	C075.0M	P	3	0.014	30	0.131	22NO	27NO	05DE	195	21

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631604	ELOKOMIN HAT STOCK EVALUATION	ELOKOMIN R	16JN77		103	145.0	C075.0S	B	29	0.020	41	0.029	27JN	11JL	01AU	98	1
631744	ELOKOMIN HAT PROD. EVALUATION	ELOKOMIN R	01JN78-31JN78		115	148.0	C016.0N	P	26	0.018			19JN	23JN	24JL	85	4
							C009.0N	B	2	0.002			27JN	27JN	27JN	70	3
							C007.0S	B	1	0.001			29JN	29JN	29JN	85	3
							4005.0	P	4	0.003			24JL	25JL	03AU	100	2
631856	ELOKOMIN HAT COLUMBIA RIVER FALL CHINOOK EVAL.	ELOKOMIN R	15JN79		99	22.8	C016.0N	P	1	0.005			22JN	22JN	22JN	75	11
631956	ELOKOMIN HAT COLUMBIA RIVER FALL CHINOOK EVAL.	ELOKOMIN R	15JL79		99	127.2	C075.0S	B	3	0.003	4	0.004	26JN	01JL	09JL	85	-0
							C016.0N	P	17	0.014			22JN	04JL	03AU	92	-6
							4005.0	P	2	0.002			28JN	28JN	28JN	87	-4
632005	ELOKOMIN HAT STOCK EVAL.	ELOKOMIN R	01JN80		80	98.4	C075.0S	B	2	0.003	3	0.004	30JL	11SE	12SE	123	0
							C075.0M	P	1	0.002	4	0.004	07JL	07JL	07JL	113	1
							C016.0N	P	21	0.022			23JN	02JL	16JL	86	3
							4001.1S	P	1	0.002			31AU	31AU	31AU	271	1

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631603	GRAYS R HAT STOCK EVALUATION	GRAYS R@RM 13	01JN77		74	135.8	C075.0S	B	1	0.001	1	0.001	28JN	28JN	28JN	90	-0
631743	GRAYS R HAT PRODUCT EVALUATION	GRAYS R@RM 13	26MY78		73	143.2	C075.0M	P	1	0.001	1	0.001	10MY	10MY	10MY	125	1
							C016.0N	P	31	0.022			01JN	16JN	30JN	96	2
							C009.0N	B	4	0.003			15JN	15JN	15JN	86	2
							C007.0S	B	6	0.005			31MY	06JN	06JN	82	5
631646	GRAYS R HAT COL RIVER FALL CHIN EVAL	GRAYS R@RM 13	09JN79		95	73.9	C075.0S	B	4	0.006	6	0.009	14JL	21JL	30JL	90	0
							C016.0N	P	12	0.017			18JN	27AU	17SE	115	1
631833	GRAYS R HAT COL RIVER FALL CHIN EVAL	GRAYS R@RM 13	09JN79		95	7.6	C075.0S	B	2	0.027	2	0.031	13JL	14JL	18JL	85	-0
							C075.0M	P	2	0.027	3	0.042	27JN	17JL	18JL	95	0
							C016.0N	P	1	0.014			05SE	05SE	05SE	115	0
631937	GRAYS R HAT COL RIVER FALL CHIN EVAL	GRAYS R@RM 13	09JN79		95	68.1	C075.0S	B	2	0.003	3	0.004	27JN	22JL	23JL	90	0
							C075.0M	P	1	0.002	1	0.003	29JN	29JN	29JN	80	-0
							C016.0N	P	8	0.012			04JL	11SE	14SE	122	0
632043	GRAYS R HAT STOCK EVAL.	GRAYS R@RM 13	01JN80-24JN80		80	37.5	C016.0N	P	3	0.009			23JN	09JL	14JL	79	1

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
050421	HAGERMAN HAT	ASOTIN WA	21MY79	75	92	46.0	C075.0M	P	3	0.007	5	0.012	02JL	03JL	16AU	125	16
*	SNAKE R STOCK		(RDSU3;050421)				C016.0N	P	2	0.005			11JL	11JL	11JL	137	14
050527	HAGERMAN HAT	ASOTIN WA	03JN80		60	58.4	C075.0M	P	6	0.011	13	0.023	17JN	24JN	01JL	111	32
	NMFS TRANSPORT STUDY						C016.0N	P	1	0.002			09JL	09JL	09JL	129	20
102210	HAGERMAN HAT	LO GRANITE RES	26MY81		34	55.4	C075.0S	B	4	0.008	4	0.008	02JN	05JN	08JN	103	62
	CONTROL						C075.0M	P	17	0.031	32	0.058	01JN	20JN	14AU	130	25
050420	HAGERMAN HAT	BLW BONN D	20MY79	71	84	53.0	C075.0G	B	58	0.110	69	0.130	26MY	02JN	05JL	77	12
	BARGED VS MIGRATION						C075.0M	P	16	0.031	25	0.047	25MY	27MY	29JN	94	22
							C016.0N	P	3	0.006			29MY	14JN	18JN	85	9
050528	HAGERMAN HAT	BLW BONN D	06JN80-23JN80		59	55.6	C075.0S	B	25	0.045	30	0.054	10JN	14JN	02JL	86	19
	NMFS TRUCK TRANSPORT STUDY						C075.0M	P	9	0.017	16	0.030	10JN	18JN	19JN	95	13
							C016.0N	P	6	0.011			16JN	19JN	27JN	99	16
102211	HAGERMAN HAT	BLW BONN D	28MY81		51	55.7	C075.0S	B	60	0.108	63	0.114	03JN	07JN	25JN	92	16
	TRANSPORT						C075.0M	P	7	0.013	9	0.018	04JN	05JN	18JN	106	19

SPECIES: SUB-YEAR CHINOOK

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	PURPOSE OF RELEASE		OTHER MARKS														
RA HE 1	JOHN DAY D	BLALOCK SHORE	14JL78			1.0	C075.0M	P	1	0.099	4	0.412	28JL	28JL	28JL	125	21
	TIMING AND EFFICIENCY																
LD HE 1	JOHN DAY D	BLALOCK SHORE	21JL78			6.0	C016.0N	P	1	0.017			07AU	07AU	07AU	120	21
	TIMING AND EFFICIENCY																
LD HE 2	JOHN DAY D	BLALOCK SHORE	22JL78			5.3	4005.0	P	4	0.076			28JL	28JL	28JL	116	61
	TIMING AND EFFICIENCY																
LD HE 3	JOHN DAY D	BLALOCK SHORE	23JL78			4.7	C075.0M	P	1	0.022	4	0.089	28JL	28JL	28JL	115	60
	TIMING AND EFFICIENCY						C016.0N	P	2	0.043			01AU	01AU	01AU	110	40
							4005.0	P	2	0.043			03AU	03AU	03AU	117	33
RD HE 3	JOHN DAY D	BLALOCK SHORE	29JL78-30JL78			5.4	C075.0M	P	3	0.056	13	0.232	04AU	05AU	07AU	113	43
	TIMING AND EFFICIENCY						C016.0N	P	2	0.038			07AU	07AU	07AU	112	40
LA W 1	JOHN DAY D	BLALOCK SHORE	25JL79			1.1	C075.0M	P	1	0.094	3	0.311	01AU	01AU	01AU	125	43
	EFFICIENCY																
LD W 1	JOHN DAY D	BLALOCK SHORE	26JL79			1.0	C075.0M	P	1	0.105	3	0.350	08AU	08AU	08AU	125	23
	EFFICIENCY																
RA W 2	JOHN DAY D	BLALOCK SHORE	03AU79			1.1	C016.0N	P	1	0.093			05SE	05SE	05SE	130	11
	EFFICIENCY																
LA AR 1	JOHN DAY D	BLALOCK SHORE	23JN80			0.3	C075.0M	P	1	0.314	3	0.902	14JL	14JL	14JL	100	14
	EFFICIENCY REL																
LD AR 1	JOHN DAY D	BLALOCK SHORE	27JN80			0.4	C016.0N	P	1	0.271			18JL	18JL	18JL	112	17
	EFFICIENCY REL						4005.0	P	1	0.271			21JL	21JL	21JL	114	15
RA I+ 1	JOHN DAY D	BLALOCK SHORE	10JL80			5.1	C075.0M	P	1	0.020	2	0.049	22JL	22JL	22JL	110	25
	EFFICIENCY REL						C016.0N	P	1	0.020			31JL	31JL	31JL	114	17
RD D 1	JOHN DAY D	BLALOCK SHORE	14JL80			1.7	C075.0M	P	1	0.060	3	0.188	21JL	20JL	21JL	110	50
	EFFICIENCY REL																
LA D 3	JOHN DAY D	BLALOCK SHORE	16JL80			2.0	C075.0M	P	1	0.051	4	0.220	25JL	25JL	25JL	110	33
	EFFICIENCY REL																
RD W 3	JOHN DAY D	TOWEL WASH	22AU79			0.5	C075.0S	B	1	0.195	2	0.295	29AP	29AP	29AP	85	-1
	EFFICIENCY																

SPECIES: SUB-YEAR CHINOOK

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631639	KALAMA FALLS HA STOCK EVALUATION	KALAMA R@RM 15	22JN77		113	145.7	C075.0S	B	697	0.479	968	0.665	28JN	26JL	27SE	109	2
631655	KALAMA FALLS HA STOCK EVALUATION	KALAMA R@RM 15	23JN77		76	97.4	C075.0S	B	131	0.135	187	0.192	28JN	14JL	28SE	101	3
631746	KALAMA FALLS HA PROD. EVALUATION	KALAMA R@RM 15	12JL78	68	108	150.5	C075.0S	B	530	0.353	902	0.600	14JL	03AU	15NO	83	3
							C075.0M	P	11	0.008	46	0.031	14JL	17JL	04AU	85	13
							C016.0S	P	2	0.002			08SE	08SE	09SE	110	2
							C016.0N	P	14	0.010			21JL	24JL	07SE	90	10
							C007.0S	B	1	0.001			06JN	06JN	06JN	75	-3
							4005.0	P	2	0.002			02AU	02AU	03AU	97	6
631747	KALAMA FALLS HA ATPase RELEASE	KALAMA R@RM 15	15SE78		34	140.9	C075.0S	B	101	0.072	368	0.262	20SE	03OC	12DE	83	4
							C047.0S	B	7	0.005			28SE	28SE	28SE	96	7
							C029.0S	P	2	0.002			12OC	12OC	12OC	115	4
							C016.0N	P	2	0.002			29SE	29SE	29SE	115	9
631957	KALAMA FALLS HA COL RIVER FALL CHIN EVAL	KALAMA R@RM 15	22JN79-13JL79		180	209.7	C075.0S	B	2161	1.031	2820	1.345	25JN	27JL	14SE	75	2
							C075.0M	P	68	0.033	175	0.084	24JN	31JL	12SE	85	2
							C016.0N	P	8	0.004			13JL	11SE	17SE	110	2
632105	KALAMA FALLS HA STOCK EVAL.	KALAMA R@RM 15	13JN80-24JN80		115	100.4	C075.0S	B	159	0.159	228	0.228	16JN	11JL	08SE	77	2
							C075.0M	P	4	0.004	10	0.011	25JN	12JL	19AU	110	2
							C016.0N	P	17	0.017			19JN	15JL	29JL	82	4
							4005.0	P	1	0.001			13AU	13AU	13AU	95	2
632036	KALAMA FALLS HA 5% EVAL	KALAMA R@RM 15	22MY81-28MY81		119	175.4	C075.0S	B	158	0.091	177	0.102	22MY	31MY	21JL	69	7
							C075.0M	P	17	0.010	25	0.015	24MY	31MY	10JL	79	7

SPECIES: SUB-YEAR CHINOOK

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LD T 4	KLASKANINE HAT DALLES DAM SLUICEWAY EVAL	THE DALLES D	08JN79		62	50.8	C075.0S	B	18	0.036	20	0.040	15JN	19JN	22JN	87	21
							C075.0M	P	24	0.048	28	0.055	14JN	17JN	29JN	92	26
							C016.0N	P	6	0.012			18JN	18JN	25JN	96	29
							4005.0	P	1	0.002			28JN	28JN	28JN	105	15
RD T 1	KLASKANINE HAT BONN DAM SLUICEWAY EVAL	BONN RES	13JN79		61	28.4	C075.0S	B	52	0.183	57	0.200	17JN	21JN	30JN	89	20
							C075.0M	P	26	0.092	29	0.104	16JN	18JN	29JN	91	32
							C016.0N	P	10	0.036			22JN	22JN	03JL	96	24
RD T 4	KLASKANINE HAT BONN DAM SLUICEWAY EVAL	BONN RES	14JN79		60	50.1	C075.0S	B	52	0.104	56	0.113	18JN	21JN	09JL	88	23
							C075.0M	P	25	0.050	28	0.057	18JN	21JN	29JN	89	23
							C016.0N	P	11	0.022			22JN	25JN	25JN	97	20
							4005.0	P	1	0.002			28JN	28JN	28JN	105	16
RD T 2	KLASKANINE HAT BONN DAM SLUICEWAY EVAL	BONN TAIL	13JN79		61	28.2	C075.0S	B	77	0.273	83	0.294	17JN	21JN	27JN	90	20
							C075.0M	P	23	0.082	27	0.097	17JN	19JN	02JL	97	26
							C016.0N	P	6	0.022			22JN	22JN	03JL	99	24
RD T 3	KLASKANINE HAT BONN DAM SLUICEWAY EVAL	BONN TAIL	13JN79		57	29.7	C075.0S	B	80	0.270	87	0.295	17JN	21JN	05JL	87	20
							C075.0M	P	19	0.065	22	0.074	17JN	19JN	02JL	94	26
							C016.0N	P	10	0.034			18JN	22JN	25JN	97	24
							4005.0	P	1	0.004			28JN	28JN	28JN	105	15
091608	KLASKANINE HAT HATCHERY EVALUATION	KLASKANINE R	30AP77		60	100.0	C075.0S	B	1	0.002	2	0.002	05JL	05JL	05JL	103	-0
071711	KLASKANINE HAT STOCK EVAL H.S. PRNC	KLASKANINE R	03MY78		79	51.0	C016.0N	P	5	0.010			01JN	05JN	12JN	88	1
							C009.0N	B	1	0.002			30MY	30MY	30MY	90	1
							C007.0S	B	14	0.028			09MY	18MY	06JN	81	2
071712	KLASKANINE HAT STOCK EVAL H.S.PNRC	KLASKANINE R	19MY78		72	50.1	C016.0N	P	10	0.020			26MY	12JN	26JN	110	1
							C009.0N	B	3	0.006			20MY	30MY	30MY	72	3
							C007.0S	B	8	0.016			06JN	06JN	06JN	83	2
071845	KLASKANINE HAT COL R FALL CHIN EVAL	KLASKANINE R	22MY79		71	244.1	C016.0N	P	25	0.011			04JN	18JN	04JL	92	1
							4005.0	P	7	0.003			28JN	28JN	28JN	95	1
072161	KLASKANINE HAT STOCK EVAL.	KLASKANINE R	04JN80	79		66.3	4005.0	P	1	0.002			17JN	17JN	17JN	93	2
072227	KLASKANINE HAT HATCHERY EVAL	KLASKANINE R	18MY81		86	82.1	C075.0M	P	1	0.002	1	0.002	15MY	15MY	15MY	122	13

SPECIES: SUB-YEAR CHINOOK

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	PURPOSE OF RELEASE		OTHER MARKS														
631741	KLICKITAT HAT	BLW PR RAPID D	01JN78-31JN78		124	152.5	C075.0S	B	1	0.001	2	0.002	21JL	21JL	21JL	110	11
	PROD. EVALUATION						C075.0M	P	19	0.013	80	0.053	17JL	26JL	15NO	109	10
							C050.0N	P	3	0.002			28JL	28JL	28JL	110	10
							C043.0N	P	1	0.001			28JL	28JL	28JL	100	10
							C016.0N	P	16	0.011			21JL	26JL	26JL	109	11
							4005.0	P	6	0.004			02AU	03AU	03AU	110	10
631605	KLICKITAT HAT	KLICKITAT R	03JN77		92	139.7	C075.0S	B	31	0.023	38	0.028	12JN	18AU	13SE	118	4
	STOCK EVALUATION																
631663	KLICKITAT HAT	KLICKITAT R	06JN78		87	136.3	C075.0S	B	54	0.040	82	0.061	12JN	20JN	09AU	85	20
	PROD. EVALUATION						C075.0M	P	43	0.032	146	0.108	12JN	17JL	18AU	109	7
							C050.0N	P	4	0.003			28JL	28JL	28JL	106	6
							C016.0N	P	25	0.019			12JN	07JL	07AU	104	11
							4005.0	P	5	0.004			02AU	03AU	03AU	111	6
631949	KLICKITAT HAT	KLICKITAT R	01JN79		80	225.4	C075.0S	B	120	0.054	142	0.064	27MY	05JN	09JL	78	71
	COL R. FALL CHIN EVAL.						C075.0M	P	104	0.047	141	0.063	27MY	10JN	18JL	89	31
							C016.0N	P	22	0.010			29MY	22JN	20JL	94	16
							4005.0	P	5	0.003			28JN	28JN	03JL	101	13
631947	KLICKITAT HAT	KLICKITAT R	27MY80		85	156.1	C075.0S	B	45	0.029	59	0.038	02JN	06JN	30JN	78	28
	STOCK EVAL.						C075.0M	P	19	0.013	43	0.028	02JN	12JN	30JL	86	18
							C016.0N	P	8	0.006			16JN	23JN	11JL	85	13
632008	KLICKITAT HAT	KLICKITAT R	05JN81		78	130.0	C075.0S	B	13	0.010	15	0.012	14JN	25JN	03JL	87	14
	5% EVAL						C075.0M	P	17	0.014	25	0.020	10JN	12JN	10AU	85	40
LD U 1	KLICKITAT HAT	RAINIER ORE	13JN79	78		23.9	C075.0S	B	40	0.168	45	0.188	15JN	18JN	25JN	81	7
	SURVIVAL AND EFFICIENCY						C075.0M	P	5	0.021	5	0.022	14JN	14JN	15JN	87	34
							C016.0N	P	2	0.009			25JN	25JN	25JN	92	8

SPECIES: SUB-YEAR CHINOOK

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	PURPOSE OF RELEASE		OTHER MARKS														
050426	KOOSKIA HAT	CLEAR CR	29AP79	100	40	62.0	C075.0M	P	27	0.044	31	0.050	29MY	17JN	02JL	121	16
*	BARGED VS MIGRATION	Ø Age	(5-4/26;RASU1)				C016.0N	P	6	0.010			29MY	22JN	25JN	125	16
RA SU 1	KOOSKIA HAT	CLEAR CR	29AP79	100	40	62.0	C075.0S	B	1	0.002	1	0.002	24MY	24MY	24MY	90	32
*	BARGED VS MIGRATION	Ø Age	(5-4/26;RASU1)				C075.0M	P	3	0.005	3	0.006	16JN	17JN	18JN	115	16
							C016.0N	P	1	0.002			29MY	29MY	29MY	110	28
050427	KOOSKIA HAT	BLW BONN D	03MY79-20MY79	100	44	51.5	C075.0S	B	15	0.030	21	0.040	11MY	21MY	29MY	97	9
	BARGED VS MIGRATION	Ø Age					C075.0M	P	23	0.045	31	0.062	14MY	24MY	02JL	98	7
							C029.0S	P	2	0.004			18MY	18MY	18MY	106	13
							C016.0N	P	3	0.006			29MY	04JN	04JN	100	7
102218	KOOSKIA HAT	CLEAR CR	21MY81		36	38.3	C075.0M	P	11	0.029	18	0.049	31MY	19JN	10JL	120	27
	Ø AGE AT RELEASE																

SPECIES: SUB-YEAR CHINOOK

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	PURPOSE OF RELEASE		OTHER MARKS														
631616	LEWIS R	LEWIS R	29AP77-01JL77		6	9.8	C075.OS	B	5	0.051	6	0.062	11JL	23AU	28SE	108	1
	WILD STOCK EVALUATION																
631618	LEWIS R	LEWIS R	01MY78-13JN78		5	19.8	C075.OS	B	25	0.127	47	0.238	10JL	16AU	13SE	101	1
	DENSITY STUDY						C075.OM	P	2	0.011	9	0.043	28JL	13AU	14AU	95	1
631619	LEWIS R	LEWIS R	01JN78-06JL78		150	15.9	C075.OS	B	40	0.252	75	0.474	13JL	20AU	18OC	89	1
	NATIVE FISH						C075.OM	P	2	0.013	9	0.055	14AU	14AU	14AU	95	1
							C047.OS	B	1	0.007			28SE	28SE	28SE	115	1
							C016.ON	P	1	0.007			26JL	26JL	26JL	110	3
631611	LEWIS R	LEWIS R	01JL78-31JL78		140	48.9	C075.OS	B	76	0.156	168	0.344	21JL	25AU	24OC	91	2
	WILD STOCK REARED						C075.OM	P	4	0.009	17	0.035	02AU	09AU	13NO	100	2
							C047.OS	B	1	0.003			28SE	28SE	28SE	100	1
							C016.OS	P	1	0.003			09SE	09SE	09SE	115	2
							C016.ON	P	4	0.009			24JL	31AU	29SE	102	2
							4005.O	P	1	0.003			03AU	03AU	03AU	95	5
010104	LEWIS R	LEWIS R	25AP79-15MY79		300	31.1	C075.OS	B	27	0.087	34	0.109	06JL	31JL	23AU	93	1
	WILDSTOCK SEINED TAG REL IN RIVER						C075.OM	P	7	0.023	19	0.063	06JL	16JL	14AU	86	1
							C016.ON	P	7	0.023			13AU	13SE	17SE	128	1
010105	LEWIS R	LEWIS R	15MY79-30MY79		300	29.8	C075.OS	B	45	0.152	60	0.201	05JL	30JL	07SE	88	1
	WILDSTOCK SEINED TAG REL IN RIVER						C075.OM	P	3	0.011	9	0.031	14AU	17AU	22AU	97	1
							C029.OS	P	1	0.004			06AU	06AU	06AU	105	2
							C016.ON	P	3	0.011			11SE	11SE	14SE	110	1
631910	LEWIS R	LEWIS R	25MY79-08JN79		250	30.7	C075.OS	B	95	0.310	119	0.390	13JL	02AU	05SE	88	1
	WILD STOCK-SEINED,TAG REL. IN RIVE						C075.OM	P	11	0.036	42	0.137	06JL	18AU	26SE	97	1
							C016.ON	P	6	0.020			29AU	11SE	19SE	112	1
631858	LEWIS R	LEWIS R	18JN79-19JN79		200	26.2	C075.OS	B	121	0.462	175	0.667	16JL	06AU	19SE	89	2
	WILDSTOCK SEINED TAG REL IN RIVER						C075.OM	P	3	0.012	11	0.043	15AU	04SE	05SE	105	1
							C016.ON	P	2	0.008			13AU	13AU	14SE	105	3
631902	LEWIS R	LEWIS R	19JN79-26JN79		200	21.2	C075.OS	B	91	0.430	127	0.601	09JL	07AU	14SE	83	2
	WILDSTOCK SEINED TAG REL IN RIVER						C075.OM	P	9	0.043	37	0.173	20JL	11AU	05SE	93	2
							C016.ON	P	5	0.024			11SE	17SE	19SE	111	2
632002	LEWIS R	LEWIS R	02JL79-19JL79		200	18.2	C075.OS	B	96	0.527	133	0.731	16JL	09AU	14SE	78	2
	WILD STOCK SEINED TAG REL IN RIVER						C075.OM	P	6	0.033	19	0.106	25JL	08AU	17AU	82	2
							C016.ON	P	1	0.006			06SE	06SE	06SE	100	2
631859	LEWIS R	LEWIS R	13JL79-26JL79		200	23.4	C075.OS	B	105	0.449	149	0.637	16JL	04AU	14SE	76	4
	WILDSTOCK SEINED TAG REL IN RIVER						C075.OM	P	2	0.009	5	0.021	20JL	21JL	15AU	80	11
010201	LEWIS R	LEWIS R	01AP80-16AP80	45		26.0	C075.OS	B	11	0.043	16	0.060	14JN	27JL	04SE	93	1
	WILD STOCK EVAL.						C016.ON	P	1	0.004			31JL	31JL	31JL	96	1
010202	LEWIS R	LEWIS R	16AP80-29AP80	45		27.4	C075.OS	B	15	0.055	24	0.089	26JN	25JL	05SE	92	1
	WILD STOCK EVAL.						C075.OM	P	1	0.004	4	0.014	19AU	19AU	19AU	104	1
							C016.ON	P	1	0.004			25JL	25JL	25JL	80	1
							4005.O	P	1	0.004			14AU	14AU	14AU	98	1
010205	LEWIS R	LEWIS R	30AP80-09MY80	46		30.7	C075.OS	B	10	0.033	24	0.078	25MY	23JL	28AU	95	1
	WILD STOCK EVAL.																
632123	LEWIS R	LEWIS R	09MY80-29MY80	49		25.0	C075.OS	B	34	0.136	63	0.250	16JN	03AU	29AU	91	1
	WILD STOCK EVAL.						C075.OM	P	3	0.012	11	0.046	12JL	14AU	15AU	105	1
							C016.ON	P	1	0.004			18JL	18JL	18JL	98	2

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	PURPOSE OF RELEASE		OTHER MARKS														
632124	LEWIS R	LEWIS R	29MY80-04JN80	52		27.5	C075.OS	B	49	0.179	84	0.306	06JL	06AU	15SE	90	1
	WILD STOCK EVAL.						C075.OM	P	2	0.008	7	0.025	22JL	01AU	01AU	90	1
							4005.O	P	1	0.004			13AU	13AU	13AU	104	2
632125	LEWIS R	LEWIS R	05JN80-10JN80	55		25.6	C075.OS	B	56	0.219	89	0.346	28JN	15AU	18SE	95	1
	WILD STOCK EVAL.						C075.OM	P	4	0.016	16	0.065	07JL	01AU	05AU	90	2
							C016.ON	P	1	0.004			25JL	25JL	25JL	87	3
							4005.O	P	1	0.004			13AU	13AU	13AU	96	2
632207	LEWIS R	LEWIS R	11JN80-17JN80	56		26.2	C075.OS	B	69	0.264	114	0.435	03JL	12AU	16SE	94	1
	WILD STOCK EVAL.						C075.OM	P	5	0.020	22	0.083	10JL	02AU	02SE	85	2
632208	LEWIS R	LEWIS R	17JN80-25JN80	61		24.5	C075.OS	B	48	0.197	72	0.296	03JL	15AU	15SE	88	1
	WILD STOCK EVAL.						C075.OM	P	2	0.009	8	0.032	11AU	12AU	19AU	74	2
							C016.ON	P	2	0.009			16JL	16JL	26AU	104	5
							4005.O	P	1	0.005			22AU	22AU	22AU	117	2
632214	LEWIS R	LEWIS R	24JN80-07JL80	64		26.4	C075.OS	B	34	0.130	56	0.213	18JL	17AU	11SE	97	2
	WILD STOCK EVAL.						C075.OM	P	3	0.012	12	0.045	30JL	30JL	11AU	91	2
							C016.ON	P	1	0.004			31JL	31JL	31JL	94	4
							4005.O	P	1	0.004			14AU	14AU	14AU	95	3
632213	LEWIS R	LEWIS R	07JL80-11JL80	68		14.0	C075.OS	B	17	0.122	26	0.186	22JL	19AU	15SE	91	2
	WILD STOCK EVAL.						C075.OM	P	1	0.008	4	0.025	13AU	13AU	13AU	97	2

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631950	LEWIS R HAT	SPEELYAI	19JL79			108.2	C075.0S	B	815	0.754	1087	1.005	21JL	02AU	14SE	84	9
	COL R F CH EVAL REARED 3 MONTHS						C075.0M	P	15	0.014	46	0.043	20JL	13AU	22AU	102	5
							C029.0S	P	1	0.001			22AU	22AU	22AU	110	5
							C016.0N	P	16	0.015			29AU	11SE	17SE	117	3
							4005.0	P	1	0.001			09AU	09AU	09AU	99	9
631920	LEWIS R HAT	SPEELYAI	05SE79		28	51.7	C075.0S	B	18	0.035	81	0.157	10SE	15SE	26SE	99	12
	COL R. F CH EVAL REARED 3 MONTHS						C043.0N	P	2	0.004			10SE	10SE	10SE	112	31
							C016.0N	P	7	0.014			11SE	13SE	17SE	119	22
131614	LEWIS R HAT	LEWIS R	06JL77		110	42.2	C075.0S	B	42	0.100	57	0.137	15JL	08SE	29SE	106	1
	WILD STOCK EVALUATION																
010101	LEWIS R HAT	LEWIS R	11AP78		200	50.9	C075.0S	B	15	0.030	23	0.045	12JL	23JL	31AU	97	1
	WILD STOCK-SEINED-TAGGED & RELEA						C075.0M	P	3	0.006	13	0.025	28JL	07AU	18AU	100	1
							C016.0N	P	5	0.010			21JL	24JL	29SE	110	1
631748	LEWIS R HAT	LEWIS R	17MY78-22MY78		165	82.5	C075.0S	B	301	0.365	477	0.579	20MY	09JN	30AU	76	4
	WILD STOCK EGGS						C075.0M	P	20	0.025	41	0.050	24MY	24JN	31JL	101	2
							C029.0S	P	1	0.002			12OC	12OC	12OC	125	1
							C016.0N	P	20	0.025			05JN	30JN	24JL	101	3
							C007.0S	B	1	0.002			13JL	13JL	13JL	90	3
							4005.0	P	2	0.003			25JL	25JL	03AU	110	2
631813	LEWIS R HAT	LEWIS R	13JL79		160	60.5	C075.0S	B	296	0.490	396	0.656	17JL	03AU	05SE	83	4
	COL RIVER FALL CHIN EVAL REARED 3						C075.0M	P	15	0.025	48	0.079	23JL	08AU	16AU	87	3
							C016.0N	P	5	0.009			27AU	14SE	19SE	110	2
632021	LEWIS R HAT	LEWIS R	02JL80			63.0	C075.0S	B	165	0.262	261	0.414	07JL	03AU	15SE	88	3
	WILD STOCK EVAL. (Hat. reared 3 mos.)						C075.0M	P	6	0.010	23	0.037	23JL	04AU	19AU	84	3
							C016.0N	P	2	0.004			15JL	15JL	19AU	75	11

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054701	LIT WH SAL HAT	LIT WH SAL R@RM 2	15MY77		122	280.4	C075.0S	B	263	0.094	290	0.104	09JN	21JN	28JL	78	5
	HATCHERY EVALUATION						C075.0M	P	4	0.002	5	0.002	08JN	08JN	09JN	78	8
050342	LIT WH SAL HAT	LIT WH SAL R@RM 2	24MY78	74	123	50.5	C075.0S	B	102	0.202	162	0.321	30MY	09JN	24JN	73	12
	SPRING CREEK STOCK EVALUATION						C075.0M	P	4	0.008	5	0.010	31MY	01JN	05JN	68	23
							C016.0N	P	6	0.012			19JN	22JN	05JL	90	8
							C007.0S	B	2	0.004			06JN	06JN	06JN	80	20
056101	LIT WH SAL HAT	LIT WH SAL R@RM 2	24MY78	74	118	48.4	C075.0S	B	108	0.224	172	0.355	26AP	06JN	27JN	71	14
	SPRING CREEK STOCK EVAL.						C075.0M	P	9	0.019	13	0.028	30MY	04JN	23JN	80	17
							C016.0N	P	3	0.007			14JN	16JN	19JN	88	11
							C009.0N	B	1	0.003			15JN	15JN	15JN	75	11
							C007.0S	B	3	0.007			06JN	06JN	06JN	63	20
							4005.0	P	1	0.003			25JL	25JL	25JL	105	4
056301	LIT WH SAL HAT	LIT WH SAL R@RM 2	24MY78	74	117	52.3	C075.0S	B	96	0.184	153	0.294	25AP	05JN	26JN	71	16
	SPRING CREEK STOCK EVAL						C075.0M	P	9	0.018	14	0.026	01JN	06JN	14JL	95	14
							C016.0N	P	11	0.022			12JN	22JN	03JL	90	8
							C007.0S	B	1	0.002			06JN	06JN	06JN	80	20
050343	LIT WH SAL HAT	LIT WH SAL R@RM 2	25MY78		135	49.5	C075.0S	B	93	0.188	154	0.311	30MY	08JN	08JL	70	13
	LITTLE W SALMON HTCY EVAL.						C075.0M	P	3	0.007	4	0.009	01JN	05JN	21JN	65	17
							C016.0N	P	6	0.013			16JN	22JN	05JL	90	9
							C009.0N	B	1	0.003			15JN	15JN	15JN	90	12
							C007.0S	B	2	0.005			06JN	06JN	06JN	70	21
050344	LIT WH SAL HAT	LIT WH SAL R@RM 2	25MY78		139	51.3	C075.0S	B	103	0.201	161	0.314	30MY	08JN	27JN	73	13
	LITTLE W SALMON HTCY EVAL.						C075.0M	P	4	0.008	7	0.015	31MY	09JL	10JL	90	4
							C016.0N	P	13	0.026			16JN	23JN	30JN	90	8
							C009.0N	B	1	0.002			15JN	15JN	15JN	90	12
							C007.0S	B	2	0.004			06JN	06JN	06JN	75	21
050345	LIT WH SAL HAT	LIT WH SAL R@RM 2	25MY78		131	52.2	C075.0S	B	123	0.236	201	0.386	30MY	07JN	07JL	71	14
	LITTLE WHITE SALMON HTCY.EVAL						C075.0M	P	4	0.008	6	0.011	01JN	17JN	01JL	80	8
							C016.0N	P	8	0.016			16JN	23JN	30JN	92	8
							C009.0N	B	1	0.002			15JN	15JN	15JN	75	12
050346	LIT WH SAL HAT	LIT WH SAL R@RM 2	25MY78	74	110	49.9	C075.0S	B	106	0.213	175	0.352	30MY	07JN	26JN	72	14
	LITTLE WHITE SALMON HTCY.EVAL.						C075.0M	P	8	0.017	10	0.021	31MY	02JN	26JN	66	23
							C016.0N	P	11	0.023			16JN	23JN	07JL	88	8
							C007.0S	B	4	0.009			06JN	06JN	06JN	70	21
050347	LIT WH SAL HAT	LIT WH SAL R@RM 2	25MY78	74	113	49.4	C075.0S	B	94	0.191	148	0.301	30MY	08JN	03AU	73	13
	LITTLE WHITE SALMON HTCY. EVAL.						C075.0M	P	5	0.011	6	0.014	30MY	01JN	09JN	71	27
							C016.0N	P	10	0.021			19JN	26JN	05JL	87	8
050348	LIT WH SAL HAT	LIT WH SAL R@RM 2	25MY78	74	122	49.5	C075.0S	B	114	0.231	184	0.372	30MY	07JN	28JN	72	14
	LITTLE WHITE SALMON HTCY. EVAL.						C075.0M	P	7	0.015	10	0.020	31MY	06JN	23JN	80	16
							C016.0N	P	7	0.015			16JN	22JN	30JN	90	9
							C007.0S	B	1	0.003			06JN	06JN	06JN	80	21
050355	LIT WH SAL HAT	LIT WH SAL R@RM 2	12JL78	73	100	39.4	C075.0S	B	8	0.021	13	0.033	25JL	28JL	23AU	77	12
	LITTLE WHITE SALMON HTCY. EVAL.																

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050355	LIT WH SAL HAT LITTLE WHITE SALMON HTCY. EVAL.	LIT WH SAL R@RM 2	12JL78	73	100	39.4	C075.0M	P	7	0.018	28	0.071	21JL	26JL	14AU	88	13
							C016.0N	P	3	0.008			26JL	01AU	23AU	75	12
050356	LIT WH SAL HAT LITTLE WHITE SALMON HTCY. EVAL.	LIT WH SAL R@RM 2	12JL78	73	109	40.2	C075.0S	B	17	0.043	25	0.063	24JL	30JL	16AU	79	10
							C075.0M	P	1	0.003	4	0.011	11AU	11AU	11AU	105	6
							C016.0N	P	4	0.010			26JL	26JL	01AU	86	17
							4005.0	P	1	0.003			22AU	22AU	22AU	110	6
050357	LIT WH SAL HAT LITTLE WHITE SALMON HTCY. EVAL.	LIT WH SAL R@RM 2	12JL78	73	104	39.2	C075.0S	B	23	0.059	37	0.096	24JL	29JL	18AU	81	11
							C075.0M	P	5	0.013	23	0.059	21JL	11AU	18AU	100	6
							C016.0N	P	1	0.003			26JL	26JL	26JL	85	17
							4005.0	P	1	0.003			02AU	02AU	02AU	90	12
050352	WILLARD HAT LITTLE WHITE SALMON HTCY. EVAL.	LIT WH SAL R@RM 5	01ND78 RECOVERED 1979	104	39	35.6	C075.0S	B	3	0.009	18	0.051	12DE	12DE	12DE	113	5
050448	LIT WH SAL HAT EVAL & CONTRIB	LIT WH SAL R@RM 2	22JN79		105	177.8	C075.0S	B	159	0.090	221	0.125	28JN	05JL	13AU	74	14
							C075.0M	P	95	0.054	150	0.085	27JN	30JN	16AU	79	23
							C016.0N	P	12	0.007			02JL	19JL	14SE	93	9
							4005.0	P	1	0.001			09AU	09AU	09AU	100	5
050449	LIT WH SAL HAT EVAL & CONTRIB	LIT WH SAL R@RM 2	22JN79		123	264.8	C075.0S	B	293	0.111	402	0.152	28JN	06JL	10AU	72	13
							C075.0M	P	119	0.045	186	0.071	27JN	30JN	01AU	74	23
							C029.0S	P	4	0.002			06AU	06AU	06AU	102	5
							C016.0N	P	23	0.009			02JL	13JL	14SE	85	12
							4005.0	P	2	0.001			09AU	09AU	23AU	102	5
050643	LIT WH SAL HAT COL. R. FALL CHIN. EVAL.	LIT WH SAL R@RM 2	10JN80	73	101	162.6	C075.0S	B	86	0.053	102	0.063	14JN	19JN	07JL	76	21
							C075.0M	P	8	0.005	15	0.010	14JN	17JN	16JL	78	27
							C016.0N	P	41	0.026			18JN	24JN	14JL	80	17
050747	LIT WH SAL HAT TIME OF RELEASE	LIT WH SAL R@RM 2	04JN81-05JN81	75	94	183.4	C075.0S	B	110	0.060	119	0.065	08JN	11JN	05JL	76	27
							C075.0M	P	7	0.004	10	0.006	08JN	10JN	12JN	78	31
050849	LIT WH SAL HAT TIME OF RELEASE	LIT WH SAL R@RM 2	04JN81-05JN81	75	94	52.4	C075.0S	B	39	0.075	42	0.080	09JN	11JN	02JL	78	27
							C075.0M	P	4	0.008	5	0.011	09JN	09JN	15JN	83	37
050850	LIT WH SAL HAT TIME OF RELEASE	LIT WH SAL R@RM 2	04JN81-05JN81	75	94	13.3	C075.0S	B	3	0.023	3	0.024	10JN	11JN	13JN	75	27
							C075.0M	P	1	0.008	1	0.011	09JN	09JN	09JN	84	37
LD U 1	LIT WH SAL HAT ESTUARY EFFICIENCY	PRESCOTT ORE	08JN78	71		14.7	C075.0S	B	67	0.457	96	0.652	10JN	12JN	27JN	73	10
							C075.0M	P	2	0.014	3	0.018	03MY	08JN	09JN	80	40
LA U 3	LIT WH SAL HAT SURVIVAL AND EFFICIENCY,HELD 4 DAY	PRESCOTT ORE	16JN80	73		25.8	C075.0S	B	48	0.186	50	0.196	17JN	19JN	25JN	74	13
							C075.0M	P	2	0.008	3	0.014	17JN	17JN	18JN	75	40
							C016.0N	P	7	0.028			20JN	24JN	02JL	78	12
LA U 4	LIT WH SAL HAT SURVIVAL AND EFFICIENCY	PRESCOTT ORE	16JN80	74		24.7	C075.0S	B	72	0.292	76	0.308	18JN	19JN	24JN	75	13
							C075.0M	P	1	0.005	2	0.008	19JN	19JN	19JN	75	13
							C016.0N	P	3	0.013			24JN	24JN	02JL	71	12
LD U 2	LIT WH SAL HAT SURVIVAL AND EFFICIENCY	PRESCOTT ORE	12JN81-15JN81	78	125	25.4	C075.0S	B	33	0.130	34	0.136	13JN	16JN	25JN	75	10
LD U 3	LIT WH SAL HAT SURVIVAL AND EFFICIENCY	RAINIER ORE	26JN79	68	114	25.3	C075.0S	B	64	0.254	82	0.323	28JN	30JN	23JL	72	9
							C075.0M	P	6	0.024	8	0.032	27JN	29JN	02JL	75	11
							C016.0N	P	1	0.004			17JL	17JL	17JL	120	4

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631742	LO KALAMA HAT PROD.EVALUATION	KALAMA R@RM 15	30MY78		61	129.7	C075.0S	B	68	0.053	99	0.077	02MY	08JN	20JL	78	7
							C075.0M	P	68	0.053	76	0.059	31MY	01JN	28JN	81	33
							C016.0N	P	40	0.031			02JN	23JN	24JL	96	5
							C009.0N	B	1	0.001			15JN	15JN	15JN	90	8
							C007.0S	B	16	0.013			06JN	06JN	13JN	79	19
							4005.0	P	1	0.001			25JL	25JL	25JL	105	2
632006	LO KALAMA HAT STOCK EVAL.	KALAMA R@RM 6	06JN80		150	144.5	C075.0S	B	203	0.141	268	0.186	07JN	14JN	09SE	62	7
							C075.0M	P	6	0.005	12	0.009	07JN	08JN	05AU	65	26
							C016.0N	P	12	0.009			18JN	18JL	25AU	86	3
							4005.0	P	1	0.001			13AU	13AU	13AU	96	2
632254	LO KALAMA HAT 5% EVAL	KALAMA R@RM 6	01JN81-11JN81		100	155.3	C075.0S	B	168	0.109	196	0.127	03JN	20JN	18AU	70	3
							C075.0M	P	7	0.005	9	0.006	03JN	04JN	15JN	79	17

SPECIES:

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
07/22/23	McKenzie Hat.	McKenzie@Leaburg	05NO81	158	8	31.1	C075.M	P	9	.029	54	.174	13NO	22NO	02DE	210	
07/25/17	McKenzie Hat. McKenzie stock	McKenzie@Leaburg	05NO81	187	5	31.1	C075.M	P	11	.035	55	.177	13NO	23NO	22NO	198	

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
LA I+ 2	MCNARY D EFFICIENCY REL	PORT KELLY ORE	23JN80			1.1	C075.OM	P	1	0.091	2	0.182	10JL	10JL	10JL	115	25
LA I+ 3	MCNARY D EFFICIENCY REL	PORT KELLY ORE	26JN80			2.5	C075.OM	P	1	0.041	4	0.142	07JL	07JL	07JL	115	39
RA AN 1	MCNARY D EFFICIENCY REL.	PORT KELLY ORE	01JL80			2.6	C075.OM	P	1	0.039	6	0.232	15AU	15AU	15AU	145	9
							C016.ON	P	2	0.078			17JL	17JL	17JL	108	30
LA IF 1	MCNARY D	MCNARY RES	29JN78-14JL78			15.1	C075.OM	P	3	0.020	16	0.108	17JL	21JL	21JL	110	18
*	MCNARY CONTROL		(WHPUGNBL,LAIF1)				C016.ON	P	2	0.014			21JL	21JL	21JL	110	21
							4005.O	P	1	0.007			28JL	28JL	28JL	110	16
LA UP 1	MCNARY D	MCNARY RES	05JL79-16JL79			8.4	C075.OM	P	4	0.048	20	0.237	27JL	10AU	05SE	110	11
*	TRANSPORTATION CONTROL		(WHYWBLLB)														
WHYWBLLB	MCNARY D	MCNARY RES	05JL79-13AU79			19.8	C029.OS	P	1	0.006			27AU	27AU	25JN	110	8
*	TRANSPORTATION CONTROL		(LAUP1:LAUP3)														
LA S 1	MCNARY D	MCNARY TAIL	11AP79-03JL79			0.3	C075.OM	P	2	0.681	3	0.948	21JN	01JL	02JL	105	5
*	TRANSPORT TAILRACE CONTRL		(BLACK:LAS1)														
LA S 3	MCNARY D	MCNARY TAIL	04JN79-21JN79			0.5	C075.OM	P	3	0.577	3	0.654	18JN	19JN	23JN	115	26
*	TRANSPORT TAILRACE CONTRL		(WHRDLGYW)														
LA IM 1	MCNARY D	MCNARY TAIL	12JN79-29JN79			22.9	C075.OS	B	1	0.005	1	0.005	15AU	15AU	15AU	150	6
*	TAILRACE CONTROL		(LAIM1:WHRDYWPK)				C075.OM	P	11	0.049	25	0.108	29JN	09JL	03AU	125	15
LA IM 3	MCNARY D	MCNARY TAIL	03JL79-17JL79			31.8	C075.OM	P	4	0.013	16	0.051	23JL	02AU	22AU	115	13
*	TAILRACE CONTROL		(WHRDPKOR:WHRDYWPK)														
LA IM 2	MCNARY D	MCNARY TAIL	24JL79-06AU79			40.4	C075.OM	P	2	0.005	5	0.013	05JN	03AU	03AU	115	39
*	TAILRACE CONTROL		(LAIM2:WHLBYWLB)														
WHLBYWLB	MCNARY D	MCNARY TAIL	24JL79-06AU79			40.4	C016.ON	P	1	0.003			14SE	14SE	14SE	135	9
*	TAILRACE CONTROL		(LAIM2:WHLBYWLB)														
CE	MCNARY D	MCNARY TAIL	09JN80-14JL80			39.0	C016.ON	P	1	0.003			18JL	18JL	18JL	125	12
*	TAILRACE CONTROL		CWT CE,LAIF,1														
LA IF 1	MCNARY D	MCNARY TAIL	09JN80-14JL80			39.0	C075.OM	P	4	0.011	13	0.035	19JN	25JL	01AU	110	9
*	TAILRACE CONTROL		CWT CE,LAIF,1				C016.ON	P	5	0.013			19JN	15JL	25JL	125	13
CEDY	MCNARY D	MCNARY TAIL	16JL80-31JL80			45.6	C016.ON	P	1	0.003			26AU	26AU	26AU	128	11
*	TAILRACE CONTROL		CWT CEDY,LAIF,3														
LA IF 3	MCNARY D	MCNARY TAIL	16JL80-31JL80			45.6	C075.OM	P	2	0.005	9	0.020	30JL	04AU	05AU	115	21
*	TAILRACE CONTROL		CWT CEDY,LAIF,3														
LA ID 1	MCNARY D	MCNARY TAIL	15JN81-16JN81			3.3	C075.OM	P	3	0.091	7	0.196	07JL	07JL	15JL	120	18
*			(031731)														
LA ID 2	MCNARY D	MCNARY TAIL	18JN81-19JN81			4.7	C075.OM	P	1	0.022	3	0.054	07JL	07JL	07JL	120	21
*			(031731)														
LA ID 3	MCNARY D	MCNARY TAIL	22JN81-26JN81			3.5	C075.OM	P	1	0.029	3	0.097	06JL	05JL	06JL	127	30
*			(031731)														
LA IM 1	MCNARY D	MCNARY TAIL	09JL81-14JL81			10.1	C075.OM	P	2	0.020	7	0.065	22JL	31JL	31JL	121	18
*	CONTROL		(031732)														
LA IM 3	MCNARY D	MCNARY TAIL	15JL81-18JL81			10.1	C075.OM	P	4	0.040	19	0.185	31JL	10AU	14AU	119	15
*	CONTROL		(031732)														
LA IM 2	MCNARY D	MCNARY TAIL	20JL81-23JL81			10.0	C075.OM	P	4	0.040	11	0.109	29JL	30JL	31JL	122	39
*	CONTROL		(031732)														
RA IC 1	MCNARY D	BLW BONN D	28JN78-13JL78			17.0	C075.OM	P	7	0.042	27	0.156	01JL	16JL	14AU	105	9
*	MCNARY TRANSPORT		(WHORGNLG,RAIC1)														

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE	NO. MKD	RECAPT. SITE	GEAR CODE	RECAPTURES ACTUAL		RECAPTURES ADJUSTED		RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN	MVMT RATE
	PURPOSE OF RELEASE		OTHER MARKS	MM /LB	THOUS	R. KM		NO.	%	NO.	%				MM	KM/DAY
RA IC 3	MCNARY D	BLW BONN D	19JL78-30AU78		3.4	C075.0S	B	3	0.089	4	0.132	25JL	31AU	01SE	112	4
*	MCNARY TRANSPORT		(WHLG,RAIC3)			C075.0M	P	4	0.119	17	0.495	31JL	31JL	31JL	100	13
						C016.0N	P	4	0.119			01AU	07AU	07AU	116	11
						4005.0	P	3	0.089			03AU	03AU	03AU	111	15
RA 3 1	MCNARY D	BLW BONN D	16AP79-02JL79		0.7	C016.0N	P	1	0.148			02JL	02JL	02JL	95	3
*	TRANSPORT EVAL	TRUCK	(WH:RA31)													
WHRDLGPK	MCNARY D	BLW BONN D	14MY79-21JN79		3.4	C075.0S	B	1	0.030	1	0.031	11JL	11JL	11JL	80	3
*	TRANSPORT EVAL	TRUCK	(RA32;RA33)			C075.0M	P	2	0.059	2	0.071	11JN	11JN	11JN	95	6
RA 3 3	MCNARY D	BLW BONN D	04JN79-21JN79		3.1	C075.0M	P	4	0.129	4	0.143	21JN	22JN	23JN	117	9
*	TRANSPORT EVAL	TRUCK	(WHRDLGPK)													
RA I+ 1	MCNARY D	BLW BONN D	12JN79-29JN79		43.5	C075.0S	B	7	0.017	8	0.020	19JN	23JN	02JL	100	14
*	TRANSPORT EVAL	TRUCK	(WHRDPKLB;RAI+1)			C075.0M	P	114	0.263	149	0.344	17JN	26JN	11JL	107	11
						C016.0N	P	18	0.042			22JN	22JN	04JL	110	21
						4005.0	P	4	0.010			28JN	28JN	10AU	102	14
WHRDPKLB	MCNARY D	BLW BONN D	12JN79-29JN79		43.5	C075.0M	P	20	0.046	26	0.060	15JN	23JN	02JL	107	14
*	TRANSPORT EVAL	TRUCK	(WHRDPKLB;RAI+1)			C016.0N	P	1	0.003			25JN	25JN	25JN	120	16
RA I+ 3	MCNARY D	BLW BONN D	02JL79-17JL79		22.5	C075.0S	B	5	0.023	6	0.027	19JN	20JN	14JL	65	-12
*	TRANSPORT EVAL	TRUCK	(WHRDPKOR;RAI+3)			C075.0M	P	19	0.085	46	0.207	12JL	18JL	20JL	107	10
						C016.0N	P	13	0.058			13JL	19JL	14SE	108	13
RA I+ 2	MCNARY D	BLW BONN D	24JL79-06AU79		41.2	C075.0S	B	6	0.015	8	0.019	30JL	31JL	10AU	110	22
*	TRANSPORT EVAL	TRUCK	(WHLBYWLG;RAI+2)			C075.0M	P	22	0.054	87	0.211	27JL	04AU	08AU	106	14
						C029.0S	P	2	0.005			06AU	06AU	06AU	122	15
						C016.0N	P	11	0.027			07AU	13SE	14SE	140	4
						4005.0	P	2	0.005			10AU	10AU	15AU	130	13
WHLBYWLG	MCNARY D	BLW BONN D	24JL79-06AU79		41.2	C075.0S	B	1	0.003	1	0.004	03AU	03AU	03AU	110	16
*	TRANSPORT EVAL	TRUCK	(WHLBYWLG;RAI+2)			C016.0N	P	4	0.010			11SE	13SE	14SE	128	4
RA I+ 4	MCNARY D	BLW BONN D	08AU79-24AU79		18.5	C075.0S	B	2	0.011	2	0.012	14AU	14AU	15AU	107	26
*	TRANSPORT EVAL	TRUCK	(WHRDLBYW;RAI+4)			C075.0M	P	16	0.087	44	0.235	14AU	15AU	22AU	118	22
						C036.0M	P	2	0.011			10SE	10SE	10SE	127	6
						C016.0N	P	21	0.114			20AU	06SE	17SE	128	7
						4005.0	P	5	0.027			21AU	18SE	20SE	126	5
WHRDLBYW	MCNARY D	BLW BONN D	08AU79-24AU79		18.5	C075.0M	P	2	0.011	6	0.032	14AU	16AU	17AU	120	19
*	TRANSPORT EVAL	TRUCK	(WHRDLBYW;RAI+4)			C016.0N	P	1	0.006			14SE	14SE	14SE	125	6
RA IC 1	MCNARY D	BLW BONN D	13JN80-17JL80		39.5	C075.0S	B	5	0.013	7	0.019	07JL	08JL	17JL	98	6
*	TRUCK TRANSPORT		CWT LA,RAIC,1			C075.0M	P	35	0.089	100	0.255	06JL	10JL	17JL	95	6
						C016.0N	P	30	0.076			09JL	15JL	31JL	95	7
						4008.1N	P	1	0.003			12JL	12JL	12JL	94	7
						4005.0	P	1	0.003			21JL	21JL	21JL	97	6
HO	MCNARY D	BLW BONN D	18JL80-01AU80		40.7	C075.0M	P	1	0.003	4	0.010	06AU	06AU	06AU	110	8
*	TRUCK TRANSPORT		CWT HO,RAIC,3													
RA IC 3	MCNARY D	BLW BONN D	18JL80-01AU80		40.7	C075.0S	B	4	0.010	5	0.014	22JL	23JL	01AU	96	31
*	TRUCK TRANSPORT		CWT HO,RAIC,3			C075.0M	P	29	0.072	99	0.244	21JL	21JL	05AU	105	52
						C016.0N	P	10	0.025			25JL	28JL	31JL	102	21
031733	MCNARY D	BLW BONN D	09JL81-31JL81		42.9	C075.0S	B	2	0.005	5	0.011	24JL	24JL	24JL	103	10
*	TRUCK TRANS		(RA I+ 1,2,3,4)			C075.0M	P	4	0.010	15	0.036	17JL	24JL	31JL	105	10
RA I+ 1	MCNARY D	BLW BONN D	09JL81-14JL81		10.1	C075.0S	B	1	0.010	2	0.016	15JL	15JL	15JL	103	26
*	TRUCK TRANSPORT		(031733)													

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE	NO. MKD	RECAPT. SITE	GEAR CODE	RECAPTURES ACTUAL		RECAPTURES ADJUSTED		RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN	MVMT RATE
	PURPOSE OF RELEASE		OTHER MARKS	MM /LB	THOUS	R. KM		NO.	%	NO.	%				MM	KM/DAY
RA I+ 1	MCNARY D	BLW BONN D	09JL81-14JL81		10.1	C075.0M	P	1	0.010	3	0.026	13JL	12JL	13JL	118	52
*	TRUCK TRANSPORT		(031733)													
RA I+ 3	MCNARY D	BLW BONN D	15JL81-18JL81		10.1	C075.0S	B	5	0.050	7	0.072	20JL	21JL	22JL	103	26
*	TRUCK TRANSPORT		(031733)			C075.0M	P	18	0.178	56	0.554	20JL	30JL	31JL	111	10
RA I+ 2	MCNARY D	BLW BONN D	20JL81-23JL81		10.0	C075.0S	B	2	0.020	3	0.028	23JL	24JL	29JL	105	39
*	TRUCK TRANSPORT		(031733)			C075.0M	P	6	0.060	13	0.131	29JL	29JL	29JL	110	17
RA I+ 4	MCNARY D	BLW BONN D	27JL81-31JL81		12.7	C075.0M	P	5	0.040	13	0.104	29JL	02AU	03AU	111	26
*	TRUCK TRANSPORT		(031733)													

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
071738	OAKRIDGE HAT CONTRIBUTION BY SIZE AT REL	M FK WILLAM@DEXTER	07N078		8	24.0	C075.0M	P	2	0.009	15	0.063	05DE	05DE	05DE	173	15
	07/22/37 Oakridge Hat. Dexter stock	M Fk Willam@Dexter	05N081	198	4	29.4	C075.M	P	12	.041	54	.184	13NO	18NO	05DE	201	
	07/24/18 Oakridge Hat. Oakridge stock	M Fk Willam@Dexter	05N081	179	6	31.6	C075.M	P	3	.009	18	.057	25NO	27NO	29NO	198	

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
072162	OXBOW HAT IMPRINT MCNARY, HOMING	SKAMANIA LIGHT	27MY80-28MY80		100	50.2	C075.0S	B	20	0.040	31	0.061	02JN	04JN	26JN	77	18
							C075.0M	P	1	0.002	3	0.006	02JN	02JN	02JN	72	24
							C016.0N	P	6	0.012			16JN	23JN	02JL	86	8
072163	OXBOW HAT IMPRINT MCNARY,HOMING	SKAMANIA LIGHT	27MY80-28MY80		100	53.1	C075.0S	B	17	0.033	27	0.051	02JN	04JN	23JN	79	18
							C075.0M	P	3	0.006	9	0.017	03JN	08JL	09JL	82	3
							C016.0N	P	3	0.006			10JL	14JL	15JL	101	4
							4005.0	P	1	0.002			26JN	26JN	26JN	85	7

SORT SEQUENCE : SPECIES.SOURCE.RELEASE KM(-).START RELEASE DATE,MARK. RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
631662	PR RAPID SPAW C PNRC UPPER COL R EVAL.	PR RAPID SPAW CH	27JN77		96	150.6	C075.0S	B	2	0.002	2	0.002	22AU	29AU	30AU	143	9
631821	PR RAPID SPAW C COL R FALL CHIN EVALUATION	PR RAPID SPAW CH	23MY79		74	48.1	C075.0M	P	12	0.025	22	0.047	17JN	17JL	01AU	132	10
							C016.0N	P	3	0.007			25JN	25JN	27AU	105	19
632017	PR RAPID SPAW C COL R FALL CHIN EVAL.	PR RAPID SPAW CH	28JN79		77	82.2	C075.0M	P	6	0.008	22	0.027	27JL	30JL	17AU	113	18
							C043.0N	P	1	0.002			10SE	10SE	10SE	125	8
							C016.0N	P	2	0.003			13AU	13AU	29AU	125	14
							4005.0	P	1	0.002			16JL	16JL	16JL	90	35
631948	PR RAPID SPAW C STOCK EVAL.	PR RAPID SPAW CH	20MY80-24JN80		88	110.1	C075.0S	B	1	0.001	1	0.002	28JN	28JN	28JN	115	14
							C075.0M	P	10	0.010	27	0.025	12JN	11JL	01AU	113	11
							C016.0N	P	10	0.010			14JL	17JL	23JL	100	11
							4005.0	P	2	0.002			21JL	21JL	22AU	115	10
632261	PR RAPID SPAW C 5% EVAL	PR RAPID SPAW CH	18MY81		67	42.1	C075.0M	P	13	0.031	30	0.072	18JN	07JL	21JL	124	11
632155	PR RAPID SPAW C 5% EVAL	PR RAPID SPAW CH	23JN81-24JN81		115	194.7	C075.0S	B	1	0.001	2	0.002	24JL	24JL	24JL	102	18
							C075.0M	P	32	0.017	125	0.064	09JL	09AU	10SE	119	12

SORT SEQUENCE : SPECIES.SOURCE,RELEASE KM(-).START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE OTHER MARKS	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
631745	RINGOLD HAT PROD. EVALUATION	RINGOLD HAT	23JN78		35	146.7	C075.0S	B	1	0.001	1	0.001	10JL	10JL	10JL	125	29
							C075.0M	P	23	0.016	94	0.064	14JL	14JL	26JL	129	23
							C047.0S	P	1	0.001			28JL	28JL	28JL	130	15
							C016.0N	P	5	0.004			21JL	21JL	26JL	117	20
							4005.0	P	3	0.003			02AU	02AU	02AU	115	14

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
071926	S SANTIAM HAT	S SANTIAM@FOSTER	07NO78	165	8	31.6	C075.0M	P	1	0.004	8	0.024	05DE	05DE	05DE	170	12
	SMOLT SURVIVAL (EFFECTS OF REL S																
071928	S SANTIAM HAT	S SANTIAM@FOSTER	07NO78	167	7	21.1	C075.0M	P	2	0.010	15	0.072	05DE	05DE	05DE	170	12
	SMOLT SURVIVAL (EFFECTS OF REL S																
071706	S SANTIAM HAT	MILL CR	05JN78	97	46	48.6	C075.0M	P	21	0.044	36	0.074	16JN	27JN	10JL	117	11
	STK-EVAL-WILLAM R						C016.0N	P	10	0.021			21JN	23JN	05JL	112	16
071707	S SANTIAM HAT	MILL CR	05JN78	97	47	51.6	C075.0S	B	1	0.002	2	0.004	27JN	27JN	27JN	120	11
	STK-EVAL-WILLAM R						C075.0M	P	10	0.020	15	0.029	20JN	27JN	01JL	114	11
							C016.0N	P	11	0.022			05JN	26JN	03JL	125	14
071708	S SANTIAM HAT	ABV WILLAM FALLS	31MY78	99	47	50.9	C075.0M	P	44	0.087	69	0.137	07JN	14JN	30JN	105	10
	TURBINE EVAL. SULLVN FOREBAY						C016.0N	P	21	0.042			12JN	21JN	07JL	114	9
							C009.0N	B	1	0.002			15JN	15JN	15JN	100	13
071710	S SANTIAM HAT	ABV WILLAM FALLS	01JN78	99	44	51.2	C075.0S	B	4	0.008	6	0.013	14JN	26JN	28JN	111	5
	TURBINE EVAL SULLVN FOREBAY						C075.0M	P	48	0.094	80	0.157	06JN	10JN	05JL	103	15
							C016.0N	P	20	0.040			25MY	21JN	07JL	115	10
071709	S SANTIAM HAT	BLW WILLAM FALLS	31MY78	101	46	51.3	C075.0S	B	3	0.006	5	0.010	16JN	23JN	24JN	117	6
	TURBINE EVAL +STK EVAL OC						C075.0M	P	61	0.119	90	0.177	06JN	10JN	28JN	103	13
							C016.0N	P	18	0.036			08JN	19JN	07JL	111	10
							C009.0N	B	1	0.002			15JN	15JN	15JN	100	13
071713	S SANTIAM HAT	BLW WILLAM FALLS	01JN78	91	80	47.6	C075.0S	B	2	0.005	3	0.007	24JN	26JN	27JN	112	5
	STOCK EVAL BELOW OCF						C075.0M	P	34	0.072	60	0.126	07JN	27JN	19JL	113	5
							C016.0N	P	19	0.040			12JN	30JN	07JL	119	7
							C009.0N	B	2	0.005			15JN	15JN	27JN	90	14
							4005.0	P	1	0.003			02AU	02AU	02AU	125	3
071929	S SANTIAM HAT	BLW WILLAM FALLS	07NO78	166	8	32.6	C075.0S	B	1	0.004	15	0.046	27NO	27NO	27NO	190	7
	SMOLT SURVIVAL (EFFECTS OF REL S						C075.0M	P	2	0.007	17	0.052	15NO	15NO	15NO	195	16
071930	S SANTIAM HAT	BLW WILLAM FALLS	07NO78	169		32.8	C075.0M	P	5	0.016	33	0.102	10NO	14NO	05DE	203	19
	SMOLT SURVIVAL (EFFECTS OF REL S																

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
632160	SPEELYAI	LEWIS R	15JL80		148	103.5	C075.0S	B	190	0.184	285	0.276	18JL	05AU	19SE	85	4
	WILD STOCK EVAL.						C075.0M	P	7	0.007	21	0.020	18JL	22JL	06AU	86	13
							4005.0	P	3	0.003			24JL	04AU	14AU	90	8

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN / PURPOSE OF RELEASE	RELEASE SITE	RELEASE DATE / OTHER MARKS	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
050743	SPRING CR HAT	ROCK CR	21AP81-22AP81		75	25.7	C075.OS	B	4	0.016	4	0.016	07MY	09MY	13MY	89	16
	PRODUCTION REL						C075.OM	P	6	0.024	8	0.032	05MY	06JN	11JN	115	6
050746	SPRING CR HAT	ROCK CR	21AP81-22AP81		75	150.5	C075.OS	B	25	0.017	27	0.018	03MY	12MY	24MY	88	14
	PRODUCTION REL						C075.OM	P	31	0.021	39	0.027	04MY	22MY	15JN	99	9
LD IF 1	SPRING CR HAT	JOHN DAY D	05JN79	102		19.7	C075.OM	P	19	0.037	22	0.110	11JN	12JN	17JN	103	39
	TURBINE CONTROL																
LD IF 2	SPRING CR HAT	JOHN DAY D	05JN79	102		20.2	C075.OM	P	6	0.030	7	0.034	11JN	11JN	12JN	104	45
	TURBINE CONTROL						C016.ON	P	1	0.005			14JN	14JN	14JN	110	37
LD IF 3	SPRING CR HAT	JOHN DAY D	05JN79	102		20.3	C075.OM	P	15	0.074	17	0.084	11JN	12JN	28JN	101	39
	TURBINE CONTROL						C016.ON	P	5	0.025			14JN	14JN	22JN	101	37
LD IK 1	SPRING CR HAT	JOHN DAY D	05JN79	102		19.6	C075.OS	B	2	0.011	2	0.012	16JN	17JN	19JN	82	23
	SPILL CONTROL						C075.OM	P	15	0.077	17	0.087	11JN	12JN	15JN	101	39
							C016.ON	P	6	0.031			15JN	18JN	22JN	85	25
							4005.O	P	1	0.006			21JN	21JN	21JN	105	21
LD IK 2	SPRING CR HAT	JOHN DAY D	05JN79	102		19.5	C075.OM	P	10	0.052	11	0.056	11JN	12JN	13JN	99	39
	SPILL CONTROL						C016.ON	P	1	0.006			14JN	14JN	14JN	105	37
LD IK 3	SPRING CR HAT	JOHN DAY D	05JN79	102		19.5	C075.OM	P	19	0.098	22	0.111	10JN	12JN	15JN	100	39
	SPILL CONTROL						C016.ON	P	1	0.006			14JN	14JN	14JN	95	37
RD IF 1	SPRING CR HAT	JOHN DAY D	05JN79	102		20.1	C075.OM	P	16	0.080	18	0.088	11JN	12JN	15JN	103	39
	TURBINE TEST						C016.ON	P	5	0.025			14JN	15JN	22JN	103	33
RD IF 2	SPRING CR HAT	JOHN DAY D	05JN79	102		20.2	C075.OM	P	18	0.090	19	0.096	11JN	13JN	16JN	102	34
	TURBINE TEST						C016.ON	P	1	0.005			14JN	14JN	14JN	100	37
RD IF 3	SPRING CR HAT	JOHN DAY D	05JN79	102		19.7	C075.OM	P	23	0.117	25	0.128	11JN	12JN	16JN	100	39
	TURBINE TEST						C016.ON	P	2	0.011			18JN	18JN	18JN	97	25
RD IK 1	SPRING CR HAT	JOHN DAY D	05JN79	102		21.6	C075.OS	B	1	0.005	1	0.005	14JN	14JN	14JN	85	30
	SPILL TEST						C075.OM	P	29	0.135	31	0.145	11JN	12JN	17JN	100	39
							C016.ON	P	1	0.005			14JN	14JN	14JN	105	37
RD IK 2	SPRING CR HAT	JOHN DAY D	05JN79	102		20.7	C075.OM	P	33	0.160	36	0.176	10JN	13JN	27JN	101	34
	SPILL TEST						C016.ON	P	1	0.005			14JN	14JN	14JN	105	37
RD IK 3	SPRING CR HAT	JOHN DAY D	05JN79	102		19.1	C075.OS	B	1	0.006	1	0.006	19JN	19JN	19JN	95	19
	SPILL TEST						C075.OM	P	27	0.142	32	0.168	11JN	12JN	03JL	105	39
							C016.ON	P	3	0.016			14JN	18JN	18JN	105	25
LD IC 1	SPRING CR HAT	JOHN DAY D	06JN79	102		20.0	C075.OS	B	1	0.005	1	0.007	16JN	16JN	16JN	75	27
	SPILL CONTROL						C075.OM	P	28	0.140	30	0.151	12JN	14JN	24JN	98	34
							C016.ON	P	5	0.025			14JN	18JN	02JL	100	28
LD IC 2	SPRING CR HAT	JOHN DAY D	06JN79	102		20.4	C075.OS	B	1	0.005	1	0.006	22JN	22JN	22JN	90	17
	SPILL CONTROL						C075.OM	P	20	0.098	22	0.110	12JN	15JN	03JL	102	30
LD IC 3	SPRING CR HAT	JOHN DAY D	06JN79	102		19.9	C075.OM	P	20	0.101	21	0.106	11JN	14JN	28JN	102	34
	SPILL CONTROL						C016.ON	P	7	0.036			14JN	15JN	25JN	106	37
							4005.O	P	1	0.006			28JN	28JN	28JN	100	15
LD PI 1	SPRING CR HAT	JOHN DAY D	06JN79	102		21.3	C075.OS	B	2	0.010	2	0.010	13JN	18JN	19JN	85	23
	TURBINE CONTROL						C075.OM	P	15	0.071	16	0.074	12JN	14JN	18JN	99	34
							C016.ON	P	1	0.005			14JN	14JN	14JN	105	41
LD PI 2	SPRING CR HAT	JOHN DAY D	06JN79	102		20.3	C075.OM	P	24	0.119	25	0.124	12JN	13JN	16JN	103	39
	TURBINE CONTROL						C016.ON	P	6	0.030			14JN	15JN	25JN	106	37
LD PI 3	SPRING CR HAT	JOHN DAY D	06JN79	102		19.7	C075.OS	B	2	0.011	2	0.013	16JN	17JN	23JN	100	25
	TURBINE CONTROL																

SPECIES: SUB-YEAR CHINOOK

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LD PI 3	SPRING CR HAT	JOHN DAY D	06JN79	102		19.7	C075.OM	P	20	0.102	21	0.107	12JN	13JN	15JN	102	39
	TURBINE CONTROL						C016.ON	P	3	0.016			14JN	14JN	14JN	103	41
RD IC 1	SPRING CR HAT	JOHN DAY D	06JN79	102		24.8	C075.OS	B	3	0.013	3	0.013	14JN	20JN	21JN	75	19
	SPILL TEST						C075.OM	P	23	0.093	26	0.105	12JN	16JN	03JL	101	27
							C016.ON	P	3	0.013			14JN	14JN	22JN	107	41
RD IC 2	SPRING CR HAT	JOHN DAY D	06JN79	102		20.0	C075.OS	B	1	0.005	1	0.007	16JN	16JN	16JN	85	27
	SPILL TEST						C075.OM	P	18	0.090	19	0.096	12JN	14JN	23JN	100	34
							C016.ON	P	1	0.005			18JN	18JN	18JN	100	28
RD IC 3	SPRING CR HAT	JOHN DAY D	06JN79	102		20.2	C075.OS	B	1	0.005	1	0.006	14JN	14JN	14JN	95	34
	SPILL TEST						C075.OM	P	20	0.100	22	0.109	12JN	15JN	24JN	98	30
							C016.ON	P	3	0.015			15JN	15JN	22JN	97	37
RD PI 1	SPRING CR HAT	JOHN DAY D	06JN79	102		20.1	C075.OS	B	2	0.010	2	0.012	17JN	18JN	20JN	82	23
	TURBINE TEST						C075.OM	P	28	0.140	30	0.150	12JN	14JN	23JN	102	34
							C016.ON	P	3	0.015			14JN	14JN	14JN	103	41
RD PI 2	SPRING CR HAT	JOHN DAY D	06JN79	102		20.3	C075.OS	B	2	0.010	2	0.011	13JN	20JN	21JN	85	19
	TURBINE TEST						C075.OM	P	21	0.104	23	0.111	12JN	14JN	26JN	104	34
							C016.ON	P	1	0.005			14JN	14JN	14JN	115	41
RD PI 3	SPRING CR HAT	JOHN DAY D	06JN79	102		20.1	C075.OM	P	21	0.105	22	0.110	12JN	13JN	28JN	103	39
	TURBINE TEST						C016.ON	P	9	0.045			14JN	18JN	25JN	100	28
							4005.O	P	1	0.005			28JN	28JN	28JN	95	15
054101	SPRING CR HAT	BIG WH REAR PD	18AP77		77	87.7	C075.OS	B	354	0.404	477	0.545	27AP	11MY	04JN	88	9
	CONTROL MORPHOLINE						C075.OM	P	4	0.005	11	0.013	05MY	12MY	08JN	63	8
054201	SPRING CR HAT	BIG WH REAR PD	18AP77		82	91.4	C075.OS	B	332	0.364	445	0.488	27AP	10MY	31MY	88	9
	MORPHOLINE						C075.OM	P	1	0.002	4	0.004	11MY	11MY	11MY	63	9
055501	SPRING CR HAT	BIG WH REAR PD	12MY78	85	61	144.3	C075.OS	B	126	0.088	165	0.115	03AP	23MY	05JN	86	18
	BARGING CONTRIBUTION						C075.OM	P	21	0.015	29	0.020	17MY	29MY	28JN	78	12
							C016.ON	P	60	0.042			23MY	02JN	23JN	92	12
							C009.ON	B	1	0.001			30MY	30MY	30MY	100	15
034701	SPRING CR HAT	BIG WH REAR PD	28MR79		109	42.4	C075.OS	B	58	0.137	81	0.191	10AP	01MY	06JN	84	6
	CONTROL-NATURAL						C075.OM	P	9	0.022	13	0.030	24AP	23MY	26MY	109	4
							C029.OS	P	1	0.003			17MY	17MY	17MY	94	5
							C016.ON	P	3	0.008			21MY	26MY	04JN	110	4
035201	SPRING CR HAT	BIG WH REAR PD	19MY79		63	47.8	C075.OS	B	3	0.007	4	0.010	25MY	26MY	27MY	90	28
	CONTROL-NATURAL						C075.OM	P	18	0.038	28	0.060	23MY	25MY	11JN	96	33
							C016.ON	P	7	0.015			26MY	29MY	11JL	95	26
050443	SPRING CREEK	BIG WH REAR PD	21MY79		69	141.4	C075.OS	B	30	0.022	37	0.027	27AP	31MY	08JN	83	20
	CONTRIB						C075.OM	P	26	0.019	45	0.033	25MY	26MY	03JN	87	40
							C016.ON	P	13	0.010			04JN	14JN	02JL	98	11
							4005.O	P	2	0.002			28JN	28JN	28JN	102	7
035501	SPRING CR HAT	BIG WH REAR PD	26JN79		62	28.5	C075.OS	B	5	0.018	7	0.025	28JN	03JL	06JL	90	28
	CONTROL-NATURAL						C075.OM	P	20	0.071	36	0.125	14JN	01JL	09JL	96	40
							C016.ON	P	9	0.032			02JL	02JL	04JL	93	43
035601	SPRING CR HAT	BIG WH REAR PD	26JN79		62	34.8	C075.OS	B	4	0.012	5	0.014	25JN	04JL	19JL	90	25
	CONTROL-NATURAL						C075.OM	P	13	0.038	22	0.063	08JN	01JL	11JL	97	40
							C016.ON	P	7	0.021			02JL	02JL	04JL	97	43
035701	SPRING CR HAT	BIG WH REAR PD	26JN79		62	36.3	C075.OS	B	1	0.003	2	0.005	02JL	02JL	02JL	85	33
	CONTROL-NATURAL						C075.OM	P	10	0.028	17	0.048	23JN	01JL	02JL	97	40
							C016.ON	P	17	0.047			02JL	02JL	04JL	95	43
054301	SPRING CR HAT	SPRING CR HAT	18MR77		111	146.4	C075.OS	B	165	0.113	251	0.172	14AP	05MY	27MY	96	4
	HATCHERY EVALUATION						C075.OM	P	4	0.003	14	0.010	31MY	03JN	08JN	118	3

SPECIES: SUB-YEAR CHINOOK

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	PURPOSE OF RELEASE		OTHER MARKS														
054401	SPRING CR HAT	SPRING CR HAT	08AP77		86	96.8	C075.0S	B	216	0.224	336	0.348	16AP	01MY	04JN	88	8
	VACCINATED VIBRIO																
054501	SPRING CR HAT	SPRING CR HAT	08AP77		86	95.8	C075.0S	B	206	0.216	340	0.355	14AP	01MY	31MY	88	8
	CONTROL VIBRACE						C075.0M	P	1	0.002	6	0.007	06MY	06MY	06MY	103	7
054901	SPRING CR HAT	SPRING CR HAT	08AP77	75	79	75.8	C075.0S	B	23	0.031	32	0.043	17AP	14MY	07JN	95	5
*	CONTROL TRANSPORT		(054901,RDU1)				C075.0M	P	1	0.002	3	0.005	01JN	01JN	01JN	131	4
RD U 1	SPRING CR HAT	SPRING CR HAT	08AP77	75	79	75.8	C075.0S	B	191	0.252	271	0.357	15AP	27AP	24JN	86	10
*	CONTROL TRANSPORT		(054901,RDU1)														
054601	SPRING CR HAT	SPRING CR HAT	24MY77		42	145.1	C075.0S	B	35	0.025	41	0.029	28MY	31MY	06JN	98	28
	HATCHERY EVALUATION						C075.0M	P	7	0.005	24	0.017	31MY	01JN	03JN	106	24
055601	SPRING CR HAT	SPRING CR HAT	21MR78	73	104	149.7	C075.0S	B	168	0.113	218	0.146	27MR	14AP	07JN	81	8
	CONTRIBUTION						C075.0M	P	6	0.005	10	0.007	27MR	18MY	03JN	140	3
							C016.0N	P	12	0.009			16MY	01JN	02JN	109	4
							C009.0N	B	3	0.003			18AP	18AP	18AP	78	9
							C007.0S	B	4	0.003			17AP	04MY	09MY	80	6
056001	SPRING CR HAT	SPRING CR HAT	18AP78	84	64	98.1	C075.0S	B	127	0.130	158	0.162	24AP	30AP	23MY	85	16
	VIBRIO.VACC.	HTCY. EVAL.					C075.0M	P	26	0.027	34	0.035	23AP	24AP	05JN	86	32
							C016.0N	P	19	0.020			05MY	25MY	16JN	95	7
							C009.0N	B	5	0.006			02MY	02MY	30MY	88	19
							C007.0S	B	2	0.003			04MY	04MY	09MY	100	16
056201	SPRING CR HAT	SPRING CR HAT	18AP78	84	68	92.3	C075.0S	B	160	0.174	194	0.211	24AP	03MY	09JN	85	13
	VIBRO.UNVACC.HTCY						C075.0M	P	15	0.017	19	0.021	23AP	26AP	05JN	88	24
							C016.0N	P	27	0.030			22MY	01JN	12JN	105	6
							C009.0N	B	2	0.003			02MY	02MY	02MY	87	19
							C007.0S	B	1	0.002			04MY	04MY	04MY	80	16
055701	SPRING CR HAT	SPRING CR HAT	18MY78	92	56	155.2	C075.0S	B	75	0.049	96	0.062	25AP	25MY	28AU	89	28
	-CONTRIBUTION						C075.0M	P	31	0.020	40	0.026	22MY	23MY	10JN	91	39
							C016.0N	P	55	0.036			22MY	02JN	16JN	95	17
							C009.0N	B	2	0.002			30MY	30MY	30MY	95	22
							C007.0S	B	1	0.001			31MY	31MY	31MY	95	20
050339	SPRING CR HAT	SPRING CR HAT	18AU78	138	16	49.9	C075.0S	B	4	0.009	8	0.017	23AU	23AU	23AU	130	39
	HATCHERY EVALUATION						C075.0M	P	2	0.005	8	0.017	24AU	24AU	24AU	120	32
050340	SPRING CR HAT	SPRING CR HAT	18AU78	138	16	52.1	C075.0S	B	5	0.010	10	0.020	23AU	23AU	23AU	131	39
	HATCHERY EVALUATION						C075.0M	P	2	0.004	8	0.016	22AU	22AU	22AU	147	49
050341	SPRING CR HAT	SPRING CR HAT	18AU78	138	16	50.6	C075.0S	B	2	0.004	4	0.008	09JN	22AU	23AU	120	49
	HATCHERY EVALUATION						C075.0M	P	4	0.008	28	0.055	22AU	28AU	29AU	130	19
							4005.0	P	1	0.002			05SE	05SE	05SE	165	14
050446	SPRING CR HAT	SPRING CR HAT	20MR79		125	246.0	C075.0S	B	211	0.086	374	0.153	26MR	08AP	30MY	70	10
	EVAL & CONTRIB						C075.0M	P	18	0.008	50	0.021	26MR	27MR	09JN	70	28
							C029.0S	P	1	0.001			18MY	18MY	18MY	101	4
							C016.0N	P	6	0.003			21MY	04JN	14JN	100	3
050434	SPRING CR HAT	SPRING CR HAT	20AP79		87	95.6	C075.0S	B	179	0.188	228	0.239	25AP	04MY	08JN	81	14
	ERM VACCINE						C075.0M	P	17	0.018	21	0.022	25AP	27AP	11JN	83	28
							C016.0N	P	11	0.012			21MY	07JN	15JN	105	5
							C014.0S	P	2	0.003			25MY	25MY	25MY	101	7
							4005.0	P	1	0.002			03JL	03JL	03JL	100	4

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
050444	SPRING CR HAT	SPRING CR HAT	20AP79		78	135.5	C075.0S	B	229	0.169	284	0.210	25AP	04MY	27MY	83	14
	EVAL&CONTRIB&ERM CONTROL						C075.0M	P	52	0.039	64	0.047	24AP	27AP	02JN	83	28
							C029.0S	P	2	0.002			18MY	18MY	18MY	99	9
							C016.0N	P	13	0.010			21MY	07JN	14JN	102	5
							C014.0S	P	1	0.001			25MY	25MY	25MY	99	7
							4005.0	P	1	0.001			03JL	03JL	03JL	140	4
050433	SPRING CR HAT	SPRING CR HAT	18MY79		50	140.9	C075.0S	B	25	0.018	28	0.020	21MY	23MY	29MY	91	39
	EVAL & CONTRIB						C075.0M	P	73	0.052	94	0.067	21MY	22MY	30MY	95	49
							C018.0S	P	1	0.001			30MY	30MY	30MY	92	21
							C016.0N	P	9	0.007			26MY	07JN	18JN	106	13
							C014.0S	P	2	0.002			25MY	25MY	25MY	93	36
050445	SPRING CR HAT	SPRING CR HAT	13AU79	120	19	55.6	C075.0M	P	33	0.060	100	0.181	17AU	18AU	22AU	140	39
	EVAL & CONTRIB						C016.0N	P	4	0.008			20AU	20AU	20AU	133	36
							4005.0	P	1	0.002			23AU	23AU	23AU	140	26
050639	SPRING CR HAT	SPRING CR HAT	10MR80	68	123	130.2	C075.0S	B	120	0.092	257	0.197	14MR	26MR	23MY	73	13
	HATCHERY CONTRIBUTION						C075.0M	P	3	0.003	5	0.004	15MY	05JN	10JN	116	2
							C016.0N	P	4	0.004			16MY	16MY	23MY	116	4
050640	SPRING CR HAT	SPRING CR HAT	10AP80	77	83	77.7	C075.0S	B	96	0.124	152	0.196	16AP	24AP	17MY	81	14
	HATCHERY CONTRIBUTION						C075.0M	P	12	0.016	25	0.033	14AP	16AP	06MY	87	32
							C016.0N	P	2	0.003			20MY	20MY	21MY	107	6
050641	SPRING CR HAT	SPRING CR HAT	09MY80	90	51	61.8	C075.0S	B	23	0.038	29	0.048	12MY	14MY	19MY	90	39
	HATCHERY CONTRIBUTION						C075.0M	P	32	0.052	49	0.081	12MY	12MY	11JN	95	65
							C016.0N	P	9	0.015			20MY	22MY	23MY	97	19
050642	SPRING CR HAT	SPRING CR HAT	07AU80		19	23.1	C075.0S	B	3	0.013	5	0.022	12AU	14AU	15AU	129	28
	HATCHERY CONTRIBUTION						C075.0M	P	6	0.026	28	0.122	11AU	13AU	15AU	130	32
							4005.0	P	3	0.013			13AU	14AU	14AU	132	37
050740	SPRING CR HAT	SPRING CR HAT	25MR81		90	104.7	C075.0S	B	62	0.060	106	0.102	30MR	03AP	21MY	79	22
	PRODUCTION REL						C075.0M	P	1	0.001	2	0.003	02AP	02AP	02AP	77	24
050748	SPRING CR HAT	SPRING CR HAT	25MR81		118	28.8	C075.0S	B	12	0.042	24	0.083	02AP	04AP	20MY	71	19
	PRODUCTION REL																
050750	SPRING CR HAT	SPRING CR HAT	25MR81		121	13.7	C075.0S	B	9	0.066	13	0.098	30MR	01AP	04MY	73	28
	PRODUCTION REL																
050751	SPRING CR HAT	SPRING CR HAT	25MR81		102	15.4	C075.0S	B	8	0.053	11	0.073	03AP	19AP	04MY	73	8
	PRODUCTION REL																
050741	SPRING CR HAT	SPRING CR HAT	15AP81	80	71	76.7	C075.0S	B	71	0.033	82	0.107	20AP	23AP	19MY	84	14
	PRODUCTION REL						C075.0M	P	7	0.010	14	0.019	20AP	21AP	02MY	87	32
050743	SPRING CR HAT	SPRING CR HAT	15AP81	80	71	30.9	C075.0S	B	33	0.107	36	0.118	23AP	30AP	17MY	85	13
	PRODUCTION REL						C075.0M	P	2	0.007	4	0.012	21AP	22AP	03MY	80	28
050742	SPRING CR HAT	SPRING CR HAT	05MY81		65	63.4	C075.0S	B	102	0.161	105	0.165	09MY	11MY	30MY	86	32
	TIME OF RELEASE						C075.0M	P	3	0.005	3	0.006	13MY	16MY	21MY	94	18
055001	SPRING CR HAT	BLW BONN D	11AP77	75	83	76.1	C075.0S	B	16	0.022	29	0.039	16AP	17AP	20MY	77	26
*	BARGE TRANSPORT		(055001,RDU4)														
RD U 4	SPRING CR HAT	BLW BONN D	11AP77	75	83	76.1	C075.0S	B	288	0.379	396	0.521	16AP	01MY	31JL	88	8
*	BARGE TRANSPORT		(055001,RDU4)														
055401	SPRING CR HAT	BLW BONN D	20AP78	78	79	98.2	C075.0S	B	181	0.185	219	0.224	24AP	01MY	06JN	82	14
	BARGING-CONTRIBUTION						C075.0M	P	20	0.021	24	0.025	23AP	25AP	01JN	80	31

SPECIES: SUB-YEAR CHINOOK

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	PURPOSE OF RELEASE		OTHER MARKS														
055401	SPRING CR HAT	BLW BONN D	20AP78	78	79	98.2	C016.0N	P	24	0.025			01MY	01JN	16JN	100	5
	BARGING-CONTRIBUTION						C009.0N	B	3	0.004			02MY	02MY	02MY	80	18
							C007.0S	B	4	0.005			27AP	09MY	09MY	90	12
							4005.0	P	1	0.002			03AU	03AU	03AU	135	2
050648	SPRING CR HAT	BLW BONN D	19MY80			99.6	C075.0S	B	15	0.016	37	0.038	22MY	25MY	04JN	97	26
	NMFS HOMING.TEST #1						C075.0M	P	25	0.026	58	0.059	22MY	23MY	27MY	94	39
							C016.0N	P	1	0.002			18JN	18JN	18JN	133	7
							4006.3S	P	1	0.002			29MY	29MY	29MY	85	22
							4006.2S	P	1	0.002			29MY	29MY	29MY	99	22
050649	SPRING CR HAT	BLW BONN D	19MY80			99.7	C075.0S	B	10	0.011	23	0.024	23MY	25MY	02JN	93	26
	NMFS HOMING.TEST #2						C075.0M	P	21	0.022	49	0.049	22MY	23MY	27MY	96	39
							4006.1N	P	1	0.002			29MY	29MY	29MY	92	22
							4004.1N	P	1	0.002			27MY	27MY	27MY	99	28
RD U 1	SPRING CR HAT	PRESCOTT ORE	05AP78	77		16.1	C075.0S	B	52	0.323	59	0.363	07AP	12AP	19JN	81	6
	ESTUARY EFFICIENCY						C007.0S	B	1	0.007			10AP	10AP	10AP	77	22
RD U 3	SPRING CR HAT	PRESCOTT ORE	04MY78	83		13.8											
	ESTUARY EFFICIENCY						C075.0S	B	49	0.457	63	0.457	05MY	07MY	17MY	86	13
							C075.0M	P	3	0.022	4	0.031	05MY	06MY	02JN	82	20
							C018.0S	P	1	0.008			22MY	22MY	22MY	83	5
							C016.0N	P	3	0.022			19MY	19MY	22MY	85	7
RD U 2	SPRING CR HAT	PRESCOTT ORE	01JN78	98		12.8	C075.0S	B	14	0.110	19	0.149	02JN	03JN	05JN	100	20
	ESTUARY EFFICIENCY						C075.0M	P	3	0.024	4	0.032	02JN	02JN	02JN	100	40
							C016.0N	P	4	0.032			05JN	05JN	08JN	106	25
LD U 3	SPRING CR HAT	PRESCOTT ORE	03SE78-05SE78	133		15.8	C075.0S	B	2	0.013	3	0.018	05SE	05SE	05SE	140	20
	ESTUARY EFFICIENCY																
RD U 1	SPRING CR HAT	PRESCOTT ORE	03AP79	72	153	25.6	C075.0S	B	122	0.477	208	0.811	04AP	08AP	20JN	71	8
	SURVIVAL AND EFFICIENCY		ADJUSTED BY HAND				C075.0M	P	21	0.082	35	0.136	04AP	04AP	04AP	75	40
							C016.0N	P	2	0.008			07JN	07JN	11JL	110	2
RA U 1	SPRING CR HAT	PRESCOTT ORE	08AP80	77		24.5	C075.0S	B	18	0.074	32	0.133	09AP	11AP	15AP	77	13
	SURVIVAL AND EFFICIENCY						C075.0M	P	2	0.009	5	0.021	09AP	13AP	14AP	110	8
RA U 3	SPRING CR HAT	PRESCOTT ORE	21AP80	79	84	26.7	C075.0S	B	35	0.132	56	0.210	23AP	25AP	16MY	83	10
	SURVIVAL AND EFFICIENCY						C016.0N	P	1	0.004			22MY	22MY	22MY	98	3
RA U 4	SPRING CR HAT	PRESCOTT ORE	21AP80	79	84	26.9	C075.0S	B	21	0.079	37	0.137	18AP	24AP	22MY	78	13
	SURVIVAL AND EFFICIENCY.HELD 4 DAY						C075.0M	P	7	0.027	12	0.046	22AP	22AP	03MY	82	40
							C016.0N	P	2	0.008			22MY	22MY	22MY	97	3
RP U 4	SPRING CR HAT	PRESCOTT ORE	19MY80		51	14.0	C075.0S	B	11	0.079	26	0.189	23MY	25MY	02JN	88	7
	SURVIVAL AND EFFICIENCY.HELD 4 DAY		(Estimated No. Released)				C075.0M	P	1	0.008	3	0.021	21MY	21MY	21MY	95	20
							C016.0N	P	1	0.008			21MY	21MY	21MY	104	49
RD U 1	SPRING CR HAT	PRESCOTT ORE	24AP81-27AP81	83	75	24.7	C075.0S	B	15	0.061	17	0.070	24AP	30AP	26MY	82	7
	SURVIVAL AND EFFICIENCY						C075.0M	P	2	0.009	6	0.026	25AP	25AP	25AP	82	40
RD U 3	SPRING CR HAT	PRESCOTT ORE	08MY81-11MY81	85	65	25.5	C075.0S	B	38	0.149	38	0.151	08MY	13MY	17MY	85	8
	SURVIVAL AND EFFICIENCY		HAND ADJUSTED				C075.0M	P	8	0.032	10	0.039	13MY	13MY	17MY	90	8
RD U 2	SPRING CR HAT	RAINIER ORE	02MY79	84	83	25.0	C075.0S	B	51	0.205	66	0.264	04MY	05MY	30JN	85	11
	SURVIVAL AND EFFICIENCY						C075.0M	P	9	0.037	11	0.045	04MY	05MY	02JL	85	11
RD U 4	SPRING CR HAT	RAINIER ORE	29MY79	88	52	24.9	C075.0S	B	28	0.113	31	0.126	31MY	01JN	09JN	88	11
	SURVIVAL AND EFFICIENCY						C075.0M	P	4	0.017	4	0.017	31MY	31MY	01JN	98	17

SPECIES: SUB-YEAR CHINOOK

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	PURPOSE OF RELEASE		OTHER MARKS														
RD U 4	SPRING CR HAT	RAINIER ORE	29MY79	88	52	24.9	C016.0N	P	4	0.017			04JN	07JN	07JN	96	10
	SURVIVAL AND EFFICIENCY																
LD U 4	SPRING CR HAT	RAINIER ORE	13AU79-14AU79	120	19	20.2	C075.0S	B	3	0.015	4	0.022	15AU	17AU	20AU	110	9
	SURVIVAL AND EFFICIENCY						C075.0M	P	26	0.129	45	0.225	15AU	15AU	16AU	124	17
							C016.0N	P	4	0.020			04JL	20AU	31AU	132	13
RP U 1	SPRING CR HAT	RAINIER ORE	20MY80		51	27.0	C075.0S	B	35	0.130	74	0.276	23MY	26MY	05JN	90	6
	SURVIVAL AND EFFICIENCY						C075.0M	P	2	0.008	5	0.019	22MY	21MY	22MY	92	34
							C016.0N	P	1	0.004			23MY	23MY	23MY	95	31
034901	SPRING CR HAT	STAVEBOLT CR	31MR79		118	47.3	C014.0S	P	1	0.003			25MY	25MY	25MY	102	0
	TEST NATURAL																
035301	SPRING CR HAT	STAVEBOLT CR	17MY79		69	47.7	C016.0N	P	1	0.003			07JN	07JN	07JN	105	1
	TEST-NATURAL																
035001	SPRING CR HAT	STAVEBOLT CR	19MY79		71	48.2	C018.0S	P	2	0.005			30MY	30MY	30MY	93	1
	TEST-NATURAL						C016.0N	P	3	0.007			07JN	14JN	18JN	90	1
							C014.0S	P	1	0.003			25MY	25MY	25MY	95	3
034801	SPRING CR HAT	HAMMOND ORE	30MR79		134	44.4	C014.0S	P	1	0.003			25MY	25MY	25MY	106	0
	TEST-TRUCK																
035101	SPRING CR HAT	HAMMOND ORE	22MY79		72	49.3	4005.0	P	1	0.003			03JL	03JL	03JL	120	0
	TEST-TRUCK																
035401	SPRING CR HAT	HAMMOND ORE	22MY79		76	46.3	C016.0N	P	1	0.003			18JN	18JN	18JN	95	0
	TEST-TRUCK						C014.0S	P	1	0.003			25MY	25MY	25MY	91	0

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: SUB-YEAR CHINOOK

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	PURPOSE OF RELEASE		OTHER MARKS														
07/23/47	Rnd Butte Hat.	Deschutes@Rm 100	050C81	186	6	44.2	C075.M	P	2	.005	17	.038	26NO	29NO	03DE	214	

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SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	/LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	%	ADJUSTED NO.	%	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
072055	STAYTON PD	VAR WILLAM R & TRI	28AP80-21JN80		100	282.0	C075.OS	B	21	0.008	32	0.012	07MY	16MY	24JN	79	13
	EVAL. STAYTON POND REAR.						C075.OM	P	36	0.013	70	0.025	06MY	20MY	30JN	90	10
							C016.ON	P	27	0.010			09MY	21MY	27JN	96	12
							4005.0	P	1	0.001			17JN	17JN	17JN	102	6
071841	STAYTON PD	ABV WILLAM FALLS	07MY79-21MY79		67	283.8	C075.OS	B	66	0.024	85	0.030	14MY	18MY	24JN	84	12
	FALL CHIN IN WILL R.						C075.OM	P	192	0.068	224	0.079	13MY	17MY	02JL	90	13
							C029.OS	P	16	0.006			17MY	18MY	18MY	92	16
							C018.OS	P	1	0.001			30MY	30MY	30MY	95	8
							C016.ON	P	26	0.010			21MY	04JN	22JN	105	7
							C014.OS	P	1	0.001			16MY	16MY	16MY	92	22
							4005.0	P	1	0.001			03JL	03JL	03JL	120	4
072335	STAYTON PD	ABV WILLAM FALLS	27AP81-15JN81		75	242.5	C075.OS	B	99	0.041	102	0.043	07MY	13MY	03JN	87	8
							C075.OM	P	70	0.029	93	0.039	06MY	22MY	02JL	92	5

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SPECIES: SUB-YEAR CHINOOK

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	PURPOSE OF RELEASE		OTHER MARKS														
631640	TOUTLE HAT	GREEN R	29JN77		117	132.5	C075.0S	B	606	0.458	872	0.658	05JL	05AU	28SE	106	2
	STOCK EVALUATION																
631763	TOUTLE HAT	GREEN R	19JN78	68	98	142.8	C075.0S	B	432	0.303	710	0.498	23JN	02JL	20SE	78	7
	PROD. EVALUATION																
							C075.0M	P	25	0.018	87	0.061	23JN	27JL	22AU	94	2
							C050.0N	P	1	0.001			28JL	28JL	28JL	105	3
							C016.0N	P	35	0.025			07JL	24JL	15SE	97	4
							C007.0S	B	1	0.001			13JL	13JL	13JL	85	6
							4005.0	P	6	0.005			25JL	03AU	22AU	96	3
631801	TOUTLE HAT	GREEN R	07JL78		72	126.5	C075.0S	B	141	0.112	247	0.196	13JL	04AU	27NO	86	3
	ATPase RELEASE						C075.0M	P	23	0.019	89	0.071	14JL	19JL	07AU	93	7
							C050.0N	P	2	0.002			28JL	28JL	28JL	92	5
							C043.0N	P	1	0.001			28JL	28JL	28JL	85	6
							C016.0N	P	19	0.016			21JL	24JL	07SE	94	8
							4005.0	P	5	0.004			02AU	03AU	03AU	95	6
631854	TOUTLE HAT	GREEN R	17JN79		160	12.0	C075.0S	B	63	0.526	85	0.707	30JN	13JL	12SE	82	3
	COL RIVER FALL CHIN EVAL						C075.0M	P	7	0.059	11	0.095	29JN	01JL	13JL	74	6
							C029.0S	P	1	0.009			06AU	06AU	06AU	105	3
							C016.0N	P	4	0.034			19JL	27AU	17SE	112	2
631941	TOUTLE HAT	GREEN R	17JN79		160	132.1	C075.0S	B	735	0.511	980	0.681	12JN	13JL	19SE	82	3
	COL R. F CH EVAL						C075.0M	P	59	0.041	108	0.075	20JN	01JL	14AU	73	6
							C029.0S	P	1	0.001			22AU	22AU	22AU	115	2
							C016.0N	P	24	0.017			11JL	20AU	14SE	115	2
							4005.0	P	3	0.003			09AU	15AU	15AU	107	3
631954	TOUTLE HAT	GREEN R	17JN79		160	0.1	C075.0S	B	2	0.002	2	0.002	16JL	17JL	09AU	90	3
	COL R F CH EVAL (631941) only a few released with 631954																

SORT SEQUENCE : SPECIES,SOURCE,RELEASE KM(-),START RELEASE DATE,MARK, RECAPTURE SITE(-) (FINAL/SOURCE)

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	RECAPTURES ACTUAL %	RECAPTURES ADJUSTED NO.	RECAPTURES ADJUSTED %	RECAPTURE DATE 1ST FISH	RECAPTURE DATE MED. FISH	RECAPTURE DATE LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
631641	WASHOUGAL HAT	WASHOUGAL R@RM 15	28JN77		64	128.6	C075.0S	B	188	0.147	261	0.204	08JL	09AU	23SE	111	3
	STOCK EVALUATION																
631803	WASHOUGAL HAT	WASHOUGAL R@RM 15	26JN78		62	151.4	C075.0S	B	189	0.125	298	0.197	05JL	18JL	15SE	92	7
	PROD. EVALUATION																
							C075.0M	P	23	0.016	104	0.069	05JL	15JL	14AU	91	8
							C050.0N	P	2	0.002			28JL	28JL	28JL	95	5
							C047.0S	P	1	0.001			28JL	28JL	28JL	95	5
							C047.0S	B	1	0.001			28SE	28SE	28SE	130	2
							C016.0N	P	29	0.020			05JL	24JL	07SE	96	7
							4005.0	P	7	0.005			25JL	02AU	03AU	105	6
631938	WASHOUGAL HAT	WASHOUGAL R@RM 15	14JN79		95	93.7	C075.0S	B	266	0.284	322	0.344	20JN	30JN	12AU	80	9
	COL. RIVER FALL CHIN EVAL		6.4k released 02SE79				C075.0M	P	30	0.032	46	0.049	20JN	29JN	15AU	80	10
			(2 recapt.)				C043.0N	P	2	0.002			10SE	10SE	10SE	115	2
							C016.0N	P	18	0.019			02JL	31AU	14SE	115	3
							4005.0	P	2	0.002			28JN	28JN	03JL	90	15
631946	WASHOUGAL HAT	WASHOUGAL R@RM 15	14JN79		95	158.8	C075.0S	B	521	0.329	639	0.403	19JN	01JL	29AU	80	9
	COL RIVER FALL CHIN EVAL						C075.0M	P	68	0.043	109	0.069	20JN	30JN	14AU	80	9
							C029.0S	P	2	0.002			06AU	06AU	06AU	110	4
							C016.0N	P	21	0.014			02JL	13AU	14SE	115	3
632153	WASHOUGAL HAT	WASHOUGAL R@RM 15	30JN80		80	319.2	C075.0S	B	591	0.186	982	0.308	02JL	18JL	15SE	82	8
	STOCK EVAL.						C075.0M	P	18	0.006	77	0.025	02JL	25JL	05SE	91	6
							C016.0N	P	27	0.009			09JL	15JL	19AU	81	14
							4005.0	P	6	0.002			13AU	13AU	14AU	102	5
632251	WASHOUGAL HAT	WASHOUGAL R@RM 15	26JN81-30JN81	83	71	277.3	C075.0S	B	400	0.145	600	0.217	21JN	05JL	03SE	82	16
	5% EVAL						C075.0M	P	17	0.007	56	0.021	29JN	05JL	04AU	87	16
632148	WASHOUGAL HAT	WASHOUGAL R@RM 15	06JL81-01SE81		81	25.4	C075.0S	B	16	0.062	36	0.141	12JL	29JL	09SE	90	8
	5% EVAL DELAYED																
							C075.0M	P	2	0.008	20	0.079	10SE	09SE	10SE	107	2
LD U 1	WASHOUGAL HAT	PRESCOTT ORE	13JL80	78	80	14.0	C075.0S	B	61	0.436	80	0.569	14JL	17JL	29JL	80	10
	SURVIVAL AND EFFICIENCY,HELD 4 DAY		(estimated no. released)				C075.0M	P	3	0.022	7	0.053	14JL	14JL	15JL	85	40
							C016.0N	P	3	0.022			16JL	18JL	28JL	83	20
							4005.0	P	1	0.008			24JL	24JL	24JL	93	10
LD U 3	WASHOUGAL HAT	PRESCOTT ORE	05JL81-09JL81	83	71	25.1	C075.0S	B	15	0.060	20	0.081	07JL	10JL	20JL	79	8
	SURVIVAL AND EFFICIENCY		Sa[illegible] 63225				C075.0M	P	9	0.036	28	0.112	06JL	06JL	10JL	84	40
LD U 2	WASHOUGAL HAT	RAINIER ORE	25JN79	74	116	26.0	C075.0S	B	136	0.523	169	0.649	27JN	30JN	26JL	76	7
	SURVIVAL AND EFFICIENCY						C075.0M	P	18	0.070	24	0.091	27JN	28JN	09JL	80	11
							C016.0N	P	4	0.016			22JN	18JL	20JL	91	4
							4005.0	P	1	0.004			10AU	10AU	10AU	90	2

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
631762	WELLS SPAW CH	WELLS TAIL	13JN78		52	153.6	C075.0M	P	2	0.002	8	0.005	26JL	06AU	07AU	135	14
	PROD. EVALUATION						C016.0N	P	1	0.001			07AU	07AU	07AU	145	15
631749	WELLS SPAW CH	BLW PR RAPID D	26JN78		45	154.1	C075.0S	B	2	0.002	3	0.002	18JL	23JL	24JL	120	21
	HAULING STUDY		RECOVERED IN 1979				C075.0M	P	33	0.022	127	0.083	10JL	18JL	07AU	115	26
							C050.0N	P	2	0.002			28JL	28JL	28JL	115	18
							C021.0S	P	1	0.001			23OC	23OC	23OC	155	5
							C016.0N	P	18	0.012			21JL	21JL	26JL	110	25
							4005.0	P	2	0.002			03AU	03AU	03AU	125	17

SPECIES: SUB-YEAR CHINOOK

MARK	HATCH/ORIGIN	RELEASE SITE	RELEASE DATE	SIZE AT RELEASE MM	SIZE AT RELEASE /LB	NO. MKD THOUS	RECAPT. SITE R. KM	GEAR CODE	RECAPTURES ACTUAL NO.	ACTUAL %	ADJUSTED NO.	ADJUSTED %	RECAPTURE DATE 1ST FISH	MED. FISH	LAST FISH	AVG LEN MM	MVMT RATE KM/DAY
	PURPOSE OF RELEASE		OTHER MARKS														
631939	WEYCO PD	GRAYS R@RM 21	05JN79		58	92.4	C075.0S	B	3	0.004	4	0.005	17JL	06AU	10AU	100	0
	COL RIVER FALL	CHIN EVAL					C075.0M	P	1	0.002	4	0.005	10AU	10AU	10AU	100	0
							C016.0N	P	7	0.008			14JN	22JN	17SE	90	3
							4005.0	P	3	0.004			28JN	28JN	28JN	90	3
010203	WEYCO PD	GRAYS R@RM 21	10JN80		64	97.8	C016.0N	P	16	0.017			16JN	19JN	02JL	92	6
	COL R. F. CHIN	EVAL					4005.0	P	1	0.002			26JN	26JN	26JN	87	4