CZES Coastal Zone and Estuarine Studies

Migrational Characteristics of Juvenile Salmon and Steelhead in the Columbia River Basin and Related Passage Research at John Day Dam

VOLUMES I & II

by

Carl W. Sims, John G. Williams,
David A. Faurot, Richard C. Johnsen,
and Dean A. Brege

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INTRODUCTION

During 1980, the National Marine Fisheries Service (NMFS) monitored the seaward migrations of juvenile salmonids from the Snake and Columbia Rivers. In addition, the behavior of the juveniles in the forebay of John Day Dam was investigated, and two airlift pump systems designed to remove fingerlings from turbine intake gatewells were tested at John Day Dam.

Monitoring provided the necessary data to: (1) determine current status (timing) of the smolt migration so that daily spill and augmented river flows could be timed with smolt passage, (2) assure that spill allocated for fish passage was judiciously used, (3) determine the percentage of the total smolt migration being transported from dams, and (4) assess the success of the 1980 smolt outmigration.

The objective of the behavior study was to examine smolt behavior and movement in the John Day Dam forebay in relation to various modes of dam operation.

The objectives of the airlift pump study were to test the ability of two different types of airlift systems to evacuate juvenile salmonids from turbine intake gatewells and to monitor the degree of descaling and mortality of fish evacuated.

METHODS

Assessment of the 1980 Smolt Outmigrations

Juvenile salmon and steelhead migrations were sampled in the Snake and Columbia Rivers. On the Snake River, catches from the fingerling collection facility at Lower Granite Dam were sampled. On the Columbia

River, turbine intake gatewells at John Day Dam and the collection facility at McNary Dam were sampled. Sampling schedules at the various locations in 1980 were as follows:

Sampling site	Period sampled
Lower Granite Dam	3 April to 6 July
McNary Dam	3 April to 15 August
John Day Dam	14 April to 3 December

A percentage of smolts sampled at Lower Granite, McNary, and John Day Dams were marked by thermal branding (cold brand) and released. Subsequent recoveries of these fish provided information on migrational timing, magnitude, travel time, and survival. Permission was again obtained in 1980 to sacrifice up to 75 fish with excised adipose fins per day from the total ad-clips collected at each of the U.S. Army Corps of Engineers (CofE) dams. Such fish were previously marked at hatcheries with coded-wire tags (CWT). By reading these tags and expanding the sample to the total ad-clips collected each day, survival, timing, etc., were obtained on the migrations from the various upstream hatcheries.

Travel times through specified sections of the Columbia River system were calculated from recoveries of marked fish; the difference between the median release date and the median recovery date provided this information. Travel times calculated in this manner reflected the movement rate of only those fish surviving from point of release to point of recapture.

In previous years, estimates of juvenile salmonid populations at Lower Granite Dam were made by dividing the number of fish collected at the dam by the efficiency of collection. The efficiency of collection was determined by marking groups of fish, releasing them in the dam's forebay,

and then recapturing them at the dam. The efficiency was the percentage of fish recaptured. In 1980, marked releases of juvenile chinook salmon into the Lower Granite Dam forebay and their subsequent recapture did not provide adequate data to determine collection efficiency. This was partially the result of a nonrandom sample of fish examined from the large number of fish collected at the facility. In addition, there was a problem with brand recognition.

The efficiency of juvenile chinook salmon collection and their related population estimates were determined by using the following deductive process:

Assumptions:

1. All marked groups of fish from the Snake River system collected and examined concurrently at McNary Dam had the same probability of recapture.
2. Brands were equally readable at McNary Dam for all marked groups of Snake River fish.
3. The marked fish released in the Lower Granite Dam forebay were collected with the same efficiency and had the same mortality between the forebay and Little Goose Dam tailrace as the whole Snake River run.
4. Turbine mortality at Lower Granite and Little Goose Dams was 15%.
5. The pool mortality between the Lower Granite Dam tailrace and the Little Goose Dam collection facility was 10%. This was based on flow and survival curves generated for Ice Harbor Dam.

Method:

1. The percentage recapture at McNary Dam of Lower Granite Dam forebay and Little Goose Dam tailrace releases was determined.
2. The ratio of the recapture rates determined the percentage of smolts that successfully migrated from the Lower Granite Dam forebay to the Little Goose Dam tailrace. Fish that did not migrate to below Little Goose Dam were either collected or lost to mortality. This ratio was designated as the target (T_o).
3. Efficiences (E) for collection at Lower Granite Dam were then substituted into the following formulas until an efficiency was found such that $T_1 = T_o$.

$$\hat{N} = \frac{C_1}{E}$$

$$(\hat{N} - C_1)\ (0.765) = N_1$$

$$(N_1 - C_2)\ (0.85) = N_2$$

$$\frac{N_2}{\hat{N}} = T_1$$

$\hat{N}$ = Estimated population to Lower Granite Dam

C_1 = Number of fish collected at Lower Granite Dam

E = Efficiency of collection at Lower Granite Dam

N_1 = Population to Little Goose Dam forebay

0.765 = Lower Granite Dam turbine survival times pool survival

C_2 = Number of fish collected at Little Goose Dam

0.85 = Little Goose Dam turbine survival

The efficiency of steelhead collection was determined from the recapture rate of two Lower Granite Dam forebay efficiency releases. When an efficiency of collection for steelhead at Lower Granite Dam was derived by the method used for juvenile chinook salmon, the result was the same as the average efficiency measure determined by recapture of forebay releases. Thus the deductive method was assumed to be a good estimator of efficiencies and their related population estimates for both steelhead and chinook salmon.

Population estimates at John Day Dam in 1980 were completed on a daily basis from sample catches from index turbine Unit 3 and flow-efficiency regression formulas (Figure 1). These flow efficiency formulas were derived from recaptures of marked fish released into the tailrace at McNary Dam and the percent of the total flow at John Day Dam passing through index turbine Unit 3 between 2100 and 0200 h each night. They were based on the assumption that the number of fish entering index turbine Unit 3 was directly proportional to the amount of water passing through the unit. Derivation of the formulas is detailed in Appendix Tables A1 and A2.

Survival was estimated by comparing the actual recovery rate of marked fish released at a given dam with expected recovery rate (100% survival) at that dam as estimated from measures of sampling efficiency. For example, if sampling efficiency at Lower Granite Dam was 14%, and 7% of a marked fish group were recovered, then survival was 50% from the point of release to Lower Granite Dam. See Raymond (1979) for additional detail.

Smolt Behavior, John Day Dam Forebay

Radio tagged juvenile salmonids were tracked in the immediate vicinity of John Day Dam--River Kilometer (RKm) 347 to 357 (Figure 2). This reach

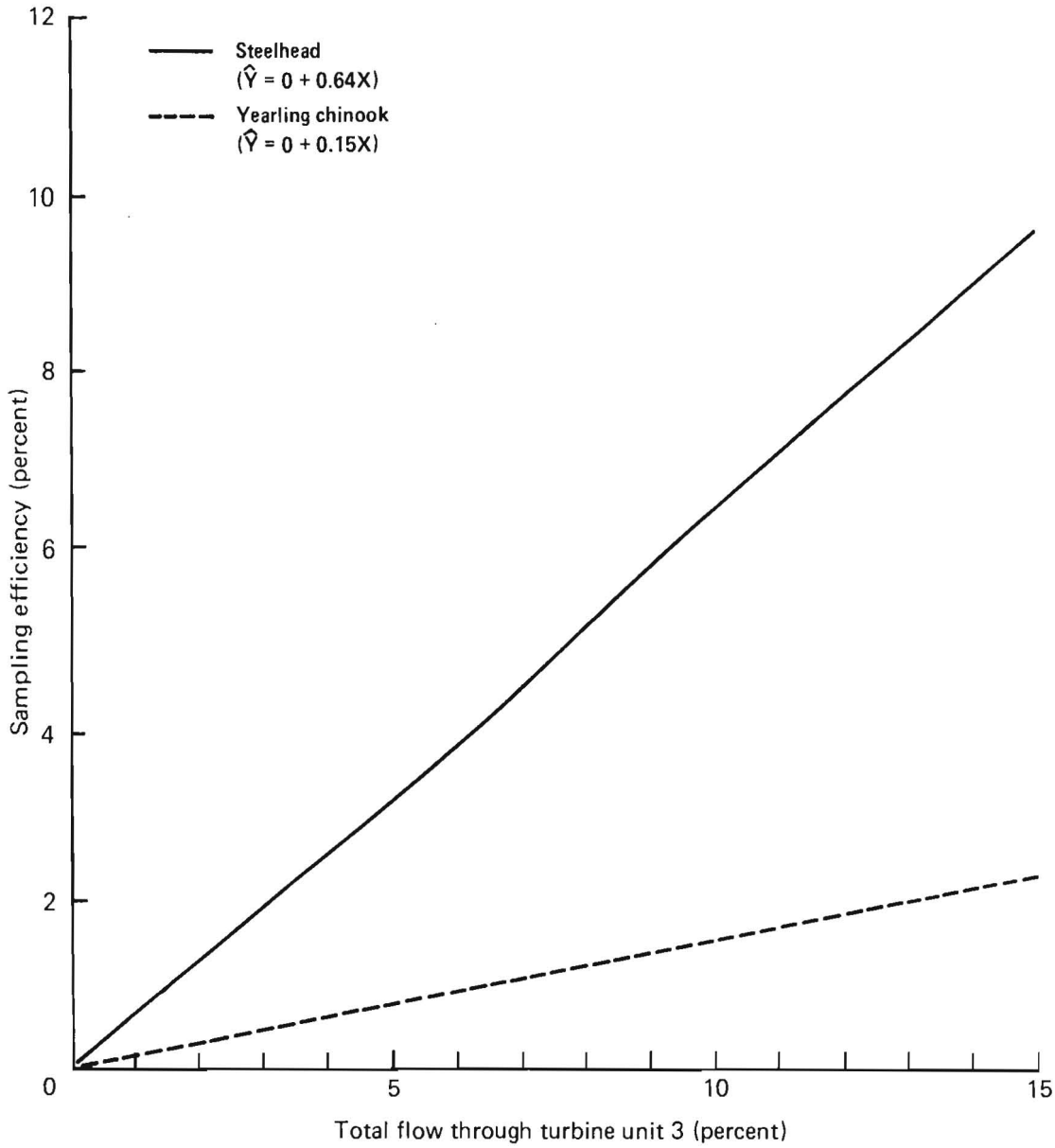


Figure 1.--Flow-efficiency relationship for yearling chinook salmon and steelhead trout at John Day Dam, 1980.

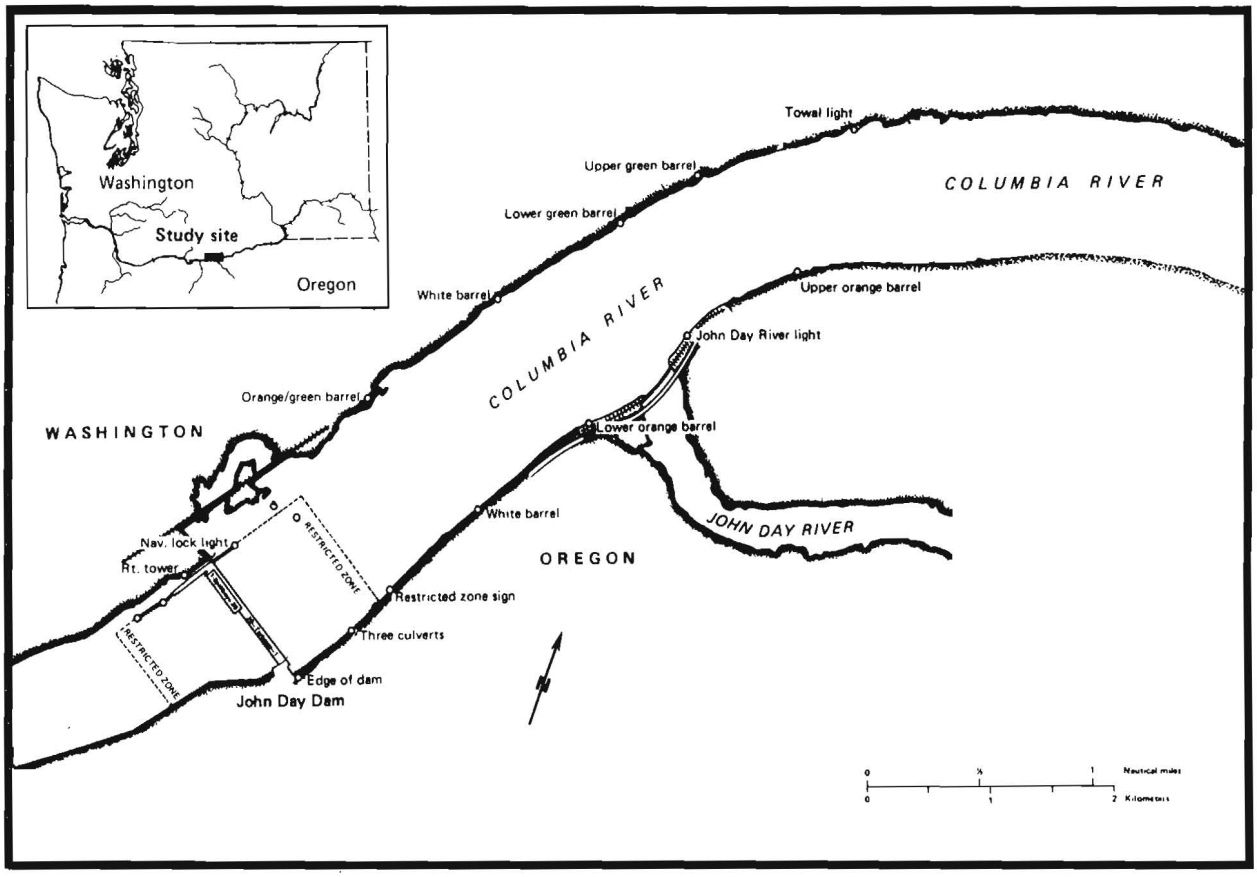


Figure 2.--Study area for radio tracking of juvenile salmonids at John Day Dam, 1980.

of river is about 1 km wide and has one major tributary, The John Day River, entering on the Oregon shore at RKm 351. Flow patterns immediately upstream from the dam (RKm 347-348) were substantially influenced by the operation of the dam. When all of the flow passing the dam was through the powerhouse, the flow was concentrated toward the Oregon side of the river. If water was also being spilled, the flow spread toward the Washington side. The degree of spread was dependent upon the quantity of water being spilled in relation to the quantity being passed through the powerhouse (during normal operation spill never exceeded one-third of the total river flow). Between RKm 350 and 357, the natural tendency was for the greatest flow to be on the Washington side of the river. Crossover of flow to the Oregon side generally occurred between RKm 348 and 350.

Equipment

The juvenile radio tag, developed by NMFS electronic technicians, was a battery powered transmitter that operated on a carrier frequency of approximately 30 megahertz (MHz) (Figure 3). The transmitter and batteries were coated with dental acrylic and a mixture of paraffin and beeswax to form a flattened cylinder 26 x 9 x 6 mm weighing approximately 2.9 g in air. For identification purposes, each tag transmitted on one of nine specific frequencies spaced 10 kilohertz (KHz) apart between 30.17 through 30.25 MHz. Initially tag range was only 30 m, but it was improved to 90 m by the end of the season. Tag life was 7 to 10 days.

Receivers and antennas were the same as those described by Liscom et al. (1978). Hand held directional loop antennas 18 inches in diameter were used with the portable direction finder-receivers. The receiver amplified the tag signal and produced an audible tone. Bearings to the tags were

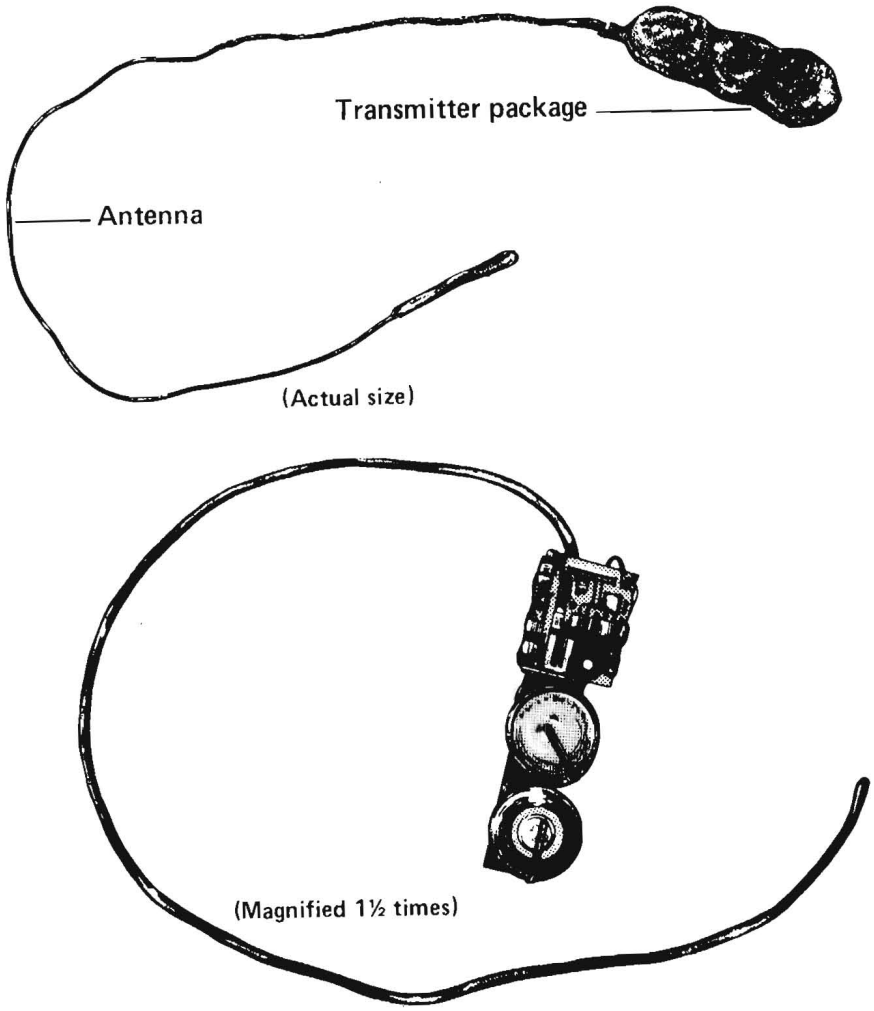


Figure 3.--Miniature radio transmitter used in juvenile chinook salmon and steelhead trout at John Day Dam in 1980.

obtained by rotating the antenna to null out the tag signal.

Tagging and Release Procedures

Juvenile fish to be tagged were collected during morning gatewell dipping operations at John Day Dam. Only fish longer than 142 mm in fork length that showed no descaling were tagged. Fish to be tagged were anesthetized in a solution of MS-222 (175 ppm). Once anesthetized (about 10 s), the fish was removed from the anesthetic solution and measured. The tagger then took a radio tag from an antiseptic solution of zephiran chloride, dipped it in glycerin, and inserted it into the fish's mouth. A small diameter plastic drinking straw was then used to push the tag through the esophagus into the stomach. The flexible antenna extended out of the mouth and was bent to trail aft. The elapsed time from when the fish was placed in the anesthetic until it was tagged and placed in the recovery tank was usually no more than 30 s.

Tagged fish were hand-held in the recovery tank until they could swim on their own (up to 5 min). Fish longer than 160 mm swam level and appeared to be fully recovered in an hour; whereas, smaller fish took up to 4 h. After recovery, the tagged fish were placed in a livewell on the tracking boat, transported to the release site, released into the river, and tracking commenced.

Tracking

The tracking range (30-150 m) and large size of the study area (10 km long by 1 km wide) required tracking by boat rather than from shore stations. Two boats, each with a two-man crew, were used for tracking the tagged fish (Figure 4). One man operated the boat while the second operated the antenna and receiver. To stay within range of the tagged

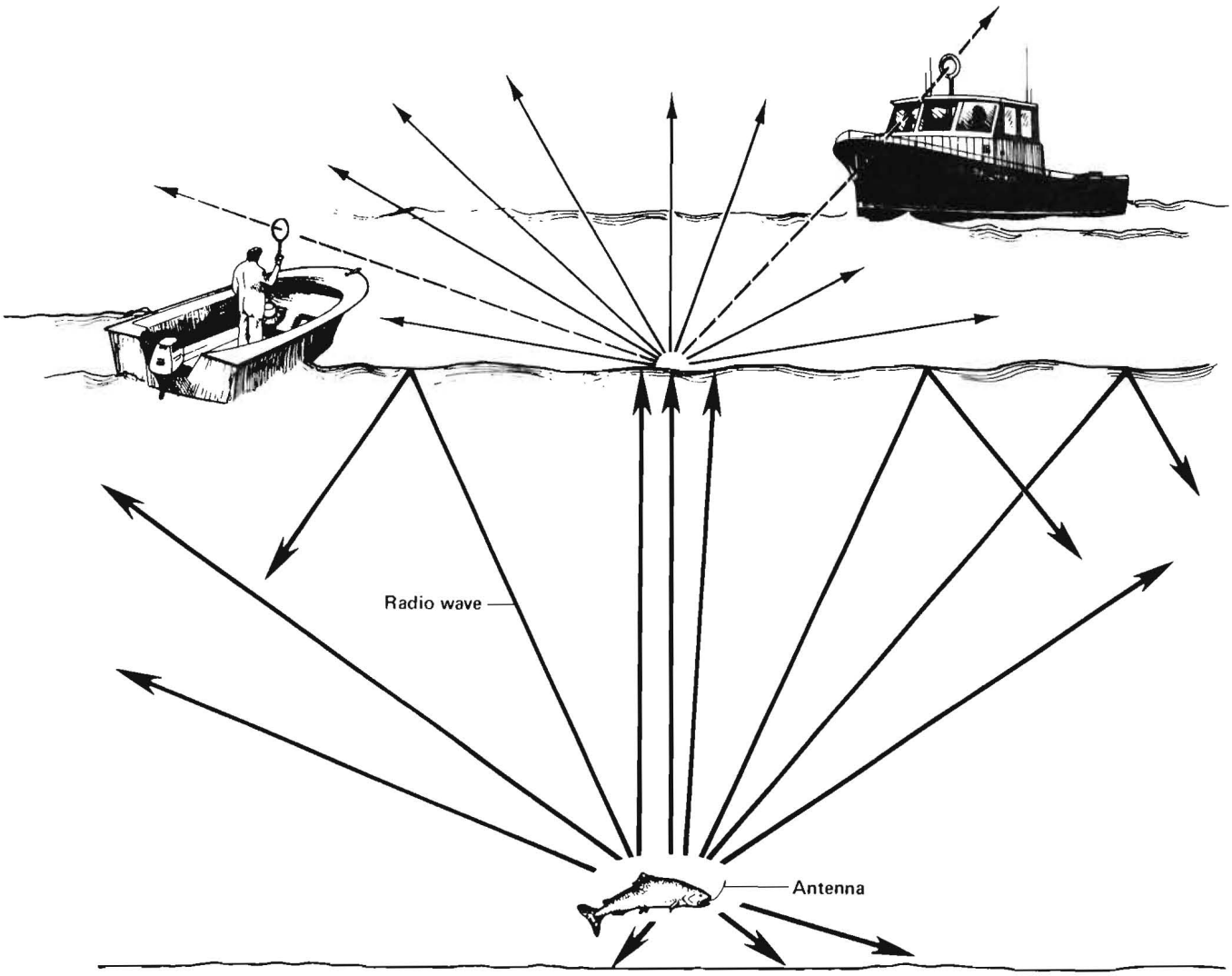


Figure 4.--The two-boat tracking system used to follow radio tagged chinook salmon and steelhead trout smolts in the John Day Reservoir.

fish, one boat was deployed downstream from the fish in the expected direction of movement, and the other boat was deployed to one side of the fish's expected location. As the fish moved to the downstream boat, the boat alongside the fish would move past the downstream boat and the lower boat would stay alongside of the fish.

Positional fixes for plotting the fish's location on tracking maps were made by placing a boat directly over the fish's location and then fixing the location of the boat on the map. The boat was judged to be directly over a fish when a strong signal was received throughout the entire 360° rotation of the antenna. Positional fixes to determine the location of the boat were made by measuring, with a sextant, the horizontal angle between fixed navigational aids and/or brightly colored and lighted markers placed at known positions on the river bank. The angles when plotted with a three-arm protractor provided a very accurate and fast method of locating fish positions on a navigational chart (Dunlap and Schufeldt 1969).

Short tracking distances and high winds required that constant cross bearings be taken to stay with the fish. If the signal was lost, a marker buoy was dropped at the point of last contact, and the area was searched until the tagged fish was relocated.

Airlift Pump Evaluations at John Day Dam

An airlift pump lifts water by injecting compressed air at a low level into a vertically oriented submerged pipe. The introduction of air creates less dense water inside than outside the pipe. The less dense mixture of

air bubbles and water rises, and denser water moves into the lower end of the pipe as the air-water mixture spills out the top. Percent submergence of the lift pipe (Figure 5) is the main factor affecting efficiency of an airlift pump. "The volume of air necessary to operate an airlift increases with decreasing percent of submergence. Maximum efficiency (100%) is...when the top of the pipe is submerged" (Spotte 1979).

Two different airlift pump systems were tested at John Day Dam in 1980--a "J" airlift and a "Funnel" airlift.

Equipment

Both pumps were constructed of adjustable lengths of 30.5-cm diameter thin walled (15 gauge) aluminum irrigation pipe which coupled together for convenient assembly and disassembly (Figures 6 and 7). In addition, each airlift was equipped with a light at the entry orifice and another about half way through the system. Compressed air was supplied by an electrically driven air compressor, maximum capacity 2.8 m^3/min at 6.3 kg/cm^2 (100 cfm at 90 psi) and by a diesel engine driven air compressor, maximum capacity 5.2 m^3/min at 6.3 kg/cm^2 (185 cfm at 90 psi). Air delivery was from a common air chamber through separate regulator valves and hoses to each aerator (Figure 8).

Pump discharge elevation from the "J" airlift was about 1 m above the water surface into a basket (fish pen) floating in the gatewell; whereas, discharge elevation from the "Funnel" airlift varied from 1 m when discharging into a floating pen in the gatewell to as much as 8.2 m above the water surface when discharging into a tank on the intake deck of the dam.

Tests during the spring migration were conducted in Gatewell B ("J" airlift) and Gatewell C ("Funnel" airlift) of turbine Unit 5. Gatewell

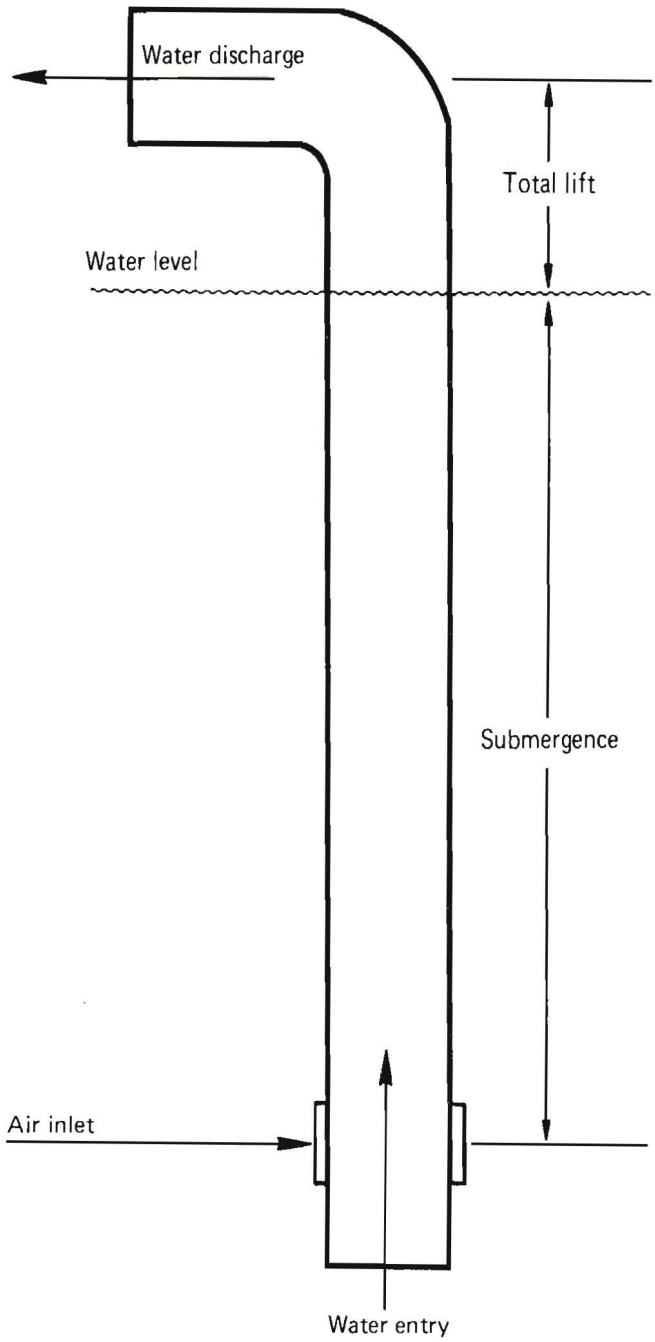


Figure 5.--Airlift pump operating principles (adapted for Spotte, 1979).

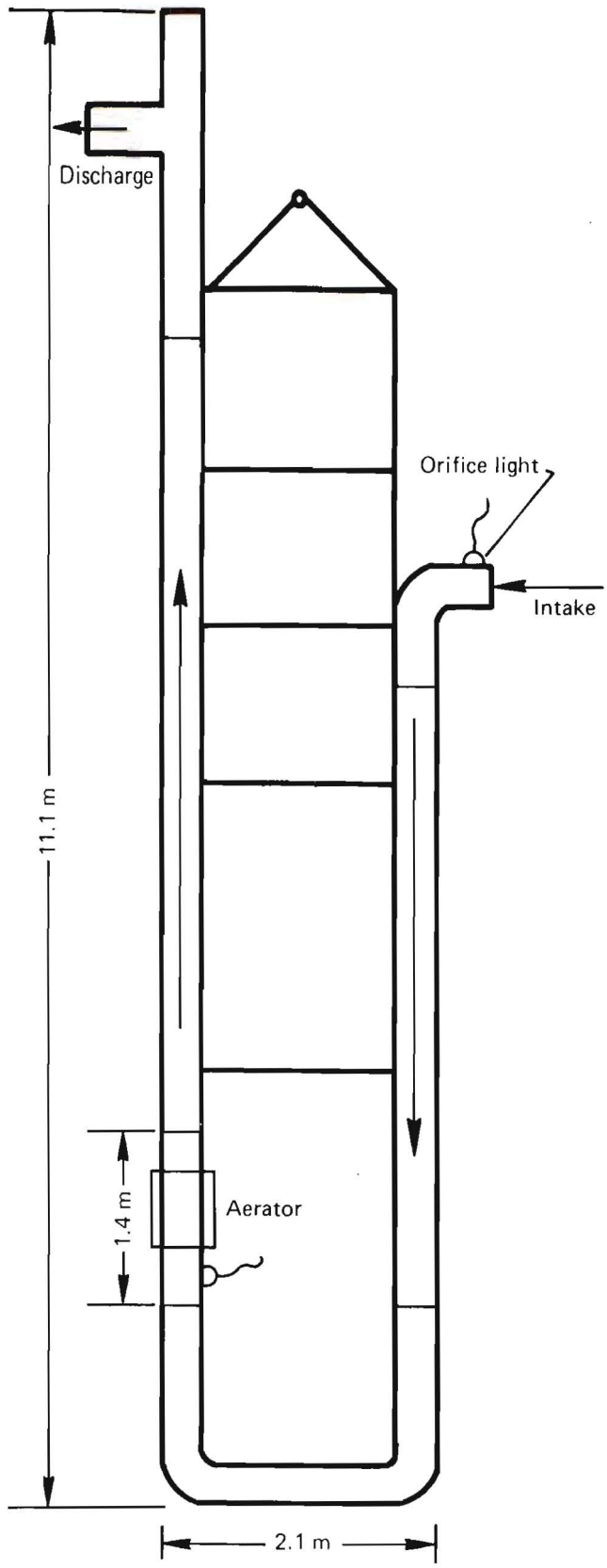


Figure 6.--The "J" airlift pump systems tested at Lake Dr[illegible] in 1[illegible]

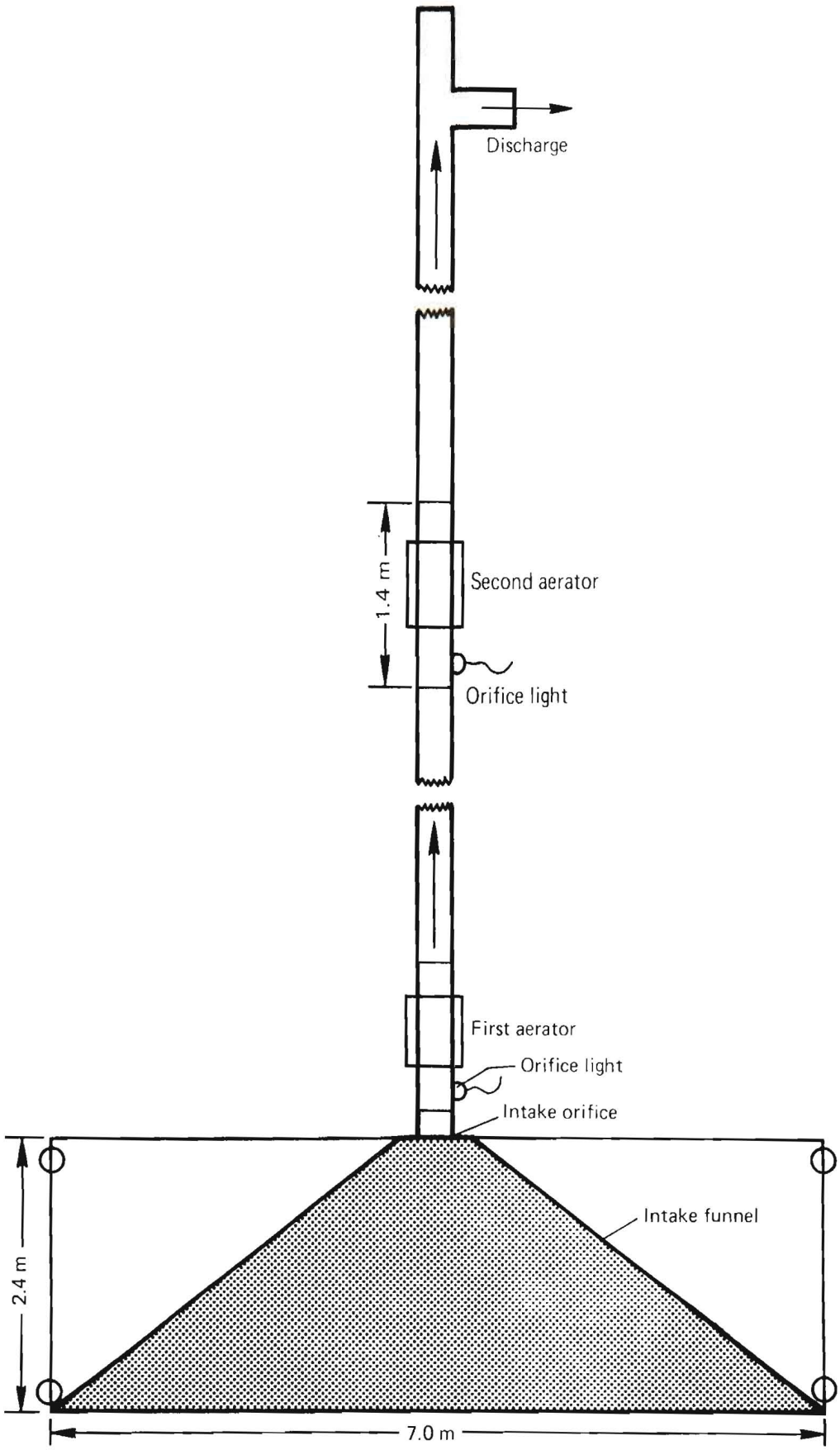


Figure 7.--The "Funnel" airlift pump system tested at John Day Dam in 1980.

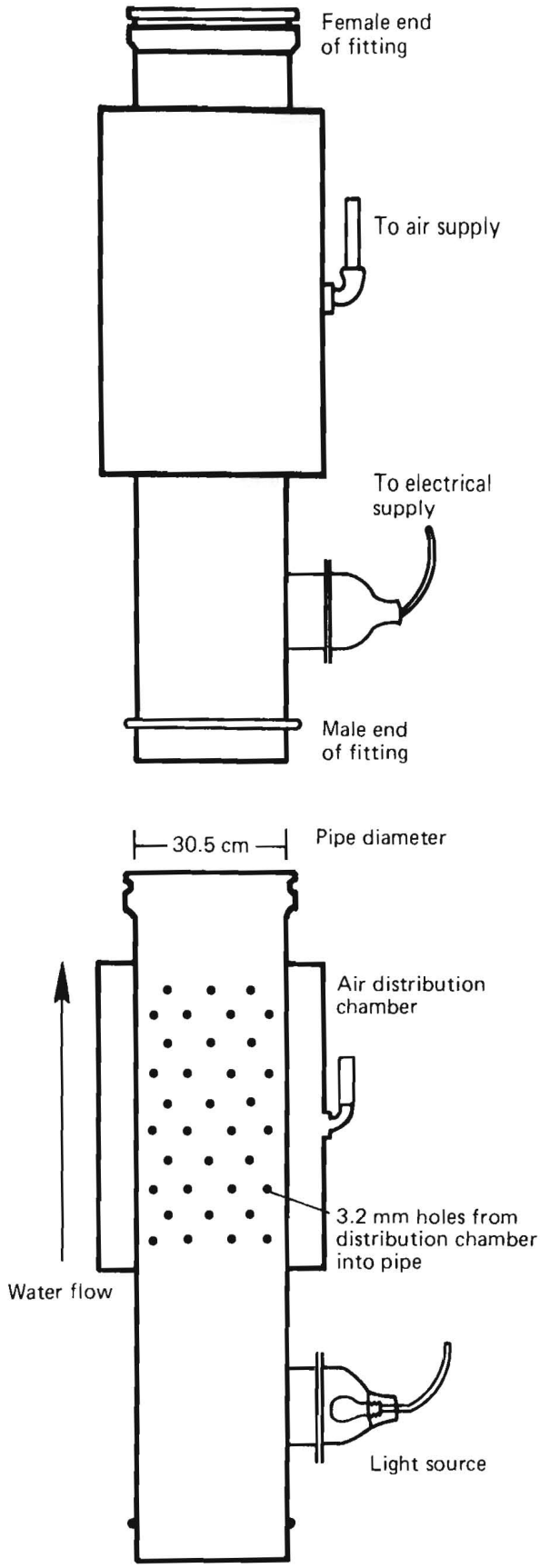


Figure 8.--Construction detail of the aerators used in the airlift pump systems tested at John Day Dam in 1980.

5-B was equipped with a complete vertical barrier screen, and 5-C was equipped with a partial barrier screen in the lower 4.9 m. Summer tests were only conducted on the "Funnel" airlift and mostly in Gatewell 5-B.

Testing Procedures

Methods used to evaluate the airlift pumps were as follows:

1. During the spring, 24-h operation of each airlift for extended periods provided diel patterns of capture. In addition, depths, lighting, and air delivery were varied to provide information on operating criteria for the airlift systems.

2. During the summer, the "Funnel" airlift was initially operated during daytime hours only. The entire pump unit (funnel, pipe, hoses, and aerators) was raised above the water level in the gatewell to allow unrestricted entry of fish during night hours. The "Funnel" airlift was lowered toward the bottom of the gatewell when fish were to be evacuated. Later for night tests, the same procedure was employed except that the airlift was removed during the day and lowered in evening.

3. Examination of the airlift catch provided a measure of fish condition under various airlift operating modes. Mortalities and numbers of descaled fish (>10% scale loss) were recorded and compared to typical gatewell dipnetted fish.

4. Species composition of airlift captured fish was compared to dipnetted fish from control gatewells (5-B and 3-B & C).

5. Airlift efficiencies in the spring season were determined differently for the two airlifts. The number of fish taken in the "J" airlift over a test period (1-7 days) was compared to the total number captured in the gatewell (total airlift catch during the test period +

dipnet catch at the end of the test period). This ratio provided a measure of efficiency in a direct manner. The complete barrier screen made this possible by allowing "clean out" dipnetting of the gatewell before and after airlift operations. Efficiency of the "Funnel" airlift during the spring season was determined by mark-release and recapture procedures. During the summer, the "Funnel" airlift was shifted to Gatewell 5-B to utilize the complete barrier screen and efficiency was measured by "clean out" dipnetting.

6. The maximum discharge height (total lift) capability was different for each airlift. For the "J" airlift, discharge height tests were made only at a height (about 1 m above the gatewell water surface) sufficient to spill water into the floating fish holding pen. Fish captured were lifted by crane from the gatewell and spilled from the holding pen through a hose into a transport tank for delivery to our examination facility.

Discharge height for the "Funnel" airlift was tested from a floating pen level to heights as much as 2.1 m above the intake deck level (8.2 m above the water surface). The greater submergence of the "Funnel" airlift compared to the "J" airlift and the addition of another aerator, 6-12 m above the lower one, enabled sufficient lift to deliver fish to deck level. Excess water was discharged back into the gatewell through overflow perforations in the holding pen. Captured fish were spilled from this pen into a transport tank for delivery to our examination building.

RESULTS AND DISCUSSION

Assessment of the 1980 Smolt Outmigrations

Timing of Migration and Travel Time

Weekly summaries of catch information provided a general guideline for

timing of migrations by species past Lower Granite, McNary, and John Day Dams (Appendix Tables B1-B3). Weekly catches were broken down by day to provide exact dates of median passage.

Fish first appeared at Lower Granite Dam on 2 April with 85% of the chinook salmon and 90% of the steelhead migration passing between 22 April and 26 May (Figure 9). Chinook salmon peaked on 26 April and steelhead on 6 May. This was 8 and 4 days earlier than in 1979 for chinook salmon and steelhead, respectively. Juvenile chinook salmon and steelhead that were not collected and transported (41 and 22%, respectively) peaked at John Day Dam on 8 May and 16 May. This was 8 and 6 days earlier than in 1979.

The river flow was higher in 1980 than in 1979, which may have accounted for the earlier arrival of fish at both Lower Granite and John Day Dams. Flows during the period of maximum fish passage at Lower Granite Dam (22 April to 26 May) were greater than the minimum 85,000 cfs recommended for fish migrations in the Snake River by the Columbia River Fisheries Council. The rate of travel as compared with river flow was generally the same in 1980 as in previous years (Table 1).

Relative Magnitude and Survival

Approximately 5.6 million chinook salmon and 3.6 million steelhead were estimated at Lower Granite Dam in 1980 (Table 2). Of these, 3.2 million chinook salmon (59%) and 2.8 million steelhead (78%) were collected at Lower Granite and Little Goose Dams and then transported below Bonneville Dam. Nontransported chinook salmon continuing downstream on their own volition had a 36% survival to John Day Dam. This was comparable to survival measured in 1975, 1976, and 1979, but below the excellent 44% survival of 1978 (Figure 10). Nontransported steelhead continuing

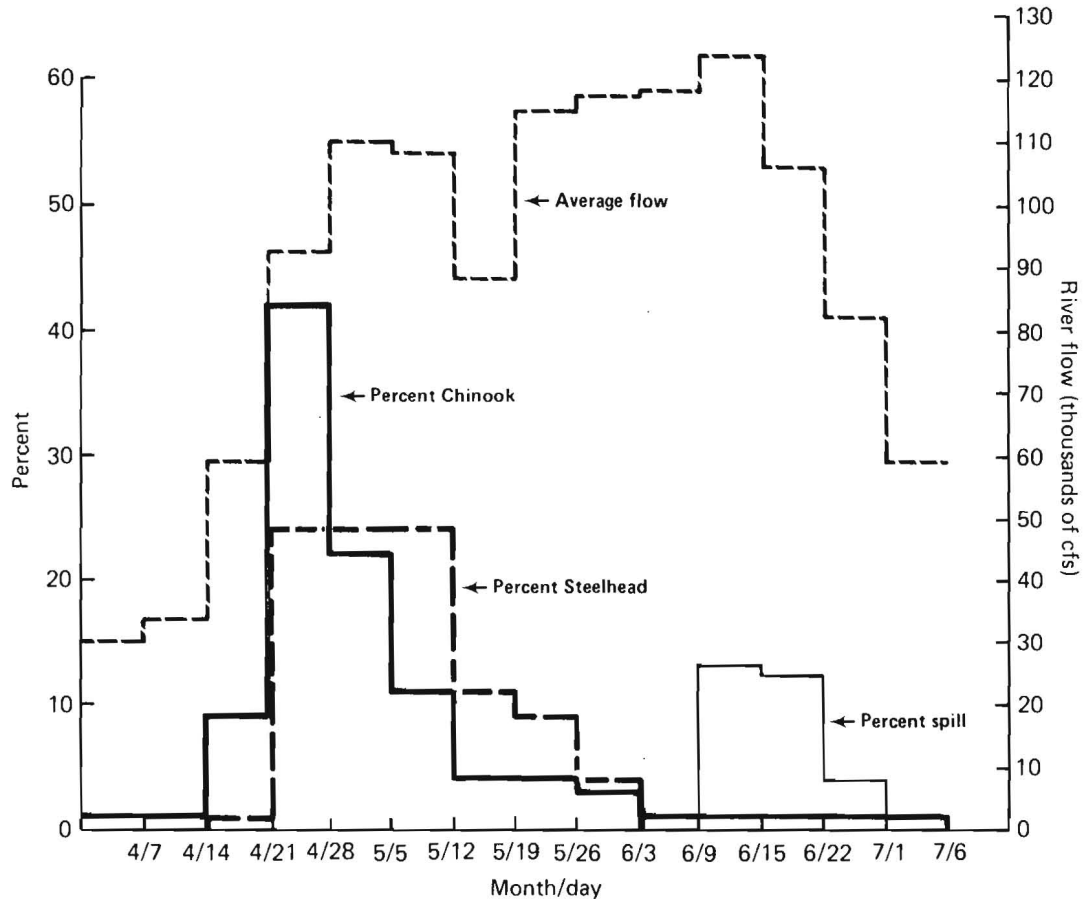


Figure 9.--Timing of the smolt migration at Lower Granite Dam, 1980.

Table 1.--Average travel time from Lower Granite Dam to John Day Dam for yearling chinook salmon and steelhead smolts, 1973-80.

Year	Average river flow at Ice Harbor Dam (cfs)[a]		Average river flow at John Day Dam (cfs)[a]		Average smolt travel time (days)	
	Chinook	Steelhead	Chinook	Steelhead	Chinook	Steelhead
1973	71,000	68,000	150,000	146,000	22	20
1974	158,000	103,000	351,000	317,000	12	14
1975	140,000	136,000	344,000	344,000	12	10
1976	110,000	167,000	363,000	339,000	15	17
1977	40,000	40,000	125,000	119,000	36	37
1978	106,000	106,000	268,000	273,000	11	10
1979	85,000	89,000	255,000	255,000	13	13
1980	110,000	99,000	261,000	249,000	12	10

[a] During migration peak for chinook salmon and steelhead ± 7 days.

Table 2.--Snake River smolt migration (millions of fish) for 1980.

	1980			
	Chinook		Steelhead	
Migration	No.	Survival (%)	No.	Survival (%)
To Lower Granite	5.6		3.6	
Transported Granite	2.02		1.81	
Survival Granite to Little Goose		76.5		76.5
To Little Goose	2.74		1.37	
Transported Goose	1.24		1.05	
Survival Goose to McNary		64.0		53.2
To McNary	0.96		0.17	
Transport McNary	0.2		0.08	
Survival McNary to John Day		74.0		50.4
To John Day	0.56		0.045	
Total survival for the system	(76.5x64.0x74.0) = 36		(76.5x53.2x50.4) = 21	

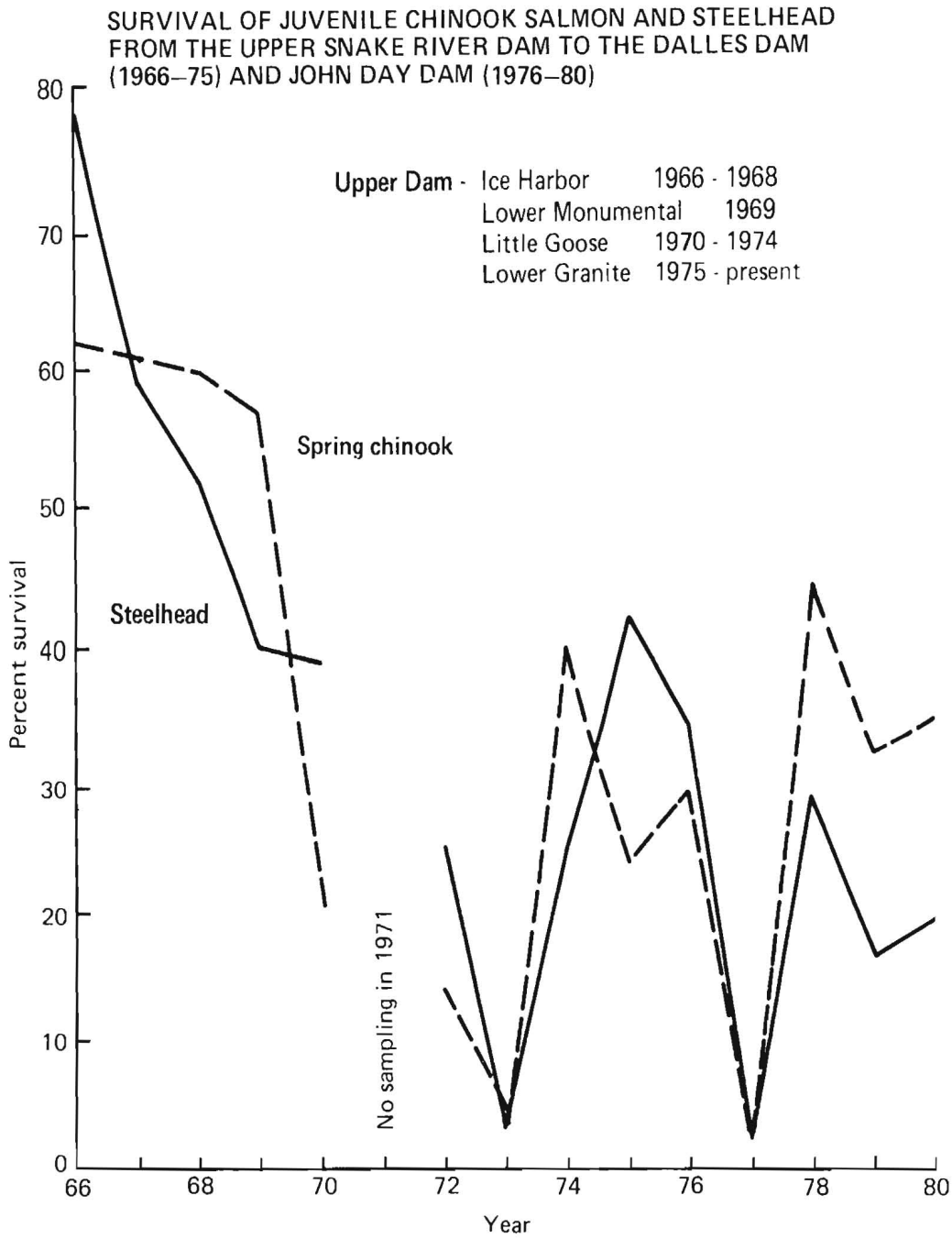


Figure 10.--Survival of juvenile chinook salmon and steelhead from the upper Snake River to The Dalles Dam (1966-75) and John Day Dam (1976-80).

downstream on their own volition had a 21% survival to John Day Dam. This was slightly higher than the 17% measured in 1979 but considerably below the 36 to 40% measured in 1975, 1976, and 1978 (Figure 10).

Measurements of survival to Lower Granite Dam were made for all marked groups of Snake River fish (Appendix Tables C1-C8). There was considerable variation between different marked groups, particularly for those groups with CWT only. Although the rates of survival may have represented actual values, they may have been an artifact of the sampling procedure at the collection facility. The majority of the outmigration passed the project between 21 April and 12 May. During this period, only 4 to 10% of the daily collection was subsampled for marks. This sample was not a random sample of fish passing during a 24-h period. Due to extremely large numbers of fish collected during this period, the number of fish that could be looked at in 1 day was collected in a 20- to 30-minute period. Construction of the fish separator at the facility did not allow for shorter subsampling periods to be spread out over the 24-h collection period. A subsample of ad-clipped fish from the total number of ad-clipped fish in the daily sample was taken, sacrificed, and the CWT read to determine stocks. After adjusting the CWT subsample to the daily sample to the total daily collection, each CWT read represented 26 and 107 chinook salmon and steelhead, respectively. Thus the population estimates to Lower Granite Dam for different stocks of fish must be used carefully, especially those derived from CWT only.

Fall chinook salmon reared at Hagerman National Fish Hatchery (NFH) were released at Asotin, Washington, on 3 June. The release consisted of 58,100 CWT-adipose fin clipped fish and 110,022 unmarked fish. Although no ad-clipped chinook salmon were sacrificed at Lower Granite Dam after the

end of May, the arrival of this release was evident. The number of ad-clipped chinook salmon counted per day at the collection facility was less than 20 prior to 3 June. On 5 June, 188 ad-clipped fish were collected and the number increased to 325 the next day. If all of the ad-clipped fish after the sharp increase of 5 June were assumed to be from the Asotin release, then the following would be a rough population estimate.

The total number of ad-clipped fish counted at the collection facility between 5 June and 6 July was 3,426. No releases were made of fall chinook salmon to determine collection efficiency at Lower Granite Dam, however, it was estimated that the efficiency of collection for spring chinook salmon was twice as great as fall chinook salmon at McNary Dam in 1980. If this same differential was applied to Lower Granite, then fall chinook salmon collection efficiency would have been 18%, as the spring chinook salmon collection efficiency was 36%. The number of ad-clipped fall chinook salmon collected at Lower Granite Dam (3,426) divided by the assumed efficiency of collection (18%) would equal the total population (19,050) of marked fall chinook salmon arriving at Lower Granite Dam prior to the shut down of the facility on 6 July. The survival of these fish would be 32.8% (19,050 ÷ 58,100).

This estimate of survival probably does not account for all of the fish from the Asotin release. The collection facility was taking 150 ad-clipped fish per day until its termination. This was equivalent to approximately 800 tagged fish per day passing the dam.

In addition to an incomplete accounting of the fall chinook salmon run to Lower Granite, some of the fall chinook salmon released at Asotin can be expected to hold over until the spring outmigration in 1981. This

projection can be made on the basis of the 1979 run. Of the 37,440 ad-clipped fall chinook salmon released at Asotin on 21 May 1979, 6 and 770 were estimated to have passed Lower Granite and McNary Dams, respectively, in the spring of 1980. This represented 2% of the 1979 release.

An accurate assessment of the number of smolts passing McNary Dam in 1980 was not possible due to the heavy spill that occurred beginning in late May. Approximately 8.28 million fish were estimated at John Day Dam (Table 3). A total of 7.9 million fish were collected at Lower Granite, Little Goose, and McNary Dams and transported below Bonneville Dam (Table 4). The combined total of 16.1 million smolts to the lower river was about 4.0 million higher than 1979 and 4.5 million higher than 1978 (Table 3). This increase in smolts can be accounted for by increased populations to Lower Granite Dam with a concurrent increase in collection and possibly by higher spills on the mid-Columbia during fish passage.

A complete listing of all CWT and brand recaptures for Lower Granite, McNary, and John Day Dams can be found in Volume II of this report.

Smolt Behavior, John Day Dam Forebay

Radio tracking took place in the forebay of John Day Dam from 15 April through 30 July 1980. Miniature radio tags were placed in 21 fish--13 chinook salmon and 8 steelhead. The chinook salmon ranged in fork length from 143 to 210 mm, and the steelhead ranged from 195 to 225 mm (Table 5).

This was the first time radio tracking of salmonid smolts had been attempted in the Columbia River, and the first 2 weeks were spent developing methods and training personnel. Wind was the major factor limiting the day-to-day operations; whereas, tracking range was the

Table 3.--Number of transported and nontransported smolts from areas above McNary Dam to the Lower Columbia River, (millions of smolts), 1975-80.

	1975		1976		1977[b]		1978		1979		1980	
	Transport[a]	Non-transported[b]	Transport	Non-transported	Transport	Non-transported	Transport	Non-transported	Transport	Non-transported	Transport	Non-transported
Snake River												
Chinook	0.41	0.90	0.75	1.30	1.36	0.02	1.60	0.70	2.11	0.55	3.25	0.58
Steelhead	0.55	1.10	0.44	0.90	0.90	0.01	1.40	0.20	1.72	0.05	2.86	0.06
Total	0.96	2.00	1.19	2.20	2.26	0.03	3.00	0.90	3.83	0.60	6.11	0.64
Columbia River												
Chinook 0's	0	1.90	0	2.50	0	0.95	0	3.60	0.50	2.50	0.65	3.72
Chinook 1's	0	1.50	0	0.90	0	1.00	0	1.90	0.30	1.85	0.80	2.81
Sockeye	0	0.50	0	0.70	0	0.75	0	1.30	0.20	1.82	0.05	0.30
Steelhead	0	0.20	0	0.25	0	0.11	0	0.40	0.17	0.42	0.21	0.75
Coho	0	0.17	0	0.11	0	0.20	0	0.80	0.08	0.21	0.03	0.06
Total	0	4.27	0	4.46	0	3.01	0	8.00	1.25	6.80	1.74	7.64
Snake & Columbia River	0.96	6.27	1.19	6.66	2.26	3.04	3.00	8.90	5.08	7.40	7.85	8.28
Grand Total	7.23		7.85		5.30		11.90		12.48		16.13	

a/Transport numbers = Numbers released below Bonneville Dam. Nontransport numbers = estimated number of downstream migrants passing John Day Dam.

b/Fish collected were in poor condition and there was high delayed mortality after transport below Bonneville Dam. This has resulted in a much lower than normal rate of adult return back to the Snake River. Adult returns from those transported in 1978 and 1979 should be significantly higher.

Table 4.--Number of juvenile chinook, coho, and sockeye salmon and steelhead transported from Lower Granite, Little Goose, and McNary Dams and released below Bonneville Dam 1980.

	CHINOOK	COHO	SOCKEYE	STEELHEAD	TOTAL
Lower Granite Dam					
Truck	316,250	37	1,076	195,774	513,137
Barge	1,700,809	101	2,925	1,617,914	3,321,749
Subtotal	2,017,059	138	4,001	1,813,688	3,834,886[a]
Little Goose Dam					
Truck	792,924	----	1,851	621,985	1,416,760
Barge	444,195	----	1,068	423,883	869,146
Subtotal	1,237,119	----	2,919	1,045,868	2,285,906
McNary Dam					
Truck	972,620	15,377	21,456	82,846	1,092,299
Barge	474,199	17,976	28,931	127,140	648,246
Subtotal	1,446,819[b]	33,353	50,387	209,986	1,740,545
Grand total transported	4,700,997	33,491	57,307	3,069,542	7,861,337[c]

[a] This total adjusted for a significant counter error.

[b] This total includes 651,678 fall chinook salmon.

[c] This total includes those fish marked and transported for experimental purposes.

Table 5.--Radio tracking summary.

Fish number	Species	Size (mm)	Duration of track (h)	Cause of termination	Dam passage	Time of passage (h)	Ave. spill at time of passage (kcfs) (spill bays open)	Ave. turbine discharge (kcfs)
1	Chinook	200	2	No track-training[a/]				
2	Chinook	210	1	Tag malfunction				273
3	Chinook	190	7	Passage through dam	Turbine Unit 1	2215	25 (14,15,19,20)	283
4	Steelhead	210	13	Lack of down-stream movement				285
5	Chinook	175	1	Lost signal				281
6	Steelhead	205	0	Lost signal	Turbine Unit 5-B	Unknown	Unknown	215
7	Steelhead	205	2	Seagull predation				232
8	Chinook	185	1	Lost signal				230
9	Chinook	185	1	Lost Signal				228
10	Chinook	185	16	Passage through dam	Turbine Unit 12-C	2206	75 (11-20)	228
11	Chinook	185	4	Lost signal, weather				251
12	Steelhead	200	10	Lost signal, possible predation				221
13	Steelhead	205	14	Passage through dam	Turbine Unit 1-B	0258	80 (2-20)	239
14	Steelhead	225	2	Mechanical problems (boats)				248
15	Chinook	180	11	Passage through dam	Turbine Unit 3-A	0102	80 (1-20)	222
16	Chinook	185	2	Weather				229
17	Steelhead	195	2	Lost signal, possible predation				232
18	Steelhead	205	10	Lack of downstream movement weather				196
19	Chinook	149	6	Lost signal				202
20	Chinook	195	11	Lost signal				194
21	Chinook	143	6	Completion of tracking-Blalock area				N/A

a/ Fish tagged and utilized for equipment check and training of personnel.

factor that most affected the overall success of the program. Once tracking experience was obtained and modifications increased the tag's range, tracking capabililty increased to the point where a good track was possible with every release, and the miniature radio tag became a viable research tool for use in the Columbia River.

General Movement Pattern and Behavior

Of the 21 tagged fish released, 9 were tracked to a natural termination and 12 were prematurely terminated due to excessive wind, equipment problems, lost signal, or possible predation (Table 5 and Appendix D, Fish 1-21).

From a release site near the Towal light, fish generally drifted with the current to the vicinity of the Washington white barrel (Figure 2), or swam toward the nearest shore. All the fish tracked in our study moved immediately. Radio tagged Atlantic salmon, Salmo salar, on the east coast were more variable in this respect (Knight et al. 1977; Layzer and O'Leary 1978).

The average rate of net downstream movement in John Day Reservoir was 0.39 km/h (0.05 - 1.0 km/h) (net speed from Point A to Point B downstream and does not take in account meanders that the fish might take) (Tables 6 and 7). These rates of movement compared roughly with most Atlantic salmon studies (Knight et al. 1977; Fried et al. 1978).

Downstream movement generally occurred during the day until the fish reached an area approximately 2 km above the dam. At this point they waited until sunset before moving on toward the dam. Turbine loading and spill determined the flow pattern in the reservoir and roughly how close to

Table 6.--Net downstream movement rates of radio-tagged salmonid smolts in John Day Dam forebay, Spring 1980.

Fish number	Species	Duration of track (h)	Net downstream movement: Distance (km)	Rate of travel (km/h)	Travel per day (km/day)
1[a]	Ch	--	--	--	--
2	Ch	1.0	1.0	1.0	24.0
3	Ch	7.0	6.0	0.86	2.9
4	Sthd[a]	(12.6)	-(1.8)[b]	-(0.14)[b]	0.3
5	Ch	0.5	0.4	0.80	38.4
6[a]	Sthd	--	--	--	--
7	Sthd	2.1	0.6	0.29	3.3
8	Ch	0.6	0.5	0.83	33.2
9	Ch	1.3	0.8	0.62	11.4
10	Ch	5.7	4.1	0.72	3.0
11	Ch	4.1	1.2	0.29	1.7
12	Sthd	9.5	3.3	0.35	0.9
13	Sthd	13.7	5.3	0.39	0.7
14	Sthd	2.0	1.3	0.65	7.8
15	Ch	11.0	6.0	0.55	1.2
16	Ch	1.3	0.0	0.00	0.0
17	Sthd	1.0	0.6	0.60	14.4
18	Sthd	9.9	1.2	0.12	0.3
19	Ch	6.0	1.0	0.17	0.7
20	Ch	10.6	0.5	0.05	0.1
21	Ch	5.1	2.0	0.39	1.8
Total		105	34.0		
Average rate $= \frac{\text{distance}}{\text{duration}}$				0.39	

a/ Not included in calculations.

b/ Fish traveled upstream.

Table 7.--Movement rates by species of radio-tagged chinook salmon and steelhead smolts in John Day Dam forebay, Spring 1980.

Fish number	Net downstream movement (km/h)	
	Chinook salmon	Steelhead
1[a]	--	--
2	1.00	
3	0.86	
4[a]		-(0.14)[b]
5	0.08	
6[a]		--
7		0.29
8	0.83	
9	0.62	
10	0.72	
11	0.29	
12		0.35
13		0.39
14		0.65
15	0.55	
16	0.00	
17		0.60
18		0.12
19	0.17	
20	0.05	
21	0.39	
Average	0.52	0.40

a/ Not included in calculations.

b/ Fish movement was upstream.

the Oregon shore the fish would move before passing the dam.

The four fish tracked to the dam all arrived during darkness. This agreed with past results of gatewell dipping tests for diel turbine passage of chinook salmon and steelhead at John Day Dam (Raymond and Sims 1980). The distance from the face of the dam at which the smolts sounded (15 - 20 m) reinforced previous side scanning sonar observations (personal observation, Faurot).

Effect of Spill

General movement patterns showed the fish moving downstream with the current. With only four fish (Numbers 3, 10, 13, and 15) tracked to the dam, it was difficult to isolate the effect of the various spills on the fish. All four of these fish (see Appendix D) went through the powerhouse at night during periods when various volumes of water were spilled. How the others passed the dam was unknown.

Fish Number 3 crossed all the way from the Washington shore to the Oregon shore and went through turbine Unit 1 (Appendix D, Fish 3). At the time, 25,000 cfs of water were being spilled through four spillbays (8% of the total river flow).

Fish Number 10 passed the dam when 25% of the flow was being spilled (Spillbays 11-20). It crossed only to the middle of the river and appeared to be headed directly for the spill but changed direction dramatically at the last minute and went through Unit 12 (Appendix D, Fish 10).

One-fourth of the river was again being spilled (Spillbays 2-20) as Fish Number 13 reached the dam. It approached the restricted area on the Washington side of the river, made several sharp course changes before selecting the Oregon side for passage (Appendix D, Fish Number 13).

Fish Number 15, under the same conditions as Number 13, followed an almost identical course as Fish Number 3, giving no indication that it was attracted to spill at all (Appendix D, Fish Number 15).

Airlift Pump Evaluation at John Day Dam

Preliminary testing of both airlift systems began on 25 April. Systematic sampling and testing began on 30 April for the "J" airlift and on 5 May for the "Funnel" airlift. Spring tests continued through 13 June. Summer testing of the "Funnel" airlift only ran from 9 July through 22 August. Total catches in the spring were over 14,000 juvenile salmonids in the "J" airlift (Table 8) and over 11,000 in the "Funnel" airlift (Table 9); an additional 9,000 were taken in the "Funnel" airlift during July and August. Complete catch data for the season are listed in Appendix Tables E1-3.

"J" Airlift

Nine tests of the "J" airlift system were completed between 6 May and 13 June. Duration of these tests varied from 1-7 days.

Operational Modes.--Data from the 24-h operation of the "J" airlift indicated that night hours were the most productive for capture of juvenile salmonids. Allowing at least 1 night's recruitment after each "clean out" dipnetting, catches during daylight hours averaged 10.3 juvenile salmonids per hour fished compared to 29.8 per hour during dark hours (Table 10). The most productive pumping periods generally coincided with the 24-h diel pattern of the highest recruitment into the gatewells as determined by gatewell dipnetting (Sims et al. 1976, 1977, 1978).

Table 8.--Juvenile salmonid catches from the "J" airlift pump system, Unit 5, John Day Dam, 1980.

	Day						Night					
	Chinook salmon					Fish per hr	Chinook salmon					Fish per hr
Date	Subyearling	Yearling	Steelhead	Coho	Sockeye		Subyearling	Yearling	Steelhead	Coho	Sockeye	
April 28	34	127	119			49.1						
29	17	124	131			68.0						
30	17	94	68			28.4						
May 1	53	255	290			52.0	160	298	312			86.5
2	8	52	21			13.0						
3	3	126	139			76.6						
4	13	116	249			55.6						
5	6	184	185		1	31.1	18	218	263	1	7	62.6
6	5	42	48		1	8.6	8	72	39		7	22.1
7	4	1				0.6	19	119	42		9	20.8
8	5	2	2			0.8	5	80	41	1	2	17.9
9	0	38	14		2	3.6	10	145	76		23	30.6
10	4	66	89			12.7	4	60	25		12	12.6
11	4	55	6		4	6.6	7	120	62	1	34	27.0
12	3	65	27			6.6	10	137	93	4	34	34.8
13	8	116	76	2	5	13.8	13	284	203	5	44	68.6
14	10	174	177	3	14	26.1	18	407	482	6	90	119.4
15	4	45	42	1	4	12.0	5	98	58		10	21.4
16	0	8	4	1		1.1	8	198	70	1	32	32.9
17	2	37	10		2	5.7	5	40	43	2	20	13.4
18	2	67	50		1	8.2	17	194	70	2	30	39.6
19	0	25	26			5.7	11	78	25	3	14	17.2
20	1	14	19		1	11.3	13	65	51	2	28	21.1
21	3	22	38			9.1	6	224	266	3	30	69.6
22	2	29	39	1	2	6.8	2	106	42	7	5	23.8
23	1	23	9	2	1	4.7	25	266	77	1	28	57.5
24	2	25	8	1	2	5.4	9	207	65	8	34	42.5
25	0	89	28	8	1	20.3	8	341	115	39	68	67.2
26	0	99	31	6	5	18.3	1	97	38	10	16	20.8
27	2	18	7		2	5.3	16	84	38	8	17	21.2
28	2	47	10	4	3	5.0	13	92	36	28	27	27.2
29	5	11	8	3	2	2.7	8	42	49	18	16	17.3
30	4	11	10	6		3.8	15	64	64	19	25	26.0
31	5	11	2	9		3.3	5	12	20	7	10	6.9
June 1	1		5	4		2.0	13	98	32	24	14	25.5
2		3	6	5		2.3						
3		1				0.1	19	8	14	6	5	7.0
4				2		0.5						
5	4	126	18	44	9	30.5	57	51	45	8	7	22.4
6	1	68	3	9	2	24.4	86	48	33	17	8	17.0
9	1	131	21	31	9	41.0	119	56	30	16	17	31.0
10	6	19	1		1	12.3	84	5	13	4	1	14.1
11	14	3	1	9	1	3.7	84	0	5	3	1	12.4
12	2	14		3		2.8	22	3	9	4	3	5.3
Total	259	2,583	2,037	154	75		923	4,417	2,946	258	728	

Table 9.--Juvenile salmonid catches from the "Funnel" airlift pump system, Unit 5, John Day Dam, 1980.

		Day						Night					
		Chinook salmon					Fish per hr	Chinook salmon					Fish per hr
Date		Subyearling	Yearling	Steelhead	Coho	Sockeye		Subyearling	Yearling	Steelhead	Coho	Sockeye	
May	2	4	27	109	1	1	47.3						
	5	11	87	102		7	18.8	3	74	114			29.8
	6	15	18	22			4.0	18	309	266		8	72.4
	7	9	6	10		2	3.8	12	283	259		8	72.5
	8	9	21	30		7	10.3	4	208	268		14	64.1
	9	4	3	6			2.8	6	224	252		13	79.8
	10	2	7	18		4	3.3	3	77	84		7	21.1
	11	11	10	15		4	3.1	3	225	338		39	84.0
	12	3	5	31		10	5.8	7	234	563	6	42	105.2
	13	1	1	26			6.4						
	14	6	2	19		5	4.9	7	288	482	6	50	115.7
	15	8	15	71		9	8.4	3	168	193	2	19	106.9
	16		2	13		3	3.2	2	97	153	1	13	33.2
	17	2	10	10	1		3.0	5	48	81	2	5	17.6
	18	2	12	1			1.3	2	31	74	1	6	14.1
	19	2		5			1.2	2	82	58		2	22.5
	20	1		2		1	1.3	1	187	202	1	12	53.7
	21	1	2	3			1.0	2	266	224	11	27	71.6
	22	2	5	18		1	3.2		90	60	3	24	25.3
	23		2	7	1	1	1.9	1	260	87	3	22	49.7
	24	1	3	7		1	1.9	1	274	158	12	23	62.0
	25	1	5		1		2.4	5	309	140	24	19	64.5
	26	1	3	17		10	4.9	12	134	52	5	28	29.2
	27	5	6	3		8	3.8	8	144	78	23	27	35.4
	28	8	1	3	1	3	1.5	2	47	43	10	13	16.4
	29	9	5	13		2	1.8	9	54	80	19	19	23.2
	30	1		6			0.8	5	65	116	28	23	29.6
	31		1	6			4.7	5	48	45	25	2	15.8
June	1		4	3	2		1.6	4	29	24	18	3	10.7
	2							13	17	18	10	2	5.9
	3		3	1			0.6	34	28	26	23	10	15.7
	4	5	2	8	2		2.8						
	5	1	3	10	8	3	3.6	30	24	13	3	8	9.75
	6	1	5	4	2	2	2.2	97	67	26	17	4	28.9
	9		2				0.6	67	12	13	3	5	13.0
	10		2	1			0.8	73	4	10	3		12.3
	11		1	2			0.4						
	13	23		6	3	1	5.5	57	4	6			8.7
Total		149	281	608	22	86		503	4,411	4,606	249	497	

Table 10.--Juvenile salmonid catch per hour in the "J" airlift pump system, 1980.

	Chinook salmon					
	Subyearling	Yearling	Steelhead	Coho	Sockeye	Total
Day						
Catch/hour	0.38	5.88	3.16	0.62	0.29	10.33
%	11.9	28.6	26.1	41.6	10.5	25.7
Night						
Catch/hour	2.82	14.67	8.96	0.87	2.47	29.79
%	88.1	71.4	73.9	58.4	89.5	74.3

Attempts were made to improve capture effectiveness of the "J" airlift by varying the operation of the equipment. Among these were variations in depth, direction, and location (in the gatewell); lighting of the entry orifice as well as darkening the gatewell (in daytime); and temporary turbine shutdown (to eliminate confusing currents adjacent to airlift orifice). None of these variations and manipulations appeared promising except possibly the lighting manipulations. Alternate on-off operation of surface lighting each 1-2-hour fishing period in conjunction with the orifice light (on) increased capture during short-term tests. This method was not tried on longer term tests.

Fish Condition.--Observers felt that that fish captured in the "J" airlift were in excellent condition. Fewer fish were descaled in airlift catches than dipnet catches except for yearling chinook salmon (Table 11). Mortality among samples of these fish was nil.

Species Composition.--Species composition was essentially the same regardless of recapture period (Figure 11). Species selectivity for the "J" airlift showed a bias toward yearling chinook salmon and away from steelhead (Figure 12). When dipnet catches from Gatewell 5-B were added to the airlift catches from 5-B (to comprise the total number entering the gatewell), the composition was essentially identical to the control gatewells. Most significant was the fact that steelhead were captured in the "J" airlift at a lower rate than expected from the gatewell population if sampling were unbiased.

Capture Efficiency.--Nine tests of the "J" airlift provided a measure of efficiency for periods of 1 day (3 replicates) to 7 days. Efficiency

Table 11.--Descaling of juvenile salmonids captured by the "J" airlift pump system compared to those captured by dipnetting turbine intake gatewells at John Day Dam, 1980.

	Chinook salmon									
	Subyearling		Yearling		Steelhead		Coho		Sockeye	
	(No.[a])	(%)	(No.[a])	(%)	(No.[a])	(%)	(No.[a])	(%)	(No.[a])	(%)
Airlift pump Catches	11/572	1.9	677/5901	11.5	574/3856	14.9	22/309	7.1	94/673	14.0
Dipnet Catches	204/4193	4.9	224/2106	10.6	106/351	30.2	28/158	17.1	26/160	16.2

a/ $\frac{\text{No. descaled}}{\text{total sample}}$ (descaled = >10% loss of scales)

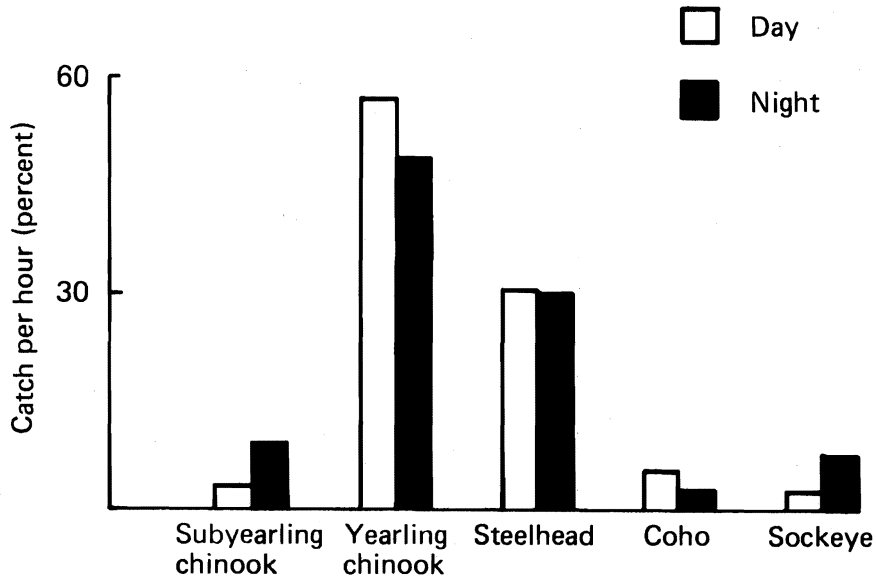


Figure 11.--Species composition of "J" airlift pump catches at John Day Dam in 1980.

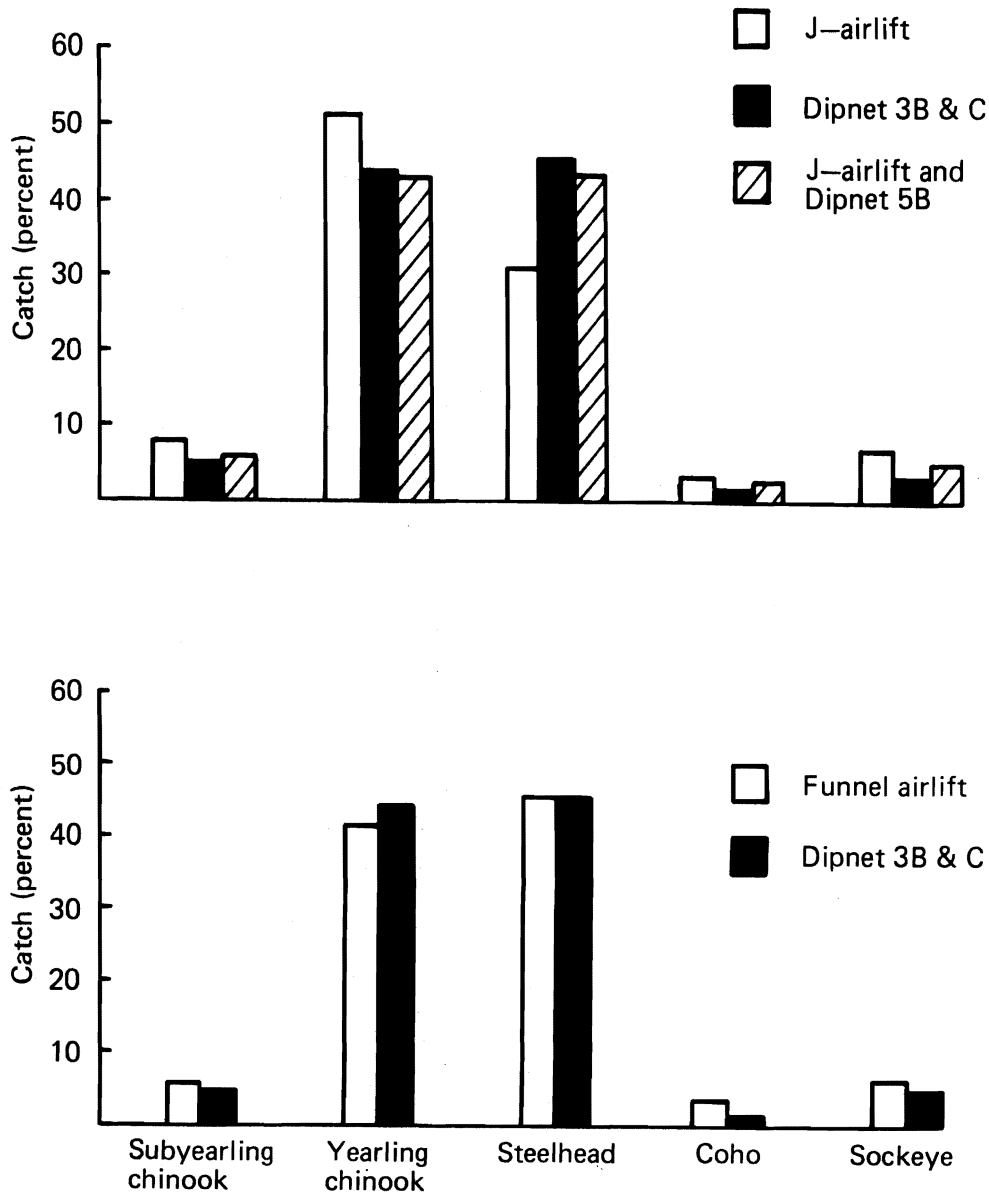


Figure 12.--Species composition of airlift pump system catches compared to dipnet catches, John Day Dam, 1980.

of recapture of marked fish ranged from 6.5% for steelhead during Test 1 to 98.0% for fall chinook salmon during Test 5. Overall efficiency of recapture for all species ranged from 11.9% during Test 1 to 70.8% during Test 8 (Table 12). These tests indicated efficiency more than doubled after the first day. Since fish must be induced to enter this pump system, it was apparent many were not receptive until they remained in the gatewell for a period of time. Average efficiency for the 1-day tests (species combined) was 21% compared to an average of 56.3% for tests exceeding 1 day. For Tests 1-9 combined, the overall efficiency was 50.1%. This low overall efficiency significantly reflected the low steelhead collection efficiency.

Lift Capability.--No attempt was made to increase lift to or near the intake deck level. Length of the "J" airlift unit was limited by available crane lifting capability, thus submergence limited the lift height for discharge. Significant design changes would be required to achieve the lift required to reach deck level. Submergence would have to be increased 0.3-2 m from the presently designed 8.2 m to function adequately in anything less than maximum pool (forebay) level.

"Funnel" Airlift

Operational Modes.--Variations in the operation of the "Funnel" airlift were limited to orifice lighting, depth, addition of a second aerator, and duration of pumping as related to gatewell entry of fish. Orifice lighting may have been beneficial in speeding fish through the system, but increased catch was not clearly demonstrated. Both the depth fished and the addition of a second aerator had a definite affect on the

Table 12.--Test summary of "J" airlift pump system at John Day Dam, 1980.

	Orifice			Catch						Duration of test (days)
	Depth (ft.)	Direction open	Location	Chinook salmon Subyearling	Chinook salmon Yearling	Steelhead	Coho	Sockeye	Total	
Test #1 (May 6-7)										
Airlift pump	6.0-8.5	East	NE Cor.	11	72	39		7	129	1
Dipnet				28	361	559		10	958	
Airlift pump efficiency (AL) %[a]				28.2	16.6	6.5		41.1	11.9	
Test #2 (May 7-8)										
Airlift pump	6.0-8.5	East	Mid-E	23	122	44		9	198	1
Dipnet				9	267	386		10	672	
AL efficiency %				71.9	31.4	10.2		47.4	22.8	
Test #3 (May 15-16)										
Airlift pump	6.0-8.5	East	NE Cor.	9	105	64	1	11	190	1
Dipnet				2	66	241		8	317	
AL efficiency %				81.8	61.4	21.0		57.9	37.5	
Test #4 (May 16-22)										
Airlift pump	0.5-1.5	East	NE Cor.	68	997	719	13	156	1953	6
Dipnet				4	811	1427	2	38	2282	
AL efficiency %				94.4	55.1	33.5	86.7	80.4	46.1	
Test #5 (May 22-27)										
Airlift pump	6.0-8.5	East	NE Cor.	51	1269	420	82	162	1984	5
Dipnet				1	478	637	14	66	1196	
AL efficiency %				98.0	72.6	39.7	84.4	71.0	62.4	
Test #6 (May 27-29)										
Airlift pump	6.0-8.5	East	NE Cor.	34	235	91	43	49	452	2
Dipnet				12	104	180	14	23	333	
AL efficiency %				73.9	69.3	33.6	75.4	68.0	57.6	

Table 12.--Continued.

	Orifice			Catch						Duration of test (days)
	Depth (ft.)	Direction open	Location	Chinook salmon Subyearling	Chinook salmon Yearling	Steelhead	Coho	Sockeye	Total	
Test #7 (May 29-June 2)										
Airlift pump	6.0-8.5	South	Under pen	54	237	192	92	65	640	4
Dipnet				13	205	200	73	33	524	
AL efficiency %				80.6	53.6	49.0	55.8	66.3	55.0	
Test #8 (June 3-10)										
Airlift pump	6.0-8.5	South	Under pen	294	507	165	133	58	1157	7
Dipnet				193	109	129	7	40	478	
AL efficiency %				60.4	82.3	56.1	95.0	59.2	70.8	
Test #9 (June 10-13)										
Airlift pump	6.0-8.5	Down	Mid-E	206	25	28	23	6	288	3
Dipnet				140	8	41	9	7	205	
AL efficiency %				59.5	75.7	40.6	71.9	46.2	58.4	
Combined tests 1-9										
Airlift pump				750	3569	1762	387	523	6991	
Dipnet				402	2409	3800	119	235	6965	
AL efficiency %				65.1	59.7	31.7	76.5	69.0	50.1	

a/ Airlift pump efficiency = $\frac{\text{Airlift pump catch}}{\text{Airlift pump catch + dipnet catch}} \times 100$

operations but not the catch efficiency. When the unit was fished at the bottom of the gatewell (elevation 170 feet), descaling and mortalities were noted. These were eliminated by modifying the funnel. Addition of a second aerator provided sufficient lift to deliver fish 1.5 m above the intake deck while holding surging to an acceptable minimum. With a second aerator, however, the quantity of air required was two to three times greater, depending on depth fished. During the summer, it was found that of the fish caught (>99% subyearling chinook salmon), over 90% were taken in the first 2 h of pumping.

Diel Entry Pattern.--During diel test periods in the spring, substantially more fish were captured at night than during the day--91.3% versus 8.7%, respectively (Table 13). The percentage of fish captured at night was much higher for the "Funnel" airlift than for the "J" airlift--91.3% versus 74.3%, respectively. This was due largely to the design of the airlift and the depth it was fished. The "Funnel" airlift was placed near the bottom of the gatewell which allowed little sanctuary area for fish, and they were removed as they entered, thus the opportunity to escape the gatewell was reduced.

The capture pattern for spring and summer migrants in the "Funnel" airlift was similar if not identical to that determined from diel gatewell dipnetting (Sims et al. 1976, 1977, and 1978). In the spring nearly half (44.9%) of the night catch was taken from dusk until midnight; the other half was distributed through the balance of the night recruitment period, midnight to about dawn. The summer pattern was similar to that previously reported for diel dipnetting; it showed a majority were captured in the latter part of the dark period--from about 0100 to 0200 h until about dawn.

Table 13. Juvenile salmonid catch per hour from the "Funnel" airlift system at John Day Dam, 1980.

	Chinook salmon					
	Subyearling	Yearling	Steelhead	Coho	Sockeye	Total
Day catch/hour	0.56	0.98	1.92	0.08	0.33	3.87
%	28.1	5.3	9.5	7.5	14.3	8.7
Night catch/hour	1.99	17.45	18.22	0.98	1.97	40.61
%	71.9	94.7	90.5	92.5	85.3	91.3

Fish Condition.--Early in the testing program, excessive descaling and mortality were noted when the funnel was operated at the deepest level in the gatewell (elevation 170 ft). Raising the funnel 12.5 m from the bottom of the gatewell (elevation 211 ft) reduced descaling and mortalities (Tables 14 and 15) to a level similar to or better than dipnetting. In an attempt to further improve fish condition, the funnel was modified. The screened ceiling of the funnel was covered to make a smooth flat surface, since it appeared fish may have been forced against the screen by the current--especially when fished at the deeper level. This modification, plus smoothing the interior of the pipe and fittings, further reduced descaling and mortalities of yearling chinook salmon at all levels fished as compared to the original funnel design. The benefit to steelhead was not as significant.

Tests in the summer (>99% subyearling chinook salmon) also showed descaling from the airlift was less than descaling from the dipnet except when the airlift was fished at the lowest level in the gatewell. A redesigned funnel was tested at the end of the season; its potential appeared good, but evaluation was not possible because few fish were available.

Species Composition.--The species composition of the "Funnel" airlift catch accurately represented the composition of the population of juvenile salmonids in the gatewell when compared to dipnet catches (Figure 12). No species bias was evident in "Funnel" airlift catches.

Capture Efficiency.--Measurement of capture efficiency in the "Funnel" airlift during the spring migration was made by the mark release and

Table 14.--Descaling of juvenile salmonids captured by the "Funnel" airlift pump system compared to those captured by dipnetting turbine intake gatewells at John Day Dam, 1980.

Season	Fishing depth: Meters above bottom of gatewell	Fishing depth: Feet elevation above sea level	Chinook salmon: Subyearling No.[a]	Chinook salmon: Subyearling %	Chinook salmon: Yearling No.[a]	Chinook salmon: Yearling %	Steelhead No.[a]	Steelhead %	Coho No.[a]	Coho %	Sockeye No.[a]	Sockeye %
Spring												
1. Original funnel design, one aerator.												
	0	170	5/24	20.8	283/487	58.1	203/750	27.1				
	1.5	175	0/16	0.0	55/193	28.5	26/266	9.8				
	4.8-6.7	186-192	0/56	0.0	259/612	42.3	88/566	15.6				
	11.3-12.5	207-211	0/26	0.0	161/547	29.4	86/705	12.2				
2. Modified funnel, one aerator.												
	0	170	0/45	0.0	33/107	30.8	31/141	22.0				
	6.6	190-192	2/256	0.0	399/2415	16.5	321/2022	15.9	13/195	6.7	93/339	27.4
	11.3-12.5	207-211	0/7	0.0	33/267	12.4	67/437	15.3				
3. Modified funnel, two aerators.												
	4.8	186	10/178	5.6	11/77	14.3	22/74	29.7				
4. Dipnet catch descaling. Gatewells 5B, 3B & C												
		Dipnet	204/4139	4.9	224/2106	10.6	106/351	30.2	28/158	17.7	26/160	16.2
Summer												
1. Modified funnel, two aerators.												
	1	173	305/771	39.6								
	5.5	188	197/3677	5.4								
	8.5	208	135/4425	3.0								
2. Dipnet catch descaling Gatewell 5B												
			1325/12,850	10.3								

a/ No. descaled/total sample

Table 15.--Mortality of juvenile salmonids captured by the "Funnel" airlift pump system compared to dipnet mortality at John Day Dam, 1980.

Fishing depth: Meters above bottom of gatewell	Fishing depth: Feet elevation above sea level	Chinook 0 No.[a]	Chinook 0 %	Chinook 1 No.[a]	Chinook 1 %	Steelhead No.[a]	Steelhead %	Coho No.[a]	Coho %	Sockeye No.[a]	Sockeye %
Spring											
1. Original funnel design, one aerator.											
0	170	1/18	5.5	10/487	2.0	9/750	1.2	--	--	1/57	1.8
1.5	175	11/49	22.4	3/193	1.6	16/266	6.0	--	--	0/17	0.0
4.8-6.7	186-192	7/36	19.4	4/612	0.6	2/566	0.4	--	--	0/18	0.0
11.3-12.5	207-211	3/32	9.3	5/547	0.9	0/705	0.0	--	--	0/82	0.0
2. Modified funnel, one aerator.											
0	170	19/47	40.4	2/107	1.9	0/141	0.0	1/30	3.3	4/37	10.8
6.6	190-192	8/277	2.9	16/2415	0.7	14/2022	0.7	0/189	0.0	7/348	2.0
11.3-12.5	207-211	0/7	0.0	0/267	0.0	0/437	0.0	0/4	0.0	1/29	3.4
3. Modified funnel, two aerators.											
4.8	186	5/191	2.6	2/77	2.6	1/74	1.4	0/49	0.0	0/12	0.0
4. Dipnet catch mortality. Gatewells 5B, 3B & C		302/9671	3.1	671/35,832	1.9	174/38,586	0.4	2/1218	0.2	11/2524	0.4
Summer											
1. Modified funnel, two aerators.											
1	173	38/1218	3.1								
5.5	188	52/3837	1.4								
8.5	208	70/4315	1.6								
2. Dipnet catch mortality. Gatewell 5B		62/13,868	0.4								

a/ No. mortalities/total sample.

recapture method. Seventeen releases of marked yearling chinook salmon and steelhead were made from mid-May through early June (Table 16). All recoveries were made on the same day or night the fish were released (most within about 3 h of release). Overall recapture rate was 80.8% for yearling chinook salmon and 88.1% for steelhead, however, the range of recapture rates was wide--0 to 100% for steelhead and 5.9 to 100% for chinook salmon. The high variability was related to the procedure for releasing marked fish into the bottom of the funnel. In the spring there was a higher recapture rate of day releases than of night releases. The reason for this difference is unknown.

During the summer migration, the "Funnel" system was tested to determine if fish allowed to accumulate in the gatewell overnight could be removed as effectively as those that were removed as they entered the gatewell. If the system could be operated only during the daytime without sacrificing efficiency and condition of fish, considerable savings in cost of operating a complete dam system could be achieved.

Twenty-one, 1-day tests were conducted. Efficiency of capture ranged from 22 to 38% for daytime removal of accumulated fish and from 87 to 99% when fish were removed as they entered the gatewell (Table 17). The effectiveness of the "Funnel" airlift to remove fish from the gatewell was more than twice as great when operated as fish were entering as compared to periods when fish were allowed to accumulate overnight before removal. We believe that these tests accurately depicted the capture efficiency of the airlift pump system. Summer tests utilizing cleanout dipnetting provided a more accurate assessment of the "Funnel" airlift's efficiency as problems associated with marking and releasing fish were not involved. Morning

Table 16.--Efficiency of "Funnel" airlift pump system based on recoveries of marked juvenile salmonids, John Day Dam, 1980.

Date	No. released		Day Night	Recoveries[a]			
				Yearling chinook		Steelhead	
	Yearling chinook	Steelhead		No.	%	No.	%
May 16	48	50	Night	48	100.0	41	82.0
17	50	50	"	45	90.0	43	86.0
18	48	51	"	37	77.1	45	88.2
20	24	22	"	21	87.5	19	86.4
22	14	24	"	14	100.0	21	87.5
23	25	25	"	19	76.0	25	100.0
24	27	27	Day	25	92.6	27	100.0
24	20	20	Night	19	95.0	20	100.0
25	20	20	"	16	80.0	18	90.0
27	20	18	"	14	70.0	16	88.9
28	13	13	"	11	84.6	13	100.0
30	17	21	"	3	17.6	17	80.9
Jun 5	21	45	Day	21	100.0	45	100.0
6	27	61	"	22	81.5	60	98.4
7	17	16	Night	1	5.9	0	0.0
10	12	13	"	11	91.7	11	84.6
11	4	12	"	2	50.0	9	75.0
Total							
Day	75	133		68	90.7	132	99.2
Night	332	355		261	78.6	298	83.9
Combined	407	488		329	80.8	430	88.1

a/ All recoveries made the same day or night as released.

Table 17.--Efficiency of "Funnel" airlift pump system during periods when fish were removed from gatewells as they entered and during periods when fish were allowed to accumulate overnight before removal.

Date	Airlift catch	Dipnet Catch	Efficiency (%) [a]
Fish allowed to accumulate			
July 18	179	482	27.0
July 21	253	881	22.3
July 22	340	553	38.1
July 23	159	480	24.9
July 24	144	330	30.4
Fish removed as they enter			
July 28/29	1324	193	87.2
July 29/30	420	18	95.9
July 30/31	166	8	95.4
July 31/August 1	330	8	97.6
August 1/2	513	16	97.0
August 4/5	489	23	93.5
August 5/6	1205	27	97.8
August 7/8	207	28	88.1
August 11/12	242	7	97.2
August 12/13	52	1	98.1
August 13/14	121	1	99.2
August 14/15	922	33	96.5
August 18/19	208	33	86.3
August 19/20	128	4	97.0
August 20/21	71	2	97.3
August 21/22	42	5	89.4

[a] Based on dipnetting after test period

removal of fish accumulated overnight in the gatewell did not prove satisfactory.

Lift Capability.--The "Funnel" airlift was designed to operated from the bottom of the gatewell (elevation 170 ft) to any lesser practical depth. It was tested over a 12.5-m range (elevation 170-211 ft). Within this submergence range of 25.0 to 11.6 meters, a lift of over 7.6 m above low pool (gatewell elevation 260 ft) was achievable.

Initial tests were designed to deliver fish about 2 m above the intake deck level, but this proved impractical; surging extremes were too great to contain adequately. The intermittent discharge varied from none to a full pipe with considerable velocity in a strong surge. Surge was eliminated by lowering the delivery level of the pump and discharging into a floating fish collection pen. In a further effort to pump fish to the deck level, a second aerator was added to the system 6 m above the first. This provided sufficient lift to deliver fish to a holding tank 1.2 m above the deck (elevation 285 ft) with a minimum surge. Lift above the water surface was about 7.3 m with the forebay at elevation 261 ft (gatewell about 260). Only a few tests with the second aerator were completed before the end of the spring season, but several 1-day tests were completed in the summer season. Three depth intervals were tested (Table 18) with very satisfactory results except for excessive descaling at the deepest level (elevation 173 ft) as was found earlier with the single aerator. Though successful, using two aerators in the "Funnel" airlift required the maximum capacity of the diesel air compressor, 5.2 m^3/min at 6.3 kg/cm^2 (185 cfm at 90 psi).

To determine approximate velocity through the pump system, two special tests were performed. A measured volume of water over a timed period was

Table 18.--Summary of operating characteristics of the "Funnel" airlift pump system at John Day Dam, 1980.

Fishing depth		Average Upper aerator		Average Lower aerator		Total lift	Submergence	
Meters above bottom of gatewell	Feet elevation above sea level	cfm (Range)	psi	cfm (Range)	psi	m (Range)	m (Range)	%
1	173	172 (150-200)	22 (20-24)	63 (60-65)	35 (34-36)	5.6 (5.5-5.6)	24.9 (24.8-25.0)	81.6
5.5	188	166 (150-200)	26 (24-27)	62 (60-70)	31 (30-32)	5.6 (5.4-5.7)	20.3 (20.0-20.5)	78.5
11.6	208	239 (210-245)	20 (18-20)	78 (75-80)	21 (20-28)	5.8 (5.5-6.3)	14.0 (13.6-14.4)	70.8

pumped from 5.5 and 11.6 m above the bottom of the gatewell, respectively (elevations 188 and 209 feet); five replicates at each elevation were made. Water delivery was made to 2 m above the deck (elevation 280 ft), a lift of about 6.6 m above the gatewell water level. Submergence for the two depths was about 75 and 67%, respectively. The average volumes pumped from these two positions (funnel, 5.5 and 11.6 m above the bottom of the gatewell) were 0.078 m^3/s (2.75 ft^3s) and 0.049 m^3/s (1.73 ft^3/s). The average velocities calculated from these measured volumes, using the formula $V = \frac{Q}{A}$ (Q = flow/s A = cross-section area of pipe) were 1.07 m/sec (3.5 fps) and 0.67 m/s (2.2 fps), respectively. These velocities likely represented the flow conditions during actual fish capture testing.

SUMMARY AND CONCLUSIONS

In 1980, the NMFS monitored the juvenile salmonid outmigrations from the Snake and Columbia Rivers. In addition, juvenile salmon behavior was investigated in John Day Reservoir, and an airlift pump system designed to remove fingerlings from turbine intake gatewells was tested at John Day Dam.

1980 Smolt Outmigration

1. Approximately 5.6 million chinook salmon and 3.6 million steelhead arrived at Lower Granite Dam. Of these, 3.2 million chinook salmon (59%) and 2.8 million steelhead (78%) were collected at Lower Granite and Little Goose Dams and transported and released on the Columbia River below Bonneville Dam. Snake River fish not transported had a 36% (chinook salmon) and 21% (steelhead) survival to John Day Dam.

2. An accurate assessment of the number of smolt passing McNary Dam was not possible, due to heavy spill that occurred beginning in late May.

3. Approximately 8.3 million smolts arrived at John Day Dam--3.7 million fall chinook salmon, 3.4 million spring chinook salmon, 0.3 million sockeye salmon, 0.8 million steelhead, and 0.1 million coho salmon.

Smolt Behavior, John Day Dam Forebay

In the spring of 1980, research was conducted to examine smolt behavior and movement, as related to flows, in the John Day Dam forebay. Twenty-one juvenile salmonid smolts (13 chinook salmon and 8 steelhead) were internally tagged with a newly developed, miniature radio tag and tracked as they approached the dam.

1. Steelhead and spring chinook salmon ranging in length from 143 to 225 mm were tracked.

2. Four smolts tracked to the dam passed through turbine Units 1, 12, 1, or 3 when the flow through the spillway was 8, 25, 25, and 25% of total river flow, respectively.

3. Smolts appeared to be influenced by river currents.

4. Radio-tagged smolts held up 2 km above dam until darkness.

5. Passage through the dam was at night.

6. Smolts sounded to enter the turbine units 15-20 m upstream of the face of the dam.

7. Wind and waves hindered tracking operations.

Airlift Pump Evaluation at John Day Dam

As a potential method of removing fingerlings from turbine intake gatewells, two types of airlift pump systems were tested at John Day Dam during the major smolt migration in 1980. Specifically, a "J" shaped airlift system and a "Funnel" airlift system were developed and tested for effectiveness and efficiency.

"J" Airlift"

1. The "J" airlift system did not prove to be an effective method of removing fingerlings from gatewells at John Day Dam. None of the operating mode of conditions tested produced an acceptable level of efficiency.

2. Descaling was less than or equal to comparative dipnet catches.

3. Catches included 7% more yearling chinook salmon and 15% fewer steelhead than comparable dipnet catches.

4. Capture efficiency for a 24-h period of operation was about 21%. During periods of operation of 48 hours or more, efficiency more than doubled to 56%.

"Funnel" Airlift

1. The "Funnel" airlift proved to be an effective and safe method of removing fingerlings from gatewells. It is recommended that this airlift system replace dipnetting whenever possible.

2. The most productive periods of operation were night hours, dusk to midnight for spring migrants and from 0100 to 0200 h until dawn for summer migrants. Changes in operational modes and equipment did not show increased catch, but other benefits were noted. At the deepest level fished, descaling was excessive and some mortalities occurred. Addition of a ceiling baffle to the funnel and raising the fishing depth reduced descaling and mortalities.

3. Condition of the fish captured varied with depth of capture. Highest descaling (58.1% yearling chinook salmon) and mortality (40.4% subyearling chinook salmon) were associated with the deepest level fished (elevation 170-173 ft). At shallower fishing depths, airlift descaling was usually less than dipnet catches.

4. No species bias was noted in airlift catches compared to fish captured by dipnetting.

5. Capture efficiency using the mark-release method averaged 81.6% for yearling chinook salmon and 88.2% for steelhead in the spring season. Using cleanout dipnetting, capture efficiency of summer migrants (>99% chinook salmon subyearling) was determined to be 93.9% in the night hours.

6. Addition of a second aerator improved lift capacity and minimized surge. Sufficient lift was provided to deliver fish about 8 m above the gatewell water level. Successful fish capture was achieved at a submergence of 68 and 77%. This placed the funnel at 11.6 and 5.5 m (elevations 209 and 188 ft) above the bottom of the gatewell, respectively.

7. Two special flow tests of this system calculated velocities at a discharge point on the forebay deck (6.5 m of lift) of 1.07 m/s (3.5 fps) and 0.67 m/s (2.2 fps) with a submergence of 77 and 68%, respectively.

8. Fish allowed to accumulate overnight in the gatewell could not be removed as efficiently as those removed as they entered the gatewell.

LITERATURE CITED

Dunlap, B. D. and H. H. Schufeldt.
1969. Dutton's navigation and piloting. United States Naval Institute, Annapolis. 691 p.

Fried, S. M., J. D. McCleave, and G. W. La Bar.
1978. Seaward migration of hatchery-reared Atlantic salmon (Salmo salar) smolts in the Penobscot River estuary, Maine: Riverine movements. J. Fish. Res. Board Can. 35:76-87.

Knight, A. E., G. Marancik, and J. B. Layzer.
1977. Monitoring movements of juvenile anadromous fish by radio-telemetry. Prog. Fish-Cult. 39(3):148-150.

Layzer, J. B. and J. A. O'Leary.
1978. Northfield Mountain pumped storage hydroelectric project, anadromous fish study (Part III). Out migration of radio-tagged Atlantic salmon (Salmo salar) smolts in the Connecticut River with particular reference to the Northfield Mountain pumped storage hydroelectric project, 1976-1978. 25 pp.

Liscom, K. L., L. C. Stuehrenberg, and G. E. Monan.
1978. Radio tracking studies of spring chinook salmon and steelhead trout to determine specific areas of loss between Bonneville and John Day Dams, 1977. Northwest and Alaska Fisheries Center, Nat. Mar. Fish. Ser. Seattle, WA.

Raymond, H. L. and C. W. Sims.
1980. Assessment of smolt migration and passage enhancement studies for 1979. Northwest and Alaska Fisheries Center, Nat. Mar. Fish. Ser. Seattle, WA.

Raymond, Howard L.
1979. Effects of dams and impoundments on migrations of juvenile chinook salmon and steelhead from the Snake River, 1966-1975. Trans. Amer. Fish. Soc. Vol. 108 No. 6, 24 p.

Sims, C. W., R. C. Johnsen, and W. W. Bentley.
1976. Effects of power peaking operations on juvenile salmon and steelhead trout migrations, 1975. NOAA, NMFS, Northwest Fisheries Center, Seattle, Washington. Progress Report to U.S. Army Corps of Engineers. Contract DACW57-F-0303.

Sims, C. W., W. W. Bentley, and R. C. Johnsen.
1977. Effects of power peaking operations on juvenile salmon and steelhead trout migrations, 1976. NOAA, NMFS, Northwest and Alaska Fisheries Center, Seattle, Washington. Progress Report to U.S. Army Corps of Engineers. Contract DACW68-77-0025.

Sims, C. W., W. W. Bentley, and R. C. Johnsen.
1978. Effects of power peaking operations on juvenile salmon and steelhead trout migrations, 1977. NOAA, NMFS, Northwest and Alaska Fisheries Center, Seattle, Washington. Progress Report to U.S. Army Corps of Engineers, Contract DACW68-77-C-0025.

Spotte, Stephen.
1979. Fish and invertebrate culture: water management in closed systems, 2nd Ed., Wiley, New York, 179 p.

APPENDIX A

DERIVATION OF FLOW-EFFICIENCY REGRESSION FORMULAS FOR JOHN DAY DAM, 1980

Appendix Table A1.--Derivation of flow-efficiency formula for steelhead trout at John Day Dam, 1980.

Date	% Flow unit 3		No. "H" Brands recovered	No. mark recaptures adjusted to 5% flow through unit 3
April 21	10.87		2	0.92
22	10.41		3	1.44
23	8.39		4	2.38
24	7.61		2	1.31
25	8.42		2	1.19
26	10.39			
27	9.42	x =		
28	7.96	9.26	17	63.17
29	8.33		57	34.21
30	7.12		23	16.15
May 1	7.24		28	19.34
2	8.58		62	36.13
3	7.30		35	23.97
4	9.29		49	26.37
5	6.83		28	20.50
6	7.29		49	33.61
7	6.85		31	22.63
8	6.08		23	18.91
9	7.01		35	24.96
10	8.42		30	17.81
11	8.20		8	4.88
12	7.69		28	18.21
13	7.18		14	9.75
14	6.94		2	1.44
15	9.24		20	10.82
16	9.05		21	11.60
17	7.38		14	9.49
18	7.27		17	11.69
19	7.88		6	3.81
20	8.25		2	1.21
21	7.41		4	2.70
22	6.51		11	8.45
23	6.68	x =		
24	6.35	6.52	3	2.30
25	6.43		9	7.00
26	6.25		13	10.40
27	7.91		32	20.23
28	6.30		16	12.70
29	5.09		5	4.91

Appendix Table A1.--Continued.

Date	% Flow unit 3		No. "H" brands recovered	No. mark recaptures adjusted to 5% flow through unit 3
May 30	5.24		8	7.63
31	5.43		15	13.81
June 1	2.39			
2	2.53	x =		
3	1.56	2.16	1	2.31
4	0.00	x =		
5	5.90	2.95	1	1.69
6	6.43		3	2.33
7	4.95		0	
8	5.68		0	
9	5.15		0	
10	4.76		0	
11	5.39		0	
12	5.58		0	
13	5.43		1	0.92
Totals			834	545

No. "H" brands recovered adjusted to 5% flow through Unit 3 = 545

No. "H" brands released (less 20% estimated mortality) = 17,033

% flow through Unit 3 (x)	% sampling efficiency (y)
5	545/17,033 = 3.2
10	2(545)/17,033 = 6.4
15	3(545)/17,033 = 9.6

The relationship of efficiency to flow through Unit 3 can be expressed by the linear regression line that best fits the data (x) and (y) above. In this case, that line would be expressed by the formula $y = 0.00 + 0.64\ x$.

Appendix Table A2.--Derivation of flow-efficiency formula for yearling chinook salmon at John Day Dam, 1980.

Date		% Flow unit 3		No. "H" brands recovered	No. mark recapture adjusted to 5% flow through unit 3
April	18	12.65		3	1.2
	19	10.07	x =		
	20	9.98	10.03	13	6.5
	21	10.87		14	6.4
	22	10.41		16	7.7
	23	8.39		16	9.5
	24	7.61		9	5.9
	25	8.42		4	2.4
	26	10.39			
	27	9.42	x =		
	28	7.96	9.26	20	10.6
	29	8.33		20	12.0
	30	7.12		7	4.9
May	1	7.24		16	11.0
	2	8.58		8	4.7
	3	7.30		13	8.9
	4	9.29		14	7.5
	5	6.83		12	8.8
	6	7.29		18	12.3
	7	6.85		9	6.6
	8	6.08		19	15.7
	9	7.01		6	4.3
	10	8.42		3	1.8
	11	8.20		19	11.6
	12	7.69		11	7.2
	13	7.18		4	2.8
	14	6.94		1	0.7
	15	9.24		18	9.1
	16	9.05		23	12.7
	17	7.38		11	7.5
	18	7.27		12	8.3
	19	7.88		9	5.7
	20	8.25		15	9.1
	21	7.41		17	11.5
	22	6.51		3	2.3
	23	6.68		27	20.2
	24	6.35		18	14.2
	25	6.43		1	0.8
	26	6.25		2	1.6
	27	7.91		1	0.6
	28	6.30		3	2.4
	29	5.09		0	0.0
	30	5.24		4	3.8
	31	5.43		3	2.8
Totals				442	284.3

Appendix Table A2.--Continued.

No. "H" brands recovered adjusted to 5% flow through unit 3 = 284

No. "H" brands released (less 20% estimated mortality) = 37,268

% flow through Unit 3 (x)	% sampling efficiency (y)
5	284/37,268 = 0.76
10	2(284)/37,268 = 1.52
15	3(284)/37,268 = 2.28

The relationship of efficiency to flow through Unit 3 can be expressed by the linear regression line that best fits the data (x) and (y) above. In this case, that line would be expressed by the formula $y = 0.00 + 0.15\ x$.

APPENDIX B

WEEKLY CATCHES OF JUVENILE SALMONIDS

AT VARIOUS SAMPLING SITES, 1980

Appendix Table B1.--Weekly catches and sample sizes of juvenile salmon and steelhead from the collection facility of Lower Granite Dam, 1980.

	Date	Chinook Catch (No.)	Chinook Sample (No.)	Steelhead Catch (No.)	Steelhead Sample (No.)	Coho Catch (No.)	Coho Sample (No.)	Sockeye Catch (No.)	Sockeye Sample (No.)
April	3-7	13,123	6,879	181	89	0	0	39	18
	8-14	12,070	10,402	260	237	0	0	4	4
	15-21	170,053	33,735	7,387	1,393	6	1	53	12
	22-28	814,604	61,540	435,769	29,009	0	0	49	3
	29-May 5	419,822	30,459	425,902	32,807	36	2	45	2
May	6-12	206,643	18,140	433,689	39,278	0	0	296	16
	13-19	85,843	12,235	189,953	26,743	21	2	1,127	46
	20-26	68,107	13,611	152,966	31,639	7	1	1,029	163
	27-June 3	57,498	12,902	78,303	19,590	11	1	297	242
June	4-9	16,540	15,662	21,587	20,651	3	3	126	284
	10-15	17,190	17,190	17,008	17,008	0	0	126	126
	16-22	13,395	13,395	12,524	12,524	0	0	75	75
	23-July 1	13,804	13,804	6,242	6,242	4	4	74	74
July	2-6	14,893	14,893	776	776	0	0	2	2
Total		1,923,585	274,847	1,782,547	237,986	82	14	3,342	1,067

›pendix Table B2.--Weekly catches and sample sizes of juvenile salmon and steelhead from the collection facility at :Nary Dam, 1980.

	Date	Chinook "0" Catch (No.)	Chinook "0" Sample (No.)	Chinook "1" Catch (No.)	Chinook "1" Sample (No.)	Steelhead Catch (No.)	Steelhead Sample (No.)	Coho Catch (No.)	Coho Sample (No.)	Sockeye Catch (No.)	Sockeye Sample (No.)
›ril	8-14	0	0	39,998	25,257	557	365	53	34	141	72
	15-21	0	0	27,809	20,928	6,457	5,278	656	503	107	78
	22-28	0	0	30,962	23,122	21,540	16,656	223	206	271	182
	29-May 5	0	0	160,971	66,578	54,690	22,200	92	73	3,817	1,382
ıy	6-12	0	0	272,250	112,163	68,709	26,612	309	120	11,389	4,826
	13-19	0	0	151,934	93,078	60,139	37,639	2,113	1,017	6,866	4,149
	20-26	655	168	187,437	80,697	47,917	21,608	24,916	8,319	22,668	8,846
	27-June 2	9,804	6,689	48,754	36,129	13,043	9,915	13,978	10,591	5,126	3,806
ıne	3-9	34,727	27,610	10,042	7,238	4,064	3,014	3,450	2,662	2,678	2,142
	10-16	4,497	3,981	859	759	584	477	228	198	165	143
	17-23	8,376	5,301	1,069	681	574	365	184	117	129	82
	24-30	84,480	56,168	4,063	2,807	473	346	325	232	131	92
ıly	1-7	221,377	105,191	1,591	1,156	119	76	190	112	112	51
	8-14	106,734	83,793	78	65	35	28	49	40	119	91
	15-21	78,538	54,531	23	17	18	13	21	15	164	115
	22-28	58,435	49,038	1	1	1	1	4	4	107	101
	29-Aug 4	74,342	65,106	1	1	2	2	0	0	137	124
	5-11	34,462	29,605	0	0	5	4	0	0	56	45
	12-15	17,720	14,191	0	0	0	0	2	2	25	19
›tal		734,192	501,372	937,842	470,677	278,927	144,599	46,793	24,245	54,181	26,346

Appendix Table B3.--Weekly catches of juvenile salmon and steelhead from Turbine Intake Gatewell 3 at John Day Dam, 1980.

Date		Chinook "0" (No.)	Chinook "1" (No.)	Steelhead (No.)	Coho (No.)	Sockeye (No.)
April	14-21	3	2820	676	2	9
	22-28	3064	2496	4933	0	2
	29-May 5	3483	4434	7163	7	67
May	6-12	467	8286	9755	2	424
	13-19	324	7921	9137	21	804
	20-26	144	5651	3713	219	564
	27-June 2	219	2398	1596	567	441
June	3-9	160	1789	569	197	105
	10-16	724	1071	162	122	37
	17-23	1469	495	121	44	65
	24-July 1	4080	199	244	36	28
July	2-7	6287	19	9	4	8
	8-14	8038	5	3	4	9
	15-21	6872	1	3	1	2
	22-28	7284	3	0	3	4
	29-August 4	7827	7	1	0	1
August	5-11	5021	12	5	2	2
	12-18	5871	21	1	1	3
	19-26	1531	14	0	0	1
	27-Sep 2	2471	11	1	0	1
Sep	3-9	2301	4	0	0	0
	10-16	3010	9	0	0	2
	17-23	1246	4	0	0	14
	24-30	783	9	0	0	7
Oct	1-7	817	9	0	0	6
Total		73,496	37,688	38,092	1,232	2,606

APPENDIX C

ADJUSTED CODED WIRE-TAG AND BRAND RECOVERIES

FROM THE SNAKE RIVER SYSTEM, 1980

Appendix Table C1.--Juvenile coded wire-tagged (CWT) steelhead recovered at Lower Granite Dam, 1980.

CWT	Release site	Release date	Number released	Adjusted[a] recovery	Estimated[b] population at L. Granite	Survival to L. Granite	Recovery[c] period
050455	Clearwater River	4/17/80	59,125	18,361	37,471	63.4%	4/23-4/30-5/18
100533	Clearwater	5/01/80	1,940	280	571	29.5%	5/05-5/08-5/21
102161	Clearwater	4/25/80	49,210	20,931	42,716	86.8%	4/28-4/30-5/08
102162	Clearwater	4/17/80	46,941	5,656	11,543	24.6%	4/25-5/04-5/16
050635	Pahsimeroi River	4/21/80	27,455	12,907	26,341	95.9%	5/09-5/18-5/28
050636	Pahsimeroi	2/04/80	30,410	9,651	19,696	64.8%	5/02-5/10-5/22
050637	Pahsimeroi	2/04/80	25,442	7,384	15,069	59.2%	5/02-5/08-5/19
102156	Pahsimeroi	4/11/80	49,900	13,209	26,957	54.0%	4/27-5/03-5/22
102157	Pahsimeroi	4/12/80	50,325	11,752	23,984	47.7%	4/27-5/05-5/21

a/ Expanded to reflect total marks collected.

b/ Adjusted recovery divided by collection efficiency (49%).

c/ 10%-50%-90%.

Appendix Table C2.--Snake River juvenile coded wire-tagged (cwt) steelhead to the Lower Columbia River, 1980.

CWT	Release site	Release date	Recovery site	Adjusted tag recovery	Tags sacrificed	Number of fish transported	Estimated population to John Day	Recovery period	Travel time days
050455	Clearwater River	4/17/80	L. Granite	18,361	280	18,081	---	4/23-4/30/5/18	13
			L. Goose	10,682	0	10,682	---	N.A.	N.A.
			McNary	979	65	914	---	N.A.	N.A.
			John Day	141	141	0	3,684	5/03-5/07-5/20	21
			Total	30,163	486	29,677	To Lower River = 33,361		
100533	Clearwater River	5/01/80	L. Granite	280	3	277	---	5/05-5/08-5/21	7
			L. Goose	163	0	163	---	N.A.	N.A.
			McNary	0	0	0	---	---	---
			John Day	1	1	0	30	N.A.-5/29-N.A.	28
			Total	444	4	440	To Lower River = 470		
102161	Clearwater River	4/25/80	L. Granite	20,931	193	20,738	---	4/28-4/30-5/08	5
			L. Goose	12,178	0	12,178	---	N.A.	N.A.
			McNary	864	49	815	---	N.A.	N.A.
			John Day	54	54	0	1,623	5/07-5/11-5/17	16
			Total	34,027	296	33,731	To Lower River = 35,354		
102162	Clearwater River	4/17/80	L. Granite	5,656	73	5,583	---	4/25-5/04-5/16	17
			L. Goose	3,291	0	3,291	---	N.A.	N.A.
			McNary	445	39	406	---	N.A.	N.A.
			John Day	75	75	0	1,930	5/03-5/07-5/17	20
			Total	9,467	187	9,280	To Lower River = 11,210		

Appendix Table C2.--Continued.

CWT	Release site	Release date	Recovery site	Adjusted tag recovery	Tags sacrificed	Number of fish transported	Estimated population to John Day	Recovery period	Travel time days
050635	Pahsimeroi River	4/21/80	L. Granite	12,907	247	12,660	---	5/09-5/18-5/28	27
			L. Goose	7,510	0	7,510	---	N.A.	N.A.
			McNary	223	32	191	---	N.A.	N.A.
			John Day	2	2	0	30	N.A.-5/29-N.A.	38
			Total	20,642	281	20,361	To Lower River = 20,391		
050636	Pahsimeroi River	2/4/80	L. Granite	9,651	135	9,516	---	5/02-5/10-5/22	96
			L. Goose	5,615	0	5,615	---	N.A.	N.A.
			McNary	192	24	168	---	N.A.	N.A.
			John Day	20	20	0	506	5/17-5/21-5/29	107
			Total	15,478	179	15,299	To Lower River = 15,805		
050637	Pahsimeroi River	2/4/80	L. Granite	7,384	111	7,273	---	5/02-5/08-5/19	94
			L. Goose	4,296	0	4,296	---	N.A.	N.A.
			McNary	191	22	169	---	N.A.	N.A.
			John Day	16	16	0	459	5/13-5/25-5/29	111
			Total	11,887	149	11,738	To Lower River = 12,197		
102156	Pahsimeroi River	4/11/80	L. Granite	13,209	149	13,060	---	4/17-5/03-5/22	22
			L. Goose	7,685	0	7,685	---	N.A.	N.A.
			McNary	860	57	803	---	N.A.	N.A.
			John Day	56	56	0	1,955	5/06-5/12-5/21	31
			Total	21,810	262	21,548	To Lower River = 23,503		
102157	Pahsimeroi River	4/12/80	L. Granite	11,752	145	11,607	---	4/27-5/05-5/21	23
			L. Goose	6,838	0	6,838	---	N.A.	N.A.
			McNary	1,256	67	1,189	---	N.A.	N.A.
			John Day	60	60	0	1,637	5/07-5/16-5/29	34
			Total	19,906	272	19,634	To Lower River = 21,271		

a/ Estimated.

b/ Includes estimated numbers on dates not sampled (May 10, 11, 17, and 18).

c/ From release date to median recovery date.

d/ Number transported plus number arriving at John Day Dam.

Appendix Table C3.--Recoveries at Lower Granite Dam of branded juvenile steelhead released by the University of Idaho into the Snake River drainage during 1980.

Brand	Release site	Release date	Number released	Adjusted[a/] recovery	Estimated[b/] population at Lower Granite	Survival to Lower Granite	Recovery[c/] period
LA DT 3	Pahsimeroi R.	4/17/80	9,145	2,697	5,504	60.2%	5/08-5/18-5/28
LD DT 1	Pahsimeroi R.	2/04/80	10,077	3,140	6,408	63.6%	5/07-5/13-5/24
RD DT 1	Pahsimeroi R.	2/04/80	8,490	2,331	4,757	56.0%	5/05-5/13-5/18
LA + 1	Pahsimeroi R.	3/03/80	9,492	2,643	5,394	56.8%	5/07-5/14-5/26
RA + 1	Pahsimeroi R.	3/03/80	8,230	1,547	3,157	38.4%	5/07-5/13-5/25
LA SU 1	Pahsimeroi R.	4/23/80	5,083	897	1,831	36.0%	5/13-5/23-5/29
RA SU 1	Pahsimeroi R.	3/28/80	5,043	510	1,041	20.6%	5/09-5/19-5/28
LD X3 1	Pahsimeroi R.	3/03/80	5,127	637	1,300	25.3%	5/01-5/10-5/23
RD X3 1	Pahsimeroi R.	2/04/80	5,432	380	776	14.3%	5/05-5/12-5/23
RA X3 3	Pahsimeroi R.	4/23/80	10,441	1,778	3,629	34.8%	5/09-5/20-5/26
RD IU 2	Upper Lemhi R.	4/22/80	10,570	145	269	2.8%	5/13-5/21-5/28
LA SU 4	Upper Lemhi R.	4/24/80	10,136	1,362	2,780	27.4%	5/06-5/17-5/27
RA DT 3	Clearwater R.	4/29/80	9,953	834	1,702	17.1%	5/03-5/07-5/19
RA 4 4	Clearwater R.	4/18/80	10,007	923	1,884	18.8%	4/23-4/29-5/13
RD 4 2	Clearwater R.	4/22/80	375	48	98	26.1%	5/01-5/04-5/05
LD IU 1	Clearwater R.	4/22/80	5,072	439	896	17.7%	4/24-4/26-5/05
LD IU 2	Clearwater R.	4/22/80	4,960	1,096	2,237	45.1%	4/25-4/27-5/06
LD IU 4	Clearwater R.	4/22/80	4,975	1,456	2,971	59.7%	4/24-4/27-5/06
LA X3 3	Clearwater R.	4/29/80	10,107	1,279	2,610	25.8%	5/02-5/06-5/16
LD SU 3	Clearwater R.	5/01/80	477	96	196	41.1%	5/05-5/06-5/13

a/ Expanded to reflect total marks recovered.

b/ Adjusted recovery divided by collection efficiency (49.0%).

c/ 10% - 50% - 90%.

Appendix Table C4.--Branded juvenile steelhead from the Snake River drainage to the Lower Columbia River in 1980.

Brand	Release site	Release date	Recovery site	Number of fish transported	Estimated population to John Day	Recovery period	Travel time (days) c/
LA DT 3	Pahsimeroi River	4/17/80	L. Granite	2,697 a/	----	5/08-5/18-5/28	31
			L. Goose	1,569 b/	----	N.A.	N.A.
			McNary	2	----	N.A.	N.A.
			John Day	0	63	5/30	43
			Total	4,268	To Lower River = 4,331 d/		
LD DT 1	Pahsimeroi River	2/04/80	L. Granite	3,140 a/	----	5/07-5/13-5/24	99
			L. Goose	1,827 b/	----	N.A.	N.A.
			McNary	10	----	N.A.	N.A.
			John Day	0	0	N.A.	N.A.
			Total	4,977	To Lower River = 4,977 d/		
RD DT 1	Pahsimeroi River	2/04/80	L. Granite	2,331 a/	----	5/05-5/13-5/18	99
			L. Goose	1,356 b/	----	N.A.	N.A.
			McNary	15	----	N.A.	N.A.
			John Day	0	0	N.A.	N.A.
			Total	3,702	To Lower River = 3,702 d/		
LA + 1	Pahsimeroi River	3/03/80	L. Granite	2,643 a/	----	5/07-5/14-5/26	72
			L. Goose	1,583 b/	----	N.A.	N.A.
			McNary	16	----	N.A.	N.A.
			John Day	0	0	N.A.	N.A.
			Total	4,242	To Lower River = 4,242 d/		
RA + 1	Pahsimeroi River	3/03/80	L. Granite	1,547 a/	----	5/07-5/13-5/25	71
			L. Goose	900 b/	----	N.A.	N.A.
			McNary	12	----	N.A.	N.A.
			John Day	0	0	N.A.	N.A.
			Total	2,459	To Lower River = 2,459 d/		

Appendix Table C4.—Continued.

Brand	Release site	Release date	Recovery site	Number of fish transported	Estimated population to John Day	Recovery period	Travel time (days) c/
LA SU 1	Pahsimeroi River	4/23/80	L. Granite	897	----	5/13-5/23-5/29	30
			L. Goose	522 a/	----	N.A.	N.A.
			McNary	3 b/	----	N.A.	N.A.
			John Day	0	0	N.A.	N.A.
			Total	1,422		To Lower River = 1,422 d/	
RA SU 1	Pahsimeroi River	3/28/80	L. Granite	510	----	5/09-5/19-5/28	52
			L. Goose	867 a/	----	N.A.	N.A.
			McNary	1 b/	----	N.A.	N.A.
			John Day	0	0	N.A.	N.A.
			Total	1,378		To Lower River = 1,378 d/	
LD X3 1	Pahsimeroi River	3/03/80	L. Granite	637	----	5/01-5/10-5/23	68
			L. Goose	371 a/	----	N.A.	N.A.
			McNary	52 b/	----	N.A.	N.A.
			John Day	0	29	5/17	75
			Total	1,060		To Lower River = 1,089 d/	
RD X3 1	Pahsimeroi River	2/04/80	L. Granite	380	----	5/05-5/12-5/23	98
			L. Goose	221 a/	----	N.A.	N.A.
			McNary	0 b/	----	N.A.	N.A.
			John Day	0	0	N.A.	N.A.
			Total	601		To Lower River = 601 d/	
RX X3 3	Pahsimeroi River	4/23/80	L. Granite	1,778	----	5/09-5/20-5/26	27
			L. Goose	1,035 a/	----	N.A.	N.A.
			McNary	0 b/	----	N.A.	N.A.
			John Day	0	0	N.A.	N.A.
			Total	2,813		To Lower River = 2,813 d/	

Appendix Table C4.--Continued.

Brand	Release site	Release date	Recovery site	Number of fish transported	Estimated population to John Day	Recovery period	Travel time (days)[c]
RD IU 2	Upper Lemhi River	4/22/80	L. Granite	145 [a]	----	5/13-5/21-5/28	29
			L. Goose	69 [b]	----	N.A.	N.A.
			McNary	0	----	N.A.	N.A.
			John Day	0	0	N.A.	N.A.
			Total	214		To Lower River = 214 [d]	
LA SU 4	Upper Lemhi River	4/24/80	L. Granite	1,362 [a]	----	5/06-5/17-5/27	23
			L. Goose	793 [b]	----	N.A.	N.A.
			McNary	3	----	N.A.	N.A.
			John Day	0	23	N.A.	N.A.
			Total	1,438		To Lower River = 1,461 [d]	
RA DT 3	Clearwater River	4/29/80	L. Granite	834 [a]	----	5/03-5/07-5/19	8
			L. Goose	466 [b]	----	N.A.	N.A.
			McNary	54	----	N.A.	N.A.
			John Day	0	130	5/11-5/13-5/16	14
			Total	1,354		To Lower River = 1,484 [d]	
RA 4 4	Clearwater River	4/18/80	L. Granite	923 [a]	----	4/23-4/29-5/13	11
			L. Goose	537 [b]	----	N.A.	N.A.
			McNary	92	----	N.A.	N.A.
			John Day	0	134	5/06-5/08-5/21	21
			Total	1,552		To Lower River = 1,686 [d]	
RD 4 2	Clearwater River	4/22/80	L. Granite	48 [a]	----	5/01-5/04-5/05	12
			L. Goose	28 [b]	----	N.A.	N.A.
			McNary	7	----	N.A.	N.A.
			John Day	0	33	6/05	43
			Total	83		To Lower River = 116 [d]	

Appendix Table C4.--Continued.

Brand	Release site	Release date	Recovery site	Number of fish transported	Estimated population to John Day	Recovery period	Travel time (days) c/
LD IU 1	Clearwater River	4/22/80	L. Granite	439	----	4/24-4/26-5/05	4
			L. Goose	255 a/	----	N.A.	N.A.
			McNary	14 b/	----	N.A.	N.A.
			John Day	0	171	5/02-5/13-5/22	21
			Total	708		To Lower River = 879 d/	
LD IU 2	Clearwater River	4/22/80	L. Granite	1,096	----	4/25-4/27-5/06	5
			L. Goose	638 a/	----	N.A.	N.A.
			McNary	11 b/	----	N.A.	N.A.
			John Day	0	189	5/05-5/06-5/07	14
			Total	1,745		To Lower River = 1,934 d/	
LD IU 4	Clearwater River	4/22/80	L. Granite	1,456	----	4/24-4/27-5/06	5
			L. Goose	847 a/	----	N.A.	N.A.
			McNary	19 b/	----	N.A.	N.A.
			John Day	0	270	5/05-5/07-5/12	15
			Total	2,322		To Lower River = 2,592 d/	
LA X3 3	Clearwater River	4/29/80	L. Granite	1,279	----	5/02-5/06-5/16	7
			L. Goose	744 a/	----	N.A.	N.A.
			McNary	162 b/	----	N.A.	N.A.
			John Day	0	269	5/12-5/16-5/28	17
			Total	2,185		To Lower River = 2,454 d/	
LD SU 3	Clearwater River	5/01/08	L. Granite	96	----	5/05-5/06-5/13	5
			L. Goose	56	----	N.A.	N.A.
			McNary	9	----	N.A.	N.A.
			John Day	0	0	N.A.	N.A.
			Total	161		To Lower River = 161 d/	

a/ Estimated.
b/ Includes estimated numbers on dates not sampled (May 10, 11, 17, and 18).
c/ From release date to median recovery date.
d/ Number transported plus number arriving at John Day Dam.

Appendix Table C5.--Recoveries at Lower Granite Dam of branded juvenile chinook salmon released by the University of Idaho into the Snake River drainage during 1980.

Brand	Release site	Release date	Number released	Adjusted recovery[a/]	Estimated[b/] population at L. Granite	Survival to L. Granite	Recovery[c/] period
LA IU 1	Rapid River	11/5/79	61008	6391	17753	29.1%	4/19-4/23-4/30
RA IU 1	Rapid River	4/15/80	10304	1703	4731	45.9%	4/27-4/29-5/06

a/ Expanded to reflect total marks collected.

b/ Adjusted recovery divided by collection efficiency (36%).

c/ 10%-50%-90%

Appendix Table C6.--Branded juvenile chinook salmon from the Snake River drainage to the Lower Columbia River in 1980.

Brand	Release site	Release date	Recovery site	Number of fish transported	Estimated population to John Day	Recovery period	Travel time (days) [c/]
LA IU 1	Rapid River	11/05/79	L. Granite	6391	------	4/19-4/23-4/30	NA
			L. Goose	3920 [a/]	------	NA	NA
			McNary	1099 [b/]	------	NA	NA
			John Day	0	6000	5/02-5/05-5/13	NA
			Total	11410		To Lower River [d/]	17,410
RA IU 1	Rapid River	4/15/80	L. Granite	1703	-----	4/27-4/29-5/06	14
			L. Goose	1045 [a/]	-----	NA	NA
			McNary	405 [b/]	-----	NA	NA
			John Day	0	1835	5/05-5/12-5/17	27
			Total	3153		To Lower River [d/]	4,970

a/ Estimated

b/ Includes estimated number on dates not sampled (May 10, 11, 17, and 18).

c/ From release date to median recovery date.

d/ Number transported plus number arriving at John Day Dam.

Appendix Table C7.--Juvenile coded wire-tagged (CWT) chinook salmon recovered at Lower Granite Dam, 1980.

CWT	Release site	Release date	Number released	Adjusted[a/] recovery	Estimated[b/] population at Lower Granite	Survival to L. Granite	Recovery[c/] period
050529	Below Bonneville	(Some fish escaped hatchery)	unknown	364	1,011	unknown	5/06-5/09-5/16
050532	Clear Creek	4/16/80	61,300	10,536	29,267	47.7%	4/24-4/28-5/05
102112	S. Fork Clear River	9/26/79	43,800	3,634	10,094	23.0%	4/27-5/08-5/28
102114	Rapid River	11/05/79 to 4/28/80	43,156	2,424	6,733	15.6%	4/20-4/27-4/28
102125	Lemhi River	4/02/80	40,100	3,134	8,706	12.7%	4/22-4/27-5/07
102126	Lemhi River	4/03/80	41,150	2,611	7,253	17.6%	4/22-4/27-5/07

a/ Expanded to reflect total marks collected.
b/ Adjusted recovery divided by collection efficiency (36%).
c/ 10% - 50% - 90%.

Appendix Table C8.--Snake River juvenile coded wire-tagged chinook salmon to the Lower Columbia River, 1980.

CWT	Release site	Release date	Recovery site	Adjusted tag recovery	Tags sacrificed	Number of fish transported	Estimated population to John Day	Recovery period	Travel[c/] time days
050529	(Escaped from hatchery)		L. Granite	364	37	327	--	5/06-5/09-5/16	NA
			L. Goose	223[a/]	0	223[a/]	--	NA	NA
			McNary	65[b/]	33	32	--	NA	NA
			John Day	0	0	0	0	NA	NA
			Total	652	70	582	To lower river[d/] =		582
050532	Clear Creek	4/16/80	L. Granite	10,863	373	10,490	--	4/24-4/28-5/05	12
			L. Goose	6,462[a/]	0	6,462[a/]	--	NA	NA
			McNary	1,926[b/]	218	1,708	--	NA	NA
			John Day	44	44	0	3,478	5/06-5/09-5/15	24
			Total	19,295	635	18,660	To lower river[d/] =		22,138
102112	S. Fork Clear River	9/26/79	L. Granite	3,634	343	3,291	--	4/27-5/08-5/28	NA
			L. Goose	2,229[a/]	0	2,229[a/]	--	NA	NA
			McNary	716[b/]	192	524	--	NA	NA
			John Day	34	34	0	2,449	5/07-5/12-5/19	NA
			Total	6,613	569	6,044	To lower river[d/] =		8,493

Appendix Table C8.--Continued.

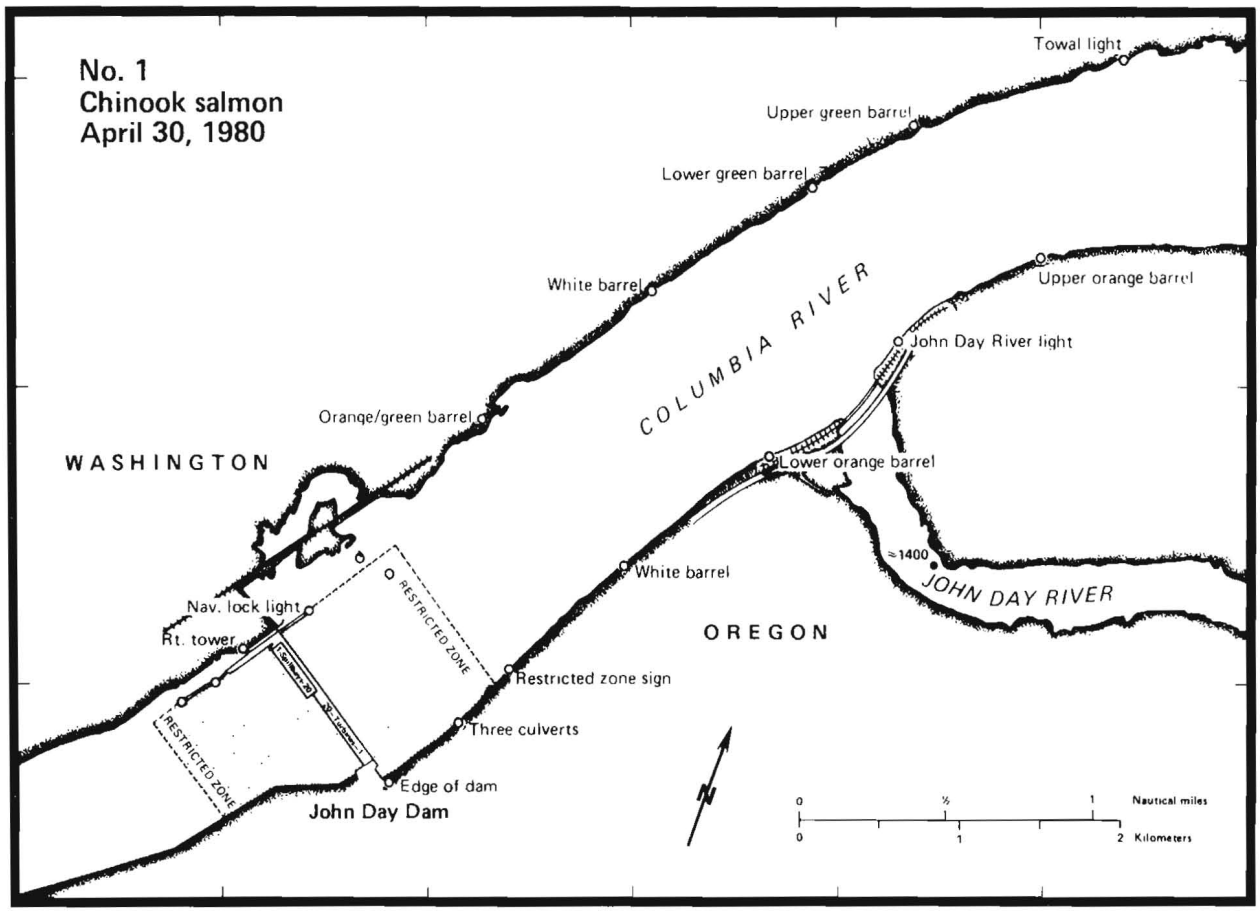
CWT	Release site	Release date	Recovery site	Adjusted tag recovery	Tags sacrificed	Number of fish transported	Estimated population to John Day	Recovery period	Travel[c/] time days
102114	Rapid River	11/05/79	L. Granite	2,424	132	2,292	--	4/20-4/27-4/28	NA
		to	L. Goose	1,487[a/]	0	1,487[a/]	--	NA	NA
		4/28/80	McNary	291[b/]	42	249	--	NA	NA
			John Day	5	5	0	343	5/02-5/02-5/06	NA
			Total	4,207	179	4,028	To lower river[d/] =		4,371
102125	Lemhi River	4/02/80	L. Granite	3,134	116	3,018	--	4/22-4/27-5/07	25
			L. Goose	1,922[a/]	0	1,922[a/]	--	NA	NA
			McNary	369[b/]	47	322	--	NA	NA
			John Day	14	14	0	936	5/06-5/07-5/09	36
			Total	5,439	177	5,262	To lower river[d/] =		6,198
102126	Lemhi River	4/03/80	L. Granite	2,611	107	2,504	--	4/22-4/27-5/07	24
			L. Goose	1,601[a/]	0	1,601[a/]	--	NA	NA
			McNary	539[b/]	72	467	--	NA	NA
			John Day	19	19	0	1,481	5/05-5/08-5/16	36
			Total	4,770	198	4,572	To lower river[d/] =		6,053

a/ Estimated.
b/ Includes estimated numbers on dates not sampled (May 10, 11, 17, and 18).
c/ From release date to median recovery date.
d/ Number transported plus number arriving at John Day Dam.

APPENDIX D

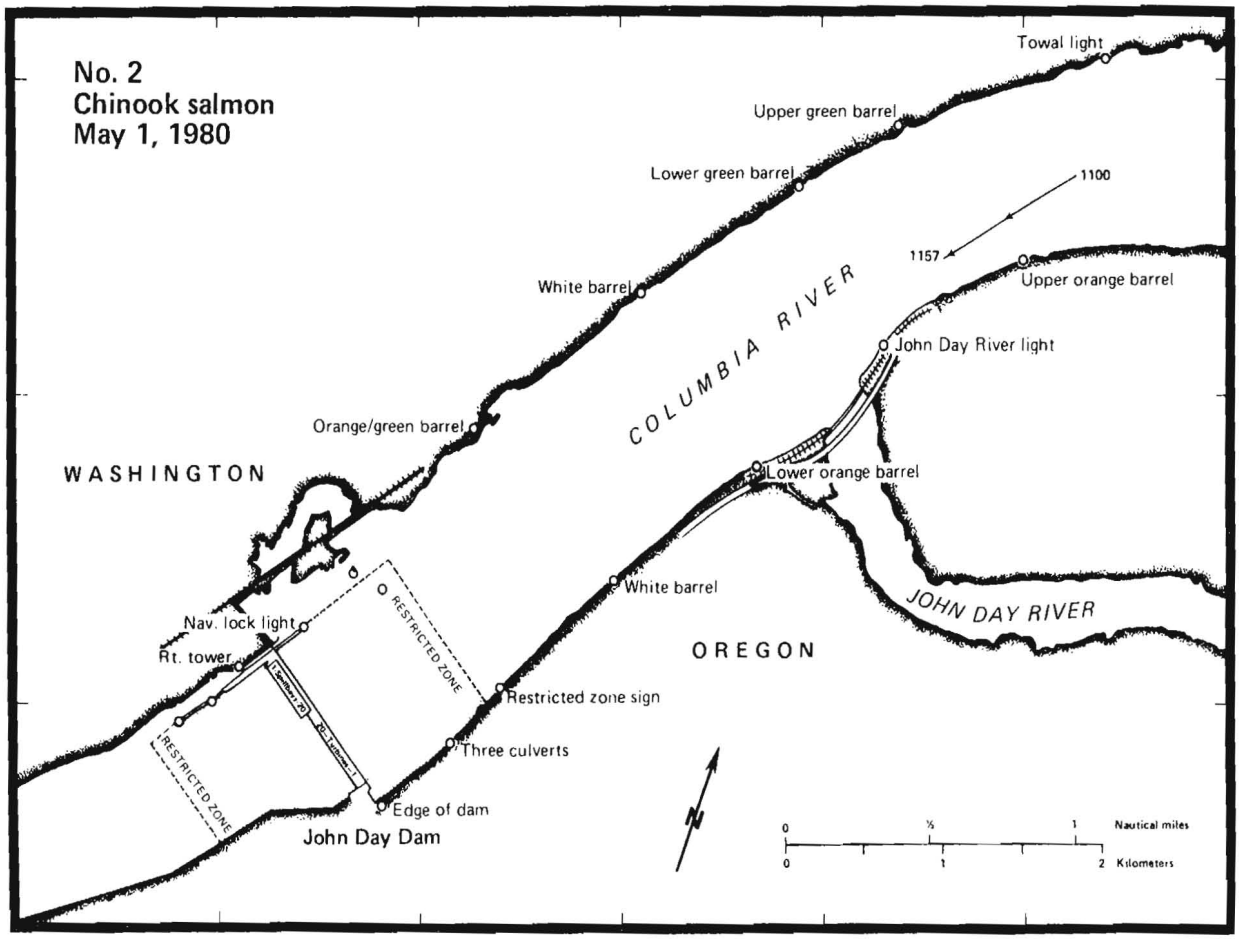
INDIVIDUAL RADIO TRACKS OF JUVENILE SALMONIDS

IN THE FOREBAY OF JOHN DAY DAM, 1980



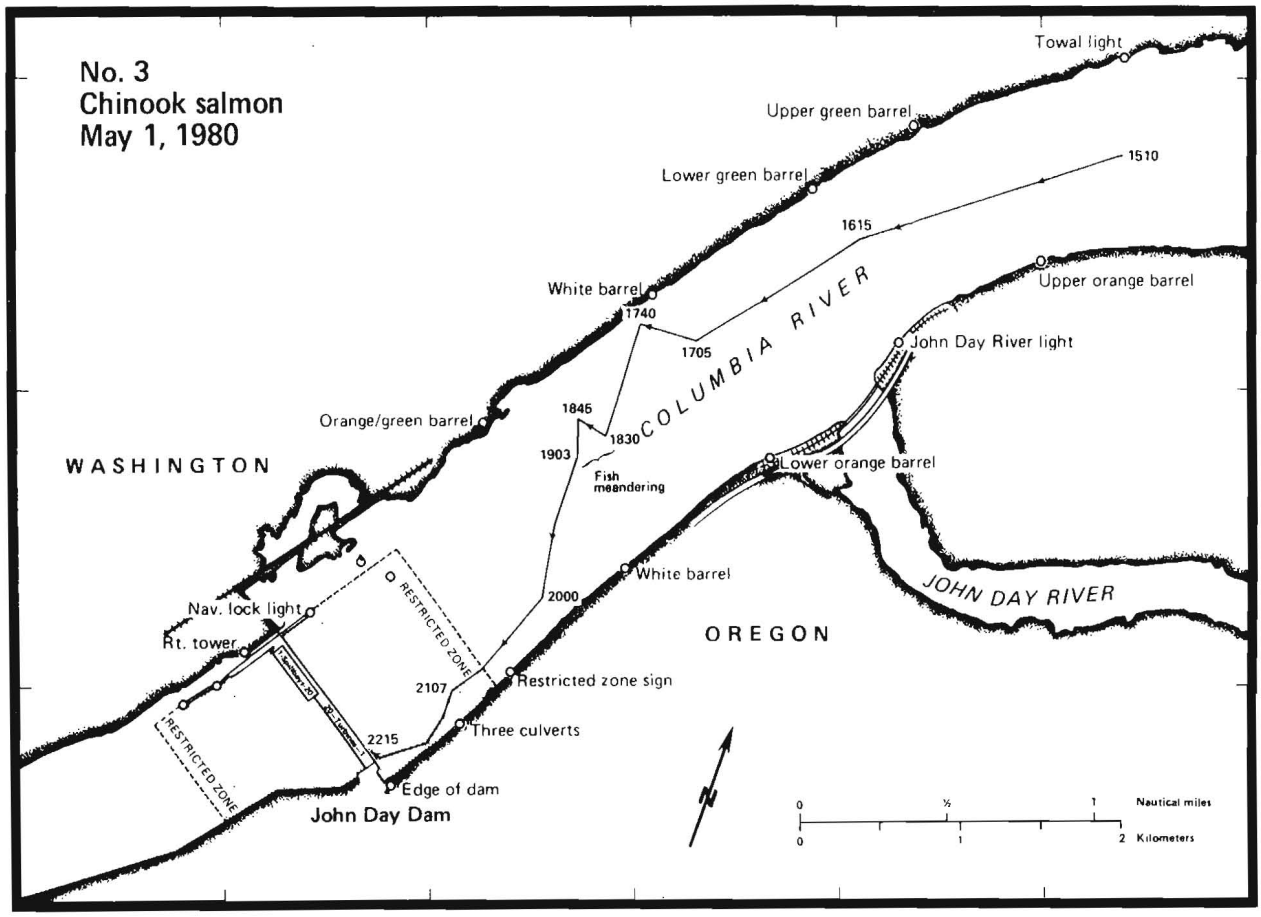
Fish Number 1 Chinook salmon 200 mm 30 April 1980

Fish Number 1 was our first exposure to actual tracking conditions. It was released in shallow water within the mouth of the John Day River (sheltered water). The fish had been handled extensively, was in poor condition, and didn't move all afternoon and evening, but was gone when checked at 0700 the next morning.



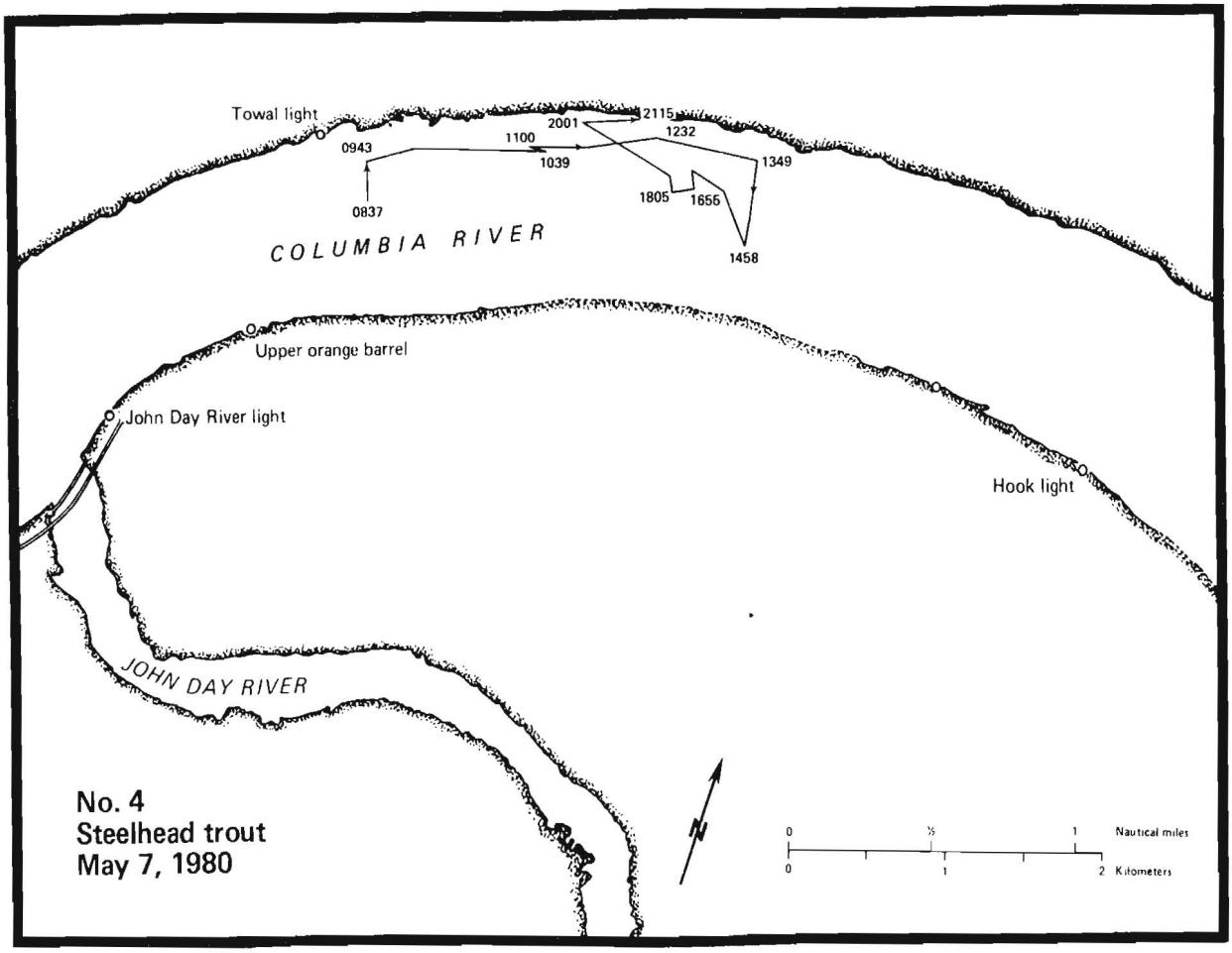
Fish Number 2 Chinook salmon 210 mm 1 May 1980

Fish Number 2 was tracked for only 57 min, during which time the pulse rate slowed making the tag untrackable. This fish was intended for training and was not held for 24 h. It had been caught in Lampera net, tagged, and released in the Columbia River after only 20 min of acclimation.



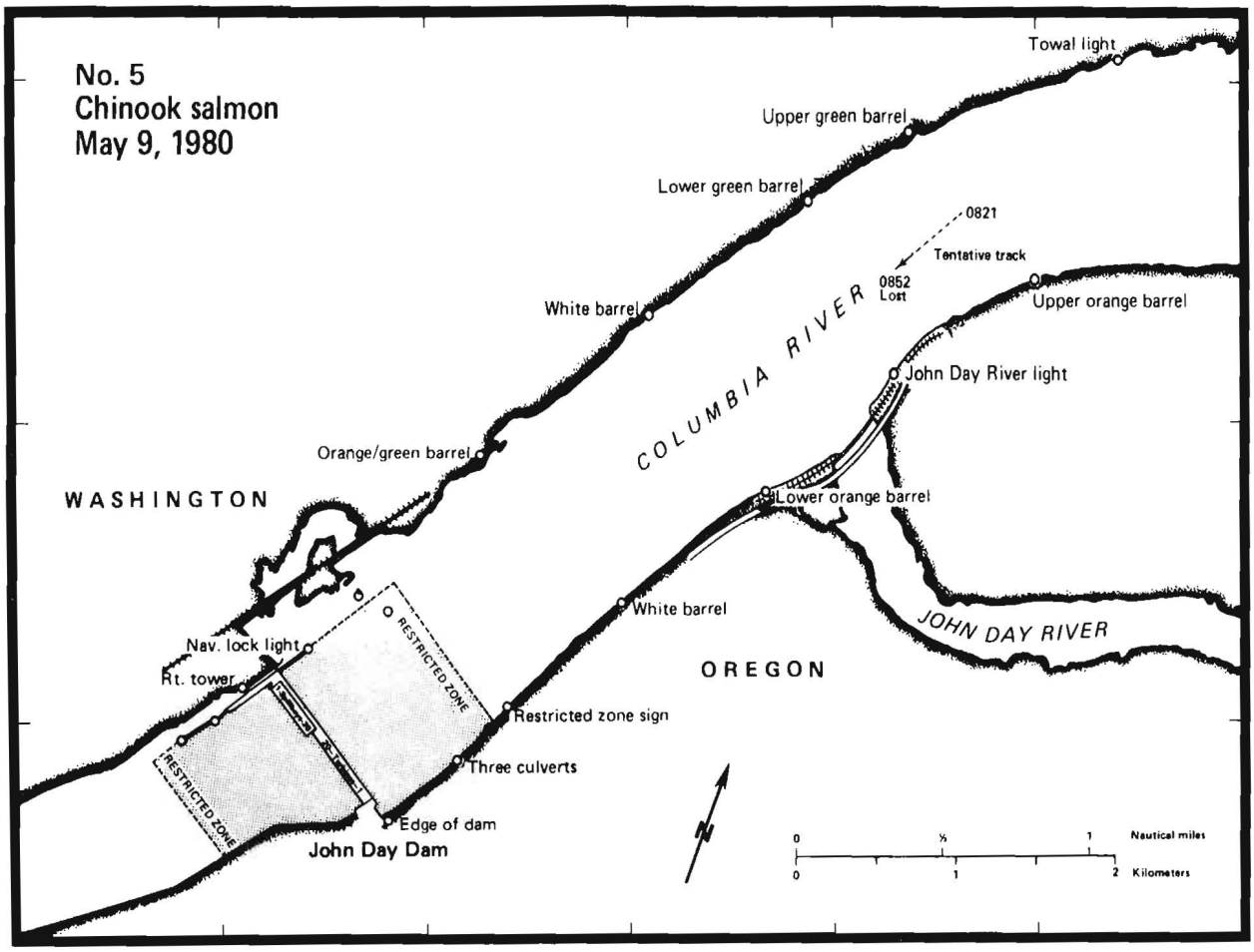
Fish Number 3 Chinook salmon 190 mm 1 May 1980

Weather excellent. Fish Number 3 was released into the middle of the river near Towal at 1510 h and was tracked to the dam in 7 h. From the release site it angled to the Washington shore, came very close to shore at the white marker barrel, then with some meandering, cut across to the Oregon shore 0.5 km above the restricted zone, and followed the shore up to the dam. Before sounding, the fish moved to the face of the dam then backed off about 15-20 km, and sounded in front of turbine Unit 1.



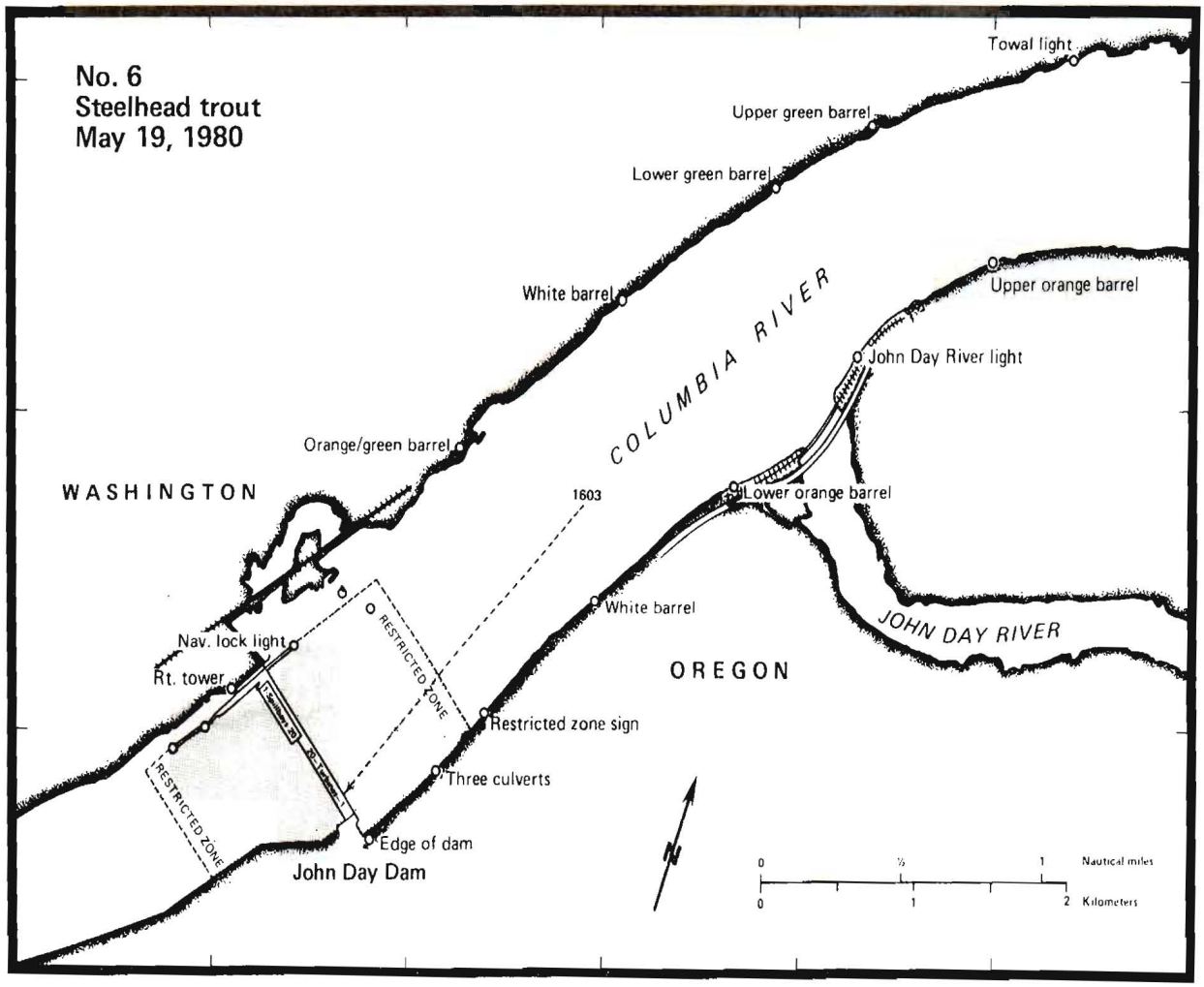
Fish Number 4 Steelhead 210 mm 7 May 1980

Weather excellent. Fish Number 4, the first steelhead, was released into the middle of the river slightly above Towal at 0837 h. It was taken from a gatewell at the dam the previous evening, tagged, and kept in the holding pen at a cove near Towal. Lost almost immediately after release, it was picked up an hour later inshore and upstream. It continued upstream for 6 h and then more or less meandered until the track was terminated because of lack of downstream movement at 2115 h. Maximum effective tracking range was 35 m, and the signal was lost several times. Most of this track was spent above the normal operating area and out of range of the navigational markers. Many of the fixes were with binocular compass readings, which were harder to plot and not as accurate.



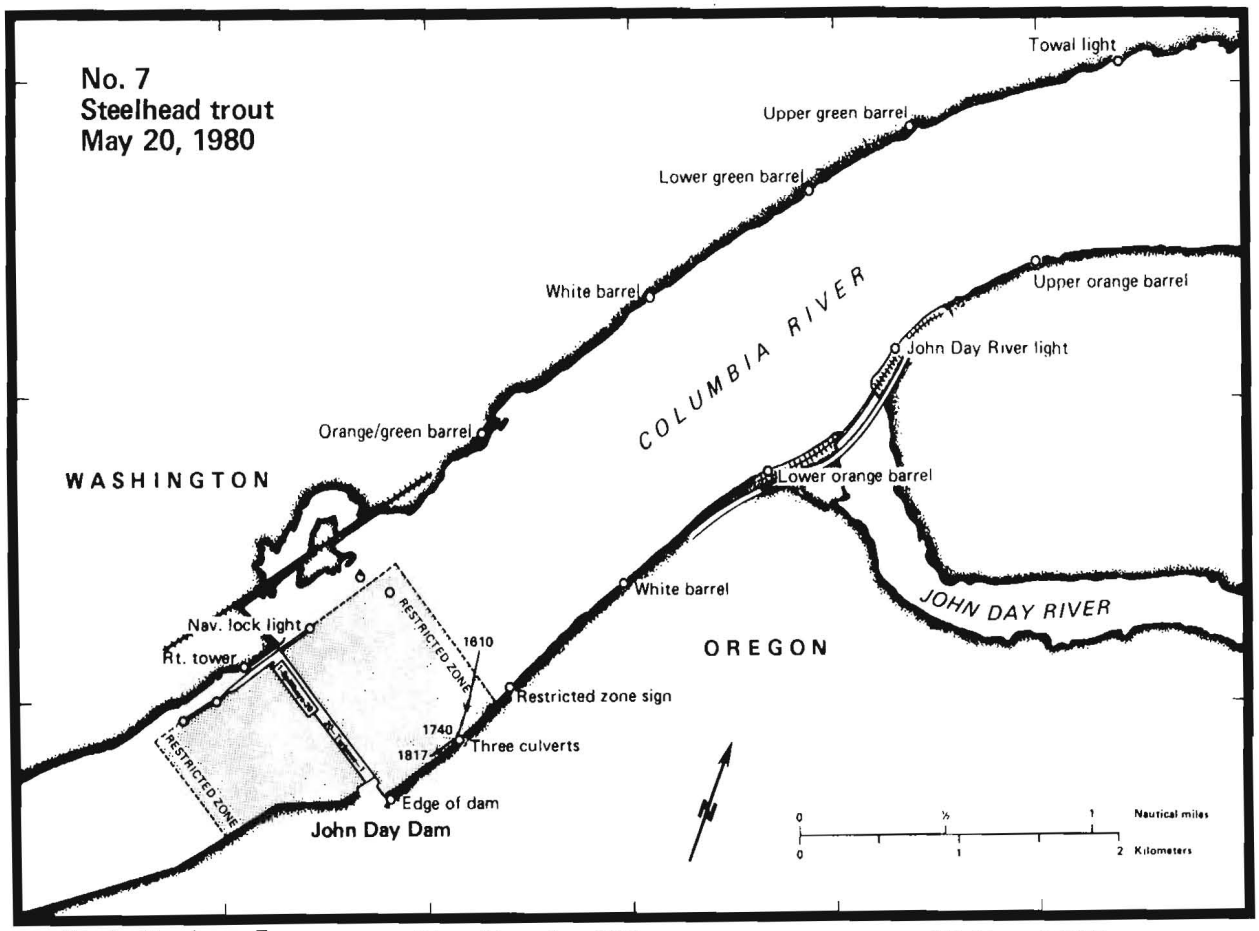
Fish Number 5 Chinook salmon 175 mm 9 May 1980

Fish Number 5 was taken from the McNary transport truck, tagged, and held overnight in the Towal holding pen. The release was made in moderate winds with the hope that tracking could take place in less than ideal weather. Constant boat maneuvering was required. The fish started downstream, but the signal was lost in 1/2 h and not found. Effective tracking range was 30 m.



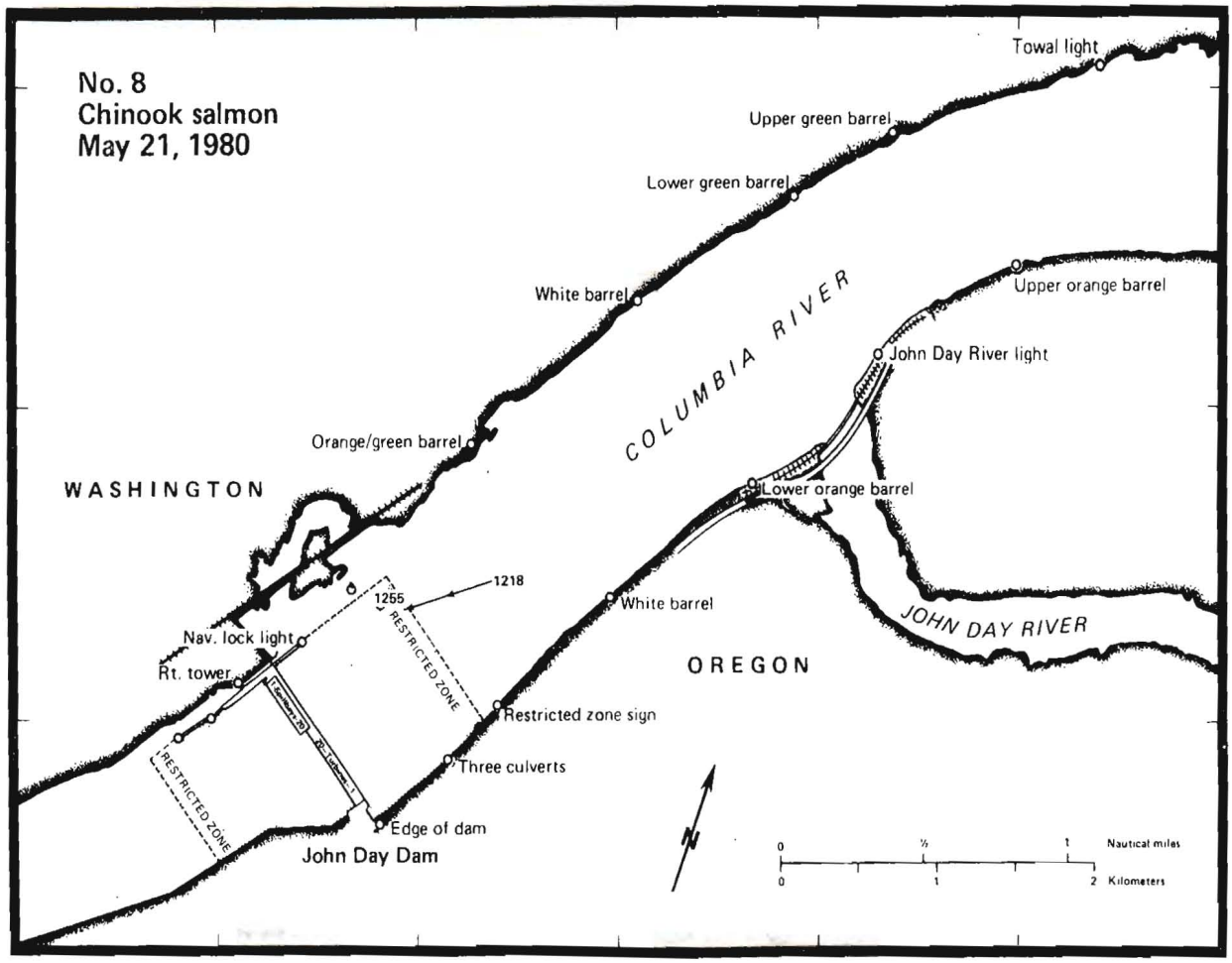
Fish Number 6 Steelhead 205 mm 19 May 1980

Fish Number 6 was lost within 3 min of release. The signal had appeared weak in prerelease testing (tracking range 15 m). The fish and tag were recovered 22 May during routine dipping of Unit 5-B.



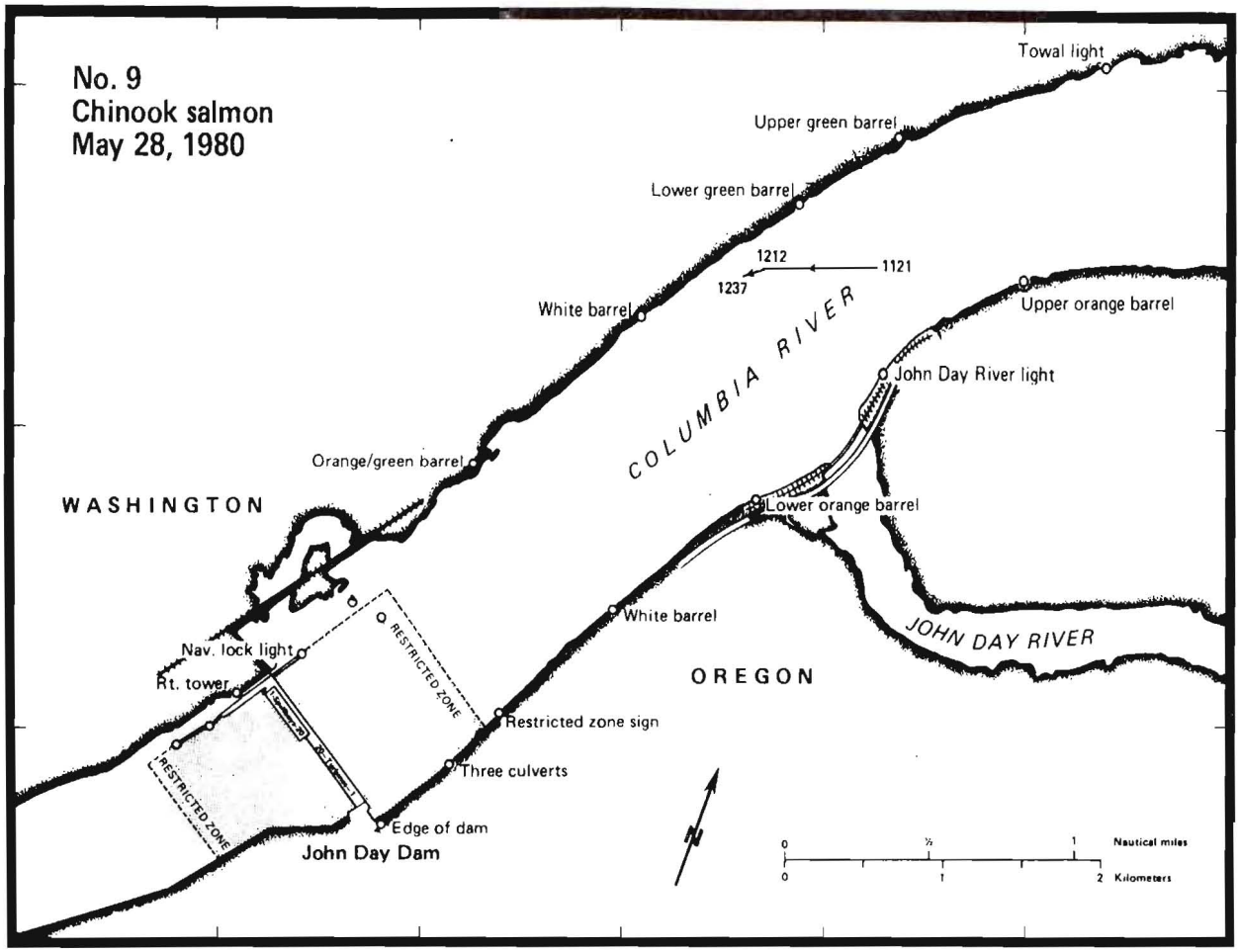
Fish Number 7 Steelhead 205 mm 20 May 1980

Weather windy. After testing two tags in the morning for signal strength at various depths, Fish Number 7 was tagged with the stronger of these two tags. The fish was taken from a gatewell at the dam and tagged 3 h before release. It was released at 1610 h at the outer edge of the forebay restricted area. We felt tracking might be possible on more occasions if short tracks were tried. The release was in the wind protected area approximately 1 km above the dam. The signal was lost briefly, shortly after release. After it was found, the tracking range was approximately 30 m. Near the end of the track the fish ran at the surface and tracking range increased to 70 m. The track, which had gone smoothly, ended abruptly when the fish was eaten by a seagull (Larus sp.). Using the receivers, the individual seagull was later singled out of a flock and followed for 1 km out of the restricted zone. Tracking range of the airborne tag was about 150 m.



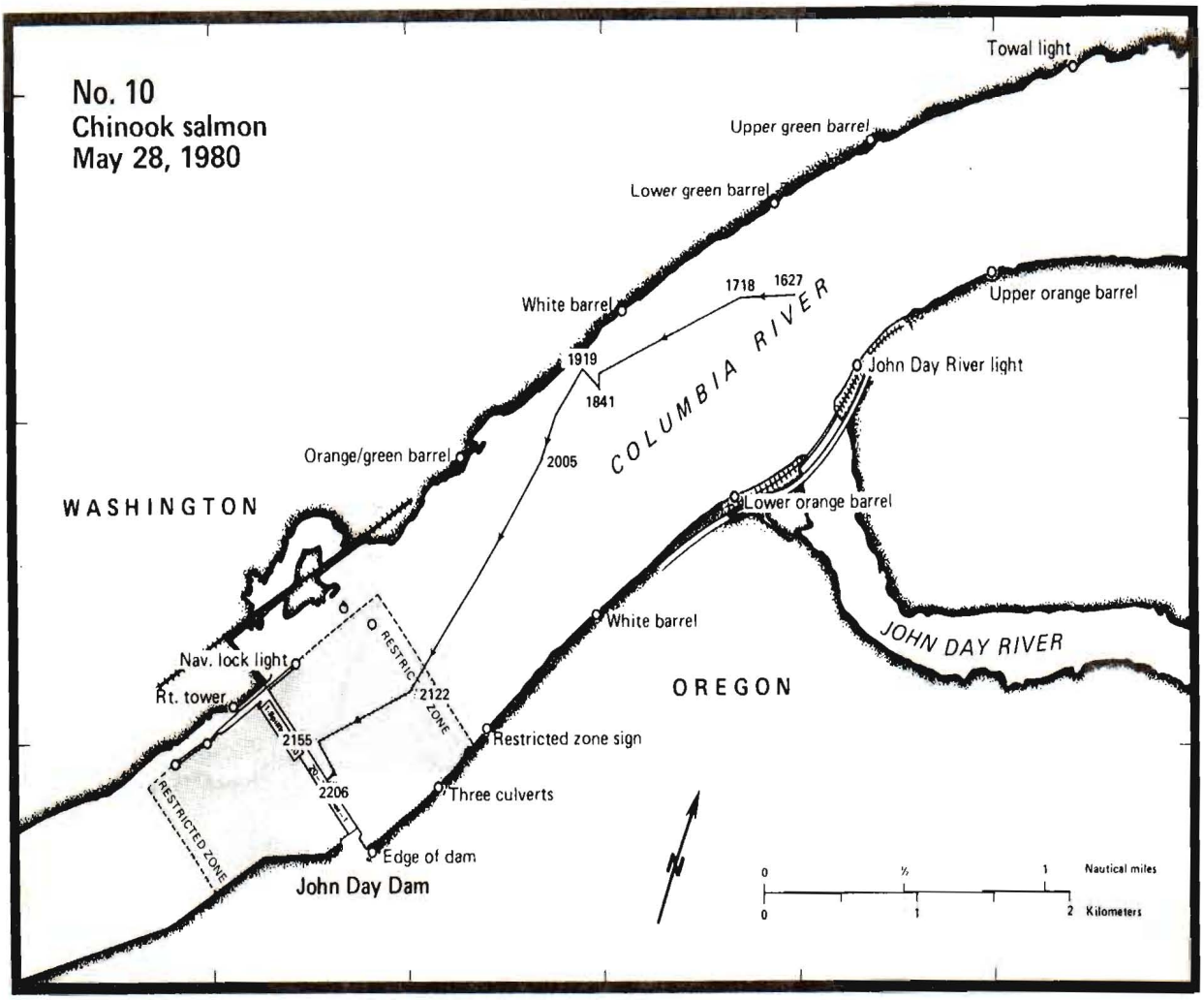
Fish Number 8 Chinook salmon 195 mm 21 May 1980

Fish Number 8 was another attempt to track during windy weather, and was released 0.4 km above the forebay restricted zone. The signal was weak and was lost several times within an hour.



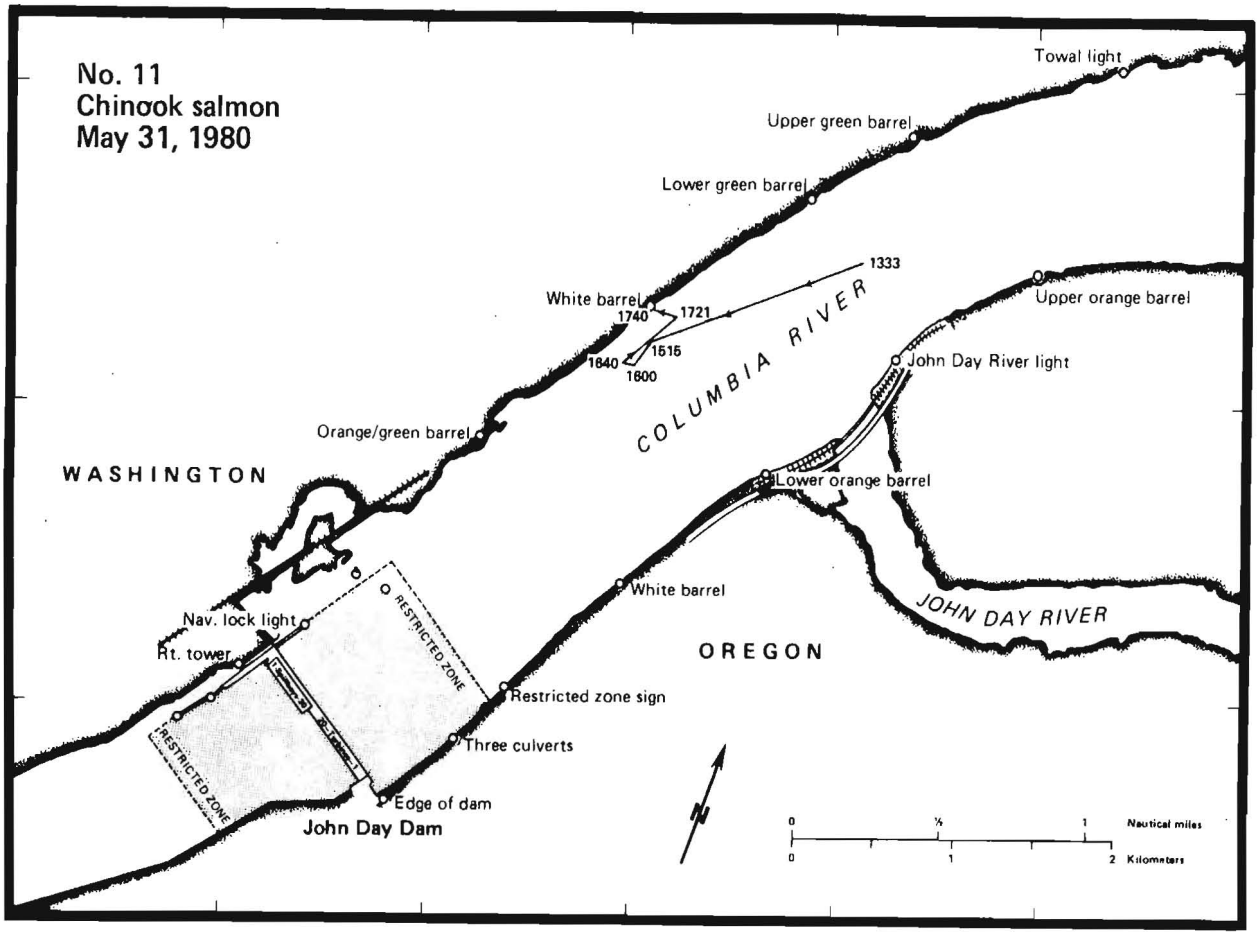
Fish Number 9 Chinook salmon 185 mm 28 May 1980

Although released further upstream, Fish Number 9 was similar to Fish Number 8 in that it was lost several times, and tracked for only a little over an hour. The fish was lost close to shore near an old submerged railroad bed. The weather was ideal.



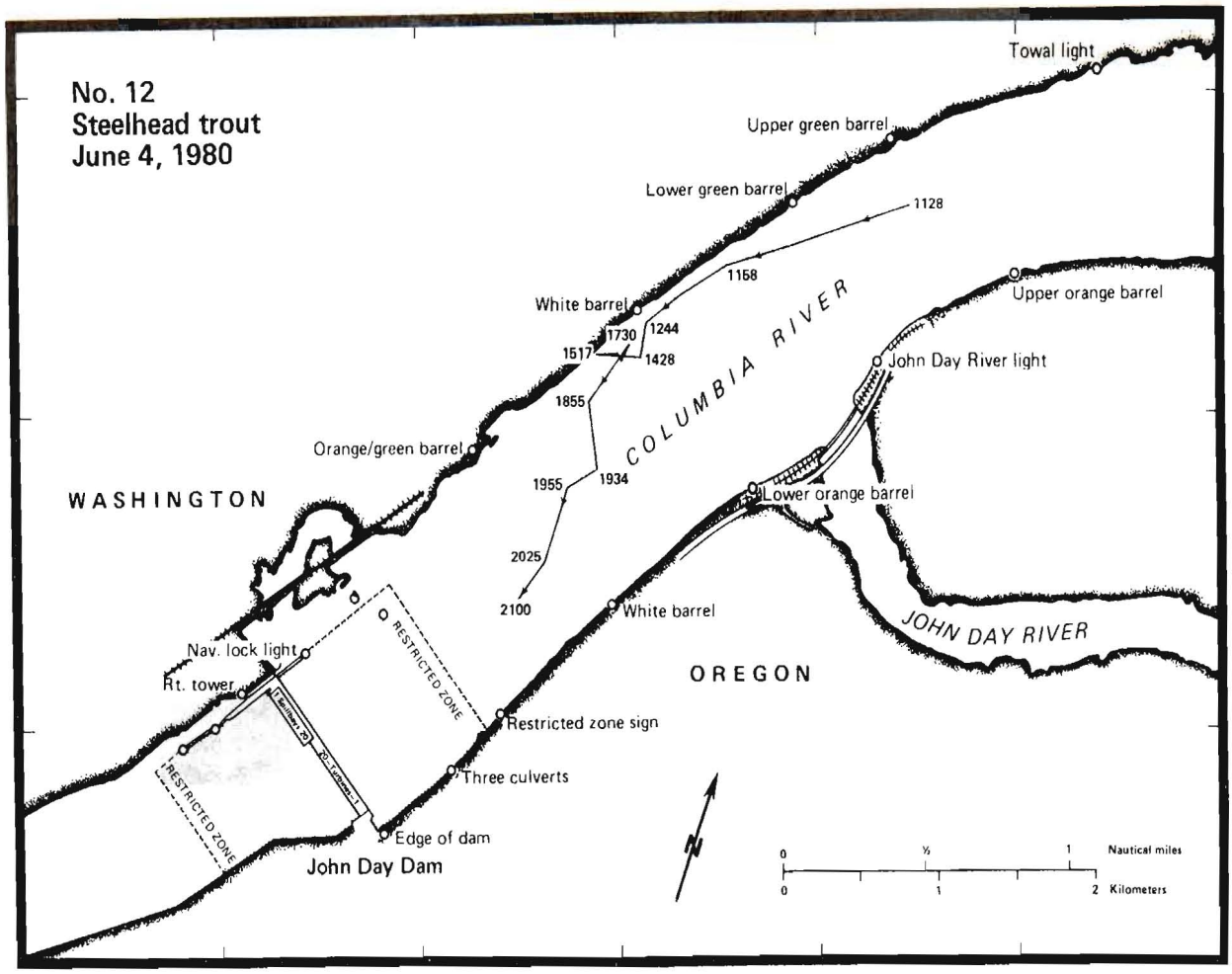
Fish Number 10 Chinook Salmon 185 mm 28 May 1980

The winds were calm. Fish Number 10 was the second tracking attempt of the day, and it turned out to be one of the best tracks of the season. It was released into the middle of the river above the John Day River at 1627 h. Even though the fish went near the old submerged railroad bed, which had caused problems before, signal contact was maintained. Movement was fast until the fish got in close to the Washington shore near the white marker barrel where it meandered until sunset (similar to Fish Number 3). At this point the fish started to move again, but instead of going all the way across to the Oregon side, it seemed to be affected by the 75 kcfs spill and headed for Spillway 20. At 2155 h it made a dramatic directional change and went into turbine Unit 12-C at 2206 h. The fish was subsequently located in Gatewell 12-C, where it stayed at least until the tag life expired.



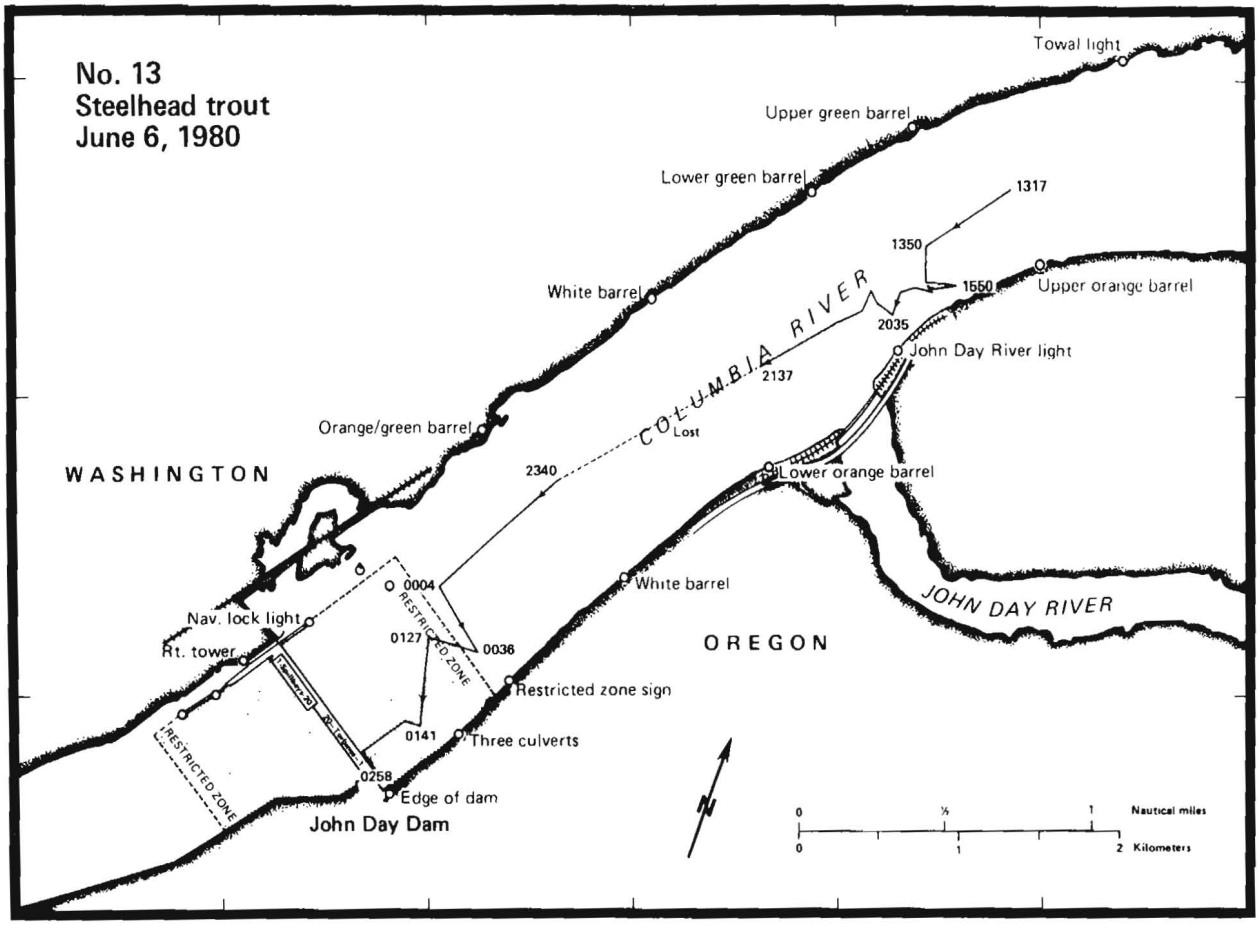
Fish Number 11 Chinook salmon 185 mm 31 May 1980

Weather overcast with increasing winds. Fish Number 11 was released in the same spot as Number 10 and started following the same path. It was lost for over an hour and finally relocated by going to the "meander" spot and searching along the Washington shore. Tracking continued for awhile, but both boats were taking some water and when contact was lost, the track was terminated after a short search.



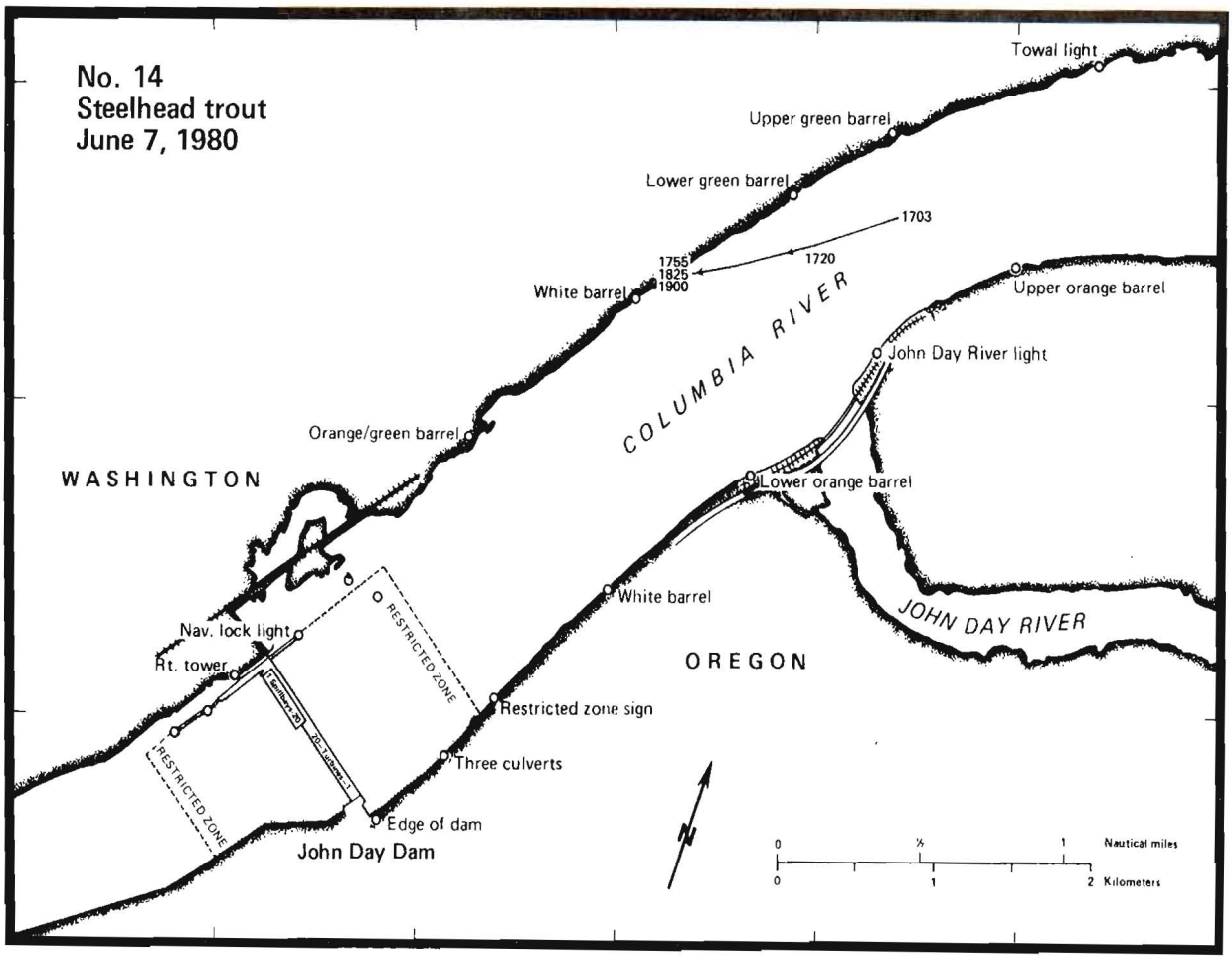
Fish Number 12 Steelhead 200 mm 4 June 1980

This tag gave a stronger signal and a very good track until it was lost as it approached the dam. The path was the traditional "outside of bend, meander til sunset, cross river and head for the dam." The signal was lost briefly during the day (1517-1730). The final signal loss was sudden and simultaneous on both receivers, which led us to believe the fish was eaten by a predator. Even when moderate winds were encountered this track went well.



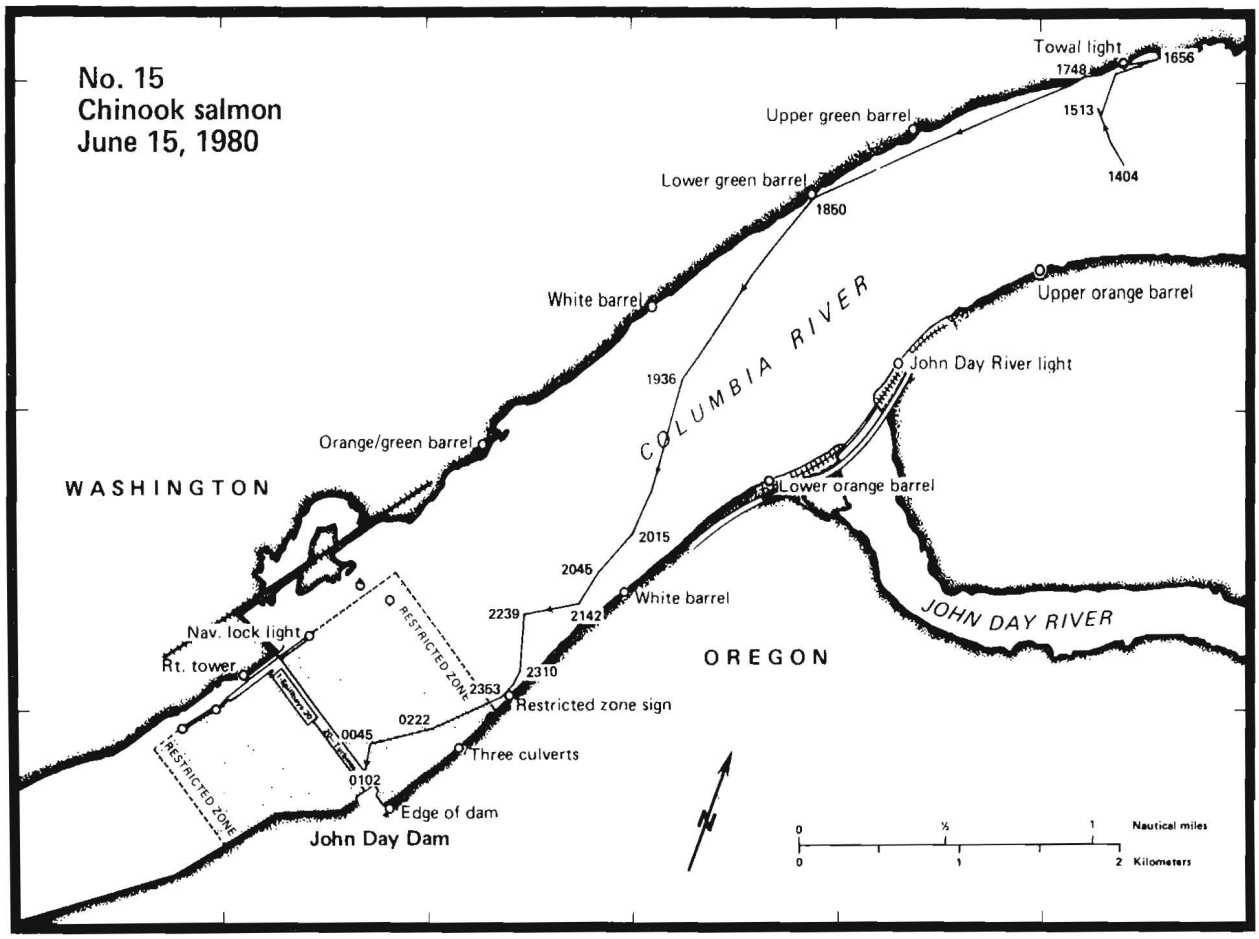
Fish Number 13 Steelhead 205 mm 6 June 1980

The weather was overcast during the day with evening thunderstorms. Fish Number 13 was released at 1317 h into the middle of the river below Towal and was an unusual track. From the same release point as Fish Number 3, this fish went downstream and then to the Oregon shore rather than with the current to the Washington shore. It meandered for about 6 h upstream of the John Day River mouth, after which movement was steady downstream to the restricted area. This fish moved slower than the average through the restricted zone and did not follow a straight path. Over 30 min were spent at the face of the dam with the fish sounding at three different turbine units (4, 3 and 1) before finally going through Unit 1-B at 0258 h.



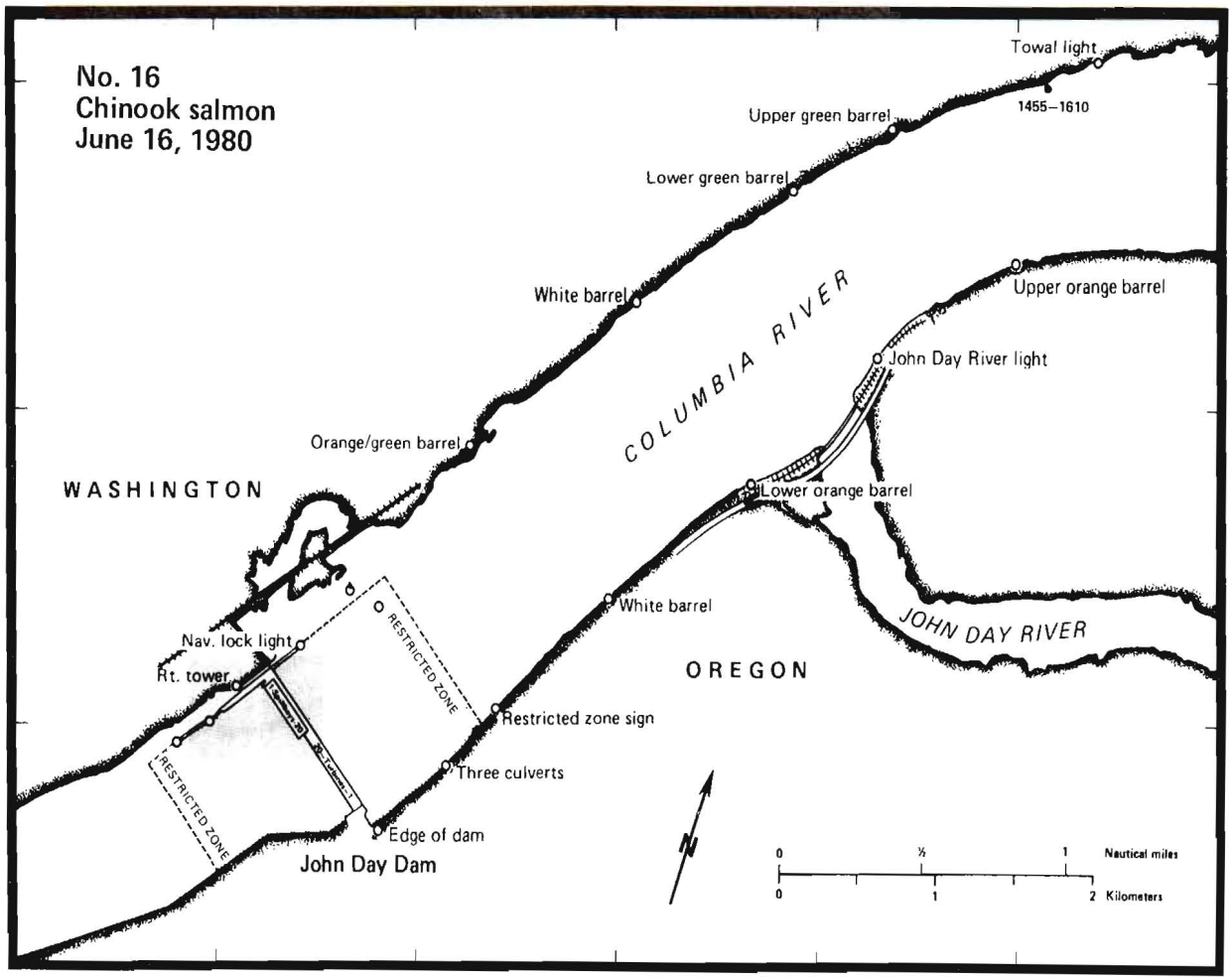
Fish Number 14 Steelhead 225 mm 7 June 1980

The effect of current on fish was emphasized on this track. There was no wind when Fish Number 14 was released at 1703 h, and the boat and the fish moved with the current until they were near the shore, 0.4 km from the Washington white barrel. The fish stayed in this spot 1-1/2 h until mechanical problems with the boat forced termination of the track.



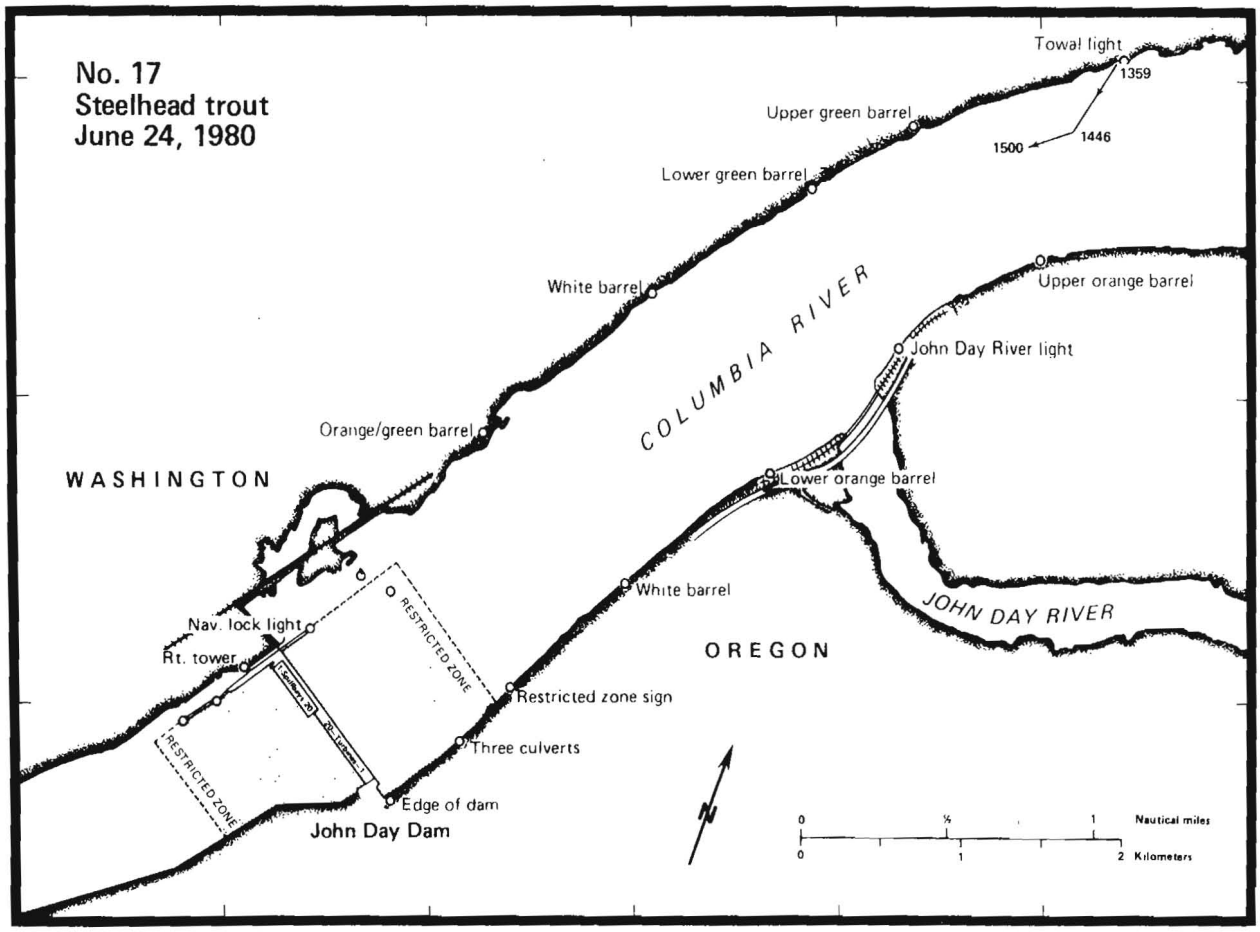
Fish Number 15 Chinook salmon 180 mm 15 June 1980

This track showed slow but steady movement over the entire route. The fish went straight into the Washington shore from the release site, made a quick meander at Towal, followed the shoreline downstream, made the cut across the river slightly upstream of the normal, moved through the second half of the restricted zone very fast, and passed through turbine Unit 3-A at 0102 h the morning of the 16th.



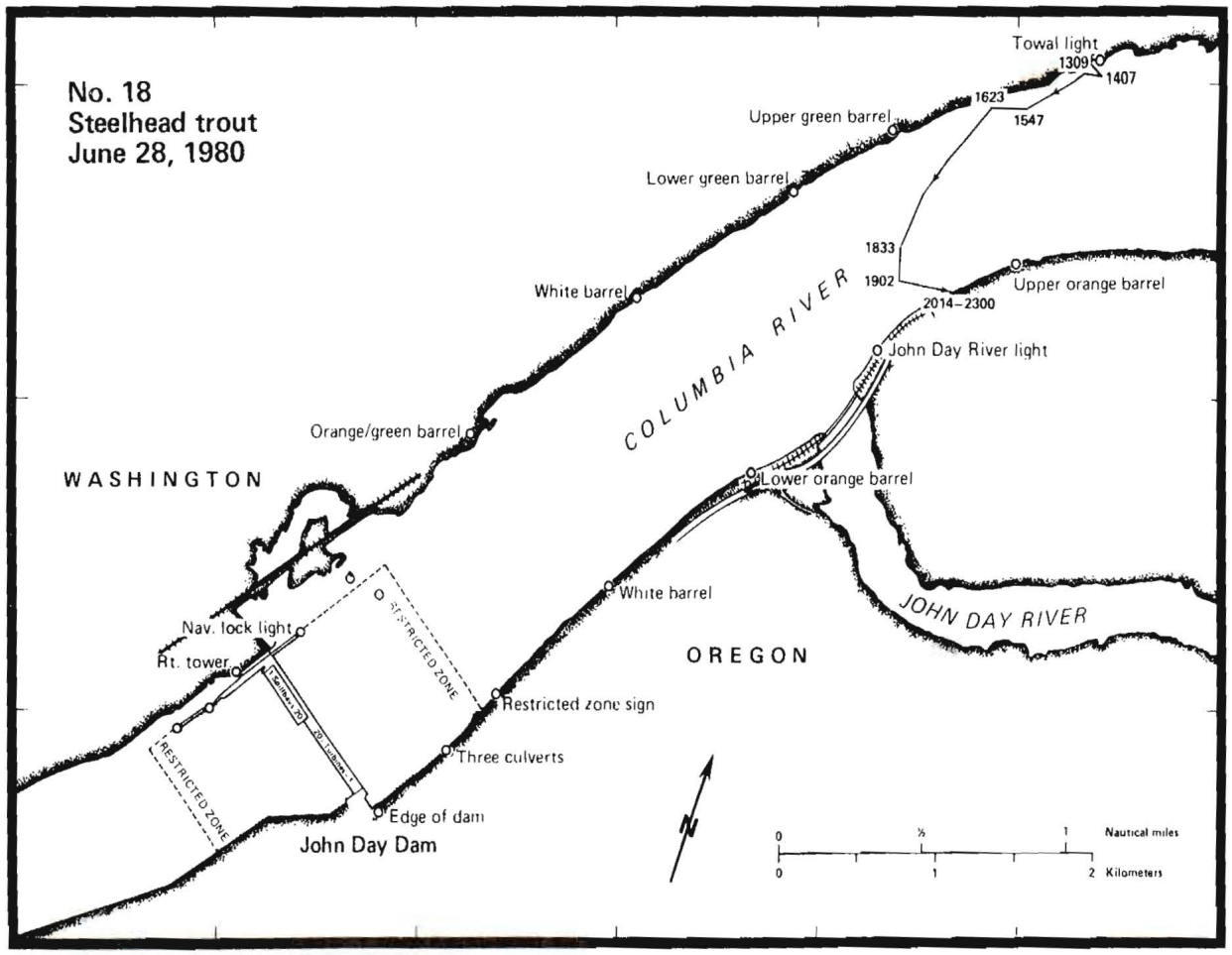
Fish Number 16 Chinook salmon 185 mm 16 June 1980

The same general release site had been used up to this point. To test whether the migrational pattern would be affected by changing release site, the fish was released into 0.2 meter of water in a small cove on the Washington shore. The weather was calm at release (1455) but picked up so fast that the track was terminated (1610).



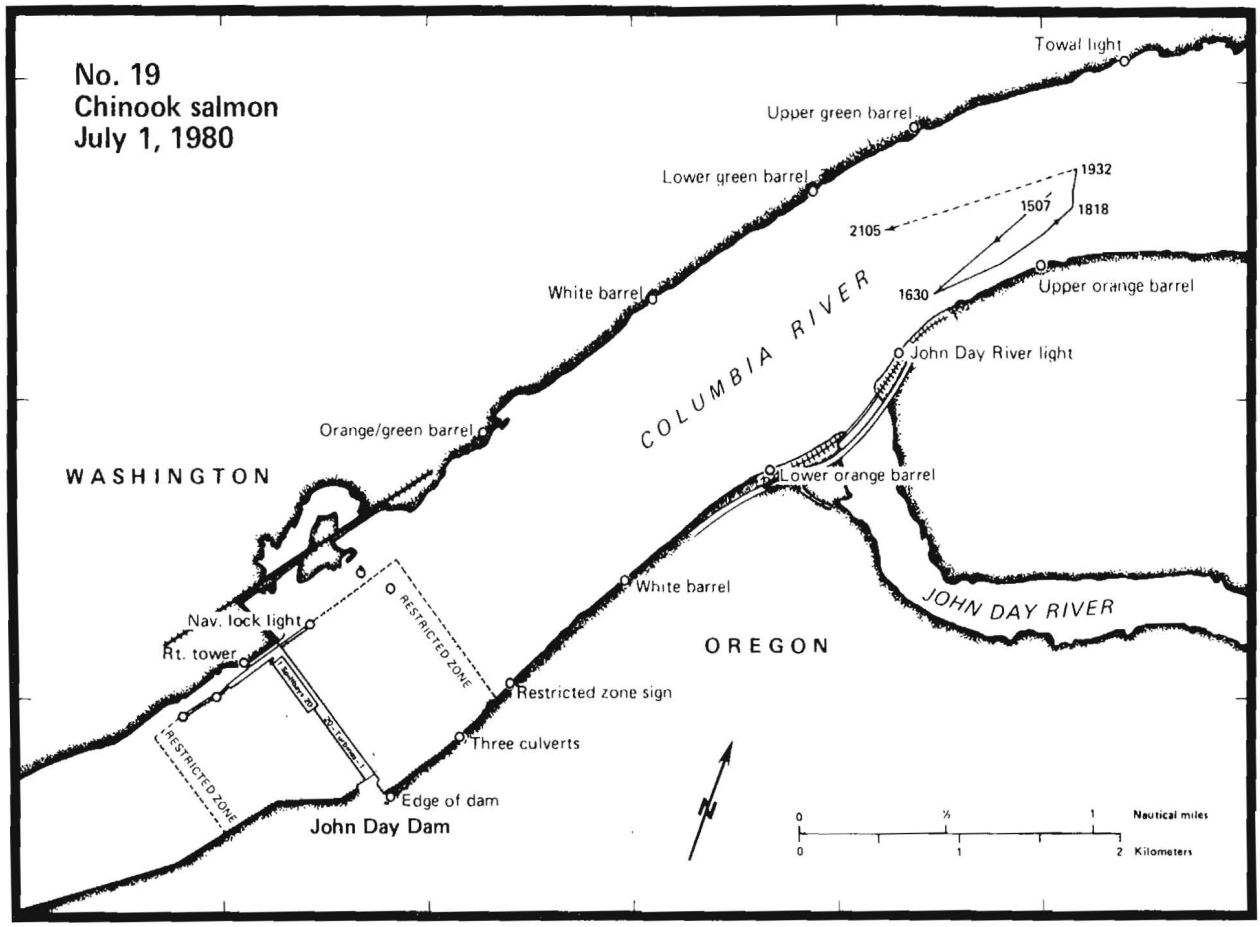
Fish Number 17 Steelhead 195 mm 24 June 1980

The inshore Washington release site was tried again, with a newly modified tag. Tracking range proved to be 135 m, a great improvement. The fish moved immediately to deeper water and was soon lost.



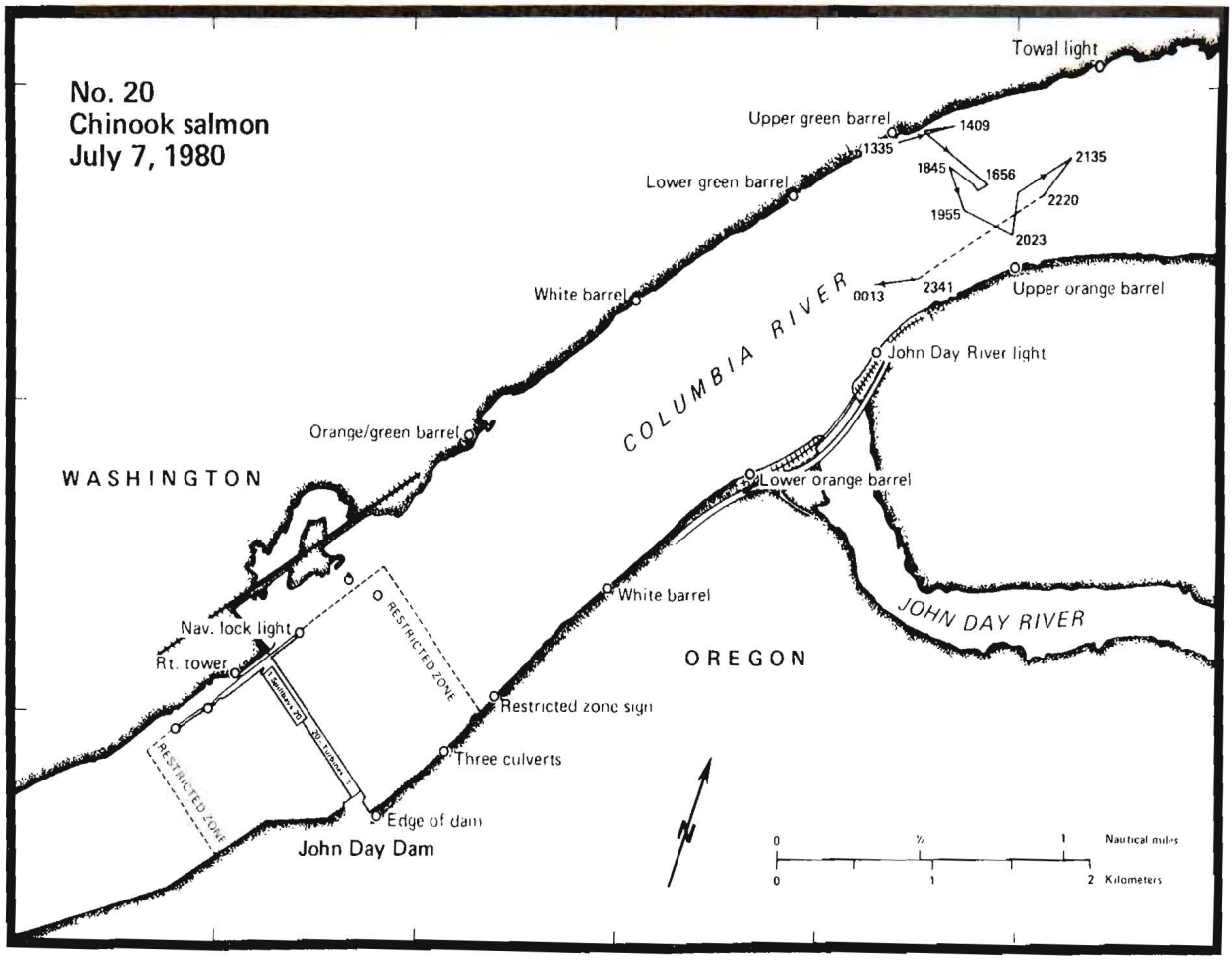
Fish Number 18 Steelhead 205 mm 28 June 1980

Once again the inshore Washington release site was used. The fish stayed in the release area for a couple of hours, then started downstream and across. The fish reached the Oregon shore above the John Day River and stayed in the same exact spot until tracking was terminated due to weather 3 h later. The possibility existed that this fish died or was eaten by a predator. The next morning, the signal could not be found.



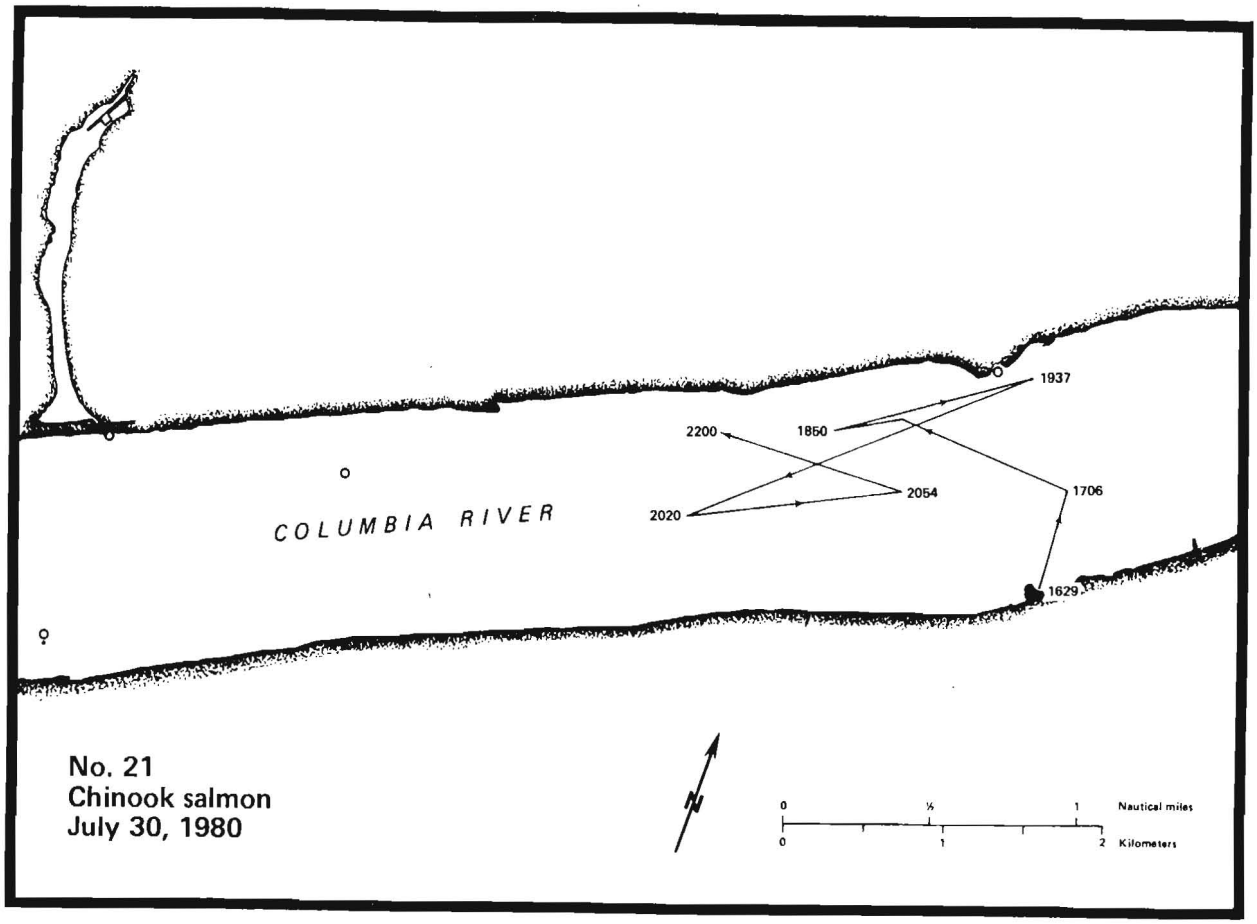
Fish Number 19 Chinook salmon 149 mm 1 July 1980

This was the smallest fish to date. It was acclimated 3-4 h in an effort to offset the effects of the tag weight on the small fish. The fish appeared to be in excellent condition and fully compensated when released. It was lost several times before the final loss and did not make much progress towards the dam.



Fish Number 20 Chinook salmon 195 mm 7 July 1980

Release was made at the Washington shore and from there the fish wandered extensively, being lost many times in 11 h. Passing trains appeared to cause this fish to sound. At this time it was decided to utilize smaller fish as larger fish did not seem to be actively migrating.



Fish Number 21 Chinook salmon 143 mm 30 July 1980

This fall chinook salmon smolt was the smallest radio tagged fish tracked. Holding time after tagging was slightly longer (6 h) than for the other tagged fish. It was released with a group of branded fish at Blalock, Oregon (RKm 373) to test the behavior of the fish used to evaluate the efficiency of the collection gear at John Day Dam. The 6 h track that followed showed the radio-tagged fish did not stay in the release area nor did it move into another shallow area where predators are expected to be a problem. It moved directly out to the middle of the river, downstream to the Washington shore, then randomly up and down the Washington half of the river.

APPENDIX E

DAILY OPERATION AND CATCH DATA FOR AIRLIFT PUMP SYSTEMS AT JOHN DAY DAM, 1980

ıdix Table E1.--"J" airlift pump catches of juvenile salmonids at John Day Dam, Unit 5, ›ring 1980.

e	Hours fished	Day-night	Fore-bay elev.	Air delivery cfm	Air delivery psi	Orifice Depth ft	Orifice Direction	Orifice Location	Orifice Light	Catch Chinook "0" "1"	Catch Steelhead	Catch Coho	Catch Sockeye	Remarks
		1/												
28	5.7	D	262.7				North	N.E.Corner	Off	34 127	119			Variable Oper.
29	4.0	D	263.9				"	"		17 124	131			
30	2.1	D	263.9			10	"	"		10 49	30			
30	2.75	D	263.8			8	"	"		4 33	26			
30	1.5	D	263.7			6	"	"		3 12	12			
1	1.5	D	263.3			6	"	"		1	6			
1	1.0	D	263.1			8.5	"	"	On	17 8	11			
1	9.0	D	263.2			8	"	"		36 246	273			
1	1.5	N	263.4			8.5	"	"		79 76	87			
1	1.0	N	263.4			8-9	"	"		24 52	68			
-2	6.4	N	263.3	100	12	8	"	"		57 170	157			Variable Oper.
2	5	D	263.2	100	12	8	"	"		7 52	20			
2	1.25	D	263.2	50		8	"	"		1	1			
3	3.5	D	262.7	100	11-12	8	East	"		3 126	139	1	1	
4	5.6	D	264.3	100	11-12.5	8	"	"	On	12 83	211		4	
4	1.2	D	264.4	100	11	8	"	"	On	1 33	38		1	
5	12.1	D	264.5	100	12	7.5	"	"	On	6 184	185		1	
-6	8.1	N	264.5			7.5	"	"	On	18 218	263	1	7	
6	2	D	264.5			7.5	"	"	On	2 18	39		1	
6	2	D	Compressor quit; actual pumping time not known							24	9			
6	7.2	D	265			6.5	East	N.E.Corner	On	3				
-7	5.7	N	265			6.5	"	"	On	8 72	39		7	
7	7.7	D	265			6.5	"	Mid-Up Stream	On	4 1				
-8	9.1	N	265			6.5	"	"	On	19 119	42		9	
8	2.2	D	265			6.5	"	"	On	5 2	2			
8	9.7	D	264.2	85	12	1.5	"	N.E.Corner	Off					
-9	7.2	N	264.2	110	14	1.5	"	"	On	5 80	41	1	6	
9	1.5	D	264.25			1.5	"	"	On	1	2		1	
9	13.3	D	264.25			1.5	"	"	Off	37	12		1	
9	1.75	N	264.5			1.5	"	"	Off	1 7	1		1	
.0	6.8	N	263.8			1	"	"	On	9 138	75		22	
.0	3	D	264			1	"	"	On	20	8			
0	2	D	264			1.5	"	"	Off	4 46	78			
0	1.5	D	264			2.5	"	"	Off					

ndix Table E1.--Continued.

e	Hours fished	Day-night	Fore-bay elev.	Air delivery cfm	Air delivery psi	Orifice Depth ft	Orifice Direction	Orifice Location	Orifice Light	Catch Chinook "0"	Catch Chinook "1"	Catch Steelhead	Catch Coho	Catch Sockeye	Remarks
		1/													
10	9	D	264.5	120	12	1	East	N.E.Corner	Off			3			
11	1.9	N	264.5			1	"	"	Off	1	9	2		1	
11	3	N	264			1	"	"	On	2	40	17		6	
11	3	N	263.9			.5	"	"	On	1	11	6		5	
11	4.8	D	263.5			.5	"	"	On		4			2	
11	5.6	D	262.8			6.5	"	"	On	4	51	6		2	
12	1.2	N	261.7			5.75	"	"	On	3	16	9	1	17	
12	6.1	N	262			5.5	"	"	On	4	104	53		17	
12	14.4	D	262			5.5	"	"	On	3	65	27			
13	1.8	N	261.4	125		5	"	"	On	4	17	12	2	25	
13	1.1	N	261.6			7	"	"	On	3	44	26	2	3	
13	3.5	N	261.6			5.5	"	"	On	1	56	30		2	
13	1.6	N	262			6.5	"	"	On	2	20	25		4	
13	1.4	D	262			6.5	"	"	On	2	8	10	1	1	
13	8.3	D	262			5.5	"	"	On	3	58	36	1	1	
13	3.2	D	262	125		7	"	"	On & Off	3	50	30		3	
13	3.4	N	262	130		7	"	"	On	8	146	136	2	34	
14	4.5	N	261.5			6.5	"	"	On	5	138	67	3	10	
14	14.5	D		120-125		6	"	"	On	10	174	177	3	14	
15	6.9	N	260.9	125-150		6	"	"	On	15	366	398	6	77	
15	1.5	N	262.4	" "		7	"	"	On	3	41	84		13	
15	8.0	D	261.5	130		7	"	"	On	4	45	42	1	4	
16	5.1	N	261.7	130	13-14	7	"	"	On	5	67	38		7	
16	1.4	N	262.4	150	14	6	"	"	On		7	8		Turbine shut-down	
16	1.5	N	262.6	150	15	6.5	"	"	On		24	12		3	2350-0330
16	2.25	D	262.5	150	15	6	"	"	On		4	2			
16	7.4	D	262.5	125	11	1.5	"	"	On		4	2	1		
17	1.7	N	262.5	125	11	1.5	"	"	On	7	18	6	0	1	
17	7.7	N	261.9	140-150		1	"	"	On	1	180	65	1	31	
17	9.0	D	262.5	70-150											
					13-15	1	"	"	On & Off	2	36	10		2	
18	8.2	N	262.5	70	15	1	"	"	On	5	40	43	2	20	
18	3.3	D	262.5	70	15	1	"	"	On	1	3	3			
18	8.25	D	262.5	125	11	1	"	"	On	1	57	44		1	
18	3.0	D	262.5	125	12	1	"	"	Off		7	3			
19	7.9	N	262.5	125-130	12	1	"	"	On	17	194	70	2	30	
19	8.9	D	261.7	130	12-13	1	"	"	On	25	26				
20	7.6	N	260.7	135	12	.5	"	"	On	11	78	25	3	14	

Appendix Table E1.--Continued.

Date	Hours fished	Day-night	Fore-bay elev.	Air delivery cfm	Air delivery psi	Orifice Depth ft	Orifice Direction	Orifice Location	Orifice Light	Catch Chinook "0"	Catch Chinook "1"	Catch Steelhead	Catch Coho	Catch Sockeye	Remarks
		1/													
May 20	3.1	D	261.5				East	N.E.Corner	On	1	14	19			
20-21	7.5	N	260.8	130	12	.5	"	"	On	13	65	41	2	28	
21	6.2	D	261.2	125	12	.5	"	"	On	3	13	33			
21	.8	D	260.7	125		1.	"	"	On		9	5			
21-22	7.6	N	260.8	140-145	14	1.5	"	"	On	6	224	266	3	30	
22	2.5	D	260.6			1.5	"	"	On		29	39	1	2	
22	8.3	D	260.1	125	25.5	7.5	"	"	On	2					
22-23	4.5	N	260.2	140	14	7.5	"	"	On	2	29	17	1	1	
22-23	1.0	N	261.	150	14	8.	"	"	On		74	21	5	3	
22-23	1.3	N	261.4	140	14	8.5	"	"	On		3	4	1	1	
23	7.7	D	261.5	120-125	13-14	8.5	"	"	On	1	23	9	2	1	
23-24	3.	N	261.5	125-140	13-14	7.5	"	"	On	22	195	63	1	22	
23-24	1.6	N	262.	130	12	8.	"	"	On	3	15	2		3	
23-24	2.3	N	262.	140	14	6.	"	"	On		56	12		3	
24	2.1	D	262.2	125	14	6.	"	"	On		4	2			
24	5.0	D	262.2	125	14	7.	"	"	On	2	21	6	1	2	
24-25	7.6	N	262.	140	13-14	7.	"	"	On	9	207	65	8	34	
25	6.2	D	262.6	120	14	7.	"	"	On		89	28	8	1	
25-26	3.	N	261.3	130-140	14	6.5	"	"	On	1	76	37	6	18	
25-26	1.6	N	261.6	125	13	6.75	"	"	On	5	147	28	18	31	
25-26	2.9	N	261.8	125-130	13	7.	"	"	On	2	118	50	15	20	
26	7.7	D	261.9	130		6.	"	"	Off		99	31	6	5	
26-27	7.8	N	261.5	120-130	13	6.	"	"	On		97	38	10	16	
27	1.7	D	263.	130	14	6.	"	"	Off	1	17	7		1	
27	3.75	D	262.8	125	12	7.5	N.E.	"	On	1	1			1	
27-28	7.7	N	262.6	125-140	13-14	7.5	"	"	On	16	84	38	8	17	
28	1.7	D	262.5	140	14	7.	"	"	On		1	2			
28	5.8	D	262.7	140	13	7.5	"	"	On		28	3	2	1	
28	5.6	D	263.	130	13	8.	"	"	On	2	18	5	2	2	
28-29	7.2	N	262.6	130-140	13	8.	"	"	On	13	92	37	28	27	
29	2.3	D	263.2	130	13	8.	"	"	On	2	11	6	3	2	
29	8.5	D	263.	145-150	13-14	8.	South	Under f.pen	On	3	2				
29-30	7.7	N	263.	130-140	13	8.	"	"	On	8	42	49	18	16	
30	2.2	D	263.2			8.	"	"	On		5	6	3		
30	5.	D	262.6	150	13	7.5	"	"	On	4	6	4	3		
30-31	7.7	N	261.4	130-140	12	8	"	"	On	15	60	64	19	25	
31	8.	D	261.2	125	11.5-13.5	7.5	"	"	On	5	11	2	9		

Appendix Table E1.--Continued.

Date	Hours fished	Day-night 1/	Fore-bay elev.	Air delivery cfm	Air delivery psi	Orifice Depth ft	Orifice Direction	Orifice Location	Orifice Light	Catch Chinook "0"	Catch Chinook "1"	Catch Steelhead	Catch Coho	Catch Sockeye	Remarks
r 31-1	7.8	N	260.7	130-135	14	8.	South	Under f-pen	Off	5	12	20	7	10	
ne 1	5.2	D	261.1	130	13.5	8.	"	"	On	1		5	4		
1-2	7.1	N	261.1	145-150	14-15.5	8.	"	"	On	13	98	20	24	14	
2	6.2	D	261.7	130	13	8.	"	"	On		3	6	5		Unit not fishe for one day.
3	1.7	D	261.4			8.	"	"	On		1				
3-4	7.5	N	262.8			7.	"	"	On	19	8	14	6	5	
4	5.8	D	262.8	125	9	7.	"	"	On	1			2		
4-5	1.7	N				7-8	"	"	On						
5	6.6	D	263	140	13	7.5	"	"	On	4	126	18	44	9	
5-6	7.5	N	262.6	135-140	13-14	7.	"	"	On	57	51	45	8	7	
6	3.4	D	263.2	140	14.5	8.	"	"	On	1	68	3	9	2	
6-7	3.8	N	263.2	130	14	8.	"	"	On		9	5	3	2	
6-7	7.5	N	263.2	135-140	12-14	7.	"	"	On	86	39	28	14	6	
7	4.7	D	262.8	140-150	12.5-15.5	8.	"	"	On	1	131	21	31	9	
9-10	7.7	N	262.8	135-140	14-15	7.	"	"	On	119	56	30	16	17	
10	2.2	D	262.9	130	12	8.	"	"	On	6	19	1		1	
10-11	7.6	N	263.			7.	Down	East of pen	On	84	5	13	4	1	
11	7.5	D	263.			8.	"	"	On	14	3	1	9	1	
11-12	7.5	N	262.4			8.	"	"	On	84		5	3	1	
12	6.8	D	263.			7.	"	"	On	2	14		3		
12-13	7.7	N	262.3			7.	"	"	On	22	3	9	4	3	

/ D = Day; N = Night

Appendix Table E2.--"Funnel" airlift pump catches of juvenile salmonids at John Day Dam, Unit 5, Spring 1980.

Date	Hours fished	Day-night	Fore-bay elev.	Air delivery cfm	Air delivery psi	Pump elev.	Total lift (ft)	Orifice light	Catch: Chinook "0"	Catch: Chinook "1"	Catch: Steelhead	Catch: Coho	Catch: Sockeye	Remarks
		1/		2/		3/	4/							
May 2	3.0	D	263.1	100-135	30-34	170'	25.9	Off	4	27	109	1	1	Testing equipment
														Variable operation
5	11.0	D	264.5	100	30	175'	24.5	On	11	87	102		7	" "
5-6	6.4	N	264.5	100	30	175'	24.5	On	5	98	145		2	
6	13.6	D	264.5	100	30	175'	24.5	On	15	18	22			
6-7	8.3	N	265.0	100	30	192'	24.0	On	18	309	266		8	
7	7.1	D	265.0	100-110	30	190'	3.0	On	9	6	6		2	
7-8	7.75	N	265.0	100	30	190'	3.0	Off	12	283	259		1	
8	2.5	D	265.0	100	30	190'	3.0	Off	3	5	8		Ø	
8	4.	D	264.2	100	30	170'	3.0	On	6	16	22		7	
8-9	7.7	N	264.2	100	30	170	3.0	On	4	208	268		14	
9	1.5	D	264.25	100	30	170'	3.0	On		3				
9	3.2	D	264.5	100	30	211'	3.0	On	4		6			
9-10	6.2	N	264.	100	30	211'	3.0	On	6	224	23			
10	9.4	D	264.	100	30	211'	3.0	On	2	7	18		4	
10-11	8.1	N	264.	100	30	211'	3.0	On	3	77	84		7	
11	13.	D	262.8	100	30	211'	3.0	On/Off	11	9	15		5	
11-12	3.7	N	262.	100	30	208'	3.0	Off	2	140	170	2	21	
11-12	4.4	N	262.	100	30	210'	3.0	On	1	85	168		18	
12	1.5	D	262.	100	30	211'	3.0	On		4	20		1	
12	1.25	D	262	100	30	207'	3.0	Off	3		4		2	
12	5.7	D	261.4	100	30	170'	3.0	On		1	7		7	
12-13	8.1	N	261.6	100	30	170	3.0	On	7	234	563	6	42	
13	4.4	D	262.	100	30	170'	3.0	On	1	1	28			
14	6.5	D	261.5	50-75	16-26	190'	3.0	On	6	2	19		5	
14-15	7.2	N	260.9	60-75	18-24	190'	3.0	On	7	288	482	6	50	
15	12.2	D	262.	80	24	190'	3.0	On	8	15	71		9	
15-16	3.6	N	262.	65-80	24-26	190'	3.0	On	3	168	193	2	19	
16	1.4	D	262.6	70	26	190'	3.0	On			10			
16	5.3	D	262.3	60-70	17	210'	3.0	On		2	3		3	
16-17	8.	N	261.9	65-80	18	210'	3.0	On	2	97	153	1	13	
17	1.7	D	261.9	70	18	210'	3.0	On			4			
17	5.8	D	262.5	135	12	210'	3.0	Off	2	10	6	1		
17-18	8.	N	262.2	130	12	210'	3.0	On	5	48	81	2	5	
18	11.5	D	262.5	75-130	12-16	210'	3.0	On	2	3	12	1		
18-19	8.0	N	262.5	75	12-16	210'	3.0	On	2	31	74	1	6	
19	6.	D	262.5	75	17	210'	3.0	On	2		5			

pendix Table E2.--Continued.

ate	Hours fished	Day-night	Fore-bay elev.	Air delivery cfm	Air delivery psi	Pump elev.	Total lift (ft)	Orifice light	Catch: Chinook "0"	Catch: Chinook "1"	Catch: Steelhead	Catch: Coho	Catch: Sockeye	Remarks
		1/			2/	3/	4/							
19-20	6.4	N	260.7	80	16	210'	3.0	On	2	72	58		2	
20	3.	D	261.5	80	16	190'	3.0	On	1		2		1	
20-21	7.5	N	261.7	80	25	190'	3.0	On	1	187	202	1	12	
21	6.2	D	261.5	75	25	190'	3.0	On	1	2	3			
21-22	7.4	N	260.8	75	26	190'	3.0	On	2	266	224	11	27	
22	8.3	D	260.1	75	25	190'	3.0	On	2	5	18		2	
22-23	7.0	N	261.	75	14-26	190'	3.0	On		90	60	3	24	
23	5.8	D	261.5	70	22	190'	3.0	Off		2	7	1	1	
23-24	7.5	N	261.5	75	26	190'	3.0	On	1	260	87	3	22	
24	6.25	D	262.2	60	26	190'	3.0	On	1	3	7		1	
24-25	7.7	N	262.0	75	26	190'	3.0	On	1	274	158	12	23	
25	2.9	D	262.6	75	26	190'	3.0	On	1	5		1		
25-26	7.7	N	261.6	75	26	190'	3.0	On	5	309	140	24	19	
26	6.3	D	261.9	70		190'	3.0	Off	1	3	17		10	
26-27	7.9	N	262.2	70	26	190'	3.0	On	12	134	52	5	28	
27	5.8	D	262.8	75	25	190'	3.0	Off	5	6	3		8	
27-28	7.9	N	262.6	75	25	190	3.0	On	8	144	78	23	27	
28	3.5	D	262.5	75	32	190'	3.0	On	7		1		1	
28	7.1	D	262.7	75	26	170'	3.0	On/Off	1	1	2	1	2	
28-29	7.0	N	262.6	70-75	34	170'	3.0	On	2	47	43	10	13	
29	15.6	D	263.0	75	34	170'	3.0	On	9	5	13		2	
29-30	7.8	N	263.0	75	34	170'	3.0	On	9	54	80	19	19	
30	4.75	D	263.2	75	33	170'	3.0	On	1		3			
30	3.75	D	262.	75	24	190'	3.0				3			
30-31	8.0	N	261.	75	24	190'	3.0	On	5	65	116	28	23	
31	1.5	D	261	75	25	190'	3.0	On		1	6			
31-6/1	7.9	N	260.7	75	27	190'	3.0	Off	5	48	45	25	2	
e 1	5.6	D	261.1	75	27	190'	19.9	On		4	3	2		
1-2	7.3	N	261.1	75	26	190'	19.9	On	4	29	24	18	3	2nd aerator installed
2-3	7.5	N	261.4	150 75	23 30	186'	19.6	On	13	17	18	10	2	
3	6.75	D	261.4	150 75		186'	19.6	On		3	1			
3-4	7.7	N	262.2	150 75	21 30	186'	18.8	On	34	28	26	23	10	
4	2.2	D	262.8	150 75	21 30	186'	18.2	On	1		1			

ndix Table E2.--Continued.

e	Hours fished	Day-night	Fore-bay elev.	Air elivery cfm	Air elivery psi	Pump elev.	Total lift (ft)	Orifice light	Catch: Chinook "0"	Catch: Chinook "1"	Catch: Steelhead	Catch: Coho	Catch: Sockeye	Remarks
		1/		2/		3/	4/							
4	3.9	D	262.8	60	26	190'	18.2	On			2			Removed 2nd aerator
4	1.7	N	263	75	26	190'	18.0	On	Hyster malfunctioned - est. # fish 50 - 60.					
5	6.9	D	263.	75	27	190'	18.0	On	1	3	10	8	3	
-6	6.4	N	263.2	75	26	190'	17.8	On	7	1	5			
6	6.25	D	263.2	70	26	190'	17.8	On	1	5	4	2	2	
-7	7.3	N	263.2	75	26	190'	17.8	On	97	67	26	17	4	
9	3.4	D	262.9	75	26	190'	18.1	On		2				
0	7.7	N	262.8	75	27	190'	18.2	On	67	12	13	3	5	
0	3.9	D	262.9	75	26	190'	18.1	On		2	1			
1	7.3	N	262.4	150	27	186'	18.6	On	73	4	10	3		
				75	30									
1	7.5	D	263.	150-155	26	186'	22.5	On		1	2			
				85	29				Diesel air compressor not operable 38 hours.					
3	5.	D	263.2	175	22	186'	22.3	On						
				80	30				23		6	3	1	
4	7.7	N	263.2	150-175	22-26	186'	22.3	On	57	4	6			
				80	30									

1/ D=Day; N=Night.
2/ Two entries indicate upper and lower aerator.
3/ Elevation of bottom of funnel (feet above sealevel).
4/ Total lift (feet)=delivery elevation less gatewell water elevation.

Appendix Table E3.—Funnel airlift pump catches of juvenile salmonids at John Day Dam, Unit 5, Summer 1980.

Date	Hours fished	Day-night a/	Fore-bay elev. (ft)	Air delivery cfm b/	Air delivery psi b/	Pump elev. c/	Total lift (ft) d/	Orifice light	Catch e/	Remarks
July 9	2.0	N	267.0	170-65	26-32	188	18.5	On	55	Fishing 5-C, 2 aerators
	2.0	N	"	"	"	"	"	"	164	
10	2.0	N	267.3	"	"	"	18.2	"	163	
	2.0	N	"	"	"	"	"	"	124	
	3.5	D	267.0	170-60	"	"	18.5	"	75	
	6.5	D	267.3	"	24-30	"	18.2	"	3	
	2.0	N	267.5	"	27-30	"	18.0	"	34	
11	2.0	N	267.3	"	"	"	18.2	"	138	
	2.0	N	"	"	"	"	"	"	120	
	2.0	N	"	"	"	"	"	"	115	
	4.5	D	"	"	"	"	"	"	53	
	5.9	D	"	"	"	"	"	"	1	
14	2.0	N	267.1	150-60	24-32	188	18.4	Off	21	
15	2.0	N	"	"	"	"	"	"	36	
	2.0	N	"	"	"	"	"	"	45	
	2.0	N	"	"	"	"	"	"	34	
	2.0	N	267.7	"	"	"	17.8	On	33	
16	2.0	N	"	"	"	"	"	"	48	
	2.0	N	267.8	"	"	"	17.7	"	137	
	2.0	N	"	"	26-32	"	"	"	112	
17	0.25	D	366.9	"	"	188	18.6	"	87	Shifted airlift pump 5C to 5B
	0.2	D	"	"	"	"	"	"	9	
	0.2	D	"	"	"	"	"	"	3	
	0.2	D	"	"	"	"	"	"	1	
	0.2	D	"	"	"	"	"	"	0	
	0.2	D	"	"	"	"	"	"	0	
	0.2	D	"	"	"	"	"	"	0	
	0.2	D	"	"	"	"	"	"	0	
	0.2	D	"	"	"	"	"	"	0	
	0.2	D	"	"	"	"	"	"	0	
18	1.0	D	267.0	150-65	20-34	173	18.5	"	175	
	1.5	D	"	"	"	"	"	"	4	

Appendix Table E3.--Continued.

Date	Hours fished	Day night a/	Fore-bay elev. (ft)	Air delivery cfm b/	Air delivery psi b/	Pump elev. c/	Total lift (ft) d/	Orifice light	Catch e/	Remarks
July 21	1.1	D	267.5	200-65	24-36	173	18.0	On	253	
	2.25	D	267.0	"	"	"	18.5	"	0	
22	0.75	D	"	170-60	22-36	"	"	Off	305	
	0.75	D	"	"	"	"	"	"	7	
	0.75	D	"	"	"	"	"	"	6	
	0.75	D	"	"	"	"	"	On	11	
	0.6	D	"	"	"	"	"	"	11	
23	0.75	D	266.2	200-70	20-30	188	19.3	Off	143	
	0.75	D	"	"	"	"	"	"	6	
	0.75	D	"	"	"	"	"	"	1	
	0.25	D	"	"	"	"	"	On	0	
	0.25	D	"	"	"	"	"	Off	0	
	0.25	D	266.4	"	"	"	19.1	On	0	
	0.25	D	"	"	"	"	"	"	9	
24	1.0	D	266.6	200-75	17-25	199	18.9	"	90	
	1.0	D	"	"	"	"	"	"	3	
	1.0	D	"	"	"	"	"	"	13	
	1.0	D	"	230-90	14-24	"	"	"	21	
	1.0	D	266.0	"	"	"	19.5	"	17	
28	2.0	N	266.4	235-75	20-20	208	19.1	"	281	
29	2.0	N	"	"	"	"	"	"	352	
	2.0	N	"	"	"	"	"	"	428	
	2.0	N	"	"	"	"	"	"	261	
	1.0	D	266.5	"	"	"	19.0	"	4	
	2.0	N	267.0	210-75	18-28	"	18.5	"	103	
30	2.0	N	"	"	"	"	"	"	116	
	2.0	N	"	"	"	"	"	"	91	
	2.0	N	"	"	"	"	"	"	110	
	3.0	D	"	"	"	"	"	"	3	
	2.0	N	266.9	245-75	20-20	"	18.6	"	44	
31	2.0	N	"	"	"	"	"	"	45	
	2.0	N	"	"	"	"	"	"	42	
	2.0	N	"	"	"	"	"	"	35	
	3.5	D	"	"	"	"	"	"	2	
	2.0	N	"	240-80	"	"	"	"	93	

Appendix Table E3.--Continued.

Date	Hours fished	Day night a/	Fore-bay elev. (ft)	Air delivery cfm b/	Air delivery psi b/	Pump elev. c/	Total lift (ft) d/	Orifice light	Catch e/	Remarks
Aug 1	2.0	N	266.9	240-80	20-20	208	18.6	On	76	
	2.0	N	"	"	"	"	"	"	109	
	2.0	N	"	"	"	"	"	"	51	
	3.0	D	"	"	"	"	"	"	3	
	2.0	N	266.8	245-75	"	"	18.7	"	103	
2	2.0	N	"	"	"	"	"	"	108	
	2.0	N	"	"	"	"	"	"	183	
	2.0	N	"	"	"	"	"	"	119	
4	2.0	N	"	240-75	22-30	188	"	"	130	
5	2.0	N	"	"	"	"	"	"	106	
	2.0	N	"	"	"	"	"	"	125	
	2.0	N	"	"	"	"	"	"	128	
	1.5	D	"	"	"	"	"	"	5	
	2.0	N	"	"	"	"	"	"	158	
6	2.0	N	"	"	"	"	"	"	348	
	2.0	N	"	"	"	"	"	"	418	
	2.0	N	"	"	"	"	"	"	277	
7	2.0	N	266.2	240-80	20-30	"	19.3	"	30	
8	2.0	N	"	"	"	"	"	"	60	
	2.0	N	"	"	"	"	"	"	67	
	2.0	N	"	"	"	"	"	"	48	
11	2.0	N	266.0	"	20-20	208	19.5	"	48	
	2.0	N	"	"	"	"	"	"	63	
12	2.0	N	"	"	"	"	"	"	61	
	3.0	N	"	"	"	"	"	"	70	
	2.0	N	265.9	245-80	"	"	19.6	"	9	
	2.0	N	"	"	"	"	"	"	3	
13	2.0	N	"	"	"	"	"	"	11	
	3.0	N	"	"	"	"	"	"	29	
	2.0	N	265.4	"	"	"	20.1	"	22	
	2.0	N	265.2	"	"	"	20.3	"	16	
14	2.0	N	265.0	"	"	"	20.5	"	27	
	3.0	N	"	"	"	"	"	"	56	
	2.0	N	266.0	"	20-22	"	19.5	"	191	

Appendix Table E3.--Continued.

Date	Hours fished	Day night a/	Fore-bay elev. (ft)	Air delivery cfm b/	Air delivery psi b/	Pump elev. c/	Total lift (ft) d/	Orifice light	Catch e/	Remarks
Aug 14	2.0	N	266.0	245-80	20-22	208	19.5	On	261	
15	2.4	N	"	"	"	"	"	"	209	
	2.75	N	"	"	"	"	"	"	254	
18	2.0	N	267.6	240-80	"	"	17.9	"	20	
	2.0	N	"	"	"	"	"	"	36	
19	2.0	N	267.6	245-80	"	"	"	"	46	
	3.0	N	"	240-80	"	"	"	"	105	
	2.0	N	267.0	235-75	"	"	18.5	"	10	
	2.0	N	"	"	"	"	"	"	23	
20	2.0	N	"	240-75	"	188	"	"	31	
	3.0	N	"	"	"	"	"	"	64	
	2.0	N	266.8	235-80	22-30	"	18.7	"	9	
	2.0	N	"	"	"	"	"	"	14	
21	2.0	N	"	"	"	"	"	"	15	
	3.0	N	"	"	"	"	"	"	33	
	2.0	N	"	240-80	"	"	"	"	4	
	2.0	N	"	"	"	"	"	"	5	
22	2.0	N	"	240-75	"	"	"	"	15	
	3.0	N	266.7	"	"	"	18.8	"	17	

a/ D=Day; N=Night.

b/ 1st entry is for upper aerator; 2nd entry is for lower aerator.

c/ Elevation of bottom of funnel.

d/ Total lift (feet) = delivery less gatewell water elevation.

e/ Catch is > 99.6% chinook "O".

MIGRATIONAL CHARACTERISTICS OF JUVENILE SALMON AND STEELHEAD TROUT IN THE COLUMBIA RIVER BASIN AND RELATED PASSAGE RESEARCH AT JOHN DAY DAM

VOLUME II

by

Carl W. Sims
John G. Williams
David A. Faurot
Richard C. Johnsen
Dean A. Brege

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May 1981

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APPENDIX D--RELEASE INFORMATION, 1980

VOLUME II

This volume contains the release data for all branded and coded wire-tagged juvenile salmonids released into the Columbia River watershed in 1980. In addition, it contains the recovery information of branded and coded wire-tagged juveniles sampled by NMFS at Lower Granite, McNary, and John Day Dams. Daily catch summaries of fish at these dams are included and expansion factors are computed to adjust daily sample size to total daily catch. Recaptured marks are adjusted by the daily expansion factor to represent the total number of a particular mark in the daily catch.

APPENDIX A

RECAPTURE SUMMARY OF BRANDS, 1980

RECAPTURE SUMMARY OF BRANDS COLLECTED AT LOWER GRANITE DAM, 1980

Sorted by species, brand.

Number = Actual number observed.

Adjusted number = Adjusts the number observed in the sample to reflect the total number collected for the day.

12/9/80

RECAPTURE SUMMARY DATA FROM FILE BRGR80

THRU

0 0 0

LA IS 4 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	1	1	1

TOTAL COHO MARKED LA IS 4 = 1 (ADJ = 1)

10%= 0 50%= 1 90%= 1

LA IS 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800414	3	3	3
800415	15	15	18
800417	79	170	188
800418	30	168	356
800419	10	46	402
800420	10	60	462
800421	9	70	532
800422	23	238	770
800423	6	67	837
800424	1	11	848
800427	3	81	929
800428	1	12	941
800504	1	13	954
800505	1	10	964
800526	1	10	974

TOTAL CHINOOK-1S MARKED LA IS 1 = 193 (ADJ = 974)

10%= 97 50%= 487 90%= 877

LA IS 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800425	1	12	12
800428	1	12	24
800429	2	45	69
800430	2	26	95
800501	6	78	173
800502	4	43	216
800504	12	154	370
800505	8	77	447
800506	1	8	455
800507	2	23	478
800508	5	52	530
800509	2	29	559
800511	3	47	606
800512	1	10	616
800516	2	9	625

TOTAL CHINOOK-1S MARKED LA IS 2 = 52 (ADJ = 625)

10%= 63 50%= 313 90%= 563

LA IS 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	2	19	19
800513	6	37	56
800514	6	46	102
800515	8	48	150

800516	8	34	184
800519	11	115	299
800520	13	25	324
800521	23	92	416
800522	6	18	434
800523	6	44	478
800526	2	21	499
800527	1	6	505
800528	1	11	516
800529	1	3	519

TOTAL CHINOOK-1S MARKED LA IS 3 = 94 (ADJ = 519)
10%= 52 50%= 260 90%= 467

LA IS 4 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	10	103	103
800527	47	301	404
800528	20	211	615
800529	21	56	671
800530	19	95	766
800601	16	100	866
800603	67	67	933
800605	91	92	1025
800607	25	29	1054
800609	13	14	1068
800611	5	6	1074
800613	2	2	1076
800615	8	9	1085
800617	8	8	1093
800620	2	2	1095
800622	2	2	1097
800626	1	1	1098

TOTAL CHINOOK-1S MARKED LA IS 4 = 357 (ADJ = 1098)
10%= 110 50%= 549 90%= 988

LA IU 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800403	9	21	21
800404	4	4	25
800406	16	18	43
800407	6	18	61
800408	12	17	78
800409	15	17	95
800410	9	11	106
800411	6	8	114
800413	39	39	153
800414	18	18	171
800415	18	18	189
800417	53	114	303
800418	32	179	482
800419	50	228	710
800420	72	429	1139
800421	107	832	1971
800422	89	920	2891
800423	72	804	3695
800424	34	374	4069
800425	37	426	4495
800427	29	781	5276
800428	15	185	5461
800429	9	203	5664

800430	15	198	5862
800501	11	144	6006
800502	5	54	6060
800504	11	141	6201
800505	3	29	6230
800506	3	24	6254
800507	3	34	6288
800508	8	84	6372
800515	2	12	6384
800526	1	10	6394
800603	1	1	6395
800706	1	1	6396

TOTAL CHINOOK-1S MARKED LA IU 1 = 815 (ADJ = 6396)
10%= 640 50%= 3198 90%= 5756

RA IU 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800422	1	10	10
800424	6	66	76
800425	3	35	111
800427	16	431	542
800428	11	135	677
800429	10	225	902
800430	21	277	1179
800501	7	92	1271
800502	5	54	1325
800504	12	154	1479
800505	4	38	1517
800506	5	40	1557
800507	3	34	1591
800508	5	52	1643
800509	1	15	1658
800513	2	12	1670
800514	1	8	1678
800516	1	4	1682
800519	1	10	1692
800526	1	10	1702

TOTAL CHINOOK-1S MARKED RA IU 1 = 116 (ADJ = 1702)
10%= 170 50%= 851 90%= 1532

LA + 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	12	115	115
800506	8	64	179
800507	6	68	247
800508	20	209	456
800509	15	220	676
800511	9	141	817
800512	18	173	990
800513	48	299	1289
800514	22	169	1458
800515	16	96	1554
800516	21	89	1643
800519	22	229	1872
800520	22	43	1915
800521	19	76	1991
800522	31	93	2084
800523	18	131	2215
800526	21	216	2431
800527	9	58	2489

800528	11	116	2605
800529	1	3	2608
800530	5	25	2633
800603	3	3	2636
800605	2	2	2638
800609	1	1	2639
800613	1	1	2640
800615	2	2	2642
800617	1	1	2643

TOTAL STEELHEAD MARKED LA + 1 = 364 (ADJ = 2643)
10%= 264 50%= 1322 90%= 2379

RA + 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800428	1	12	12
800430	1	13	25
800505	3	29	54
800506	4	32	86
800507	10	113	199
800508	4	42	241
800509	8	117	358
800511	11	173	531
800512	6	58	589
800513	35	218	807
800514	17	131	938
800515	7	42	980
800516	13	55	1035
800519	8	83	1118
800520	15	29	1147
800521	10	40	1187
800522	24	72	1259
800523	9	65	1324
800526	15	154	1478
800527	4	26	1504
800528	2	21	1525
800529	3	8	1533
800530	1	5	1538
800603	2	2	1540
800605	1	1	1541
800607	1	1	1542
800613	1	1	1543
800620	1	1	1544
800622	2	2	1546
800624	1	1	1547

TOTAL STEELHEAD MARKED RA + 1 = 220 (ADJ = 1547)
10%= 155 50%= 774 90%= 1392

RA 4 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800422	8	83	83
800423	7	78	161
800424	7	77	238
800425	2	23	261
800427	6	162	423
800429	2	45	468
800501	3	39	507
800502	1	11	518
800504	5	64	582
800506	4	32	614
800507	5	57	671

800508	1	10	681
800509	7	103	784
800511	2	31	815
800513	4	25	840
800514	1	8	848
800515	2	12	860
800516	2	9	869
800520	4	8	877
800521	2	8	885
800526	3	31	916
800529	1	3	919
800530	1	5	924
800605	1	1	925

TOTAL STEELHEAD MARKED RA 4 4 = 81 (ADJ = 925)
10%= 93 50%= 463 90%= 833

RD 4 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	1	13	13
800504	2	26	39
800505	1	10	49

TOTAL STEELHEAD MARKED RD 4 2 = 4 (ADJ = 49)
10%= 5 50%= 25 90%= 44

LA DT 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800609	1	1	1
800611	3	3	4
800613	1	1	5
800624	1	1	6

TOTAL STEELHEAD MARKED LA DT 1 = 6 (ADJ = 6)
10%= 1 50%= 3 90%= 5

LA DT 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	1	11	11
800504	1	13	24
800505	4	38	62
800506	7	56	118
800507	11	124	242
800508	11	115	357
800509	9	132	489
800511	7	110	599
800512	12	116	715
800513	33	205	920
800514	21	161	1081
800515	10	60	1141
800516	25	106	1247
800519	18	188	1435
800520	39	75	1510
800521	24	96	1606
800522	29	87	1693
800523	30	218	1911
800526	34	349	2260
800527	14	90	2350
800528	16	169	2519
800529	10	27	2546
800530	8	40	2586
800601	6	37	2623
800603	26	26	2649

800605	13	13	2662
800607	5	6	2668
800609	6	6	2674
800611	2	2	2676
800613	4	5	2681
800615	4	4	2685
800617	5	5	2690
800620	4	4	2694
800622	2	2	2696

TOTAL STEELHEAD MARKED LA DT 3 = 451 (ADJ = 2696)
10%= 270 50%= 1348 90%= 2426

LD DT 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	1	13	13
800501	1	13	26
800502	1	11	37
800504	3	38	75
800505	6	58	133
800506	17	136	269
800507	13	147	416
800508	22	230	646
800509	15	220	866
800511	26	408	1274
800512	15	144	1418
800513	56	348	1766
800514	35	269	2035
800515	13	78	2113
800516	25	106	2219
800519	29	302	2521
800520	24	46	2567
800521	14	56	2623
800522	15	45	2668
800523	18	131	2799
800526	21	216	3015
800527	5	32	3047
800528	4	42	3089
800529	4	11	3100
800530	4	20	3120
800601	1	6	3126
800603	7	7	3133
800605	3	3	3136
800607	3	3	3139

TOTAL STEELHEAD MARKED LD DT 1 = 401 (ADJ = 3139)
10%= 314 50%= 1570 90%= 2825

LD DT 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800706	1	1	1

TOTAL STEELHEAD MARKED LD DT 3 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

RA DT 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	4	43	43
800504	9	115	158
800505	11	106	264
800506	14	112	376
800507	7	79	455
800508	2	21	476

800509	6	88	564
800511	2	31	595
800512	2	19	614
800513	6	37	651
800514	4	31	682
800515	4	24	706
800516	6	26	732
800519	2	21	753
800520	1	2	755
800521	2	8	763
800522	6	18	781
800523	1	7	788
800527	2	13	801
800528	2	21	822
800529	3	8	830
800603	1	1	831
800605	1	1	832
800617	1	1	833
800622	1	1	834

TOTAL STEELHEAD MARKED RA DT 3 = 100 (ADJ = 834)
10%= 83 50%= 417 90%= 751

RD DT 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800428	2	25	25
800429	2	45	70
800430	1	13	83
800501	3	39	122
800502	3	33	155
800504	4	51	206
800505	17	163	369
800506	18	144	513
800507	14	158	671
800508	19	198	869
800509	15	220	1089
800511	15	235	1324
800512	9	87	1411
800513	49	305	1716
800514	21	161	1877
800515	3	18	1895
800516	14	60	1955
800519	18	188	2143
800520	12	23	2166
800521	9	36	2202
800522	13	39	2241
800523	2	15	2256
800526	5	51	2307
800527	1	6	2313
800528	1	11	2324
800530	1	5	2329
800603	1	1	2330

TOTAL STEELHEAD MARKED RD DT 1 = 272 (ADJ = 2330)
10%= 233 50%= 1165 90%= 2097

LA IS 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	2	21	21
800613	1	1	22

TOTAL STEELHEAD MARKED LA IS 1 = 3 (ADJ = 22)
10%= 2 50%= 11 90%= 20

LA IS 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800427	2	54	54
800428	5	62	116
800429	5	113	229
800430	5	66	295
800501	10	131	426
800502	3	33	459
800504	9	115	574
800505	18	173	747
800506	7	56	803
800507	4	45	848
800508	22	230	1078
800509	8	117	1195
800511	3	47	1242
800512	7	67	1309
800513	14	87	1396
800514	1	8	1404
800515	3	18	1422
800516	2	9	1431
800520	4	8	1439
800522	2	6	1445
800526	3	31	1476
800527	1	6	1482

TOTAL STEELHEAD MARKED LA IS 2 = 138 (ADJ = 1482)

10%= 148 50%= 741 90%= 1334

LA IS 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800511	7	110	110
800512	10	96	206
800513	11	68	274
800514	11	84	358
800515	18	108	466
800516	21	89	555
800519	27	282	837
800520	67	130	967
800521	25	100	1067
800522	16	48	1115
800523	2	15	1130
800526	9	92	1222
800527	1	6	1228
800528	2	21	1249
800529	1	3	1252
800624	1	1	1253

TOTAL STEELHEAD MARKED LA IS 3 = 229 (ADJ = 1253)

10%= 125 50%= 627 90%= 1128

LA IS 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	140	1438	1438
800527	76	487	1925
800528	55	581	2506
800529	60	161	2667
800530	27	135	2802
800601	38	236	3038
800603	314	312	3350
800605	353	358	3708
800607	96	110	3818

800609	49	52	3870
800611	30	33	3903
800613	12	14	3917
800615	12	13	3930
800617	12	12	3942
800620	5	5	3947
800622	2	2	3949

TOTAL STEELHEAD MARKED LA IS 4 = 1281 (ADJ = 3949)
10%= 395 50%= 1975 90%= 3554

LD IU 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800424	8	88	88
800425	3	35	123
800427	6	162	285
800429	1	23	308
800430	3	40	348
800501	1	13	361
800505	5	48	409
800507	1	11	420
800513	1	6	426
800515	1	6	432
800516	1	4	436
800521	1	4	440

TOTAL STEELHEAD MARKED LD IU 1 = 32 (ADJ = 440)
10%= 44 50%= 220 90%= 396

LD IU 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800424	7	77	77
800425	13	150	227
800427	12	323	550
800428	4	49	599
800429	3	68	667
800430	5	66	733
800501	3	39	772
800502	7	76	848
800504	5	64	912
800505	7	67	979
800506	3	24	1003
800508	1	10	1013
800511	2	31	1044
800512	1	10	1054
800513	2	12	1066
800516	2	9	1075
800520	1	2	1077
800522	2	6	1083
800527	1	6	1089
800530	1	5	1094
800603	1	1	1095

TOTAL STEELHEAD MARKED LD IU 2 = 83 (ADJ = 1095)
10%= 110 50%= 548 90%= 986

LD IU 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800424	15	165	165
800425	14	161	326
800427	17	458	784
800428	7	86	870
800429	3	68	938

800430	6	79	1017
800501	6	78	1095
800502	3	33	1128
800504	8	103	1231
800505	4	38	1269
800506	6	48	1317
800507	2	23	1340
800508	3	31	1371
800509	3	44	1415
800512	2	19	1434
800514	1	8	1442
800515	1	6	1448
800516	2	9	1457

TOTAL STEELHEAD MARKED LD IU 4 = 103 (ADJ = 1457)
10%= 146 50%= 729 90%= 1311

RD IU 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	4	25	25
800514	3	23	48
800519	2	21	69
800520	1	2	71
800521	3	12	83
800522	1	3	86
800523	1	7	93
800526	2	21	114
800527	1	6	120
800528	2	21	141
800605	2	2	143
800607	1	1	144
800609	1	1	145

TOTAL STEELHEAD MARKED RD IU 2 = 24 (ADJ = 145)
10%= 15 50%= 73 90%= 131

LA SU 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800418	1	6	6
800508	1	10	16
800509	2	29	45
800511	2	31	76
800512	1	10	86
800513	14	87	173
800514	6	46	219
800515	6	36	255
800516	5	21	276
800519	5	52	328
800520	9	17	345
800521	6	24	369
800522	11	33	402
800523	10	73	475
800526	22	226	701
800527	7	45	746
800528	4	42	788
800529	8	21	809
800530	4	20	829
800601	3	19	848
800603	11	11	859
800605	7	7	866
800607	7	8	874
800609	5	5	879

800611	1	1	880
800613	4	5	885
800615	3	3	888
800617	2	2	890
800620	2	2	892
800706	1	1	893

TOTAL STEELHEAD MARKED LA SU 1 = 170 (ADJ = 893)
10%= 89 50%= 447 90%= 804

LA SU 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	1	13	13
800502	2	22	35
800504	4	51	86
800505	5	48	134
800506	4	32	166
800507	3	34	200
800508	1	10	210
800509	2	29	239
800511	4	63	302
800512	3	29	331
800513	22	137	468
800514	14	108	576
800515	9	54	630
800516	10	43	673
800519	8	83	756
800520	13	25	781
800521	12	48	829
800522	18	54	883
800523	9	65	948
800526	24	247	1195
800527	11	71	1266
800528	5	53	1319
800529	2	5	1324
800530	3	15	1339
800601	2	12	1351
800603	3	3	1354
800605	3	3	1357
800607	2	2	1359
800609	1	1	1360
800615	1	1	1361
800617	1	1	1362
800620	1	1	1363
800626	1	1	1364

TOTAL STEELHEAD MARKED LA SU 4 = 204 (ADJ = 1364)
10%= 136 50%= 682 90%= 1228

LD SU 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	4	38	38
800506	2	16	54
800507	1	11	65
800509	1	15	80
800513	1	6	86
800519	1	10	96

TOTAL STEELHEAD MARKED LD SU 3 = 10 (ADJ = 96)
10%= 10 50%= 48 90%= 86

RA SU 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.

800430	1	13	13
800505	2	19	32
800506	1	8	40
800508	1	10	50
800509	1	15	65
800511	1	16	81
800512	1	10	91
800513	7	44	135
800514	4	31	166
800515	1	6	172
800516	5	21	193
800519	7	73	266
800520	5	10	276
800521	3	12	288
800522	7	21	309
800523	7	51	360
800526	7	72	432
800527	3	19	451
800528	2	21	472
800530	2	10	482
800601	2	12	494
800603	3	3	497
800605	5	5	502
800607	2	2	504
800609	1	1	505
800615	3	3	508
800622	1	1	509
800706	1	1	510

TOTAL STEELHEAD MARKED RA SU 1 = 86 (ADJ = 510)

10%= 51 50%= 255 90%= 459

LA X3 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	2	26	26
800502	16	174	200
800504	13	167	367
800505	17	163	530
800506	16	128	658
800507	9	102	760
800508	10	104	864
800509	7	103	967
800511	5	78	1045
800512	3	29	1074
800513	8	50	1124
800514	1	8	1132
800515	3	18	1150
800516	3	13	1163
800519	2	21	1184
800520	6	12	1196
800521	4	16	1212
800522	1	3	1215
800523	3	22	1237
800526	1	10	1247
800527	2	13	1260
800528	1	11	1271
800530	1	5	1276
800603	1	1	1277
800607	3	3	1280
800620	1	1	1281

TOTAL STEELHEAD MARKED LA X3 3 = 139 (ADJ = 1281)

10%= 128 50%= 641 90%= 1153

LD X3 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800427	2	54	54
800501	2	26	80
800502	2	22	102
800504	2	26	128
800505	4	38	166
800506	4	32	198
800507	3	34	232
800508	2	21	253
800509	4	59	312
800511	2	31	343
800512	1	10	353
800513	12	75	428
800514	7	54	482
800515	2	12	494
800516	4	17	511
800519	1	10	521
800520	4	8	529
800521	7	28	557
800522	3	9	566
800523	2	15	581
800526	5	51	632
800530	1	5	637
800605	2	2	639

TOTAL STEELHEAD MARKED LD X3 1 = 78 (ADJ = 639)

10%= 64 50%= 320 90%= 575

RA X3 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	3	29	29
800506	3	24	53
800507	4	45	98
800508	5	52	150
800509	4	59	209
800511	6	94	303
800512	4	39	342
800513	19	118	460
800514	17	131	591
800515	11	66	657
800516	16	68	725
800519	12	125	850
800520	23	45	895
800521	14	56	951
800522	23	69	1020
800523	26	189	1209
800526	43	442	1651
800527	10	64	1715
800528	1	11	1726
800529	6	16	1742
800530	2	10	1752
800601	2	12	1764
800603	2	2	1766
800605	2	2	1768
800607	2	2	1770
800609	1	1	1771
800611	1	1	1772
800613	2	2	1774

800615	3	3	1777
800617	1	1	1778

TOTAL STEELHEAD MARKED RA X3 3 = 268 (ADJ = 1778)
10%= 178 50%= 889 90%= 1600

RD X3 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	1	13	13
800502	1	11	24
800504	1	13	37
800505	2	19	56
800507	1	11	67
800508	3	31	98
800509	4	59	157
800511	1	16	173
800513	10	62	235
800514	3	23	258
800515	4	24	282
800516	3	13	295
800519	2	21	316
800520	2	4	320
800521	3	12	332
800522	2	6	338
800523	3	22	360
800526	2	21	381

TOTAL STEELHEAD MARKED RD X3 1 = 48 (ADJ = 381)
10%= 38 50%= 191 90%= 343

TOTAL MARKS IN FILE BRGR80 6424

RECAPTURE SUMMARY OF BRANDS COLLECTED AT McNARY DAM, 1980

Sorted by species, brand.

Number = Actual number observed.

Adjusted number = Adjusts the number observed in the sample to reflect the total number collected for the day.

2/20/81

RECAPTURE SUMMARY DATA FROM FILE BRMCBO

THRU FINAL

0 0 0

LD 52 1 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800521	6	8	8
800522	8	17	25
800523	28	71	96
800526	288	1119	1215
800528	360	550	1765
800529	94	94	1859
800530	53	57	1916
800602	49	82	1998
800603	27	41	2039
800604	46	66	2105
800605	44	47	2152
800606	22	22	2174
800609	7	7	2181
800613	12	13	2194
800620	3	5	2199
800623	1	2	2201
800626	3	4	2205
800630	6	9	2214
800701	2	2	2216
800703	1	1	2217
800707	1	4	2221

TOTAL COHO MARKED LD 52 1 = 1061 (ADJ = 2221)

10%= 222 50%= 1111 90%= 1999

LD 52 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800520	1	1	1
800521	31	39	40
800522	61	131	171
800523	94	238	409
800526	523	2032	2441
800528	429	655	3096
800529	125	125	3221
800530	58	63	3284
800602	52	87	3371
800603	34	52	3423
800604	37	53	3476
800605	39	42	3518
800606	10	10	3528
800609	9	9	3537
800613	9	9	3546
800616	2	4	3550
800620	3	5	3555
800623	2	3	3558
800626	2	2	3560
800630	4	6	3566
800701	3	3	3569
800702	4	7	3576
800703	1	1	3577
800707	2	7	3584
800708	1	1	3585

TOTAL COHO MARKED LD 52 2 = 1536 (ADJ = 3585)

10%= 359 50%= 1793 90%= 3227

RD 52 1 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.

800522	13	28	31
800523	27	68	99
800526	313	1216	1315
800528	363	554	1869
800529	95	95	1964
800530	40	43	2007
800602	53	88	2095
800603	26	40	2135
800604	45	65	2200
800605	30	32	2232
800606	14	14	2246
800609	8	8	2254
800613	15	16	2270
800616	2	4	2274
800626	4	5	2279
800630	8	12	2291
800701	5	5	2296
800702	1	2	2298
800707	1	4	2302
800709	1	1	2303
800710	1	1	2304
800714	1	2	2306

TOTAL COHO MARKED RD 52 1 = 1068 (ADJ = 2306)
10%= 231 50%= 1153 90%= 2075

RD 52 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800520	1	1	1
800521	23	29	30
800522	71	152	182
800523	99	250	432
800526	431	1674	2106
800528	385	588	2694
800529	124	124	2818
800530	54	58	2876
800602	49	82	2958
800603	32	49	3007
800604	33	48	3055
800605	37	40	3095
800606	16	16	3111
800609	13	13	3124
800613	7	7	3131
800620	1	2	3133
800623	1	2	3135
800626	6	7	3142
800630	8	12	3154
800701	1	1	3155
800702	1	2	3157
800703	1	1	3158
800707	3	11	3169
800708	3	3	3172
800709	1	1	3173
800710	1	1	3174
800711	2	2	3176
800717	1	1	3177

TOTAL COHO MARKED RD 52 2 = 1405 (ADJ = 3177)
10%= 318 50%= 1589 90%= 2859

LD 1H 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	21	82	82
800528	281	429	511
800529	175	175	686
800530	109	118	804
800602	92	155	959

800604	94	136	1166
800605	66	71	1237
800606	35	35	1272
800609	8	8	1280
800613	9	9	1289
800616	2	4	1293
800620	1	2	1295
800623	3	5	1300
800626	5	6	1306
800630	13	20	1326
800701	1	1	1327
800702	2	3	1330
800703	1	1	1331
800708	1	1	1332
800716	1	1	1333
800717	1	1	1334

TOTAL COHO MARKED LD IH 2 = 968 (ADJ = 1334)

10%= 133 50%= 667 90%= 1201

LD IH 3 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	43	167	167
800528	283	432	599
800529	214	214	813
800530	113	122	935
800602	107	178	1113
800603	42	64	1177
800604	99	143	1320
800605	73	79	1399
800606	28	28	1427
800609	15	15	1442
800613	17	18	1460
800616	1	2	1462
800620	7	11	1473
800623	4	6	1479
800626	10	12	1491
800630	4	6	1497
800701	3	3	1500
800707	2	7	1507
800715	1	1	1508
800717	1	1	1509

TOTAL COHO MARKED LD IH 3 = 1067 (ADJ = 1509)

10%= 151 50%= 755 90%= 1358

RD IH 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	31	120	120
800528	259	395	515
800529	213	213	728
800530	106	115	843
800602	104	173	1016
800603	49	75	1091
800604	84	121	1212
800605	81	87	1299
800606	23	23	1322
800609	18	18	1340
800613	10	10	1350
800616	1	2	1352
800620	1	2	1354
800623	1	2	1356
800626	6	7	1363
800630	6	9	1372
800701	3	3	1375
800702	2	3	1378
800707	1	4	1382

800710	2	3	1386

TOTAL COHO MARKED RD IH 2 = 1002 (ADJ = 1386)
10%= 139 50%= 693 90%= 1247

RD IH 3 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	35	136	136
800528	251	383	519
800529	194	194	713
800530	85	92	805
800602	93	165	970
800603	52	79	1049
800604	67	97	1146
800605	60	65	1211
800606	20	20	1231
800609	7	7	1238
800613	16	17	1255
800616	2	4	1259
800620	3	5	1264
800623	1	2	1266
800626	4	5	1271
800630	3	5	1276
800703	1	1	1277
800708	1	1	1278

TOTAL COHO MARKED RD IH 3 = 901 (ADJ = 1278)
10%= 128 50%= 639 90%= 1150

LD IX 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800523	10	25	25
800526	359	1395	1420
800528	614	937	2357
800529	218	218	2575
800530	71	77	2652
800602	82	137	2789
800603	44	67	2856
800604	49	71	2927
800605	43	46	2973
800606	35	35	3008
800609	9	9	3017
800613	11	12	3029
800620	1	2	3031
800623	1	2	3033
800626	9	11	3044
800630	3	5	3049
800701	1	1	3050
800703	1	1	3051
800708	1	1	3052
800709	1	1	3053
800716	1	1	3054

TOTAL COHO MARKED LD IX 2 = 1564 (ADJ = 3054)
10%= 305 50%= 1527 90%= 2749

LD IX 3 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800523	7	18	18
800526	361	1402	1420
800528	583	890	2310
800529	173	173	2483
800530	49	53	2536
800602	69	115	2651
800603	39	59	2710
800604	56	81	2791
800605	32	35	2826
800606	16	16	2842

800613	8	8	2860
800616	3	5	2865
800626	4	5	2870
800630	10	16	2886
800701	3	3	2889
800709	1	1	2890

TOTAL COHO MARKED LD IX 3 = 1424 (ADJ = 2890)
10%= 289 50%= 1445 90%= 2601

RD IX 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800523	7	18	18
800526	270	1049	1067
800528	391	597	1664
800529	170	170	1834
800530	47	51	1885
800602	62	103	1988
800603	26	40	2028
800604	47	68	2096
800605	39	42	2138
800606	15	15	2153
800609	5	5	2158
800613	6	6	2164
800620	1	2	2166
800623	1	2	2168
800626	8	10	2178
800630	4	6	2184
800701	1	1	2185
800702	1	2	2187
800707	2	7	2194
800708	1	1	2195

TOTAL COHO MARKED RD IX 2 = 1104 (ADJ = 2195)
10%= 220 50%= 1098 90%= 1976

RD IX 3 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	1	1	1
800523	8	20	21
800526	257	998	1019
800528	426	650	1669
800529	153	153	1822
800530	56	61	1883
800602	46	77	1960
800603	23	35	1995
800604	53	76	2071
800605	39	42	2113
800606	18	18	2131
800609	8	8	2139
800613	15	16	2155
800616	2	4	2159
800620	2	3	2162
800623	2	3	2165
800626	2	2	2167
800630	6	9	2176
800701	3	3	2179
800702	3	5	2184
800703	1	1	2185
800708	1	1	2186
800709	2	2	2188

TOTAL COHO MARKED RD IX 3 = 1127 (ADJ = 2188)
10%= 219 50%= 1094 90%= 1969

LA 2X 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	11	13	13

800516	53	57	92
800519	6	7	99
800520	3	3	102
800521	1	1	103
800522	1	2	105

TOTAL CHINOOK-1S MARKED LA 2X 1 = 91 (ADJ = 105)
10%= 11 50%= 53 90%= 95

LA 2X 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	19	27	27
800516	78	84	111
800519	20	23	134
800520	2	2	136
800521	2	3	139
800522	1	2	141
800523	1	3	144

TOTAL CHINOOK-1S MARKED LA 2X 2 = 123 (ADJ = 144)
10%= 14 50%= 72 90%= 130

LA 2X 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	19	20	20
800519	84	97	117
800520	13	13	130
800521	3	4	134
800522	2	4	138
800523	1	3	141
800528	1	2	143
800602	1	2	145

TOTAL CHINOOK-1S MARKED LA 2X 3 = 124 (ADJ = 145)
10%= 15 50%= 73 90%= 131

LA 2X 4 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800519	17	20	20
800520	5	5	25
800521	11	14	39
800523	3	8	47
800526	1	4	51
800530	1	1	52

TOTAL CHINOOK-1S MARKED LA 2X 4 = 38 (ADJ = 52)
10%= 5 50%= 26 90%= 47

LD 3 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800508	6	14	14
800509	4	8	22
800513	1	1	23
800515	1	1	24
800519	1	1	25
800526	2	8	33
800528	2	3	36
800530	1	1	37

TOTAL CHINOOK-1S MARKED LD 3 1 = 18 (ADJ = 37)
10%= 4 50%= 19 90%= 33

LD 3 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	7	14	14
800513	3	4	18
800514	1	1	19
800515	2	3	22

TOTAL CHINOOK-1S MARKED LD 3 2 = 13 (ADJ = 22)
10%= 2 50%= 11 90%= 20

LD 3 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	2	3	3
800513	2	3	6
800514	4	5	11
800515	2	3	14
800516	1	1	15

TOTAL CHINOOK-1S MARKED LD 3 3 = 11 (ADJ = 15)
10%= 2 50%= 8 90%= 14

LD 3 4 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	2	3	3
800513	3	4	7
800514	2	2	9
800520	1	1	10
800602	1	2	12

TOTAL CHINOOK-1S MARKED LD 3 4 = 9 (ADJ = 12)
10%= 1 50%= 6 90%= 11

LA 5 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	133	517	517
800528	41	63	580
800529	15	15	595
800530	13	14	609
800602	8	13	622
800603	1	2	624

TOTAL CHINOOK-1S MARKED LA 5 1 = 211 (ADJ = 624)
10%= 62 50%= 312 90%= 562

LA 5 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800528	1	2	2
800529	84	84	86
800530	47	51	137
800602	30	50	187
800603	3	5	192

TOTAL CHINOOK-1S MARKED LA 5 2 = 165 (ADJ = 192)
10%= 19 50%= 96 90%= 173

LA 5 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800530	28	30	30
800602	27	45	75
800603	1	2	77
800604	1	1	78

TOTAL CHINOOK-1S MARKED LA 5 3 = 57 (ADJ = 78)
10%= 8 50%= 39 90%= 70

LA 5 4 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800602	17	28	28
800603	1	2	30

TOTAL CHINOOK-1S MARKED LA 5 4 = 18 (ADJ = 30)
10%= 3 50%= 15 90%= 27

RA 9 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800519	2	2	2

TOTAL CHINOOK-1S MARKED RA 9 1 = 2 (ADJ = 2)
10%= 0 50%= 1 90%= 2

RA 9 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.

800521	1	1	2
800522	1	2	4
800526	1	4	8

TOTAL CHINOOK-1S MARKED RA 9 3 = 4 (ADJ = 8)
10%= 1 50%= 4 90%= 7

LD AN 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	4	5	5
800502	1	1	6
800506	2	2	8
800508	2	5	13
800513	1	1	14

TOTAL CHINOOK-1S MARKED LD AN 1 = 10 (ADJ = 14)
10%= 1 50%= 7 90%= 13

LA B2 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800602	1	2	2
800604	1	1	3
800606	1	1	4

TOTAL CHINOOK-1S MARKED LA B2 1 = 3 (ADJ = 4)
10%= 0 50%= 2 90%= 4

LA B2 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800604	1	1	1
800605	55	59	60
800606	9	9	69
800609	4	4	73

TOTAL CHINOOK-1S MARKED LA B2 3 = 69 (ADJ = 73)
10%= 7 50%= 37 90%= 66

LD F 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800522	26	56	56
800523	40	101	157
800526	51	198	355
800528	57	87	442
800529	37	37	479
800530	16	17	496
800602	25	42	538
800603	3	5	543
800604	19	27	570
800605	44	47	617
800606	9	9	626
800609	5	5	631
800613	2	2	633
800701	1	1	634
800709	1	1	635

TOTAL CHINOOK-1S MARKED LD F 1 = 336 (ADJ = 635)
10%= 64 50%= 318 90%= 572

LD F 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	8	31	31
800528	648	989	1020
800529	605	605	1625
800530	215	233	1858
800602	132	220	2078
800603	18	27	2105
800604	40	58	2163
800605	13	14	2177
800606	8	8	2185
800609	5	5	2190

10%= 219 50%= 1095 90%= 1971

LD F 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800528	2	3	3
800529	225	225	228
800530	589	637	865
800602	471	785	1650
800603	30	46	1696
800604	34	49	1745
800605	21	23	1768
800606	4	4	1772
800609	1	1	1773

TOTAL CHINOOK-1S MARKED LD F 3 = 1377 (ADJ = 1773)
10%= 177 50%= 887 90%= 1596

RD F 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800522	27	58	58
800523	30	76	134
800526	51	198	332
800528	54	82	414
800529	32	32	446
800530	17	18	464
800602	20	33	497
800603	3	5	502
800604	13	19	521
800605	21	23	544
800606	10	10	554
800609	7	7	561
800613	10	10	571
800626	1	1	572

TOTAL CHINOOK-1S MARKED RD F 1 = 296 (ADJ = 572)
10%= 57 50%= 286 90%= 515

RD F 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	6	23	23
800528	635	970	993
800529	661	661	1654
800530	162	175	1829
800602	102	170	1999
800603	22	33	2032
800604	24	35	2067
800605	32	35	2102
800606	4	4	2106
800609	1	1	2107
800613	1	1	2108

TOTAL CHINOOK-1S MARKED RD F 2 = 1650 (ADJ = 2108)
10%= 211 50%= 1054 90%= 1897

RD F 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800528	3	5	5
800529	224	224	229
800530	517	559	788
800602	474	790	1578
800603	21	32	1610
800604	33	48	1658
800605	16	17	1675
800606	6	6	1681
800609	1	1	1682

TOTAL CHINOOK-1S MARKED RD F 3 = 1295 (ADJ = 1682)
10%= 168 50%= 841 90%= 1514

```
 DATE       NUMBER     ADJ.NUMBER   CUM. ADJ. NO.
 800609        6           6            6
 800613        1           1            7
 800630        1           2            9
 TOTAL CHINOOK-1S  MARKED LA I+ 1  =     8 (ADJ =       9)
 10%= 1   50%= 5   90%= 8

LA 1+ 2 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER   CUM. ADJ. NO.
 800626        3           4            4
 TOTAL CHINOOK-1S  MARKED LA I+ 2  =     3 (ADJ =       4)
 10%= 0   50%= 2   90%= 4

LA 1+ 3 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER   CUM. ADJ. NO.
 800630        2           3            3
 TOTAL CHINOOK-1S  MARKED LA I+ 3  =     2 (ADJ =       3)
 10%= 0   50%= 2   90%= 3

LA ID 1 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER   CUM. ADJ. NO.
 800519       83          36           96
 800520       47          48          144
 800521       41          51          195
 800522       25          53          248
 800523        3           8          256
 800526        6          23          279
 TOTAL CHINOOK-1S  MARKED LA ID 1  =   205 (ADJ =     279)
 10%= 28  50%= 140  90%= 251

LA ID 2 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER   CUM. ADJ. NO.
 800521      108         135          135
 800522      132         282          417
 800523       37          94          511
 800526       13          50          561
 800528        2           3          564
 TOTAL CHINOOK-1S  MARKED LA ID 2  =   292 (ADJ =     564)
 10%= 56  50%= 282  90%= 508

LA ID 3 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER   CUM. ADJ. NO.
 800522       37          79           79
 800523       39          99          178
 800526        9          35          213
 800530        1           1          214
 TOTAL CHINOOK-1S  MARKED LA ID 3  =    86 (ADJ =     214)
 10%= 21  50%= 107  90%= 193

LA ID 4 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER   CUM. ADJ. NO.
 800522        1           2            2
 800523       22          56           58
 800526      102         396          454
 800528       11          17          471
 800529        3           3          474
 800602        2           3          477
 TOTAL CHINOOK-1S  MARKED LA ID 4  =   141 (ADJ =     477)
 10%= 48  50%= 239  90%= 429

LD IL 1 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER   CUM. ADJ. NO.
 800526      562        2183         2183
 800528      733        1119         3302
 800529      384         384         3686
```

800602	70	117	3877
800603	7	11	3888
800604	10	14	3902
800605	8	9	3911
800606	4	4	3915
800609	1	1	3916
800630	1	2	3918
800701	1	1	3919

TOTAL CHINOOK-1S MARKED LD IL 1 = 1849 (ADJ = 3919)
10%= 392 50%= 1960 90%= 3527

LD IL 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	3	3	3
800515	2	3	6
800516	11	12	18
800519	45	52	70
800520	33	34	104
800521	43	54	158
800522	66	141	299
800523	59	149	448
800526	116	451	899
800528	77	118	1017
800529	49	49	1066
800530	15	16	1082
800602	22	37	1119
800603	10	15	1134
800604	24	35	1169
800605	25	27	1196
800606	12	12	1208
800609	2	2	1210
800613	3	3	1213
800623	1	2	1215
800626	1	1	1216
800630	2	3	1219

TOTAL CHINOOK-1S MARKED LD IL 2 = 621 (ADJ = 1219)
10%= 122 50%= 610 90%= 1097

LD IL 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800519	1	1	1
800523	3	8	9
800526	684	2657	2666
800528	382	583	3249
800529	208	208	3457
800530	52	56	3513
800602	42	70	3583
800603	8	12	3595
800604	11	16	3611
800605	9	10	3621
800606	3	3	3624
800609	2	2	3626
800630	1	2	3628

TOTAL CHINOOK-1S MARKED LD IL 3 = 1406 (ADJ = 3628)
10%= 363 50%= 1814 90%= 3265

RD IL 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	491	1907	1907
800528	605	924	2831
800529	286	286	3117
800530	76	82	3199
800602	64	107	3306
800603	13	20	3326
800604	17	19	3345

800606	2	2	3357
800609	2	2	3359
800613	1	1	3360

TOTAL CHINOOK-1S MARKED RD IL 1 = 1562 (ADJ = 3360)
10%= 336 50%= 1680 90%= 3024

RD IL 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	2	2	2
800515	4	6	8
800516	10	11	19
800519	33	38	57
800520	34	35	92
800521	46	58	150
800522	59	126	276
800523	39	99	375
800526	116	451	826
800528	79	121	947
800529	37	37	984
800530	19	21	1005
800602	28	47	1052
800603	3	5	1057
800604	20	29	1086
800605	14	15	1101
800606	10	10	1111
800609	4	4	1115
800613	4	4	1119
800620	1	2	1121
800708	1	1	1122

TOTAL CHINOOK-1S MARKED RD IL 2 = 563 (ADJ = 1122)
10%= 112 50%= 561 90%= 1010

RD IL 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800519	1	1	1
800522	1	2	3
800523	2	5	8
800526	611	2373	2381
800527	1	1	2382
800528	428	653	3035
800529	227	227	3262
800530	45	49	3311
800602	46	77	3388
800603	5	8	3396
800604	5	7	3403
800605	7	8	3411
800609	1	1	3412

TOTAL CHINOOK-1S MARKED RD IL 3 = 1380 (ADJ = 3412)
10%= 341 50%= 1706 90%= 3071

LD IM 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	4	35	35
800506	5	6	41
800507	4	10	51
800508	2	5	56

TOTAL CHINOOK-1S MARKED LD IM 1 = 15 (ADJ = 56)
10%= 6 50%= 28 90%= 50

LD IM 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	1	1	1
800508	2	5	6
800509	1	2	8
800514	1	1	9

10%= 1 50%= 5 90%= 8

LA IS 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800428	10	17	17
800429	33	33	50
800430	39	46	96
800502	16	18	114
800505	8	71	185
800506	4	5	190
800507	7	18	208
800508	5	12	220
800509	3	6	226
800512	2	3	229
800513	3	4	233
800514	1	1	234
800515	3	4	238
800519	6	7	245
800520	1	1	246
800521	1	1	247
800522	3	6	253
800526	1	4	257
800528	1	2	259
800609	1	1	260

TOTAL CHINOOK-1S MARKED LA IS 1 = 148 (ADJ = 260)

10%= 26 50%= 130 90%= 234

LA IS 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	4	4	4
800505	9	79	83
800506	33	39	122
800507	17	43	165
800508	16	38	203
800509	20	41	244
800512	24	36	280
800513	24	31	311
800514	28	32	343
800515	15	21	364
800516	9	10	374
800519	13	15	389
800520	5	5	394
800523	2	5	399
800526	1	4	403
800528	1	2	405
800603	2	3	408

TOTAL CHINOOK-1S MARKED LA IS 2 = 223 (ADJ = 408)

10%= 41 50%= 204 90%= 367

LA IS 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800519	2	2	2
800520	8	8	10
800521	5	6	16
800522	2	4	20
800526	10	39	59
800528	10	15	74
800529	3	3	77
800530	1	1	78
800602	1	2	80
800603	1	2	82

TOTAL CHINOOK-1S MARKED LA IS 3 = 43 (ADJ = 82)

10%= 8 50%= 41 90%= 74

LA IS 4 MARKED CHINOOK-1S

800530	1	1	5
800602	4	7	12
800603	2	3	15
800604	7	10	25
800605	5	5	30
800606	5	5	35
800609	1	1	36
800613	5	5	41

TOTAL CHINOOK-1S MARKED LA IS 4 = 31 (ADJ = 41)
10%= 4 50%= 21 90%= 37

LA 1U 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800428	34	58	58
800429	72	72	130
800430	99	116	246
800502	87	96	342
800505	43	380	722
800506	63	75	797
800507	37	94	891
800508	27	63	954
800509	11	22	976
800512	15	22	998
800513	10	13	1011
800514	7	8	1019
800515	4	6	1025
800516	4	4	1029
800520	5	5	1034
800522	1	2	1036
800523	2	5	1041
800528	1	2	1043

TOTAL CHINOOK-1S MARKED LA IU 1 = 522 (ADJ = 1043)
10%= 104 50%= 522 90%= 939

RA 1U 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800429	1	1	1
800502	6	7	8
800505	10	88	96
800506	30	36	132
800507	8	20	152
800508	19	45	197
800509	29	59	256
800512	13	19	275
800513	15	20	295
800514	14	16	311
800515	5	7	318
800516	5	5	323
800519	1	1	324
800520	5	5	329
800522	2	4	333
800526	1	4	337
800529	1	1	338

TOTAL CHINOOK-1S MARKED RA IU 1 = 165 (ADJ = 338)
10%= 34 50%= 169 90%= 304

LD 1Y 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800602	48	80	80
800603	61	93	173
800604	96	138	311
800605	38	41	352
800606	5	5	357
800609	5	5	362

10%= 36 50%= 181 90%= 326

LD IY 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800530	14	15	15
800602	119	198	213
800603	37	56	269
800604	107	154	423
800605	36	39	462
800606	14	14	476
800609	7	7	483
800613	1	1	484

TOTAL CHINOOK-1S MARKED LD IY 2 = 335 (ADJ = 484)
10%= 48 50%= 242 90%= 436

LD IY 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800522	8	17	17
800523	20	51	68
800526	57	221	289
800528	45	69	358
800529	23	23	381
800530	10	11	392
800602	29	48	440
800603	12	18	458
800604	14	20	478
800605	18	19	497
800606	9	9	506
800609	2	2	508
800613	7	7	515
800708	1	1	516

TOTAL CHINOOK-1S MARKED LD IY 3 = 255 (ADJ = 516)
10%= 52 50%= 258 90%= 464

RD IY 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800602	51	85	85
800603	66	100	185
800604	95	137	322
800605	40	43	365
800606	7	7	372
800609	5	5	377
800613	2	2	379

TOTAL CHINOOK-1S MARKED RD IY 1 = 266 (ADJ = 379)
10%= 38 50%= 190 90%= 341

RD IY 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800528	1	2	2
800530	7	8	10
800602	116	193	203
800603	51	78	281
800604	109	157	438
800605	50	54	492
800606	13	13	505
800609	6	6	511
800613	3	3	514

TOTAL CHINOOK-1S MARKED RD IY 2 = 356 (ADJ = 514)
10%= 51 50%= 257 90%= 463

RD IY 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800522	8	17	17
800523	17	43	60
800526	44	171	231

800520	38	38	325
800530	23	25	350
800602	17	28	378
800603	8	12	390
800604	16	23	413
800605	23	25	438
800606	12	12	450
800609	6	6	456
800613	8	8	464
800620	1	2	466
800623	1	2	468
800630	1	2	470

TOTAL CHINOOK-1S MARKED RD IY 3 = 260 (ADJ = 470)
10%= 47 50%= 235 90%= 423

LA P 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800429	64	64	64
800430	202	237	301
800502	111	123	424
800505	41	362	786
800506	118	141	927
800507	82	208	1135
800508	71	167	1302
800509	58	118	1420
800512	22	33	1453
800513	11	14	1467
800514	13	15	1482
800515	5	7	1489
800516	12	13	1502
800519	4	5	1507
800520	5	5	1512
800521	4	5	1517
800522	3	6	1523
800523	4	10	1533
800526	2	8	1541
800528	1	2	1543
800602	1	2	1545

TOTAL CHINOOK-1S MARKED LA P 1 = 834 (ADJ = 1545)
10%= 155 50%= 773 90%= 1391

LA P 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800507	1	3	3
800508	10	23	26
800509	9	18	44
800512	31	46	90
800513	59	77	167
800514	122	140	307
800515	89	125	432
800516	81	87	519
800519	65	75	594
800520	41	42	636
800521	40	50	686
800522	39	83	769
800523	53	134	903
800526	20	78	981
800528	6	9	990
800529	2	2	992
800530	2	2	994
800602	2	3	997
800603	1	2	999
800606	1	1	1000

TOTAL CHINOOK-1S MARKED LA P 2 = 674 (ADJ = 1000)
10%= 100 50%= 500 90%= 900

LA P 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800523	1	3	3
800526	23	89	92
800528	15	23	115
800529	4	4	119
800530	6	6	125
800602	13	22	147
800603	459	698	845
800604	30	43	888
800605	21	23	911
800606	10	10	921
800609	8	8	929
800613	1	1	930
800616	1	2	932

TOTAL CHINOOK-1S MARKED LA P 3 = 592 (ADJ = 932)

10%= 93 50%= 466 90%= 839

LA P1 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	3	26	26
800506	17	20	46
800507	30	76	122
800508	56	131	253
800509	83	169	422
800512	104	156	578
800513	83	108	686
800514	113	130	816
800515	121	169	985
800516	98	105	1090
800519	144	166	1256
800520	119	122	1378
800521	102	128	1506
800522	243	520	2026
800523	254	642	2668
800526	266	1033	3701
800528	130	198	3899
800529	51	51	3950
800530	23	25	3975
800602	38	63	4038
800603	4	6	4044
800604	8	12	4056
800605	7	8	4064
800606	5	5	4069
800626	1	1	4070
800630	1	2	4072

TOTAL CHINOOK-1S MARKED LA P1 1 = 2104 (ADJ = 4072)

10%= 407 50%= 2036 90%= 3665

LA P1 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	1	9	9
800506	6	7	16
800507	13	33	49
800508	28	66	115
800509	36	73	188
800512	73	109	297
800513	88	115	412
800514	126	145	557
800515	81	113	670
800516	99	106	776
800519	128	148	924
800520	137	141	1065
800521	85	107	1172
800522	227	486	1658

800526	289	1123	3319
800527	1	1	3320
800528	158	241	3561
800529	93	93	3654
800530	37	40	3694
800602	26	43	3737
800603	5	8	3745
800604	5	7	3752
800605	6	6	3758
800606	3	3	3761
800609	2	2	3763
800626	1	1	3764

TOTAL CHINOOK-1S MARKED LA P1 2 = 1967 (ADJ = 3764)
10%= 376 50%= 1882 90%= 3388

LA P1 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	7	62	62
800506	124	148	210
800507	106	269	479
800508	203	476	955
800509	259	526	1481
800512	158	237	1718
800513	199	260	1978
800514	257	295	2273
800515	258	361	2634
800516	320	344	2978
800519	321	370	3348
800520	236	242	3590
800521	167	209	3799
800522	177	379	4178
800523	187	473	4651
800526	75	291	4942
800528	15	23	4965
800529	7	7	4972
800530	2	2	4974
800602	3	5	4979

TOTAL CHINOOK-1S MARKED LA PI 3 = 3081 (ADJ = 4979)
10%= 498 50%= 2490 90%= 4481

LA P1 4 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	1	9	9
800509	6	12	21
800512	53	79	100
800513	65	85	185
800514	53	61	246
800515	111	155	401
800516	122	131	532
800519	211	243	775
800520	115	118	893
800521	95	119	1012
800522	180	385	1397
800523	218	551	1948
800526	267	1037	2985
800528	188	287	3272
800529	70	70	3342
800530	27	29	3371
800602	30	50	3421
800603	1	2	3423
800604	7	10	3433
800605	12	13	3446
800606	3	3	3449
800609	1	1	3450
800613	2	2	3452

TOTAL CHINOOK-1S MARKED LA PI 4 = 1839 (ADJ = 3454)
10%= 345 50%= 1727 90%= 3109

LA PP 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800429	31	31	31
800430	108	127	158
800502	213	236	394
800505	53	468	862
800506	220	262	1124
800507	180	457	1581
800508	167	392	1973
800509	225	457	2430
800512	256	384	2814
800513	217	283	3097
800514	288	330	3427
800515	306	428	3855
800516	309	332	4187
800519	281	324	4511
800520	175	180	4691
800521	107	134	4825
800522	123	263	5088
800523	78	197	5285
800526	28	109	5394
800528	12	18	5412
800529	2	2	5414

TOTAL CHINOOK-1S MARKED LA PP 1 = 3379 (ADJ = 5414)
10%= 541 50%= 2707 90%= 4873

LA PP 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	1	1	1
800505	2	18	19
800506	9	11	30
800507	9	23	53
800508	22	52	105
800509	36	73	178
800512	85	127	305
800513	115	150	455
800514	180	207	662
800515	190	266	928
800516	223	239	1167
800519	354	408	1575
800520	251	257	1832
800521	229	287	2119
800522	444	950	3069
800523	638	1612	4681
800526	791	3073	7754
800527	2	2	7756
800528	547	835	8591
800529	205	205	8796
800530	110	119	8915
800602	113	188	9103
800603	16	24	9127
800604	20	29	9156
800605	28	30	9186
800606	16	16	9202
800609	2	2	9204
800613	1	1	9205
800623	4	6	9211
800626	1	1	9212
800630	2	3	9215
800710	1	1	9216

TOTAL CHINOOK-1S MARKED LA PP 2 = 4647 (ADJ = 9216)
10%= 922 50%= 4608 90%= 8294

LA S 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	7	8	8
800502	214	237	245
800505	62	547	792
800506	310	370	1162
800507	219	556	1718
800508	227	532	2250
800509	293	595	2845
800512	225	337	3182
800513	184	240	3422
800514	293	336	3758
800515	258	361	4119
800516	310	333	4452
800519	259	299	4751
800520	193	198	4949
800521	105	132	5081
800522	128	274	5355
800523	117	296	5651
800526	20	78	5729
800528	3	5	5734
800529	2	2	5736
800602	1	2	5738

TOTAL CHINOOK-1S MARKED LA S 1 = 3430 (ADJ = 5738)
10%= 574 50%= 2869 90%= 5164

RA W 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800508	3	7	7
800512	1	1	8

TOTAL CHINOOK-1S MARKED RA W 1 = 4 (ADJ = 8)
10%= 1 50%= 4 90%= 7

RA W 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	1	1	1

TOTAL CHINOOK-1S MARKED RA W 2 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LA + 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	2	3	3
800516	2	2	5
800520	1	1	6
800521	3	4	10
800522	1	2	12
800529	1	1	13

TOTAL STEELHEAD MARKED LA + 1 = 10 (ADJ = 13)
10%= 1 50%= 7 90%= 12

RA + 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800507	1	3	3
800508	1	2	5

800518	2	3	8
800519	1	1	9

TOTAL STEELHEAD MARKED KA + 1 = 5 (ADJ = 9)
10%= 1 50%= 5 90%= 8

LA 2X 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	46	53	53
800515	89	125	178
800516	96	103	281
800519	14	16	297
800520	2	2	299
800521	2	3	302
800522	1	2	304
800523	3	8	312
800529	1	1	313
800602	1	2	315

TOTAL STEELHEAD MARKED LA 2X 1 = 255 (ADJ = 315)
10%= 32 50%= 158 90%= 284

LA 2X 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	1	1	1
800515	96	134	135
800516	134	144	279
800519	42	48	327
800520	12	12	339
800521	4	5	344
800522	3	6	350
800523	3	8	358
800529	1	1	359
800530	1	1	360
800602	1	2	362
800603	1	2	364

TOTAL STEELHEAD MARKED LA 2X 2 = 299 (ADJ = 364)
10%= 36 50%= 182 90%= 328

LA 2X 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	1	1	1
800516	90	97	98
800519	107	123	221
800520	10	10	231
800521	9	11	242
800522	4	9	251
800523	1	3	254

TOTAL STEELHEAD MARKED LA 2X 3 = 222 (ADJ = 254)
10%= 25 50%= 127 90%= 229

LA 2X 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800519	31	36	36
800520	10	10	46
800521	12	15	61
800522	7	15	76
800526	2	8	84
800528	1	2	86

TOTAL STEELHEAD MARKED LA 2X 4 = 63 (ADJ = 86)
10%= 9 50%= 43 90%= 77

LD 3 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800508	28	66	66
800509	12	24	90
800512	12	18	108

800514	2	2	117
800515	2	3	120
800516	1	1	121
800520	1	1	122
800521	1	1	123
800525	1	4	127
800529	1	1	128

TOTAL STEELHEAD MARKED LD 3 1 = 66 (ADJ = 128)
10%= 13 50%= 64 90%= 115

LD 3 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	4	8	8
800512	11	16	24
800513	11	14	38
800514	2	2	40
800515	5	7	47
800516	2	2	49
800520	1	1	50
800529	1	1	51

TOTAL STEELHEAD MARKED LD 3 2 = 37 (ADJ = 51)
10%= 5 50%= 26 90%= 46

LD 3 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	24	36	36
800513	11	14	50
800514	8	9	59
800515	4	6	65
800516	3	3	68
800519	2	2	70

TOTAL STEELHEAD MARKED LD 3 3 = 52 (ADJ = 70)
10%= 7 50%= 35 90%= 63

LD 3 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	14	21	21
800513	11	14	35
800514	5	6	41
800515	2	3	44
800516	3	3	47
800519	2	2	49

TOTAL STEELHEAD MARKED LD 3 4 = 37 (ADJ = 49)
10%= 5 50%= 25 90%= 44

RA 4 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	6	7	7
800502	8	9	16
800505	3	26	42
800506	1	1	43
800507	1	3	46
800508	3	7	53
800509	3	6	59
800512	3	4	63
800514	2	2	65
800515	1	1	66
800516	1	1	67
800519	1	1	68
800520	1	1	69
800523	3	8	77
800526	1	4	81
800528	1	2	83

TOTAL STEELHEAD MARKED RA 4 4 = 39 (ADJ = 83)
10%= 8 50%= 42 90%= 75

RO 4 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	1	1	1
800516	1	1	2
800519	1	1	3
800602	1	2	5
800606	1	1	6

TOTAL STEELHEAD MARKED RO 4 2 = 5 (ADJ = 6)
10%= 1 50%= 3 90%= 5

LA 5 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	84	326	326
800528	29	44	370
800529	14	14	384
800530	11	12	396
800602	3	5	401

TOTAL STEELHEAD MARKED LA 5 1 = 141 (ADJ = 401)
10%= 40 50%= 201 90%= 361

LA 5 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800528	1	2	2
800529	62	62	64
800530	38	41	105
800602	14	23	128
800603	1	2	130
800605	1	1	131
800606	1	1	132

TOTAL STEELHEAD MARKED LA 5 2 = 118 (ADJ = 132)
10%= 13 50%= 66 90%= 119

LA 5 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800530	67	72	72
800602	83	138	210
800603	17	26	236
800604	1	1	237

TOTAL STEELHEAD MARKED LA 5 3 = 168 (ADJ = 237)
10%= 24 50%= 119 90%= 213

LA 5 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800530	1	1	1
800602	32	53	54
800603	6	9	63
800605	1	1	64

TOTAL STEELHEAD MARKED LA 5 4 = 40 (ADJ = 64)
10%= 6 50%= 32 90%= 58

LD AN 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	1	1	1
800502	4	4	5
800506	3	4	9
800507	1	3	12
800508	5	12	24
800512	2	3	27
800528	1	2	29
800603	1	1	30

TOTAL STEELHEAD MARKED LD AN 1 = 18 (ADJ = 30)
10%= 3 50%= 15 90%= 27

LA B2 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.

TOTAL STEELHEAD MARKED LA B2 1 = 4 (ADJ = 6)
10%= 1 50%= 3 90%= 5

LA B2 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800604	1	1	1
800605	90	97	98
800606	31	31	129
800609	20	20	149
800613	1	1	150
800616	1	2	152

TOTAL STEELHEAD MARKED LA B2 3 = 144 (ADJ = 152)
10%= 15 50%= 76 90%= 137

LA DT 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800519	1	1	1
800605	1	1	2

TOTAL STEELHEAD MARKED LA DT 3 = 2 (ADJ = 2)
10%= 0 50%= 1 90%= 2

LD DT 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	1	1	1
800519	1	1	2
800520	1	1	3
800521	1	1	4
800522	1	2	6
800523	1	3	9

TOTAL STEELHEAD MARKED LD DT 1 = 6 (ADJ = 9)
10%= 1 50%= 5 90%= 8

RA DT 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	2	4	4
800514	8	9	13
800515	7	10	23
800516	6	6	29
800519	2	2	31
800521	3	4	35
800522	1	2	37
800523	1	3	40
800528	1	2	42
800530	1	1	43
800602	1	2	45

TOTAL STEELHEAD MARKED RA DT 3 = 33 (ADJ = 45)
10%= 5 50%= 23 90%= 41

RD DT 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	4	6	6
800513	2	3	9
800515	2	3	12
800519	1	1	13

TOTAL STEELHEAD MARKED RD DT 1 = 9 (ADJ = 13)
10%= 1 50%= 7 90%= 12

LA I+ 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800609	22	22	22
800613	1	1	23

TOTAL STEELHEAD MARKED LA I+ 1 = 23 (ADJ = 23)
10%= 2 50%= 12 90%= 21

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800519	113	130	130
800520	37	38	168
800521	18	23	191
800522	26	56	247
800523	6	15	262
800526	1	4	266
800530	1	1	267
800605	1	1	268

TOTAL STEELHEAD MARKED LA ID 1 = 203 (ADJ = 268)
10%= 27 50%= 134 90%= 241

LA ID 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800521	35	44	44
800522	128	274	318
800523	72	182	500
800526	10	39	539
800528	6	9	548
800529	2	2	550
800530	1	1	551
800620	1	2	553

TOTAL STEELHEAD MARKED LA ID 2 = 255 (ADJ = 553)
10%= 55 50%= 277 90%= 498

LA ID 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800522	35	75	75
800523	90	227	302
800526	4	16	318
800528	2	3	321
800529	2	2	323
800602	1	2	325

TOTAL STEELHEAD MARKED LA ID 3 = 134 (ADJ = 325)
10%= 33 50%= 163 90%= 293

LA ID 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800523	22	56	56
800526	30	117	173
800528	10	15	188
800529	1	1	189
800530	1	1	190
800602	4	7	197

TOTAL STEELHEAD MARKED LA ID 4 = 68 (ADJ = 197)
10%= 20 50%= 99 90%= 177

LD IJ 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	30	39	39
800514	151	173	212
800515	161	225	437
800516	200	215	652
800519	98	113	765
800520	59	61	826
800521	45	56	882
800522	39	83	965
800523	22	56	1021
800526	12	47	1068
800528	5	8	1076
800529	7	7	1083
800530	2	2	1085
800602	3	5	1090
800603	2	3	1093
800609	1	1	1094

LD IJ 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	22	29	29
800514	107	123	152
800515	99	138	290
800516	191	205	495
800519	101	116	611
800520	72	74	685
800521	65	82	767
800522	45	96	863
800523	39	99	962
800526	11	43	1005
800528	10	15	1020
800529	10	10	1030
800530	2	2	1032
800602	2	3	1035
800603	1	2	1037
800606	2	2	1039
800609	1	1	1040

TOTAL STEELHEAD MARKED LD IJ 2 = 780 (ADJ = 1040)

10%= 104 50%= 520 90%= 936

LD IJ 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	29	38	38
800514	170	195	233
800515	132	185	418
800516	202	217	635
800519	120	138	773
800520	72	74	847
800521	54	68	915
800522	45	96	1011
800523	46	116	1127
800526	17	66	1193
800528	10	15	1208
800529	7	7	1215
800530	3	3	1218
800602	6	10	1228
800603	2	3	1231
800604	1	1	1232
800613	1	1	1233
800616	1	2	1235

TOTAL STEELHEAD MARKED LD IJ 3 = 918 (ADJ = 1235)

10%= 124 50%= 618 90%= 1112

RD IJ 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	40	52	52
800514	183	210	262
800515	158	221	483
800516	188	202	685
800519	106	122	807
800520	60	62	869
800521	47	59	928
800522	32	68	996
800523	22	56	1052
800526	16	62	1114
800528	5	8	1122
800529	4	4	1126
800530	2	2	1128
800602	1	2	1130
800603	1	2	1132
800604	1	1	1133

RD IJ 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	19	25	25
800514	109	125	150
800515	113	158	308
800516	173	186	494
800519	96	111	605
800520	61	63	668
800521	59	74	742
800522	45	96	838
800523	19	48	886
800526	9	35	921
800528	7	11	932
800529	4	4	936
800530	1	1	937
800602	3	5	942
800603	3	5	947
800604	3	4	951
800605	2	2	953
800606	1	1	954
800609	1	1	955

TOTAL STEELHEAD MARKED RD IJ 2 = 728 (ADJ = 955)
10%= 96 50%= 478 90%= 860

RD IJ 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	23	30	30
800514	114	131	161
800515	115	161	322
800516	189	203	525
800519	119	137	662
800520	65	67	729
800521	40	50	779
800522	31	66	845
800523	30	76	921
800526	9	35	956
800528	6	9	965
800529	8	8	973
800530	3	3	976
800602	1	2	978
800603	1	2	980
800605	2	2	982

TOTAL STEELHEAD MARKED RD IJ 3 = 756 (ADJ = 982)
10%= 98 50%= 491 90%= 884

LD IM 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	19	168	168
800506	14	17	185
800507	16	41	226
800508	7	16	242
800509	1	2	244
800512	2	3	247
800513	2	3	250
800514	3	3	253
800515	2	3	256
800522	1	2	258

TOTAL STEELHEAD MARKED LD IM 1 = 67 (ADJ = 258)
10%= 26 50%= 129 90%= 232

LD IM 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800507	2	5	5

800517	1	1	24
800519	1	1	25
800521	1	1	26

TOTAL STEELHEAD MARKED LD IM 2 = 13 (ADJ = 26)
10%= 3 50%= 13 90%= 23

LA IS 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	5	6	6
800507	2	5	11
800508	3	7	18
800509	2	4	22
800512	4	6	28
800513	3	4	32
800514	7	8	40
800515	5	7	47
800516	6	6	53
800519	6	7	60
800520	1	1	61
800521	3	4	65
800522	4	9	74
800523	3	8	82
800526	1	4	86
800529	2	2	88
800530	2	2	90
800602	1	2	92
800603	2	3	95

TOTAL STEELHEAD MARKED LA IS 2 = 62 (ADJ = 95)
10%= 10 50%= 48 90%= 86

LA IS 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	1	1	1
800519	4	5	6
800520	1	1	7
800521	4	5	12
800522	4	9	21
800523	3	8	29
800526	5	19	48
800528	2	3	51
800529	1	1	52
800603	1	2	54

TOTAL STEELHEAD MARKED LA IS 3 = 26 (ADJ = 54)
10%= 5 50%= 27 90%= 49

LA IS 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800530	1	1	1
800602	2	3	4
800604	4	6	10
800605	2	2	12
800606	2	2	14
800609	1	1	15
800613	1	1	16

TOTAL STEELHEAD MARKED LA IS 4 = 13 (ADJ = 16)
10%= 2 50%= 8 90%= 14

LD IU 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	1	1	1
800508	1	2	3
800515	1	1	4
800519	1	1	5
800526	2	8	13

10%= 1 50%= 1 90%= 16

LD IU 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800504	2	2	2
800506	3	4	6
800508	1	2	8
800512	1	1	9
800519	1	1	10

TOTAL STEELHEAD MARKED LD IU 2 = 8 (ADJ = 10)
10%= 1 50%= 5 90%= 9

LD IU 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	2	2	2
800505	1	9	11
800506	1	1	12
800507	2	5	17
800514	2	2	19

TOTAL STEELHEAD MARKED LD IU 4 = 8 (ADJ = 19)
10%= 2 50%= 10 90%= 17

LD K 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	126	189	189
800513	206	269	458
800514	233	267	725
800515	176	246	971
800516	146	157	1128
800519	62	71	1199
800520	32	33	1232
800521	32	40	1272
800522	33	71	1343
800523	16	40	1383
800526	11	43	1426
800528	3	5	1431
800529	3	3	1434
800530	1	1	1435
800602	1	2	1437
800603	2	3	1440
800604	1	1	1441
800605	3	3	1444

TOTAL STEELHEAD MARKED LD K 1 = 1087 (ADJ = 1444)
10%= 144 50%= 722 90%= 1300

LD K 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	103	154	154
800513	218	285	439
800514	239	343	782
800515	161	225	1007
800516	130	140	1147
800519	53	61	1208
800520	23	24	1232
800521	32	40	1272
800522	15	32	1304
800523	15	38	1342
800526	6	23	1365
800528	3	5	1370
800529	2	2	1372
800530	1	1	1373
800603	2	3	1376
800604	1	1	1377
800703	1	1	1378

TOTAL STEELHEAD MARKED LD K 2 = 1065 (ADJ = 1378)

LD K 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	105	157	157
800513	153	200	357
800514	213	244	601
800515	144	201	802
800516	135	145	947
800519	54	62	1009
800520	28	29	1038
800521	36	45	1083
800522	22	47	1130
800523	7	18	1148
800526	6	23	1171
800528	4	6	1177
800529	3	3	1180
800530	1	1	1181
800602	2	3	1184
800605	1	1	1185
800609	1	1	1186

TOTAL STEELHEAD MARKED LD K 3 = 915 (ADJ = 1186)

10%= 119 50%= 593 90%= 1067

RD K 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	133	199	199
800513	180	235	434
800514	212	243	677
800515	139	194	871
800516	112	120	991
800519	52	60	1051
800520	23	30	1081
800521	21	26	1107
800522	25	53	1160
800523	14	35	1195
800526	7	27	1222
800528	4	6	1228
800529	3	3	1231
800602	2	3	1234
800603	2	3	1237
800605	1	1	1238
800609	1	1	1239
800623	1	2	1241

TOTAL STEELHEAD MARKED RD K 1 = 938 (ADJ = 1241)

10%= 124 50%= 621 90%= 1117

RD K 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	112	168	168
800513	190	248	416
800514	267	306	722
800515	150	210	932
800516	122	131	1063
800519	47	54	1117
800520	19	19	1136
800521	29	36	1172
800522	21	45	1217
800523	13	33	1250
800526	10	39	1289
800528	2	3	1292
800529	2	2	1294
800530	2	2	1296
800603	1	2	1298
800605	1	1	1299

TOTAL STEELHEAD MARKED RD K 2 = 988 (ADJ = 1299)

RD K 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	106	159	159
800513	142	185	344
800514	146	167	511
800515	101	141	652
800516	115	123	775
800519	56	65	840
800520	28	29	869
800521	11	14	883
800522	22	47	930
800523	14	35	965
800526	5	19	984
800528	2	3	987
800529	2	2	989
800530	1	1	990
800607	1	2	992
800604	2	3	995
800606	2	2	997
800609	1	1	998

TOTAL STEELHEAD MARKED RD K 3 = 757 (ADJ = 998)

10%= 100 50%= 499 90%= 898

RA L 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800425	6	7	7
800428	11	19	26
800429	13	13	39
800430	3	4	43
800501	18	28	71
800502	9	10	81
800505	2	18	99
800506	3	4	103
800507	2	5	108
800508	9	21	129
800509	6	12	141
800512	10	15	156
800513	1	1	157
800514	1	1	158
800516	1	1	159
800520	1	1	160
800522	1	2	162
800526	3	12	174
800529	3	3	177

TOTAL STEELHEAD MARKED RA L 1 = 103 (ADJ = 177)

10%= 18 50%= 89 90%= 159

LA P 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800429	15	15	15
800430	17	20	35
800502	26	29	64
800505	27	238	302
800506	64	76	378
800507	70	178	556
800508	73	171	727
800509	28	57	784
800512	37	55	839
800513	17	22	861
800514	18	21	882
800515	12	17	899
800516	9	10	909
800519	14	16	925
800520	12	12	937

800522	5	11	953
800523	4	10	963
800526	4	16	979
800529	1	1	980
800603	1	2	982
800604	1	1	983

TOTAL STEELHEAD MARKED LA P 1 = 459 (ADJ = 983)
10%= 98 50%= 492 90%= 885

LA P 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	6	12	12
800512	174	261	273
800513	224	292	565
800514	226	259	824
800515	122	171	995
800516	149	160	1155
800519	161	186	1341
800520	186	191	1532
800521	180	226	1758
800522	150	321	2079
800523	84	212	2291
800526	30	117	2408
800528	14	21	2429
800529	9	9	2438
800530	6	6	2444
800602	11	18	2462
800603	4	6	2468
800604	2	3	2471
800606	1	1	2472
800609	1	1	2473
800613	2	2	2475

TOTAL STEELHEAD MARKED LA P 2 = 1742 (ADJ = 2475)
10%= 248 50%= 1238 90%= 2228

LA P 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800520	1	1	1
800521	1	1	2
800522	29	62	64
800523	89	225	289
800526	41	159	448
800528	8	12	460
800529	34	34	494
800530	22	24	518
800602	21	35	553
800603	16	24	577
800604	26	38	615
800605	8	9	624
800606	16	16	640
800609	10	10	650
800613	2	2	652
800616	1	2	654
800620	1	2	656
800630	2	3	659

TOTAL STEELHEAD MARKED LA P 3 = 328 (ADJ = 659)
10%= 66 50%= 330 90%= 593

LA PP 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800508	1	2	2
800512	1	1	3
800515	1	1	4
800519	1	1	5
800521	1	1	6

```
800521          1          4          15
TOTAL STEELHEAD   MARKED LA PP 1   =      8 (ADJ =      15)
10%= 2  50%= 8  90%= 14

LA PP 2 MARKED STEELHEAD
DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
800520        32         33          33
800521        74         93         126
800522        65        139         265
800523        45        114         379
800526        42        163         542
800528        23         44         586
800529         8          8         594
800530        10         11         605
800602        20         33         638
800603         1          2         640
800609         2          2         642
TOTAL STEELHEAD   MARKED LA PP 2   =    328 (ADJ =     642)
10%= 64  50%= 321  90%= 578

LA SU 1 MARKED STEELHEAD
DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
800523         1          3           3
TOTAL STEELHEAD   MARKED LA SU 1   =      1 (ADJ =       3)
10%= 0  50%= 2  90%= 3

LA SU 4 MARKED STEELHEAD
DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
800523         1          3           3
TOTAL STEELHEAD   MARKED LA SU 4   =      1 (ADJ =       3)
10%= 0  50%= 2  90%= 3

LD SU 3 MARKED STEELHEAD
DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
800509         1          2           2
800512         1          1           3
800514         2          2           5
800516         1          1           6
800519         1          1           7
TOTAL STEELHEAD   MARKED LD SU 3   =      6 (ADJ =       7)
10%= 1  50%= 4  90%= 6

RA SU 1 MARKED STEELHEAD
DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
800516         1          1           1
TOTAL STEELHEAD   MARKED RA SU 1   =      1 (ADJ =       1)
10%= 0  50%= 1  90%= 1

RA W  1 MARKED STEELHEAD
DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
800506         1          1           1
800508         1          2           3
800513         1          1           4
800514         1          1           5
800522         1          2           7
TOTAL STEELHEAD   MARKED RA W  1   =      5 (ADJ =       7)
10%= 1  50%= 4  90%= 6

RA W  2 MARKED STEELHEAD
DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
800514         1          1           1
TOTAL STEELHEAD   MARKED RA W  2   =      1 (ADJ =       1)
10%= 0  50%= 1  90%= 1

LA X3 3 MARKED STEELHEAD
```

800508	3	7	7
800509	3	6	13
800512	5	7	20
800513	5	7	27
800514	9	10	37
800515	39	55	92
800516	2	2	94
800519	1	1	95
800520	2	2	97
800521	1	1	98
800522	2	4	102
800523	5	13	115
800528	1	2	117
800602	1	2	119
800605	1	1	120

TOTAL STEELHEAD MARKED LA X3 3 = 80 (ADJ = 120)
10%= 12 50%= 60 90%= 108

LD X3 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	4	6	6
800513	3	4	10
800514	3	3	13
800515	4	6	19
800516	2	2	21
800519	3	3	24
800520	2	2	26
800521	3	4	30
800523	2	5	35
800526	1	4	39
800604	1	1	40

TOTAL STEELHEAD MARKED LD X3 1 = 28 (ADJ = 40)
10%= 4 50%= 20 90%= 36

LD Y 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	180	270	270
800513	172	225	495
800514	172	197	692
800515	101	141	833
800516	96	103	936
800519	40	46	982
800520	36	37	1019
800521	22	28	1047
800522	23	49	1096
800523	10	25	1121
800526	6	23	1144
800528	7	11	1155
800529	3	3	1158
800530	6	6	1164
800602	3	5	1169
800605	2	2	1171
800609	1	1	1172

TOTAL STEELHEAD MARKED LD Y 1 = 880 (ADJ = 1172)
10%= 117 50%= 586 90%= 1055

LD Y 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	154	231	231
800513	141	184	415
800514	124	142	557
800515	82	115	672
800516	67	72	744
800519	23	33	777
800520	22	23	800

800522	14	30	845
800523	14	35	880
800526	9	35	915
800528	8	12	927
800529	4	4	931
800530	2	2	933
800605	3	3	936
800609	1	1	937

TOTAL STEELHEAD MARKED LD Y 2 = 686 (ADJ = 937)
10%= 94 50%= 469 90%= 843

LD Y 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	145	217	217
800513	159	208	425
800514	142	163	588
800515	85	119	707
800516	70	75	782
800519	35	40	822
800520	25	26	848
800521	13	16	864
800522	10	21	885
800523	13	33	918
800526	4	16	934
800528	7	11	945
800529	4	4	949
800530	2	2	951
800603	1	2	953
800604	1	1	954
800606	1	1	955
800613	1	1	956

TOTAL STEELHEAD MARKED LD Y 3 = 718 (ADJ = 956)
10%= 96 50%= 478 90%= 860

RD Y 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	143	214	214
800513	149	195	409
800514	163	187	596
800515	107	150	746
800516	105	113	859
800519	48	55	914
800520	28	29	943
800521	21	26	969
800522	19	41	1010
800523	11	28	1038
800526	7	27	1065
800528	8	12	1077
800529	4	4	1081
800530	2	2	1083
800602	2	3	1086
800603	1	2	1088
800604	1	1	1089
800605	1	1	1090
800606	1	1	1091

TOTAL STEELHEAD MARKED RD Y 1 = 821 (ADJ = 1091)
10%= 109 50%= 546 90%= 982

RD Y 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	1	2	2
800512	167	250	252
800513	138	180	432
800514	151	173	605
800515	113	158	763

800519	40	46	886
800520	35	36	932
800521	11	14	946
800522	16	34	980
800523	4	10	990
800526	8	31	1021
800528	4	6	1027
800529	1	1	1028
800602	1	2	1030
800609	2	2	1032

TOTAL STEELHEAD MARKED RD Y 2 = 773 (ADJ = 1032)
10%= 103 50%= 516 90%= 929

RD Y 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	104	156	156
800513	137	179	335
800514	115	132	467
800515	105	147	614
800516	57	61	675
800519	32	37	712
800520	17	17	729
800521	20	25	754
800522	18	39	793
800523	9	23	816
800526	3	12	828
800528	4	6	834
800529	2	2	836
800602	3	5	841
800603	1	2	843
800606	2	2	845

TOTAL STEELHEAD MARKED RD Y 3 = 629 (ADJ = 845)
10%= 85 50%= 423 90%= 761

LA AN 4 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800718	1	1	1

TOTAL CHINOOK-OS MARKED LA AN 4 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

RA AN 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800703	20	25	25
800707	42	156	181
800708	10	11	192
800709	2	2	194
800710	3	4	198
800714	2	3	201
800716	2	3	204
800718	1	1	205
800721	2	3	208
800722	1	1	209
800730	6	7	216
800731	1	1	217
800813	1	1	218

TOTAL CHINOOK-OS MARKED RA AN 1 = 93 (ADJ = 218)
10%= 22 50%= 109 90%= 196

RA AN 2 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800707	52	194	194
800708	25	26	220
800709	7	8	228
800710	5	7	235
800711	9	9	244

800717	1	1	255
800718	3	3	256
800721	2	3	259
800722	1	1	260
800725	1	1	261
800730	3	3	264
800811	1	1	265

TOTAL CHINOOK-OS MARKED RA AN 2 = 115 (ADJ = 265)
10%= 27 50%= 133 90%= 239

RA AN 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800709	7	8	8
800710	34	44	52
800711	69	69	121
800714	57	88	209
800715	4	5	214
800716	3	4	218
800717	3	4	222
800718	2	2	224
800721	10	16	240
800722	3	3	243
800724	2	3	246
800725	2	2	248
800730	3	3	251
800731	1	1	252
800801	1	1	253
800804	4	5	258
800808	1	1	259
800813	1	1	260

TOTAL CHINOOK-OS MARKED RA AN 3 = 207 (ADJ = 260)
10%= 26 50%= 130 90%= 234

RA AN 4 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800710	11	14	14
800711	51	51	65
800714	93	144	209
800715	11	15	224
800716	9	12	236
800717	5	7	243
800718	7	8	251
800721	13	21	272
800722	6	7	279
800724	1	1	280
800730	10	11	291
800731	4	4	295
800801	2	3	298
800804	5	6	304
800813	4	5	309
800815	1	1	310

TOTAL CHINOOK-OS MARKED RA AN 4 = 233 (ADJ = 310)
10%= 31 50%= 155 90%= 279

LA B2 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800605	5	5	5
800606	3	3	8
800609	3	3	11

TOTAL CHINOOK-OS MARKED LA B2 3 = 11 (ADJ = 11)
10%= 1 50%= 6 90%= 10

LA 1+ 2 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800626	31	37	37

800706	14	24	80
800707	1	4	84
800708	1	1	85
800714	1	2	87

TOTAL CHINOOK-OS MARKED LA I+ 2 = 61 (ADJ = 87)
10%= 9 50%= 44 90%= 78

LA I+ 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800609	2	2	2
800613	1	1	3
800630	152	237	240
800701	49	49	289
800702	26	44	333
800703	15	19	352
800707	2	7	359
800708	6	6	365
800709	2	2	367
800710	2	3	370
800711	1	1	371
800714	1	2	373
800716	1	1	374
800718	1	1	375
800724	2	3	378

TOTAL CHINOOK-OS MARKED LA I+ 3 = 263 (ADJ = 378)
10%= 38 50%= 189 90%= 340

LA I+ 4 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800702	2	3	3
800703	48	60	63
800707	19	71	134
800709	4	5	139
800710	2	3	142
800714	3	5	147
800718	2	2	149
800721	4	7	156
800725	1	1	157

TOTAL CHINOOK-OS MARKED LA I+ 4 = 85 (ADJ = 157)
10%= 16 50%= 79 90%= 141

RA I+ 4 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800724	1	1	1

TOTAL CHINOOK-OS MARKED RA I+ 4 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

RA IC 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800703	1	1	1

TOTAL CHINOOK-OS MARKED RA IC 1 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

RA ID 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800722	1	1	1
800724	36	48	49
800725	49	52	101
800730	23	26	127
800731	6	6	133
800801	10	13	146
800804	10	11	157
800808	1	1	158
800811	3	3	161

```
800813          1           1          103
TOTAL CHINOOK-OS  MARKED RA ID 1    =     141 (ADJ =      163)
10%= 16  50%= 82  90%= 147
```

RA ID 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800724	7	9	9
800725	18	19	28
800730	48	54	82
800731	8	9	91
800801	9	12	103
800804	9	10	113
800806	2	3	116
800808	1	1	117
800811	2	2	119
800813	5	6	125

TOTAL CHINOOK-OS MARKED RA ID 3 = 109 (ADJ = 125)
10%= 13 50%= 63 90%= 113

RA IM 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800716	23	32	32
800717	56	75	107
800718	76	87	194
800721	91	150	344
800722	22	25	369
800724	4	5	374
800725	6	6	380
800730	10	11	391
800731	10	11	402
800801	3	4	406
800804	7	8	414
800806	2	3	417
800808	6	6	423
800811	1	1	424
800813	6	8	432
800815	1	1	433

TOTAL CHINOOK-OS MARKED RA IM 1 = 324 (ADJ = 433)
10%= 43 50%= 217 90%= 390

RA IM 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800717	1	1	1
800718	38	44	45
800721	80	132	177
800722	31	35	212
800724	6	8	220
800725	4	4	224
800730	4	4	228
800731	4	4	232
800801	3	4	236
800804	1	1	237
800806	1	2	239
800808	2	2	241
800813	2	3	244
800815	2	2	246

TOTAL CHINOOK-OS MARKED RA IM 3 = 179 (ADJ = 246)
10%= 25 50%= 123 90%= 221

LA P 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800826	1	1	1

TOTAL CHINOOK-OS MARKED LA P 3 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

TOTAL MARKS IN FILE BRMC80 78997

RECAPTURE SUMMARY OF BRANDS COLLECTED AT JOHN DAY DAM, 1980

Sorted by species, brand.

Number = Actual number observed.

Adjusted number = No adjustment made. All fish captured were totaled.

2/20/81

RECAPTURE SUMMARY DATA FROM FILE BRJD80

THRU FINAL

0 0 0

LA H 1 MARKED SOCKEYE

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800504	1	1	1
800519	1	1	2

TOTAL SOCKEYE MARKED LA H 1 = 2 (ADJ = 2)

10%= 0 50%= 1 90%= 2

LA H 2 MARKED SOCKEYE

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800520	1	1	1
800521	1	1	2
800523	1	1	3
800610	1	1	4
800612	1	1	5

TOTAL SOCKEYE MARKED LA H 2 = 5 (ADJ = 5)

10%= 1 50%= 3 90%= 5

LA 2 1 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800531	1	1	1

TOTAL COHO MARKED LA 2 1 = 1 (ADJ = 1)

10%= 0 50%= 1 90%= 1

LD 52 1 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800525	1	1	1
800526	4	4	5
800527	6	6	11
800528	1	1	12
800529	6	6	18
800530	3	3	21
800531	9	9	30
800601	4	4	34
800602	1	1	35
800603	3	3	38
800605	6	6	44
800606	4	4	48
800609	1	1	49
800610	4	4	53
800611	1	1	54
800613	2	2	56
800616	2	2	58
800623	2	2	60
800625	1	1	61
800716	2	2	63

TOTAL COHO MARKED LD 52 1 = 63 (ADJ = 63)

10%= 6 50%= 32 90%= 57

LD 52 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	3	3	3
800525	4	4	7
800526	7	7	14
800527	10	10	24
800528	6	6	30
800529	11	11	41
800530	8	8	49
800531	7	7	56

800602	4	4	64
800603	4	4	68
800605	5	5	73
800606	1	1	74
800609	1	1	75
800611	1	1	76
800612	1	1	77
800613	1	1	78
800618	1	1	79
800627	1	1	80
800818	1	1	81

TOTAL COHO MARKED LD 52 2 = 81 (ADJ = 81)
10%= 8 50%= 41 90%= 73

LD 52 3 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800623	1	1	1

TOTAL COHO MARKED LD 52 3 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

RD 52 1 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800525	1	1	1
800526	3	3	4
800527	2	2	6
800529	11	11	17
800530	8	8	25
800531	8	8	33
800601	6	6	39
800603	7	7	46
800605	4	4	50
800606	5	5	55
800609	3	3	58
800610	2	2	60
800611	1	1	61
800613	2	2	63
800618	2	2	65
800625	1	1	66
800716	1	1	67

TOTAL COHO MARKED RD 52 1 = 67 (ADJ = 67)
10%= 7 50%= 34 90%= 60

RD 52 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	3	3	3
800525	3	3	6
800526	4	4	10
800527	6	6	16
800528	4	4	20
800529	10	10	30
800530	7	7	37
800531	5	5	42
800601	5	5	47
800602	2	2	49
800603	3	3	52
800605	5	5	57
800606	1	1	58
800613	1	1	59
800623	1	1	60
800716	1	1	61
800721	1	1	62

TOTAL COHO MARKED RD 52 2 = 62 (ADJ = 62)
10%= 6 50%= 31 90%= 56

LA H 2 MARKED COHO

800524	2	2	2
800528	1	1	3
800531	2	2	5
800605	1	1	6

TOTAL COHO MARKED LA H 2 = 6 (ADJ = 6)
10%= 1 50%= 3 90%= 5

LD H 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800601	1	1	1

TOTAL COHO MARKED LD H 2 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

RD H 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800530	1	1	1
800531	1	1	2

TOTAL COHO MARKED RD H 2 = 2 (ADJ = 2)
10%= 0 50%= 1 90%= 2

LD IH 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800529	3	3	3
800530	2	2	5
800531	10	10	15
800601	10	10	25
800602	4	4	29
800603	15	15	44
800605	4	4	48
800606	6	6	54
800609	6	6	60
800610	1	1	61
800611	1	1	62
800613	2	2	64
800618	1	1	65
800623	4	4	69
800710	1	1	70
800725	1	1	71

TOTAL COHO MARKED LD IH 2 = 71 (ADJ = 71)
10%= 7 50%= 36 90%= 64

LD 1H 3 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800530	8	8	8
800531	9	9	17
800601	7	7	24
800602	2	2	26
800603	8	8	34
800605	5	5	39
800606	3	3	42
800609	5	5	47
800610	2	2	49
800611	1	1	50
800612	1	1	51
800613	1	1	52
800618	2	2	54
800708	1	1	55

TOTAL COHO MARKED LD 1H 3 = 55 (ADJ = 55)
10%= 6 50%= 28 90%= 50

RD 1H 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800528	1	1	1
800530	4	4	5
800531	15	15	20

800602	3	3	30
800603	9	9	39
800605	5	5	44
800606	3	3	47
800609	4	4	51
800610	2	2	53
800611	1	1	54
800613	4	4	58
800616	3	3	61
800618	1	1	62
800623	1	1	63
800716	1	1	64

TOTAL COHO MARKED RD IH 2 = 64 (ADJ = 64)
10%= 6 50%= 32 90%= 58

RD IH 3 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800529	1	1	1
800530	3	3	4
800531	9	9	13
800601	9	9	22
800602	1	1	23
800603	8	8	31
800605	3	3	34
800606	5	5	39
800609	4	4	43
800610	2	2	45
800611	1	1	46
800612	2	2	48
800618	1	1	49
800627	1	1	50
800723	1	1	51
800808	1	1	52

TOTAL COHO MARKED RD IH 3 = 52 (ADJ = 52)
10%= 5 50%= 26 90%= 47

RD IK 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800801	1	1	1

TOTAL COHO MARKED RD IK 2 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LD IX 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800525	1	1	1
800526	1	1	2
800527	1	1	3
800528	3	3	6
800529	13	13	19
800530	5	5	24
800531	9	9	33
800601	3	3	36
800602	5	5	41
800603	5	5	46
800605	7	7	53
800606	7	7	60
800609	5	5	65
800611	1	1	66
800612	4	4	70
800613	1	1	71
800618	2	2	73
800623	2	2	75
800627	1	1	76
800714	1	1	77

TOTAL COHO MARKED LD IX 2 = 77 (ADJ = 77)

LD IX 3 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800527	1	1	1
800528	4	4	5
800529	12	12	17
800530	9	9	26
800531	8	8	34
800601	3	3	37
800602	5	5	42
800603	4	4	46
800604	1	1	47
800605	3	3	50
800606	3	3	53
800609	1	1	54
800613	1	1	55
800616	1	1	56
800618	1	1	57

TOTAL COHO MARKED LD IX 3 = 57 (ADJ = 57)

10%= 6 50%= 29 90%= 51

RD IX 2 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800525	1	1	1
800526	2	2	3
800528	4	4	7
800529	19	19	26
800530	7	7	33
800531	11	11	44
800601	4	4	48
800602	5	5	53
800603	4	4	57
800605	7	7	64
800606	4	4	68
800609	1	1	69
800610	1	1	70
800611	1	1	71
800612	2	2	73
800618	1	1	74
800623	1	1	75
800707	1	1	76
800716	1	1	77
800723	1	1	78

TOTAL COHO MARKED RD IX 2 = 78 (ADJ = 78)

10%= 8 50%= 39 90%= 70

RD IX 3 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	1	1	1
800528	1	1	2
800529	8	8	10
800530	7	7	17
800531	8	8	25
800601	6	6	31
800602	4	4	35
800603	7	7	42
800605	5	5	47
800606	4	4	51
800609	4	4	55
800612	1	1	56
800616	1	1	57
800627	1	1	58

TOTAL COHO MARKED RD IX 3 = 58 (ADJ = 58)

10%= 6 50%= 29 90%= 52

```
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800616          1           1           1
 TOTAL COHO        MARKED RD IY 2   =     1 (ADJ =       1)
 10%= 0  50%= 1  90%= 1

LA 00 1 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800514          1           1           1
 TOTAL CHINOOK-1S  MARKED LA 00 1   =     1 (ADJ =       1)
 10%= 0  50%= 1  90%= 1

RA 2C 1 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800424          2           2           2
 800425          1           1           3
 800428          2           2           5
 800430          1           1           6
 800501          1           1           7
 TOTAL CHINOOK-1S  MARKED RA 2C 1   =     7 (ADJ =       7)
 10%= 1  50%= 4  90%= 6

RA 2I 1 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800422          1           1           1
 TOTAL CHINOOK-1S  MARKED RA 2I 1   =     1 (ADJ =       1)
 10%= 0  50%= 1  90%= 1

LA 2X 1 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800517          1           1           1
 800518          2           2           3
 800520          2           2           5
 800522          2           2           7
 800526          1           1           8
 TOTAL CHINOOK-1S  MARKED LA 2X 1   =     8 (ADJ =       8)
 10%= 1  50%= 4  90%= 7

LA 2X 2 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800518          3           3           3
 800520          4           4           7
 800521          1           1           8
 800522          2           2          10
 800523          1           1          11
 800524          1           1          12
 800525          1           1          13
 TOTAL CHINOOK-1S  MARKED LA 2X 2   =    13 (ADJ =      13)
 10%= 1  50%= 7  90%= 12

LA 2X 3 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800518          1           1           1
 800519          1           1           2
 800520          3           3           5
 800522          2           2           7
 800523          1           1           8
 800524          2           2          10
 TOTAL CHINOOK-1S  MARKED LA 2X 3   =    10 (ADJ =      10)
 10%= 1  50%= 5  90%= 9

LA 2X 4 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800521          5           5           5
 800522          5           5          10
 800523          1           1          11
```

```
 800525          1           1           13
 TOTAL CHINOOK-1S  MARKED LA 2X 4    =      13 (ADJ =       13)
 10%= 1  50%= 7  90%= 12

LD 3  1 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
 800511          1           1           1
 800512          4           4           5
 800513          5           5          10
 800515          3           3          13
 TOTAL CHINOOK-1S  MARKED LD 3  1    =      13 (ADJ =       13)
 10%= 1  50%= 7  90%= 12

LD 3  2 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
 800512          2           2           2
 800513          3           3           5
 800514          2           2           7
 800515          8           8          15
 800516          3           3          18
 800517          1           1          19
 800522          1           1          20
 TOTAL CHINOOK-1S  MARKED LD 3  2    =      20 (ADJ =       20)
 10%= 2  50%= 10  90%= 18

LD 3  3 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
 800513          3           3           3
 800514          2           2           5
 800515          4           4           9
 800516          2           2          11
 800517          1           1          12
 800522          1           1          13
 TOTAL CHINOOK-1S  MARKED LD 3  3    =      13 (ADJ =       13)
 10%= 1  50%= 7  90%= 12

LD 3  4 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
 800513          2           2           2
 800516          1           1           3
 800517          2           2           5
 TOTAL CHINOOK-1S  MARKED LD 3  4    =       5 (ADJ =        5)
 10%= 1  50%= 3  90%= 5

RA 3C 1 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
 800424          1           1           1
 TOTAL CHINOOK-1S  MARKED RA 3C 1    =       1 (ADJ =        1)
 10%= 0  50%= 1  90%= 1

RA 3T 1 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
 800422          2           2           2
 800423          1           1           3
 800425          1           1           4
 800429          1           1           5
 TOTAL CHINOOK-1S  MARKED RA 3T 1    =       5 (ADJ =        5)
 10%= 1  50%= 3  90%= 5

LA 5  1 MARKED CHINOOK-1S
 DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
 800510          1           1           1
 800514          2           2           3
 800527          2           2           5
 800528          3           3           8
```

```
800530          2           2           13
800531          1           1           14
800603          1           1           15
TOTAL CHINOOK-1S  MARKED LA 5  1   =      15 (ADJ =      15)
10%= 2  50%= 8  90%= 14

LA 5  2 MARKED CHINOOK-1S
DATE        NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800527          1           1           1
800530          1           1           2
800601          4           4           6
800603          1           1           7
TOTAL CHINOOK-1S  MARKED LA 5  2   =       7 (ADJ =       7)
10%= 1  50%= 4  90%= 6

LA 5  3 MARKED CHINOOK-1S
DATE        NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800522          1           1           1
800602          1           1           2
TOTAL CHINOOK-1S  MARKED LA 5  3   =       2 (ADJ =       2)
10%= 0  50%= 1  90%= 2

LA 5  4 MARKED CHINOOK-1S
DATE        NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800605          2           2           2
TOTAL CHINOOK-1S  MARKED LA 5  4   =       2 (ADJ =       2)
10%= 0  50%= 1  90%= 2

LA AN 1 MARKED CHINOOK-1S
DATE        NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800618          1           1           1
TOTAL CHINOOK-1S  MARKED LA AN 1   =       1 (ADJ =       1)
10%= 0  50%= 1  90%= 1

LA AN 3 MARKED CHINOOK-1S
DATE        NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800801          1           1           1
TOTAL CHINOOK-1S  MARKED LA AN 3   =       1 (ADJ =       1)
10%= 0  50%= 1  90%= 1

LA AN 4 MARKED CHINOOK-1S
DATE        NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800618          1           1           1
TOTAL CHINOOK-1S  MARKED LA AN 4   =       1 (ADJ =       1)
10%= 0  50%= 1  90%= 1

LD AN 1 MARKED CHINOOK-1S
DATE        NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800503          1           1           1
800504          1           1           2
800507          1           1           3
TOTAL CHINOOK-1S  MARKED LD AN 1   =       3 (ADJ =       3)
10%= 0  50%= 2  90%= 3

LA B2 1 MARKED CHINOOK-1S
DATE        NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800529          1           1           1
800603          1           1           2
800605          2           2           4
TOTAL CHINOOK-1S  MARKED LA B2 1   =       4 (ADJ =       4)
10%= 0  50%= 2  90%= 4

LA B2 3 MARKED CHINOOK-1S
DATE        NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800608          2           2           2
```

TOTAL CHINOOK-1S MARKED LA 82 3 = 3 (ADJ = 3)
10%= 0 50%= 2 90%= 3

LD F 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800522	1	1	1
800523	1	1	2
800524	1	1	3
800526	2	2	5
800527	1	1	6
800528	1	1	7
800530	1	1	8
800531	1	1	9
800601	2	2	11
800606	1	1	12
800609	1	1	13
800610	2	2	15
800616	1	1	16
800618	1	1	17

TOTAL CHINOOK-1S MARKED LD F 1 = 17 (ADJ = 17)
10%= 2 50%= 9 90%= 15

LD F 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	1	1	1
800527	1	1	2
800529	1	1	3
800530	4	4	7
800531	4	4	11
800601	3	3	14
800602	5	5	19
800603	6	6	25
800605	4	4	29
800606	5	5	34
800609	1	1	35
800616	1	1	36

TOTAL CHINOOK-1S MARKED LD F 2 = 36 (ADJ = 36)
10%= 4 50%= 18 90%= 32

LD F 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800601	3	3	3
800602	3	3	6
800603	4	4	10
800605	10	10	20
800606	5	5	25
800609	3	3	28
800610	2	2	30
800613	1	1	31

TOTAL CHINOOK-1S MARKED LD F 3 = 31 (ADJ = 31)
10%= 3 50%= 16 90%= 28

RD F 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800525	3	3	3
800526	2	2	5
800527	2	2	7
800529	1	1	8
800530	1	1	9
800531	1	1	10
800603	2	2	12
800606	1	1	13
800609	3	3	16
800610	3	3	19
800618	1	1	20

800625	1	1	22

TOTAL CHINOOK-1S MARKED RD F 1 = 22 (ADJ = 22)
10%= 2 50%= 11 90%= 20

RD F 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800529	3	3	3
800530	11	11	14
800531	7	7	21
800601	13	13	34
800602	8	8	42
800603	6	6	48
800605	2	2	50
800606	2	2	52
800609	2	2	54
800610	1	1	55

TOTAL CHINOOK-1S MARKED RD F 2 = 55 (ADJ = 55)
10%= 6 50%= 28 90%= 50

RD F 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	1	1	1
800601	4	4	5
800602	1	1	6
800603	6	6	12
800605	4	4	16
800606	7	7	23
800610	1	1	24

TOTAL CHINOOK-1S MARKED RD F 3 = 24 (ADJ = 24)
10%= 2 50%= 12 90%= 22

LA H 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800418	3	3	3
800421	13	13	16
800422	14	14	30
800423	16	16	46
800424	16	16	62
800425	9	9	71
800428	20	20	91
800429	4	4	95
800430	20	20	115
800501	8	8	123
800502	16	16	139
800503	8	8	147
800504	14	14	161
800505	14	14	175
800506	12	12	187
800507	21	21	208
800508	12	12	220
800509	20	20	240
800510	6	6	246
800511	3	3	249
800512	19	19	268
800513	11	11	279
800514	4	4	283
800515	13	13	296
800516	19	19	315
800517	21	21	336
800518	4	4	340
800519	3	3	343
800520	2	2	345
800521	3	3	348
800522	3	3	351
800527	1	1	352

10%= 35 50%= 176 90%= 317

LA H 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800517	2	2	2
800518	7	7	9
800519	9	9	18
800520	7	7	25
800521	12	12	37
800522	24	24	61
800523	3	3	64
800524	27	27	91
800525	18	18	109
800526	1	1	110
800527	6	6	116
800528	1	1	117
800529	3	3	120
800531	4	4	124
800601	2	2	126
800609	1	1	127
800610	1	1	128

TOTAL CHINOOK-1S MARKED LA H 2 = 128 (ADJ = 128)
10%= 13 50%= 64 90%= 115

LA HE 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	1	1	1

TOTAL CHINOOK-1S MARKED LA HE 1 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LA HE 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800507	2	2	2

TOTAL CHINOOK-1S MARKED LA HE 2 = 2 (ADJ = 2)
10%= 0 50%= 1 90%= 2

LA HE 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	4	4	4
800523	1	1	5

TOTAL CHINOOK-1S MARKED LA HE 3 = 5 (ADJ = 5)
10%= 1 50%= 3 90%= 5

LA HE 4 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800520	1	1	1
800522	1	1	2
800524	1	1	3

TOTAL CHINOOK-1S MARKED LA HE 4 = 3 (ADJ = 3)
10%= 0 50%= 2 90%= 3

LD HE 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	3	3	3
800510	1	1	4

TOTAL CHINOOK-1S MARKED LD HE 1 = 4 (ADJ = 4)
10%= 0 50%= 2 90%= 4

LD HE 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800508	1	1	1

TOTAL CHINOOK-1S MARKED LD HE 2 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LD HE 3 MARKED CHINOOK-1S

```
 800516          2          2          2
 800517          1          1          3
 800518          1          1          4
 800519          1          1          5
 TOTAL CHINOOK-1S  MARKED LD HE 3   =      5 (ADJ =      5)
 10%= 1   50%= 3   90%= 5

LD HE 4 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800522          2          2          2
 TOTAL CHINOOK-1S  MARKED LD HE 4   =      2 (ADJ =      2)
 10%= 0   50%= 1   90%= 2

LP HE 1 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800502          1          1          1
 800504          1          1          2
 800507          1          1          3
 TOTAL CHINOOK-1S  MARKED LP HE 1   =      3 (ADJ =      3)
 10%= 0   50%= 2   90%= 3

RA HE 1 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800428          1          1          1
 800504          1          1          2
 800505          1          1          3
 800507          1          1          4
 TOTAL CHINOOK-1S  MARKED RA HE 1   =      4 (ADJ =      4)
 10%= 0   50%= 2   90%= 4

RA HE 2 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800503          1          1          1
 800507          1          1          2
 TOTAL CHINOOK-1S  MARKED RA HE 2   =      2 (ADJ =      2)
 10%= 0   50%= 1   90%= 2

RA HE 3 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800510          1          1          1
 800515          2          2          3
 800518          1          1          4
 TOTAL CHINOOK-1S  MARKED RA HE 3   =      4 (ADJ =      4)
 10%= 0   50%= 2   90%= 4

RA HE 4 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800517          2          2          2
 800518          2          2          4
 800519          1          1          5
 800522          1          1          6
 TOTAL CHINOOK-1S  MARKED RA HE 4   =      6 (ADJ =      6)
 10%= 1   50%= 3   90%= 5

RD HE 2 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800506          1          1          1
 TOTAL CHINOOK-1S  MARKED RD HE 2   =      1 (ADJ =      1)
 10%= 0   50%= 1   90%= 1

RD HE 3 MARKED CHINOOK-1S
 DATE       NUMBER    ADJ.NUMBER  CUM. ADJ. NO.
 800511          1          1          1
 800515          2          2          3
 TOTAL CHINOOK-1S  MARKED RD HE 3   =      3 (ADJ =      3)
```

RD HE 4 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800519	1	1	1
800520	2	2	3
800521	1	1	4
800522	2	2	6

TOTAL CHINOOK-1S MARKED RD HE 4 = 6 (ADJ = 6)
10%= 1 50%= 3 90%= 5

RP HE 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	1	1	1
800501	1	1	2

TOTAL CHINOOK-1S MARKED RP HE 1 = 2 (ADJ = 2)
10%= 0 50%= 1 90%= 2

RP HE 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	1	1	1
800508	1	1	2
800509	2	2	4

TOTAL CHINOOK-1S MARKED RP HE 2 = 4 (ADJ = 4)
10%= 0 50%= 2 90%= 4

RP HE 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800518	1	1	1

TOTAL CHINOOK-1S MARKED RP HE 3 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

RP HE 4 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800520	2	2	2

TOTAL CHINOOK-1S MARKED RP HE 4 = 2 (ADJ = 2)
10%= 0 50%= 1 90%= 2

LA I+ 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800606	1	1	1
800609	3	3	4
800610	4	4	8
800612	3	3	11
800613	5	5	16
800623	1	1	17

TOTAL CHINOOK-1S MARKED LA I+ 1 = 17 (ADJ = 17)
10%= 2 50%= 9 90%= 15

LA ID 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800521	4	4	4
800522	5	5	9
800523	1	1	10
800525	1	1	11
800527	1	1	12

TOTAL CHINOOK-1S MARKED LA ID 1 = 12 (ADJ = 12)
10%= 1 50%= 6 90%= 11

LA ID 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	3	3	3
800525	2	2	5
800526	2	2	7
800527	2	2	9

TOTAL CHINOOK-1S MARKED LA ID 2 = 9 (ADJ = 9)

LA ID 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	4	4	4
800525	2	2	6
800526	1	1	7
800527	2	2	9
800528	2	2	11
800602	1	1	12

TOTAL CHINOOK-1S MARKED LA ID 3 = 12 (ADJ = 12)

10%= 1 50%= 6 90%= 11

LA ID 4 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	1	1	1
800526	2	2	3
800527	5	5	8
800528	5	5	13

TOTAL CHINOOK-1S MARKED LA ID 4 = 13 (ADJ = 13)

10%= 1 50%= 7 90%= 12

LD IL 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800522	1	1	1
800527	1	1	2
800528	3	3	5
800529	10	10	15
800530	19	19	34
800531	8	8	42
800601	7	7	49
800602	2	2	51
800603	4	4	55
800605	1	1	56
800606	5	5	61

TOTAL CHINOOK-1S MARKED LD IL 1 = 61 (ADJ = 61)

10%= 6 50%= 31 90%= 55

LD IL 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800517	1	1	1
800519	1	1	2
800521	2	2	4
800522	3	3	7
800523	1	1	8
800524	1	1	9
800525	1	1	10
800526	6	6	16
800527	1	1	17
800528	1	1	18
800529	1	1	19
800530	1	1	20
800531	4	4	24
800601	1	1	25
800602	1	1	26
800603	2	2	28
800605	2	2	30
800606	3	3	33
800609	2	2	35
800610	1	1	36

TOTAL CHINOOK-1S MARKED LD IL 2 = 36 (ADJ = 36)

10%= 4 50%= 18 90%= 32

LD IL 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	4	4	4

800528	12	12	22
800529	8	8	30
800530	10	10	40
800531	4	4	44
800601	5	5	49
800602	1	1	50
800603	7	7	57
800606	1	1	58
800610	1	1	59

TOTAL CHINOOK-1S MARKED LD 1L 3 = 59 (ADJ = 59)
10%= 6 50%= 30 90%= 53

RD 1L 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800527	5	5	5
800528	3	3	8
800529	5	5	13
800530	10	10	23
800531	9	9	32
800601	8	8	40
800605	1	1	41
800606	2	2	43
800609	1	1	44

TOTAL CHINOOK-1S MARKED RD 1L 1 = 44 (ADJ = 44)
10%= 4 50%= 22 90%= 40

RD 1L 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800522	4	4	4
800524	3	3	7
800526	2	2	9
800527	1	1	10
800528	4	4	14
800529	2	2	16
800530	1	1	17
800531	6	6	23
800601	2	2	25
800602	1	1	26
800603	3	3	29
800605	1	1	30
800606	1	1	31
800609	2	2	33
800618	2	2	35

TOTAL CHINOOK-1S MARKED RD 1L 2 = 35 (ADJ = 35)
10%= 4 50%= 18 90%= 32

RD 1L 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800525	1	1	1
800526	2	2	3
800527	1	1	4
800528	10	10	14
800529	18	18	32
800530	12	12	44
800531	4	4	48
800601	6	6	54
800603	5	5	59
800605	1	1	60
800606	2	2	62

TOTAL CHINOOK-1S MARKED RD 1L 3 = 62 (ADJ = 62)
10%= 6 50%= 31 90%= 56

LD 1M 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800507	4	4	4

800509	1	1	8
800510	1	1	9
800513	1	1	10
800517	1	1	11

TOTAL CHINOOK-1S MARKED LD IM 1 = 11 (ADJ = 11)
10%= 1 50%= 6 90%= 10

LD IM 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	2	2	2
800512	1	1	3
800515	1	1	4
800516	1	1	5
800521	1	1	6

TOTAL CHINOOK-1S MARKED LD IM 2 = 6 (ADJ = 6)
10%= 1 50%= 3 90%= 5

LA 1S 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800425	1	1	1
800430	1	1	2
800501	3	3	5
800502	1	1	6
800505	1	1	7
800507	3	3	10
800508	1	1	11
800516	1	1	12
800522	1	1	13

TOTAL CHINOOK-1S MARKED LA IS 1 = 13 (ADJ = 13)
10%= 1 50%= 7 90%= 12

LA IS 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800507	2	2	2
800509	3	3	5
800511	1	1	6
800512	1	1	7
800513	2	2	9
800514	2	2	11
800515	4	4	15
800516	3	3	18
800517	4	4	22
800519	3	3	25
800520	2	2	27
800521	1	1	28
800522	1	1	29
800523	1	1	30
800524	1	1	31
800526	1	1	32
800530	1	1	33
800531	1	1	34

TOTAL CHINOOK-1S MARKED LA IS 2 = 34 (ADJ = 34)
10%= 3 50%= 17 90%= 31

LA 1S 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	1	1	1

TOTAL CHINOOK-1S MARKED LA IS 3 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LA 1S 4 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800605	1	1	1
800609	1	1	2
800612	1	1	3

TOTAL CHINOOK-1S MARKED LA IS 4 = 6 (ADJ = 6)
10%= 1 50%= 3 90%= 5

LA IU 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800423	1	1	1
800425	1	1	2
800429	1	1	3
800501	4	4	7
800502	9	9	16
800503	6	6	22
800504	3	3	25
800505	11	11	36
800506	10	10	46
800507	4	4	50
800508	4	4	54
800509	3	3	57
800510	3	3	60
800512	2	2	62
800513	3	3	65
800514	3	3	68
800516	2	2	70
800522	1	1	71

TOTAL CHINOOK-1S MARKED LA IU 1 = 71 (ADJ = 71)
10%= 7 50%= 36 90%= 64

LA IU 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800510	2	2	2

TOTAL CHINOOK-1S MARKED LA IU 2 = 2 (ADJ = 2)
10%= 0 50%= 1 90%= 2

LA IU 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800421	16	16	16
800422	20	20	36
800423	26	26	62
800424	49	49	111
800425	24	24	135
800428	80	80	215
800429	5	5	220
800430	26	26	246
800501	8	8	254
800502	2	2	256
800503	1	1	257
800504	1	1	258
800505	1	1	259
800506	2	2	261
800507	1	1	262
800509	1	1	263

TOTAL CHINOOK-1S MARKED LA IU 3 = 263 (ADJ = 263)
10%= 26 50%= 132 90%= 237

LD IU 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800605	1	1	1

TOTAL CHINOOK-1S MARKED LD IU 1 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

RA IU 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	2	2	2
800507	2	2	4
800508	3	3	7
800509	2	2	9

800513	1	1	15
800516	2	2	17
800517	3	3	20
800525	1	1	21

TOTAL CHINOOK-1S MARKED RA IU 1 = 21 (ADJ = 21)
10%= 2 50%= 11 90%= 19

LD IY 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800603	1	1	1
800605	22	22	23
800606	27	27	50
800609	6	6	56
800610	2	2	58

TOTAL CHINOOK-1S MARKED LD IY 1 = 58 (ADJ = 58)
10%= 6 50%= 29 90%= 52

LD IY 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800601	1	1	1
800603	6	6	7
800605	9	9	16
800606	6	6	22
800609	3	3	25
800610	6	6	31
800513	2	2	33

TOTAL CHINOOK-1S MARKED LD IY 2 = 33 (ADJ = 33)
10%= 3 50%= 17 90%= 30

LD IY 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800525	1	1	1
800528	2	2	3
800530	1	1	4
800601	1	1	5
800605	1	1	6
800606	4	4	10
800609	2	2	12
800610	1	1	13
800613	1	1	14
800616	1	1	15

TOTAL CHINOOK-1S MARKED LD IY 3 = 15 (ADJ = 15)
10%= 2 50%= 8 90%= 14

RD IY 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800605	27	27	27
800606	25	25	52
800609	6	6	58
800610	1	1	59
800611	1	1	60

TOTAL CHINOOK-1S MARKED RD IY 1 = 60 (ADJ = 60)
10%= 6 50%= 30 90%= 54

RD IY 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800530	1	1	1
800602	4	4	5
800603	1	1	6
800605	13	13	19
800606	12	12	31
800609	7	7	38
800610	3	3	41
800616	1	1	42
800616	1	1	43

10%= 4 50%= 22 90%= 39

RD IY 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800527	1	1	1
800528	1	1	2
800530	1	1	3
800602	1	1	4
800603	1	1	5
800605	1	1	6
800606	2	2	8
800609	2	2	10
800618	1	1	11

TOTAL CHINOOK-1S MARKED RD IY 3 = 11 (ADJ = 11)

10%= 1 50%= 6 90%= 10

LA P 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	4	4	4
800503	1	1	5
800504	4	4	9
800505	3	3	12
800506	4	4	16
800507	10	10	26
800508	9	9	35
800509	4	4	39
800510	5	5	44
800511	5	5	49
800512	3	3	52
800513	1	1	53
800515	3	3	56
800516	2	2	58
800522	3	3	61
800524	3	3	64

TOTAL CHINOOK-1S MARKED LA P 1 = 64 (ADJ = 64)

10%= 6 50%= 32 90%= 58

LA P 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	1	1	1
800509	1	1	2
800510	2	2	4
800512	2	2	6
800514	1	1	7
800515	5	5	12
800516	2	2	14
800517	10	10	24
800518	3	3	27
800519	1	1	28
800520	2	2	30
800522	10	10	40
800523	3	3	43
800524	3	3	46
800525	4	4	50
800526	4	4	54
800527	1	1	55
800528	1	1	56
800529	1	1	57
800601	1	1	58
800606	1	1	59
800609	1	1	60

TOTAL CHINOOK-1S MARKED LA P 2 = 60 (ADJ = 60)

10%= 6 50%= 30 90%= 54

LA P 3 MARKED CHINOOK-1S

800519	1	1	1
800522	1	1	2
800524	1	1	3
800525	1	1	4
800527	1	1	5
800528	1	1	6
800605	5	5	11
800606	4	4	15
800609	1	1	16
800610	3	3	19
800612	1	1	20
800623	1	1	21

TOTAL CHINOOK-1S MARKED LA P 3 = 21 (ADJ = 21)
10%= 2 50%= 11 90%= 19

LA PI 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800508	1	1	1
800509	1	1	2
800510	3	3	5
800511	2	2	7
800512	5	5	12
800513	8	8	20
800514	1	1	21
800515	4	4	25
800516	3	3	28
800517	9	9	37
800518	3	3	40
800519	6	6	46
800521	7	7	53
800522	21	21	74
800523	4	4	78
800524	5	5	83
800525	9	9	92
800526	9	9	101
800527	10	10	111
800528	7	7	118
800529	4	4	122
800530	1	1	123
800531	3	3	126
800601	1	1	127
800605	1	1	128
800606	1	1	129
800609	1	1	130

TOTAL CHINOOK-1S MARKED LA PI 1 = 130 (ADJ = 130)
10%= 13 50%= 65 90%= 117

LA PI 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	2	2	2
800515	6	6	8
800516	5	5	13
800517	6	6	19
800518	1	1	20
800519	3	3	23
800520	4	4	27
800521	7	7	34
800522	14	14	48
800523	5	5	53
800524	10	10	63
800525	12	12	75
800526	14	14	89
800527	9	9	98
800528	9	9	107
800529	4	4	111

800531	2	2	116
800601	3	3	119
800603	1	1	120
800605	2	2	122
800609	2	2	124
800610	1	1	125
800623	1	1	126

TOTAL CHINOOK-1S MARKED LA P1 2 = 126 (ADJ = 126)
10%= 13 50%= 63 90%= 113

LA P1 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800508	1	1	1
800510	1	1	2
800511	7	7	9
800512	12	12	21
800513	13	13	34
800514	15	15	49
800515	28	28	77
800516	31	31	108
800517	31	31	139
800518	10	10	149
800519	11	11	160
800520	8	8	168
800521	14	14	182
800522	35	35	217
800523	9	9	226
800524	20	20	246
800525	12	12	258
800526	9	9	267
800527	12	12	279
800528	3	3	282
800530	2	2	284
800603	1	1	285

TOTAL CHINOOK-1S MARKED LA P1 3 = 285 (ADJ = 285)
10%= 29 50%= 143 90%= 257

LA PI 4 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	3	3	3
800510	2	2	5
800513	1	1	6
800514	1	1	7
800515	4	4	11
800516	2	2	13
800517	3	3	16
800518	2	2	18
800519	1	1	19
800520	2	2	21
800521	6	6	27
800522	4	4	31
800523	2	2	33
800524	3	3	36
800525	9	9	45
800526	6	6	51
800527	13	13	64
800528	5	5	69
800529	5	5	74
800530	2	2	76
800531	4	4	80
800601	1	1	81
800602	2	2	83
800603	3	3	86
800606	1	1	87

TOTAL CHINOOK-1S MARKED LA P1 4 = 87 (ADJ = 87)

LA PP 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	1	1	1
800503	1	1	2
800504	1	1	3
800505	7	7	10
800506	2	2	12
800507	11	11	23
800508	5	5	28
800509	11	11	39
800510	12	12	51
800511	3	3	54
800512	23	23	77
800513	23	23	100
800514	9	9	109
800515	26	26	135
800516	29	29	164
800517	35	35	199
800518	7	7	206
800519	10	10	216
800520	4	4	220
800521	12	12	232
800522	20	20	252
800523	7	7	259
800524	6	6	265
800525	6	6	271
800526	6	6	277
800527	1	1	278
800602	1	1	279

TOTAL CHINOOK-1S MARKED LA PP 1 = 279 (ADJ = 279)

10%= 28 50%= 140 90%= 251

LA PP 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	1	1	1
800510	1	1	2
800511	1	1	3
800512	1	1	4
800513	3	3	7
800514	2	2	9
800515	5	5	14
800516	4	4	18
800517	2	2	20
800518	4	4	24
800519	3	3	27
800520	4	4	31
800521	7	7	38
800522	17	17	55
800523	11	11	66
800524	20	20	86
800525	29	29	115
800526	31	31	146
800527	28	28	174
800528	22	22	196
800529	13	13	209
800530	10	10	219
800531	4	4	223
800601	4	4	227
800603	4	4	231
800605	5	5	236
800606	1	1	237
800609	2	2	239
800610	2	2	241

TOTAL CHINOOK-1S MARKED LA PP 2 = 241 (ADJ = 241)

LA S 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800504	1	1	1
800505	4	4	5
800506	4	4	9
800507	3	3	12
800508	12	12	24
800509	16	16	40
800510	7	7	47
800511	11	11	58
800512	21	21	79
800513	22	22	101
800514	9	9	110
800515	42	42	152
800516	30	30	182
800517	33	33	215
800518	16	16	231
800519	6	6	237
800520	10	10	247
800521	11	11	258
800522	27	27	285
800523	4	4	289
800524	8	8	297
800525	2	2	299
800526	1	1	300
800527	3	3	303
800528	1	1	304
800529	1	1	305
800605	2	2	307

TOTAL CHINOOK-1S MARKED LA S 1 = 307 (ADJ = 307)
10%= 31 50%= 154 90%= 276

LA SP 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	2	2	2

TOTAL CHINOOK-1S MARKED LA SP 2 = 2 (ADJ = 2)
10%= 0 50%= 1 90%= 2

RA SP 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800523	1	1	1
800524	1	1	2

TOTAL CHINOOK-1S MARKED RA SP 1 = 2 (ADJ = 2)
10%= 0 50%= 1 90%= 2

RD SP 1 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800529	1	1	1

TOTAL CHINOOK-1S MARKED RD SP 1 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

RD SP 2 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	3	3	3
800527	1	1	4
800603	1	1	5

TOTAL CHINOOK-1S MARKED RD SP 2 = 5 (ADJ = 5)
10%= 1 50%= 3 90%= 5

RD SP 3 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800611	1	1	1

TOTAL CHINOOK-1S MARKED RD SP 3 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LA 00 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	1	1	1

TOTAL STEELHEAD MARKED LA 00 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LA 00 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	4	4	4
800515	4	4	8
800516	2	2	10
800517	1	1	11
800518	1	1	12

TOTAL STEELHEAD MARKED LA 00 1 = 12 (ADJ = 12)
10%= 1 50%= 6 90%= 11

RA 2 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800504	1	1	1
800511	2	2	3
800518	1	1	4

TOTAL STEELHEAD MARKED RA 2 1 = 4 (ADJ = 4)
10%= 0 50%= 2 90%= 4

RA 2 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800528	1	1	1

TOTAL STEELHEAD MARKED RA 2 2 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LA 2X 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800517	10	10	10
800518	5	5	15
800519	1	1	16
800520	2	2	18
800521	1	1	19
800522	2	2	21
800525	1	1	22
800526	1	1	23

TOTAL STEELHEAD MARKED LA 2X 1 = 23 (ADJ = 23)
10%= 2 50%= 12 90%= 21

LA 2X 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800517	1	1	1
800518	11	11	12
800519	1	1	13
800520	2	2	15
800521	4	4	19
800522	12	12	31
800523	3	3	34

TOTAL STEELHEAD MARKED LA 2X 2 = 34 (ADJ = 34)
10%= 3 50%= 17 90%= 31

LA 2X 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800519	6	6	6
800520	2	2	8
800521	2	2	10
800522	2	2	12
800523	1	1	13
800524	1	1	14
800527	1	1	15

TOTAL STEELHEAD MARKED LA 2X 3 = 15 (ADJ = 15)

LA 2X 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800519	1	1	1
800520	4	4	5
800521	3	3	8
800522	3	3	11

TOTAL STEELHEAD MARKED LA 2X 4 = 11 (ADJ = 11)

10%= 1 50%= 6 90%= 10

LD 3 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	1	1	1
800513	1	1	2
800515	4	4	6
800518	1	1	7

TOTAL STEELHEAD MARKED LD 3 1 = 7 (ADJ = 7)

10%= 1 50%= 4 90%= 6

LD 3 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	4	4	4
800514	6	6	10
800515	2	2	12
800516	1	1	13
800521	1	1	14

TOTAL STEELHEAD MARKED LD 3 2 = 14 (ADJ = 14)

10%= 1 50%= 7 90%= 13

LD 3 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	2	2	2
800513	6	6	8
800514	2	2	10
800515	5	5	15
800516	1	1	16
800517	1	1	17
800518	2	2	19
800519	1	1	20
800522	1	1	21

TOTAL STEELHEAD MARKED LD 3 3 = 21 (ADJ = 21)

10%= 2 50%= 11 90%= 19

LD 3 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	1	1	1
800514	4	4	5
800515	4	4	9
800516	1	1	10
800517	1	1	11
800518	1	1	12
800525	1	1	13

TOTAL STEELHEAD MARKED LD 3 4 = 13 (ADJ = 13)

10%= 1 50%= 7 90%= 12

LA 4 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	1	1	1

TOTAL STEELHEAD MARKED LA 4 3 = 1 (ADJ = 1)

10%= 0 50%= 1 90%= 1

RA 4 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	2	2	2
800508	2	2	4

TOTAL STEELHEAD MARKED RA 4 4 = 5 (ADJ = 5)
10%= 1 50%= 3 90%= 5

RD 4 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800605	1	1	1

TOTAL STEELHEAD MARKED RD 4 2 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LA 5 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800528	1	1	1
800529	1	1	2
800601	1	1	3

TOTAL STEELHEAD MARKED LA 5 1 = 3 (ADJ = 3)
10%= 0 50%= 2 90%= 3

LA 5 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800601	3	3	3
800602	3	3	6

TOTAL STEELHEAD MARKED LA 5 2 = 6 (ADJ = 6)
10%= 1 50%= 3 90%= 5

LA 5 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800601	1	1	1
800603	3	3	4

TOTAL STEELHEAD MARKED LA 5 3 = 4 (ADJ = 4)
10%= 0 50%= 2 90%= 4

LA 5 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800601	1	1	1
800602	5	5	6
800603	3	3	9

TOTAL STEELHEAD MARKED LA 5 4 = 9 (ADJ = 9)
10%= 1 50%= 5 90%= 8

LD AN 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800423	1	1	1
800502	1	1	2
800503	2	2	4
800504	1	1	5
800505	1	1	6
800507	1	1	7
800509	1	1	8

TOTAL STEELHEAD MARKED LD AN 1 = 8 (ADJ = 8)
10%= 1 50%= 4 90%= 7

LA B2 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800603	3	3	3
800610	1	1	4

TOTAL STEELHEAD MARKED LA B2 1 = 4 (ADJ = 4)
10%= 0 50%= 2 90%= 4

LA B2 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800606	1	1	1
800610	1	1	2
800611	1	1	3

TOTAL STEELHEAD MARKED LA B2 3 = 3 (ADJ = 3)
10%= 0 50%= 2 90%= 3

LA DT 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	1	1	1
800605	1	1	2

TOTAL STEELHEAD MARKED LA DT 3 = 2 (ADJ = 2)

10%= 0 50%= 1 90%= 2

RA DT 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800511	1	1	1
800513	2	2	3
800515	2	2	5
800516	2	2	7

TOTAL STEELHEAD MARKED RA DT 3 = 7 (ADJ = 7)

10%= 1 50%= 4 90%= 6

LA H 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800421	2	2	2
800422	3	3	5
800423	4	4	9
800424	2	2	11
800425	2	2	13
800428	117	117	130
800429	57	57	187
800430	23	23	210
800501	28	28	238
800502	62	62	300
800503	35	35	335
800504	49	49	384
800505	28	28	412
800506	49	49	461
800507	31	31	492
800508	23	23	515
800509	35	35	550
800510	30	30	580
800511	8	8	588
800512	28	28	616
800513	14	14	630
800514	2	2	632
800515	20	20	652
800516	21	21	673
800517	12	12	685
800518	2	2	687
800519	1	1	688
800522	3	3	691

TOTAL STEELHEAD MARKED LA H 1 = 691 (ADJ = 691)

10%= 69 50%= 346 90%= 622

LA H 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800517	2	2	2
800518	15	15	17
800519	5	5	22
800520	2	2	24
800521	4	4	28
800522	8	8	36
800524	3	3	39
800525	9	9	48
800526	13	13	61
800527	32	32	93
800528	16	16	109
800529	5	5	114
800530	8	8	122
800531	15	15	137

800605	1	1	139
800606	3	3	142
800613	1	1	143

TOTAL STEELHEAD MARKED LA H 2 = 143 (ADJ = 143)
10%= 14 50%= 72 90%= 129

LA HE 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	16	16	16
800502	15	15	31
800503	2	2	33
800504	3	3	36
800507	2	2	38
800513	1	1	39
800515	1	1	40
800525	1	1	41

TOTAL STEELHEAD MARKED LA HE 1 = 41 (ADJ = 41)
10%= 4 50%= 21 90%= 37

LA HE 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800507	14	14	14
800508	4	4	18
800509	2	2	20
800510	3	3	23
800518	1	1	24

TOTAL STEELHEAD MARKED LA HE 2 = 24 (ADJ = 24)
10%= 2 50%= 12 90%= 22

LA HE 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800510	1	1	1
800513	6	6	7
800514	5	5	12
800515	16	16	28
800516	1	1	29
800517	1	1	30
800519	1	1	31
800520	1	1	32

TOTAL STEELHEAD MARKED LA HE 3 = 32 (ADJ = 32)
10%= 3 50%= 16 90%= 29

LA HE 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800518	2	2	2
800520	1	1	3
800521	2	2	5
800522	7	7	12
800523	2	2	14
800525	1	1	15

TOTAL STEELHEAD MARKED LA HE 4 = 15 (ADJ = 15)
10%= 2 50%= 8 90%= 14

LD HE 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800428	1	1	1
800502	19	19	20
800503	7	7	27
800504	4	4	31
800505	1	1	32
800507	1	1	33
800508	1	1	34
800510	1	1	35
800515	1	1	36
800517	1	1	37

10%= 4 50%= 19 90%= 33

LD HE 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	1	1	1
800507	1	1	2
800508	10	10	12
800509	2	2	14
800510	3	3	17
800511	1	1	18
800515	2	2	20
800522	1	1	21

TOTAL STEELHEAD MARKED LD HE 2 = 21 (ADJ = 21)

10%= 2 50%= 11 90%= 19

LD HE 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	15	15	15
800516	9	9	24
800517	6	6	30
800518	2	2	32
800519	1	1	33
800521	2	2	35
800522	1	1	36
800525	1	1	37

TOTAL STEELHEAD MARKED LD HE 3 = 37 (ADJ = 37)

10%= 4 50%= 19 90%= 33

LD HE 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800520	2	2	2
800521	6	6	8
800522	5	5	13
800524	1	1	14
800525	1	1	15
800528	1	1	16

TOTAL STEELHEAD MARKED LD HE 4 = 16 (ADJ = 16)

10%= 2 50%= 8 90%= 14

LP HE 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800503	1	1	1
800504	2	2	3
800505	2	2	5
800506	1	1	6
800507	1	1	7
800509	1	1	8
800510	1	1	9
800522	1	1	10

TOTAL STEELHEAD MARKED LP HE 1 = 10 (ADJ = 10)

10%= 1 50%= 5 90%= 9

LP HE 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	1	1	1
800510	7	7	8
800515	4	4	12
800520	1	1	13

TOTAL STEELHEAD MARKED LP HE 2 = 13 (ADJ = 13)

10%= 1 50%= 7 90%= 12

LP HE 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	1	1	1
800516	6	6	7

800519	1	1	15
800520	1	1	16
800521	1	1	17
800522	1	1	18

TOTAL STEELHEAD MARKED LP HE 3 = 18 (ADJ = 18)
10%= 2 50%= 9 90%= 16

LP HE 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800526	1	1	1

TOTAL STEELHEAD MARKED LP HE 4 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

RA HE 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800428	19	19	19
800429	4	4	23
800430	4	4	27
800501	4	4	31
800502	1	1	32
800504	1	1	33
800505	2	2	35
800506	1	1	36
800510	1	1	37
800515	1	1	38
800517	1	1	39
800524	1	1	40

TOTAL STEELHEAD MARKED RA HE 1 = 40 (ADJ = 40)
10%= 4 50%= 20 90%= 36

RA HE 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800504	5	5	5
800505	4	4	9
800506	4	4	13
800507	1	1	14
800510	2	2	16

TOTAL STEELHEAD MARKED RA HE 2 = 16 (ADJ = 16)
10%= 2 50%= 8 90%= 14

RA HE 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800510	8	8	8
800511	7	7	15
800512	2	2	17
800513	2	2	19
800514	1	1	20
800515	8	8	28
800516	1	1	29
800518	1	1	30

TOTAL STEELHEAD MARKED RA HE 3 = 30 (ADJ = 30)
10%= 3 50%= 15 90%= 27

RA HE 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800517	9	9	9
800518	18	18	27
800519	2	2	29
800520	1	1	30
800522	8	8	38
800523	1	1	39
800527	1	1	40

TOTAL STEELHEAD MARKED RA HE 4 = 40 (ADJ = 40)
10%= 4 50%= 20 90%= 36

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800428	9	9	9
800429	8	8	17
800430	4	4	21
800501	4	4	25
800504	1	1	26
800505	2	2	28
800506	3	3	31
800507	1	1	32
800508	1	1	33
800510	1	1	34
800518	1	1	35
800519	1	1	36
800524	1	1	37
800525	1	1	38

TOTAL STEELHEAD MARKED RD HE 1 = 38 (ADJ = 38)
10%= 4 50%= 19 90%= 34

RD HE 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	2	2	2
800506	13	13	15
800507	11	11	26
800508	1	1	27
800509	2	2	29
800512	1	1	30
800513	1	1	31

TOTAL STEELHEAD MARKED RD HE 2 = 31 (ADJ = 31)
10%= 3 50%= 16 90%= 28

RD HE 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800507	1	1	1
800510	1	1	2
800511	5	5	7
800513	2	2	9
800514	2	2	11
800515	6	6	17
800518	2	2	19
800522	1	1	20

TOTAL STEELHEAD MARKED RD HE 3 = 20 (ADJ = 20)
10%= 2 50%= 10 90%= 18

RD HE 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800518	16	16	16
800519	3	3	19
800520	3	3	22
800522	5	5	27
800523	1	1	28
800525	1	1	29

TOTAL STEELHEAD MARKED RD HE 4 = 29 (ADJ = 29)
10%= 3 50%= 15 90%= 26

RP HE 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	5	5	5
800501	14	14	19
800502	7	7	26
800503	2	2	28

TOTAL STEELHEAD MARKED RP HE 1 = 28 (ADJ = 28)
10%= 3 50%= 14 90%= 25

RP HE 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.

800507	10	10	13
800508	3	3	16
800512	1	1	17

TOTAL STEELHEAD MARKED RP HE 2 = 17 (ADJ = 17)
10%= 2 50%= 9 90%= 15

RP HE 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	1	1	1
800513	1	1	2
800514	1	1	3
800515	3	3	6
800518	2	2	8
800520	2	2	10

TOTAL STEELHEAD MARKED RP HE 3 = 10 (ADJ = 10)
10%= 1 50%= 5 90%= 9

RP HE 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	1	1	1
800519	3	3	4
800520	5	5	9
800521	4	4	13
800522	4	4	17
800523	2	2	19
800524	1	1	20

TOTAL STEELHEAD MARKED RP HE 4 = 20 (ADJ = 20)
10%= 2 50%= 10 90%= 18

LA I+ 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800606	1	1	1
800610	1	1	2

TOTAL STEELHEAD MARKED LA I+ 1 = 2 (ADJ = 2)
10%= 0 50%= 1 90%= 2

LA ID 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800521	7	7	7
800522	8	8	15
800523	1	1	16
800524	1	1	17
800525	1	1	18

TOTAL STEELHEAD MARKED LA ID 1 = 18 (ADJ = 18)
10%= 2 50%= 9 90%= 16

LA ID 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	3	3	3
800525	1	1	4
800526	2	2	6
800527	1	1	7

TOTAL STEELHEAD MARKED LA ID 2 = 7 (ADJ = 7)
10%= 1 50%= 4 90%= 6

LA ID 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	2	2	2
800525	3	3	5
800526	1	1	6
800527	2	2	8

TOTAL STEELHEAD MARKED LA ID 3 = 8 (ADJ = 8)
10%= 1 50%= 4 90%= 7

LA ID 4 MARKED STEELHEAD

800526	5	5	5
800527	6	6	11
800528	1	1	12
800530	1	1	13

TOTAL STEELHEAD MARKED LA ID 4 = 13 (ADJ = 13)
10%= 1 50%= 7 90%= 12

LD IJ 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	6	6	6
800517	22	22	28
800518	14	14	42
800519	8	8	50
800520	10	10	60
800521	10	10	70
800522	25	25	95
800523	6	6	101
800524	2	2	103
800529	1	1	104

TOTAL STEELHEAD MARKED LD IJ 1 = 104 (ADJ = 104)
10%= 10 50%= 52 90%= 94

LD IJ 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	1	1	1
800516	2	2	3
800517	16	16	19
800518	12	12	31
800519	11	11	42
800520	17	17	59
800521	16	16	75
800522	34	34	109
800523	5	5	114
800525	2	2	116
800527	3	3	119
800528	1	1	120
800529	1	1	121
800530	1	1	122
800531	3	3	125

TOTAL STEELHEAD MARKED LD IJ 2 = 125 (ADJ = 125)
10%= 13 50%= 63 90%= 113

LD IJ 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	8	8	8
800517	24	24	32
800518	19	19	51
800519	10	10	61
800520	13	13	74
800521	17	17	91
800522	18	18	109
800523	8	8	117
800524	7	7	124
800525	2	2	126
800526	2	2	128
800527	3	3	131
800528	1	1	132
800529	1	1	133
800531	1	1	134

TOTAL STEELHEAD MARKED LD IJ 3 = 134 (ADJ = 134)
10%= 13 50%= 67 90%= 121

RD IJ 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	10	10	10

800518	7	7	34
800519	11	11	45
800520	7	7	52
800521	6	6	58
800522	30	30	88
800523	4	4	92
800524	1	1	93
800525	2	2	95
800526	2	2	97
800527	3	3	100
800529	1	1	101
800531	1	1	102

TOTAL STEELHEAD MARKED RD IJ 1 = 102 (ADJ = 102)
10%= 10 50%= 51 90%= 92

RD IJ 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	1	1	1
800516	3	3	4
800517	12	12	16
800518	12	12	28
800519	14	14	42
800520	18	18	60
800521	12	12	72
800522	42	42	114
800523	4	4	118
800524	1	1	119
800525	3	3	122
800527	2	2	124
800529	1	1	125

TOTAL STEELHEAD MARKED RD IJ 2 = 125 (ADJ = 125)
10%= 13 50%= 63 90%= 113

RD IJ 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	3	3	3
800517	32	32	35
800518	20	20	55
800519	8	8	63
800520	7	7	70
800521	15	15	85
800522	29	29	114
800523	4	4	118
800524	2	2	120
800525	1	1	121
800527	2	2	123
800605	1	1	124

TOTAL STEELHEAD MARKED RD IJ 3 = 124 (ADJ = 124)
10%= 12 50%= 62 90%= 112

LD IM 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	2	2	2
800507	11	11	13
800508	3	3	16
800509	4	4	20
800518	1	1	21

TOTAL STEELHEAD MARKED LD IM 1 = 21 (ADJ = 21)
10%= 2 50%= 11 90%= 19

LD IM 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	1	1	1
800510	2	2	3
800511	3	3	6

```
800515          2          2          9
TOTAL STEELHEAD   MARKED LD 1M 2   =       9 (ADJ =       9)
10%= 1  50%= 5  90%= 8

LD 1N 3 MARKED STEELHEAD
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800715          1          1          1
TOTAL STEELHEAD   MARKED LD IN 3   =       1 (ADJ =       1)
10%= 0  50%= 1  90%= 1

LA 1S 1 MARKED STEELHEAD
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800502          1          1          1
800506          1          1          2
TOTAL STEELHEAD   MARKED LA IS 1   =       2 (ADJ =       2)
10%= 0  50%= 1  90%= 2

LA IS 2 MARKED STEELHEAD
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800507          2          2          2
800508          1          1          3
800510          2          2          5
800514          1          1          6
800516          2          2          8
800518          1          1          9
800527          1          1         10
800801          1          1         11
TOTAL STEELHEAD   MARKED LA IS 2   =      11 (ADJ =      11)
10%= 1  50%= 6  90%= 10

LA 1S 3 MARKED STEELHEAD
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800529          1          1          1
TOTAL STEELHEAD   MARKED LA 1S 3   =       1 (ADJ =       1)
10%= 0  50%= 1  90%= 1

LA 1U 1 MARKED STEELHEAD
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800510          1          1          1
800517          1          1          2
TOTAL STEELHEAD   MARKED LA IU 1   =       2 (ADJ =       2)
10%= 0  50%= 1  90%= 2

LD IU 1 MARKED STEELHEAD
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800502          1          1          1
800507          2          2          3
800508          1          1          4
800518          2          2          6
800522          1          1          7
TOTAL STEELHEAD   MARKED LD IU 1   =       7 (ADJ =       7)
10%= 1  50%= 4  90%= 6

LD IU 2 MARKED STEELHEAD
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800505          1          1          1
800506          4          4          5
800507          1          1          6
800522          1          1          7
TOTAL STEELHEAD   MARKED LD IU 2   =       7 (ADJ =       7)
10%= 1  50%= 4  90%= 6

LD IU 4 MARKED STEELHEAD
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800505          2          2          2
```

800507	2	2	6
800508	2	2	8
800511	1	1	9
800512	1	1	10
800515	1	1	11
800522	1	1	12

TOTAL STEELHEAD MARKED LD IU 4 = 12 (ADJ = 12)
10%= 1 50%= 6 90%= 11

RD IU 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800507	1	1	1
800605	1	1	2

TOTAL STEELHEAD MARKED RD IU 2 = 2 (ADJ = 2)
10%= 0 50%= 1 90%= 2

LD K 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	29	29	29
800516	13	13	42
800517	26	26	68
800518	16	16	84
800519	9	9	93
800520	4	4	97
800521	6	6	103
800522	20	20	123
800523	3	3	126
800524	3	3	129
800525	1	1	130
800526	2	2	132
800528	1	1	133
800606	1	1	134

TOTAL STEELHEAD MARKED LD K 1 = 134 (ADJ = 134)
10%= 13 50%= 67 90%= 121

LD K 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	2	2	2
800515	36	36	38
800516	30	30	68
800517	27	27	95
800518	16	16	111
800519	7	7	118
800520	4	4	122
800521	6	6	128
800522	22	22	150
800523	4	4	154
800524	2	2	156
800525	2	2	158
800526	2	2	160
800527	2	2	162
800528	1	1	163
800531	1	1	164

TOTAL STEELHEAD MARKED LD K 2 = 164 (ADJ = 164)
10%= 16 50%= 82 90%= 148

LD K 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	27	27	27
800516	19	19	46
800517	38	38	84
800518	13	13	97
800519	5	5	102
800520	7	7	109
800521	4	4	113

800523	4	4	128
800525	2	2	130
800529	3	3	133

TOTAL STEELHEAD MARKED LD K 3 = 133 (ADJ = 133)
10%= 13 50%= 67 90%= 120

RD K 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	1	1	1
800515	33	33	34
800516	23	23	57
800517	34	34	91
800518	18	18	109
800519	4	4	113
800520	5	5	118
800521	3	3	121
800522	21	21	142
800524	1	1	143
800525	2	2	145
800527	2	2	147
800528	1	1	148
800529	1	1	149
800601	1	1	150

TOTAL STEELHEAD MARKED RD K 1 = 150 (ADJ = 150)
10%= 15 50%= 75 90%= 135

RD K 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	3	3	3
800515	38	38	41
800516	30	30	71
800517	33	33	104
800518	11	11	115
800519	8	8	123
800520	5	5	128
800521	6	6	134
800522	20	20	154
800523	1	1	155
800524	1	1	156
800525	1	1	157
800527	2	2	159
800528	1	1	160
800529	1	1	161
800603	1	1	162
800609	2	2	164

TOTAL STEELHEAD MARKED RD K 2 = 164 (ADJ = 164)
10%= 16 50%= 82 90%= 148

RD K 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	1	1	1
800515	21	21	22
800516	17	17	39
800517	28	28	67
800518	17	17	84
800519	5	5	89
800520	7	7	96
800521	3	3	99
800522	9	9	108
800523	2	2	110
800524	1	1	111
800525	1	1	112
800530	1	1	113

TOTAL STEELHEAD MARKED RD K 3 = 113 (ADJ = 113)
10%= 11 50%= 57 90%= 102

RA L 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800429	2	2	2
800501	1	1	3
800502	1	1	4
800503	1	1	5
800505	1	1	6
800506	1	1	7
800507	2	2	9
800508	2	2	11
800509	2	2	13
800510	1	1	14
800610	1	1	15

TOTAL STEELHEAD MARKED RA L 1 = 15 (ADJ = 15)

10%= 2 50%= 8 90%= 14

LA P 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	5	5	5
800503	1	1	6
800504	1	1	7
800505	6	6	13
800506	7	7	20
800507	22	22	42
800508	12	12	54
800509	13	13	67
800510	7	7	74
800511	3	3	77
800512	2	2	79
800513	2	2	81
800515	11	11	92
800516	1	1	93
800517	2	2	95
800519	2	2	97
800520	2	2	99
800521	1	1	100
800522	1	1	101
800527	1	1	102

TOTAL STEELHEAD MARKED LA P 1 = 102 (ADJ = 102)

10%= 10 50%= 51 90%= 92

LA P 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	4	4	4
800510	7	7	11
800511	3	3	14
800512	5	5	19
800513	5	5	24
800514	5	5	29
800515	22	22	51
800516	18	18	69
800517	21	21	90
800518	14	14	104
800519	6	6	110
800520	2	2	112
800521	5	5	117
800522	32	32	149
800523	4	4	153
800524	3	3	156
800525	4	4	160
800526	4	4	164
800527	13	13	177
800531	1	1	178
800601	3	3	181
800602	2	2	183

800606	1	1	185
800609	1	1	186
800612	1	1	187

TOTAL STEELHEAD MARKED LA P 2 = 187 (ADJ = 187)
10%= 19 50%= 94 90%= 168

LA P 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	1	1	1
800526	1	1	2
800527	3	3	5
800528	1	1	6
800529	1	1	7
800530	1	1	8
800531	1	1	9
800604	1	1	10
800605	5	5	15
800606	5	5	20
800609	2	2	22
800610	1	1	23

TOTAL STEELHEAD MARKED LA P 3 = 23 (ADJ = 23)
10%= 2 50%= 12 90%= 21

LA PP 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800504	1	1	1
800524	1	1	2
800525	2	2	4
800527	7	7	11
800529	1	1	12
800616	2	2	14

TOTAL STEELHEAD MARKED LA PP 2 = 14 (ADJ = 14)
10%= 1 50%= 7 90%= 13

LA SP 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800530	1	1	1
800531	7	7	8
800603	1	1	9

TOTAL STEELHEAD MARKED LA SP 1 = 9 (ADJ = 9)
10%= 1 50%= 5 90%= 8

LA SP 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800527	3	3	3

TOTAL STEELHEAD MARKED LA SP 2 = 3 (ADJ = 3)
10%= 0 50%= 2 90%= 3

LD SP 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800531	1	1	1
800601	7	7	8
800603	1	1	9

TOTAL STEELHEAD MARKED LD SP 1 = 9 (ADJ = 9)
10%= 1 50%= 5 90%= 8

LD SP 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800527	2	2	2
800528	1	1	3

TOTAL STEELHEAD MARKED LD SP 2 = 3 (ADJ = 3)
10%= 0 50%= 2 90%= 3

LP SP 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.

TOTAL STEELHEAD MARKED LP SP 1 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LP SP 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800529	1	1	1

TOTAL STEELHEAD MARKED LP SP 2 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

RA SP 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	1	1	1
800525	2	2	3
800527	1	1	4

TOTAL STEELHEAD MARKED RA SP 1 = 4 (ADJ = 4)
10%= 0 50%= 2 90%= 4

RD SP 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800529	2	2	2
800530	3	3	5

TOTAL STEELHEAD MARKED RD SP 1 = 5 (ADJ = 5)
10%= 1 50%= 3 90%= 5

RD SP 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800524	6	6	6
800525	4	4	10
800526	2	2	12
800527	4	4	16
800528	1	1	17

TOTAL STEELHEAD MARKED RD SP 2 = 17 (ADJ = 17)
10%= 2 50%= 9 90%= 15

RD SP 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800611	3	3	3

TOTAL STEELHEAD MARKED RD SP 3 = 3 (ADJ = 3)
10%= 0 50%= 2 90%= 3

RP SP 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800525	1	1	1

TOTAL STEELHEAD MARKED RP SP 2 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LD SU 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	1	1	1

TOTAL STEELHEAD MARKED LD SU 1 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LD SU 4 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	1	1	1

TOTAL STEELHEAD MARKED LD SU 4 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LA X3 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	1	1	1
800513	2	2	3
800515	2	2	5
800516	2	2	7
800517	1	1	8

800522	1	1	10
800525	1	1	11
800528	1	1	12

TOTAL STEELHEAD MARKED LA X3 3 = 12 (ADJ = 12)
10%= 1 50%= 6 90%= 11

LD X3 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800517	1	1	1

TOTAL STEELHEAD MARKED LD X3 1 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LD Y 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	2	2	2
800513	29	29	31
800514	3	3	34
800515	39	39	73
800516	15	15	88
800517	13	13	101
800518	8	8	109
800519	3	3	112
800520	4	4	116
800521	2	2	118
800522	11	11	129
800524	2	2	131
800525	1	1	132
800527	1	1	133
800603	1	1	134
800605	1	1	135

TOTAL STEELHEAD MARKED LD Y 1 = 135 (ADJ = 135)
10%= 14 50%= 68 90%= 122

LD Y 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	1	1	1
800513	18	18	19
800514	8	8	27
800515	34	34	61
800516	17	17	78
800517	14	14	92
800518	8	8	100
800519	4	4	104
800520	4	4	108
800521	5	5	113
800522	19	19	132
800523	4	4	136
800524	1	1	137
800525	1	1	138
800526	1	1	139
800527	2	2	141

TOTAL STEELHEAD MARKED LD Y 2 = 141 (ADJ = 141)
10%= 14 50%= 71 90%= 127

LD Y 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	2	2	2
800513	16	16	18
800514	6	6	24
800515	30	30	54
800516	19	19	73
800517	17	17	90
800518	6	6	96
800519	2	2	98
800521	2	2	100

800527	1	1	106
800540	1	1	107

TOTAL STEELHEAD MARKED LD Y 3 = 107 (ADJ = 107)
10%= 11 50%= 54 90%= 96

RD Y 1 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	13	13	13
800514	6	6	19
800515	40	40	59
800516	21	21	80
800517	15	15	95
800518	4	4	99
800519	5	5	104
800520	4	4	108
800521	3	3	111
800522	11	11	122
800523	2	2	124
800524	1	1	125
800525	1	1	126
800527	1	1	127
800531	1	1	128

TOTAL STEELHEAD MARKED RD Y 1 = 128 (ADJ = 128)
10%= 13 50%= 64 90%= 115

RD Y 2 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	16	16	16
800514	5	5	21
800515	44	44	65
800516	19	19	84
800517	15	15	99
800518	11	11	110
800519	5	5	115
800520	5	5	120
800521	5	5	125
800522	17	17	142
800523	2	2	144
800524	1	1	145
800526	1	1	146
800527	1	1	147
800606	1	1	148

TOTAL STEELHEAD MARKED RD Y 2 = 148 (ADJ = 148)
10%= 15 50%= 74 90%= 133

RD Y 3 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800513	11	11	11
800514	4	4	15
800515	26	26	41
800516	13	13	54
800517	13	13	67
800518	4	4	71
800519	4	4	75
800520	1	1	76
800521	3	3	79
800522	3	3	82
800523	3	3	85
800525	1	1	86
800527	2	2	88
800528	1	1	89

TOTAL STEELHEAD MARKED RD Y 3 = 89 (ADJ = 89)
10%= 9 50%= 45 90%= 80

RA 2Y 1 MARKED CHINOOK-OS

800806	3	3	3
800808	8	8	11
800811	2	2	13
800813	1	1	14
800815	1	1	15
800818	2	2	17
800820	1	1	18
800826	3	3	21
800829	3	3	24
800902	2	2	26
800905	1	1	27
800909	6	6	33
800912	7	7	40
800916	2	2	42
800923	2	2	44
800926	1	1	45
801014	2		45

TOTAL CHINOOK-OS MARKED RA 2X 1 = 47 (ADJ = 45)
10%= 5 50%= 23 90%= 41

RA AN 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800707	1	1	1
800708	3	3	4
800709	2	2	6
800710	1	1	7
800711	2	2	9
800714	2	2	11
800715	1	1	12
800716	1	1	13
800721	1	1	14
800723	3	3	17
800728	1	1	18
800801	1	1	19
800808	1	1	20

TOTAL CHINOOK-OS MARKED RA AN 1 = 20 (ADJ = 20)
10%= 2 50%= 10 90%= 18

RA AN 2 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800716	1	1	1
800717	1	1	2
800718	2	2	4
800721	2	2	6
800806	1	1	7
800912	1	1	8
800916	1	1	9

TOTAL CHINOOK-OS MARKED RA AN 2 = 9 (ADJ = 9)
10%= 1 50%= 5 90%= 8

RA AN 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800723	1	1	1
800728	1	1	2
800819	1	1	3
800909	1	1	4

TOTAL CHINOOK-OS MARKED RA AN 3 = 4 (ADJ = 4)
10%= 0 50%= 2 90%= 4

RA AN 4 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800718	3	3	3
800730	1	1	4
800801	1	1	5
800804	1	1	6

800818	1	1	11
800829	1	1	12
800905	1	1	13
800923	1	1	14
801010	1		14

TOTAL CHINOOK-OS MARKED KA AN 4 = 15 (ADJ = 14)
10%= 1 50%= 7 90%= 13

RD AN 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800707	1	1	1

TOTAL CHINOOK-OS MARKED RD AN 1 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LA AR 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800625	5	5	5
800708	1	1	6

TOTAL CHINOOK-OS MARKED LA AR 1 = 6 (ADJ = 6)
10%= 1 50%= 3 90%= 5

LA AR 2 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800707	11	11	11
800708	5	5	16
800709	2	2	18
800710	2	2	20
800714	3	3	23
800715	1	1	24
800716	1	1	25
800721	1	1	26
800811	2	2	28
801014	1		28

TOTAL CHINOOK-OS MARKED LA AR 2 = 29 (ADJ = 28)
10%= 3 50%= 14 90%= 25

LD AR 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800707	1	1	1
800708	1	1	2
800808	1	1	3

TOTAL CHINOOK-OS MARKED LD AR 1 = 3 (ADJ = 3)
10%= 0 50%= 2 90%= 3

LD AR 2 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800709	10	10	10
800710	8	8	18
800711	5	5	23
800714	11	11	34
800715	2	2	36
800716	5	5	41
800718	2	2	43
800721	5	5	48
800723	6	6	54
800728	1	1	55
800730	1	1	56
800801	1	1	57
800815	1	1	58
800902	1	1	59
800916	2	2	61
800923	1	1	62

TOTAL CHINOOK-OS MARKED LD AR 2 = 62 (ADJ = 62)
10%= 6 50%= 31 90%= 56

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800708	1	1	1
800716	1	1	2
800730	1	1	3
801010	1		3

TOTAL CHINOOK-OS MARKED RA AR 1 = 4 (ADJ = 3)
10%= 0 50%= 2 90%= 3

RA AR 2 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800703	3	3	3
800707	3	3	6
800708	2	2	8
800710	1	1	9
800714	1	1	10
800730	1	1	11

TOTAL CHINOOK-OS MARKED RA AR 2 = 11 (ADJ = 11)
10%= 1 50%= 6 90%= 10

RD AR 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800707	2	2	2
800708	4	4	6
800709	1	1	7
800716	1	1	8
800717	1	1	9
800718	3	3	12
800723	1	1	13

TOTAL CHINOOK-OS MARKED RD AR 1 = 13 (ADJ = 13)
10%= 1 50%= 7 90%= 12

RD AR 2 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800711	5	5	5
800714	10	10	15
800715	6	6	21
800716	7	7	28
800718	1	1	29
800721	2	2	31
800723	8	8	39
800725	1	1	40
800728	1	1	41
800730	2	2	43
800818	1	1	44
800829	1	1	45
800916	1	1	46

TOTAL CHINOOK-OS MARKED RD AR 2 = 46 (ADJ = 46)
10%= 5 50%= 23 90%= 41

LA B2 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800616	1	1	1

TOTAL CHINOOK-OS MARKED LA B2 3 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

LA D 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800711	1	1	1
800714	4	4	5
800715	3	3	8
800716	7	7	15
800718	12	12	27
800721	5	5	32
800723	9	9	41
800725	3	3	44

800730	2	2	47
800804	1	1	48
800806	1	1	49
800829	1	1	50
800916	1	1	51

TOTAL CHINOOK-OS MARKED LA D 1 = 51 (ADJ = 51)
10%= 5 50%= 26 90%= 46

LA D 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800718	1	1	1
800721	15	15	16
800723	16	16	32
800725	4	4	36
800730	6	6	42
800801	2	2	44
800804	2	2	46
800806	1	1	47
800808	3	3	50
800813	2	2	52
800818	1	1	53
800912	1	1	54

TOTAL CHINOOK-OS MARKED LA D 3 = 54 (ADJ = 54)
10%= 5 50%= 27 90%= 49

LD D 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800715	3	3	3
800716	2	2	5
800718	7	7	12
800721	4	4	16
800723	4	4	20
800725	2	2	22
800728	1	1	23
800730	1	1	24
800804	2	2	26
800811	1	1	27
800818	1	1	28
800829	1	1	29

TOTAL CHINOOK-OS MARKED LD D 1 = 29 (ADJ = 29)
10%= 3 50%= 15 90%= 26

LD D 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800723	3	3	3
800725	8	8	11
800728	3	3	14
800730	1	1	15
800801	3	3	18
800804	4	4	22
800806	3	3	25
800811	2	2	27
800815	3	3	30
800818	1	1	31
800819	2	2	33
800829	1	1	34
800902	1	1	35
800912	1	1	36
800916	1	1	37
800919	1	1	38
801003	1		38
801007	1		38
801014	1		38
801017	1		38

TOTAL CHINOOK-OS MARKED LD D 3 = 42 (ADJ = 38)

RA D 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800714	9	9	9
800716	8	8	17
800718	6	6	23
800721	4	4	27
800723	7	7	34
800725	2	2	36
800730	1	1	37
800815	1	1	38
800818	3	3	41
800819	1	1	42
800909	1	1	43
800916	2	2	45
800930	1	0	45

TOTAL CHINOOK-OS MARKED RA D 1 = 46 (ADJ = 45)
10%= 5 50%= 23 90%= 41

RA D 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800721	4	4	4
800723	19	19	23
800725	3	3	26
800728	2	2	28
800730	1	1	29
800804	6	6	35
800806	3	3	38
800808	1	1	39
800818	3	3	42
800916	2	2	44
800919	1	1	45

TOTAL CHINOOK-OS MARKED RA D 3 = 45 (ADJ = 45)
10%= 5 50%= 23 90%= 41

RD D 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800716	1	1	1
800718	7	7	8
800721	7	7	15
800723	12	12	27
800725	2	2	29
800728	2	2	31
800730	2	2	33
800801	1	1	34
800804	5	5	39
800806	1	1	40
800811	1	1	41
800829	2	2	43
800905	1	1	44
801003	1		44

TOTAL CHINOOK-OS MARKED RD D 1 = 45 (ADJ = 44)
10%= 4 50%= 22 90%= 40

RD D 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800725	7	7	7
800728	6	6	13
800730	9	9	22
800801	1	1	23
800804	12	12	35
800806	6	6	41
800808	7	7	48
800811	2	2	50
800815	1	1	51

800822	1	1	56
800829	3	3	59
800902	1	1	60
800909	2	2	62
800912	2	2	64
800930	1	0	64
801003	2		64
801010	1		64

TOTAL CHINOOK-OS MARKED RD D 3 = 68 (ADJ = 64)
10%= 6 50%= 32 90%= 58

LA 1+ 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800616	1	1	1
800627	1	1	2
800707	2	2	4
800708	2	2	6
800714	1	1	7
800718	1	1	8

TOTAL CHINOOK-OS MARKED LA I+ 1 = 8 (ADJ = 8)
10%= 1 50%= 4 90%= 7

LA 1+ 2 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800627	1	1	1
800701	1	1	2
800703	1	1	3
800707	2	2	5
800708	1	1	6
800723	1	1	7

TOTAL CHINOOK-OS MARKED LA I+ 2 = 7 (ADJ = 7)
10%= 1 50%= 4 90%= 6

LA 1+ 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800701	2	2	2
800703	1	1	3
800707	13	13	16
800708	4	4	20
800710	5	5	25
800711	1	1	26
800716	2	2	28
800721	1	1	29
800723	1	1	30
800725	1	1	31
800730	1	1	32
801003	1		32

TOTAL CHINOOK-OS MARKED LA I+ 3 = 33 (ADJ = 32)
10%= 3 50%= 16 90%= 29

LA 1+ 4 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800707	1	1	1
800708	1	1	2
800709	3	3	5
800711	2	2	7
800714	2	2	9
800715	1	1	10
800716	1	1	11
800723	1	1	12
800730	1	1	13
800804	1	1	14
800909	1	1	15
800916	1	1	16
801010	1		16

10%= 2 50%= 8 90%= 14

RA I+ 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800711	1	1	1
800714	9	9	10
800716	8	8	18
800717	1	1	19
800718	5	5	24
800721	12	12	36
800723	10	10	46
800725	7	7	53
800728	4	4	57
800730	2	2	59
800801	2	2	61
800804	1	1	62
800806	5	5	67
800808	2	2	69
800811	2	2	71
800813	2	2	73
800818	3	3	76
800819	2	2	78
800829	1	1	79
800904	1	1	80
800909	2	2	82
800912	2	2	84
800916	2	2	86
800923	1	1	87
800930	1	0	87
801003	1		87
801014	1		87

TOTAL CHINOOK-OS MARKED RA I+ 1 = 90 (ADJ = 87)

10%= 9 50%= 44 90%= 78

RA ID 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800804	3	3	3
800806	2	2	5
800808	1	1	6
800818	1	1	7
800826	1	1	8
800902	2	2	10
800912	1	1	11
801003	1		11
801007	1		11

TOTAL CHINOOK-OS MARKED RA ID 1 = 13 (ADJ = 11)

10%= 1 50%= 6 90%= 10

RA ID 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800730	1	1	1
800804	1	1	2
800806	3	3	5
800808	1	1	6
800819	2	2	8
800826	1	1	9
800909	2	2	11
801003	1		11

TOTAL CHINOOK-OS MARKED RA ID 3 = 12 (ADJ = 11)

10%= 1 50%= 6 90%= 10

LA IF 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800616	1	1	1
800618	1	1	2

800625	1	1	4
800701	1	1	5
800703	1	1	6
800707	20	20	26
800708	15	15	41
800709	7	7	48
800710	6	6	54
800711	16	16	70
800714	21	21	91
800715	16	16	107
800716	22	22	129
800717	2	2	131
800718	16	16	147
800721	13	13	160
800723	22	22	182
800725	14	14	196
800728	6	6	202
800730	15	15	217
800801	6	6	223
800804	29	29	252
800806	20	20	272
800808	7	7	279
800811	8	8	287
800813	4	4	291
800815	4	4	295
800818	25	25	320
800819	3	3	323
800820	1	1	324
800826	1	1	325
800829	4	4	329
800902	7	7	336
800905	2	2	338
800909	8	8	346
800912	8	8	354
800916	5	5	359
800919	3	3	362
800923	3	3	365
800930	3	0	365
801003	1		365
801007	1		365
801010	3		365
801014	3		365
801017	5		365

TOTAL CHINOOK-OS MARKED LA IF 1 = 381 (ADJ = 365)
10%= 37 50%= 183 90%= 329

LA IF 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800721	3	3	3
800723	1	1	4
800725	5	5	9
800728	3	3	12
800730	12	12	24
800801	9	9	33
800804	32	32	65
800806	42	42	107
800808	31	31	138
800811	18	18	156
800813	3	3	159
800815	15	15	174
800818	62	62	236
800819	10	10	246
800822	4	4	250
800826	7	7	257
800829	24	24	281

800905	14	14	326
800909	29	29	355
800912	28	28	383
800916	10	10	393
800919	7	7	400
800923	10	10	410
800926	3	3	413
800930	8	0	413
801003	7		413
801007	5		413
801010	1		413
801014	2		413
801017	6		413

TOTAL CHINOOK-OS MARKED LA IF 3 = 442 (ADJ = 413)
10%= 41 50%= 207 90%= 372

RA IF 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800707	2	2	2
800709	2	2	4
800711	2	2	6
800716	1	1	7
800721	1	1	8
800723	1	1	9
800725	1	1	10
800730	1	1	11
800804	1	1	12
800806	1	1	13
800818	1	1	14
800916	2	2	16

TOTAL CHINOOK-OS MARKED RA IF 1 = 16 (ADJ = 16)
10%= 2 50%= 8 90%= 14

RA IF 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800818	1	1	1
800916	10	10	11

TOTAL CHINOOK-OS MARKED RA IF 3 = 11 (ADJ = 11)
10%= 1 50%= 6 90%= 10

LA IM 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800919	1	1	1

TOTAL CHINOOK-OS MARKED LA IM 1 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

RA IM 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800808	1	1	1
800815	1	1	2
800818	2	2	4
800819	1	1	5
800829	1	1	6
800902	1	1	7
800905	1	1	8
800912	1	1	9
800916	1	1	10

TOTAL CHINOOK-OS MARKED RA IM 1 = 10 (ADJ = 10)
10%= 1 50%= 5 90%= 9

RA IM 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800811	1	1	1
800815	2	2	3
800818	1	1	4

```
800905          1          1          6
TOTAL CHINOOK-OS  MARKED RA IM 3   =       6 (ADJ =       6)
10%= 1  50%= 3  90%= 5

LA IS 1 MARKED CHINOOK-OS
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800709          3          3          3
TOTAL CHINOOK-OS  MARKED LA IS 1   =       3 (ADJ =       3)
10%= 0  50%= 2  90%= 3

LA IS 4 MARKED CHINOOK-OS
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800618          1          1          1
TOTAL CHINOOK-OS  MARKED LA IS 4   =       1 (ADJ =       1)
10%= 0  50%= 1  90%= 1

LA L  2 MARKED CHINOOK-OS
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800707          1          1          1
TOTAL CHINOOK-OS  MARKED LA L  2   =       1 (ADJ =       1)
10%= 0  50%= 1  90%= 1

LA TI 1 MARKED CHINOOK-OS
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800728          5          5          5
800730          5          5         10
800801          1          1         11
800804          3          3         14
800806          1          1         15
800811          1          1         16
800815          1          1         17
800818          2          2         19
800820          1          1         20
800826          1          1         21
800829          1          1         22
800902          1          1         23
800905          1          1         24
800909          2          2         26
800923          1          1         27
800930          1          0         27
801010          1                    27
801017          1                    27
TOTAL CHINOOK-OS  MARKED LA TI 1   =      30 (ADJ =      27)
10%= 3  50%= 14  90%= 24

LD TI 1 MARKED CHINOOK-OS
DATE       NUMBER     ADJ.NUMBER  CUM. ADJ. NO.
800801          4          4          4
800804          2          2          6
800806          7          7         13
800808          4          4         17
800811          1          1         18
800815          1          1         19
800818          1          1         20
800820          1          1         21
800822          1          1         22
800829          3          3         25
800902          1          1         26
800905          1          1         27
800912          1          1         28
801007          1                    28
TOTAL CHINOOK-OS  MARKED LD TI 1   =      29 (ADJ =      28)
10%= 3  50%= 14  90%= 25

RA TI 1 MARKED CHINOOK-OS
```

800730	1	1	1
800801	2	2	3
800804	2	2	5
800806	3	3	8
800808	2	2	10
800818	1	1	11
800826	1	1	12
800902	1	1	13
800909	1	1	14
800912	1	1	15
800916	2	2	17
800923	3	3	20
800930	1	0	20
801003	1		20
801017	1		20

TOTAL CHINOOK-OS MARKED RA TI 1 = 23 (ADJ = 20)
10%= 2 50%= 10 90%= 18

RD TI 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800801	1	1	1
800804	2	2	3
800806	2	2	5
800811	1	1	6
800829	1	1	7
800902	1	1	8
800905	1	1	9
801014	1		9

TOTAL CHINOOK-OS MARKED RD TI 1 = 10 (ADJ = 9)
10%= 1 50%= 5 90%= 8

LA WG 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800804	7	7	7
800806	5	5	12
800808	1	1	13
800815	1	1	14
800818	6	6	20
800909	1	1	21
800912	2	2	23
800916	2	2	25
800930	1	0	25
801003	1		25
801010	1		25
801014	1		25
801017	1		25

TOTAL CHINOOK-OS MARKED LA WG 1 = 30 (ADJ = 25)
10%= 3 50%= 13 90%= 23

LA WG 2 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800826	3	3	3
800829	2	2	5
800909	2	2	7
800912	2	2	9
800916	1	1	10
801003	1		10

TOTAL CHINOOK-OS MARKED LA WG 2 = 11 (ADJ = 10)
10%= 1 50%= 5 90%= 9

LA WG 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800813	1	1	1
800815	1	1	2
800818	5	5	7

800826	2	2	11
800829	4	4	15
800902	2	2	17
800905	2	2	19
800909	1	1	20
800912	4	4	24
801017	1		24

TOTAL CHINOOK-OS MARKED LA WG 3 = 25 (ADJ = 24)
10%= 2 50%= 12 90%= 22

LD WG 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800808	1	1	1
800811	5	5	6
800813	3	3	9
800818	1	1	10
800820	1	1	11
800829	6	6	17
800902	2	2	19
800909	4	4	23
800912	1	1	24
800916	4	4	28
800923	2	2	30
800930	2	0	30
801003	2		30
801007	1		30
801014	1		30
801017	2		30

TOTAL CHINOOK-OS MARKED LD WG 1 = 38 (ADJ = 30)
10%= 3 50%= 15 90%= 27

LD WG 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800818	11	11	11
800819	3	3	14
800826	3	3	17
800829	4	4	21
800902	2	2	23
800909	3	3	26
800912	3	3	29
800916	3	3	32
800923	3	3	35
801010	2		35
801017	1		35

TOTAL CHINOOK-OS MARKED LD WG 3 = 38 (ADJ = 35)
10%= 4 50%= 18 90%= 32

RA WG 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800806	17	17	17
800808	4	4	21
800815	1	1	22
800826	1	1	23
800902	1	1	24
800909	1	1	25
800912	1	1	26
800923	3	3	29
801007	1		29
801017	1		29

TOTAL CHINOOK-OS MARKED RA WG 1 = 31 (ADJ = 29)
10%= 3 50%= 15 90%= 26

RA WG 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800815	1	1	1

800826	1	1	4
800829	1	1	5
800912	1	1	6
800926	2	2	8
801007	1		8

TOTAL CHINOOK-OS MARKED RA WG 3 = 9 (ADJ = 8)
10%= 1 50%= 4 90%= 7

RD WG 1 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800811	1	1	1
800813	1	1	2
800815	1	1	3
800818	3	3	6
800829	2	2	8
800905	1	1	9
800909	2	2	11
800912	3	3	14
800916	3	3	17
800926	2	2	19
801007	1		19

TOTAL CHINOOK-OS MARKED RD WG 1 = 20 (ADJ = 19)
10%= 2 50%= 10 90%= 17

RD WG 3 MARKED CHINOOK-OS

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800818	1	1	1
800820	2	2	3
800822	2	2	5
800826	8	8	13
800829	4	4	17
800902	5	5	22
800909	1	1	23
800912	4	4	27
800916	2	2	29
800923	2	2	31
800930	2	0	31
801010	1		31
801017	1		31

TOTAL CHINOOK-OS MARKED RD WG 3 = 35 (ADJ = 31)
10%= 3 50%= 16 90%= 28

TOTAL MARKS IN FILE BRJD80 10814

APPENDIX B

RECAPTURE SUMMARY OF CODED WIRE TAGS, 1980

RECAPTURE SUMMARY OF CODED WIRE TAGS SACRIFICED AT LOWER GRANITE DAM, 1980

Sorted by species, brand.

Number = Number of coded wire tags sacrificed.

Adjusted number = Adjusts the number sacrificed to the number of fish with adipose clips in the sample, then adjusts this number to reflect the total number collected for the day.

11/12/80

RECAPTURE SUMMARY DATA FROM FILE MTGRBO

THRU

0 0 0

050421 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800404	1	1	1
800413	1	1	2

TOTAL CHINOOK-1S MARKED 050421 = 2 (ADJ = 2)

10%= 0 50%= 1 90%= 2

050529 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800413	3	3	3
800430	1	23	26
800506	3	26	52
800507	3	36	88
800508	2	21	109
800509	5	76	185
800511	4	69	254
800512	3	37	291
800515	5	33	324
800516	3	16	340
800519	1	12	352
800520	3	7	359
800521	1	5	364

TOTAL CHINOOK-1S MARKED 050529 = 37 (ADJ = 364)

10%= 36 50%= 182 90%= 328

050532 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800413	2	2	2
800422	12	251	253
800423	10	622	875
800424	28	1051	1926
800425	32	1063	2989
800427	22	1470	4459
800428	25	1564	6023
800429	22	914	6937
800430	34	775	7712
800501	32	856	8568
800502	27	345	8913
800504	29	576	9489
800505	28	371	9860
800506	25	219	10079
800507	7	85	10164
800508	9	96	10260
800509	8	121	10381
800511	2	35	10416
800512	3	37	10453
800515	1	7	10460
800516	3	16	10476
800519	1	12	10488
800520	2	5	10493
800521	2	10	10503
800522	1	4	10507

800523	1	9	10516
800526	1	14	10530
800529	1	3	10533
800603	3	3	10536

TOTAL CHINOOK-1S MARKED 050532 = 373 (ADJ = 10536)
10%= 1054 50%= 5268 90%= 9482

050651 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.

TOTAL CHINOOK-1S MARKED 050651 = 2 (ADJ = 27)
10%= 3 50%= 14 90%= 24

102112 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800404	1	1	1
800413	13	13	14
800414	1	1	15
800418	1	8	23
800421	3	50	73
800422	2	42	115
800425	3	100	215
800427	5	334	549
800429	6	249	798
800430	20	456	1254
800501	4	107	1361
800502	2	26	1387
800504	10	199	1586
800505	7	93	1679
800506	8	70	1749
800507	10	122	1871
800508	16	171	2042
800509	12	182	2224
800511	10	173	2397
800512	1	12	2409
800515	25	166	2575
800516	21	113	2688
800519	10	123	2811
800520	21	49	2860
800521	8	40	2900
800522	10	37	2937
800523	7	65	3002
800526	10	141	3143
800527	22	153	3296
800528	21	222	3518
800529	9	24	3542
800530	5	30	3572
800601	3	19	3591
800603	35	37	3628
800605	1	6	3634

TOTAL CHINOOK-1S MARKED 102112 = 343 (ADJ = 3634)
10%= 363 50%= 1817 90%= 3271

102113 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	1	23	23
800502	1	13	36

TOTAL CHINOOK-1S MARKED 102113 = 2 (ADJ = 36)
10%= 4 50%= 18 90%= 32

102114 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800406	3	3	3
800407	3	21	24
800408	3	7	31
800409	9	12	43
800410	1	4	47
800411	5	7	54
800413	9	9	63
800414	5	7	70
800415	9	10	80
800417	5	19	99
800418	4	31	130
800419	15	68	198
800420	3	60	258
800421	6	101	359
800422	9	188	547
800423	5	311	858
800424	4	150	1008
800425	5	166	1174
800427	10	668	1842
800428	6	375	2217
800429	1	42	2259
800430	2	46	2305
800504	1	20	2325
800505	1	13	2338
800506	1	9	2347
800508	5	53	2400
800512	1	12	2412
800519	1	12	2424

TOTAL CHINOOK-1S MARKED 102114 = 132 (ADJ = 2424)

10%= 242 50%= 1212 90%= 2182

102115 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800413	3	3	3
800427	1	67	70

TOTAL CHINOOK-1S MARKED 102115 = 4 (ADJ = 70)

10%= 7 50%= 35 90%= 63

102125 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800421	10	168	168
800422	14	292	460
800423	9	560	1020
800424	10	375	1335
800425	5	166	1561
800427	7	468	2029
800428	4	250	2279
800429	2	83	2362
800430	4	91	2453
800501	6	160	2613
800502	2	26	2639
800504	4	79	2718
800505	5	66	2784
800506	2	18	2802
800507	6	73	2875
800508	5	53	2928
800509	2	30	2958
800511	2	35	2993

800512	1	12	3005
800515	3	20	3025
800516	3	16	3041
800519	2	25	3066
800520	2	5	3071
800521	1	5	3076
800523	1	9	3085
800526	3	42	3127
800527	1	7	3134

TOTAL CHINOOK-1S MARKED 102125 = 116 (ADJ = 3134)
10%= 313 50%= 1567 90%= 2821

102126 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800413	2	2	2
800421	6	101	103
800422	9	188	291
800423	6	373	664
800424	6	225	889
800425	7	233	1122
800427	7	468	1590
800428	3	188	1778
800429	1	42	1820
800430	4	91	1911
800501	3	80	1991
800502	7	90	2081
800504	7	139	2220
800505	7	93	2313
800506	3	26	2339
800507	1	12	2351
800508	7	75	2426
800509	1	15	2441
800511	1	17	2458
800512	2	25	2483
800515	5	33	2516
800516	1	5	2521
800519	2	25	2546
800520	1	2	2548
800522	2	7	2555
800523	2	18	2573
800526	2	28	2601
800527	1	7	2608
800529	1	3	2611

TOTAL CHINOOK-1S MARKED 102126 = 107 (ADJ = 2611)
10%= 261 50%= 1306 90%= 2350

NO TAG MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800428	1	63	63

TOTAL CHINOOK-1S MARKED NO TAG = 1 (ADJ = 63)
10%= 6 50%= 32 90%= 57

050439 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	1	122	122

TOTAL STEELHEAD MARKED 050439 = 1 (ADJ = 122)
10%= 12 50%= 61 90%= 110

050455 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.

800413	3	3	3
800414	6	6	9
800422	42	1374	1383
800423	33	938	2321
800424	28	874	3195
800425	29	1685	4880
800427	12	2004	6884
800428	4	419	7303
800429	5	1071	8374
800430	10	1216	9590
800501	7	568	10158
800502	7	616	10774
800504	6	909	11683
800505	4	417	12100
800506	4	487	12587
800507	8	912	13499
800508	8	1141	14640
800509	1	136	14776
800511	4	626	15402
800512	2	147	15549
800515	6	217	15766
800516	5	194	15960
800519	9	853	16813
800520	3	111	16924
800521	5	167	17091
800522	5	172	17263
800523	2	124	17387
800526	4	535	17922
800527	4	161	18083
800528	3	163	18246
800530	1	25	18271
800601	1	17	18288
800603	5	33	18321
800609	1	12	18333
800611	1	14	18347
800624	1	9	18356
800706	1	5	18361

TOTAL STEELHEAD MARKED 050455 = 280 (ADJ = 18361)
10%= 1836 50%= 9181 90%= 16525

050635 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800413	18	18	18
800414	5	5	23
800504	1	151	174
800506	1	122	296
800507	2	228	524
800508	5	713	1237
800509	10	1363	2600
800511	13	2036	4636
800512	9	661	5297
800515	7	254	5551
800516	11	426	5977
800519	12	1138	7115
800520	8	295	7410
800521	12	400	7810
800522	7	241	8051
800523	10	620	8671
800526	17	2275	10946
800527	11	442	11388

800528	11	598	11986
800529	15	160	12146
800530	6	148	12294
800601	12	205	12499
800603	12	80	12579
800605	11	90	12669
800607	5	51	12720
800609	3	36	12756
800611	3	42	12798
800613	2	27	12825
800615	2	22	12847
800617	2	25	12872
800620	1	16	12888
800624	1	9	12897
800626	1	5	12902
800701	1	5	12907

TOTAL STEELHEAD MARKED 050635 = 247 (ADJ = 12907)
10%= 1291 50%= 6454 90%= 11616

050636 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800413	6	6	6
800414	13	13	19
800424	1	31	50
800427	2	334	384
800428	2	210	594
800429	1	214	808
800501	1	81	889
800502	1	88	977
800504	2	303	1280
800505	7	729	2009
800506	6	731	2740
800507	3	342	3082
800508	6	856	3938
800509	6	818	4756
800511	9	1409	6165
800512	12	881	7046
800515	11	399	7445
800516	3	116	7561
800519	7	664	8225
800520	2	74	8299
800521	5	167	8466
800522	7	241	8707
800523	4	248	8955
800526	3	401	9356
800528	3	163	9519
800529	3	32	9551
800530	1	25	9576
800601	1	17	9593
800603	2	13	9606
800605	2	16	9622
800607	1	10	9632
800611	1	14	9646
800626	1	5	9651

TOTAL STEELHEAD MARKED 050636 = 135 (ADJ = 9651)
10%= 965 50%= 4826 90%= 8686

050637 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800413	11	11	11

800414	15	15	26
800425	1	58	84
800427	1	167	251
800501	5	406	657
800504	2	303	960
800505	5	521	1481
800506	5	609	2090
800507	5	570	2660
800508	8	1141	3801
800509	8	1030	4831
800511	4	626	5517
800512	5	367	5884
800515	5	181	6065
800516	4	155	6220
800519	5	474	6694
800520	1	37	6731
800521	4	133	6864
800522	3	103	6967
800523	4	248	7215
800527	1	40	7255
800528	1	54	7309
800529	4	43	7352
800603	1	7	7359
800605	2	16	7375
800622	1	9	7384

TOTAL STEELHEAD MARKED 050637 = 111 (ADJ = 7384)
10%= 738 50%= 3692 90%= 6646

071614 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800414	1	1	1
800424	2	62	63
800430	2	243	306
800501	2	162	468
800502	1	88	556
800504	2	303	859
800505	5	521	1380
800506	1	122	1502
800507	4	456	1958
800508	2	285	2243
800512	2	147	2390
800515	2	72	2462
800520	1	37	2499
800521	3	100	2599
800522	2	69	2668
800525	2	268	2936
800530	1	25	2961
800603	2	13	2974
800605	6	49	3023
800607	1	10	3033
800611	2	28	3061
800613	1	13	3074
800615	1	11	3085
800617	1	13	3098

TOTAL STEELHEAD MARKED 071614 = 49 (ADJ = 3098)
10%= 310 50%= 1549 90%= 2788

072201 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800413	2	2	2

800414	1	1	3
800502	1	88	91
800504	2	303	394
800506	1	122	516
800508	1	143	659
800509	1	136	795
800512	5	367	1162
800515	5	181	1343
800516	4	155	1498
800520	6	221	1719
800521	10	333	2052
800522	7	241	2293
800523	5	310	2603
800526	13	1739	4342
800527	4	161	4503
800528	3	163	4666
800529	2	21	4687
800530	1	25	4712
800601	4	68	4780
800603	16	106	4886
800605	16	130	5016
800607	11	113	5129
800609	16	193	5322
800611	9	126	5448
800613	8	107	5555
800615	11	124	5679
800617	4	50	5729
800620	1	16	5745
800622	2	19	5764
800626	1	5	5769
800706	1	5	5774

TOTAL STEELHEAD MARKED 072201 = 174 (ADJ = 5774)
10%= 577 50%= 2887 90%= 5197

072202 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800624	1	9	9

TOTAL STEELHEAD MARKED 072202 = 1 (ADJ = 9)
10%= 1 50%= 5 90%= 8

100533 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	1	104	104
800508	1	143	247
800521	1	33	280

TOTAL STEELHEAD MARKED 100533 = 3 (ADJ = 280)
10%= 28 50%= 140 90%= 252

102113 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800420	1	6	6

TOTAL STEELHEAD MARKED 102113 = 1 (ADJ = 6)
10%= 1 50%= 3 90%= 5

102156 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800413	3	3	3
800414	3	3	6
800424	2	62	68
800425	5	290	358

800427	8	1336	1694
800428	4	419	2113
800429	10	2143	4256
800430	5	608	4864
800501	5	406	5270
800502	11	968	6238
800504	8	1212	7450
800505	5	521	7971
800506	6	731	8702
800507	2	228	8930
800508	4	570	9500
800509	4	545	10045
800511	3	470	10515
800512	6	441	10956
800515	3	109	11065
800516	6	232	11297
800519	3	284	11581
800520	5	184	11765
800521	3	100	11865
800522	4	138	12003
800523	2	124	12127
800526	4	535	12662
800527	5	201	12863
800528	3	163	13026
800529	2	21	13047
800601	2	34	13081
800603	2	13	13094
800605	4	33	13127
800607	2	21	13148
800609	1	12	13160
800613	1	13	13173
800615	1	11	13184
800620	1	16	13200
800624	1	9	13209

TOTAL STEELHEAD MARKED 102156 = 149 (ADJ = 13209)
10%= 1321 50%= 6605 90%= 11888

102157 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800413	3	3	3
800414	2	2	5
800424	2	62	67
800425	2	116	183
800427	9	1336	1519
800428	3	315	1834
800429	3	643	2477
800430	4	487	2964
800501	11	892	3856
800502	8	704	4560
800504	6	909	5469
800505	4	417	5886
800506	2	244	6130
800507	11	1254	7384
800508	2	225	7609
800509	4	545	8214
800511	4	626	8840
800512	9	661	9501
800515	4	145	9646
800516	6	232	9878
800519	5	474	10352

800520	3	111	10463
800521	5	167	10630
800522	4	138	10768
800523	4	248	11016
800526	2	268	11284
800527	5	201	11485
800528	1	54	11539
800530	3	74	11613
800603	2	13	11626
800605	4	33	11659
800607	2	21	11680
800609	1	12	11692
800613	1	13	11705
800615	1	11	11716
800617	1	13	11729
800622	1	9	11738
800624	1	9	11747
800701	1	5	11752

TOTAL STEELHEAD MARKED 102157 = 145 (ADJ = 11752)
10%= 1175 50%= 5876 90%= 10577

102161 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800413	2	2	2
800414	2	2	4
800423	13	369	373
800425	1	58	431
800427	9	1503	1934
800428	29	3041	4975
800429	18	3857	8832
800430	19	2311	11143
800501	11	892	12035
800502	16	1408	13443
800504	18	2726	16169
800505	11	1146	17315
800506	9	1096	18411
800507	2	228	18639
800508	6	856	19495
800509	5	681	20176
800512	1	73	20249
800515	2	72	20321
800516	4	155	20476
800519	1	95	20571
800520	3	111	20682
800521	2	67	20749
800522	1	34	20783
800527	1	40	20823
800528	1	54	20877
800529	1	11	20888
800603	2	13	20901
800605	2	16	20917
800611	1	14	20931

TOTAL STEELHEAD MARKED 102161 = 193 (ADJ = 20931)
10%= 2093 50%= 10466 90%= 18838

102162 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800422	6	196	196
800424	15	468	664
800425	7	407	1071

800428	1	105	1176
800429	2	429	1605
800430	6	730	2335
800501	3	243	2578
800504	2	303	2881
800506	6	731	3612
800507	3	342	3954
800508	1	143	4097
800509	1	136	4233
800511	5	783	5016
800515	1	36	5052
800516	1	39	5091
800519	3	284	5375
800520	3	111	5486
800521	2	67	5553
800522	1	34	5587
800527	1	40	5627
800605	2	16	5643
800617	1	13	5656

TOTAL STEELHEAD MARKED 102162 = 73 (ADJ = 5656)
10%= 566 50%= 2828 90%= 5090

632003 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	1	122	122
800701	1	5	127

TOTAL STEELHEAD MARKED 632003 = 2 (ADJ = 127)
10%= 13 50%= 64 90%= 114

NO TAG MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800407	3	0	0
800408	2	0	0
800409	1	0	0
800410	2	0	0
800413	3	0	0
800414	3	0	0
800415	1	0	0
800417	4	0	0
800418	2	0	0
800419	3	0	0
800422	8	0	0
800424	6	0	0
800427	2	0	0
800428	6	0	0
800429	2	0	0
800430	14	0	0
800501	2	0	0
800502	1	0	0
800505	5	0	0
800506	6	0	0
800507	2	0	0
800508	2	0	0
800509	1	0	0
800511	2	0	0
800512	2	0	0
800515	5	0	0
800516	8	0	0
800519	3	0	0
800520	6	0	0

800522	3	0	0
800523	3	0	0
800526	6	0	0
800527	1	0	0
800528	1	0	0
800530	1	0	0
800603	3	0	0

TOTAL CHINOOK-1S MARKED NO TAG = 125 (ADJ = 0)
10%= 0 50%= 0 90%= 0

BROWN MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800527	1	0	0

TOTAL STEELHEAD MARKED BROWN = 1 (ADJ = 0)
10%= 0 50%= 0 90%= 0

NO TAG MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800406	1	0	0
800413	5	0	0
800414	3	0	0
800417	1	0	0
800418	1	0	0
800419	1	0	0
800422	3	0	0
800423	2	0	0
800424	16	0	0
800425	8	0	0
800427	10	0	0
800428	7	0	0
800429	5	0	0
800430	3	0	0
800501	7	0	0
800502	6	0	0
800504	5	0	0
800505	7	0	0
800506	9	0	0
800507	8	0	0
800508	7	0	0
800509	11	0	0
800511	9	0	0
800515	6	0	0
800516	3	0	0
800519	3	0	0
800520	14	0	0
800521	3	0	0
800522	6	0	0
800523	15	0	0
800526	9	0	0
800527	5	0	0
800528	3	0	0
800529	9	0	0
800530	3	0	0
800601	1	0	0
800603	4	0	0
800605	1	0	0
800607	4	0	0
800609	3	0	0
800611	6	0	0
800613	6	0	0

800615	4	0	0
800617	7	0	0
800620	5	0	0
800622	1	0	0
800624	5	0	0
800626	4	0	0
800701	3	0	0
800706	2	0	0
800506	1	0	0

TOTAL STEELHEAD MARKED NO TAG = 271 (ADJ = 0)

10%= 0 50%= 0 90%= 0

TOTAL MARKS IN FILE MTGR80 3080

RECAPTURE SUMMARY OF CODED WIRE TAGS SACRIFICED AT MCNARY DAM, 1980

Sorted by species, brand.

Number = Number of coded wire tags sacrificed.

Adjusted number = Adjusts the number sacrificed to the number of fish with adipose clips in the sample, then adjusts this number to reflect the total number collected for the day.

2/20/81

RECAPTURE SUMMARY DATA FROM FILE MTMC80

THRU FINAL

0	0	0

050638 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	1	1	1
800501	1	2	3
800514	4	6	9
800519	1	13	22
800523	5	129	151
800526	5	319	470
800602	2	15	485
800604	1	3	488
800606	1	2	490

TOTAL COHO MARKED 050638 = 21 (ADJ = 490)

10%= 49 50%= 245 90%= 441

034302 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	1	7	7

TOTAL CHINOOK-1S MARKED 034302 = 1 (ADJ = 7)

10%= 1 50%= 4 90%= 6

034602 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800523	1	3	3

TOTAL CHINOOK-1S MARKED 034602 = 1 (ADJ = 3)

10%= 0 50%= 2 90%= 3

034702 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	1	1	1
800516	1	1	2
800528	1	2	4

TOTAL CHINOOK-1S MARKED 034702 = 3 (ADJ = 4)

10%= 0 50%= 2 90%= 4

034802 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	1	10	10
800508	2	17	27
800512	1	4	31
800513	1	5	36
800519	2	3	39
800521	1	1	40
800522	1	2	42
800523	1	3	45

TOTAL CHINOOK-1S MARKED 034802 = 10 (ADJ = 45)

10%= 5 50%= 23 90%= 41

034902 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	2	9	9
800501	2	14	23
800513	1	5	28
800516	3	3	31
800522	1	2	33
800528	1	2	35

TOTAL CHINOOK-1S MARKED 034902 = 10 (ADJ = 35)

10%= 4 50%= 18 90%= 32

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800429	1	4	4
800501	3	21	25
800502	4	32	57
800509	1	10	67
800512	1	4	71
800519	1	1	72
800520	1	1	73
800521	1	1	74
800522	1	2	76
800530	1	2	78

TOTAL CHINOOK-1S MARKED 035002 = 15 (ADJ = 78)
10%= 8 50%= 39 90%= 70

035102 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	1	1	1
800516	1	1	2
800523	1	3	5
800526	3	12	17
800528	1	2	19
800529	2	3	22
800530	1	2	24
800602	2	5	29

TOTAL CHINOOK-1S MARKED 035102 = 12 (ADJ = 29)
10%= 3 50%= 15 90%= 26

035202 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800528	1	2	2

TOTAL CHINOOK-1S MARKED 035202 = 1 (ADJ = 2)
10%= 0 50%= 1 90%= 2

035302 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	1	1	1

TOTAL CHINOOK-1S MARKED 035302 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

035702 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	1	5	5

TOTAL CHINOOK-1S MARKED 035702 = 1 (ADJ = 5)
10%= 1 50%= 3 90%= 5

036102 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800515	1	1	1
800516	1	1	2
800521	1	1	3
800522	2	4	7
800526	2	8	15
800530	1	2	17
800602	3	8	25

TOTAL CHINOOK-1S MARKED 036102 = 11 (ADJ = 25)
10%= 3 50%= 13 90%= 23

050421 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800416	2	4	4
800418	1	2	6
800421	8	10	16
800423	1	1	17
800424	3	8	25
800425	4	9	34

800429	2	8	51
800501	1	7	58
800505	2	96	154

TOTAL CHINOOK-1S MARKED 050421 = 27 (ADJ = 154)
10%= 15 50%= 77 90%= 139

050454 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	1	1	1

TOTAL CHINOOK-1S MARKED 050454 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

050527 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800602	2	5	5

TOTAL CHINOOK-1S MARKED 050527 = 2 (ADJ = 5)
10%= 1 50%= 3 90%= 5

050529 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	2	3	3
800515	1	1	4
800516	2	2	6
800519	7	9	15
800520	9	11	26
800521	5	6	32
800522	2	4	36
800526	3	12	48
800528	1	2	50
800529	1	1	51

TOTAL CHINOOK-1S MARKED 050529 = 33 (ADJ = 51)
10%= 5 50%= 26 90%= 46

050532 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	3	14	14
800501	12	85	99
800502	16	127	226
800505	10	480	706
800506	24	236	942
800507	15	351	1293
800508	26	227	1520
800509	10	99	1619
800512	24	97	1716
800513	9	45	1761
800514	23	39	1800
800515	9	13	1813
800516	13	14	1827
800519	5	7	1834
800520	4	5	1839
800521	3	4	1843
800522	3	6	1849
800523	3	8	1857
800526	3	12	1869
800528	1	2	1871
800604	1	2	1873
800605	1	1	1874

TOTAL CHINOOK-1S MARKED 050532 = 218 (ADJ = 1874)
10%= 187 50%= 937 90%= 1687

050639 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	1	1	1

TOTAL CHINOOK-1S MARKED 050639 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

050544 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800505	1	48	48

TOTAL CHINOOK-1S MARKED 050644 = 1 (ADJ = 48)
10%= 5 50%= 24 90%= 43

050648 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800528	2	3	3

TOTAL CHINOOK-1S MARKED 050648 = 2 (ADJ = 3)
10%= 0 50%= 2 90%= 3

102112 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	2	9	9
800502	4	32	41
800505	3	144	185
800506	5	49	234
800507	1	23	257
800508	2	17	274
800509	5	50	324
800512	5	20	344
800513	6	30	374
800514	19	32	406
800515	11	15	421
800516	19	20	441
800519	11	15	456
800520	8	10	466
800521	9	11	477
800522	13	28	505
800523	13	33	538
800526	7	27	565
800528	8	12	577
800529	4	5	582
800530	2	3	585
800602	7	18	603
800603	5	8	611
800604	6	11	622
800605	3	3	625
800606	3	4	629
800609	4	4	633
800613	5	6	639
800616	2	4	643

TOTAL CHINOOK-1S MARKED 102112 = 192 (ADJ = 643)
10%= 64 50%= 322 90%= 579

102113 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800429	1	4	4

TOTAL CHINOOK-1S MARKED 102113 = 1 (ADJ = 4)
10%= 0 50%= 2 90%= 4

102114 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800422	1	1	1
800428	8	23	24
800429	12	46	70
800430	7	32	102
800501	4	28	130
800502	2	16	146
800505	1	48	194
800506	3	30	224
800507	2	47	271
800509	2	20	291

TOTAL CHINOOK-1S MARKED 102114 = 42 (ADJ = 291)

102125 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800429	1	4	4
800430	4	18	22
800501	4	28	50
800502	6	48	98
800505	3	144	242
800506	2	20	262
800508	1	9	271
800509	1	10	281
800512	5	20	301
800513	2	10	311
800514	1	2	313
800515	3	4	317
800516	2	2	319
800519	1	1	320
800520	1	1	321
800521	4	5	326
800522	2	4	330
800526	2	8	338
800529	1	1	339
800602	1	3	342

TOTAL CHINOOK-1S MARKED 102125 = 47 (ADJ = 342)
10%= 34 50%= 171 90%= 308

102126 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800428	2	6	6
800429	3	11	17
800430	15	68	85
800501	12	85	170
800502	7	56	226
800505	3	144	370
800506	4	39	409
800508	6	52	461
800509	1	10	471
800512	1	4	475
800513	1	5	480
800514	3	5	485
800515	1	1	486
800516	2	2	488
800519	2	3	491
800520	1	1	492
800521	3	4	496
800522	1	2	498
800523	2	5	503
800528	1	2	505
800602	1	3	508

TOTAL CHINOOK-1S MARKED 102126 = 72 (ADJ = 508)
10%= 51 50%= 254 90%= 457

631857 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800416	1	2	2
800421	2	2	4

TOTAL CHINOOK-1S MARKED 631857 = 3 (ADJ = 4)
10%= 0 50%= 2 90%= 4

631958 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800418	1	2	2

TOTAL CHINOOK-1S MARKED 631958 = 1 (ADJ = 2)
10%= 0 50%= 1 90%= 2

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800416	3	6	6
800418	3	5	11
800421	2	2	13
800422	2	3	16
800425	1	2	18
800430	1	5	23
800523	1	3	26

TOTAL CHINOOK-1S MARKED 632017 = 13 (ADJ = 26)
10%= 3 50%= 13 90%= 23

NO TAG MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	2	3	3

TOTAL CHINOOK-1S MARKED NO TAG = 2 (ADJ = 3)
10%= 0 50%= 2 90%= 3

050455 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800429	4	23	23
800430	9	52	75
800501	6	133	208
800502	2	24	232
800505	2	141	373
800506	3	21	394
800507	3	101	495
800508	6	100	595
800509	2	22	617
800512	3	43	660
800514	3	30	690
800515	1	14	704
800516	1	4	708
800519	3	41	749
800520	1	10	759
800521	1	9	768
800522	1	17	785
800526	4	50	835
800528	2	9	844
800529	1	3	847
800602	2	10	857
800603	3	9	866
800604	2	8	874

TOTAL STEELHEAD MARKED 050455 = 65 (ADJ = 874)
10%= 87 50%= 437 90%= 787

050635 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	1	4	4
800521	2	18	22
800522	1	17	39
800523	4	80	119
800526	3	38	157
800528	3	13	170
800529	6	15	185
800602	1	5	190
800603	2	6	196
800604	1	4	200
800605	3	8	208
800606	2	6	214
800609	2	5	219
800616	1	2	221

TOTAL STEELHEAD MARKED 050635 = 32 (ADJ = 221)
10%= 22 50%= 111 90%= 199

050636 MARKED STEELHEAD

800428	4	85	85
800516	1	4	89
800520	1	10	99
800521	2	18	117
800522	4	68	185
800526	3	38	223
800528	1	4	227
800529	5	13	240
800602	3	15	255
800604	1	4	259
800606	2	6	265
800609	1	3	268

TOTAL STEELHEAD MARKED 050636 = 28 (ADJ = 268)
10%= 27 50%= 134 90%= 241

050637 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	1	14	14
800516	3	12	26
800520	2	20	46
800521	5	46	92
800522	2	34	126
800526	1	13	139
800528	3	13	152
800529	2	5	157
800530	2	10	167
800605	1	3	170

TOTAL STEELHEAD MARKED 050637 = 22 (ADJ = 170)
10%= 17 50%= 85 90%= 153

071614 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	1	7	7
800509	1	11	18
800512	1	14	32
800513	1	34	66
800514	2	20	86
800515	1	14	100
800516	3	12	112
800521	1	9	121
800528	1	4	125

TOTAL STEELHEAD MARKED 071614 = 12 (ADJ = 125)
10%= 13 50%= 63 90%= 113

072201 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800514	1	10	10
800515	1	14	24
800520	2	20	44
800522	1	17	61
800526	3	38	99
800528	6	27	126
800529	1	3	129
800602	4	20	149
800604	2	8	157
800605	2	6	163
800606	1	3	166
800609	1	3	169
800613	1	1	170

TOTAL STEELHEAD MARKED 072201 = 26 (ADJ = 170)
10%= 17 50%= 85 90%= 153

102119 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800508	1	17	17

10%= 2 50%= 9 90%= 15

102156 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	1	12	12
800505	2	141	153
800506	4	27	180
800508	7	116	296
800512	1	14	310
800513	1	34	344
800514	3	30	374
800516	5	20	394
800519	4	55	449
800520	2	20	469
800521	3	28	497
800522	4	68	565
800523	5	100	665
800526	2	25	690
800529	3	8	698
800530	1	5	703
800602	3	15	718
800603	2	6	724
800604	3	12	736
800613	1	1	737

TOTAL STEELHEAD MARKED 102156 = 57 (ADJ = 737)

10%= 74 50%= 369 90%= 663

102157 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800416	1	3	3
800430	1	6	9
800502	1	12	21
800505	7	494	515
800506	4	27	542
800507	2	67	609
800508	1	17	626
800509	2	22	648
800512	1	14	662
800513	3	103	765
800514	3	30	795
800515	1	14	809
800516	7	28	837
800519	1	14	851
800520	3	30	881
800521	1	9	890
800522	1	17	907
800523	6	120	1027
800526	3	38	1065
800528	2	9	1074
800529	5	13	1087
800530	2	10	1097
800602	1	5	1102
800603	2	6	1108
800604	2	8	1116
800605	1	3	1119
800606	1	3	1122
800609	1	3	1125
800620	1	3	1128

TOTAL STEELHEAD MARKED 102157 = 67 (ADJ = 1128)

10%= 113 50%= 564 90%= 1015

102161 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800425	1	7	7
800505	3	212	214

800507	2	67	313
800508	5	83	396
800509	3	33	429
800512	4	57	486
800513	1	34	520
800514	4	39	559
800515	2	28	587
800516	6	24	611
800519	1	14	625
800520	1	10	635
800521	2	18	653
800522	3	51	704
800526	1	13	717
800528	2	9	726
800529	1	3	729
800530	1	5	734
800602	1	5	739
800603	1	3	742

TOTAL STEELHEAD MARKED 102161 = 49 (ADJ = 742)
10%= 74 50%= 371 90%= 668

102162 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	1	6	6
800501	3	67	73
800502	5	60	133
800506	6	41	174
800509	3	33	207
800512	1	14	221
800514	4	39	260
800515	2	28	288
800516	3	12	300
800519	1	14	314
800520	1	10	324
800522	1	17	341
800526	2	25	366
800528	3	13	379
800529	1	3	382
800530	1	5	387
800613	1	1	388

TOTAL STEELHEAD MARKED 102162 = 39 (ADJ = 388)
10%= 39 50%= 194 90%= 349

631804 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800421	2	7	7
800423	1	6	13

TOTAL STEELHEAD MARKED 631804 = 3 (ADJ = 13)
10%= 1 50%= 7 90%= 12

632003 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800418	2	3	3
800421	24	87	90
800422	17	28	118
800423	16	68	186
800424	16	107	293
800425	17	119	412
800428	15	320	732
800429	29	168	900
800430	32	186	1086
800501	19	422	1508
800502	26	313	1821
800505	5	353	2174
800506	16	109	2283

800508	17	282	2834
800509	7	76	2910
800512	21	299	3209
800513	9	309	3518
800514	21	207	3725
800515	19	271	3996
800516	21	83	4079
800519	19	260	4339
800520	10	101	4440
800521	9	83	4523
800522	12	205	4728
800523	11	220	4948
800526	17	215	5163
800528	18	80	5243
800529	6	15	5258
800530	2	10	5268
800602	7	35	5303
800603	3	9	5312
800604	20	79	5391
800605	27	75	5466
800606	28	87	5553
800609	19	50	5603
800613	3	4	5607
800616	1	2	5609

TOTAL STEELHEAD MARKED 632003 = 569 (ADJ = 5609)
10%= 561 50%= 2805 90%= 5048

NO TAG MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	2	44	44

TOTAL STEELHEAD MARKED NO TAG = 2 (ADJ = 44)
10%= 4 50%= 22 90%= 40

NO TAG MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800421	3	0	0
800423	4	0	0
800424	2	0	0
800425	1	0	0
800428	2	0	0
800501	9	0	0
800502	1	0	0
800506	4	0	0
800507	2	0	0
800508	4	0	0
800512	2	0	0
800514	12	0	0
800515	2	0	0
800516	3	0	0
800519	3	0	0
800520	7	0	0
800521	2	0	0
800523	5	0	0
800526	2	0	0
800528	3	0	0
800529	2	0	0
800530	1	0	0
800602	3	0	0
800604	1	0	0
800606	1	0	0

TOTAL CHINOOK-1S MARKED NO TAG = 81 (ADJ = 0)
10%= 0 50%= 0 90%= 0

BLANK MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.

TOTAL STEELHEAD MARKED BLANK = 1 (ADJ = 0)
10%= 0 50%= 0 90%= 0

NO TAG MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800422	3	0	0
800424	4	0	0
800425	2	0	0
800428	5	0	0
800429	6	0	0
800502	5	0	0
800506	2	0	0
800507	4	0	0
800509	1	0	0
800512	8	0	0
800513	5	0	0
800515	4	0	0
800516	7	0	0
800519	2	0	0
800520	7	0	0
800521	3	0	0
800522	1	0	0
800523	3	0	0
800526	2	0	0
800528	6	0	0
800529	6	0	0
800530	2	0	0
800602	5	0	0
800603	4	0	0
800604	3	0	0
800605	4	0	0
800613	2	0	0
800620	2	0	0

TOTAL STEELHEAD MARKED NO TAG = 108 (ADJ = 0)
10%= 0 50%= 0 90%= 0

WHLBPK MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800530	1	0	0

TOTAL STEELHEAD MARKED WHLBPK = 1 (ADJ = 0)
10%= 0 50%= 0 90%= 0

TOTAL MARKS IN FILE M1MC80 1908

RECAPTURE SUMMARY OF CODED WIRE TAGS SACRIFICED AT JOHN DAY DAM, 1980

Sorted by species, brand.

Number = Number of coded wire tags sacrificed.

Adjusted number = No adjustment made. All adipose fin-clipped fish were sacrificed.

2/20/81

RECAPTURE SUMMARY DATA FROM FILE MTJD80

THRU FINAL

0	0	0

050638 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800504	1	0	0
800526	1	0	0

TOTAL COHO MARKED 050638 = 2 (ADJ = 0)

10%= 0 50%= 0 90%= 0

631750 MARKED COHO

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800811	1	0	0

TOTAL COHO MARKED 631750 = 1 (ADJ = 0)

10%= 0 50%= 0 90%= 0

034702 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800516	1	1	1

TOTAL CHINOOK-1S MARKED 034702 = 1 (ADJ = 1)

10%= 0 50%= 1 90%= 1

034802 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	1	1	1
800530	1	0	1

TOTAL CHINOOK-1S MARKED 034802 = 2 (ADJ = 1)

10%= 0 50%= 1 90%= 1

034902 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	1	1	1
800510	1	1	2

TOTAL CHINOOK-1S MARKED 034902 = 2 (ADJ = 2)

10%= 0 50%= 1 90%= 2

035002 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800510	1	1	1
800515	1	1	2

TOTAL CHINOOK-1S MARKED 035002 = 2 (ADJ = 2)

10%= 0 50%= 1 90%= 2

050421 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800423	2	2	2
800428	1	1	3
800501	1	1	4
800502	2	2	6
800506	1	1	7

TOTAL CHINOOK-1S MARKED 050421 = 7 (ADJ = 7)

10%= 1 50%= 4 90%= 6

050527 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800728	2	0	0

TOTAL CHINOOK-1S MARKED 050527 = 2 (ADJ = 0)

10%= 0 50%= 0 90%= 0

050532 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.

800506	3	2	5
800507	5	3	8
800508	7	7	15
800509	4	4	19
800510	2	2	21
800511	2	3	24
800512	5	4	28
800513	2	2	30
800514	4	3	33
800515	5	4	37
800516	1	1	38
800519	1	1	39
800521	1	1	40

TOTAL CHINOOK-1S MARKED 050532 = 44 (ADJ = 40)
10%= 4 50%= 20 90%= 36

050644 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800428	1	1	1

TOTAL CHINOOK-1S MARKED 050644 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

071930 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	1	1	1

TOTAL CHINOOK-1S MARKED 071930 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

071939 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800421	1	1	1
800429	1	1	2
800430	1	0	2
800506	1	1	3
800521	1	1	4

TOTAL CHINOOK-1S MARKED 071939 = 5 (ADJ = 4)
10%= 0 50%= 2 90%= 4

071940 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800509	1	1	1

TOTAL CHINOOK-1S MARKED 071940 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

071941 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800421	4	4	4
800422	1	1	5
800502	2	2	7
800506	2	1	8
800509	1	1	9
800517	1	2	11

TOTAL CHINOOK-1S MARKED 071941 = 11 (ADJ = 11)
10%= 1 50%= 6 90%= 10

072024 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800421	2	2	2
800425	1	2	4
800506	1	1	5
800510	1	1	6
800513	1	1	7
800515	1	1	8

TOTAL CHINOOK-1S MARKED 072024 = 7 (ADJ = 8)
10%= 1 50%= 4 90%= 7

072025 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800425	1	2	2
800428	2	2	4
800429	1	1	5
800502	2	2	7
800506	2	1	8
800515	1	1	9

TOTAL CHINOOK-1S MARKED 072025 = 9 (ADJ = 9)
10%= 1 50%= 5 90%= 8

072026 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800418	1	1	1
800421	9	8	9
800422	3	4	13
800424	3	2	15
800506	1	1	16
800513	1	1	17

TOTAL CHINOOK-1S MARKED 072026 = 18 (ADJ = 17)
10%= 2 50%= 9 90%= 15

072027 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800428	1	1	1
800504	1	1	2
800516	1	1	3

TOTAL CHINOOK-1S MARKED 072027 = 3 (ADJ = 3)
10%= 0 50%= 2 90%= 3

072028 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	2	1	1
800508	2	2	3
800514	1	1	4
800515	1	1	5
800522	1	0	5

TOTAL CHINOOK-1S MARKED 072028 = 7 (ADJ = 5)
10%= 1 50%= 3 90%= 5

072038 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800503	1	1	1

TOTAL CHINOOK-1S MARKED 072038 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

102112 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800506	2	1	1
800507	2	1	2
800508	6	6	8
800509	1	1	9
800510	1	1	10
800512	6	4	14
800513	3	2	16
800514	1	1	17
800515	4	3	20
800516	1	1	21
800517	1	2	23
800519	1	1	24
800521	2	3	27
800529	2	0	27
800530	1	0	27

TOTAL CHINOOK-1S MARKED 102112 = 34 (ADJ = 27)
10%= 3 50%= 14 90%= 24

102114 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	2	2	2
800504	1	1	3
800506	2	1	4

TOTAL CHINOOK-1S MARKED 102114 = 5 (ADJ = 4)
10%= 0 50%= 2 90%= 4

102115 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800801	1	0	0

TOTAL CHINOOK-1S MARKED 102115 = 1 (ADJ = 0)
10%= 0 50%= 0 90%= 0

102125 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800503	1	1	1
800505	5	3	4
800507	3	2	6
800509	3	3	9
800513	1	1	10
800522	1	0	10

TOTAL CHINOOK-1S MARKED 102125 = 14 (ADJ = 10)
10%= 1 50%= 5 90%= 9

102126 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	1	1	1
800505	2	3	4
800506	3	2	6
800507	3	2	8
800508	3	3	11
800509	1	1	12
800510	1	1	13
800514	1	1	14
800515	1	1	15
800516	1	1	16
800519	1	1	17
800522	1	0	17

TOTAL CHINOOK-1S MARKED 102126 = 19 (ADJ = 17)
10%= 2 50%= 9 90%= 15

631821 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800502	1	1	1

TOTAL CHINOOK-1S MARKED 631821 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

632017 MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800423	1	1	1
800501	1	1	2

TOTAL CHINOOK-1S MARKED 632017 = 2 (ADJ = 2)
10%= 0 50%= 1 90%= 2

050455 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	2	1	1
800502	13	13	14
800503	11	13	27
800504	12	11	38
800505	10	11	49
800506	29	22	71
800507	14	13	84
800508	4	7	91

800510	6	9	103
800511	2	2	105
800512	5	3	108
800513	2	2	110
800514	1	1	111
800515	4	4	115
800516	2	3	118
800517	1	2	120
800518	2	2	122
800519	2	2	124
800520	2	2	126
800522	1	0	126
800527	3	3	129
800528	1	1	130
800529	2	2	132
800530	2	1	133
800602	1	1	134
800603	1	1	135
800605	2	2	137
800616	1	1	138

TOTAL STEELHEAD MARKED 050455 = 141 (ADJ = 138)
10%= 14 50%= 69 90%= 124

050635 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800529	1	1	1
800610	1	0	1

TOTAL STEELHEAD MARKED 050635 = 2 (ADJ = 1)
10%= 0 50%= 1 90%= 1

050636 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	1	0	0
800515	1	1	1
800517	3	5	6
800518	1	1	7
800520	2	2	9
800521	2	2	11
800522	1	0	11
800525	1	1	12
800527	1	1	13
800528	3	2	15
800529	2	2	17
800530	1	0	17
800603	1	1	18

TOTAL STEELHEAD MARKED 050636 = 20 (ADJ = 18)
10%= 2 50%= 9 90%= 16

050637 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	2	1	1
800513	3	4	5
800514	1	1	6
800517	1	2	8
800519	1	1	9
800522	1	0	9
800525	2	3	12
800527	3	3	15
800529	1	1	16
800601	1	1	17

TOTAL STEELHEAD MARKED 050637 = 16 (ADJ = 17)
10%= 2 50%= 9 90%= 15

071614 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.

800506	2	2	3
800507	5	5	8
800508	1	2	10
800509	1	1	11
800510	2	3	14
800511	1	1	15
800512	1	1	16
800513	1	1	17
800514	2	2	19
800516	5	9	28
800518	1	1	29
800528	1	1	30
800529	1	1	31
800602	1	1	32

TOTAL STEELHEAD MARKED 071614 = 26 (ADJ = 32)
10%= 3 50%= 16 90%= 29

072201 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	1	0	0
800504	1	1	1
800509	1	1	2
800522	1	0	2
800527	2	2	4
800610	2	0	4

TOTAL STEELHEAD MARKED 072201 = 8 (ADJ = 4)
10%= 0 50%= 2 90%= 4

100533 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800529	1	1	1

TOTAL STEELHEAD MARKED 100533 = 1 (ADJ = 1)
10%= 0 50%= 1 90%= 1

102156 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	3	1	1
800504	2	2	3
800505	2	2	5
800506	2	2	7
800507	5	5	12
800508	6	11	23
800509	3	3	26
800510	1	1	27
800511	2	2	29
800512	1	1	30
800513	3	4	34
800514	2	2	36
800515	7	7	43
800516	1	2	45
800517	2	3	48
800518	3	3	51
800519	1	1	52
800520	2	2	54
800521	2	2	56
800522	1	0	56
800525	1	1	57
800527	1	1	58
800528	1	1	59
800529	1	1	60
800603	1	1	61

TOTAL STEELHEAD MARKED 102156 = 56 (ADJ = 61)
10%= 6 50%= 31 90%= 55

102157 MARKED STEELHEAD

800501	1	0	0
800504	1	1	1
800505	1	1	2
800506	2	2	4
800507	7	7	11
800508	3	6	17
800510	1	1	18
800511	1	1	19
800512	2	1	20
800513	2	2	22
800514	1	1	23
800515	6	6	29
800516	4	7	36
800517	2	3	39
800518	2	2	41
800519	2	2	43
800520	2	2	45
800521	2	2	47
800522	3	1	48
800525	2	3	51
800527	3	3	54
800528	2	1	55
800529	4	4	59
800530	2	1	60
800603	1	1	61
800610	1	0	61

TOTAL STEELHEAD MARKED 102157 = 60 (ADJ = 61)
10%= 6 50%= 31 90%= 55

102161 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800504	1	1	1
800505	5	5	6
800507	6	6	12
800508	1	2	14
800509	6	6	20
800510	3	4	24
800511	5	6	30
800512	5	3	33
800513	5	6	39
800514	4	4	43
800515	2	2	45
800516	3	5	50
800517	4	6	56
800519	1	1	57
800527	3	3	60

TOTAL STEELHEAD MARKED 102161 = 54 (ADJ = 60)
10%= 6 50%= 30 90%= 54

102162 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800501	1	0	0
800502	4	4	4
800503	5	6	10
800504	13	12	22
800505	1	1	23
800506	13	10	33
800507	6	6	39
800508	2	4	43
800509	4	4	47
800510	3	4	51
800511	1	1	52
800512	5	3	55
800513	1	1	56
800514	2	2	58

800516	1	2	62
800517	3	5	67
800518	1	1	68
800520	3	3	71
800522	2	1	72
800527	1	1	73
800529	1	1	74

TOTAL STEELHEAD MARKED 102162 = 75 (ADJ = 74)
10%= 7 50%= 37 90%= 67

632003 MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800424	1	1	1
800425	1	1	2
800428	2	5	7
800429	1	1	8
800430	3	5	13
800501	5	1	14
800502	9	9	23
800503	5	6	29
800504	8	7	36
800505	8	9	45
800506	17	13	58
800507	5	5	63
800508	4	7	70
800509	6	6	76
800510	7	10	86
800511	4	5	91
800512	4	2	93
800513	6	7	100
800514	2	2	102
800515	8	7	109
800516	4	7	116
800517	9	14	130
800518	10	11	141
800519	2	2	143
800520	3	3	146
800521	1	1	147
800522	3	1	148
800525	5	7	155
800527	4	5	160
800528	1	1	161
800529	3	3	164
800530	1	0	164
800609	4	4	168

TOTAL STEELHEAD MARKED 632003 = 156 (ADJ = 168)
10%= 17 50%= 84 90%= 151

631948 MARKED CHINOOK-0S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800715	3	0	0

TOTAL CHINOOK-0S MARKED 631948 = 3 (ADJ = 0)
10%= 0 50%= 0 90%= 0

NO TAG MARKED CHINOOK-1S

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800422	1	0	0
800428	1	0	0
800505	1	0	0
800509	1	0	0
800511	1	0	0
800513	1	0	0
800515	3	0	0
800516	2	0	0
800517	1	0	0

800529	5	0	0
800530	1	0	0
800531	3	0	0

TOTAL CHINOOK-1S MARKED NO TAG = 22 (ADJ = 0)
10%= 0 50%= 0 90%= 0

NO TAG MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800430	2	0	0
800501	3	0	0
800503	4	0	0
800504	5	0	0
800505	1	0	0
800506	4	0	0
800507	7	0	0
800508	3	0	0
800509	1	0	0
800510	3	0	0
800511	8	0	0
800512	1	0	0
800513	2	0	0
800515	5	0	0
800516	5	0	0
800517	5	0	0
800518	1	0	0
800519	2	0	0
800521	1	0	0
800522	6	0	0
800525	4	0	0
800527	6	0	0
800528	1	0	0
800529	2	0	0
800530	2	0	0
800616	1	0	0

TOTAL STEELHEAD MARKED NO TAG = 85 (ADJ = 0)
10%= 0 50%= 0 90%= 0

WHLBPKG MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800512	1	0	0

TOTAL STEELHEAD MARKED WHLBPKG = 1 (ADJ = 0)
10%= 0 50%= 0 90%= 0

WHLBYWR MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800504	1	0	0

TOTAL STEELHEAD MARKED WHLBYWR = 1 (ADJ = 0)
10%= 0 50%= 0 90%= 0

WHLGPKY MARKED STEELHEAD

DATE	NUMBER	ADJ.NUMBER	CUM. ADJ. NO.
800511	1	0	0

TOTAL STEELHEAD MARKED WHLGPKY = 1 (ADJ = 0)
10%= 0 50%= 0 90%= 0

TOTAL MARKS IN FILE MTJD80.331

APPENDIX C

DAILY CATCH SUMMARY, 1980

DAILY CATCH SUMMARY FOR LOWER GRANITE DAM

FILE CATCHGR 12/12/80

DATE	Ad CLIPS IN SAMPLE CHINO	CHIN1	STLHD	COHO	SOCK	CATCH SAMPLE SIZE CHINO	CHIN1	STLHD	COHO	SOCK	TOT CAT.	SMPL.CAT.	EXP.FACT.	EXPANDED CATCH CHINO	CHIN1	STLHD	COHO	SOCK
800401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800402	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800403	0	0	0	0	0	0	1508	27	0	5	3661	1540	2.4	0	3585	64	0	12
800404	0	2	0	0	0	0	1240	13	0	2	2152	0	1.0	0	1240	13	0	2
800405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800406	0	3	1	0	0	0	2701	28	0	5	3155	2734	1.2	0	3117	32	0	6
800407	0	7	0	0	0	0	1430	21	0	6	4376	1457	3.0	0	4295	63	0	18
800408	0	5	0	0	0	0	1461	13	0	0	2029	1474	1.4	0	2011	18	0	0
800409	0	10	0	0	0	0	1958	26	0	0	2311	1984	1.2	0	2281	30	0	0
800410	0	3	0	0	0	0	1420	22	0	2	1773	1444	1.2	0	1744	27	0	2
800411	0	5	0	0	0	0	1463	29	0	0	1972	1492	1.3	0	1934	38	0	0
800412	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800413	0	13	1	0	0	0	2477	90	0	1	2568	2568	1.0	0	2477	90	0	1
800414	0	8	0	0	0	0	1622	58	0	1	1681	1681	1.0	0	1622	58	0	1
800415	0	10	0	0	0	0	1639	43	0	2	1684	1684	1.0	0	1639	43	0	2
800416	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800417	0	9	1	0	0	0	7453	205	0	4	16463	7662	2.1	0	16014	440	0	9
800418	0	7	1	0	0	0	4721	183	0	1	27494	4905	5.6	0	26463	1026	0	6
800419	0	0	0	0	0	0	4165	263	0	1	20152	4429	4.6	0	18951	1197	0	5
800420	0	10	0	0	0	0	6909	416	1	0	43676	7326	6.0	0	41190	2480	6	0
800421	0	54	0	0	0	0	8848	283	0	4	71026	9135	7.8	0	68795	2200	0	31
800422	0	93	152	0	0	0	10156	1672	0	0	122218	11828	10.3	0	104941	17277	0	0
800423	0	167	117	0	0	0	11825	1840	0	1	152647	13666	11.2	0	132083	20553	0	11
800424	0	164	142	0	0	0	10820	4642	0	1	169935	15463	11.0	0	118909	51015	0	11
800425	0	150	227	0	0	0	11974	9346	0	0	245499	21320	11.5	0	137880	107619	0	0
800426	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800427	0	129	248	0	0	0	7816	6671	0	1	390282	14488	26.9	0	210550	179705	0	27
800428	0	193	366	0	0	0	8948	4839	0	0	169828	13787	12.3	0	110221	59607	0	0
800429	0	59	371	0	0	0	4907	4359	1	2	208799	9269	22.5	0	110538	98193	23	45
800430	0	114	433	0	0	0	6682	5133	0	1	156020	11816	13.2	0	88230	67777	0	13
800501	0	92	279	0	0	0	5399	3280	0	0	113530	8679	13.1	0	70624	42906	0	0
800502	0	46	365	0	0	0	3385	4668	0	0	87357	8053	10.8	0	36720	50637	0	0
800503	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800504	0	79	579	0	0	0	5479	7967	0	0	172360	13446	12.8	0	70234	102126	0	0
800505	0	69	455	0	0	0	4407	7402	0	0	113526	11809	9.6	0	42367	71159	0	0
800506	0	46	640	0	0	0	4436	10728	0	0	121182	15164	8.0	0	35450	85732	0	0
800507	0	29	403	0	0	0	2755	6253	0	1	101959	9009	11.3	0	31180	70768	0	11
800508	0	45	601	0	0	0	4294	7624	0	3	124456	11921	10.4	0	44830	79595	0	31
800509	0	29	372	0	0	0	1857	4818	0	4	97869	6679	14.7	0	27211	70599	0	59
800510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800511	0	21	419	0	0	0	3589	5307	0	4	139693	8900	15.7	0	56332	83298	0	63
800512	0	14	389	0	0	0	1209	4493	0	4	54933	5706	9.6	0	11639	43255	0	39
800513	0	23	860	0	0	0	2137	7479	0	0	59838	9616	6.2	0	13298	46540	0	0
800514	0	26	406	0	0	0	2059	3642	0	4	43818	5705	7.7	0	15814	27973	0	31
800515	0	43	277	0	0	0	2465	3259	0	17	34540	5741	6.0	0	14830	19607	0	102
800516	0	39	400	0	0	0	2887	5358	0	16	35184	8261	4.3	0	12296	22820	0	68
800517	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800518	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800519	0	20	409	0	0	0	2770	7005	2	9	102074	9786	10.4	0	28893	73066	21	94
800520	0	35	667	0	0	0	3743	10291	0	16	27199	14050	1.9	0	7246	19922	0	31
800521	0	15	432	0	0	0	2372	5437	0	11	31359	7820	4.0	0	9512	21803	0	44
800522	0	16	471	0	0	0	2912	5968	0	39	26782	8919	3.0	0	8744	17921	0	117
800523	0	14	265	0	0	0	1490	2931	1	21	32246	4443	7.3	0	10814	21272	7	152
800524	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800525	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

800526	0	22[illegible]	586	0	0	0	3094	7012	0	76	104620	10182	10.3	0	31701	72049	0	781
800527	0	26[illegible]	207	0	0	0	3325	3526	0	44	44197	6895	6.4	0	21313	22602	0	282
800528	0	21	134	0	0	0	1856	2858	1	51	50304	4766	10.6	0	19590	30166	11	538
800529	0	11	107	0	0	0	2050	2791	0	18	13057	4859	2.7	0	5509	7500	0	48
800530	0	6	64	0	0	0	613	1297	0	6	9591	1916	5.0	0	3069	6492	0	30
800531	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800601	0	3[illegible]	55	0	0	0	567	1285	0	13	11599	1865	6.2	0	3526	7992	0	81
800602	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800603	0	41[illegible]	294	0	0	0	4491	7833	0	110	12343	12434	1.0	0	4458	7776	0	109
800604	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800605	0	188	394	0	0	0	4901	9527	3	165	14800	14596	1.0	0	4969	9660	3	167
800606	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800607	0	637[illegible]	196	0	0	0	5386	5342	0	66	12420	10794	1.2	0	6197	6147	0	76
800608	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800609	0	374	249	0	0	0	5375	5778	0	53	11923	11206	1.1	0	5719	6148	0	56
800610	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800611	0	208	213	0	0	0	4367	5284	0	46	10796	9697	1.1	0	4862	5883	0	51
800612	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800613	0	136	155	0	0	0	5184	5978	0	33	12600	11195	1.1	0	5835	6728	0	37
800614	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800615	0	222[illegible]	161	0	0	0	7639	5746	0	47	15005	13432	1.1	0	8534	6419	0	53
800616	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800617	0	83	113	0	0	0	5474	5483	0	28	10985	10985	1.0	0	5474	5483	0	28
800618	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800619	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800620	0	73	49	0	0	0	4025	4201	0	28	8254	8254	1.0	0	4025	4201	0	28
800621	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800622	0	83	37	0	0	0	3896	2840	0	19	6811	6755	1.0	0	3928	2864	0	19
800623	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800624	0	87	45	0	0	0	4673	3249	3	15	7940	7940	1.0	0	4673	3249	3	15
800625	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800626	0	35	14	0	0	0	2499	1452	1	33	3985	3985	1.0	0	2499	1452	1	33
800627	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800628	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800629	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800701	0	327	14	0	0	0	6632	1541	0	26	8199	8199	1.0	0	6632	1541	0	26
800702	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800703	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800704	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800705	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800706	0	752	10	0	0	0	14893	776	0	2	15671	15671	1.0	0	14893	776	0	2
800707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800708	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800709	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800710	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800926	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800927	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	0	5251	13846	0	0	0	274728	237931	13	1068	3726406	512485		0	1926240	1795691	75	3504

DAILY CATCH SUMMARY FOR MCNARY DAM

DATE	Ad CLIPS IN SAMPLE CHIND	CHIN1	STLHD	COHO	SOCK	CATCH SAMPLE SIZE CHIND	CHIN1	STLHD	COHO	SOCK	TOT CAT.	SMPL.CAT.	EXP.FACT.	EXPANDED CATCH CHIND	CHIN1	STLHD	COHO	SOCK
800401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800402	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800403	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800404	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800406	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800407	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800408	0	13	0	0	0	0	5319	23	0	5	10141	5347	1.9	0	10088	44	0	9
800409	0	8	1	0	1	0	8263	155	22	35	14030	8475	1.7	0	13679	257	36	58
800410	0	2	0	0	0	0	2403	61	1	8	3013	2573	1.2	0	2931	71	1	9
800411	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800412	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800413	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800414	0	23	1	0	0	0	9172	126	11	24	12675	9333	1.4	0	12456	171	15	33
800415	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800416	0	9	2	0	0	0	7217	271	72	19	9580	7579	1.3	0	9122	343	91	24
800417	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800418	0	5	2	0	0	0	6580	319	147	35	10307	7081	1.5	0	10042	487	224	53
800419	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800421	0	0	77	0	0	0	7106	4713	284	24	14921	12127	1.2	0	8743	5739	349	30
800422	0	4	28	0	0	0	3249	2739	169	17	6174	6174	1.0	0	3249	2739	169	17
800423	0	0	51	1	0	0	3637	3249	15	29	9268	6980	1.3	0	4829	4280	20	39
800424	0	7	96	0	1	0	4168	3134	2	3	8137	7307	1.1	0	4641	3440	2	3
800425	0	10	109	1	0	0	4218	3330	5	28	8743	7581	1.2	0	4865	3840	6	32
800426	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800427	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800428	0	22	238	3	0	0	7829	4175	15	105	20672	12124	1.7	0	13349	7119	26	179
800429	0	76	197	0	0	0	8793	2915	8	132	11848	11848	1.0	0	8793	2915	8	132
800430	0	134	213	0	0	0	14236	3370	4	152	20834	17762	1.2	0	16698	3953	5	178
800501	0	175	334	0	0	0	16547	6609	18	416	37219	23590	1.6	0	26107	10427	28	656
800502	0	280	402	0	0	0	16756	5807	33	411	25486	23007	1.1	0	18561	6433	37	455
800503	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800504	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800505	0	125	152	0	0	0	10250	3495	10	271	123797	14026	8.8	0	90469	30848	88	2392
800506	0	322	218	0	1	0	28261	5778	17	1365	42244	35421	1.2	0	33705	6891	20	1628
800507	0	166	199	1	1	0	22174	4577	21	319	68768	27091	2.5	0	56287	11618	53	810
800508	0	138	262	0	0	0	22963	5440	12	612	68084	29027	2.3	0	53861	12760	28	1435
800509	0	98	97	3	2	0	20870	3025	38	1316	51260	25249	2.0	0	42370	6141	77	2672
800510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800511	0	0	0	0	0	0	0	0	0	0	83676	0	1.0	0	0	0	0	0
800512	0	99	314	1	4	0	17895	7732	32	1214	40372	26933	1.5	0	26824	11680	48	1820
800513	0	77	395	3	0	0	18661	8531	25	874	36679	28031	1.3	0	24366	11139	33	1141
800514	0	71	351	5	0	0	22775	9506	31	1000	38217	33312	1.1	0	26128	10306	36	1147
800515	0	27	275	2	0	0	15451	6922	19	651	32235	23043	1.4	0	21615	9683	27	911
800516	0	17	192	5	1	0	16318	5977	119	853	24978	24267	1.1	0	17518	6417	128	916
800517	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800518	0	0	0	0	0	0	0	0	0	0	56231	0	1.0	0	0	0	0	0
800519	0	34	344	11	2	0	19875	6701	823	771	32482	28170	1.2	0	22917	7727	949	889
800520	0	32	257	6	1	0	13761	4193	587	816	19856	19357	1.0	0	14116	4301	602	837
800521	0	13	188	6	0	0	11954	3582	790	1167	21935	17493	1.3	0	14989	4492	931	1463
800522	0	13	240	3	10	0	18391	4465	960	1235	53735	25111	2.1	0	39355	9555	2054	2771
800523	0	11	205	51	13	0	16563	4830	1460	2329	65310	25842	2.5	0	41859	12358	3630	7402
800524	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800525	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800526	0	13	127	82	0	168	20027	4479	4522	2639	123664	31835	3.9	653	77735	17399	17566	10251
800527	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800528	0	6	119	28	0	828	16664	4326	5325	2018	44525	29161	1.5	1264	25444	6605	8131	3081
800529	0	10	79	9	0	1185	9259	3032	3400	830	17706	17706	1.0	1185	9259	3032	3400	830
800530	0	8	46	5	0	953	4752	1374	971	599	9354	8649	1.1	1031	5139	1486	1050	648
800531	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

800602	0	26	64	9	0	3724	5454	1183	835	359	19354	11614	1.7	6204	3083	1971	1431	539
800603	0	4	26	0	0	1672	1172	427	546	317	6287	4134	1.5	2543	1782	649	830	482
800604	3	9	85	2	0	11114	2575	985	875	649	23364	16198	1.4	16031	3714	1421	1262	936
800605	3	3	88	2	0	6947	1810	611	767	519	11495	10654	1.1	7495	1953	659	828	560
800606	4	4	112	2	0	4204	1170	558	320	331	6583	6583	1.0	4204	1170	558	320	331
800607	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800608	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800609	6	4	66	2	0	3673	511	433	154	326	5097	5097	1.0	3673	511	433	154	326
800610	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800611	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800612	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800613	23	6	9	2	0	3548	673	364	170	123	5103	4878	1.0	3712	704	381	178	129
800614	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800615	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800616	7	1	2	1	0	433	86	113	28	20	1220	680	1.8	777	154	203	50	36
800617	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800618	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800619	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800620	26	2	4	3	0	3033	232	141	45	38	5483	3489	1.6	4766	365	222	71	60
800621	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800622	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800623	32	1	3	3	0	2268	449	224	72	44	4749	3057	1.6	3523	698	348	112	68
800624	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800625	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800626	320	26	4	2	0	13343	1060	200	115	38	17650	14756	1.2	15960	1268	239	138	45
800627	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800628	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800629	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800630	543	49	0	3	0	42825	1747	146	117	54	69952	44889	1.6	66736	2722	228	182	84
800701	409	2	0	4	0	28386	822	33	60	15	29316	29316	1.0	28386	822	33	60	15
800702	365	0	0	3	0	25546	250	25	26	11	43658	25858	1.7	43131	422	42	44	19
800703	252	2	0	0	0	18309	52	12	9	7	22892	18389	1.2	22792	65	15	11	9
800704	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800705	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800707	492	0	0	1	0	32950	32	6	17	18	124035	33023	3.7	122763	119	22	63	67
800708	310	0	0	0	0	23772	24	12	17	16	25151	23841	1.1	25078	25	13	18	17
800709	129	0	0	1	0	12755	12	3	8	14	14634	12792	1.1	14592	14	3	9	16
800710	133	0	0	0	0	9195	14	4	7	11	12031	9231	1.3	11984	18	5	9	14
800711	165	0	0	0	0	12533	7	2	5	19	12566	12566	1.0	12533	7	2	5	19
800712	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800713	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800714	405	0	0	0	0	25538	8	7	3	31	39509	25587	1.5	33433	12	11	5	48
800715	68	0	2	0	0	3742	2	2	0	8	5014	3754	1.3	4998	3	3	0	11
800716	85	0	0	0	0	6362	3	7	4	23	8822	6339	1.4	8771	4	10	6	32
800717	56	0	0	0	0	4170	8	0	3	15	5629	4196	1.3	5594	11	0	4	20
800718	180	0	0	0	0	13892	3	2	4	23	15991	13924	1.1	15954	3	2	5	26
800719	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800721	245	0	0	2	0	26365	1	2	4	46	43486	26418	1.6	43339	2	3	7	76
800722	120	0	0	1	0	15266	0	0	1	28	17472	15295	1.1	17439	0	0	1	34
800723	110	0	0	0	0	12053	0	0	3	17	13836	12073	1.1	13813	0	0	3	19
800724	64	0	0	0	0	4882	0	0	0	16	6478	4898	1.3	6457	0	0	0	21
800725	55	0	0	0	0	5084	1	0	0	7	5434	5090	1.1	5425	1	0	0	7
800726	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800727	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800728	99	0	0	0	0	11755	0	1	0	20	14960	11776	1.3	14933	0	1	0	25
800729	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800730	216	0	0	0	0	24976	1	1	0	46	27974	25024	1.1	27920	1	1	0	51
800731	105	0	0	0	0	14932	0	0	0	17	15940	14949	1.1	15922	0	0	0	18
800801	94	0	0	0	0	12164	0	0	0	17	16146	12181	1.3	16123	0	0	0	23
800802	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800803	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800804	104	0	1	0	0	13034	0	1	0	44	14870	13079	1.1	14819	0	1	0	50
800805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

800807	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800808	36	0	0	0	0	9711	0	3	0	15	9729	9729	1.0	9711	0	3	0	15
800809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800811	36	0	0	0	0	14973	0	0	0	15	16818	14988	1.1	16801	0	0	0	17
800812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800813	70	0	0	0	0	10537	0	0	2	13	13230	10552	1.3	13271	0	0	3	16
800814	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800815	17	0	0	0	0	3654	0	0	0	6	4457	3660	1.2	4450	0	0	0	7
800816	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800817	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800819	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800820	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800821	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800822	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800823	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800825	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800826	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800827	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800828	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800829	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800830	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800831	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800901	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800902	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800903	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800904	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800905	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800906	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800907	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800908	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800910	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800911	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800912	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800913	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800914	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800915	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800916	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800917	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800918	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800919	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800921	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800922	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800926	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800927	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	5489	6338	37	470636	24260	2042038	724190	244930	43296									
	2187	269	501372	144640	26318	1167226	837828	45481										

DAILY CATCH SUMMARY FOR JOHN DAY DAM

DATE	Ad CLIPS IN SAMPLE CHINO	CHIN1	STLHD	COHO	SOCK	CATCH SAMPLE SIZE CHINO	CHIN1	STLHD	COHO	SOCK	TOT CAT.	SMPL.CAT.	EXP.FACT.	EXPANDED CATCH CHINO	CHIN1	STLHD	COHO	SOCK
800401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800402	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800403	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800404	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800406	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800407	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800408	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800409	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800411	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800412	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800413	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800414	0	1	0	0	0	0	768	39	0	3	810	810	1.0	0	768	39	0	3
800415	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800416	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800417	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800418	0	1	0	0	0	3	835	132	1	5	1037	1037	1.0	3	835	132	1	5
800419	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800421	0	15	1	0	0	0	1156	505	0	1	1662	1662	1.0	0	1156	505	0	1
800422	0	5	0	0	0	0	496	371	0	0	867	867	1.0	0	496	371	0	0
800423	0	3	0	0	0	0	543	698	0	1	1242	1242	1.0	0	543	698	0	1
800424	0	2	1	0	0	20	537	1026	0	0	1583	1583	1.0	20	537	1026	0	0
800425	0	3	1	0	0	425	240	871	0	0	1536	1536	1.0	425	240	871	0	0
800426	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800427	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800428	0	6	5	0	0	2619	679	1957	0	1	5266	5266	1.0	2619	679	1957	0	1
800429	0	2	1	0	0	801	287	976	0	1	2065	2065	1.0	801	287	976	0	1
800430	0	0	5	0	0	835	598	742	0	4	2159	2159	1.0	835	598	742	0	4
800501	0	2	4	0	0	650	460	512	0	2	1624	1624	1.0	650	460	512	0	2
800502	0	12	26	0	0	354	687	830	6	6	1883	1883	1.0	354	687	830	6	6
800503	0	2	24	0	0	451	902	1238	1	11	2703	2703	1.0	451	902	1238	1	11
800504	0	1	37	0	0	248	590	1365	0	20	2223	2223	1.0	248	590	1365	0	20
800505	0	5	23	0	0	144	910	1420	0	23	2497	2497	1.0	144	910	1420	0	23
800506	0	18	49	0	0	122	1009	1741	0	14	2886	2886	1.0	122	1009	1741	0	14
800507	0	9	45	0	0	109	1139	1772	1	26	3107	3107	1.0	109	1139	1772	1	26
800508	0	17	29	0	0	74	1493	1412	0	35	3014	3014	1.0	74	1493	1412	0	35
800509	0	14	23	0	0	41	1159	1104	1	63	2368	2368	1.0	41	1159	1104	1	63
800510	0	8	34	0	0	35	1690	2041	0	68	3834	3834	1.0	35	1690	2041	0	68
800511	0	3	20	0	0	47	597	872	0	74	1590	1590	1.0	47	597	872	0	74
800512	0	8	14	0	0	39	1139	813	0	144	2135	2135	1.0	39	1139	813	0	144
800513	0	6	27	0	0	55	1460	1763	7	148	3453	3453	1.0	55	1460	1763	7	148
800514	0	5	14	0	0	54	780	733	3	63	1683	1683	1.0	54	780	733	3	63
800515	0	10	22	0	0	41	1238	1277	2	194	2752	2752	1.0	41	1238	1277	2	194
800516	0	7	34	0	0	49	1281	1440	0	143	2913	2913	1.0	49	1281	1440	0	143
800517	0	4	38	0	0	23	1906	1931	5	109	3374	3374	1.0	23	1906	1931	5	109
800518	0	0	21	0	0	63	728	1145	3	75	2016	2016	1.0	63	728	1145	3	75
800519	0	3	10	0	0	39	553	777	1	71	1445	1445	1.0	39	553	777	1	71
800520	0	2	13	0	0	26	420	551	9	76	1092	1092	1.0	26	420	551	9	76
800521	0	5	8	0	0	23	766	648	5	45	1488	1488	1.0	23	766	648	5	45
800522	0	0	4	0	0	18	979	597	22	89	1698	1698	1.0	18	979	597	22	89
800523	0	0	10	0	0	29	525	481	3	72	1170	1170	1.0	29	525	481	3	72
800524	0	2	0	0	0	23	969	412	45	95	1544	1544	1.0	23	969	412	45	95
800525	0	0	15	0	0	20	980	526	62	75	1673	1673	1.0	20	980	526	62	75
800526	0	1	0	0	0	5	934	475	73	118	1605	1605	1.0	5	934	475	73	118
800527	0	0	24	0	0	6	526	317	40	121	1010	1010	1.0	6	526	317	40	121
800528	0	1	6	0	0	36	556	302	60	70	1024	1024	1.0	36	556	302	60	70
800529	0	0	16	0	0	54	357	268	112	61	852	852	1.0	54	357	268	112	61
800530	0	0	2	0	0	54	360	359	98	84	955	955	1.0	54	360	359	98	84
800531	0	0	0	0	0	39	266	504	124	75	1008	1008	1.0	39	266	504	124	75

800602	2	0	1	0	0	9	85	97	54	12	245	255	1.0	9	85	97	54	12
800603	0	0	4	0	0	21	32	25	15	12	105	105	1.0	21	32	25	15	12
800604	0	0	0	0	0	20	5	7	1	1	34	34	1.0	20	5	7	1	1
800605	0	5	2	0	0	10	468	196	72	24	770	770	1.0	10	468	196	72	24
800606	0	0	0	0	0	150	100	163	24	30	467	467	1.0	150	100	163	24	30
800607	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800608	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800609	0	1	4	0	0	405	723	178	85	38	1429	1429	1.0	405	723	178	85	38
800610	0	0	0	0	0	163	89	45	10	12	324	324	1.0	163	89	45	10	12
800611	0	0	0	0	0	235	11	14	13	8	341	341	1.0	235	11	14	13	8
800612	0	0	0	0	0	310	14	56	86	6	472	472	1.0	310	14	56	86	6
800613	0	0	0	0	0	236	11	18	6	1	272	272	1.0	236	11	18	6	1
800614	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800615	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800616	0	0	1	0	0	592	69	29	5	10	705	705	1.0	592	69	29	5	10
800617	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800618	0	0	0	0	0	453	86	50	12	16	617	617	1.0	453	86	50	12	16
800619	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800620	0	5	0	0	0	693	175	50	19	25	962	962	1.0	693	175	50	19	25
800621	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800622	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800623	0	1	0	0	0	323	234	21	13	24	615	615	1.0	323	234	21	13	24
800624	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800625	3	1	0	0	0	1189	99	12	12	7	1319	1319	1.0	1189	99	12	12	7
800626	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800627	20	0	0	0	0	1435	75	14	12	14	1550	1550	1.0	1435	75	14	12	14
800628	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800629	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800701	25	0	0	0	0	1456	25	19	2	7	1509	1509	1.0	1456	25	19	2	7
800702	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800703	11	0	0	0	0	1049	12	6	1	3	1071	1071	1.0	1049	12	6	1	3
800704	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800705	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800707	41	0	0	0	0	5248	7	3	3	5	5256	5256	1.0	5238	7	3	3	5
800708	12	0	0	0	0	2558	2	0	1	3	2564	2564	1.0	2558	2	0	1	3
800709	7	0	0	0	0	1586	2	2	2	2	1594	1594	1.0	1586	2	2	2	2
800710	1	0	0	0	0	1187	1	0	1	1	1190	1190	1.0	1187	1	0	1	1
800711	13	0	0	0	0	1257	0	1	0	1	1259	1259	1.0	1257	0	1	0	1
800712	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800713	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800714	11	0	0	0	0	1450	0	0	0	2	1452	1452	1.0	1450	0	0	0	2
800715	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800716	2	0	0	0	0	1238	0	1	1	2	1242	1242	1.0	1238	0	1	1	2
800717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800718	10	0	0	0	0	3064	0	1	0	0	3065	3065	1.0	3064	0	1	0	0
800719	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800721	12	0	0	0	0	2571	1	1	0	1	2574	2574	1.0	2571	1	1	0	1
800722	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800723	10	0	0	0	0	3849	0	0	2	4	3855	3855	1.0	3849	0	0	2	4
800724	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800725	15	0	0	0	0	2092	1	0	1	0	2094	2094	1.0	2092	1	0	1	0
800726	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800727	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800728	5	0	0	0	0	1343	2	0	0	0	1345	1345	1.0	1343	2	0	0	0
800729	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800730	17	0	0	0	0	3609	0	0	0	1	3610	3610	1.0	3609	0	0	0	1
800731	0	0	0	0	0	12	0	0	0	0	12	12	1.0	12	0	0	0	0
800801	3	0	0	0	0	1136	3	0	0	0	1139	1139	1.0	1136	3	0	0	0
800802	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800803	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800804	14	0	0	0	0	3063	4	1	0	1	3069	3069	1.0	3063	4	1	0	1
800805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

800907	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800908	2	0	0	0	0	1308	4	3	2	1	1318	1318	1.0	1308	4	3	2	1
800909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800910	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800911	3	0	0	0	0	961	6	2	0	0	969	969	1.0	961	5	2	0	0
800912	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800913	3	0	0	0	0	591	5	0	0	0	596	596	1.0	591	5	0	0	0
800914	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800915	11	0	0	0	0	1839	4	0	0	0	1842	1842	1.0	1839	4	0	0	0
800916	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800917	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800918	18	0	0	0	0	3442	12	1	1	3	3459	3459	1.0	3442	12	1	1	3
800919	2	0	0	0	0	573	3	0	0	0	576	576	1.0	573	3	0	0	0
800920	1	0	0	0	0	196	0	0	0	1	197	197	1.0	196	0	0	0	1
800921	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800922	2	0	0	0	0	228	1	0	0	0	229	229	1.0	228	1	0	0	0
800923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800926	1	0	0	0	0	534	11	0	0	0	545	545	1.0	534	11	0	0	0
800927	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800928	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800929	4	1	0	0	0	1279	7	0	0	0	1286	1286	1.0	1279	7	0	0	0
800930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800931	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800901	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800902	9	0	0	0	0	1192	4	1	0	1	1198	1198	1.0	1192	4	1	0	1
800903	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800904	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800905	9	0	0	0	0	1106	3	0	0	0	1109	1109	1.0	1106	3	0	0	0
800906	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800907	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800908	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800909	1	0	0	0	0	1195	1	0	0	0	1196	1196	1.0	1195	1	0	0	0
800910	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800911	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800912	10	0	0	0	0	1387	6	0	0	0	1393	1393	1.0	1387	6	0	0	0
800913	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800914	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800915	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800916	13	0	0	0	0	1623	3	0	0	2	1628	1628	1.0	1623	3	0	0	2
800917	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800918	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800919	1	0	0	0	0	390	0	0	0	16	406	406	1.0	390	0	0	0	16
800920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800921	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800922	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800926	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800927	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800928																		
	352	541	0	37108	1220	150781	72294	38379	2600									
	201	0	72294	38379	2600	150781	37108	1220										

APPENDIX D

RELEASE INFORMATION, 1980

LEGEND

Mag Tag = Coded wire tag
* Sorted by brand, CWT under remarks section

LOC = L: left
R: right

A: anterior
D: dorsal
P: posterior

BR = Brand

ROT = Rotation e.g.

1: K
2:
3:
4:

SP = Species

1: Sockeye
4: Coho
5: Spring chinook
6: Steelhead
9: Fall chinook

KM = distance from mouth of Columbia River

Report Date 81/02/27
Last Revision Date :80/12/23

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
	LA	+	1	LP		6	79	DWORSHAK NFH	PAHSIMEROI	1305	800303	800427	9492		5	
					COLD WATER COND.				VOLITION REL. TO 80/04/27							
	RA	+	1	LP		6	79	DWORSHAK NFH	PAHSIMEROI	1305	800204	800427	8203		3	
					COLD WATER COND.				VOLITION REL. TO 80/04/27							
	LA	13	1	AD		5	78	DESCHUTES R.	DESCHUTES RIVER	399	800222	800321	143	107		0
*					STOCK EVAL				CWT 071846,902 FISH							
	LA	13	2	AD		5	78	DESCHUTES R.	DESCHUTES RIVER	399	800303	800314	342	105		0
*					STOCK EVAL				CWT 071846,902 FISH							
	LA	13	3	AD		5	78	DESCHUTES R.	DESCHUTES RIVER	399	800327	800327	114	107		0
*					STOCK EVAL				(CWT 071846,58 FISH)							
	LA	13	4	AD		5	78	DESCHUTES R.	DESCHUTES RIVER	399	800401	800411	190	112		0
*					STOCK EVAL				CWT 071846,902 FISH							
	RA	13	1	AD		5	78	DESCHUTES R.	DESCHUTES RIVER	399	800418	800425	129	122		0
*					STOCK EVAL				CWT 071846,902 FISH							
	RA	13	2	AD		5	78	DESCHUTES R.	DESCHUTES RIVER.	399	800428	800503	23	124		0
*					STOCK EVAL				CWT 071846,902 FISH							
	RA	13	3	AD		5	78	DESCHUTES R.	DESCHUTES RIVER.	399	800512	800523	9			0
*					STOCK EVAL				CWT 071846,902 FISH							
	RA	13	4	AD		5	78	DESCHUTES R.	DESCHUTES RIVER.	399	800528	800528	4	128		0
*					STOCK EVAL				CWT 071846,902 FISH							
	RA	2C	1	AD		5	78	LO.GRANITE DAM	DALTON POINT	206	800408	800422	11838			0
*					TRUCK TRANSPORT #1				CWT CETB(451 DUMP BLALOCK CANYON POND)							
	RA	2C	3	AD		5	78	LO.GRANITE DAM	DALTON POINT	206	800423	800430	11796			0
*					TRUCK TRANSPORT #1				CWT CETB							
	RA	2J	1	AD		5	78	LO.GRANITE DAM	DALTON POINT	206	800409	800422	12609			0
*					TRUCK TRANSPORT #3				CWT LAPR(146 DUMP BLALOCK CANYON POND)							
	RA	2J	3	AD		5	78	LO.GRANITE DAM	DALTON POINT	206	800423	800430	13849			0
*					TRUCK TRANSPORT #3				CWT LAPR							
	RA	2L	1	AD		5	78	LO.GRANITE DAM	DALTON POINT	206	800505	800512	3339			0
*					TRUCK TRNASPORT #2				CWT ND							

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
*	RA	2T	1		AD TRUCK TRANSPORT	5	78	LO. GRANITE DAM	DALTON POINT CWT PRTB	206	800505	800512	4245			0
	LA	2X	1		 EFFICIENCY REL	5		MCNARY DAM	PORT KELLY (WA.)	501	800512	800512	1187			0
	LA	2X	1		 EFFICIENCY REL.	6		MCNARY DAM	PORT KELLY (WA.)	501	800512	800512	1349			
	LA	2X	2		 EFFICIENCY REL	5		MCNARY DAM	PORT KELLY (OR.)	501	800513	800513	1337			0
	LA	2X	2		 EFFICIENCY REL.	6		MCNARY DAM	PORT KELLY (OR.)	501	800513	800513	1206			
	LA	2X	3		 EFFICIENCY REL.	6		MCNARY DAM	PORT KELLY (WA.)	501	800514	800514	1230			
	LA	2X	3		TC EFFICIENCY REL	5		MCNARY DAM	PORT KELLY (WA.)	501	800514	800514	1134			0
	LA	2X	4		 EFFICIENCY REL.	6		MCNARY DAM	PORT KELLY (OR.)	501	800515	800515	857			
	LA	2X	4		TC EFFICIENCY REL	5		MCNARY DAM	PORT KELLY (OR.)	501	800515	800515	1438			0
	RA	2X	1		BC EFFICIENCY REL	9		JOHN DAY DAM	BLALOCK MTDRIV.	375	800804	800804	5063			0
	LD	3	1		 EFFICIENCY REL	5		MCNARY DAM	PORT KELLY (OR.)	501	800506	800506	1881			0
	LD	3	1		 EFFICIENCY REL.	6		MCNARY DAM	PORT KELLY (WA.)	501	800506	800506	1189			
	LD	3	2		 EFFICIENCY REL	5		MCNARY DAM	PORT KELLY (WA.)	501	800507	800507	1884			0
	LD	3	2		 EFFICIENCY REL.	6		MCNARY DAM	PORT KELLY (WA.)	501	800507	800507	658			
	LD	3	3		 EFFICIENCY REL	5		MCNARY DAM	PORT KELLY (OR.)	501	800508	800508	1417			0

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
			PURPOSE OF RELEASE						REMARKS							
	LD	3	3			6		MCNARY DAM	PORT KELLY (OR.)	501	800508	800508	968			
			EFFICIENCY REL.													
	LD	3	4			5		MCNARY DAM	PORT KELLY (WA.)	501	800509	800509	1879			0
			EFFICIENCY REL													
	LD	3	4			6		MCNARY DAM	PORT KELLY (WA.)	501	800509	800509	676			
			EFFICIENCY REL.													
	RA	3C	1		AD	5	78	LO.GRANITE DAM	DALTON POINT	206	800505	800512	2039			0
*			TRUCK TRANSPORT #1						CWT CETB							
	RA	3J	1		AD	5	78	LO.GRANITE DAM	DALTON POINT	206	800505	800512	4720			0
*			TRUCK TRANSPORT #3						CWT LAPR							
	RA	3L	1		AD	5	78	LO.GRANITE DAM	DALTON POINT	206	800408	800422	12102			0
*			TRUCK TRANSPORT #2						CWT ND							
	RA	3L	3		AD	5	78	LO.GRANITE DAM	DALTON POINT	206	800423	800430	14443			0
*			TRUCK TRANSPORT #2						CWT ND							
	RA	3T	1		AD	5	78	LO.GRANITE DAM	DALTON POINT	206	800408	800422	14735			0
*			TRUCK TRANSPORT						CWT PRTB(1352 DUMP BLALOCK POND)							
	RA	3T	3		AD	5	78	LO.GRANITE DAM	DALTON POINT	206	800423	800430	15144			0
*			TRUCK TRANSPORT						CWT PRTB							
	LD	4	1		AD	6	79	DWORSHAK NFH	BARGE BELOW BONN.	230	800429	800429	8486		6	
*									CWT 102119							
	RA	4	4			6	78	DWORSHAK NFH	CLEARWATER @DNFH	806	800418	800418	10007		8	
			TIMING AND MIGRATION													
	RD	4	2			6	79	DWORSHAK NFH	CLEARWATER @DNFH	806	800422	800422	375		9	
			TIMING AND MIGRATION													
	LA	5	1			6		MCNARY DAM	PORT KELLY (WA.)	501	800523	800523	510			
			EFFICIENCY REL.													
	LA	5	1		TC	5		MCNARY DAM	PORT KELLY (WA.)	501	800523	800523	1615			0
			EFFICIENCY REL													
	LA	5	2			6		MCNARY DAM	PORT KELLY (OR.)	501	800527	800527	323			
			EFFICIENCY REL.													

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE			REMARKS							
	LA	5	2	TC		5	MCNARY DAM	PORT KELLY (OR.)	501	800527	800527	1623			0
					EFFICIENCY REL										
	LA	5	3			6	MCNARY DAM	PORT KELLY (WA.)	501	800528	800528	902			
					EFFICIENCY REL.										
	LA	5	3	TC		5	MCNARY DAM	PORT KELLY (WA.)	501	800528	800528	1162			0
					EFFICIENCY REL										
	LA	5	4			6	MCNARY DAM	PORT KELLY (OR.)	501	800529	800529	881			
					EFFICIENCY REL.										
	LA	5	4	TC		5	MCNARY DAM	PORT KELLY (OR.)	501	800529	800529	1051			0
					EFFICIENCY REL										
	LD	52	1			4	78 TURTLE ROCK	ROCKY REACH FOREBAY	758	800513	800513	24192			0
					CONTROL										
	LD	52	2			4	78 TURTLE ROCK	ROCKY REACH TAILRAC	758	800513	800513	25489			0
					SPILLWAY TEST										
	RD	52	1			4	78 TURTLE ROCK	ROCKY REACH FOREBAY	758	800513	800513	24102			0
					CONTROL										
	RD	52	2			4	78 TURTLE ROCK	ROCKY REACH TAILRAC	758	800513	800513	22402			0
					SPILLWAY TEST										
	LA	AN	1			5	MCNARY DAM	PORT KELLY (OR.)	501	800428	800428	988			0
					EFFICIENCY REL										
	LD	AN	1			6	MCNARY DAM	PORT KELLY (OR.)	501	800428	800428	623			0
					EFFICIENCY REL.										
	RA	AN	1			9	MCNARY DAM	PORT KELLY (OR.)	501	800701	800701	2597			
					EFFICIENCY REL.										
	RA	AN	2			9	MCNARY DAM	PORT KELLY (WA.)	501	800702	800702	2465			
					EFFICIENCY REL.										
	RA	AN	3			9	MCNARY DAM	PORT KELLY (OR.)	501	800707	800707	2674			
					EFFICIENCY REL.										
	RA	AN	4			9	MCNARY DAM	PORT KELLY (WA.)	501	800708	800708	2480			
					EFFICIENCY REL.										

Report Date 81/02/27
Last Revision Date :80/12/23

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
	LA	AR	1	BC		4		JOHN DAY DAM	BLALOCK SHORE	375	800623	800623	8			0
					EFFICIENCY REL											
	LA	AR	1	BC		5		JOHN DAY DAM	BLALOCK SHORE	375	800623	800623	87			0
					EFFICIENCY REL											
	LA	AR	1	BC		6		JOHN DAY DAM	BLALOCK SHORE	375	800623	800623	16			0
					EFFICIENCY REL											
	LA	AR	1	BC		9	79	JOHN DAY DAM	BLALOCK SHORE	375	800623	800623	319			0
					EFFICIENCY REL											
	LA	AR	2	BC		5		JOHN DAY DAM	BLALOCK MIDRIV.	375	800701	800701	6			0
					EFFICIENCY REL											
	LA	AR	2	BC		6		JOHN DAY DAM	BLALOCK MIDRIV.	375	800701	800701	2			0
					EFFICIENCY REL											
	LA	AR	2	BC		9		JOHN DAY DAM	BLALOCK MIDRIV.	375	800701	800701	1063			0
					EFFICIENCY REL											
	LD	AR	1			5		JOHN DAY DAM	BLALOCK SHORE	375	800627	800627	60			0
					EFFICIENCY REL											
	LD	AR	1	BC		4		JOHN DAY DAM	BLALOCK SHORE	375	800627	800627	3			0
					EFFICIENCY REL											
	LD	AR	1	BC		6		JOHN DAY DAM	BLALOCK SHORE	375	800627	800627	7			0
					EFFICIENCY REL											
	LD	AR	1	BC		9	79	JOHN DAY DAM	BLALOCK SHORE	375	800627	800627	370			0
					EFFICIENCY REL											
	LD	AR	2	BC		9	79	JOHN DAY DAM	BLALOCK SHORE	375	800707	800707	3000			0
					EFFICIENCY REL											
	RA	AR	1	BC		9		JOHN DAY DAM	BLALOCK MIDRIV.	375	800703	800703	106			0
					EFFICIENCY REL											
	RA	AR	2	BC		4		JOHN DAY DAM	BLALOCK SHORE	375	800627	800627	3			0
					EFFICIENCY REL											
	RA	AR	2	BC		5		JOHN DAY DAM	BLALOCK SHORE	375	800627	800627	7			0
					EFFICIENCY REL											

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
	RA	AR	2	BC		9	79	JOHN DAY DAM	BLALOCK SHORE	375	800627	800627	774			0
					EFFICIENCY REL											
	RD	AR	1	BC		5		JOHN DAY DAM	BLALOCK MIDRIV.	375	800703	800703	5			0
					EFFICIENCY REL											
	RD	AR	1	BC		9		JOHN DAY DAM	BLALOCK MIDRIV.	375	800703	800703	696			0
					EFFICIENCY REL											
	RD	AR	2	BC		9		JOHN DAY DAM	BLALOCK MIDRIV.	375	800708	800708	2460			0
					EFFICIENCY REL											
	LA	B2	1			6		MCNARY DAM	PORT KELLY (WA.)	501	800530	800530	491			
					EFFICIENCY REL.											
	LA	B2	1	TC		5		MCNARY DAM	PORT KELLY (WA.)	501	800530	800530	696			0
					EFFICIENCY REL											
	LA	B2	3	TC		5		MCNARY DAM	PORT KELLY (OR.)	501	800603	800603	327			0
					EFFICIENCY REL											
	LA	B2	3	TC		6		MCNARY DAM	PORT KELLY (OR.)	501	800603	800603	202			
					EFFICIENCY REL.											
	LA	B2	3	TC		9		MCNARY DAM	PORT KELLY (OR.)	501	800603	800603	321			0
					EFFICIENCY REL											
	LA	D	1	BC		9		JOHN DAY DAM	BLALOCK SHORE	375	800709	800709	2053			0
					EFFICIENCY REL											
	LA	D	3	BC		4		JOHN DAY DAM	BLALOCK SHORE	375	800716	800716	2			0
					EFFICIENCY REL											
	LA	D	3	BC		9		JOHN DAY DAM	BLALOCK SHORE	375	800716	800716	1972			0
					EFFICIENCY REL											
	LD	D	1	BC		9		JOHN DAY DAM	BLALOCK SHORE	375	800711	800711	1635			0
					EFFICIENCY REL											
	LD	D	3	BC		9		JOHN DAY DAM	BLALOCK MIDRIV.	375	800721	800721	1901			0
					EFFICIENCY REL											
	RA	D	1	BC		9		JOHN DAY DAM	BLALOCK SHORE	375	800710	800710	1921			0
					EFFICIENCY REL											

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE / REMARKS	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
	RA	D	3	BC		9		JOHN DAY DAM	BLALOCK SHORE	375	800718	800721	2190			0
				EFFICIENCY REL												
	RD	D	1	BC		9		JOHN DAY DAM	BLALOCK SHORE	375	800714	800714	1671			0
				EFFICIENCY REL												
	RD	D	3	BC		9		JOHN DAY DAM	BLALOCK SHORE	375	800731	800723	3097			0
				EFFICIENCY REL												
	LA	DT	3	AD		6	79	HAGERMAN	PAHSIMEROI	1305	800427	800427	9145			0
*				COLD WATER COND.					CWT 050635,36600 FISH							
	LD	DT	1	AD		6	79	HAGERMAN	PAHSIMEROI	1305	800427	800427	10077			0
*				COLD WATER COND.					CWT 050636,40487 FISH							
	RA	DT	3			6	79	DWORSHAK NFH	CLEARWATER @DNFH	806	800429	800429	9953		7	
				TIMING AND MIGRATION												
	RD	DT	1	AD		6	79	HAGERMAN	PAHSIMEROI	1305	800427	800427	8490			0
*				COLD WATER COND.					CWT 050637,33932 FISH							
	LD	F	1			5	78	LEAVENWORTH	METHOW R. MOUTH	839	800510	800510	16449			0
				SYSTEMS TEST												
	LD	F	2			5	78	LEAVENWORTH	PRIEST RAPIDS T.R.	635	800522	800522	16222			0
				SYSTEMS TEST												
	LD	F	3			5	78	LEAVENWORTH	RICHLAND	540	800526	800526	16272			0
				SYSTEMS TEST												
	RD	F	1			5	78	LEAVENWORTH	METHOW R. MOUTH	839	800510	800510	15257			0
				SYSTEMS TEST					(@PATEROS FERRY)							
	RD	F	2			5	78	LEAVENWORTH	PRIEST RAPIDS T.R.	635	800522	800522	15481			0
				SYSTEMS TEST												
	RD	F	3			5	78	LEAVENWORTH	RICHLAND	540	800526	800526	15813			0
				SYSTEMS TEST												
	LA	HE	1			5		JOHN D/DESCHUTE	BLALOCK SHORE/WM SP	375	800220	800429	260			0
*				JOHN DAY EFFICIENCY/WM SP RIVER EVAL.					(50 WITH CWT 072149/J.D. EFF. REL. ON 800429)							
	LA	HE	1			6		JOHN DAY DAM	BLALOCK SHORE	375	800429	800429	766			0
				EFFICIENCY REL												

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
	LA	HE	2				5	JOHN D/DESCHUTE	BLALOCK MIDRIV/WM S	375	800304	800505	945			0
*					JOHN DAY EFFICIENCY/WM SP RIVER EVAL.				428 W CWT 072149/J.D. EFF. REL ON 800505)							
	LA	HE	2				6	JOHN DAY DAM	BLALOCK MIDRIV.	375	800505	800505	1076			0
					EFFICIENCY REL											
	LA	HE	3				5	JOHN D/DESCHUTE	BLALOCK SHORE/WM SP	375	800318	800511	632			0
*					JOHN DAY EFFICIENCY/WM SP RIVER EVAL.				348 W CWT 072149/J.D. EFF. REL ON 800511)							
	LA	HE	3				6	JOHN DAY DAM	BLALOCK SHORE	375	800511	800511	650			0
					EFFICIENCY REL											
	LA	HE	4				5	JOHN D/DESCHUTE	BLALOCK SHORE/WM SP	375	800401	800518	492			0
*					JOHN DAY EFFICIENCY/WM SP RIVER EVAL.				341 W CWT 072149/J.D. EFF. REL ON 800401)							
	LA	HE	4				6	JOHN DAY DAM	BLALOCK SHORE	375	800518	800518	490			0
					EFFICIENCY REL											
	LD	HE	1				5	JOHN DAY DAM	BLALOCK MIDRIV.	375	800430	800430	344			0
					EFFICIENCY REL											
	LD	HE	1				6	JOHN DAY DAM	BLALOCK MIDRIV.	375	800430	800430	540			0
					EFFICIENCY REL											
	LD	HE	2				5	JOHN DAY DAM	BLALOCK SHORE	375	800506	800506	349			0
					EFFICIENCY REL											
	LD	HE	2				6	JOHN DAY DAM	BLALOCK SHORE	375	800506	800506	1350			0
					EFFICIENCY REL											
	LD	HE	3				5	JOHN DAY DAM	BLALOCK SHORE	375	800513	800513	843			0
					EFFICIENCY REL											
	LD	HE	3				6	JOHN DAY DAM	BLALOCK SHORE	375	800513	800513	1231			0
					EFFICIENCY REL											
	LD	HE	4				5	JOHN DAY DAM	BLALOCK SHORE	375	800519	800519	343			0
					EFFICIENCY REL											
	LD	HE	4				6	JOHN DAY DAM	BLALOCK SHORE	375	800519	800519	399			0
					EFFICIENCY REL											
	LP	HE	1				5	JOHN D/DESCHUTE	BLALOCK/WRM SPR TR	375	730923	800501	213			0
*									(TWO SOURCES)71830							

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
			PURPOSE OF RELEASE					REMARKS							
	LP	HE	1			6	JOHN DAY DAM	BLALOCK MIDRIV.	375	800501	800501	427			0
			EFFICIENCY REL												
*	LP	HE	2			5	JOHN D/DESCHUTE	BLALOCK/WRM SPR TR (TWO SOURCES)71830	375	790923	800507	300			0
	LP	HE	2			6	JOHN DAY DAM	BLALOCK MIDRIV.	375	800507	800507	1519			0
			EFFICIENCY REL												
*	LP	HE	3			5	JOHN D/DESCHUTE	BLALOCK/WRM SPR TR (TWO SOURCES)71830	375	790923	800514	425			0
	LP	HE	3			6	JOHN DAY DAM	BLALOCK SHORE	375	800514	800514	546			0
			EFFICIENCY REL												
*	LP	HE	4			5	JOHN DAY DAM	BLALOCK SHORE (TWO SOURCES)71830	375	790923	800520	159			0
	LP	HE	4			6	JOHN DAY DAM	BLALOCK SHORE	375	800520	800520	267			0
			EFFICIENCY REL												
*	RA	HE	1			5	JOHN D/DESCHUTE	BLALOCK SHORE/WM SP 309 W CWT 072149/J.D. EFF. REL ON 800424)	375	800418	800425	956			0
			JOHN DAY EFFICIENCY/WM SP RIVER EVAL												
	RA	HE	1			6	JOHN DAY DAM	BLALOCK SHORE	375	800424	800424	860			0
			EFFICIENCY REL												
*	RA	HE	2			5	JOHN D/DESCHUTE	BLALOCK MIDRIV/WM S 315 W CWT 362149/J.D. EFF. REL ON 800502)	375	800429	800503	1283			0
			JOHN DAY EFFICIENCY/WM SP RIVER EVAL												
	RA	HE	2			6	JOHN DAY DAM	BLALOCK MIDRIV.	375	800502	800502	582			0
			EFFICIENCY REL												
*	RA	HE	3			5	JOHN D/DESCHUTE	BLALOCK SHORE/WM SP 332 W CWT 072149/J.D. EFF. REL ON 800508)	375	800508	800523	2007			0
			JOHN DAY EFFICIENCY/SM SP RIVER EVAL.												
	RA	HE	3			6	JOHN DAY DAM	BLALOCK SHORE	375	800508	800508	1425			0
			EFFICIENCY REL												
*	RA	HE	4			5	JOHN D/DESCHUTE	BLALOCK SHORE/WM SP 1281 W CWT 072149/J.D. EFF. REL ON 800515)	375	800515	800606	1416			0
			JOHN DAY EFFICIENCY/WM SP RIVER EVAL.												
	RA	HE	4			6	JOHN DAY DAM	BLALOCK SHORE	375	800515	800515	1619			0
			EFFICIENCY REL												

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RDT CLIP OTHER MARK PURPOSE OF RELEASE	SP	BY HATCHERY OR SOURCE	RELEASE SITE REMARKS	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
	RD	HE	1 EFFICIENCY REL	5	JOHN DAY DAM	BLALOCK SHORE	375	800425	800425	111			0
	RD	HE	1 EFFICIENCY REL	6	JOHN DAY DAM	BLALOCK SHORE	375	800425	800425	737			0
	RD	HE	2 EFFICIENCY REL	5	JOHN DAY DAM	BLALOCK SHORE	375	800503	800503	373			0
	RD	HE	2 EFFICIENCY REL	6	JOHN DAY DAM	BLALOCK SHORE	375	800503	800503	1064			0
	RD	HE	3 EFFICIENCY REL.	5	JOHN DAY DAM	BLALOCK MIDRIV.	375	800509	800509	652			0
	RD	HE	3 EFFICIENCY REL	6	JOHN DAY DAM	BLALOCK MIDRIV.	375	800509	800509	834			0
	RD	HE	4 EFFICIENCY REL	5	JOHN DAY DAM	BLALOCK SHORE	375	800516	800516	620			0
	RD	HE	4 EFFICIENCY REL	6	JOHN DAY DAM	BLALOCK SHORE	375	800516	800516	895			0
*	RP	HE	1	5	JOHN D/DESCHUTE	BLALOCK/SRM SPR TR (TWO SOURCES)71830	375	800428	800428	276			0
	RP	HE	1 EFFICIENCY REL	6	JOHN DAY DAM	BLALOCK SHORE	375	800428	800428	1156			0
	RP	HE	2 EFFICIENCY REL	5	JOHN DAY DAM	BLALOCK MIDRIV.	375	800504	800504	213			0
	RP	HE	2 EFFICIENCY REL	6	JOHN DAY DAM	BLALOCK MIDRIV.	375	800504	800504	988			0
	RP	HE	3 EFFICIENCY REL	5	JOHN DAY DAM	BLALOCK MIDRIV.	375	800510	800510	447			0
	RP	HE	3 EFFICIENCY REL	6	JOHN DAY DAM	BLALOCK MIDRIV.	375	800510	800510	636			0
	RP	HE	4 EFFICIENCY REL	5	JOHN DAY DAM	BLALOCK SHORE	375	800517	800517	533			0

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RUT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
	RP	HE	4			6		JOHN DAY DAM	BLALOCK SHORE	375	800517	800517	997			0
					EFFICIENCY REL											
	LA	I+	1			6		MCNARY DAM	PORT KELLY (WA.)	501	800605	800605	304			
					EFFICIENCY REL											
	LA	I+	1	TC		5		MCNARY DAM	PORT KELLY (WA.)	501	800605	800605	537			0
					EFFICIENCY REL											
	LA	I+	1	TC		9		MCNARY DAM	PORT KELLY (WA.)	501	800605	800605	1162			0
					EFFICIENCY REL											
	LA	I+	2			9		MCNARY DAM	PORT KELLY (OR.)	501	800623	800623	1107			
					EFFICIENCY REL											
	LA	I+	3			9		MCNARY DAM	PORT KELLY (OR.)	501	800626	800626	2476			
					EFFICIENCY REL											
	LA	I+	4			9		MCNARY DAM	PORT KELLY (WA.)	501	800630	800630	2612			
					EFFICIENCY REL											
	RA	I+	1	BC		9		JOHN DAY DAM	BLALOCK SHORE	375	800710	800710	5033			0
					EFFICIENCY REL											
	LA	ID	1			6		MCNARY DAM	PORT KELLY (WA.)	501	800516	800516	679			
					EFFICIENCY REL											
	LA	ID	1	TC		5		MCNARY DAM	PORT KELLY (WA.)	501	800516	800516	1410			0
					EFFICIENCY REL											
	LA	ID	2			6		MCNARY DAM	PORT KELLY (OR.)	501	800519	800519	615			
					EFFICIENCY REL											
	LA	ID	2	TC		5		MCNARY DAM	PORT KELLY (OR.)	501	800519	800519	1606			0
					EFFICIENCY REL											
	LA	ID	3			6		MCNARY DAM	PORT KELLY (WA.)	501	800520	800520	710			
					EFFICIENCY REL											
	LA	ID	3	TC		5		MCNARY DAM	PORT KELLY (WA.)	501	800520	800520	1360			0
					EFFICIENCY REL											
	LA	ID	4			6		MCNARY DAM	PORT KELLY (OR.)	501	800521	800522	741			
					EFFICIENCY REL											

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RM	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
	LA	ID	4		TC EFFICIENCY REL	5		MCNARY DAM	PORT KELLY (OR.)	501	800521	800522	1859			0
	RA	ID	1		EFFICIENCY REL	9		MCNARY DAM	PORT KELLY (OR.)	501	800721	800721	2209			
	RA	ID	3		EFFICIENCY REL	9		MCNARY DAM	PORT KELLY (WA.)	501	800722	800722	2598			
	LD	IH	2		SPILLWAY TEST	4	78	TURTLE ROCK	ROCKY REACH FOREBAY	758	800519	800519	24972			0
	LD	IH	3		CONTROL	4	78	TURTLE ROCK	ROCKY REACH TAILRAC	758	800519	800519	27958			0
	RD	IH	2		SPILLWAY TEST	4	78	TURTLE ROCK	ROCKY REACH FOREBAY	758	800519	800519	27205			0
	RD	IH	3		CONTROL	4	78	TURTLE ROCK	ROCKY REACH TAILRAC	758	800519	800519	25447			0
	LD	IJ	1		CONTROL	6	78	WELLS DAM	WELLS DAM TAILRACE	825	800505	800505	11534			0
	LD	IJ	2		SPILLWAY TEST	6	78	WELLS DAM	WELLS DAM FOREBAY	826	800505	800505	12004			0
	LD	IJ	3		TURBINE TEST	6	78	WELLS DAM	WELLS DAM FOREBAY	826	800505	800505	13188			0
	RD	IJ	1		CONTROL	6	78	WELLS DAM	WELLS DAM TAILRACE	825	800505	800505	10068			0
	RD	IJ	2		SPILLWAY TEST	6	78	WELLS DAM	WELLS DAM FOREBAY	826	800505	800505	11656			0
	RD	IJ	3		TURBINE TEST	6	78	WELLS DAM	WELLS DAM FOREBAY	826	800505	800505	11215			0
	LD	IL	1		SYSTEMS TEST	5	78	LEAVENWORTH	RICHLAND	540	800522	800522	15303			0
	LD	IL	2		SYSTEMS TEST	5	78	LEAVENWORTH	METHOW R. MOUTH (@ PATEROS FERRY)	839	800505	800505	15004			0

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
	LD	IL	3			5	78	LEAVENWORTH	PRIEST RAPIDS T.R.	635	800520	800520	15233			0
					SYSTEMS TEST											
	RD	IL	1			5	78	LEAVENWORTH	RICHLAND	540	800522	800522	13654			0
					SYSTEMS TEST											
	RD	IL	2			5	78	LEAVENWORTH	METHOW R. MOUTH (@ PATERUS FERRY)	839	800505	800505	13861			
					SYSTEMS TEST											
	RD	IL	3			5	78	LEAVENWORTH	PRIEST RAPIDS T.R.	635	800520	800520	14732			0
					SYSTEMS TEST											
	LD	IM	1			5		MCNARY DAM	PORT KELLY (OR.)	501	800501	800501	641			0
					EFFICIENCY REL											
	LD	IM	1			6		MCNARY DAM	PORT KELLY (OR.)	501	800501	800501	1723			
					EFFICIENCY REL											
	LD	IM	2			5		MCNARY DAM	PORT KELLY (OR.)	501	800505	800505	1513			0
					EFFICIENCY REL											
	LD	IM	2			6		MCNARY DAM	PORT KELLY (OR.)	501	800505	800505	655			
					EFFICIENCY REL											
	RA	IM	1			9		MCNARY DAM	PORT KELLY (WA.)	501	800714	800714	2635			
					EFFICIENCY REL											
	RA	IM	3			9		MCNARY DAM	PORT KELLY (OR.)	501	800715	800715	1907			
					EFFICIENCY REL											
	LA	IS	1			5		LO.GRANITE DAM	CLARKSTON	739	800403	800418	5682			0
					FOREBAY RELEASE											
	LA	IS	1			6	78	LO.GRANITE DAM	CLARKSTON	739	800403	800418	43			0
					FOREBAY RELEASE											
	LA	IS	2			5		LO.GRANITE DAM	CLARKSTON	739	800421	800506	15038			0
					FOREBAY RELEASE											
	LA	IS	2			6	78	LO.GRANITE DAM	CLARKSTON	739	800421	800506	5125			0
					FOREBAY RELEASE											
	LA	IS	3			5		LO.GRANITE DAM	CLARKSTON	739	800503	800516	3035			0
					FOREBAY RELEASE											

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
	LA	IS	3			6	78	LO.GRANITE DAM	CLARKSTON	739	800509	800516	3137			0
					FOREBAY RELEASE											
	LA	IS	4			5	78	LO.GRANITE DAM	CLARKSTON	739	800523	800602	5376			0
					FOREBAY RELEASE											
	LA	IS	4			6	78	LO.GRANITE DAM	CLARKSTON	739	800523	800602	8302			0
					FOREBAY RELEASE											
	LA	IT	1			4		JONES BEACH	JONES BEACH MIDRIV.	75	800505	800505	869	141		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LA	IT	1			5		JONES BEACH	JONES BEACH MIDRIV.	75	800505	800505	498	133		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LA	IT	1			6		JONES BEACH	JONES BEACH MIDRIV.	75	800505	800505	497	197		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LA	IT	1			9		JONES BEACH	JONES BEACH MIDRIV.	75	800505	800505	62	77		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LA	IT	2			4		JONES BEACH	JONES BEACH MIDRIV.	75	800516	800516	418	146		0
					MIGRATIONAL TIMING THROUGH ESTAURY											
	LA	IT	2			5		JONES BEACH	JONES BEACH MIDRIV.	75	800516	800516	140	139		0
					MIGRATIONAL TIMING THROUGH ESTAURY											
	LA	IT	2			6		JONES BEACH	JONES BEACH MIDRIV.	75	800516	800516	283	193		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LA	IT	2			9		JONES BEACH	JONES BEACH MIDRIV.	75	800516	800516	647	69		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LA	IT	3			4		JONES BEACH	JONES BEACH SHORE	75	800603	800603	89	140		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LA	IT	3			5		JONES BEACH	JONES BEACH SHORE	75	800603	800603	11	124		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LA	IT	3			6		JONES BEACH	JONES BEACH SHORE	75	800603	800603	36	187		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LA	IT	3			9		JONES BEACH	JONES BEACH SHORE	75	800603	800603	1009	78		0
					MIGRATIONAL TIMING THROUGH ESTUARY											

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RUT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
	LA	IT	4			4		JONES BEACH	JONES BEACH MIDRIV.	75	800618	800618	28	134		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LA	IT	4			5		JONES BEACH	JONES BEACH MIDRIV.	75	800618	800618	25	124		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LA	IT	4			6		JONES BEACH	JONES BEACH MIDRIV.	75	800618	800618	19	191		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LA	IT	4			9		JONES BEACH	JONES BEACH MIDRIV.	75	800618	800618	1073	75		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LD	IT	1			4		JONES BEACH	JONES BEACH MIDRIV.	75	800507	800507	972	144		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LD	IT	1			5		JONES BEACH	JONES BEACH MIDRIV.	75	800507	800507	357	145		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LD	IT	1			6		JONES BEACH	JONES BEACH MIDRIV.	75	800507	800507	228	136		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LD	IT	1			9		JONES BEACH	JONES BEACH MIDRIV.	75	800507	800507	24	66		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LD	IT	2			4		JONES BEACH	JONES BEACH SHORE	75	800517	800517	1176	142		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LD	IT	2			5		JONES BEACH	JONES BEACH SHORE	75	800517	800517	178	135		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LD	IT	2			6		JONES BEACH	JONES BEACH SHORE	75	800517	800517	482	198		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LD	IT	2			9		JONES BEACH	JONES BEACH SHORE	75	800517	800517	926	69		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LD	IT	3			4		JONES BEACH	JONES BEACH SHORE	75	800604	800604	37	139		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LD	IT	3			6		JONES BEACH	JONES BEACH SHORE	75	800604	800604	13	166		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
	LD	IT	3			9		JONES BEACH	JONES BEACH SHORE	75	800604	800604	421	74		0
					MIGRATIONAL TIMING THROUGH ESTUARY											

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE			REMARKS							
	LD	IT	4			4	JONES BEACH	JONES BEACH MIDRIV.	75	800619	800619	15	134		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LD	IT	4			5	JONES BEACH	JONES BEACH MIDRIV.	75	800619	800619	35	124		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LD	IT	4			6	JONES BEACH	JONES BEACH MIDRIV.	75	800619	800619	21	191		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LD	IT	4			9	JONES BEACH	JONES BEACH MIDRIV.	75	800619	800619	581	75		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LP	IT	1			4	JONES BEACH	JONES BEACH MIDRIV.	75	800508	800508	748	144		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LP	IT	1			5	JONES BEACH	JONES BEACH MIDRIV.	75	800508	800508	364	145		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LP	IT	1			6	JONES BEACH	JONES BEACH MIDRIV.	75	800508	800508	351	136		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LP	IT	2			4	JONES BEACH	JONES BEACH MIDRIV.	75	800519	800519	797	142		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LP	IT	2			5	JONES BEACH	JONES BEACH MIDRIV.	75	800519	800519	96	127		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LP	IT	2			6	JONES BEACH	JONES BEACH MIDRIV.	75	800519	800519	214	190		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LP	IT	3			4	JONES BEACH	JONES BEACH SHORE	75	800605	800605	412	140		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LP	IT	3			5	JONES BEACH	JONES BEACH SHORE	75	800605	800605	66	124		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LP	IT	3			6	JONES BEACH	JONES BEACH SHORE	75	800605	800605	75	187		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LP	IT	3			9	JONES BEACH	JONES BEACH SHORE	75	800605	800605	1089	74		0
					MIGRATIONAL TIMING THROUGH ESTUARY										
	LP	IT	4			4	JONES BEACH	JONES BEACH MIDRIV.	75	800623	800623	5	133		0
					MIGRATIONAL TIMING THROUGH ESTUARY										

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
								REMARKS							
	LP	IT	4			5	JONES BEACH	JONES BEACH MIDRIV.	75	800623	800623	27	124		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	LP	IT	4			6	JONES BEACH	JONES BEACH MIDRIV.	75	800623	800623	18	201		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	1			4	JONES BEACH	JONES BEACH MIDRIV.	75	800501	800501	193	147		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	1			5	JONES BEACH	JONES BEACH MIDRIV.	75	800501	800501	69	139		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	1			6	JONES BEACH	JONES BEACH MIDRIV.	75	800501	800501	252	199		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	1			9	JONES BEACH	JONES BEACH MIDRIV.	75	800501	800501	143	79		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	2			4	JONES BEACH	JONES BEACH MIDRIV.	75	800509	800509	616	141		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	2			5	JONES BEACH	JONES BEACH MIDRIV.	75	800509	800509	453	138		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	2			6	JONES BEACH	JONES BEACH MIDRIV.	75	800509	800509	527	208		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	2			9	JONES BEACH	JONES BEACH MIDRIV.	75	800509	800509	882	72		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	3			4	JONES BEACH	JONES BEACH SHORE	75	800527	800527	196	139		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	3			5	JONES BEACH	JONES BEACH SHORE	75	800527	800527	124	137		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	3			6	JONES BEACH	JONES BEACH SHORE	75	800527	800527	62	186		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	3			9	JONES BEACH	JONES BEACH SHORE	75	800527	800527	181	73		0
			MIGRATIONAL TIMING THROUGH ESTUARY												
	RA	IT	4			4	JONES BEACH	JONES BEACH MIDRIV.	75	800606	800606	135	137		0
			MIGRATIONAL TIMING THROUGH ESTUARY												

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
							PURPOSE OF RELEASE	REMARKS							
	RA	IT	4			5	JONES BEACH	JONES BEACH MIDRIV.	75	800606	800606	81	138		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RA	IT	4			6	JONES BEACH	JONES BEACH MIDRIV.	75	800606	800606	73	196		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RA	IT	4			9	JONES BEACH	JONES BEACH MIDRIV.	75	800606	800606	269	72		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RD	IT	1			4	JONES BEACH	JONES BEACH MIDRIV.	75	800502	800502	632	147		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RD	IT	1			5	JONES BEACH	JONES BEACH MIDRIV.	75	800502	800502	134	139		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RD	IT	1			6	JONES BEACH	JONES BEACH MIDRIV.	75	800502	800502	323	199		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RD	IT	1			9	JONES BEACH	JONES BEACH MIDRIV.	75	800502	800502	326	79		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RD	IT	2			4	JONES BEACH	JONES BEACH MIDRIV.	75	800512	800512	343	140		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RD	IT	2			5	JONES BEACH	JONES BEACH MIDRIV.	75	800512	800512	335	128		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RD	IT	2			6	JONES BEACH	JONES BEACH MIDRIV.	75	800512	800512	264	202		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RD	IT	2			9	JONES BEACH	JONES BEACH MIDRIV.	75	800512	800512	1691	78		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RD	IT	3			4	JONES BEACH	JONES BEACH SHORE	75	800528	800528	259	138		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RD	IT	3			5	JONES BEACH	JONES BEACH SHORE	75	800528	800528	72	137		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RD	IT	3			6	JONES BEACH	JONES BEACH SHORE	75	800528	800528	53	186		0
							MIGRATIONAL TIMING THROUGH ESTUARY								
	RD	IT	3			9	JONES BEACH	JONES BEACH SHORE	75	800528	800528	257	73		0
							MIGRATIONAL TIMING THROUGH ESTUARY								

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RUT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
	RD	IT	4			4		JONES BEACH	JONES BEACH MIDRIV.	75	800609	800609	32	117		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RD	IT	4			5		JONES BEACH	JONES BEACH MIDRIV.	75	800609	800609	25	137		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RD	IT	4			6		JONES BEACH	JONES BEACH MIDRIV.	75	800609	800609	34	177		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RD	IT	4			9		JONES BEACH	JONES BEACH MIDRIV.	75	800609	800609	126	68		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RP	IT	1			4		JONES BEACH	JONES BEACH MIDRIV.	75	800503	800503	816	146		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RP	IT	1			5		JONES BEACH	JONES BEACH MIDRIV.	75	800503	800503	352	130		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RP	IT	1			6		JONES BEACH	JONES BEACH MIDRIV.	75	800503	800503	727	197		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RP	IT	2			4		JONES BEACH	JONES BEACH SHORE	75	800513	800513	322	140		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RP	IT	2			5		JONES BEACH	JONES BEACH SHORE	75	800513	800513	230	128		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RP	IT	2			6		JONES BEACH	JONES BEACH SHORE	75	800513	800513	244	202		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RP	IT	3			4		JONES BEACH	JONES BEACH SHORE	75	800529	800529	162	136		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RP	IT	3			5		JONES BEACH	JONES BEACH SHORE	75	800529	800529	35	110		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RP	IT	3			6		JONES BEACH	JONES BEACH SHORE	75	800529	800529	52	187		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RP	IT	3			9		JONES BEACH	JONES BEACH SHORE	75	800529	800529	141	71		0
			MIGRATIONAL TIMING THROUGH ESTUARY													
	RP	IT	4			4		JONES BEACH	JONES BEACH MIDRIV.	75	800610	800610	76	134		0
			MIGRATIONAL TIMING THROUGH ESTUARY													

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RDT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
	RP	IT	4			5		JONES BEACH	JONES BEACH MIDRIV.	75	800610	800610	22	137		0
					PURPOSE OF RELEASE				REMARKS							
					MIGRATIONAL TIMING THROUGH ESTUARY											
	RP	IT	4			6		JONES BEACH	JONES BEACH MIDRIV.	75	800610	800610	42	177		0
					MIGRATIONAL TIMING THROUGH ESTUARY											
*	LA	IU	1	AD		5	79	RAPID RIVER HAT	RAPID RIVER	958	791105	800410	61008			0
									CWT'S 102113,39204 FISH;102114,21804 FISH							
*	LA	IU	3	AD		5	78	RAPID RIVER HAT	TRUCK BELOW BONN	230	800409	800415	39206		14	1245
					MIGRATION HOMING TRANSPORT				(102115)13 K DUMPED AT BLALOCK							
	LD	IU	1			6	79	DWORSHAK NFH	CLEARWATER @DNFH	806	800422	800422	5072	141	17	
					TIMING AND MIGRATION											
	LD	IU	2			6	79	DWORSHAK NFH	CLEARWATER @DNFH	806	800422	800422	4960	71	10	
					TIMING AND MIGRATION											
	LD	IU	4			6	79	DWORSHAK NFH	CLEARWATER @DNFH	806	800422	800422	4975	198	6	
					TIMING AND MIGRATION											
	RA	IU	1			5	78	RAPID RIVER HAT	RAPID RIVER	958	800415	800415	10304		14	
					MIGRATION HOMING CONTROL											
	RD	IU	2			6	79	DWORSHAK NFH	UPPER LEMHI	1294	800422	800422	10570		5	
					TIMING AND MIGRATION											
	LD	IX	2			4	78	TURTLE ROCK	ROCKY REACH TAILRAC	758	800516	800516	27179			0
					CONTROL											
	LD	IX	3			4	78	TURTLE ROCK	ROCKY REACH FOREBAY	758	800516	800516	27224			0
					SPILLWAY TEST											
	RD	IX	2			4	78	TURTLE ROCK	ROCKY REACH TAILRAC	758	800516	800516	24839			0
					CONTROL											
	RD	IX	3			4	78	ROCKY REACH DAM	ROCKY REACH FOREBAY	758	800516	800516	23629			0
					SPILLWAY TEST											
	LD	IY	1			5	78	LEAVENWORTH	RICHLAND	540	800529	800529	15419			0
					SYSTEMS TEST											
	LD	IY	2			5	78	LEAVENWORTH	PRIEST RAPIDS T.R.	635	800527	800527	15270			0
					SYSTEMS TEST											

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
	LD	IY	3			5	78	LEAVENWORTH	METHOW R. MOUTH (@ PATEROS FERRY)	839	800513	800513	15288			0
					SYSTEMS TEST											
	RD	IY	1			5	78	LEAVENWORTH	RICHLAND	540	800529	800529	13938			0
					SYSTEMS TEST											
	RD	IY	2			5	78	LEAVENWORTH	PRIEST RAPIDS T.R.	635	800527	800527	13209			0
					SYSTEMS TEST											
	RD	IY	3			5	78	LEAVENWORTH	METHOW R. MOUTH (@ PATEROS FERRY)	839	800513	800513	13393			0
					SYSTEMS TEST											
	LD	K	1			6	78	WELLS DAM	WELLS DAM FOREBAY	826	800503	800503	11963			0
					SPILLWAY TEST											
	LD	K	2			6	78	WELLS DAM	WELLS DAM TAILRACE	825	800503	800503	13148			0
					CONTROL											
	LD	K	3			6	78	WELLS DAM	WELLS DAM FOREBAY	826	800503	800503	14307			0
					TURBINE TEST											
	RD	K	1			6	78	WELLS DAM	WELLS DAM FOREBAY	826	800503	800503	12002			0
					SPILLWAY TEST											
	RD	K	2			6	78	WELLS DAM	WELLS DAM TAILRACE	825	800503	800503	13829			0
					CONTROL											
	RD	K	3			6	78	WELLS DAM	WELLS DAM FOREBAY	826	800503	800503	13633			0
					TURBINE TEST											
	LA	KE	1			5	78	DESCHUTES R.	DESCHUTES RIVER	463	800220	800228	980	109		0
*					STOCK EVAL				CWT 072152,2671 FISH							
	LA	KE	2			5	78	DESCHUTES R.	DESCHUTES RIVER	463	800309	800313	732	103		0
*					STOCK EVAL				CWT 072152,2671 FISH							
	LA	KE	3			5	78	DESCHUTES R.	DESCHUTES RIVER	463	800319	800328	741	104		0
*					STOCK EVAL				CWT 072152,2671 FISH							
	LA	KE	4			5	78	DESCHUTES R.	DESCHUTES RIVER	463	800403	800411	824	109		0
*					STOCK EVAL				CWT'S 072152/218;071847/606							
	RA	KE	1			5	78	DESCHUTES R.	DESCHUTES RIVER	463	800418	800425	486	114		0
*					STOCK EVAL				CWT 071847,1347 FISH							

RELEASE DATA 1980

MAG TAG MULT	LOC	BK	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
	RA	KE	2			5	78	DESCHUTES R.	DESCHUTES RIVER.	463	800428	800509	193	120		0
*					STOCK EVAL				CWT 071847,1347 FISH							
	RA	KE	3			5	78	DESCHUTES R.	DESCHUTES RIVER.	463	800512	800525	58	125		0
*					STOCK EVAL				CWT 071847,1347 FISH							
	RA	KE	4			5		DESCHUTES R.	DESCHUTES RIVER.	463	800530	800530	4	118		0
*					STOCK EVAL				CWT 071847,1847 FISH							
	LA	P	1	AD		5	78	L.GOOSE DAM	TEXAS RAPIDS LANDIN	626	800424	800502	11561			0
*					TAILRACE CONTROL				CWT ER							
	LA	P	1	AD		6	78	L.GOOSE DAM	TEXAS RAPIDS LANDIN	626	800424	800502	5008			0
*					TAILRACE CONTROL				CWT ER,19273 FISH							
	LA	P	2	AD		5	78	L.GOOSE DAM	TEXAS RAPIDS LANDIN	626	800506	800515	6624			0
*					TAILRACE CONTROL				CWT ER							
	LA	P	2	AD		6	78	L.GOOSE DAM	TEXAS RAPIDS LANDIN	626	800506	800515	10836			0
*					TAILRACE CONTROL				CWT ER,19273 FISH							
	LA	P	3	AD		5	78	L.GOOSE DAM	TEXAS RAPIDS LANDIN	626	800517	800530	3691			0
*					TAILRACE CONTROL				CWT ER							
	LA	P	3	AD		6	78	L.GOOSE DAM	TEXAS RAPIDS LANDIN	626	800517	800530	3429			0
*					TAILRACE CONTROL				CWT ER,19273 FISH							
	LA	SP	1			4		JOHN DAY DAM	BLALOCK SHORE	375	800529	800529	20			0
					EFFICIENCY REL											
	LA	SP	1			5		JOHN DAY DAM	BLALOCK SHORE	375	800529	800529	165			0
					EFFICIENCY REL											
	LA	SP	1			6		JOHN DAY DAM	BLALOCK SHORE	375	800529	800529	260			0
					EFFICIENCY REL											
	LA	SP	2			4		JOHN DAY DAM	BLALOCK SHORE	375	800524	800524	36			0
					EFFICIENCY REL											
	LA	SP	2			5		JOHN DAY DAM	BLALOCK SHORE	375	800524	800524	386			0
					EFFICIENCY REL											
	LA	SP	2			6		JOHN DAY DAM	BLALOCK SHORE	375	800524	800524	176			0
					EFFICIENCY REL											

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT CLIP OTHER MARK PURPOSE OF RELEASE	SP	BY HATCHERY OR SOURCE	RELEASE SITE REMARKS	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
	LD	SP	1 EFFICIENCY REL	4	JOHN DAY DAM	BLALOCK SHORE	375	800530	800530	6			0
	LD	SP	1 EFFICIENCY REL	5	JOHN DAY DAM	BLALOCK SHORE	375	800530	800530	66			0
	LD	SP	1 EFFICIENCY REL	6	JOHN DAY DAM	BLALOCK SHORE	375	800530	800530	200			0
	LD	SP	2 EFFICIENCY REL	4	JOHN DAY DAM	BLALOCK SHORE	375	800525	800525	30			0
	LD	SP	2 EFFICIENCY REL	5	JOHN DAY DAM	BLALOCK SHORE	375	800525	800525	261			0
	LD	SP	2 EFFICIENCY REL	6	JOHN DAY DAM	BLALOCK SHORE	375	800525	800525	226			0
	LP	SP	1 EFFICIENCY REL	4	JOHN DAY DAM	BLALOCK SHORE	375	800531	800531	7			0
	LP	SP	1 EFFICIENCY REL	5	JOHN DAY DAM	BLALOCK SHORE	375	800531	800531	50			0
	LP	SP	1 EFFICIENCY REL	6	JOHN DAY DAM	BLALOCK SHORE	375	800531	800531	267			0
	LP	SP	2 EFFICIENCY REL	4	JOHN DAY DAM	BLALOCK SHORE	375	800526	800526	26			0
	LP	SP	2 EFFICIENCY REL	5	JOHN DAY DAM	BLALOCK SHORE	375	800526	800526	306			0
	LP	SP	2 EFFICIENCY REL	6	JOHN DAY DAM	BLALOCK SHORE	375	800526	800526	257			0
	RA	SP	1 EFFICIENCY REL	4	JOHN DAY DAM	BLALOCK SHORE	375	800521	800521	4			0
	RA	SP	1 EFFICIENCY REL	5	JOHN DAY DAM	BLALOCK SHORE	375	800521	800521	402			0
	RA	SP	1 EFFICIENCY REL	6	JOHN DAY DAM	BLALOCK SHORE	375	800521	800521	256			0

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
	RA	SP	2			4		JOHN DAY DAM	BLALOCK SHORE	375	800522	800522	24			0
			EFFICIENCY REL						REMARKS							
	RA	SP	3			4		JOHN DAY DAM	BLALOCK SHORE	375	800601	800601	4			0
			EFFICIENCY REL													
	RA	SP	3			5		JOHN DAY DAM	BLALOCK SHORE	375	800601	800601	71			0
			EFFICIENCY REL													
	RA	SP	3			6		JOHN DAY DAM	BLALOCK SHORE	375	800601	800601	79			0
			EFFICIENCY REL													
	RD	SP	1			4		JOHN DAY DAM	BLALOCK SHORE	375	800527	800527	24			0
			EFFICIENCY REL													
	RD	SP	1			5		JOHN DAY DAM	BLALOCK SHORE	375	800527	800527	190			0
			EFFICIENCY REL													
	RD	SP	1			6		JOHN DAY DAM	BLALOCK SHORE	375	800527	800527	377			0
			EFFICIENCY REL													
	RD	SP	2			4		JOHN DAY DAM	BLALOCK SHORE	375	800523	800523	1			0
			EFFICIENCY REL													
	RD	SP	2			5		JOHN DAY DAM	BLALOCK SHORE	375	800522	800522	870			0
			EFFICIENCY REL													
	RD	SP	2			5		JOHN DAY DAM	BLALOCK SHORE	375	800523	800523	87			0
			EFFICIENCY REL													
	RD	SP	2			6		JOHN DAY DAM	BLALOCK SHORE	375	800522	800522	938			0
			EFFICIENCY REL													
	RD	SP	3			4		JOHN DAY DAM	BLALOCK SHORE	375	800609	800609	15			0
			EFFICIENCY REL													
	RD	SP	3			5		JOHN DAY DAM	BLALOCK SHORE	375	800609	800609	189			0
			EFFICIENCY REL													
	RD	SP	3			6		JOHN DAY DAM	BLALOCK SHORE	375	800609	800609	111			0
			EFFICIENCY REL													
	RP	SP	1			4		JOHN DAY DAM	BLALOCK SHORE	375	800528	800528	1			0
			EFFICIENCY REL													

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RO	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
	RP	SP	1			5		JOHN DAY DAM	BLALOCK SHORE	375	800528	800528	82			0
				EFFICIENCY REL												
	RP	SP	1			6		JOHN DAY DAM	BLALOCK SHORE	375	800528	800528	131			0
				EFFICIENCY REL												
	RP	SP	2			6		JOHN DAY DAM	BLALOCK SHORE	375	800523	800523	130			0
				EFFICIENCY REL												
	LA	SU	1	LP		6	79	DWORSHAK NFH	PAHSIMEROI	1305	800423	800427	5083		5	
				TIMING AND MIGRATION RATES					VOLITION REL. TO 80/04/27							
	LA	SU	4			6	79	DWORSHAK NFH	LOWER LEMHI	1239	800424	800424	10136		5	
				TIMING AND MIGRATION												
	LD	SU	3			6	78	DWORSHAK NFH	CLEARWATER @DNFH	806	800501	800501	477		5	
*				MIGRATION HOMING TEST					(100533)							
	RA	SU	1	LP		6	79	DWORSHAK NFH	PAHSIMEROI	1305	800328	800427	5043		5	
				TIMING AND MIGRATION RATES					VOLITION REL. TO 80/04/27							
	LA	T	1			9		CASCADE HAT	THE DALLES/FOREBAY	306	800722	800807	111734			
	RA	T	1			9		CASCADE HAT	THE DALLES/FOREBAY	306	800722	800807	112233			
	RD	T	1			4		NEHALEM HAT	THE DALLES/FOREBAY	306	800507	800515	27557			
	RD	T	2			4		NEHALEM HAT	THE DALLES/FOREBAY	306	800507	800515	29436			
	LA	TI	1	BC		9		JOHN DAY DAM	BLALOCK SHORE REL	375	800725	800725	1610			0
				EFFICIENCY REL												
	LD	TI	1	BC		9		JOHN DAY DAM	BLALOCK SHORE REL	375	800730	800730	1700			0
				EFFICIENCY REL												
	RA	TI	1	BC		9		JOHN DAY DAM	BLALOCK MIDRIV.REL	375	800728	800728	1483			0
				EFFICIENCY REL												
	RD	TI	1	BC		9		JOHN DAY DAM	BLALOCK SHORE REL	375	800730	800730	728			0
				EFFICIENCY REL												

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RUT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
									REMARKS							
	LD	TT	1			5	78	DESCHUTES R.	DESCHUTES RIVER	409	800511	800523	138	120		0
*					WILD STOCK EVAL				CWT 072151,404 FISH							
	RA	TT	1			5	78	DESCHUTES R.	DESCHUTES RIVER	409	800319	800321	26	101		0
*					WILD STOCK EVAL				CWT 072151,404 FISH							
	RA	TT	2			5	78	DESCHUTES R.	DESCHUTES RIVER	409	800408	800408	17	116		0
*					WILD STOCK EVAL				CWT 072151,404 FISH							
	RD	TT	1			5	78	DESCHUTES R.	DESCHUTES RIVER	409	800421	800421	13	121		0
*					WILD STOCK EVAL				CWT 072151,404 FISH							
	RD	TT	2			5	78	DESCHUTES R.	DESCHUTES RIVER	409	800429	800510	210	122		0
*					WILD STOCK EVAL				CWT 072151,404 FISH							
	LA	U	3			9	79	L. WHT. SALMON	PRESCOTT, COL. R.	115	800616	800616	25844	73		0
					SURVIVAL AND EFFICIENCY,HELD 4 DAYS											
	LA	U	4			9	79	L. WHT. SALMON	PRESCOTT, COL. R.	115	800616	800616	24685	74		0
					SURVIVAL AND EFFICIENCY											
	LD	U	1			9	79	WASHOUGAL	PRESCOTT, COL. R.	115	800713	800713	14000	78		0
					SURVIVAL AND EFFICIENCY,HELD 4 DAYS				NUMBER ESTIMATED							
	LP	U	3			9	79	BONNEVILLE	PRESCOTT, COL. R.	115	800602	800602	26000	82		0
					SURVIVAL AND EFFICIENCY,HELD 4 DAYS											
	LP	U	4			9	79	BONNEVILLE	PRESCOTT, COL. R.	115	800602	800602	26323	78		0
					SURVIVAL AND EFFICIENCY											
	RA	U	1			9	79	SPRING CRK NFH	PRESCOTT, COL. R.	115	800408	800408	24526	77		0
					SURVIVAL AND EFFICIENCY											
	RA	U	3			9	79	SPRING CRK NFH	PRESCOTT, COL. R.	115	800421	800421	26688	79	84	0
					SURVIVAL AND EFFICIENCY											
	RA	U	4			9	79	SPRING CRK NFH	PRESCOTT, COL. R.	115	800421	800421	26836	79	84	0
					SURVIVAL AND EFFICIENCY,HELD 4 DAYS											
	RP	U	1			9	79	SPRING CRK NFH	RAINIER COL. R.	109	800520	800520	27000		51	0
					SURVIVAL AND EFFICIENCY											
	RP	U	4			9	79	SPRING CRK NFH	PRESCOTT, COL. R.	115	800519	800519	14000		51	0
					SURVIVAL AND EFFICIENCY,HELD 4 DAYS				NUMBER ESTIMATED							

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
	RA	W	1		AD	5	78	LO.GRANITE DAM	BEACON ROCK	228	800420	800429	16229			0
*					BARGE RELEASE				CWT HOPR							
	RA	W	1		AD	6	78	LO.GRANITE DAM	BEACON ROCK	228	800420	800429	2058			0
*					BARGE TRANSPORT				CWT HOPR,12496 FISH							
	RA	W	2		AD	5	78	LO.GRANITE DAM	BEACON ROCK	228	800501	800510	24490			0
*					BARGE RELEASE				CWT'S 11191 HOPR,13289 DYPR							
	RA	W	2		AD	6	78	LO.GRANITE DAM	BEACON ROCK	228	800501	800510	28443			0
*					BARGE TRANSPORT				CWT'S 12496 HOPR, 18005 DYPR,12496 FISH							
	LA	WG	1		BC	9		JOHN DAY DAM	BLALOCK SHORE REL	375	800801	800801	913			0
					EFFICIENCY REL											
	LA	WG	3		BC	9		JOHN DAY DAM	BLALOCK MIDRIV.REL	375	800811	800811	1177			0
					EFFICIENCY REL											
	LD	WG	1		BC	9		JOHN DAY DAM	BLALOCK MIDRIV.REL	375	800806	800806	1061			0
					EFFICIENCY REL											
	RA	WG	1		BC	9		JOHN DAY DAM	BLALOCK MIDRIV.REL	375	800804	800804	1694			0
					EFFICIENCY REL											
	RA	WG	3		BC	9		JOHN DAY DAM	BLALOCK SHORE REL	375	800813	800813	516			0
					EFFICIENCY REL											
	RD	WG	1		BC	9		JOHN DAY DAM	BLALOCK SHORE REL	375	800808	800808	1022			0
					EFFICIENCY REL											
	LA	X3	3			6	79	DWORSHAK NFH	CLEARWATER @DNFH	806	800429	800429	10107		7	
					TIMING AND MIGRATION											
	LD	X3	1		LP	6	79	DWORSHAK NFH	PAHSIMEROI	1305	800303	800427	4127		4	
					TIMING AND MIGRATION RATES				VOLITION REL. TO 80/04/27							
	RA	X3	3		RP	6	79	DWORSHAK NFH	PAHSIMEROI	1305	800423	800423	10441		4	
					COLD WATER COND.											
	RD	X3	1		LP	6	79	DWORSHAK NFH	PAHSIMEROI	1305	800204	800427	5432		5	
					TIMING AND MIGRATION RATES				VOLITION REL. TO 80/04/27							
	LD	Y	1			6	78	WELLS DAM	WELLS DAM FOREBAY	826	800501	800501	13490			0
					SPILLWAY TEST											

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RDT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
			PURPOSE OF RELEASE						REMARKS							
	LD	Y	2			6	78	WELLS DAM	WELLS DAM FOREBAY	826	800501	800501	13235			0
			TURBINE TEST													
	LD	Y	3			6	78	WELLS DAM	WELLS DAM TAIL RACE	825	800501	800501	13002			0
			CONTROL													
	RD	Y	1			6	78	WELLS DAM	WELLS DAM FOREBAY	826	800501	800501	13053			0
			SPILLWAY TEST													
	RD	Y	2			6	78	WELLS DAM	WELLS DAM FOREBAY	826	800501	800501	13612			0
			TURBINE TEST													
	RD	Y	3			6	78	WELLS DAM	WELLS DAM TAILRACE	825	800501	800501	12231			0
			CONTROL													
010104						5	78	LEWIS R. WILD	LEWIS R.	163	790425	790515	31055		300	
			WILD STOCK SEINED TAG REL IN RIVER													
010105						5	78	LEWIS R. WILD	LEWIS RIVER	163	790515	790530	29793		300	
			WILDSTOCK SEINED TAG REL IN RIVER													
010201				AD		9	79	LEWIS R. WILD	LEWIS R. @ HAT.	163	800401	800416	26020	45		
			WILD STOCK EVAL.													
010202				AD		9	79	LEWIS R. WILD	LEWIS R. @ HAT.	163	800416	800429	27440	45		
			WILD STOCK EVAL.													
010203				AD		9	79	WEYCO POND	GRAYS RIVER	68	800610	800610	97799		64	1854072
			COL R. F. CHIN EVAL													
010205				AD		9	79	LEWIS R. WILD	LEWIS R. @ HAT.	163	800430	800509	30674	46		
			WILD STOCK EVAL.													
034002				AD		5	79	BIG CREEK	COL.R. @ ASTORIA	21	800512	800519	49528		75	
			HOMING													
034102				AD		5	79	BIG CREEK	STAVEBOLT CK.	34	800512	800519	50414		75	
			HOMING													
034202				AD		5	79	BIG CREEK	BIG CREEK @ HAT	50	800523	800523	43863		70	
			HOMING													
034302	RA	9	1	AD		5	79	LEAVENWORTH	DALTON PT.	206	800424	800424	32441	129		0
*			HOMING;PEN HOLDING TEST #3						CWT 034302,RA9,1							

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE			REMARKS							
034402	RA	9	2	AD		5	79 LEAVENWORTH	DALTON PT.	206	800427	800427	32728	129		0
*					HOMING,PEN HOLDING TEST #3			CWT 034402,RA9,2							
034502	RA	9	3	AD		5	79 LEAVENWORTH	DALTON PT.	206	800501	800501	32464			0
*					HOMING,PEN HOLDING TEST #3			CWT 034502,RA9,3							
034602	LA	PI	1	AD		5	79 LEAVENWORTH	ICICLE RIVER @ HAT	787	800424	800424	32795	129		0
*					HOMING,SPRING CONTROL			CWT 034602,LAPI,1							
034702	LA	PI	2	AD		5	79 LEAVENWORTH	ICICLE RIVER @ HAT	787	800427	800427	32929	129		0
*					HOMING,SPRING CONTROL			CWT 034702,LAPI,2							
034802	LA	PI	3	AD		5	79 LEAVENWORTH	WHITE BLUFFS	596	800501	800501	32017			0
*					HOMING,CHANNEL MIGRANTS TEST #1			CWT 034802,LAPI,3							
034902	LA	PP	1	AD		5	79 LEAVENWORTH	WHITE BLUFFS	596	800424	800424	32649	129		0
*					HOMING,CHANNEL MIGRANTS TEST #1			CWT 034902,LAPP,1							
035002	LA	S	1	AD		5	79 LEAVENWORTH	WHITE BLUFFS	596	800424	800424	35439	129		0
*					HOMING,CHANNEL MIGRANTS TEST #1			CWT 035002,LAS,1							
035102	LA	PI	4	AD		5	79 LEAVENWORTH	ICICLE RIVER @ HAT	787	800501	800501	33065			0
*					HOMING,SPRING CONTROL			CWT 035102,LAPI,4							
035202	RA	IK	1	AD		5	79 LEAVENWORTH	DALTON PT.	206	800424	800424	32960	129		0
*					HOMING,CHANNEL MIGRANTS TEST #2			CWT 035202,RAIK,1							
035302	RA	IK	2	AD		5	79 LEAVENWORTH	DALTON PT.	206	800427	800427	32847			0
*					HOMING,CHANNEL MIGRANTS TEST #2			CWT 035302,RAIK,2							
035402	RA	IK	3	AD		5	79 LEAVENWORTH	DALTON PT.	206	800501	800501	32641			0
*					HOMING,CHANNEL MIGRANTS TEST #2			CWT 035402,RAIK,3							
035702	LA	S	2	AD		5	78 CARSON	CARSON	273	800512	800512	37499	117		0
*					CONTROL			CWT 035702,LAS,2							
035802	RA	L	1	AD		5	78 CARSON	DALTON PT.	206	800512	800512	36262	117		0
*					TEST #1 SINGLE IMPRINT			CWT 035802,RAL,1							
035902	RA	L	2	AD		5	78 CARSON	DALTON PT.	206	800514	800514	41537	117		0
*					TEST #2 SEQUENTIAL IMPRINT			CWT 035902,RAL,2							
036002	RA	L	3	AD		5	78 CARSON	HAMMOND	13	800515	800515	43180	117		0
*					TEST #3 SEQUENTIAL IMPRINT			CWT 036002,RAL,3							

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE			REMARKS							
036102 *	LA	PP	2		AD	5	79 LEAVENWORTH	ICICLE RIVER @ HAT	787	800424	800501	96638	129		0
					HOMING,FALL CONTROL			CWT 036102,LAPP,2							
050358					AD	4	78 WILLARD	L.W.S.R.BLW.BARRIER	261	800514	800514	43045			2865
					NMFS HOMING,CONTROL #1			PREMARKED IN FALL							
050359					AD	4	78 WILLARD	L.W.SAL.R.@WILLARD	267	800523	800523	42371			3186
					NMFS HOMING,CONTROL #2			PREMARKED IN FALL							
050421					AD	5	78 HAGERMAN NFH	ASOTIN-SNAKE R.	751	790521	790521	46000	75	92	40000
050437					AD	5	78 CARSON	CARSON HAT	274	800428	800428	82098		19	2124261
					CONTROL										
050438					AD	5	78 CARSON	CARSON HAT	274	800428	800428	88848		19	0
					ERYTHROMYCIN AS EGGS										
050439					AD	6	78 WARM SP. R. H	WARM SP. R. HATCHER	485	790510	790510	87380		15	
					EVAL AND CONTRIB.			WARM SP. STOCK							
050455					AD	6	79 DWORSHAK NFH	CLEARWATER @DNFH	806	800417	800417	53125		8	950204
050527					AD	9	79 HAGERMAN NFH	ASOTIN	751	800603	800603	58360		60	110022
					NMFS TRANSPORT STUDY										
050528					AD	9	79 HAGERMAN NFH	BELOW BONN. DAM	230	800606	800623	55639		59	2104
					NMFS TRUCK TRANSPORT STUDY										
050529					AD	5	78 KOOSKIA NFH	BELOW BONN.DAM	230	800423	800505	62300		22	0
					NMFS BARGE TRANSPORT STUDY										
050532					AD	5	79 KOOSKIA NFH	KOOSKIA NFH	861	800416	800416	61300		22	115846
								CLEAR CREEK							
050627					AD	5	78 WARM SPRING NFH	WARM SPRINGS HAT.	485	800407	800414	168000			0
					WARM SPRINGS NFH CONTRIBUTION										
050628					AD	5	78 WARM SPRING NFH	WARM SPRINGS HAT.	485	800407	800414	10830			0
					WARM SPRINGS NFH CONTRIBUTION										
050635 *					AD	6	79 HAGERMAN	PAHSIMEROI	1305	800421	800427	36600		5	2314
					EVAL. OF COLD WATER CONDITIONING			9145 WITH LA DT 3(VOLITION REL. TO 80/04/27)							

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
050636 *				AD	EVAL. OF COLD WATER	6	79	HAGERMAN CONDITIONING	PAHSIMEROI 10077 WITH LD DT 1(VOLITION REL. TO 80/04/27)	1305	800204	800427	40487		4	1775
050637 *				AD	EVAL. OF COLD WATER	6	79	HAGERMAN CONDITIONING	PAHSIMEROI 8490 WITH RD DT 1(VOLITION REL. TO 80/04/27)	1305	800204	800427	33932		4	2388
050638				AD	CONTRIBUTION	4	78	WILLARD	YAKIMA RIVER	535	791024	791030	76635		36	776986
050639				AD	HATCHERY CONTRIBUTION	9	79	SPRING CRK NFH	SPRING CREEK NFH	267	800310	800310	130208	68	123	7209327
050640				AD	HATCHERY CONTRIBUTION	9	79	SPRING CRK NFH	SPRING CREEK NFH	267	800410	800410	77720	77	83	3836257
050641				AD	HATCHERY CONTRIBUTION	9	79	SPRING CRK NFH	SPRING CRK NFH	267	800509	800509	61771	90	51	3128906
050642				AD	HATCHERY CONTRIBUTION	9	79	SPRING CRK NFH	SPRING CRK NFH	267	800807	800807	23127		19	1088636
050643				AD	COL. R. FALL CHIN. EVAL.	9	79	L. WHT. SALMON	L. WHT. SAL. NFH	261	800610	800610	162557		120	8611548
050644				AD	HATCHERY CONT. 2 1/2%	9	79	ABERNATHY SCC	ABERNATHY CREEK	91	800514	800408	35209			478772
050646				AD	HATCHERY CONT. 5%	9	79	ABERNATHY SCC	ABERNATHY CREEK	91	800408	800514	112489			1529626
050648				AD	NMFS HOMING,TEST #1	9	79	SPRING CRK NFH	BARGE BELOW BONN.	230	800519	800519	99583			0
050649				AD	NMFS HOMING,TEST #2	9	79	SPRING CRK NFH	BARGE BELOW BONN.	230	800519	800519	99703			0
050650				AD	NMFS HOMING,TEST #3	4	78	WILLARD	BARGE BELOW BONN.	230	800525	800525	47923			0
050651				AD	NMFS HOMING,TEST #4	4	78	WILLARD	DALTON PT.	206	800521	800521	50786			0
050652				AD	NMFS HOMING,TEST #6	4	78	WILLARD	BEAVER TERMINAL	84	800522	800522	51683			0

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
050653					AD	4	78	WILLARD	HAMMOND	13	800523	800523	50619			0
					NMFS HOMING,TEST #5											
050654					AD	4	78	WILLARD	L.W.SAL.R.@WILLARD	267	800523	800523	51525			0
					NMFS HOMING,CONTROL #3				MARKED IN SPRING							
050655					AD	4	78	WILLARD	BARGE BELOW BONN.	230	800525	800525	51425			0
					NMFS HOMING,ALTERNATE TEST #1											
050660					AD	4	78	WILLARD	BELOW BONN.	230	800524	800524	33744			
					NMFS HOMING BARGE #2											
071614					AD	6	78	WALLOWA	WALLOWA HAT.	937	790516	800405	51736		15	4259
									REL. DURING 2 YR.							
071733					AD	5	78	BONNEVILLE	TANNER CREEK	230	800313	800313	49334		7	247877
									TULE							
071734					AD	9	79	BONNEVILLE	TANNER CK	230	801111	801111	51274		14	602636
					PRODUCTION											
071735					AD	5	78	BONNEVILLE	TANNER CREEK	230	791120	791120	51227		12	932128
					STOCK EVAL.				TULE							
071736					AD	5	78	BONNEVILLE	TANNER CREEK	230	800313	800313	48112		6	982
					STOCK EVAL.											
071830						5	78	WARM SPRINGS R	WARM SPRINGS R. TRA	465	790923	791201	4224			0
*					WILD FISH CONTRIB.				(LPHE1-4;RPHE1)							
071845						5	78	DESCHUTES R.	DESCHUTES RIVER	399	800201	800601	902	130		0
*					WILD STOCK EVAL.				LA131,2,3,4, RA131,2,3,4							
071847					AD	5	78	DESCHUTES R.	DESCHUTES RIVER	463	800401	800601	1347	175		0
*					WILD STOCK EVAL.				LAKE4, RAKE1,2,3,4							
071848					AD	9	89	DESCHUTES R	DESCHUTES R.	463	800801	800831	451		41	0
071912						4	77	BONNEVILLE HAT	BONNEVILLE	230	790706	790706	25153		23	
					COHO TIME REL.											
071913					AD	9	79	BONNEVILLE	TANNER CK	230	801111	801111	47799		9	96

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	KOT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
071914			AD			5	78	BONNEVILLE	TANNER CREEK	230	791120	791120	48652		9	1765
			STOCK EVAL.													
071925			AD			5	78	OAKRIDGE H.	WILLAM @ DEXTER	491	791105	791108	14919		6	262923
			GRADING AND PRODUCTION													
071940						5	78	JOHN DAY R.	JOHN DAY R. MFK	345	790607	790701	8029		50	
			WILD STOCK EVAL.						JOHN DAY STOCK							
071943			AD			5	78	OAK RIDGE H	S. SANTIAM,FOSTER	416	791107	791107	31960		9	3548
			LOCATION TIME & SIZE OF RELEASE													
071944			AD			5	78	OAK RIDGE H	BELOW WILLAM. FALLS	205	791108	791108	34767		10	3199
			LOCATION TIME & SIZE OF RELEASE													
071945			AD			5	78	S. SANTIAM	S. SANTIAM,FOSTER	416	800314	800314	29419		6	2079
			LOCATION TIME & SIZE OF RELEASE													
071946			AD			5	78	S. SANTIAM	S. SANTIAM,FOSTER	416	800314	800314	29933		5	2288
			LOCATION TIME & SIZE OF RELEASE													
071947			AD			5	78	S. SANTIAM	BELOW WILLAM FALLS	205	800313	800314	32107		6	1443
			LOCATION TIME & SIZE OF RELEASE													
071948			AD			5	78	S. SANTIAM	BELOW WILLAM FALLS	205	800313	800314	28502		6	1064
			LOCATION TIME & SIZE OF RELEASE													
071949			AD			5	78	ROUND BUTTE	DESCHUTES R.	161	800414	800414	28177		8	1799
			HATCHERY EVAL.													
071950			AD			5	78	ROUND BUTTE	DESCHUTES R.	161	800414	800414	29989		8	769
			HATCHERY EVAL.													
071951			AD			5	78	ROUND BUTTE	DESCHUTES R.	161	800414	800415	29123		8	870
			HATCHERY EVAL.													
071952			AD			4	78	BIG CREEK	BIG CREEK	50	800507	800507	28736		20	0
			RELEASE TIME STUDY													
071953			AD			4	78	BIG CREEK	BIG CREEK	50	800606	800606	26477		19	0
			RELEASE TIME STUDY													
071954			AD			4	78	BIG CREEK	BIG CREEK	50	800707	800707	27913		18	0
			RELEASE TIME STUDY													

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
071955				AD		4	78	BIG CREEK	BIG CREEK	50	800507	800507	27991		20	0
				RELEASE TIME STUDY												
071956				AD		4	78	BIG CREEK	BIG CREEK	50	800606	800606	28460		19	0
				RELEASE TIME STUDY												
071957				AD		4	78	BIG CREEK	BIG CREEK	50	800707	800707	27613		19	0
				RELEASE TIME STUDY												
071963				AD		4	78	CASCADE NFH	BELOW BONN. DAM	230	800428	800428	29195		24	0
				RELEASE TIME STUDY												
072005						4	78	SMITH R	UMPQUA/SMITH R	0	800509	800509	22897		13	
				COASTAL STOCK ACCESSMENT												
072015						4	78	SILETZ H	SILETZ R	0	800315	800315	25966		15	
				COASTAL STOCK ACCESSMENT												
072018				AD		5	78	S. SANTIAM	BELOW WILLAM FALLS	205	791105	791106	34797		9	1262
				LOCATION TIME & SIZE OF RELEASE												
072019				AD		5	78	S. SANTIAM	BELOW WILLAM FALLS	205	791105	791106	35017		8	935
				LOCATION TIME & SIZE OF RELEASE												
072020				AD		5	78	S. SANTIAM	S. SANTIAM,FOSTER	416	791105	791106	33011		9	1921
				LOCATION TIME & SIZE OF RELEASE												
072021				AD		5	78	S. SANTIAM	S. SANTIAM,FOSTER	416	791105	791106	34847		9	1004
				LOCATION TIME & SIZE OF RELEASE												
072022				AD		5	78	S. SANTIAM	S. SANTIAM,FOSTER	416	791105	791106	34236		10	1802
				LOCATION TIME & SIZE OF RELEASE												
072026				AD		5	78	JOHN DAY R.	JOHN DAY R.	355	800228	800531	1560		30	0
				EVAL. DSM 1978 WILD					SEINED @ SPRAY AREA							
072027				AD		5	78	JOHN DAY R.	JOHN DAY R.	461	800228	800630	4664		30	0
				EVAL. DSM 1978 WILD					TRAPPED MIDFORK							
072028				AD		5	78	JOHN DAY R.	JOHN DAY R.	486	800228	800630	323		30	0
				EVAL. DSM 1978 WILD					TRAPPED MIDFORK							
072031				AD		4	78	SANDY	CEDAR CREEK @ HAT	231	800501	800501	26276		18	39952
				NUTRITION EVAL. I					OMP-4							

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
	PURPOSE OF RELEASE								REMARKS							
072032				AD		4	78	SANDY	CEDAR CREEK @ HAT	231	800501	800501	26830		17	369271
	NUTRITION EVAL. 1								OMP-2							
072033				AD		4	78	SANDY	CEDAR CREEK @ HAT	231	800501	800501	25644		18	40310
	NUTRITION EVAL. 1								OMP-4							
072034				AD		4	78	SANDY	CEDAR CREEK @ HAT	231	800501	800501	26104		18	370099
	NUTRITION EVAL. 1								OMP-2							
072035				AD		4	78	SANDY	CEDAR CREEK @ HAT	231	800501	800501	25127		18	40687
	NUTRITION EVAL. 2								OMP-2(ACID TREATMENT)							
072036				AD		4	78	SANDY	CEDAR CREEK @ HAT	231	800501	800501	24040		18	42132
	NUTRITION EVAL. 2								OMP-2(ACID TREATMENT)							
072037				AD		4	78	SANDY	CEDAR CREEK @ HAT	231	800501	800501	25415		19	40840
	NUTRITION EVAL. 2								OMP-2(FROZEN TREATMENT)							
072038				AD		4	78	SANDY	CEDAR CREEK @ HAT	231	800501	800501	25939		19	40208
	NUTRITION EVAL. 2								OMP-2(FROZEN TREATMENT)							
072040				AD		5	78	OAKRIDGE H	WILLAM @ DEXTER	491	800310	800311	30924		16	1288
	GRADING AND PRODUCTION															
072041				AD		5	78	OAKRIDGE H	WILLAM @ DEXTER	491	791105	791105	30823		29	823
	GRADING AND PRODUCTION															
072042				AD		5	78	OAKRIDGE H	WILLAM @ DEXTER	491	800310	800311	30726		9	593251
	GRADING AND PRODUCTION															
072043				AD		5	78	OAKRIDGE H	WILLAM @ DEXTER	491	791105	791105	31303		16	902
	GRADING AND PRODUCTION															
072044				AD		5	78	OAKRIDGE H	WILLAM @ DEXTER	491	800310	800310	30738		8	983
	GRADING AND PRODUCTION															
072045				AD		5	78	OAKRIDGE H	WILLAM @ DEXTER	491	791105	791105	30873		14	598
	GRADING AND PRODUCTION															
072046				AD		5	78	OAKRIDGE H	WILLAM @ DEXTER	491	800310	800310	28955		4	234
	GRADING AND PRODUCTION															
072047				AD		5	78	OAKRIDGE H	WILLAM @ DEXTER	491	791105	791105	31309		9	574
	GRADING AND PRODUCTION															

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RUT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE REMARKS	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
072048				AD		5	78	MCKENZIE	MCKENZIE HATCHERY	492	800315	800315	31058		3	3418
				GRADING AND PRODUCTION												
072049				AD		5	78	MCKENZIE	MCKENZIE HATCHERY	492	791109	791109	31558		6	339679
				GRADING AND PRODUCTION												
072050				AD		5	78	MCKENZIE	MCKENZIE HATCHERY	492	791109	791109	28418		7	0
				GRADING AND PRODUCTION												
072051				AD		5	78	MCKENZIE	MCKENZIE HATCHERY	492	800315	800315	29421		4	2386
				GRADING AND PRODUCTION												
072052				AD		5	78	MCKENZIE	MCKENZIE HATCHERY	492	791109	791109	33756		15	0
				GRADING AND PRODUCTION												
072053				AD		5	78	MCKENZIE	MCKENZIE HATCHERY	492	800315	800315	34897		11	71304
				GRADING AND PRODUCTION												
072055				AD		9	79	STAYTON POND	VARIOUS WILLAM R.&T (KM 220-360)	300	800428	800621	282039		100	6066656
				EVAL. STAYTON POND REAR.												
072056				AD		9	79	JOHN DAY DAM	MAINSTEM	355	800901	800930	98	175		2
072058				AD		9	79	JOHN DAY DAM	NORTH FORK	486	800601	800930	7397	175		105
072059				AD		9	79	JOHN DAY DAM	GRANITE CK	490	800701	800930	8447	175		155
072060				AD		9	79	JOHN DAY DAM	GRANITE CK	490	800901	800930	517	175		9
072133				AD		9	79	BONNEVILLE	TANNER CK	230	800527	800527	50462		70	0
				NUTRITION STUDIES												
072134				AD		9	79	BONNEVILLE	TANNER CK	230	800527	800527	49963		69	0
				NUTRITION STUDIES												
072135				AD		9	79	BONNEVILLE	TANNER CK	230	800527	800527	48052		67	0
				NUTRITION STUDIES												
072136				AD		9	79	BONNEVILLE	TANNER CK	230	800527	800527	49408		68	0
				NUTRITION STUDIES												

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RUN	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
	PURPOSE OF RELEASE								REMARKS							
072145				AD		9	79	DESCHUTES R.	DESCHUTES R.	488	800414	800606	23193	69		0
	WILD STOCK EVAL.								INC. 55 FOR '78							
072146				AD		9	79	DESCHUTES R.	DESCHUTES R.	463	800401	800606	11871	80		0
	WILD STOCK EVAL.															
072147				AD		9	79	DESCHUTES R.	DESCHUTES R.	399	800401	800606	5248	73		0
	WILD STOCK EVAL.															
072148				AD		9	79	DESCHUTES R.	DESCHUTES R.	409	800511	800620	116	98		0
	WILD STOCK EVAL.															
072149				AD		5	78	WARM SPRS R.	WARM SPRS. R.	436	800201	800606	3827	116		0
*	WILD STOCK EVAL.								LAHE1,2,3,4, RAHE1,2,3,4							
072150				AD		5	79	WARM SPRINGS R.	WARM SPRS. R.	436	800528	800620	1677	87		0
	WILD STOCK EVAL.															
072151				AD		5	78	DESCHUTES R.	DESCHUTES R.	409	800301	800601	404	122		0
*	WILD STOCK EVAL.								RATT1,2 RDTT1,2 LDTT,1							
072152				AD		5	78	DESCHUTES R.	DESCHUTES R.	463	800201	800402	2671	109		0
*	WILD STOCK EVAL.								LAKE1,2,3,4							
072153				AD		5	79	ROUND BUTTE	DESCHUTES R.	506	800501	800630	3516		20	0
072154				AD		5	79	ROUND BUTTE	BLW PELTON DAM	463	801006	801006	27250		6	2014
072155				AD		4	78	LEWIS & CLARK	VANDERVELDT POND	29	800411	800411	45000		12	
	HATCHERY CONTRIBUTION															
072157				AD		9	79	BONNEVILLE	TANNER CREEK	230	800522	800528	121071		75	4604412
	STOCK EVAL.															
072160				AD		9	79	BIG CREEK	BIG CREEK	50	800513	800523	143385		77	5143899
	STOCK EVAL.															
072161				AD		9	79	KLASKANINE H	N. FORK KLASKANINE	34	800604	800604	66331	79		2163503
	STOCK EVAL.															
072162				AD		9	79	OXBOW H	SKAMANIA LIGHT	230	800527	800528	50196		100	1163899
	IMPRINT MCNARY, HOMING								TRUCK MCNARY, BARGE BLW BONN.							

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RDT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
072163				AD		9	79	OXBOW H	SKAMANIA LIGHT	230	800527	800528	53087		100	1180591
					IMPRINT MCNARY,HOMING				TRUCK MCNARY, BARGE BLW BONN.							
072201				AD		6	79	WALLOWA	WALLOWA HAT.	937	800421	800421	28408		11	0
072207				AD		9	79	BONNEVILLE	TANNER CREEK	230	800630	800630	100717		830	2477
072208				AD		4	79	KLASKANINE H	TUCKER CREEK PD	29	800710	800710	30000		62	63734
					STOCK EVAL.											
072218				AD		5	79	MCKENZIE	MCKENZIE R.	492	801105	801105	32363		11	2006
072219				AD		5	79	MCKENZIE	MCKENZIE R.	492	801105	801105	36432		6	59860
072221				AD		5	79	MCKENZIE	MCKENZIE R.	492	801105	801105	37930		15	1936
072224				AD		5	79	OAKRIDGE H	WILLAM @ DEXTER	491	801106	801106	27821		11	4121
					PRODUCTION											
072226				AD		5	79	OAKRIDGE H	WILLAM @ DEXTER	491	801105	801105	28379		5	314019
					PRODUCTION											
072247				AD		5	79	MARION FORKS	N. SANTIAM	452	801105	801105	49990		20	1334
					COMPARE N. SANTIAM & CARSON STOCKS											
072248				AD		5	79	MARION FORKS	N. SANTIAM	452	801106	801107	49971		19	1652
					COMPARE N. SANTIAM & CARSON STOCKS											
072302				AD		5	79	OAKRIDGE H	WILLAM @ DEXTER	491	801105	801105	31472		7	116405
					PRODUCTION											
072304				AD		5	79	OAKRIDGE H	WILLAM @ DEXTER	491	801105	801105	30719		16	917
					PRODUCTION											
072306				AD		5	79	OAKRIDGE H	WILLAM @ DEXTER	491	801105	801105	30132		28	1453
					PRODUCTION											
091636						6	77	WALLOWA	WALLOWA R. HATCHERY	938	780430	780512	84388		8	
					WALLOWA STOCK EVAL.				(66228 REL. 4/30)							

RELEASE DATA 1980

MAG TAG / MULT	LOC	BR	RM	CLIP	OTHER MARK	SP	BY HATCHERY OR SOURCE	RELEASE SITE / REMARKS	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
100343				AD		6	78 NIAGARA SPRINGS	PAHSIMEROI RIVER	1306	790319	790319	56000		6	
				IDENTIFI. HATCH. RESEAR.				PAHSIMEROI STOCK							
100533						6	78 DWORSHAK NFH	CLEARWATER @DNFH	806	790523	800501	32515		150	
*				MIGRATION HOMING TEST				(2417 IN 1980 & 477 W LDSU3,30098 IN 1979 W RASU2)							
102112				AD		5	78 RED RIVER	S. FORK CLEAR	1000	790925	790927	43800			1355
102113				AD		5	78 RAPID RIVER HAT	RAPID RIVER	958	791105	800428	39204		14	43160
*								39204 WITH LA 1U 1							
102114				AD		5	78 RAPID RIVER HAT	RAPID RIVER	958	791105	800428	43156		14	43260
*								21804 WITH LA 1U 1							
102115				AD		5	78 RAPID RIVER H	TRUCK BELOW BONN	230	800409	800415	39206		14	1206
*				MIGRATION HOMING TRANSPOR!				13000 LA1U3 DUMP BELOW BLALOCK CANYON POND							
102119				AD		6	79 DWORSHAK NFH	BARGE BELOW BONN.	230	800429	800502	40008		6	1245
*								8486 WITH LD41							
102125				AD		5	78 HAYDEN CREEK	LEMHI R.	1187	800401	800403	40100		26	155340
102126				AD		5	78 HAYDEN CREEK	LEMHI R.	1187	800403	800404	41150		26	187834
102156				AD		6	79 NIAGRA SPRINGS	PAHSIMEROI	1305	800406	800416	49900		6	1577
102157				AD		6	79 NIAGRA SPRINGS	PAHSIMEROI	1305	800407	800417	50325		6	1575
102161				AD		6	79 DWORSHAK NFH	CLEARWATER @ DNFH	806	800425	800425	43210		9	1113690
102162				AD		6	78 DWORSHAK NFH	CLEARWATER @ DNFH	806	800417	800417	46941		6	384247
603125				AD		4	79 OR. AQUA@SPGFLD	YAQUINA BAY	0	800315	800315	12000			
				HATCHERY EVAL.											
603149				AD		4	79 OR. AQUA@SPGFLD	YAQUINA BAY	0	800628	800628	14502		24	0
				GENETIC STUDY				("0 AGE REL.)							

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
603336				AD		4	79	OR. AQUA@SPGFLD	YAQUINA BAY	0	800805	800805	16312		18	0
					DENSITY REAR. STUDY											
603339				AD		4	79	OR. AQUA@SPGFLD	YAQUINA BAY	0	800630	800630	20011		22	326000
					HATCHERY EVAL.											
624702				AD		4	79	ANADROMOUS INC.	COOS BAY OR.	0	800719	800719	19948			
					DIET EXPERIMENT				(*O-AGE REL.)							
624802				AD		4	79	ANADROMOUS INC.	COOS BAY OR.	0	800721	800721	19859			
					DIET EXPERIMENT				(*O-AGE REL.)							
631854						5	78	TOUTLE RIVER	GREEN RIVER @ HAT	160	790617	790617	144085		160	
					COL. RIVER FALL CHIN EVAL,COMBINED W/631941				TOUTLE RIVER STOCK							
631855				AD		6	79	SKAMANIA	KLICKITAT RIVER	330	800417	800422	24563		7	
631859						5	78	LEWIS R. WILD	LEWIS RIVER	163	790713	790726	23402		200	
					WILDSTOCK SFINED TAG REL. IN RIVER											
631910						5	78	LEWIS R. WILD	LEWIS RIVER	163	790525	790608	30654		250	
					WILDSTOCK SEINED TAG REL. IN RIVER											
631920						5	78	LEWIS R. NFH	LEWIS R. @ HAT	163	790905	790905	51660		28	
					COL. R. F. CH. EVAL REARED 3 MONTHS											
631931				AD		4	78	TOUTLE HAT	GREEN RIVER @ HAT	160	800507	800507	38612		18	0
					SIZE AND TIME AT RELEASE											
631941						5	78	TOUTLE RIVER	GREEN RIVER @ HAT	160	790617	790617	144085		160	
					COL. R. F. CH. EVAL COMBINED W 631954				TOUTLE RIVER STOCK							
631942						5	78	COWLITZ NFH	COWLITZ RIVER	189	790627	791016	143568		85	
					COL. RIVER FALL CHIN EVAL				COWLITZ RIVER STOCK(120443 REL 6/27)							
631947				AD		9	79	KLICKITAT	KLICKITAT	358	800527	800527	156148		85	2981693
					STOCK EVAL.											
631948				AD		9	79	PRIEST RAPIDS	PRIEST RAPIDS	635	800520	800624	110077		88	2895203
					STOCK EVAL.				ABOUT 50% REL. EA DATE							
631951						5	78	COWLITZ RIVER	COWLITZ RIVER	189	790627	791016	11080		19	
					COL RIVER FALL CHIN EVAL				(7832 REL 10/16)							

RELEASE DATA 1980

MAG TAG MLT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
	PURPOSE OF RELEASE								REMARKS							
631952			AD			4	78	GRAYS RIVER	GRAYS RIVER HAT	57	800409	800409	104679		18	127130
631953			AD			4	78	GRAYS RIVER	GRAYS RIVER HAT	57	800409	800409	103624		18	193167
631954			AD			4	78	WASHOUGAL	WASHOUGAL	221	800707	800707	106743		19	103000
	TIMING,COWLITZ STOCK															
631955			AD			4	78	WASHOUGAL	WASHOUGAL	221	800707	800707	106982		18	104491
	TIMING,COWLITZ STOCK															
631957			AD			5	78	KALAMA FALLS H	KALAMA FALLS H	141	790622	790713	209724		180	
	COL RIVER FALL CHIN EVAL								KALAMA FALLS STOCK							
632003			AD			6	79	NACHES	YAKIMA RIVER	535	800409	800527	43800		6	20900
	SKAMANIA STOCK															
632005			AD			9	79	ELOKOMIN	ELOKOMIN	94	800601	800601	98412		80	2411131
	STOCK EVAL.															
632006			AD			9	79	LOWER KALAMA	LOWER KALAMA @ HAT	127	800606	800606	144535		150	3279280
	STOCK EVAL.															
632017						5	78	PRIEST RAPIDS	PRIEST RAPIDS	635	790628	790628	82242		77	
	COL RIVER FALL CHIN EVAL															
632018			AD			6	79	SKAMANIA	WIND RIVER	266	800424	800430	75003			
	SKAMANIA STOCK															
632021			AD			9	79	LEWIS R. WILD	LEWIS RIVER	163	800701	800701	67171			0
	WILD STOCK EVAL.															
632028			AD			4	78	TOUTLE HAT	TOUTLE HAT	160	800519	800519	100			
									ESCAPEES, NOT REL. 18 MAY 80							
632037			AD			4	78	WASHOUGAL	WASHOUGAL	221	800609	800609	97280		18	107000
	TIMING,COWLITZ STOCK															
632038			AD			4	78	WASHOUGAL	WASHOUGAL	221	800609	800609	97823		18	102400
	TIMING,COWLITZ STOCK															
632039			AD			4	78	WASHOUGAL	WASHOUGAL	221	800508	800508	99638		18	104300
	TIMING,COWLITZ STOCK															

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RCT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
632040				AD		4	78	WASHOUGAL	WASHOUGAL	221	800508	800508	98683		18	103300
				TIMING,COWLITZ STOCK												
632043				AD		9	79	GRAYS RIVER	GRAYS RIVER HAT	57	800601	800624	37456		80	769514
				STOCK EVAL.												
632058				AD		4	78	TOUTLE HAT	GREEN RIVER @ HAT	160	800507	800507	39496		20	0
				SIZE AND TIME AT RELEASE												
632061				AD		9	79	SEA RESOURCES	CHINOOK R.	11	800528	800528	18772		95	745781
				STOCK EVAL.												
632105				AD		9	79	KALAMA FALLS H	KALAMA FALLS H	141	800613	800624	100355		115	2300617
				STOCK EVAL.												
632123				AD		9	79	LEWIS R. WILD	LEWIS R. @ HAT.	163	800509	800529	25028	49		
				WILD STOCK EVAL.												
632124				AD		9	79	LEWIS R. WILD	LEWIS R. @ HAT.	163	800529	800604	27505	52		
				WILD STOCK EVAL.												
632125				AD		9	79	LEWIS R. WILD	LEWIS R. @ HAT.	163	800605	800610	25642	55		
				WILD STOCK EVAL.												
632137				AD		9	79	COWLITZ	COWLITZ R.	189	800601	800601	22540			
				STOCK EVAL.												
632153				AD		9	79	WASHOUGAL	WASHOUGAL R.	221	800630	800630	319156		80	6413533
				STOCK EVAL.												
632154				AD		9	79	COWLITZ	LOWER RIVERS	63	800603	800618	114132		129	2692834
				TRUCK OUT OF VOLCANO AREA					ELOK.,GRAYS,HILL,DEEP R.							
632159				AD		9	79	COWLITZ	LOWER RIVERS	67	800618	800619	40943		119	889666
				TRUCK OUT OF VOLCANO AREA					ELOK.,DEEP R.							
632160				AD		9	79	LEWIS R. WILD	LEWIS R. @ HAT	163	800715	800715	103690		148	0
				WILD STOCK EVAL.												
632207				AD		9	79	LEWIS R. WILD	LEWIS R. @ HAT.	163	800611	800617	26181	56		
				WILD STOCK EVAL.												
632208				AD		9	79	LEWIS R. WILD	LEWIS R. @ HAT.	163	800617	800625	24479	61		
				WILD STOCK EVAL.												

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
632213					AD	9	79	LEWIS R. WILD	LEWIS R. @ HAT.	163	800707	800711	14005	68		
					WILD STOCK EVAL.											
632214					AD	9	79	LEWIS R. WILD	LEWIS R. @ HAT.	163	800624	800707	26353	64		
					WILD STOCK EVAL.											
CE	LA		IF	1		9		MCNARY DAM	MCNARY TAILRACE	467	800609	800714	39005			
*					TAILRACE CONTROL											
CEDY	LA		IF	3		9		MCNARY DAM	MCNARY TAILRACE	467	800716	800731	45582			
*					TAILRACE CONTROL											
CEND	LA	H		2	AD	1		MCNARY DAM	MCNARY TAILRACE	467	800514	800609	2310			0
*					TAILRACE CONTROL				CWT CEND,LAH,2							
CEND	LA	H		2	AD	4		MCNARY DAM	MCNARY TAILRACE	467	800514	800609	1252			0
*					TAILRACE CONTROL				CWT CEND,LAH,2							
CEND	LA	H		2	AD	5		MCNARY DAM	MCNARY TAILRACE	467	800514	800609	14107			0
*					TAILRACE CONTROL				CWT CEND,LAH,2							
CEND	LA	H		2	AD	6		MCNARY DAM	MCNARY TAILRACE	467	800514	800609	6019			0
*					TAILRACE CONTROL				CWT CEND,LAH,2							
CETB					AD	5	78	LO.GRANTIE DAM	DALTON POINT	230	800408	800512	25793			0
*					TEST TRUCK RELEASE NO. 1				RA2C1,3 RA3C1							
DY	RA	V		2	AD	1		MCNARY DAM	DALTON POINT	206	800514	800613	3385			0
*					TRUCK TRANSPORT				CWT DY,RAV,2							
DY	RA	V		2	AD	4		MCNARY DAM	DALTON POINT	206	800514	800613	1438			0
*					TRUCK TRANSPORT				CWT DY,RAV,2							
DY	RA	V		2	AD	5		MCNARY DAM	DALTON POINT	206	800514	800613	7297			0
*					TRUCK TRANSPORT				CWT DY,RAV,2							
DY	RA	V		2	AD	6		MCNARY DAM	DALTON POINT	206	800514	800613	8021			0
*					TRUCK TRANSPORT				CWT DY,RAV,2							
DYLA	RA	L		2	AD	6	78	TUCANNON	DALTON POINT	206	800612	800612	18964	171		0
*					TEST #3 ATPASE				CWT DYLA,RAL,2							
DYPR					AD	5	78	LO.GRANITE DAM	BEACON ROCK	228	800514	800529	13299			0
*					BARGE TRANSPORT				RAW2							

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	RQT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE REMARKS	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
				PURPOSE OF RELEASE												
DYPR *				AD BARGE TRANSPORT		6	78	LO.GRANITE DAM	BEACON ROCK CWT DYPR,RAW,2	228	800514	800529	18005			0
ER *				AD TAILRACE CONTROL		5	78	L.GOOSE DAM	TEXAS RAPIDS LANDIN LAP1,2,3	626	800424	800530	21876			0
ER *				AD TAILRACE CONTROL		6	78	L.GOOSE DAM	TEXAS RAPIDS LANDIN LAP1,2,3	626	800424	800530	19273			0
ERLA *	LA	H	1	AD TAILRACE CONTROL		1		MCNARY DAM	MCNARY TAILRACE CWT ERLA,LAH,1	467	800408	800512	650			0
ERLA *	LA	H	1	AD TAILRACE CONTROL		4		MCNARY DAM	MCNARY TAILRACE CWT ERLA,LAH,1	467	800408	800512	177			0
ERLA *	LA	H	1	AD TAILRACE CONTROL		5		MCNARY DAM	MCNARY TAILRACE CWT ERLA,LAH,1	467	800408	800512	32478			0
ERLA *	LA	H	1	AD TAILRACE CONTROL		6		MCNARY DAM	MCNARY TAILRACE CWT ERLA,LAH,1	467	800408	800512	15272			0
ERPR *	RA	2	1	AD BARGE TRANSPORT		1		MCNARY DAM	BELOW BONNEVILLE CWT ERPR,RA2,1	230	800422	800518	328			0
ERPR *	RA	2	1	AD BARGE TRANSPORT		4		MCNARY DAM	BELOW BONNEVILLE CWT ERPR,RA2,1	230	800422	800518	43			0
ERPR *	RA	2	1	AD BARGE TRANSPORT		5		MCNARY DAM	BELOW BONNEVILLE CWT ERPR,RA2,1	230	800422	800518	32441			0
ERPR *	RA	2	1	AD BARGE TRANSPORT		6		MCNARY DAM	BELOW BONNEVILLE CWT ERPR,RA2,1	230	800422	800518	21431			0
GDLA *	LA	PH	2	AD HATCHERY EVAL.		6	78	TUCANNON	WALLA WALLA R. CWT GDLA,LAPP,2	507	800515	800518	16923	171		0
HO *	RA	IC	3	TRUCK TRANSPORT		9		MCNARY DAM	BELOW BONN	230	800718	800801	40737			
HOPR *				AD BARGE TRANSPORT		5	78	LO.GRANITE DAM	BEACON ROCK RAW1,2	228	800420	800510	27420			0
HOPR *				AD BARGE TRANSPORT		6	78	LO.GRANITE DAM	BEACON ROCK RAW1,2	228	800420	800510	12496			0

RELEASE DATA 1980

MAG TAG MULT	LOC	BR	ROT	CLIP	OTHER MARK	SP	BY	HATCHERY OR SOURCE	RELEASE SITE	KM	ST.REL.	END.REL.	NO.REL.	MM	#/LB	NO.UNMKD
					PURPOSE OF RELEASE				REMARKS							
LA	RA	IC	1			9		MCNARY DAM	BELOW BONN.	230	800613	800717	39476			
*					TRUCK TRANSPORT				(CWT LA)							
LAPR					AD	5	78	LO.GRANITE DAM	DALTON POINT	206	800409	800512	31178			0
*					TEST TRUCK TRANSPORT #3				RA2J1,3 RA3J1							
LASMLAPR	RA	L	3		AD	6	78	TUCANNON	DALTON PT.	206	800508	800508	19747	172		0
*					HOMING STUDY				(2 DIFF. TAGS EA FISH)							
LATB	RA	2	2		AD	5		MCNARY DAM	BELOW BONNEVILLE	230	800521	800530	11532			0
*					BARGE TRANSPORT				CWT LATB,RA2,2							
LATB	RA	2	2		AD	6		MCNARY DAM	BELOW BONNEVILLE	230	800521	800530	8951			0
*					BARGE TRANSPORT				CWT LATB,RA2,2							
ND					AD	5	78	LO.GRANITE DAM	DALTON POINT	206	800408	800512	29884			0
*					TEST TRUCK TRANSPORT #2				RA3L1,3 RA2L1							
NDSM	RA	V	1		AD	1		MCNARY DAM	DALTON POINT	206	800409	800512	565			0
*					TRUCK TRANSPORT				CWT NDSM,RAV,1							
NDSM	RA	V	1		AD	4		MCNARY DAM	DALTON POINT	206	800409	800512	131			0
*					TRUCK TRANSPORT				CWT NDSM,RAV,1							
NDSM	RA	V	1		AD	5		MCNARY DAM	DALTON POINT	206	800409	800512	33641			0
*					TRUCK TRANSPORT				CWT NDSM,RAV,1							
NDSM	RA	V	1		AD	6		MCNARY DAM	DALTON POINT	206	800409	800512	14341			0
*					TRUCK TRANSPORT				CWT NDSM,RAV,1							
PRTB					AD	5	78	LO.GRANITE DAM	DALTON POINT	206	800408	800512	34124			0
*					TRUCK TRANSPORT				RA3T1,3 RA2T1(1352 DUMP BLALOCK POND)							
PRYB	RA	L	1		AD	6	79	TUCANNON	DALTON POINT	206	800409	800409	21652	164		0
*					HOMING STUDY				CWT PRYB,RAL1(2000 REL. INTO SNAKE RIVER)							
SDLA	LA	PP	2		AD	6	78	TUCANNON	WALLA WALLA RIVER	507	800517	800518	16923	171		0
*					CONTROL				CWT SDLA,LAPP,2							