SMOLT MONITORING PROGRAM ANNUAL REPORT, 1986

Migrational Characteristics of Columbia Basin
Salmon and Steelhead Trout, 1986

Volume II

Brand Recapture Data

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for

The Columbia Basin Fish and Wildlife
Agencies and Tribes

through

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TABLE OF CONTENTS

	<u>Page</u>
I. <u>INTRODUCTION</u>	1
II. <u>DATA LISTING FORMAT</u>	1
III. <u>BRAND RECAPTURE DATA: DESCRIPTION OF DATA</u> <u>COLLECTION PROCEDURES AND PRESENTATION OF DATA</u> <u>LISTINGS</u>	6
A. Lower Granite Dam.....	6
B. Lower Monumental Dam.....	25
C. Rock Island Dam.....	59
D. McNary Dam.....	80
E. John Day Dam.....	168
IV. <u>REFERENCES CITED</u>	240

I. INTRODUCTION

Smolt Monitoring Program Annual Report, 1986, Volume I, describes the results of travel time monitoring and other migrational characteristics of yearling and sub-yearling chinook salmon (Oncorhynchus tshawytscha), sockeye salmon (Oncorhynchus nerka), and steelhead trout (Salmo gairdneri). This volume presents the data from Fish Passage Center freeze brands used in the analysis of travel time for Lewiston, Lower Granite, Lower Monumental, Rock Island, McNary, and John Day dams. Summary of data collection procedures and explanation of data listings are presented in conjunction with the mark recapture data. Data for marked fish not presented in this report will be provided upon request. Daily catch statistics (by species), flow, and sample parameters for the smolt monitoring sites, Clearwater, Lewiston, Lower Granite, Lower Monumental, Rock Island, McNary, John Day, and Bonneville also will be provided upon request.

II. DATA LISTING FORMAT

Brand recapture data listings summarize catch statistics for freeze branded fish in conjunction with flow and sample parameters obtained at the smolt monitoring sites. Data presented in the listings are defined as follows:

Smolt Monitoring Site is identified on each page in the table heading.

Species is identified on each page in the table heading. Each report is divided into sections based on species. Brand recaptures are reported in order by the following species categories: yearling chinook (chinook 1), steelhead, sub-yearling chinook (chinook 0), coho, and sockeye, respectively. Within each species category brand recaptures are reported in alphabetic order by brand symbol, brand location, and brand rotation.

Brand Release Information is indicated on each page in the table heading. This information includes the following:

1. Freeze Brand Code: This includes brand location, brand symbol, and brand rotation.
2. Race: The race of the branded fish.
3. Species: The species of the branded fish.
4. Lot ID: An identification number assigned to each brand release. This number can be used to find additional information from hatchery and brand release listings in Volume I of this report.
5. # Released: The number of branded fish released.
6. Release Site: The site where the branded fish were released.
7. Release Dates: The time period over which the brands were released.
8. Agency: The agency responsible for the release.
9. Hatchery: The hatchery from where the fish were released. Non-hatchery indicates migrating fish were captured, freeze branded, and released.

Date: The year is indicated in the heading line of each page; the month and day, representing the ending date of the sample period, is indicated for each sample. Detailed information on the start

and end date and time for each sample can be obtained from the Fish Passage Data Information System (FPDIS).

Sample Parameters are used to indicate relative sampling effort and changes in sampling conditions. These parameters are used to aid interpretation and analysis of the fish counts. The sample parameters primarily are for qualitative purposes and can not be used to quantify sample effort. Descriptive information about the samples is provided in comments recorded with the sample parameters. These comments are not included in this report but are available upon request from the FPDIS.

Sample Quality Code (SC) is used to identify samples deviating from "normal" sample conditions and to identify the cause for missing samples. Sample quality codes are defined below. Fish counts from samples with sample quality codes greater than 1 are indicated with an asterisk. The basis for assignment of quality codes is discussed for each site later in this report.

Definition of Sample Quality Codes

- 1 = Normal complete sample.
- 2 = Sample taken prior to separator cleanout (used for McNary Dam only).
- 3 = Questionable sample due to abnormal flows.
- 4 = No sample or incomplete sample due to weather conditions.
- 5 = No sample or incomplete sample due to equipment failure/maintenance/ repair.
- 6 = Not used.
- 7 = No sample, incomplete or biased sample. Cause explained in comments recorded with data.
- 8 = No fish counts were entered for this sample period. Fish accumulated and were sampled at a later date.
- 9 = Not used.
- 10 = Separator cleanout counts.
- ≥12 = Sample of fish accumulated 2 or more days. The sample code minus 10 is the number of days that fish accumulated before being sampled.

Number of Days (#D) This code is used to indicate samples of fish collected over more than 1 day. Flow parameters corresponding with these accumulated samples are averaged over the entire sample period.

Number of Gatewells (GW) indicates the number of gatewells sampled. This parameter is printed only for gatewell sampling systems.

Number of Hours (HR.S) indicates the number of hours represented by the sample.

River Flow is the average river flow (in kcfs) during the sample period.

Passage Index Flow is the percentage of the river flow (available for fish passage) flowing through the sampling system.

Definition of flow percentage varies for each site and is explained in the report footnotes. The flow is averaged over the sample period (defined by the start and end date and time). The source of flow data (either compiled by the remote site operators and entered with the catch data or obtained from COE data) is indicated in the report footnotes.

Number Sampled is the number of branded fish observed. Missing counts are indicated by "---". Total sample counts are indicated at the end of each report section.

Number Collected is the number of fish collected during the sample period. If the collection is not subsampled, the number sampled and the number collected are equal. For monitoring sites that subsample the fish collection, the number of branded fish collected is estimated based on a sample rate. At McNary and

Lower Granite the sample rate is based on the proportion of time the bypass collection system was sampled. Missing counts are indicated by "---". Total collection counts are indicated at the end of each report section.

Passage Index is calculated as follows:

$$\text{Passage Index} = (\# \text{ collected} * 100) / (\% \text{ passage index flow})$$

Cumulative percent passage index is printed to the right of each passage index estimate. These percentages are based on the total counts printed at the end of each report section.

**III. BRAND RECAPTURE DATA: DESCRIPTION OF DATA COLLECTION
PROCEDURES AND PRESENTATION OF DATA LISTINGS**

A. Lower Granite Dam

Contractor: National Marine Fisheries Service

Project Leader: Richard Johnsen (503-739-2303)

Location: Snake River, River Mile 107.5, 431.8 miles to the mouth of the Columbia

Monitoring Dates: April 25 - July 24, 1986

Sampling Method: A smolt bypass collection system was used to sample fish 24 hours each day. Fish passing through the collection system were subsampled at a variable rate based on the number of fish passing the project. Species and brand composition were assessed for the subsample. The sample period was 0700 to 0700h. Additional information on the sampling procedures at Lower Granite Dam is presented in the NMFS annual report (Johnsen and Wood, 1986).

Analysis of Data: Data from Lower Granite were used for for in-season management, travel time, and migration characteristics. The flow proportion used to expand collection counts to a passage index was estimated as follows:

$$\text{Powerhouse flow} / (\text{Powerhouse flow} + \text{Spill})$$

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

LOWER GRANITE

* * *

CHINOOK 1'S

* * *

LD-Y -1 SP CHINOOK LOT ID # 86013-01 44,692 RELEASED AT: RAPID RIVER FROM: 4/04/86 TO 4/07/86
AGENCY: IDFG HATCHERY: RAPID RIVER H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW				
4/05	5 19.0	95.34	100.00 %	3 *	34 *	34 *	0.3%
4/06	1 24.0	96.70	100.00 %	7	80	80	1.1%
4/07	1 24.0	96.65	100.00 %	19	216	216	3.1%
4/08	1 24.0	96.10	100.00 %	13	148	148	4.5%
4/09	1 24.0	101.07	100.00 %	22	250	250	6.9%
4/10	1 24.0	98.84	100.00 %	31	352	352	10.2%
4/11	1 24.0	108.03	100.00 %	40	455	455	14.5%
4/12	1 24.0	102.38	98.69 %	40	455	461	18.8%
4/13	1 24.0	92.44	100.00 %	35	350	350	22.1%
4/14	1 24.0	96.88	100.00 %	24	240	240	24.4%
4/15	5 21.0	88.86	100.00 %	45 *	334 *	334 *	27.5%
4/16	1 24.0	94.20	100.00 %	88	733	733	34.4%
4/17	1 24.0	87.59	100.00 %	66	617	617	40.3%
4/18	1 24.0	97.29	100.00 %	50	500	500	45.0%
4/19	1 24.0	85.63	100.00 %	46	460	460	49.3%
4/20	1 24.0	81.70	100.00 %	76	633	633	55.3%
4/21	1 24.0	89.93	100.00 %	69	575	575	60.7%
4/22	5 22.0	82.30	100.00 %	41 *	342 *	342 *	63.9%
4/23	1 24.0	91.03	100.00 %	62	517	517	68.8%
4/24	1 24.0	117.89	98.94 %	44	423	428	72.8%
4/25	1 24.0	116.71	100.00 %	48	480	480	77.3%
4/26	1 24.0	105.94	100.00 %	35	350	350	80.6%
4/27	1 23.0	99.30	100.00 %	22	200	200	82.5%
4/28	1 24.0	89.71	100.00 %	23	235	235	84.7%
4/29	1 24.0	99.98	100.00 %	20	222	222	86.8%
4/30	1 24.0	89.24	100.00 %	13	136	136	88.1%
5/01	1 24.0	85.25	100.00 %	24	267	267	90.6%
5/02	1 24.0	89.43	100.00 %	17	189	189	92.4%
5/03	1 24.0	81.81	100.00 %	11	122	122	93.6%
5/04	1 24.0	80.85	100.00 %	6	200	200	95.5%
5/05	1 24.0	98.26	100.00 %	6	69	69	96.1%
5/06	1 24.0	113.91	100.00 %	5	63	63	96.7%
5/07	1 24.0	101.01	100.00 %	4	67	67	97.3%
5/08	1 24.0	97.20	100.00 %	1	21	21	97.5%

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LOWER GRANITE

* * *

CHINOOK 1'S

* * *

LD-Y -1 SP CHINOOK LOT ID # 86013-01

44,692 RELEASED AT: RAPID RIVER

FROM: 4/04/86 TO 4/07/86

AGENCY: IDFG

HATCHERY: RAPID RIVER H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-ID-GW-HRS	FLOW	FLOW				

* * * * * C O N T I N U E D * * * * *

5/09	1	24.0	96.51	100.00 %	5	89	89	98.4%
5/10	1	24.0	99.92	100.00 %	2	33	33	98.7%
5/11	1	24.0	101.99	100.00 %	1	32	32	99.0%
5/12	1	24.0	99.25	100.00 %	2	23	23	99.2%
5/13	1	24.0	106.45	100.00 %	1	11	11	99.3%
5/14	1	24.0	94.45	100.00 %	2	22	22	99.5%
5/15	1	24.0	98.16	100.00 %	0	0	0	99.5%
5/16	1	24.0	97.25	100.00 %	0	0	0	99.5%
5/17	1	24.0	93.40	100.00 %	0	0	0	99.5%
5/18	1	24.0	85.12	100.00 %	0	0	0	99.5%
5/19	1	24.0	87.91	100.00 %	0	0	0	99.5%
5/20	1	24.0	96.55	100.00 %	0	0	0	99.5%
5/21	1	24.0	109.13	100.00 %	0	0	0	99.5%
5/22	1	24.0	122.80	100.00 %	0	0	0	99.5%
5/23	1	24.0	124.79	100.00 %	2	22	22	99.7%
5/24	1	24.0	107.06	100.00 %	1	11	11	99.8%
5/25	1	24.0	99.41	100.00 %	0	0	0	99.8%
5/26	1	24.0	100.33	100.00 %	0	0	0	99.8%
5/27	1	24.0	111.92	100.00 %	0	0	0	99.8%
5/28	1	24.0	138.74	93.09 %	0	0	0	99.8%
5/29	1	24.0	172.37	75.66 %	0	0	0	99.8%
5/30	1	24.0	196.67	56.84 %	1	11	19	100.0%

TOTAL					1,073	10,589	10,608	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from Corps data site - LGR
(3) Index Flow: ** POWERHOUSE / (POWERHOUSE + SPILL) **
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

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LOWER GRANITE

* * *

CHINOOK 1'S

* * *

LD-Y -3 SP CHINOOK LOT ID # 86014-01

44,754 RELEASED AT: HELLS CANYON

FROM: 3/26/86 TO 3/27/86

AGENCY: IDFG

HATCHERY: RAPID RIVER H

DATE	.. SAMPLE (1) PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE		
1986	SC-ID-GW-UB-S	FLOW	FLOW					
4/05	5	19.0	95.34	100.00 %	7 *	80 *	80 *	0.8%
4/06	1	24.0	96.70	100.00 %	10	114	114	2.0%
4/07	1	24.0	96.65	100.00 %	15	170	170	3.7%
4/08	1	24.0	96.10	100.00 %	31	352	352	7.2%
4/09	1	24.0	101.07	100.00 %	31	352	352	10.8%
4/10	1	24.0	98.84	100.00 %	59	670	670	17.5%
4/11	1	24.0	108.03	100.00 %	68	773	773	25.3%
4/12	1	24.0	102.38	98.69 %	48	545	552	30.9%
4/13	1	24.0	92.44	100.00 %	61	610	610	37.1%
4/14	1	24.0	96.88	100.00 %	38	380	380	40.9%
4/15	5	21.0	88.86	100.00 %	41 *	304 *	304 *	44.0%
4/16	1	24.0	94.20	100.00 %	94	783	783	51.9%
4/17	1	24.0	87.59	100.00 %	44	411	411	56.0%
4/18	1	24.0	97.29	100.00 %	36	360	360	59.7%
4/19	1	24.0	85.63	100.00 %	39	390	390	63.6%
4/20	1	24.0	81.70	100.00 %	58	483	483	68.5%
4/21	1	24.0	89.93	100.00 %	42	350	350	72.0%
4/22	5	22.0	82.30	100.00 %	29 *	242 *	242 *	74.4%
4/23	1	24.0	91.03	100.00 %	33	275	275	77.2%
4/24	1	24.0	117.89	98.94 %	25	240	243	79.7%
4/25	1	24.0	116.71	100.00 %	19	190	190	81.6%
4/26	1	24.0	105.94	100.00 %	24	240	240	84.0%
4/27	1	23.0	99.30	100.00 %	14	127	127	85.3%
4/28	1	24.0	89.71	100.00 %	16	163	163	86.9%
4/29	1	24.0	99.98	100.00 %	17	189	189	88.8%
4/30	1	24.0	89.24	100.00 %	18	188	188	90.7%
5/01	1	24.0	85.25	100.00 %	10	111	111	91.9%
5/02	1	24.0	89.43	100.00 %	11	122	122	93.1%
5/03	1	24.0	81.81	100.00 %	5	56	56	93.7%
5/04	1	24.0	80.85	100.00 %	3	100	100	94.7%
5/05	1	24.0	98.26	100.00 %	8	91	91	95.6%
5/06	1	24.0	113.91	100.00 %	2	25	25	95.8%
5/07	1	24.0	101.01	100.00 %	5	83	83	96.7%
5/08	1	24.0	97.20	100.00 %	8	164	164	98.3%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

LOWER GRANITE

* * *

CHINOOK 1'S

* * *

LD-Y -3 SP CHINOOK LOT ID # 86014-01 44,754 RELEASED AT: HELLS CANYON FROM: 3/26/86 TO 3/27/86
AGENCY: IDFG HATCHERY: RAPID RIVER H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC-ID-GW-HRS	FLOW	FLOW				

***** CONTINUED *****

5/09	1	24.0	96.51	100.00 %	2	36	36	98.7%
5/10	1	24.0	99.92	100.00 %	3	50	50	99.2%
5/11	1	24.0	101.99	100.00 %	0	0	0	99.2%
5/12	1	24.0	99.25	100.00 %	4	46	46	99.7%
5/13	1	24.0	106.45	100.00 %	2	22	22	99.9%
5/14	1	24.0	94.45	100.00 %	0	0	0	99.9%
5/15	1	24.0	98.16	100.00 %	0	0	0	99.9%
5/16	1	24.0	97.25	100.00 %	0	0	0	99.9%
5/17	1	24.0	93.40	100.00 %	0	0	0	99.9%
5/18	1	24.0	85.12	100.00 %	0	0	0	99.9%
5/19	1	24.0	87.91	100.00 %	0	0	0	99.9%
5/20	1	24.0	96.55	100.00 %	0	0	0	99.9%
5/21	1	24.0	109.13	100.00 %	0	0	0	99.9%
5/22	1	24.0	122.80	100.00 %	1	11	11	100.0%

TOTAL					981	9,898	9,908	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from Corps data site - LGR
(3) Index Flow: ** POWERHOUSE / (POWERHOUSE + SPILL) **
(4) Passage Index: Calculated as the (number collected) / (100 % percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

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* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

LOWER GRANITE

* * *

CHINOOK 1'S

* * *

RA-Y -2 SP CHINOOK LOT ID # 86108-01 40,675 RELEASED AT: N F CLEARWATER FROM: 4/02/86 TO 4/03/86
AGENCY: USFWS HATCHERY: DWORSHAK NFH

DATE	SAMPLE (1) .. PARAMETERS .. SC-#D-GW-HR.S	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
4/08	1	24.0	96.10	100.00 %	1	11	11 0.2%
4/09	1	24.0	101.07	100.00 %	5	57	57 1.4%
4/10	1	24.0	98.84	100.00 %	12	136	136 4.3%
4/11	1	24.0	108.03	100.00 %	6	68	68 5.7%
4/12	1	24.0	102.38	98.69 %	20	227	230 10.6%
4/13	1	24.0	92.44	100.00 %	23	230	230 15.5%
4/14	1	24.0	96.88	100.00 %	16	160	160 18.8%
4/15	5	21.0	88.86	100.00 %	21 *	156 *	156 * 22.1%
4/16	1	24.0	94.20	100.00 %	34	283	283 28.1%
4/17	1	24.0	87.59	100.00 %	14	131	131 30.9%
4/18	1	24.0	97.29	100.00 %	28	280	280 36.8%
4/19	1	24.0	85.63	100.00 %	9	90	90 38.7%
4/20	1	24.0	81.70	100.00 %	30	250	250 44.0%
4/21	1	24.0	89.93	100.00 %	50	417	417 52.8%
4/22	5	22.0	82.30	100.00 %	10 *	83 *	83 * 54.6%
4/23	1	24.0	91.03	100.00 %	29	242	242 59.7%
4/24	1	24.0	117.89	98.94 %	16	154	156 63.0%
4/25	1	24.0	116.71	100.00 %	23	230	230 67.8%
4/26	1	24.0	105.94	100.00 %	15	150	150 71.0%
4/27	1	23.0	99.30	100.00 %	15	136	136 73.9%
4/28	1	24.0	89.71	100.00 %	6	61	61 75.2%
4/29	1	24.0	99.98	100.00 %	12	133	133 78.0%
4/30	1	24.0	89.24	100.00 %	8	84	84 79.7%
5/01	1	24.0	85.25	100.00 %	5	56	56 80.9%
5/02	1	24.0	89.43	100.00 %	7	78	78 82.6%
5/03	1	24.0	81.81	100.00 %	7	78	78 84.2%
5/04	1	24.0	80.85	100.00 %	1	33	33 84.9%
5/05	1	24.0	98.26	100.00 %	14	160	160 88.3%
5/06	1	24.0	113.91	100.00 %	7	89	89 90.2%
5/07	1	24.0	101.01	100.00 %	1	17	17 90.5%
5/08	1	24.0	97.20	100.00 %	1	21	21 91.0%
5/09	1	24.0	96.51	100.00 %	1	18	18 91.4%
5/10	1	24.0	99.92	100.00 %	2	33	33 92.1%

***** CONTINUED *****

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LOWER GRANITE

* * *

CHINOOK 1'S

* * *

RA-Y -2 SP CHINOOK LOT ID # 86108-01 40,675 RELEASED AT: N F CLEARWATER FROM: 4/02/86 TO 4/03/86
AGENCY: USFWS HATCHERY: DWORSHAK NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS						

***** CONTINUED *****

5/11	1	24.0	101.99	100.00 %	0	0	0	92.1%
5/12	1	24.0	99.25	100.00 %	1	11	11	92.3%
5/13	1	24.0	106.45	100.00 %	1	11	11	92.5%
5/14	1	24.0	94.45	100.00 %	2	22	22	93.0%
5/15	1	24.0	98.16	100.00 %	3	33	33	93.7%
5/16	1	24.0	97.25	100.00 %	4	44	44	94.6%
5/17	1	24.0	93.40	100.00 %	0	0	0	94.6%
5/18	1	24.0	85.12	100.00 %	1	31	31	95.3%
5/19	1	24.0	87.91	100.00 %	2	23	23	95.8%
5/20	1	24.0	96.55	100.00 %	1	11	11	96.0%
5/21	1	24.0	109.13	100.00 %	3	33	33	96.7%
5/22	1	24.0	122.80	100.00 %	3	33	33	97.4%
5/23	1	24.0	124.79	100.00 %	4	44	44	98.3%
5/24	1	24.0	107.06	100.00 %	0	0	0	98.3%
5/25	1	24.0	99.41	100.00 %	0	0	0	98.3%
5/26	1	24.0	100.33	100.00 %	0	0	0	98.3%
5/27	1	24.0	111.92	100.00 %	1	11	11	98.5%
5/28	1	24.0	138.74	93.09 %	0	0	0	98.5%
5/29	1	24.0	172.37	75.66 %	1	11	15	98.9%
5/30	1	24.0	196.67	56.84 %	1	11	19	99.3%
5/31	1	24.0	204.84	63.52 %	1	11	17	99.6%
6/01	1	24.0	209.49	61.23 %	0	0	0	99.6%
6/02	1	24.0	212.32	60.50 %	0	0	0	99.6%
6/03	1	24.0	209.37	61.76 %	1	11	18	100.0%

TOTAL					479	4,703	4,733	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - LGR
(3) Index Flow: ** POWERHOUSE / (POWERHOUSE + SPILL) **
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

LOWER GRANITE

* * *

CHINOOK 1'S

* * *

RD-Y -1 SP CHINOOK LOT ID # 86017-01 35,851 RELEASED AT: SAWTOOTH H FROM: 3/17/86 TO 3/17/86
AGENCY: IDFG HATCHERY: SAWTOOTH H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--RD--GW--HR.S	FLOW	FLOW				
4/07	1	24.0	96.65	100.00 %	2	23	23 1.0%
4/08	1	24.0	96.10	100.00 %	1	11	11 1.5%
4/09	1	24.0	101.07	100.00 %	1	11	11 2.0%
4/10	1	24.0	98.84	100.00 %	5	57	57 4.5%
4/11	1	24.0	108.03	100.00 %	11	125	125 10.0%
4/12	1	24.0	102.38	98.69 %	5	57	58 12.6%
4/13	1	24.0	92.44	100.00 %	3	30	30 13.9%
4/14	1	24.0	96.88	100.00 %	2	20	20 14.8%
4/15	5	21.0	88.86	100.00 %	11 *	82 *	82 * 18.4%
4/16	1	24.0	94.20	100.00 %	16	133	133 24.2%
4/17	1	24.0	87.59	100.00 %	6	56	56 26.7%
4/18	1	24.0	97.29	100.00 %	10	100	100 31.1%
4/19	1	24.0	85.63	100.00 %	3	30	30 32.4%
4/20	1	24.0	81.70	100.00 %	15	125	125 37.9%
4/21	1	24.0	89.93	100.00 %	17	142	142 44.2%
4/22	5	22.0	82.30	100.00 %	7 *	58 *	58 * 46.7%
4/23	1	24.0	91.03	100.00 %	11	92	92 50.8%
4/24	1	24.0	117.89	98.94 %	8	77	78 54.2%
4/25	1	24.0	116.71	100.00 %	7	70	70 57.3%
4/26	1	24.0	105.94	100.00 %	8	80	80 60.8%
4/27	1	23.0	99.30	100.00 %	6	55	55 63.3%
4/28	1	24.0	89.71	100.00 %	6	61	61 65.9%
4/29	1	24.0	99.98	100.00 %	12	133	133 71.8%
4/30	1	24.0	89.24	100.00 %	9	94	94 75.9%
5/01	1	24.0	85.25	100.00 %	7	78	78 79.4%
5/02	1	24.0	89.43	100.00 %	11	122	122 84.8%
5/03	1	24.0	81.81	100.00 %	5	56	56 87.2%
5/04	1	24.0	80.85	100.00 %	0	0	0 87.2%
5/05	1	24.0	98.26	100.00 %	2	23	23 88.2%
5/06	1	24.0	113.91	100.00 %	4	51	51 90.5%
5/07	1	24.0	101.01	100.00 %	2	33	33 91.9%
5/08	1	24.0	97.20	100.00 %	0	0	0 91.9%
5/09	1	24.0	96.51	100.00 %	1	18	18 92.7%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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System at (503) 230-4290. #

LOWER GRANITE

* * *

CHINOOK 1'S

* * *

RD-Y -1 SP CHINOOK LOT ID # 86017-01

35,851

RELEASED AT: SAWTOOTH H

FROM: 3/17/86 TO 3/17/86

AGENCY: IDFG

HATCHERY: SAWTOOTH H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS						

***** CONTINUED *****

5/10	1	24.0	99.92	100.00 %	0	0	0	92.7%
5/11	1	24.0	101.99	100.00 %	0	0	0	92.7%
5/12	1	24.0	99.25	100.00 %	2	23	23	93.7%
5/13	1	24.0	106.45	100.00 %	0	0	0	93.7%
5/14	1	24.0	94.45	100.00 %	3	33	33	95.2%
5/15	1	24.0	98.16	100.00 %	1	11	11	95.7%
5/16	1	24.0	97.25	100.00 %	0	0	0	95.7%
5/17	1	24.0	93.40	100.00 %	0	0	0	95.7%
5/18	1	24.0	85.12	100.00 %	0	0	0	95.7%
5/19	1	24.0	87.91	100.00 %	0	0	0	95.7%
5/20	1	24.0	96.55	100.00 %	0	0	0	95.7%
5/21	1	24.0	109.13	100.00 %	0	0	0	95.7%
5/22	1	24.0	122.80	100.00 %	1	11	11	96.2%
5/23	1	24.0	124.79	100.00 %	0	0	0	96.2%
5/24	1	24.0	107.06	100.00 %	1	11	11	96.7%
5/25	1	24.0	99.41	100.00 %	1	31	31	98.0%
5/26	1	24.0	100.33	100.00 %	0	0	0	98.0%
5/27	1	24.0	111.92	100.00 %	0	0	0	98.0%
5/28	1	24.0	138.74	93.09 %	1	11	12	98.5%
5/29	1	24.0	172.37	75.66 %	1	11	15	99.2%
5/30	1	24.0	196.67	56.84 %	0	0	0	99.2%
5/31	1	24.0	204.84	63.52 %	0	0	0	99.2%
6/01	1	24.0	209.49	61.23 %	0	0	0	99.2%
6/02	1	24.0	212.32	60.50 %	0	0	0	99.2%
6/03	1	24.0	209.37	61.76 %	1	11	18	100.0%

TOTAL					226	2,256	2,270	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - LGR
(3) Index Flow: ** POWERHOUSE / (POWERHOUSE + SPILL) **
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

LOWER GRANITE * * * CHINOOK 1'S * * *

RD-Y -3 SU CHINOOK LOT ID # 86018-01 43,487 RELEASED AT: S F SALMON R FROM: 3/24/86 TO 3/31/86
AGENCY: IDFG HATCHERY: MCCALL

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-D-GW-HR.S						
4/07	1	24.0	96.65	100.00 %	2	23	23 0.4%
4/08	1	24.0	96.10	100.00 %	0	0	0 0.4%
4/09	1	24.0	101.07	100.00 %	1	11	11 0.6%
4/10	1	24.0	98.84	100.00 %	2	23	23 0.9%
4/11	1	24.0	108.03	100.00 %	1	11	11 1.1%
4/12	1	24.0	102.38	98.69 %	9	102	103 2.8%
4/13	1	24.0	92.44	100.00 %	5	50	50 3.6%
4/14	1	24.0	96.88	100.00 %	8	80	80 4.9%
4/15	5	21.0	88.86	100.00 %	12 *	89 *	89 * 6.4%
4/16	1	24.0	94.20	100.00 %	10	83	83 7.7%
4/17	1	24.0	87.59	100.00 %	7	65	65 8.8%
4/18	1	24.0	97.29	100.00 %	11	110	110 10.6%
4/19	1	24.0	85.63	100.00 %	14	140	140 12.9%
4/20	1	24.0	81.70	100.00 %	18	150	150 15.4%
4/21	1	24.0	89.93	100.00 %	17	142	142 17.7%
4/22	5	22.0	82.30	100.00 %	9 *	75 *	75 * 18.9%
4/23	1	24.0	91.03	100.00 %	17	142	142 21.2%
4/24	1	24.0	117.89	98.94 %	12	115	116 23.1%
4/25	1	24.0	116.71	100.00 %	14	140	140 25.4%
4/26	1	24.0	105.94	100.00 %	8	80	80 26.7%
4/27	1	23.0	99.30	100.00 %	13	118	118 28.7%
4/28	1	24.0	89.71	100.00 %	23	235	235 32.5%
4/29	1	24.0	99.98	100.00 %	24	267	267 36.9%
4/30	1	24.0	89.24	100.00 %	19	199	199 40.1%
5/01	1	24.0	85.25	100.00 %	27	300	300 45.0%
5/02	1	24.0	89.43	100.00 %	20	222	222 48.7%
5/03	1	24.0	81.81	100.00 %	26	289	289 53.4%
5/04	1	24.0	80.85	100.00 %	4	133	133 55.6%
5/05	1	24.0	98.26	100.00 %	21	240	240 59.5%
5/06	1	24.0	113.91	100.00 %	14	178	178 62.4%
5/07	1	24.0	101.01	100.00 %	8	133	133 64.6%
5/08	1	24.0	97.20	100.00 %	0	0	0 64.6%
5/09	1	24.0	96.51	100.00 %	11	196	196 67.8%
5/10	1	24.0	99.92	100.00 %	14	233	233 71.6%
5/11	1	24.0	101.99	100.00 %	4	129	129 73.7%
5/12	1	24.0	99.25	100.00 %	10	114	114 75.6%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

LOWER GRANITE

* * *

CHINOOK 1'S

* * *

RD-Y -3 SU CHINOOK LOT ID # B6018-01 43,487 RELEASED AT: S F SALMON R FROM: 3/24/86 TO 3/31/86
AGENCY: IDFG HATCHERY: MCCALL

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--ED--GW--HR.S						

* * * * * C O N T I N U E D * * * * *

5/13	1	24.0	106.45	100.00 %	13	144	144	78.0%
5/14	1	24.0	94.45	100.00 %	9	100	100	79.6%
5/15	1	24.0	98.16	100.00 %	5	56	56	80.5%
5/16	1	24.0	97.25	100.00 %	3	33	33	81.1%
5/17	1	24.0	93.40	100.00 %	2	22	22	81.4%
5/18	1	24.0	85.12	100.00 %	1	31	31	81.9%
5/19	1	24.0	87.91	100.00 %	3	34	34	82.5%
5/20	1	24.0	96.55	100.00 %	3	33	33	83.0%
5/21	1	24.0	109.13	100.00 %	4	44	44	83.7%
5/22	1	24.0	122.80	100.00 %	4	44	44	84.5%
5/23	1	24.0	124.79	100.00 %	6	67	67	85.6%
5/24	1	24.0	107.06	100.00 %	6	67	67	86.7%
5/25	1	24.0	99.41	100.00 %	4	123	123	88.7%
5/26	1	24.0	100.33	100.00 %	3	100	100	90.3%
5/27	1	24.0	111.92	100.00 %	5	57	57	91.2%
5/28	1	24.0	138.74	93.09 %	2	22	24	91.6%
5/29	1	24.0	172.37	75.66 %	4	44	58	92.6%
5/30	1	24.0	196.67	56.84 %	5	56	99	94.2%
5/31	1	24.0	204.84	63.52 %	1	11	17	94.5%
6/01	1	24.0	209.49	61.23 %	3	92	150	96.9%
6/02	1	24.0	212.32	60.50 %	4	46	76	98.2%
6/03	1	24.0	209.37	61.76 %	0	0	0	98.2%
6/04	1	24.0	204.74	62.71 %	0	0	0	98.2%
6/05	1	24.0	197.40	64.42 %	1	33	51	99.0%
6/06	1	24.0	187.47	68.32 %	1	33	48	99.8%
6/07	1	24.0	185.60	69.16 %	0	0	0	99.8%
6/08	1	24.0	167.58	76.31 %	0	0	0	99.8%
6/09	1	24.0	153.31	83.02 %	0	0	0	99.8%
6/10	1	24.0	146.36	87.64 %	0	0	0	99.8%
6/11	1	24.0	131.05	97.66 %	0	0	0	99.8%
6/12	1	24.0	111.90	100.00 %	1	12	12	100.0%

* * * * * C O N T I N U E D * * * * *

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

LOWER GRANITE

* * *

CHINOOK 1'S

* * *

RD-Y -3 SU CHINOOK LOT ID # 86018-01

43,487

RELEASED AT: S F SALMON R

FROM: 3/24/86 TO 3/31/86

AGENCY: IDFG

HATCHERY: MCCALL

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS						

***** C O N T I N U E D *****

TOTAL				508	5,921	6,109	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from Corps data site - LGR
) Index Flow: ** POWERHOUSE / (POWERHOUSE + SPILL) **
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

 * These data are preliminary and have been derived from various sources. For *
 * verification and/or origin of data, contact the operators of the Fish Passage Data *
 * System at (503) 230-4290. *

FROM: 4/08/86 TO 4/10/86
HATCHERY: HAGERMAN NFH

SAMPLE (1)				(2)		(3)		(4)			
DATE	..	PARAMETERS	..	RIVER	INDEX	NUMBER	NUMBER	...	PASSAGE	INDEX	...
1986	SC	ED	GW	HR.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE	
4/27	1			23.0	99.30	100.00 %	4	36	36	0.8%	
4/28	1			24.0	89.71	100.00 %	3	31	31	1.6%	
4/29	1			24.0	99.98	100.00 %	12	133	133	4.7%	
4/30	1			24.0	89.24	100.00 %	12	126	126	7.7%	
5/01	1			24.0	85.25	100.00 %	4	44	44	8.7%	
5/02	1			24.0	89.43	100.00 %	9	100	100	11.0%	
5/03	1			24.0	81.81	100.00 %	1	11	11	11.3%	
5/04	1			24.0	80.85	100.00 %	2	67	67	12.9%	
5/05	1			24.0	98.26	100.00 %	7	80	80	14.7%	
5/06	1			24.0	113.91	100.00 %	10	127	127	17.7%	
5/07	1			24.0	101.01	100.00 %	3	50	50	18.9%	
5/08	1			24.0	97.20	100.00 %	3	62	62	20.4%	
5/09	1			24.0	96.51	100.00 %	3	53	53	21.6%	
5/10	1			24.0	99.92	100.00 %	3	50	50	22.8%	
5/11	1			24.0	101.99	100.00 %	1	32	32	23.5%	
5/12	1			24.0	99.25	100.00 %	3	34	34	24.3%	
5/13	1			24.0	106.45	100.00 %	4	44	44	25.4%	
5/14	1			24.0	94.45	100.00 %	2	22	22	25.9%	
5/15	1			24.0	98.16	100.00 %	1	11	11	26.1%	
5/16	1			24.0	97.25	100.00 %	4	44	44	27.2%	
5/17	1			24.0	93.40	100.00 %	2	22	22	27.7%	
5/18	1			24.0	85.12	100.00 %	1	31	31	28.4%	
5/19	1			24.0	87.91	100.00 %	2	23	23	28.9%	
5/20	1			24.0	96.55	100.00 %	2	22	22	29.5%	
5/21	1			24.0	109.13	100.00 %	4	44	44	30.5%	
5/22	1			24.0	122.80	100.00 %	5	56	56	31.8%	
5/23	1			24.0	124.79	100.00 %	5	56	56	33.1%	
5/24	1			24.0	107.06	100.00 %	5	56	56	34.4%	
5/25	1			24.0	99.41	100.00 %	2	62	62	35.9%	
5/26	1			24.0	100.33	100.00 %	6	200	200	40.6%	
5/27	1			24.0	111.92	100.00 %	16	183	183	44.9%	
5/28	1			24.0	138.74	93.09 %	14	156	168	48.8%	
5/29	1			24.0	172.37	75.66 %	10	111	147	52.3%	
5/30	1			24.0	196.67	56.84 %	11	122	215	57.3%	

***** CONTINUED *****


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*****  
* These data are preliminary and have been derived from various sources. For *  
* verification and/or origin of data, contact the operators of the Fish Passage Data *  
* System at (503) 230-4290. *  
*****
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LD-T -2 STEELHEAD LOT ID # 86101-01 52,300 RELEASED AT: SAWTOOTH H FROM: 4/08/86 TO 4/10/86
AGENCY: USFWS HATCHERY: HAGERMAN NFH

[illegible]

***** CONTINUED *****

5/31	1	24.0	204.84	63.52 %	14	156	246	63.1%
6/01	1	24.0	209.49	61.23 %	5	154	252	69.0%
6/02	1	24.0	212.32	60.50 %	8	91	150	72.5%
6/03	1	24.0	209.37	61.76 %	7	78	126	75.5%
6/04	1	24.0	204.74	62.71 %	0	0	0	75.5%
6/05	1	24.0	197.40	64.42 %	0	0	0	75.5%
6/06	1	24.0	187.47	68.32 %	2	67	98	77.8%
6/07	1	24.0	185.60	69.16 %	0	0	0	77.8%
6/08	1	24.0	167.58	76.31 %	1	17	22	78.3%
6/09	1	24.0	153.31	83.02 %	1	17	20	78.8%
6/10	1	24.0	146.36	87.64 %	5	83	95	81.0%
6/11	1	24.0	131.05	97.66 %	2	33	34	81.8%
6/12	1	24.0	111.90	100.00 %	8	98	98	84.1%
6/13	1	24.0	113.33	100.00 %	11	122	122	87.0%
6/14	1	24.0	114.55	100.00 %	9	100	100	89.3%
6/15	1	24.0	115.65	100.00 %	2	22	22	89.8%
6/16	1	24.0	97.31	100.00 %	8	89	89	91.9%
6/17	1	24.0	102.35	100.00 %	7	78	78	93.8%
6/18	1	24.0	99.35	100.00 %	6	67	67	95.3%
6/19	1	24.0	95.63	100.00 %	5	56	56	96.6%
6/20	1	24.0	87.30	100.00 %	1	11	11	96.9%
6/21	1	24.0	78.30	100.00 %	2	22	22	97.4%
6/22	1	24.0	73.47	100.00 %	2	22	22	97.9%
6/23	1	24.0	67.36	100.00 %	0	0	0	97.9%
6/24	1	24.0	66.31	100.00 %	2	22	22	98.5%
6/25	1	24.0	64.22	100.00 %	3	33	33	99.2%
6/26	1	24.0	58.34	100.00 %	0	0	0	99.2%
6/27	1	24.0	61.36	100.00 %	0	0	0	99.2%
6/28	1	24.0	62.55	100.00 %	0	0	0	99.2%
6/29	1	24.0	53.86	100.00 %	0	0	0	99.2%
6/30	1	24.0	45.04	100.00 %	0	0	0	99.2%
7/01	1	24.0	44.63	100.00 %	1	11	11	99.5%
7/02	1	24.0	43.40	100.00 %	0	0	0	99.5%

***** CONTINUED *****

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*****
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# verification and/or origin of data, contact the operators of the Fish Passage Data
# System at (503) 230-4290.
*****

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FROM: 4/08/86 TO 4/10/86
HATCHERY: HAGERMAN NFH

***** CONTINUED *****

TOTAL	290	3.772	4.260
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20

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

LOWER GRANITE

* * *

STEELHEAD

* * *

LD-T -4 STEELHEAD LOT ID # 86103-01

51,325

RELEASED AT: E F SALMON R

FROM: 4/07/86 TO 4/09/86

AGENCY: USFWS

HATCHERY: HAGERMAN NFH

DATE	.. SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW				
4/29	1	24.0	99.98	100.00 %	2	22	22 1.2%
4/30	1	24.0	89.24	100.00 %	0	0	0 1.2%
5/01	1	24.0	85.25	100.00 %	2	22	22 2.4%
5/02	1	24.0	89.43	100.00 %	0	0	0 2.4%
5/03	1	24.0	81.81	100.00 %	0	0	0 2.4%
5/04	1	24.0	80.85	100.00 %	0	0	0 2.4%
5/05	1	24.0	98.26	100.00 %	1	11	11 3.0%
5/06	1	24.0	113.91	100.00 %	0	0	0 3.0%
5/07	1	24.0	101.01	100.00 %	0	0	0 3.0%
5/08	1	24.0	97.20	100.00 %	1	21	21 4.2%
5/09	1	24.0	96.51	100.00 %	0	0	0 4.2%
5/10	1	24.0	99.92	100.00 %	2	33	33 6.0%
5/11	1	24.0	101.99	100.00 %	1	32	32 7.8%
5/12	1	24.0	99.25	100.00 %	1	11	11 8.4%
5/13	1	24.0	106.45	100.00 %	8	89	89 13.2%
5/14	1	24.0	94.45	100.00 %	8	89	89 18.1%
5/15	1	24.0	98.16	100.00 %	2	22	22 19.4%
5/16	1	24.0	97.25	100.00 %	0	0	0 19.4%
5/17	1	24.0	93.40	100.00 %	1	11	11 20.0%
5/18	1	24.0	85.12	100.00 %	1	31	31 21.7%
5/19	1	24.0	87.91	100.00 %	2	23	23 22.9%
5/20	1	24.0	96.55	100.00 %	2	22	22 24.1%
5/21	1	24.0	109.13	100.00 %	1	11	11 24.7%
5/22	1	24.0	122.80	100.00 %	1	11	11 25.3%
5/23	1	24.0	124.79	100.00 %	6	67	67 29.0%
5/24	1	24.0	107.06	100.00 %	3	33	33 30.8%
5/25	1	24.0	99.41	100.00 %	0	0	0 30.8%
5/26	1	24.0	100.33	100.00 %	4	133	133 38.2%
5/27	1	24.0	111.92	100.00 %	10	114	114 44.4%
5/28	1	24.0	138.74	93.09 %	8	89	96 49.7%
5/29	1	24.0	172.37	75.66 %	5	56	74 53.8%
5/30	1	24.0	196.67	56.84 %	11	122	215 65.6%
5/31	1	24.0	204.84	63.52 %	14	156	246 79.1%
6/01	1	24.0	209.49	61.23 %	0	0	0 79.1%
6/02	1	24.0	212.32	60.50 %	2	23	38 81.2%
6/03	1	24.0	209.37	61.76 %	1	11	18 82.2%

***** CONTINUED *****

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*****
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[illegible]

***** CONTINUED *****

6/04	1	24.0	204.74	62.71 %	0	0	0	82.2%
6/05	1	24.0	197.40	64.42 %	2	67	104	87.9%
6/06	1	24.0	187.47	68.32 %	0	0	0	87.9%
6/07	1	24.0	185.60	69.16 %	0	0	0	87.9%
6/08	1	24.0	167.58	76.31 %	0	0	0	87.9%
6/09	1	24.0	153.31	83.02 %	0	0	0	87.9%
6/10	1	24.0	146.36	87.64 %	0	0	0	87.9%
6/11	1	24.0	131.05	97.66 %	0	0	0	87.9%
6/12	1	24.0	111.90	100.00 %	0	0	0	87.9%
6/13	1	24.0	113.33	100.00 %	3	33	33	89.7%
6/14	1	24.0	114.55	100.00 %	3	33	33	91.5%
6/15	1	24.0	115.65	100.00 %	1	11	11	92.1%
6/16	1	24.0	97.31	100.00 %	1	11	11	92.7%
6/17	1	24.0	102.35	100.00 %	2	22	22	94.0%
6/18	1	24.0	99.35	100.00 %	4	44	44	96.4%
6/19	1	24.0	95.63	100.00 %	0	0	0	96.4%
6/20	1	24.0	87.30	100.00 %	0	0	0	96.4%
6/21	1	24.0	78.30	100.00 %	0	0	0	96.4%
6/22	1	24.0	73.47	100.00 %	3	33	33	98.2%
6/23	1	24.0	67.36	100.00 %	0	0	0	98.2%
6/24	1	24.0	66.31	100.00 %	0	0	0	98.2%
6/25	1	24.0	64.22	100.00 %	2	22	22	99.4%
6/26	1	24.0	58.34	100.00 %	1	11	11	100.0%
TOTAL					122	1,552	1,819	

(1) Sample parameters: SC = Sample quality code \$D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled

(2) River Flow: Data acquired from Corps data site - LGR

(3) Index Flow: **** POWERHOUSE / (POWERHOUSE + SPILL) ****

(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

LOWER GRANITE

* * *

STEELHEAD

* * *

RD-T -2 STEELHEAD LOT ID # 86004-01

51,328 RELEASED AT: HELLS CANYON

FROM: 4/25/86 TO 4/29/86

AGENCY: IDFG

HATCHERY: NIAGARA SPRING

DATE	.. SAMPLE (1) ..	PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER	NUMBER	... PASSAGE	INDEX ...
1986	SC-ID-GW-URS		FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
4/30	1	24.0	89.24	100.00 %	7	73	73	1.4%
5/01	1	24.0	85.25	100.00 %	10	111	111	3.6%
5/02	1	24.0	89.43	100.00 %	13	144	144	6.4%
5/03	1	24.0	81.81	100.00 %	19	211	211	10.4%
5/04	1	24.0	80.85	100.00 %	24	800	800	25.9%
5/05	1	24.0	98.26	100.00 %	40	457	457	34.8%
5/06	1	24.0	113.91	100.00 %	39	495	495	44.4%
5/07	1	24.0	101.01	100.00 %	16	267	267	49.5%
5/08	1	24.0	97.20	100.00 %	10	205	205	53.5%
5/09	1	24.0	96.51	100.00 %	16	284	284	59.0%
5/10	1	24.0	99.92	100.00 %	12	200	200	62.9%
5/11	1	24.0	101.99	100.00 %	9	290	290	68.5%
5/12	1	24.0	99.25	100.00 %	14	160	160	71.6%
5/13	1	24.0	106.45	100.00 %	11	122	122	73.9%
5/14	1	24.0	94.45	100.00 %	13	144	144	76.7%
5/15	1	24.0	98.16	100.00 %	13	144	144	79.5%
5/16	1	24.0	97.25	100.00 %	6	67	67	80.8%
5/17	1	24.0	93.40	100.00 %	7	78	78	82.3%
5/18	1	24.0	85.12	100.00 %	4	123	123	84.7%
5/19	1	24.0	87.91	100.00 %	8	91	91	86.5%
5/20	1	24.0	96.55	100.00 %	9	100	100	88.4%
5/21	1	24.0	109.13	100.00 %	2	22	22	88.8%
5/22	1	24.0	122.80	100.00 %	2	22	22	89.3%
5/23	1	24.0	124.79	100.00 %	8	89	89	91.0%
5/24	1	24.0	107.06	100.00 %	4	44	44	91.8%
5/25	1	24.0	99.41	100.00 %	0	0	0	91.8%
5/26	1	24.0	100.33	100.00 %	0	0	0	91.8%
5/27	1	24.0	111.92	100.00 %	1	11	11	92.0%
5/28	1	24.0	138.74	93.09 %	0	0	0	92.0%
5/29	1	24.0	172.37	75.66 %	0	0	0	92.0%
5/30	1	24.0	196.67	56.84 %	4	44	77	93.5%
5/31	1	24.0	204.84	63.52 %	5	56	88	95.2%
6/01	1	24.0	209.49	61.23 %	0	0	0	95.2%
6/02	1	24.0	212.32	60.50 %	2	23	38	96.0%

***** CONTINUED *****

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SAMPLE (1)		(2)	(3)				(4)
DATE	.. PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE	INDEX ...
1986	SC--#D--GW--HR.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE

***** CONTINUED *****

TOTAL	336	5,033	5,145
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24

B. Lower Monumental Dam

Contractor: National Marine Fisheries Service

Project Leader: Richard Johnsen (503-739-2303)

Location: Snake River, River Mile 41.6, 365.6 miles to mouth of Columbia River.

Monitoring Dates: March 25 - August 23, 1986

Sampling Method: Fish were sampled with a gatewell dipnet fished in the bulkhead gate slots of Unit 3 (gatewells A, B, and C). Complete cleanout of the gatewells were not possible and thus the counts are relative. Additional information on the sampling procedures at Lower Monumental Dam is presented in the NMFS annual report (Johnsen and Wood, 1986).

Analysis of Data: Data from Lower Monumental were used for for in-season management, travel time, and migration characteristics. The flow proportion used to expand collection counts to a passage index was estimated as follows:

$$\text{Unit 3 flow} / \text{River flow}$$

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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L. MONUMENTAL

* * *

CHINOOK 1'S

* * *

LD-Y -1 SP CHINOOK LOT ID # 86013-01

44,692 RELEASED AT: RAPID RIVER

FROM: 4/04/86 TO 4/07/86

AGENCY: IDFG

HATCHERY: RAPID RIVER H

DATE	SAMPLE (1) .. PARAMETERS ..				(2) RIVER	(3) INDEX	NUMBER	NUMBER	...	PASSAGE	INDEX	...
1986	SC	#D	GW	HR.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE		
4/10	1	3	24.0		94.80	21.48 %	1	1	5	0.9%		
4/11	1	3	24.0		105.50	18.40 %	0	0	0	0.9%		
4/12	1	3	24.0		106.70	18.55 %	1	1	5	1.8%		
4/13	8	0	0.0		101.90	14.10 %	— *	— *	— *	1.8%		
4/14	8	0	0.0		96.60	13.80 %	— *	— *	— *	1.8%		
4/15	13	3	3	61.0	98.10	16.92 %	3 *	3 *	18 *	5.2%		
4/16	1	3	24.0		94.30	18.53 %	0	0	0	5.2%		
4/17	1	3	24.0		87.90	20.69 %	0	0	0	5.2%		
4/18	1	3	24.0		90.50	21.02 %	0	0	0	5.2%		
4/19	1	3	24.0		90.70	20.40 %	4	4	20	8.9%		
4/20	8	0	0.0		83.70	21.97 %	— *	— *	— *	8.9%		
4/21	8	0	0.0		92.10	21.05 %	— *	— *	— *	8.9%		
4/22	13	3	3	67.0	90.90	21.22 %	12 *	12 *	57 *	19.4%		
4/23	1	3	24.0		79.40	22.24 %	2	2	9	21.0%		
4/24	1	3	24.0		105.00	17.70 %	3	3	17	24.2%		
4/25	1	3	24.0		116.40	17.33 %	11	11	63	35.8%		
4/26	1	3	24.0		111.40	16.76 %	5	5	30	41.3%		
4/27	8	0	0.0		103.00	16.98 %	— *	— *	— *	41.3%		
4/28	8	0	0.0		94.70	18.05 %	— *	— *	— *	41.3%		
4/29	13	3	3	71.0	97.30	18.29 %	27 *	27 *	148 *	68.6%		
4/30	1	3	24.0		96.60	16.75 %	3	3	18	72.0%		
5/01	1	3	24.0		87.20	21.57 %	3	3	14	74.5%		
5/02	1	3	24.0		89.50	19.44 %	5	5	26	79.3%		
5/03	1	3	24.0		87.40	21.26 %	4	4	19	82.8%		
5/04	8	0	0.0		83.80	20.50 %	— *	— *	— *	82.8%		
5/05	8	0	0.0		90.60	21.31 %	— *	— *	— *	82.8%		
5/06	13	3	3	68.0	92.30	20.59 %	9 *	9 *	44 *	91.0%		
5/07	1	3	24.0		116.40	17.88 %	5	5	28	96.1%		
5/08	1	3	24.0		103.40	18.95 %	1	1	5	97.0%		
5/09	1	3	24.0		100.10	19.10 %	0	0	0	97.0%		
5/10	7	3	20.0		89.20	19.59 %	0 *	0 *	0 *	97.0%		
5/11	8	0	0.0		105.40	17.64 %	— *	— *	— *	97.0%		
5/12	8	0	0.0		95.60	17.77 %	— *	— *	— *	97.0%		
5/13	13	3	3	54.0	103.10	17.92 %	1 *	1 *	6 *	98.2%		
5/14	1	3	24.0		101.50	17.23 %	0	0	0	98.2%		
5/15	1	3	24.0		89.90	19.53 %	1	1	5	99.1%		

***** CONTINUED *****


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* System at (503) 230-4290. *
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LD-Y -1 SP CHINOOK LOT ID # 86013-01 44,692 RELEASED AT: RAPID RIVER FROM: 4/04/86 TO 4/07/86
AGENCY: IDFG HATCHERY: RAPID RIVER H

[illegible]

***** CONTINUED *****

5/16	1	3	20.0	94.40	17.34 %	0	0	0	99.1%
5/17	1	3	20.0	97.40	19.40 %	1	1	5	100.0%
TOTAL						102	102	542	

27

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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L. MONUMENTAL

* * *

CHINOOK 1'S

* * *

LD-Y -3 SP CHINOOK LOT ID # 86014-01

44,754 RELEASED AT: HELLS CANYON
AGENCY: IDFG

FROM: 3/26/86 TO 3/27/86
HATCHERY: RAPID RIVER H

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE	
1986	SC	TD	GW	HR.S	FLOW					
4/11	1		3	24.0	105.50	18.40 %	2	2	11	3.0%
4/12	1		3	24.0	106.70	18.55 %	0	0	0	3.0%
4/13	8		0	0.0	101.90	14.10 %	— *	— *	— *	3.0%
4/14	8		0	0.0	96.60	13.80 %	— *	— *	— *	3.0%
4/15	13	3	3	61.0	98.10	16.92 %	5 *	5 *	30 *	11.1%
4/16	1		3	24.0	94.30	18.53 %	7	7	38	21.4%
4/17	1		3	24.0	87.90	20.69 %	3	3	14	25.1%
4/18	1		3	24.0	90.50	21.02 %	4	4	19	30.3%
4/19	1		3	24.0	90.70	20.40 %	2	2	10	33.0%
4/20	8		0	0.0	83.70	21.97 %	— *	— *	— *	33.0%
4/21	8		0	0.0	92.10	21.05 %	— *	— *	— *	33.0%
4/22	13	3	3	67.0	90.90	21.22 %	7 *	7 *	33 *	41.9%
4/23	1		3	24.0	79.40	22.24 %	3	3	13	45.4%
4/24	1		3	24.0	105.00	17.70 %	7	7	40	56.2%
4/25	1		3	24.0	116.40	17.33 %	2	2	12	59.5%
4/26	1		3	24.0	111.40	16.76 %	3	3	18	64.3%
4/27	8		0	0.0	103.00	16.98 %	— *	— *	— *	64.3%
4/28	8		0	0.0	94.70	18.05 %	— *	— *	— *	64.3%
4/29	13	3	3	71.0	97.30	18.29 %	5 *	5 *	27 *	71.6%
4/30	1		3	24.0	96.60	16.75 %	6	6	36	81.4%
5/01	1		3	24.0	87.20	21.57 %	2	2	9	83.8%
5/02	1		3	24.0	89.50	19.44 %	2	2	10	86.5%
5/03	1		3	24.0	87.40	21.26 %	2	2	9	88.9%
5/04	8		0	0.0	83.80	20.50 %	— *	— *	— *	88.9%
5/05	8		0	0.0	90.60	21.31 %	— *	— *	— *	88.9%
5/06	13	3	3	68.0	92.30	20.59 %	5 *	5 *	24 *	95.4%
5/07	1		3	24.0	116.40	17.88 %	1	1	6	97.0%
5/08	1		3	24.0	103.40	18.95 %	1	1	5	98.4%
5/09	1		3	24.0	100.10	19.10 %	0	0	0	98.4%
5/10	7		3	20.0	89.20	19.59 %	0 *	0 *	0 *	98.4%
5/11	8		0	0.0	105.40	17.64 %	— *	— *	— *	98.4%
5/12	8		0	0.0	95.60	17.77 %	— *	— *	— *	98.4%
5/13	13	3	3	54.0	103.10	17.92 %	0 *	0 *	0 *	98.4%
5/14	1		3	24.0	101.50	17.23 %	0	0	0	98.4%
5/15	1		3	24.0	89.90	19.53 %	0	0	0	98.4%
5/16	1		3	20.0	94.40	17.34 %	1	1	6	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

L. MONUMENTAL * * * CHINOOK 1'S * * *

LD-Y -3 SP CHINOOK LOT ID # 86014-01 44,754 RELEASED AT: HELLS CANYON FROM: 3/26/86 TO 3/27/86
AGENCY: IDFG HATCHERY: RAPID RIVER H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS					

* * * * * C O N T I N U E D * * * * *

TOTAL				70	70	370
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
- (2) River Flow: Data acquired from CATCH DATA
- (3) Index Flow: *** FLOW THROUGH SAMPLED UNIT/ (POWERHOUSE + SPILL) ***
- (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
1) Sample deviates from "normal" conditions (i.e. SC code) 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

L. MONUMENTAL

* * *

CHINOOK 1'S

* * *

RA-Y -2 SP CHINOOK LOT ID # 86108-01

40,675

RELEASED AT: N F CLEARWATER

FROM: 4/02/86 TO 4/03/86

AGENCY: USFWS

HATCHERY: DWORSHAK NFH

DATE	.. SAMPLE (1) ..	PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER	NUMBER	... PASSAGE	INDEX ...
1986	SC-ID-GW-URS		FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
4/16	1	3 24.0	94.30	18.53 %	1	1	5	0.9%
4/17	1	3 24.0	87.90	20.69 %	0	0	0	0.9%
4/18	1	3 24.0	90.50	21.02 %	1	1	5	1.8%
4/19	1	3 24.0	90.70	20.40 %	0	0	0	1.8%
4/20	8	0 0.0	83.70	21.97 %	— *	— *	— *	1.8%
4/21	8	0 0.0	92.10	21.05 %	— *	— *	— *	1.8%
4/22	13 3	3 67.0	90.90	21.22 %	3 *	3 *	14 *	4.4%
4/23	1	3 24.0	79.40	22.24 %	3	3	13	6.8%
4/24	1	3 24.0	105.00	17.70 %	3	3	17	9.9%
4/25	1	3 24.0	116.40	17.33 %	1	1	6	11.0%
4/26	1	3 24.0	111.40	16.76 %	5	5	30	16.5%
4/27	8	0 0.0	103.00	16.98 %	— *	— *	— *	16.5%
4/28	8	0 0.0	94.70	18.05 %	— *	— *	— *	16.5%
4/29	13 3	3 71.0	97.30	18.29 %	10 *	10 *	55 *	26.6%
4/30	1	3 24.0	96.60	16.75 %	1	1	6	27.7%
5/01	1	3 24.0	87.20	21.57 %	5	5	23	31.9%
5/02	1	3 24.0	89.50	19.44 %	9	9	46	40.3%
5/03	1	3 24.0	87.40	21.26 %	7	7	33	46.3%
5/04	8	0 0.0	83.80	20.50 %	— *	— *	— *	46.3%
5/05	8	0 0.0	90.60	21.31 %	— *	— *	— *	46.3%
5/06	13 3	3 68.0	92.30	20.59 %	20 *	20 *	97 *	64.1%
5/07	1	3 24.0	116.40	17.88 %	8	8	45	72.3%
5/08	1	3 24.0	103.40	18.95 %	4	4	21	76.2%
5/09	1	3 24.0	100.10	19.10 %	2	2	10	78.0%
5/10	7	3 20.0	89.20	19.59 %	2 *	2 *	10 *	79.9%
5/11	8	0 0.0	105.40	17.64 %	— *	— *	— *	79.9%
5/12	8	0 0.0	95.60	17.77 %	— *	— *	— *	79.9%
5/13	13 3	3 54.0	103.10	17.92 %	2 *	2 *	11 *	81.9%
5/14	1	3 24.0	101.50	17.23 %	0	0	0	81.9%
5/15	1	3 24.0	89.90	19.53 %	0	0	0	81.9%
5/16	1	3 20.0	94.40	17.34 %	3	3	17	85.0%
5/17	1	3 20.0	97.40	19.40 %	1	1	5	85.9%
5/18	8	0 0.0	90.50	18.46 %	— *	— *	— *	85.9%
5/19	8	0 0.0	86.80	18.68 %	— *	— *	— *	85.9%
5/20	13 3	3 51.0	91.90	19.04 %	4 *	4 *	21 *	89.7%
5/21	1	3 21.0	104.00	19.34 %	2	2	10	91.6%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

L. MONUMENTAL * * * CHINOOK 1'S * * *

RA-Y -2 SP CHINOOK LOT ID # 86108-01 40,675 RELEASED AT: N F CLEARWATER FROM: 4/02/86 TO 4/03/86
AGENCY: USFWS HATCHERY: DAWORSHAK NFH

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D	GW	HRS					

***** CONTINUED *****

5/22	1	3	20.0	114.50	18.05 %	2	2	11	93.6%
5/23	1	3	20.0	129.40	16.30 %	1	1	6	94.7%
5/24	1	3	24.0	122.20	15.45 %	2	2	13	97.1%
5/25	8	0	0.0	95.60	16.44 %	---	---	---	97.1%
5/26	8	0	0.0	91.70	15.53 %	---	---	---	97.1%
5/27	13	3	3 70.0	98.00	15.42 %	1 *	1 *	6 *	98.2%
5/28	1	3	20.0	126.90	16.84 %	0	0	0	98.2%
5/29	1	3	24.0	168.50	10.54 %	0	0	0	98.2%
5/30	1	3	24.0	186.70	10.52 %	0	0	0	98.2%
5/31	1	3	24.0	202.40	9.85 %	1	1	10	100.0%
TOTAL						104	104	546	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** FLOW THROUGH SAMPLED UNIT/ (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

L. MONUMENTAL

* * *

CHINOOK 1'S

* * *

RD-Y -1 SP CHINOOK LOT ID # B6017-01

35,851 RELEASED AT: SAWTOOTH H
AGENCY: IDFG

FROM: 3/17/86 TO 3/17/86
HATCHERY: SAWTOOTH H

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC	#D	GN	HR.S					
4/25	1	3	24.0	116.40	17.33 %	1	1	6	16.7%
4/26	1	3	24.0	111.40	16.76 %	0	0	0	16.7%
4/27	8	0	0.0	103.00	16.98 %	---	---	---	16.7%
4/28	8	0	0.0	94.70	18.05 %	---	---	---	16.7%
4/29	13	3	3 71.0	97.30	18.29 %	1 *	1 *	5 *	30.6%
4/30	1	3	24.0	96.60	16.75 %	0	0	0	30.6%
5/01	1	3	24.0	87.20	21.57 %	0	0	0	30.6%
5/02	1	3	24.0	89.50	19.44 %	0	0	0	30.6%
5/03	1	3	24.0	87.40	21.26 %	1	1	5	44.4%
5/04	8	0	0.0	83.80	20.50 %	---	---	---	44.4%
5/05	8	0	0.0	90.60	21.31 %	---	---	---	44.4%
5/06	13	3	3 68.0	92.30	20.59 %	1 *	1 *	5 *	58.3%
5/07	1	3	24.0	116.40	17.88 %	0	0	0	58.3%
5/08	1	3	24.0	103.40	18.95 %	1	1	5	72.2%
5/09	1	3	24.0	100.10	19.10 %	0	0	0	72.2%
5/10	7	3	20.0	89.20	19.59 %	0 *	0 *	0 *	72.2%
5/11	8	0	0.0	105.40	17.64 %	---	---	---	72.2%
5/12	8	0	0.0	95.60	17.77 %	---	---	---	72.2%
5/13	13	3	3 54.0	103.10	17.92 %	0 *	0 *	0 *	72.2%
5/14	1	3	24.0	101.50	17.23 %	0	0	0	72.2%
5/15	1	3	24.0	89.90	19.53 %	1	1	5	86.1%
5/16	1	3	20.0	94.40	17.34 %	0	0	0	86.1%
5/17	1	3	20.0	97.40	19.40 %	0	0	0	86.1%
5/18	8	0	0.0	90.50	18.46 %	---	---	---	86.1%
5/19	8	0	0.0	86.80	18.68 %	---	---	---	86.1%
5/20	13	3	3 51.0	91.90	19.04 %	1 *	1 *	5 *	100.0%
TOTAL						7	7	36	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GN = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** FLOW THROUGH SAMPLED UNIT/ (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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L. MONUMENTAL * * * CHINOOK 1'S * * *

RD-Y -3 SU CHINOOK LOT ID # 86018-01 43,487 RELEASED AT: S F SALMON R FROM: 3/24/86 TO 3/31/86
AGENCY: IDFG HATCHERY: MCCALL

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1)			(2)	(3)	NUMBER	NUMBER	... PASSAGE	INDEX	(4)
1986	SC	SD	GW	HR.S	RIVER	INDEX	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
					FLOW	FLOW				
4/25	1		3	24.0	116.40	17.33 %	1	1	6	3.2%
4/26	1		3	24.0	111.40	16.76 %	1	1	6	6.3%
4/27	8		0	0.0	103.00	16.98 %	— *	— *	— *	6.3%
4/28	8		0	0.0	94.70	18.05 %	— *	— *	— *	6.3%
4/29	13	3	3	71.0	97.30	18.29 %	1 *	1 *	5 *	9.0%
4/30	1		3	24.0	96.60	16.75 %	0	0	0	9.0%
5/01	1		3	24.0	87.20	21.57 %	3	3	14	16.4%
5/02	1		3	24.0	89.50	19.44 %	1	1	5	19.0%
5/03	1		3	24.0	87.40	21.26 %	4	4	19	29.1%
5/04	8		0	0.0	83.80	20.50 %	— *	— *	— *	29.1%
5/05	8		0	0.0	90.60	21.31 %	— *	— *	— *	29.1%
5/06	13	3	3	68.0	92.30	20.59 %	5 *	5 *	24 *	41.8%
5/07	1		3	24.0	116.40	17.88 %	3	3	17	50.8%
5/08	1		3	24.0	103.40	18.95 %	0	0	0	50.8%
5/09	1		3	24.0	100.10	19.10 %	2	2	10	56.1%
5/10	7		3	20.0	89.20	19.59 %	0 *	0 *	0 *	56.1%
5/11	8		0	0.0	105.40	17.64 %	— *	— *	— *	56.1%
5/12	8		0	0.0	95.60	17.77 %	— *	— *	— *	56.1%
5/13	13	3	3	54.0	103.10	17.92 %	2 *	2 *	11 *	61.9%
5/14	1		3	24.0	101.50	17.23 %	0	0	0	61.9%
5/15	1		3	24.0	89.90	19.53 %	2	2	10	67.2%
5/16	1		3	20.0	94.40	17.34 %	0	0	0	67.2%
5/17	1		3	20.0	97.40	19.40 %	0	0	0	67.2%
5/18	8		0	0.0	90.50	18.46 %	— *	— *	— *	67.2%
5/19	8		0	0.0	86.80	18.68 %	— *	— *	— *	67.2%
5/20	13	3	3	51.0	91.90	19.04 %	1 *	1 *	5 *	69.8%
5/21	1		3	21.0	104.00	19.34 %	2	2	10	75.1%
5/22	1		3	20.0	114.50	18.05 %	1	1	6	78.3%
5/23	1		3	20.0	129.40	16.30 %	0	0	0	78.3%
5/24	1		3	24.0	122.20	15.45 %	0	0	0	78.3%
5/25	8		0	0.0	95.60	16.44 %	— *	— *	— *	78.3%
5/26	8		0	0.0	91.70	15.53 %	— *	— *	— *	78.3%
5/27	13	3	3	70.0	98.00	15.42 %	0 *	0 *	0 *	78.3%
5/28	1		3	20.0	126.90	16.84 %	0	0	0	78.3%
5/29	1		3	24.0	168.50	10.54 %	0	0	0	78.3%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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L. MONUMENTAL * * * CHINOOK 1'S * * *

RD-Y -3 SU CHINOOK LOT ID # 86018-01 43,487 RELEASED AT: S F SALMON R FROM: 3/24/86 TO 3/31/86
AGENCY: IDFG HATCHERY: MCCALL

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1984	SC-SD-GW-HRS						

***** CONTINUED *****

5/30	1	3	24.0	186.70	10.52 %	0	0	0	78.3%	
5/31	1	3	24.0	202.40	9.85 %	3	3	30	94.2%	
6/01	8	0	0.0	212.10	8.84 %	---	*	---	94.2%	
6/02	8	0	0.0	207.80	6.08 %	---	*	---	94.2%	
6/03	13	3	3	55.0	208.00	7.61 %	0 *	0 *	94.2%	
6/04	1	3	3	24.0	205.40	10.64 %	0	0	94.2%	
6/05	1	3	3	24.0	200.10	10.84 %	0	0	94.2%	
6/06	1	3	3	24.0	189.60	12.00 %	0	0	94.2%	
6/07	1	3	3	24.0	177.80	12.75 %	1	1	8	98.4%
6/08	8	0	0.0	173.90	13.04 %	---	*	---	98.4%	
6/09	8	0	0.0	151.60	14.61 %	---	*	---	98.4%	
6/10	13	3	3	72.0	158.20	14.14 %	0 *	0 *	98.4%	
6/11	1	3	3	24.0	137.10	14.86 %	0	0	98.4%	
6/12	1	3	3	24.0	120.60	16.72 %	0	0	98.4%	
6/13	1	3	3	24.0	113.50	15.30 %	0	0	98.4%	
6/14	1	3	3	24.0	114.90	15.56 %	0	0	98.4%	
6/15	8	0	0.0	117.40	13.69 %	---	*	---	98.4%	
6/16	8	0	0.0	99.80	18.13 %	---	*	---	98.4%	
6/17	13	3	3	72.0	107.40	16.74 %	0 *	0 *	98.4%	
6/18	1	3	3	24.0	104.50	18.37 %	0	0	98.4%	
6/19	1	3	3	24.0	92.40	20.33 %	0	0	98.4%	
6/20	1	3	3	24.0	98.30	19.33 %	0	0	98.4%	
6/21	9	3	3	20.5	78.60	19.44 %	0 *	0 *	98.4%	
6/22	8	0	0.0	78.10	23.23 %	---	*	---	98.4%	
6/23	8	0	0.0	65.40	26.77 %	---	*	---	98.4%	
6/24	13	3	3	66.0	69.20	24.31 %	0 *	0 *	98.4%	
6/25	9	3	3	23.5	65.10	24.92 %	0 *	0 *	98.4%	
6/26	1	3	3	24.0	60.60	26.41 %	0	0	98.4%	
6/27	7	3	3	24.0	58.90	29.11 %	0 *	0 *	98.4%	
6/28	9	3	3	23.8	61.70	25.77 %	0 *	0 *	98.4%	
6/29	8	0	0.0	45.60	33.11 %	---	*	---	98.4%	
6/30	8	0	0.0	47.00	---	---	*	---	98.4%	
7/01	13	3	3	29.2	46.50	15.03 %	0 *	0 *	98.4%	
7/02	1	3	3	24.0	43.80	35.02 %	0	0	98.4%	

***** CONTINUED *****


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*****
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* System at (503) 230-4290. *
*****

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*** USING RELEASE DATA OF DIFFERENT AGE/RACE

SAMPLE (1)		(2)	(3)				(4)
DATE	.. PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE	INDEX ...
1984	SC-ID-GN-UB-S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE

* * * * * C O N T I N U E D * * * * *

7/03	1	3	24.0	36.20	37.36 %	0	0	0	98.4%
7/04	1	3	24.0	43.80	36.05 %	1	1	3	100.0%
TOTAL						34	34	189	

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(1) Sample parameters:  SC = Sample quality code          #D = Number of accumulated days for sample
                        GW = Number of gatewells sampled    Hrs= Number of hours sampled
(2) River Flow:        Data acquired from CATCH DATA
(3) Index Flow:        *** FLOW THROUGH SAMPLED UNIT/ (POWERHOUSE + SPILL) ***
(4) Passage Index:     Calculated as the (number collected) / (100 * percent index flow)
(*)                    Sample deviates from "normal" conditions (i.e. SC code > 1 )

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NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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L. MONUMENTAL

* * *

CHINOOK 1'S

* * *

RA-7K-1 FA CHINOOK LOT ID # 86154-01

40,168

RELEASED AT: LYONS FERRY

FROM: 4/02/86 TO 4/03/86

AGENCY: WDF

HATCHERY: LYONS FERRY

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..				(2) RIVER	(3) INDEX	NUMBER	NUMBER	... PASSAGE	(4) INDEX ...
1986	SC	JD	GW	HR.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
4/08	13	3	3	72.0	97.90	14.67 %	18 *	18 *	123 *	9.9%
4/09	1		3	24.0	94.90	20.59 %	5	5	24	11.8%
4/10	1		3	24.0	94.80	21.48 %	4	4	19	13.3%
4/11	1		3	24.0	105.50	18.40 %	6	6	33	15.9%
4/12	1		3	24.0	106.70	18.55 %	7	7	38	19.0%
4/13	8		0	0.0	101.90	14.10 %	— *	— *	— *	19.0%
4/14	8		0	0.0	96.60	13.80 %	— *	— *	— *	19.0%
4/15	13	3	3	61.0	98.10	16.92 %	50 *	50 *	296 *	42.7%
4/16	1		3	24.0	94.30	18.53 %	14	14	76	48.8%
4/17	1		3	24.0	87.90	20.69 %	7	7	34	51.5%
4/18	1		3	24.0	90.50	21.02 %	10	10	48	55.4%
4/19	1		3	24.0	90.70	20.40 %	11	11	54	59.7%
4/20	8		0	0.0	83.70	21.97 %	— *	— *	— *	59.7%
4/21	8		0	0.0	92.10	21.05 %	— *	— *	— *	59.7%
4/22	13	3	3	67.0	90.90	21.22 %	15 *	15 *	71 *	65.4%
4/23	1		3	24.0	79.40	22.24 %	13	13	58	70.0%
4/24	1		3	24.0	105.00	17.70 %	6	6	34	72.8%
4/25	1		3	24.0	116.40	17.33 %	25	25	144	84.3%
4/26	1		3	24.0	111.40	16.76 %	5	5	30	86.7%
4/27	8		0	0.0	103.00	16.98 %	— *	— *	— *	86.7%
4/28	8		0	0.0	94.70	18.05 %	— *	— *	— *	86.7%
4/29	13	3	3	71.0	97.30	18.29 %	16 *	16 *	87 *	93.7%
4/30	1		3	24.0	96.60	16.75 %	3	3	18	95.1%
5/01	1		3	24.0	87.20	21.57 %	0	0	0	95.1%
5/02	1		3	24.0	89.50	19.44 %	5	5	26	97.2%
5/03	1		3	24.0	87.40	21.26 %	3	3	14	98.3%
5/04	8		0	0.0	83.80	20.50 %	— *	— *	— *	98.3%
5/05	8		0	0.0	90.60	21.31 %	— *	— *	— *	98.3%
5/06	13	3	3	68.0	92.30	20.59 %	1 *	1 *	5 *	98.7%
5/07	1		3	24.0	116.40	17.88 %	0	0	0	98.7%
5/08	1		3	24.0	103.40	18.95 %	1	1	5	99.1%
5/09	1		3	24.0	100.10	19.10 %	0	0	0	99.1%
5/10	7		3	20.0	89.20	19.59 %	0 *	0 *	0 *	99.1%
5/11	8		0	0.0	105.40	17.64 %	— *	— *	— *	99.1%
5/12	8		0	0.0	95.60	17.77 %	— *	— *	— *	99.1%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

L. MONUMENTAL * * * CHINDOK 1'S * * *

RA-7K-1 FA CHINDOK LOT ID # 86154-01 40,168 RELEASED AT: LYONS FERRY FROM: 4/02/86 TO 4/03/86
AGENCY: WDF HATCHERY: LYONS FERRY

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	.. PARAMETERS ..	(1)	(2)	(3)	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-ID-GW-BRS	FLOW	FLOW					
***** CONTINUED *****								
5/13	13 3 3 54.0	103.10	17.92 %	0 *	0 *	0 *	99.1%	
5/14	1 3 24.0	101.50	17.23 %	1	1	6	99.6%	
5/15	1 3 24.0	89.90	19.53 %	0	0	0	99.6%	
5/16	1 3 20.0	94.40	17.34 %	0	0	0	99.6%	
5/17	1 3 20.0	97.40	19.40 %	1	1	5	100.0%	
TAL				227	227	1,248		

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** FLOW THROUGH SAMPLED UNIT/ (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(#) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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L. MONUMENTAL

* * *

CHINOOK O'S

* * *

RA-T -3 FA CHINOOK LOT ID # 86155-01

81,003 RELEASED AT: LYONS FERRY
AGENCY: WDF

FROM: 6/10/86 TO 6/10/86
HATCHERY: LYONS FERRY

DATE	.. SAMPLE (1) ..	(2)	(3)	NUMBER	NUMBER	... PASSAGE	INDEX ...
1986	SC-#D-GW-BB.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
6/12	1 3 24.0	120.60	16.72 %	1	1	6	0.2%
6/13	1 3 24.0	113.50	15.30 %	23	23	150	5.5%
6/14	1 3 24.0	114.90	15.56 %	6	6	39	6.8%
6/15	8 0 0.0	117.40	13.69 %	---	---	---	6.8%
6/16	8 0 0.0	99.80	18.13 %	---	---	---	6.8%
6/17	13 3 3 72.0	107.40	16.74 %	27 *	27 *	161 *	12.5%
6/18	1 3 24.0	104.50	18.37 %	10	10	54	14.4%
6/19	1 3 24.0	92.40	20.33 %	15	15	74	17.0%
6/20	1 3 24.0	98.30	19.33 %	14	14	72	19.5%
6/21	9 3 20.5	78.60	19.44 %	8 *	8 *	41 *	21.0%
6/22	8 0 0.0	78.10	23.23 %	---	---	---	21.0%
6/23	8 0 0.0	65.40	26.77 %	---	---	---	21.0%
6/24	13 3 3 66.0	69.20	24.31 %	62 *	62 *	255 *	29.9%
6/25	9 3 23.5	65.10	24.92 %	26 *	26 *	104 *	33.6%
6/26	1 3 24.0	60.60	26.41 %	23	23	87	36.6%
6/27	7 3 24.0	58.90	29.11 %	36 *	36 *	124 *	41.0%
6/28	9 3 23.8	61.70	25.77 %	82 *	82 *	318 *	52.2%
6/29	8 0 0.0	45.60	33.11 %	---	---	---	52.2%
6/30	8 0 0.0	47.00	---	---	---	---	52.2%
7/01	13 3 3 29.2	46.50	15.03 %	51 *	51 *	339 *	64.1%
7/02	1 3 24.0	43.80	35.02 %	26	26	74	66.7%
7/03	1 3 24.0	36.20	37.36 %	13	13	35	67.9%
7/04	1 3 24.0	43.80	36.05 %	12	12	33	69.1%
7/05	1 3 24.0	33.80	46.55 %	7	7	15	69.6%
7/06	8 0 0.0	44.30	30.75 %	---	---	---	69.6%
7/07	8 0 0.0	30.10	22.71 %	---	---	---	69.6%
7/08	13 3 3 48.0	39.40	27.95 %	48 *	48 *	172 *	75.6%
7/09	1 3 24.0	35.60	41.76 %	27	27	65	77.9%
7/10	1 3 24.0	35.00	43.77 %	15	15	34	79.1%
7/11	1 3 24.0	48.30	34.59 %	15	15	43	80.6%
7/12	1 3 24.0	37.40	42.01 %	7	7	17	81.2%
7/13	8 0 0.0	28.90	56.89 %	---	---	---	81.2%
7/14	8 0 0.0	25.70	2.81 %	---	---	---	81.2%
7/15	13 3 3 36.7	32.00	27.71 %	20 *	20 *	72 *	83.7%
7/16	1 3 24.0	37.90	38.24 %	8	8	21	84.5%
7/17	1 3 24.0	26.70	50.00 %	9	9	18	85.1%

***** CONTINUED *****

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FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

L. MONUMENTAL

* * *

CHINOOK O'S

* * *

RA-T -3 FA CHINOOK LOT ID # 86155-01

81,003

RELEASED AT: LYONS FERRY

FROM: 6/10/86 TO 6/10/86

AGENCY: WDF

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..				(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC	SD	GW	HR.S	FLOW	FLOW				

***** CONTINUED *****

7/18	9	3	23.2	25.60	57.37 %	24 *	24 *	42 *	86.6%
7/19	1	3	24.0	27.70	55.51 %	16	16	29	87.6%
7/20	8	0	0.0	27.50	54.65 %	— *	— *	— *	87.6%
7/21	8	0	0.0	22.00	4.19 %	— *	— *	— *	87.6%
7/22	13	3	43.0	28.40	32.14 %	19 *	19 *	59 *	89.7%
7/23	1	3	24.0	28.50	50.90 %	5	5	10	90.0%
7/24	1	3	24.0	18.90	63.44 %	2	2	3	90.1%
7/25	1	3	24.0	24.70	60.74 %	16	16	26	91.0%
7/26	1	3	24.0	24.20	55.04 %	7	7	13	91.5%
7/27	8	0	0.0	22.20	56.48 %	— *	— *	— *	91.5%
7/28	8	0	0.0	13.00	—	— *	— *	— *	91.5%
7/29	13	3	40.9	19.20	40.86 %	7 *	7 *	17 *	92.1%
7/30	1	3	24.0	23.80	56.22 %	8	8	14	92.6%
7/31	1	3	24.0	27.90	53.09 %	17	17	32	93.7%
8/01	1	3	24.0	25.50	61.54 %	4	4	6	93.9%
8/02	1	3	24.0	31.30	51.79 %	8	8	15	94.5%
8/03	8	0	0.0	18.80	73.18 %	— *	— *	— *	94.5%
8/04	8	0	0.0	20.40	60.00 %	— *	— *	— *	94.5%
8/05	13	3	71.6	20.10	64.95 %	15 *	15 *	23 *	95.3%
8/06	1	3	24.0	22.00	77.78 %	15	15	19	95.9%
8/07	1	3	24.0	18.00	96.55 %	6	6	6	96.1%
8/08	1	3	24.0	19.70	75.39 %	6	6	8	96.4%
8/09	1	3	24.0	24.10	58.12 %	14	14	24	97.3%
8/10	8	0	0.0	16.10	100.00 %	— *	— *	— *	97.3%
8/11	8	0	0.0	13.50	100.00 %	— *	— *	— *	97.3%
8/12	13	3	72.0	17.00	83.33 %	27 *	27 *	32 *	98.4%
8/13	9	3	18.2	23.70	43.16 %	6 *	6 *	14 *	98.9%
8/14	1	3	24.0	18.60	83.43 %	6	6	7	99.1%
8/15	1	3	24.0	28.30	54.15 %	3	3	6	99.3%
8/16	1	3	24.0	19.20	91.49 %	1	1	1	99.4%
8/17	8	0	0.0	16.70	100.00 %	— *	— *	— *	99.4%
8/18	8	0	0.0	13.40	100.00 %	— *	— *	— *	99.4%
8/19	13	3	70.0	16.20	96.13 %	2 *	2 *	2 *	99.4%
7/20	1	3	24.0	22.10	58.53 %	1	1	2	99.5%
8/21	1	3	24.0	24.30	56.30 %	1	1	2	99.6%
8/22	1	3	24.0	17.50	86.47 %	4	4	5	99.8%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

L. MONUMENTAL

* * *

CHINOOK O'S

* * *

RA-T -3 FA CHINOOK LOT ID # 86155-01 81,003 RELEASED AT: LYONS FERRY FROM: 6/10/86 TO 6/10/86
AGENCY: WDF HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW			

* * * * * C O N T I N U E D * * * * *

8/23	1	3 24.0	25.50	59.27 %	4	4	7	100.0%
------	---	--------	-------	---------	---	---	---	--------

TOTAL				835	835	2,847
-------	--	--	--	-----	-----	-------

- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** FLOW THROUGH SAMPLED UNIT/ (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
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L. MONUMENTAL

* * *

STEELHEAD

* * *

LD-T -2 STEELHEAD LOT ID # 86101-01

52,300

RELEASED AT: SAWTOOTH M

FROM: 4/08/86 TO 4/10/86

AGENCY: USFWS

HATCHERY: HAGERMAN NFH

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	TD	GW	HR.S					
5/30	1	3	24.0	186.70	10.52 %	1	1	10	37.0%
5/31	1	3	24.0	202.40	9.85 %	0	0	0	37.0%
6/01	8	0	0.0	212.10	8.84 %	— *	— *	— *	37.0%
6/02	8	0	0.0	207.80	6.08 %	— *	— *	— *	37.0%
6/03	13	3	3	55.0	7.61 %	0 *	0 *	0 *	37.0%
6/04	1	3	24.0	205.40	10.64 %	0	0	0	37.0%
6/05	1	3	24.0	200.10	10.84 %	0	0	0	37.0%
6/06	1	3	24.0	189.60	12.00 %	0	0	0	37.0%
6/07	1	3	24.0	177.80	12.75 %	1	1	8	66.7%
6/08	8	0	0.0	173.90	13.04 %	— *	— *	— *	66.7%
6/09	8	0	0.0	151.60	14.61 %	— *	— *	— *	66.7%
6/10	13	3	3	72.0	14.14 %	1 *	1 *	7 *	92.6%
6/11	1	3	24.0	137.10	14.86 %	0	0	0	92.6%
6/12	1	3	24.0	120.60	16.72 %	0	0	0	92.6%
6/13	1	3	24.0	113.50	15.30 %	0	0	0	92.6%
6/14	1	3	24.0	114.90	15.56 %	0	0	0	92.6%
6/15	8	0	0.0	117.40	13.69 %	— *	— *	— *	92.6%
6/16	8	0	0.0	99.80	18.13 %	— *	— *	— *	92.6%
6/17	13	3	3	72.0	16.74 %	0 *	0 *	0 *	92.6%
6/18	1	3	24.0	104.50	18.37 %	0	0	0	92.6%
6/19	1	3	24.0	92.40	20.33 %	0	0	0	92.6%
6/20	1	3	24.0	98.30	19.33 %	0	0	0	92.6%
6/21	9	3	20.5	78.60	19.44 %	0 *	0 *	0 *	92.6%
6/22	8	0	0.0	78.10	23.23 %	— *	— *	— *	92.6%
6/23	8	0	0.0	65.40	26.77 %	— *	— *	— *	92.6%
6/24	13	3	3	66.0	24.31 %	0 *	0 *	0 *	92.6%
6/25	9	3	23.5	65.10	24.92 %	0 *	0 *	0 *	92.6%
6/26	1	3	24.0	60.60	26.41 %	0	0	0	92.6%
6/27	7	3	24.0	58.90	29.11 %	0 *	0 *	0 *	92.6%
6/28	9	3	23.8	61.70	25.77 %	0 *	0 *	0 *	92.6%
6/29	8	0	0.0	45.60	33.11 %	— *	— *	— *	92.6%
6/30	8	0	0.0	47.00	—	— *	— *	— *	92.6%
7/01	13	3	3	29.2	15.03 %	0 *	0 *	0 *	92.6%
7/02	1	3	24.0	43.80	35.02 %	0	0	0	92.6%
7/03	1	3	24.0	36.20	37.36 %	0	0	0	92.6%

***** CONTINUED *****

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L. MONUMENTAL * * * STEELHEAD * * *

LD-T -2 STEELHEAD LOT ID # 86101-01 52,300 RELEASED AT: SAWTOOTH H FROM: 4/08/86 TO 4/10/86
AGENCY: USFWS HATCHERY: HAGERMAN NFH

DATE	SAMPLE (1)			(2)	(3)	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
	SC	#D	GW	HR.S	RIVER FLOW				
1986									

* * * * * C O N T I N U E D * * * * *

7/04	1	3	24.0	43.80	36.05 %	0	0	0	92.6%
7/05	1	3	24.0	33.80	46.55 %	0	0	0	92.6%
7/06	8	0	0.0	44.30	30.75 %	---	*	---	92.6%
7/07	8	0	0.0	30.10	22.71 %	---	*	---	92.6%
7/08	13	3	3 48.0	39.40	27.95 %	0 *	0 *	0 *	92.6%
7/09	1	3	24.0	35.60	41.76 %	0	0	0	92.6%
7/10	1	3	24.0	35.00	43.77 %	0	0	0	92.6%
7/11	1	3	24.0	48.30	34.59 %	0	0	0	92.6%
7/12	1	3	24.0	37.40	42.01 %	1	1	2	100.0%
TOTAL						4	4	27	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** FLOW THROUGH SAMPLED UNIT/ (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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* System at (503) 230-4290. *

L. MONUMENTAL

* * *

STEELHEAD

* * *

LD-T -4 STEELHEAD LOT ID # 86103-01

51,325 RELEASED AT: E F SALMON R
AGENCY: USFWS

FROM: 4/07/86 TO 4/09/86
HATCHERY: HAGERMAN NFH

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D	GW	HR.S					
5/31	1	3	24.0	202.40	9.85 %	1	1	10	31.3X
6/01	8	0	0.0	212.10	8.84 %	— *	— *	— *	31.3X
6/02	8	0	0.0	207.80	6.08 %	— *	— *	— *	31.3X
6/03	13	3	3 55.0	208.00	7.61 %	0 *	0 *	0 *	31.3X
6/04	1	3	24.0	205.40	10.64 %	0	0	0	31.3X
6/05	1	3	24.0	200.10	10.84 %	0	0	0	31.3X
6/06	1	3	24.0	189.60	12.00 %	0	0	0	31.3X
6/07	1	3	24.0	177.80	12.75 %	1	1	8	56.3X
6/08	8	0	0.0	173.90	13.04 %	— *	— *	— *	56.3X
6/09	8	0	0.0	151.60	14.61 %	— *	— *	— *	56.3X
6/10	13	3	3 72.0	158.20	14.14 %	2 *	2 *	14 *	100.0X
TOTAL						4	4	32	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** FLOW THROUGH SAMPLED UNIT/ (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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L. MONUMENTAL

* * *

STEELHEAD

* * *

RD-T -2 STEELHEAD LOT ID # 86004-01

51,328 RELEASED AT: HELLS CANYON
AGENCY: IDFG

FROM: 4/25/86 TO 4/29/86
HATCHERY: NIAGARA SPRING

DATE	SAMPLE (1) .. PARAMETERS ..				(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC	#D	GW	HR.S						
5/06	13	3	3	68.0	92.30	20.59 %	3 *	3 *	15 *	26.3%
5/07	1		3	24.0	116.40	17.88 %	1	1	6	36.8%
5/08	1		3	24.0	103.40	18.95 %	0	0	0	36.8%
5/09	1		3	24.0	100.10	19.10 %	1	1	5	45.6%
5/10	7		3	20.0	89.20	19.59 %	0 *	0 *	0 *	45.6%
5/11	8		0	0.0	105.40	17.64 %	— *	— *	— *	45.6%
5/12	8		0	0.0	95.60	17.77 %	— *	— *	— *	45.6%
5/13	13	3	3	54.0	103.10	17.92 %	1 *	1 *	6 *	56.1%
5/14	1		3	24.0	101.50	17.23 %	0	0	0	56.1%
5/15	1		3	24.0	89.90	19.53 %	0	0	0	56.1%
5/16	1		3	20.0	94.40	17.34 %	0	0	0	56.1%
5/17	1		3	20.0	97.40	19.40 %	0	0	0	56.1%
5/18	8		0	0.0	90.50	18.46 %	— *	— *	— *	56.1%
5/19	8		0	0.0	86.80	18.68 %	— *	— *	— *	56.1%
5/20	13	3	3	51.0	91.90	19.04 %	0 *	0 *	0 *	56.1%
5/21	1		3	21.0	104.00	19.34 %	0	0	0	56.1%
5/22	1		3	20.0	114.50	18.05 %	0	0	0	56.1%
5/23	1		3	20.0	129.40	16.30 %	0	0	0	56.1%
5/24	1		3	24.0	122.20	15.45 %	0	0	0	56.1%
5/25	8		0	0.0	95.60	16.44 %	— *	— *	— *	56.1%
5/26	8		0	0.0	91.70	15.53 %	— *	— *	— *	56.1%
5/27	13	3	3	70.0	98.00	15.42 %	0 *	0 *	0 *	56.1%
5/28	1		3	20.0	126.90	16.84 %	0	0	0	56.1%
5/29	1		3	24.0	168.50	10.54 %	0	0	0	56.1%
5/30	1		3	24.0	186.70	10.52 %	0	0	0	56.1%
5/31	1		3	24.0	202.40	9.85 %	0	0	0	56.1%
6/01	8		0	0.0	212.10	8.84 %	— *	— *	— *	56.1%
6/02	8		0	0.0	207.80	6.08 %	— *	— *	— *	56.1%
6/03	13	3	3	55.0	208.00	7.61 %	0 *	0 *	0 *	56.1%
6/04	1		3	24.0	205.40	10.64 %	0	0	0	56.1%
6/05	1		3	24.0	200.10	10.84 %	0	0	0	56.1%
6/06	1		3	24.0	189.60	12.00 %	3	3	25	100.0%

***** CONTINUED *****

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*****
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# System at (503) 230-4290.
*****

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SAMPLE (1)		(2)	(3)	(4)		
DATE	PARAMETERS	RIVER	INDEX	NUMBER	NUMBER	PASSAGE INDEX
				SAMPLED	COLLECTED	DAILY COUNT CUMULATIVE
1986	SC-SD-GW-UB.S	ELGW	ELGW			

***** CONTINUED *****

TOTAL 9 9 57

45

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

L. MONUMENTAL

* * *

STEELHEAD

* * *

RA-7F-1 SU STEELHEAD LOT ID # 86215-01

20,035

RELEASED AT: BELOW LGS DAM

FROM: 4/21/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D	GW	HR.S					
4/24	1	3	24.0	105.00	17.70 %	120	120	678	19.3%
4/25	1	3	24.0	116.40	17.33 %	127	127	733	40.3%
4/26	1	3	24.0	111.40	16.76 %	54	54	322	49.5%
4/27	8	0	0.0	103.00	16.98 %	---	---	---	49.5%
4/28	8	0	0.0	94.70	18.05 %	---	---	---	49.5%
4/29	13	3	3 71.0	97.30	18.29 %	109 *	109 *	596 *	66.5%
4/30	1	3	24.0	96.60	16.75 %	38	38	227	72.9%
5/01	1	3	24.0	87.20	21.57 %	22	22	102	75.9%
5/02	1	3	24.0	89.50	19.44 %	21	21	108	78.9%
5/03	1	3	24.0	87.40	21.26 %	10	10	47	80.3%
5/04	8	0	0.0	83.80	20.50 %	---	---	---	80.3%
5/05	8	0	0.0	90.60	21.31 %	---	---	---	80.3%
5/06	13	3	3 68.0	92.30	20.59 %	15 *	15 *	73 *	82.4%
5/07	1	3	24.0	116.40	17.88 %	11	11	62	84.1%
5/08	1	3	24.0	103.40	18.95 %	7	7	37	85.2%
5/09	1	3	24.0	100.10	19.10 %	6	6	31	86.1%
5/10	7	3	20.0	89.20	19.59 %	6 *	6 *	31 *	87.0%
5/11	8	0	0.0	105.40	17.64 %	---	---	---	87.0%
5/12	8	0	0.0	95.60	17.77 %	---	---	---	87.0%
5/13	13	3	3 54.0	103.10	17.92 %	16 *	16 *	89 *	89.5%
5/14	1	3	24.0	101.50	17.23 %	8	8	46	90.8%
5/15	1	3	24.0	89.90	19.53 %	6	6	31	91.7%
5/16	1	3	20.0	94.40	17.34 %	9	9	52	93.2%
5/17	1	3	20.0	97.40	19.40 %	3	3	15	93.6%
5/18	8	0	0.0	90.50	18.46 %	---	---	---	93.6%
5/19	8	0	0.0	86.80	18.68 %	---	---	---	93.6%
5/20	13	3	3 51.0	91.90	19.04 %	8 *	8 *	42 *	94.8%
5/21	1	3	21.0	104.00	19.34 %	5	5	26	95.5%
5/22	1	3	20.0	114.50	18.05 %	7	7	39	96.7%
5/23	1	3	20.0	129.40	16.30 %	4	4	25	97.4%
5/24	1	3	24.0	122.20	15.45 %	0	0	0	97.4%
5/25	8	0	0.0	95.60	16.44 %	---	---	---	97.4%
5/26	8	0	0.0	91.70	15.53 %	---	---	---	97.4%
5/27	13	3	3 70.0	98.00	15.42 %	6 *	6 *	39 *	98.5%
5/28	1	3	20.0	126.90	16.84 %	0	0	0	98.5%
5/29	1	3	24.0	168.50	10.54 %	2	2	19	99.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

L. MONUMENTAL

* * *

STEELHEAD

* * *

RA-7F-1 SU STEELHEAD LOT ID # 86215-01

20,035

RELEASED AT: BELOW LGS DAM

FROM: 4/21/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..				(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...
1986	SC	WD	GW	HR.S	FLOW	FLOW			DAILY COUNT CUMULATIVE

***** CONTINUED *****

5/30	1	3	24.0	186.70	10.52 %	0	0	0	99.0%
5/31	1	3	24.0	202.40	9.85 %	1	1	10	99.3%
6/01	8	0	0.0	212.10	8.84 %	— *	— *	— *	99.3%
6/02	8	0	0.0	207.80	6.08 %	— *	— *	— *	99.3%
6/03	13	3	55.0	208.00	7.61 %	0 *	0 *	0 *	99.3%
6/04	1	3	24.0	205.40	10.64 %	1	1	9	99.6%
6/05	1	3	24.0	200.10	10.84 %	0	0	0	99.6%
6/06	1	3	24.0	189.60	12.00 %	0	0	0	99.6%
6/07	1	3	24.0	177.80	12.75 %	0	0	0	99.6%
6/08	8	0	0.0	173.90	13.04 %	— *	— *	— *	99.6%
6/09	8	0	0.0	151.60	14.61 %	— *	— *	— *	99.6%
6/10	13	3	72.0	158.20	14.14 %	1 *	1 *	7 *	99.8%
6/11	1	3	24.0	137.10	14.86 %	0	0	0	99.8%
6/12	1	3	24.0	120.60	16.72 %	0	0	0	99.8%
6/13	1	3	24.0	113.50	15.30 %	0	0	0	99.8%
6/14	1	3	24.0	114.90	15.56 %	0	0	0	99.8%
6/15	8	0	0.0	117.40	13.69 %	— *	— *	— *	99.8%
6/16	8	0	0.0	99.80	18.13 %	— *	— *	— *	99.8%
6/17	13	3	72.0	107.40	16.74 %	0 *	0 *	0 *	99.8%
6/18	1	3	24.0	104.50	18.37 %	0	0	0	99.8%
6/19	1	3	24.0	92.40	20.33 %	0	0	0	99.8%
6/20	1	3	24.0	98.30	19.33 %	0	0	0	99.8%
6/21	9	3	20.5	78.60	19.44 %	0 *	0 *	0 *	99.8%
6/22	8	0	0.0	78.10	23.23 %	— *	— *	— *	99.8%
6/23	8	0	0.0	65.40	26.77 %	— *	— *	— *	99.8%
6/24	13	3	66.0	69.20	24.31 %	0 *	0 *	0 *	99.8%
6/25	9	3	23.5	65.10	24.92 %	0 *	0 *	0 *	99.8%
6/26	1	3	24.0	60.60	26.41 %	0	0	0	99.8%
6/27	7	3	24.0	58.90	29.11 %	0 *	0 *	0 *	99.8%
6/28	9	3	23.8	61.70	25.77 %	0 *	0 *	0 *	99.8%
6/29	8	0	0.0	45.60	33.11 %	— *	— *	— *	99.8%
6/30	8	0	0.0	47.00	—	— *	— *	— *	99.8%
7/01	13	3	29.2	46.50	15.03 %	0 *	0 *	0 *	99.8%
7/02	1	3	24.0	43.80	35.02 %	0	0	0	99.8%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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L. MONUMENTAL

* * *

STEELHEAD

* * *

RA-7F-1 SU STEELHEAD LOT ID # 86215-01

20,035

RELEASED AT: BELOW LGS DAM

FROM: 4/21/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-D-GW-HR.S	FLOW	FLOW				

***** CONTINUED *****

7/03	1	3	24.0	36.20	37.36 %	0	0	0	99.8%
7/04	1	3	24.0	43.80	36.05 %	0	0	0	99.8%
7/05	1	3	24.0	33.80	46.55 %	0	0	0	99.8%
7/06	8	0	0.0	44.30	30.75 %	---	---	---	99.8%
7/07	8	0	0.0	30.10	22.71 %	---	---	---	99.8%
7/08	13	3	3	48.0	39.40	27.95 %	0 *	0 *	99.8%
7/09	1	3	24.0	35.60	41.76 %	0	0	0	99.8%
7/10	1	3	24.0	35.00	43.77 %	0	0	0	99.8%
7/11	1	3	24.0	48.30	34.59 %	0	0	0	99.8%
7/12	1	3	24.0	37.40	42.01 %	0	0	0	99.8%
7/13	8	0	0.0	28.90	56.89 %	---	---	---	99.8%
7/14	8	0	0.0	25.70	2.81 %	---	---	---	99.8%
7/15	13	3	3	36.7	32.00	27.71 %	0 *	0 *	99.8%
7/16	1	3	24.0	37.90	38.24 %	0	0	0	99.8%
7/17	1	3	24.0	26.70	50.00 %	0	0	0	99.8%
7/18	9	3	23.2	25.60	57.37 %	0 *	0 *	0 *	99.8%
7/19	1	3	24.0	27.70	55.51 %	0	0	0	99.8%
7/20	8	0	0.0	27.50	54.65 %	---	---	---	99.8%
7/21	8	0	0.0	22.00	4.19 %	---	---	---	99.8%
7/22	13	3	3	43.0	28.40	32.14 %	0 *	0 *	99.8%
7/23	1	3	24.0	28.50	50.90 %	0	0	0	99.8%
7/24	1	3	24.0	18.90	63.44 %	0	0	0	99.8%
7/25	1	3	24.0	24.70	60.74 %	0	0	0	99.8%
7/26	1	3	24.0	24.20	55.04 %	0	0	0	99.8%
7/27	8	0	0.0	22.20	56.48 %	---	---	---	99.8%
7/28	8	0	0.0	13.00	---	---	---	---	99.8%
7/29	13	3	3	40.9	19.20	40.86 %	0 *	0 *	99.8%
7/30	1	3	24.0	23.80	56.22 %	0	0	0	99.8%
7/31	1	3	24.0	27.90	53.09 %	1	1	2	99.8%
8/01	1	3	24.0	25.50	61.54 %	0	0	0	99.8%
8/02	1	3	24.0	31.30	51.79 %	1	1	2	99.9%
8/03	8	0	0.0	18.80	73.18 %	---	---	---	99.9%
8/04	8	0	0.0	20.40	60.00 %	---	---	---	99.9%
7/05	13	3	3	71.6	20.10	64.95 %	0 *	0 *	99.9%

***** CONTINUED *****

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20.035

RELEASED AT: BELOW LGS DAM

FROM: 4/21/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

[illegible]

***** CONTINUED *****

8/06	1	3	24.0	22.00	77.78 %	0	0	0	99.9%
8/07	1	3	24.0	18.00	96.55 %	0	0	0	99.9%
8/08	1	3	24.0	19.70	75.39 %	0	0	0	99.9%
8/09	1	3	24.0	24.10	58.12 %	0	0	0	99.9%
8/10	8	0	0.0	16.10	100.00 %	— *	— *	— *	99.9%
8/11	8	0	0.0	13.50	100.00 %	— *	— *	— *	99.9%
8/12	13	3	3	72.0	17.00	83.33 %	1 *	1 *	99.9%
8/13	9	3	18.2	23.70	43.16 %	0 *	0 *	0 *	99.9%
8/14	1	3	24.0	18.60	83.43 %	0	0	0	99.9%
8/15	1	3	24.0	28.30	54.15 %	0	0	0	99.9%
8/16	1	3	24.0	19.20	91.49 %	0	0	0	99.9%
8/17	8	0	0.0	16.70	100.00 %	— *	— *	— *	99.9%
8/18	8	0	0.0	13.40	100.00 %	— *	— *	— *	99.9%
8/19	13	3	3	70.0	16.20	96.13 %	1 *	1 *	99.9%
8/20	1	3	24.0	22.10	58.53 %	0	0	0	99.9%
8/21	1	3	24.0	24.30	56.30 %	1	1	2	100.0%

TOTAL	628	628	3,504
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49

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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L. MONUMENTAL

* * *

STEELHEAD

* * *

RA-7F-3 SU STEELHEAD LOT ID # 86215-02

20,063

RELEASED AT: BELOW LGS DAM

FROM: 4/25/86 TO 4/25/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..				(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX CUMULATIVE
1986	SC	TD	GW	HR.S						
4/29	13	3	3	71.0	97.30	18.29 %	233 *	233 *	1,274 *	40.4%
4/30	1		3	24.0	96.60	16.75 %	90	90	537	57.4%
5/01	1		3	24.0	87.20	21.57 %	50	50	232	64.7%
5/02	1		3	24.0	89.50	19.44 %	53	53	273	73.4%
5/03	1		3	24.0	87.40	21.26 %	30	30	141	77.8%
5/04	8		0	0.0	83.80	20.50 %	— *	— *	— *	77.8%
5/05	8		0	0.0	90.60	21.31 %	— *	— *	— *	77.8%
5/06	13	3	3	68.0	92.30	20.59 %	25 *	25 *	121 *	81.7%
5/07	1		3	24.0	116.40	17.88 %	8	8	45	83.1%
5/08	1		3	24.0	103.40	18.95 %	4	4	21	83.8%
5/09	1		3	24.0	100.10	19.10 %	7	7	37	84.9%
5/10	7		3	20.0	89.20	19.59 %	2 *	2 *	10 *	85.2%
5/11	8		0	0.0	105.40	17.64 %	— *	— *	— *	85.2%
5/12	8		0	0.0	95.60	17.77 %	— *	— *	— *	85.2%
5/13	13	3	3	54.0	103.10	17.92 %	8 *	8 *	45 *	86.7%
5/14	1		3	24.0	101.50	17.23 %	8	8	46	88.1%
5/15	1		3	24.0	89.90	19.53 %	9	9	46	89.6%
5/16	1		3	20.0	94.40	17.34 %	9	9	52	91.2%
5/17	1		3	20.0	97.40	19.40 %	5	5	26	92.0%
5/18	8		0	0.0	90.50	18.46 %	— *	— *	— *	92.0%
5/19	8		0	0.0	86.80	18.68 %	— *	— *	— *	92.0%
5/20	13	3	3	51.0	91.90	19.04 %	12 *	12 *	63 *	94.0%
5/21	1		3	21.0	104.00	19.34 %	3	3	16	94.6%
5/22	1		3	20.0	114.50	18.05 %	3	3	17	95.1%
5/23	1		3	20.0	129.40	16.30 %	3	3	18	95.7%
5/24	1		3	24.0	122.20	15.45 %	5	5	32	96.7%
5/25	8		0	0.0	95.60	16.44 %	— *	— *	— *	96.7%
5/26	8		0	0.0	91.70	15.53 %	— *	— *	— *	96.7%
5/27	13	3	3	70.0	98.00	15.42 %	10 *	10 *	65 *	98.7%
5/28	1		3	20.0	126.90	16.84 %	2	2	12	99.1%
5/29	1		3	24.0	168.50	9.54 %	0	0	0	99.1%
5/30	1		3	24.0	186.70	9.52 %	0	0	0	99.1%
5/31	1		3	24.0	202.40	9.85 %	1	1	10	99.4%
6/01	8		0	0.0	212.10	8.84 %	— *	— *	— *	99.4%
6/02	8		0	0.0	207.80	6.08 %	— *	— *	— *	99.4%

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NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

L. MONUMENTAL

* * *

STEELHEAD

* * *

RA-7F-3 SU STEELHEAD LOT ID # 86215-02

20,063

RELEASED AT: BELOW LGS DAM

FROM: 4/25/86 TO 4/25/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1)			(2)	(3)		NUMBER	NUMBER	... PASSAGE	INDEX	(4)
1986	SC--ED--GW--HR.S			FLOW	INDEX	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE	...

***** CONTINUED *****

6/03	13	3	3	55.0	208.00	7.61 %	0 *	0 *	0 *	99.4%
6/04	1		3	24.0	205.40	10.64 %	0	0	0	99.4%
6/05	1		3	24.0	200.10	10.84 %	0	0	0	99.4%
6/06	1		3	24.0	189.60	12.00 %	0	0	0	99.4%
6/07	1		3	24.0	177.80	12.75 %	0	0	0	99.4%
6/08	8		0	0.0	173.90	13.04 %	---	---	---	99.4%
6/09	8		0	0.0	151.60	14.61 %	---	---	---	99.4%
6/10	13	3	3	72.0	158.20	14.14 %	0 *	0 *	0 *	99.4%
6/11	1		3	24.0	137.10	14.86 %	0	0	0	99.4%
6/12	1		3	24.0	120.60	16.72 %	0	0	0	99.4%
6/13	1		3	24.0	113.50	15.30 %	0	0	0	99.4%
6/14	1		3	24.0	114.90	15.56 %	0	0	0	99.4%
6/15	8		0	0.0	117.40	13.69 %	---	---	---	99.4%
6/16	8		0	0.0	99.80	18.13 %	---	---	---	99.4%
6/17	13	3	3	72.0	107.40	16.74 %	2 *	2 *	12 *	99.8%
6/18	1		3	24.0	104.50	18.37 %	0	0	0	99.8%
6/19	1		3	24.0	92.40	20.33 %	0	0	0	99.8%
6/20	1		3	24.0	98.30	19.33 %	0	0	0	99.8%
6/21	9		3	20.5	78.60	19.44 %	0 *	0 *	0 *	99.8%
6/22	8		0	0.0	78.10	23.23 %	---	---	---	99.8%
6/23	8		0	0.0	65.40	26.77 %	---	---	---	99.8%
6/24	13	3	3	66.0	69.20	24.31 %	1 *	1 *	4 *	99.9%
6/25	9		3	23.5	65.10	24.92 %	0 *	0 *	0 *	99.9%
6/26	1		3	24.0	60.60	26.41 %	0	0	0	99.9%
6/27	7		3	24.0	58.90	29.11 %	0 *	0 *	0 *	99.9%
6/28	9		3	23.8	61.70	25.77 %	0 *	0 *	0 *	99.9%
6/29	8		0	0.0	45.60	33.11 %	---	---	---	99.9%
6/30	8		0	0.0	47.00	---	---	---	---	99.9%
7/01	13	3	3	29.2	46.50	15.03 %	0 *	0 *	0 *	99.9%
7/02	1		3	24.0	43.80	35.02 %	0	0	0	99.9%
7/03	1		3	24.0	36.20	37.36 %	0	0	0	99.9%
7/04	1		3	24.0	43.80	36.05 %	0	0	0	99.9%
7/05	1		3	24.0	33.80	46.55 %	0	0	0	99.9%
7/06	8		0	0.0	44.30	30.75 %	---	---	---	99.9%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

L. MONUMENTAL

* * *

STEELHEAD

* * *

RA-7F-3 SU STEELHEAD LOT ID # 86215-02

20,063

RELEASED AT: BELOW LGS DAM

FROM: 4/25/86 TO 4/25/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..				(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT	(4) CUMULATIVE
1986	SC	GD	GW	HR.S						

***** CONTINUED *****

7/07	8	0	0.0	30.10	22.71 %	— *	— *	— *	99.9%
7/08	13	3	3 48.0	39.40	27.95 %	0 *	0 *	0 *	99.9%
7/09	1	3	24.0	35.60	41.76 %	0	0	0	99.9%
7/10	1	3	24.0	35.00	43.77 %	0	0	0	99.9%
7/11	1	3	24.0	48.30	34.59 %	0	0	0	99.9%
7/12	1	3	24.0	37.40	42.01 %	0	0	0	99.9%
7/13	8	0	0.0	28.90	56.89 %	— *	— *	— *	99.9%
7/14	8	0	0.0	25.70	2.81 %	— *	— *	— *	99.9%
7/15	13	3	3 36.7	32.00	27.71 %	0 *	0 *	0 *	99.9%
7/16	1	3	24.0	37.90	38.24 %	0	0	0	99.9%
7/17	1	3	24.0	26.70	50.00 %	0	0	0	99.9%
7/18	9	3	23.2	25.60	57.37 %	0 *	0 *	0 *	99.9%
7/19	1	3	24.0	27.70	55.51 %	0	0	0	99.9%
7/20	8	0	0.0	27.50	54.65 %	— *	— *	— *	99.9%
7/21	8	0	0.0	22.00	4.19 %	— *	— *	— *	99.9%
7/22	13	3	3 43.0	28.40	32.14 %	0 *	0 *	0 *	99.9%
7/23	1	3	24.0	28.50	50.90 %	0	0	0	99.9%
7/24	1	3	24.0	18.90	63.44 %	0	0	0	99.9%
7/25	1	3	24.0	24.70	60.74 %	0	0	0	99.9%
7/26	1	3	24.0	24.20	55.04 %	0	0	0	99.9%
7/27	8	0	0.0	22.20	56.48 %	— *	— *	— *	99.9%
7/28	8	0	0.0	13.00	—	— *	— *	— *	99.9%
7/29	13	3	3 40.9	19.20	40.86 %	0 *	0 *	0 *	99.9%
7/30	1	3	24.0	23.80	56.22 %	0	0	0	99.9%
7/31	1	3	24.0	27.90	53.09 %	0	0	0	99.9%
8/01	1	3	24.0	25.50	61.54 %	0	0	0	99.9%
8/02	1	3	24.0	31.30	51.79 %	1	1	2	100.0%

***** CONTINUED *****

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* System at (503) 230-4290.

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	SAMPLE	(1)	(2)	(3)			(4)
DATE ..	PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE INDEX ...	
1986	SC-1D-GW-HR.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE

***** CONTINUED *****

101A	584	584	3.157
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53

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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L. MONUMENTAL

* * *

STEELHEAD

* * *

RD-7F-1 SU STEELHEAD LOT ID # 86215-03

20,069

RELEASED AT: BELOW LGS DAM

FROM: 4/29/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC	ID	GW	HR.S					
5/01	1	3	24.0	87.20	21.57 %	46	46	213	7.4%
5/02	1	3	24.0	89.50	19.44 %	145	145	746	33.4%
5/03	1	3	24.0	87.40	21.26 %	122	122	574	53.3%
5/04	8	0	0.0	83.80	20.50 %	---	---	---	53.3%
5/05	8	0	0.0	90.60	21.31 %	---	---	---	53.3%
5/06	13	3	3	68.0	20.59 %	80 *	80 *	389 *	66.7%
5/07	1	3	24.0	116.40	17.88 %	54	54	302	77.4%
5/08	1	3	24.0	103.40	18.95 %	26	26	137	82.1%
5/09	1	3	24.0	100.10	19.10 %	11	11	58	84.1%
5/10	7	3	20.0	89.20	19.59 %	13 *	13 *	66 *	86.4%
5/11	8	0	0.0	105.40	17.64 %	---	---	---	86.4%
5/12	8	0	0.0	95.60	17.77 %	---	---	---	86.4%
5/13	13	3	3	54.0	17.92 %	10 *	10 *	56 *	88.4%
5/14	1	3	24.0	101.50	17.23 %	9	9	52	90.2%
5/15	1	3	24.0	89.90	19.53 %	10	10	51	92.0%
5/16	1	3	20.0	94.40	17.34 %	2	2	12	92.4%
5/17	1	3	20.0	97.40	19.40 %	2	2	10	92.7%
5/18	8	0	0.0	90.50	18.46 %	---	---	---	92.7%
5/19	8	0	0.0	86.80	18.68 %	---	---	---	92.7%
5/20	13	3	3	51.0	17.04 %	11 *	11 *	58 *	94.7%
5/21	1	3	21.0	104.00	19.34 %	8	8	41	96.2%
5/22	1	3	20.0	114.50	18.05 %	2	2	11	96.6%
5/23	1	3	20.0	129.40	16.30 %	1	1	6	96.8%
5/24	1	3	24.0	122.20	15.45 %	5	5	32	97.9%
5/25	8	0	0.0	95.60	16.44 %	---	---	---	97.9%
5/26	8	0	0.0	91.70	15.53 %	---	---	---	97.9%
5/27	13	3	3	70.0	15.42 %	3 *	3 *	19 *	98.5%
5/28	1	3	20.0	126.90	16.84 %	2	2	12	99.0%
5/29	1	3	24.0	168.50	10.54 %	0	0	0	99.0%
5/30	1	3	24.0	186.70	10.52 %	0	0	0	99.0%
5/31	1	3	24.0	202.40	9.85 %	0	0	0	99.0%
6/01	8	0	0.0	212.10	8.84 %	---	---	---	99.0%
6/02	8	0	0.0	207.80	6.08 %	---	---	---	99.0%
6/03	13	3	3	55.0	7.61 %	0 *	0 *	0 *	99.0%
6/04	1	3	24.0	205.40	10.64 %	0	0	0	99.0%
6/05	1	3	24.0	200.10	10.84 %	1	1	9	99.3%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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L. MONUMENTAL

* * *

STEELHEAD

* * *

RD-7F-1 SU STEELHEAD LOT ID # 86215-03

20,069

RELEASED AT: BELOW LGS DAM

FROM: 4/29/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX CUMULATIVE
1986	SC--#D--GW--HR.S						

***** CONTINUED *****

6/06	1	3	24.0	189.60	12.00 %	0	0	0	99.3%
6/07	1	3	24.0	177.80	12.75 %	0	0	0	99.3%
6/08	8	0	0.0	173.90	13.04 %	---	*	---	99.3%
6/09	8	0	0.0	151.60	14.61 %	---	*	---	99.3%
6/10	13	3	3	72.0	158.20	14.14 %	0 *	0 *	99.3%
6/11	1	3	24.0	137.10	14.86 %	0	0	0	99.3%
6/12	1	3	24.0	120.60	16.72 %	1	1	6	99.5%
6/13	1	3	24.0	113.50	15.30 %	0	0	0	99.5%
6/14	1	3	24.0	114.90	15.56 %	0	0	0	99.5%
6/15	8	0	0.0	117.40	13.69 %	---	*	---	99.5%
6/16	8	0	0.0	99.80	18.13 %	---	*	---	99.5%
6/17	13	3	3	72.0	107.40	16.74 %	1 *	1 *	99.7%
6/18	1	3	24.0	104.50	18.37 %	0	0	0	99.7%
6/19	1	3	24.0	92.40	20.33 %	0	0	0	99.7%
6/20	1	3	24.0	98.30	19.33 %	0	0	0	99.7%
6/21	9	3	20.5	78.60	19.44 %	0 *	0 *	0 *	99.7%
6/22	8	0	0.0	78.10	23.23 %	---	*	---	99.7%
6/23	8	0	0.0	65.40	26.77 %	---	*	---	99.7%
6/24	13	3	3	66.0	69.20	24.31 %	0 *	0 *	99.7%
6/25	9	3	23.5	65.10	24.92 %	0 *	0 *	0 *	99.7%
6/26	1	3	24.0	60.60	26.41 %	0	0	0	99.7%
6/27	7	3	24.0	58.90	29.11 %	0 *	0 *	0 *	99.7%
6/28	9	3	23.8	61.70	25.77 %	0 *	0 *	0 *	99.7%
6/29	8	0	0.0	45.60	33.11 %	---	*	---	99.7%
6/30	8	0	0.0	47.00	---	---	*	---	99.7%
7/01	13	3	3	29.2	46.50	15.03 %	0 *	0 *	99.7%
7/02	1	3	24.0	43.80	35.02 %	0	0	0	99.7%
7/03	1	3	24.0	36.20	37.36 %	0	0	0	99.7%
7/04	1	3	24.0	43.80	36.05 %	0	0	0	99.7%
7/05	1	3	24.0	33.80	46.55 %	0	0	0	99.7%
7/06	8	0	0.0	44.30	30.75 %	---	*	---	99.7%
7/07	8	0	0.0	30.10	22.71 %	---	*	---	99.7%
7/08	13	3	3	48.0	39.40	27.95 %	0 *	0 *	99.7%
7/09	1	3	24.0	35.60	41.76 %	0	0	0	99.7%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

L. MONUMENTAL

* * *

STEELHEAD

* * *

RD-7F-1 SU STEELHEAD LOT ID # 86215-03

20,069

RELEASED AT: BELOW LGS DAM

FROM: 4/29/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..				(2) RIVER	(3) INDEX	NUMBER	NUMBER	...	PASSAGE	INDEX	...
1986	SC	AD	GW	HR.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE		

***** CONTINUED *****

7/10	1	3	24.0	35.00	43.77 %	0	0	0	99.7%
7/11	1	3	24.0	48.30	34.59 %	0	0	0	99.7%
7/12	1	3	24.0	37.40	42.01 %	0	0	0	99.7%
7/13	8	0	0.0	28.90	56.89 %	— *	— *	— *	99.7%
7/14	8	0	0.0	25.70	2.81 %	— *	— *	— *	99.7%
7/15	13	3	36.7	32.00	27.71 %	0 *	0 *	0 *	99.7%
7/16	1	3	24.0	37.90	38.24 %	0	0	0	99.7%
7/17	1	3	24.0	26.70	50.00 %	0	0	0	99.7%
7/18	9	3	23.2	25.60	57.37 %	0 *	0 *	0 *	99.7%
7/19	1	3	24.0	27.70	55.51 %	0	0	0	99.7%
7/20	8	0	0.0	27.50	54.65 %	— *	— *	— *	99.7%
7/21	8	0	0.0	22.00	4.19 %	— *	— *	— *	99.7%
7/22	13	3	43.0	28.40	32.14 %	0 *	0 *	0 *	99.7%
7/23	1	3	24.0	28.50	50.90 %	0	0	0	99.7%
7/24	1	3	24.0	18.90	63.44 %	0	0	0	99.7%
7/25	1	3	24.0	24.70	60.74 %	0	0	0	99.7%
7/26	1	3	24.0	24.20	55.04 %	0	0	0	99.7%
7/27	8	0	0.0	22.20	56.48 %	— *	— *	— *	99.7%
7/28	8	0	0.0	13.00	—	— *	— *	— *	99.7%
7/29	13	3	40.9	19.20	40.86 %	0 *	0 *	0 *	99.7%
7/30	1	3	24.0	23.80	56.22 %	0	0	0	99.7%
7/31	1	3	24.0	27.90	53.09 %	0	0	0	99.7%
8/01	1	3	24.0	25.50	61.54 %	0	0	0	99.7%
8/02	1	3	24.0	31.30	51.79 %	0	0	0	99.7%
8/03	8	0	0.0	18.80	73.18 %	— *	— *	— *	99.7%
8/04	8	0	0.0	20.40	60.00 %	— *	— *	— *	99.7%
8/05	13	3	71.6	20.10	64.95 %	1 *	1 *	2 *	99.8%
8/06	1	3	24.0	22.00	77.78 %	0	0	0	99.8%
8/07	1	3	24.0	18.00	96.55 %	1	1	1	99.8%
8/08	1	3	24.0	19.70	75.39 %	0	0	0	99.8%
8/09	1	3	24.0	24.10	58.12 %	0	0	0	99.8%
8/10	8	0	0.0	16.10	100.00 %	— *	— *	— *	99.8%
8/11	8	0	0.0	13.50	100.00 %	— *	— *	— *	99.8%
8/12	13	3	72.0	17.00	83.33 %	2 *	2 *	2 *	99.9%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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L. MONUMENTAL * * * STEELHEAD * * *

RD-7F-1 SU STEELHEAD LOT ID # 86215-03 20,069 RELEASED AT: BELOW LGS DAM FROM: 4/29/86 TO 4/29/86
AGENCY: WDG HATCHERY: LYONS FERRY

DATE	.. PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE INDEX ...	(4)
1986	SC-#D-GW-HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
***** CONTINUED *****							
8/13	9 3 18.2	23.70	43.16 %	0 *	0 *	0 *	99.9%
8/14	1 3 24.0	18.60	83.43 %	0	0	0	99.9%
8/15	1 3 24.0	28.30	54.15 %	1	1	2	99.9%
8/16	1 3 24.0	19.20	91.49 %	0	0	0	99.9%
8/17	8 0 0.0	16.70	100.00 %	— *	— *	— *	99.9%
8/18	8 0 0.0	13.40	100.00 %	— *	— *	— *	99.9%
8/19	13 3 70.0	16.20	96.13 %	0 *	0 *	0 *	99.9%
8/20	1 3 24.0	22.10	58.53 %	1	1	2	100.0%
TOTAL				571	571	2,875	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** FLOW THROUGH SAMPLED UNIT/ (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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L. MONUMENTAL

* * *

STEELHEAD

* * *

RA-7N-1 SU STEELHEAD LOT ID # 86227-01

19,983

RELEASED AT: BELOW LGS DAM

FROM: 5/06/85 TO 5/06/85

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	.. PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE INDEX ...
1986	SC-ID-GW-HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT CUMULATIVE
3/25	10 3 24.0	84.70	22.04 %	1 *	1 *	5 * 45.5%
3/26	1 3 24.0	112.70	18.72 %	0	0	0 45.5%
3/27	1 3 24.0	102.40	20.18 %	0	0	0 45.5%
3/28	1 3 24.0	100.00	19.41 %	0	0	0 45.5%
3/29	1 3 24.0	108.70	15.60 %	0	0	0 45.5%
3/30	8 0 0.0	107.60	9.51 %	---	---	--- * 45.5%
3/31	8 0 0.0	109.10	6.16 %	---	---	--- * 45.5%
4/01	13 3 3 72.0	107.00	13.22 %	0 *	0 *	0 * 45.5%
4/02	1 3 24.0	102.80	17.51 %	0	0	0 45.5%
4/03	1 3 24.0	109.80	15.46 %	0	0	0 45.5%
4/04	1 3 24.0	113.70	16.53 %	0	0	0 45.5%
4/05	1 3 24.0	110.60	14.23 %	0	0	0 45.5%
4/06	8 0 0.0	95.20	15.07 %	---	---	--- * 45.5%
4/07	8 0 0.0	98.00	12.72 %	---	---	--- * 45.5%
4/08	13 3 3 72.0	97.90	14.67 %	0 *	0 *	0 * 45.5%
4/09	1 3 24.0	94.90	20.59 %	0	0	0 45.5%
4/10	1 3 24.0	94.80	21.48 %	0	0	0 45.5%
4/11	1 3 24.0	105.50	18.40 %	0	0	0 45.5%
4/12	1 3 24.0	106.70	18.55 %	0	0	0 45.5%
4/13	8 0 0.0	101.90	14.10 %	---	---	--- * 45.5%
4/14	8 0 0.0	96.60	13.80 %	---	---	--- * 45.5%
4/15	13 3 3 61.0	98.10	16.92 %	1 *	1 *	6 * 100.0%
TOTAL				2	2	11

(1) Sample parameters: SC = Sample quality code ID = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** FLOW THROUGH SAMPLED UNIT/ (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

C. Rock Island Dam

Contractor: Chelan County PUD

Project Leader: Steven Hays (509-663-8121)

Location: Columbia River, River Mile 453.4

Monitoring Dates: April 1 - August 31, 1986

Sampling Method: Fish were collected from the Rock Island second powerhouse with a gatewell bypass system and diverted into a trapping facility for determination of species and freeze brand composition. Fish were collected for a 24 hour period (0900-0900h); all trapped fish were examined for species composition and brands.

Analysis of Data: Data from Rock Island were used for management, assessment of survival, travel time, and migration characteristics. The flow proportion used to expand collection counts to a passage index was estimated as follows:

Powerhouse 2 flow / (Powerhouse 1 & 2 flow + Spill)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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ROCK ISLAND

* * *

CHINOOK 1'S

* * *

RA-7C-1 SP CHINOOK LOT ID # 86125-01

34,466 RELEASED AT: METHUEN R

FROM: 4/21/86 TO 4/21/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--ID--GW--HRS	FLOW	FLOW				
4/26	1	24.0	153.80	72.07 %	1	1	0.6%
4/27	1	23.0	125.70	77.59 %	0	0	0.6%
4/28	1	24.0	136.50	87.21 %	3	3	2.4%
4/29	1	24.0	154.90	80.61 %	3	3	4.7%
4/30	1	24.0	159.50	75.85 %	2	2	6.5%
5/01	1	24.0	146.20	73.02 %	2	2	8.3%
5/02	1	24.0	157.00	77.07 %	2	2	10.1%
5/03	1	24.0	135.30	82.20 %	2	2	11.2%
5/04	1	24.0	120.00	81.23 %	4	4	14.2%
5/05	1	24.0	108.00	86.24 %	0	0	14.2%
5/06	1	24.0	149.40	87.91 %	5	5	17.8%
5/07	1	24.0	134.70	84.41 %	9	9	24.3%
5/08	1	24.0	135.00	83.47 %	4	4	27.2%
5/09	1	24.0	128.30	87.49 %	5	5	30.8%
5/10	1	24.0	157.30	79.94 %	5	5	34.3%
5/11	1	24.0	134.80	78.50 %	4	4	37.3%
5/12	1	24.0	143.20	84.70 %	2	2	38.5%
5/13	1	24.0	150.70	82.69 %	5	5	42.0%
5/14	1	24.0	152.30	77.04 %	3	3	44.4%
5/15	1	24.0	155.90	74.45 %	5	5	48.5%
5/16	1	24.0	134.10	80.95 %	2	2	49.7%
5/17	1	24.0	146.70	83.91 %	3	3	52.1%
5/18	1	24.0	129.70	80.22 %	4	4	55.0%
5/19	1	24.0	122.10	87.26 %	2	2	56.2%
5/20	1	24.0	141.60	85.11 %	6	6	60.4%
5/21	1	24.0	144.00	80.88 %	4	4	63.3%
5/22	1	24.0	138.00	80.85 %	3	3	65.7%
5/23	1	24.0	122.40	81.01 %	4	4	68.6%
5/24	1	24.0	103.60	82.52 %	7	7	73.4%
5/25	1	24.0	103.70	86.30 %	1	1	74.0%
5/26	1	24.0	120.70	88.54 %	2	2	75.1%
5/27	1	24.0	116.80	86.23 %	5	5	78.7%
5/28	7	24.0	141.50	82.74 %	8 *	8 *	84.6%
5/29	1	24.0	153.60	84.26 %	5	5	88.2%
5/30	1	24.0	129.36	75.25 %	7	7	93.5%
5/31	1	24.0	128.40	61.05 %	3	3	96.4%

***** CONTINUED *****

210 6

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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ROCK ISLAND

* * *

CHINOOK 1'S

* * *

RA-7C-1 SP CHINOOK LOT ID # 86125-01 34,466 RELEASED AT: METHUEN R FROM: 4/21/86 TO 4/21/86
AGENCY: USFWS HATCHERY: WINTHROP NFH

DATE	.. PARAMETERS ..	(1) RIVER	(2) INDEX	(3) NUMBER	NUMBER	... PASSAGE	INDEX	(4)
1986	SC-#D-GW-HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE	

***** CONTINUED *****

6/01	1	24.0	154.30	65.42 %	2	2	3	98.2%
6/02	1	24.0	141.70	66.83 %	2	2	3	100.0%

TOTAL					136	136	169	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (PH 2) / (PH1 + PH2 + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code) 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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ROCK ISLAND

* * *

CHINOOK 1'S

* * *

RA-7C-3 SP CHINOOK LOT ID # 86125-02

34,485 RELEASED AT: METHOW R
AGENCY: USFWS

FROM: 4/25/86 TO 4/25/86
HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS .. SC--ED--GW--HR.S	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
4/29	1	24.0	154.90	80.61 %	2	2	2 1.5%
4/30	1	24.0	159.50	75.85 %	0	0	0 1.5%
5/01	1	24.0	146.20	73.02 %	0	0	0 1.5%
5/02	1	24.0	157.00	77.07 %	1	1	1 2.3%
5/03	1	24.0	135.30	82.20 %	1	1	1 3.0%
5/04	1	24.0	120.00	81.23 %	1	1	1 3.8%
5/05	1	24.0	108.00	86.24 %	2	2	2 5.3%
5/06	1	24.0	149.40	87.91 %	1	1	1 6.1%
5/07	1	24.0	134.70	84.41 %	9	9	11 14.4%
5/08	1	24.0	135.00	83.47 %	1	1	1 15.2%
5/09	1	24.0	128.30	87.49 %	3	3	3 17.4%
5/10	1	24.0	157.30	79.94 %	5	5	6 22.0%
5/11	1	24.0	134.80	78.50 %	2	2	3 24.2%
5/12	1	24.0	143.20	84.70 %	4	4	5 28.0%
5/13	1	24.0	150.70	82.69 %	5	5	6 32.6%
5/14	1	24.0	152.30	77.04 %	2	2	3 34.8%
5/15	1	24.0	155.90	74.45 %	1	1	1 35.6%
5/16	1	24.0	134.10	80.95 %	1	1	1 36.4%
5/17	1	24.0	146.70	83.91 %	1	1	1 37.1%
5/18	1	24.0	129.70	80.22 %	1	1	1 37.9%
5/19	1	24.0	122.10	87.26 %	2	2	2 39.4%
5/20	1	24.0	141.60	85.11 %	7	7	8 45.5%
5/21	1	24.0	144.00	80.88 %	2	2	2 47.0%
5/22	1	24.0	138.00	80.85 %	6	6	7 52.3%
5/23	1	24.0	122.40	81.01 %	6	6	7 57.6%
5/24	1	24.0	103.60	82.52 %	7	7	8 63.6%
5/25	1	24.0	103.70	86.30 %	1	1	1 64.4%
5/26	1	24.0	120.70	88.54 %	2	2	2 65.9%
5/27	1	24.0	116.80	86.23 %	4	4	5 69.7%
5/28	7	24.0	141.50	82.74 %	4 *	4 *	5 * 73.5%
5/29	1	24.0	153.60	84.26 %	10	10	12 82.6%
5/30	1	24.0	129.36	75.25 %	5	5	7 87.9%
5/31	1	24.0	128.40	61.05 %	4	4	7 93.2%
6/01	1	24.0	154.30	65.42 %	1	1	2 94.7%
6/02	1	24.0	141.70	66.83 %	3	3	4 97.7%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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ROCK ISLAND

* * *

CHINOOK 1'S

* * *

RA-7C-3 SP CHINOOK LOT ID # 86125-02

34,485 RELEASED AT: METHUEN R

FROM: 4/25/86 TO 4/25/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS						

***** CONTINUED *****

6/03	1	24.0	167.00	63.13 %	0	0	0	97.7%
6/04	1	24.0	163.70	43.81 %	0	0	0	97.7%
6/05	1	24.0	162.80	37.45 %	1	1	3	100.0%

TOTAL					108	108	132	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (PH 2) / (PH1 + PH2 + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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ROCK ISLAND

* * *

CHINOOK 1'S

* * *

LA-7T-1 SP CHINOOK LOT ID # 86122-01

40,602

RELEASED AT: LEAVENWORTH NFH

FROM: 4/23/86 TO 4/23/86

AGENCY: USFWS

HATCHERY: LEAVENWORTH NFH

DATE	SAMPLE (1) .. PARAMETERS .. SC--SD--GW--HR.S	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
4/25	1	24.0	164.00	68.67 %	8	8	12 3.8%
4/26	1	24.0	153.80	72.07 %	8	8	11 7.3%
4/27	1	23.0	125.70	77.59 %	8	8	10 10.5%
4/28	1	24.0	136.50	87.21 %	9	9	10 13.7%
4/29	1	24.0	154.90	80.61 %	8	8	10 16.9%
4/30	1	24.0	159.50	75.85 %	3	3	4 18.2%
5/01	1	24.0	146.20	73.02 %	8	8	11 21.7%
5/02	1	24.0	157.00	77.07 %	5	5	6 23.6%
5/03	1	24.0	135.30	82.20 %	4	4	5 25.2%
5/04	1	24.0	120.00	81.23 %	4	4	5 26.8%
5/05	1	24.0	108.00	86.24 %	6	6	7 29.1%
5/06	1	24.0	149.40	87.91 %	7	7	8 31.6%
5/07	1	24.0	134.70	84.41 %	20	20	24 39.3%
5/08	1	24.0	135.00	83.47 %	9	9	11 42.8%
5/09	1	24.0	128.30	87.49 %	10	10	11 46.3%
5/10	1	24.0	157.30	79.94 %	14	14	18 52.1%
5/11	1	24.0	134.80	78.50 %	19	19	24 59.7%
5/12	1	24.0	143.20	84.70 %	12	12	14 64.2%
5/13	1	24.0	150.70	82.69 %	7	7	8 66.8%
5/14	1	24.0	152.30	77.04 %	5	5	6 68.7%
5/15	1	24.0	155.90	74.45 %	9	9	12 72.5%
5/16	1	24.0	134.10	80.95 %	7	7	9 75.4%
5/17	1	24.0	146.70	83.91 %	2	2	2 76.0%
5/18	1	24.0	129.70	80.22 %	3	3	4 77.3%
5/19	1	24.0	122.10	87.26 %	1	1	1 77.6%
5/20	1	24.0	141.60	85.11 %	12	12	14 82.1%
5/21	1	24.0	144.00	80.88 %	6	6	7 84.3%
5/22	1	24.0	138.00	80.85 %	6	6	7 86.6%
5/23	1	24.0	122.40	81.01 %	5	5	6 88.5%
5/24	1	24.0	103.60	82.52 %	3	3	4 89.8%
5/25	1	24.0	103.70	86.30 %	4	4	5 91.4%
5/26	1	24.0	120.70	88.54 %	4	4	5 93.0%
5/27	1	24.0	116.80	86.23 %	6	6	7 95.2%
5/28	7	24.0	141.50	82.74 %	8 *	8 *	10 * 98.4%
5/29	1	24.0	153.60	84.26 %	1	1	1 98.7%
5/30	1	24.0	129.36	75.25 %	3	3	4 100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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ROCK ISLAND

* * *

CHINOOK 1'S

* * *

LA-7T-1 SP CHINOOK LOT ID # 86122-01 40,602 RELEASED AT: LEAVENWORTH NFH FROM: 4/23/86 TO 4/23/86
AGENCY: USFWS HATCHERY: LEAVENWORTH NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4) ... DAILY COUNT CUMULATIVE
1986	SC--#D--GW--HRS	FLOW	FLOW				

* * * * * C O N T I N U E D * * * * *

TOTAL				254	254		313
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (PH 2) / (PH1 + PH2 + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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ROCK ISLAND

* * *

CHINOOK 1'S

* * *

RA-7T-3 SP CHINOOK LOT ID # 86125-03

34,353 RELEASED AT: METHOW R
AGENCY: USFWS

FROM: 4/29/86 TO 4/29/86
HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-LR.S						
5/03	1	24.0	135.30	82.20 %	1	1	0.8%
5/04	1	24.0	120.00	81.23 %	2	2	2.3%
5/05	1	24.0	108.00	86.24 %	0	0	2.3%
5/06	1	24.0	149.40	87.91 %	3	3	4.5%
5/07	1	24.0	134.70	84.41 %	5	5	9.0%
5/08	1	24.0	135.00	83.47 %	3	3	12.0%
5/09	1	24.0	128.30	87.49 %	3	3	14.3%
5/10	1	24.0	157.30	79.94 %	5	5	18.8%
5/11	1	24.0	134.80	78.50 %	1	1	19.5%
5/12	1	24.0	143.20	84.70 %	5	5	24.1%
5/13	1	24.0	150.70	82.69 %	2	2	25.6%
5/14	1	24.0	152.30	77.04 %	5	5	30.1%
5/15	1	24.0	155.90	74.45 %	3	3	33.1%
5/16	1	24.0	134.10	80.95 %	2	2	34.6%
5/17	1	24.0	146.70	83.91 %	3	3	37.6%
5/18	1	24.0	129.70	80.22 %	3	3	40.6%
5/19	1	24.0	122.10	87.26 %	1	1	41.4%
5/20	1	24.0	141.60	85.11 %	6	6	46.6%
5/21	1	24.0	144.00	80.88 %	4	4	50.4%
5/22	1	24.0	138.00	80.85 %	8	8	57.9%
5/23	1	24.0	122.40	81.01 %	3	3	60.9%
5/24	1	24.0	103.60	82.52 %	4	4	64.7%
5/25	1	24.0	103.70	86.30 %	0	0	64.7%
5/26	1	24.0	120.70	88.54 %	3	3	66.9%
5/27	1	24.0	116.80	86.23 %	5	5	71.4%
5/28	7	24.0	141.50	82.74 %	4 *	4 *	75.2%
5/29	1	24.0	153.60	84.26 %	4	4	78.9%
5/30	1	24.0	129.36	75.25 %	9	9	88.0%
5/31	1	24.0	128.40	61.05 %	5	5	94.0%
6/01	1	24.0	154.30	65.42 %	4	4	98.5%
6/02	1	24.0	141.70	66.83 %	0	0	98.5%
6/03	1	24.0	167.00	63.13 %	1	1	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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ROCK ISLAND

* * *

CHINOOK 1'S

* * *

RA-7T-3 SP CHINOOK LOT ID # 86125-03 34,353 RELEASED AT: METHUEN R FROM: 4/29/86 TO 4/29/86
AGENCY: USFWS HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW				

***** C O N T I N U E D *****

TOTAL				107	107	133	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (PH 2) / (PH1 + PH2 + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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System at (503) 230-4290. #

ROCK ISLAND

* * *

CHINOOK O'S

* * *

RD-S -1 SU CHINOOK LOT ID # 86162-01 100,447 RELEASED AT: WELLS HATCHERY FROM: 5/29/86 TO 5/29/86
AGENCY: WDF HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--ID--GW--HR.S	FLOW	FLOW				
6/03	1	24.0	167.00	63.13 %	4	4	6 1.1X
6/04	1	24.0	163.70	43.81 %	14	14	32 7.2X
6/05	1	24.0	162.80	37.45 %	18	18	48 16.2X
6/06	1	24.0	157.20	35.35 %	17	17	48 25.2X
6/07	1	24.0	162.60	37.55 %	15	15	40 32.8X
6/08	1	24.0	163.70	38.06 %	10	10	26 37.7X
6/09	1	24.0	147.20	31.23 %	16	16	51 47.3X
6/10	1	24.0	150.80	36.64 %	12	12	33 53.5X
6/11	1	24.0	127.10	74.27 %	35	35	47 62.3X
6/12	1	24.0	146.30	67.74 %	12	12	18 65.7X
6/13	1	24.0	131.50	55.91 %	12	12	21 69.7X
6/14	1	24.0	139.70	57.24 %	1	1	2 70.1X
6/15	1	24.0	128.60	52.48 %	2	2	4 70.8X
6/16	1	24.0	133.80	57.18 %	2	2	3 71.4X
6/17	1	24.0	110.20	66.42 %	2	2	3 71.9X
6/18	1	24.0	117.80	70.52 %	0	0	0 71.9X
6/19	1	24.0	113.20	72.33 %	0	0	0 71.9X
6/20	1	24.0	111.80	79.64 %	0	0	0 71.9X
6/21	1	24.0	131.80	81.94 %	1	1	1 72.1X
6/22	1	24.0	109.70	97.79 %	0	0	0 72.1X
6/23	1	24.0	110.70	87.93 %	0	0	0 72.1X
6/24	1	24.0	121.40	85.22 %	1	1	1 72.3X
6/25	1	24.0	119.50	84.66 %	0	0	0 72.3X
6/26	1	24.0	109.70	93.47 %	3	3	3 72.9X
6/27	1	24.0	106.20	93.84 %	5	5	5 73.8X
6/28	1	24.0	117.90	87.32 %	0	0	0 73.8X
6/29	1	24.0	109.20	89.50 %	0	0	0 73.8X
6/30	1	24.0	90.70	99.44 %	2	2	2 74.2X
7/01	1	24.0	106.30	90.60 %	2	2	2 74.6X
7/02	1	24.0	87.10	92.80 %	0	0	0 74.6X
7/03	1	24.0	92.50	93.77 %	0	0	0 74.6X
7/04	1	24.0	83.00	95.24 %	0	0	0 74.6X
7/05	1	24.0	50.90	99.00 %	0	0	0 74.6X
7/06	1	24.0	49.10	98.96 %	0	0	0 74.6X
7/07	1	24.0	45.00	98.86 %	2	2	2 75.0X

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

ROCK ISLAND

* * *

CHINOOK O'S

* * *

RD-S -1 SU CHINOOK LOT ID # 86162-01 100,447 RELEASED AT: WELLS HATCHERY FROM: 5/29/86 TO 5/29/86
AGENCY: WDF HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW			

***** CONTINUED *****

7/08	1	24.0	78.60	99.36 %	0	0	0	75.0%
7/09	1	24.0	97.50	98.86 %	4	4	4	75.7%
7/10	1	24.0	115.00	94.47 %	26	26	28	81.0%
7/11	1	24.0	132.90	80.80 %	24	24	30	86.6%
7/12	1	24.0	135.20	76.38 %	17	17	22	90.8%
7/13	1	24.0	122.80	85.88 %	4	4	5	91.7%
7/14	1	24.0	103.40	94.43 %	1	1	1	91.9%
7/15	1	24.0	130.70	79.18 %	0	0	0	91.9%
7/16	1	24.0	141.20	75.82 %	2	2	3	92.5%
7/17	1	24.0	150.10	72.64 %	1	1	1	92.7%
7/18	1	24.0	149.00	72.09 %	1	1	1	92.8%
7/19	1	24.0	153.50	72.64 %	4	4	6	94.0%
7/20	1	24.0	133.90	67.42 %	2	2	3	94.5%
7/21	1	24.0	130.10	82.66 %	7	7	8	96.0%
7/22	1	24.0	150.90	68.76 %	4	4	6	97.2%
7/23	1	24.0	145.40	71.88 %	2	2	3	97.7%
7/24	1	24.0	138.30	76.09 %	6	6	8	99.2%
7/25	1	24.0	134.60	71.05 %	0	0	0	99.2%
7/26	1	24.0	146.70	79.55 %	2	2	3	99.8%
7/27	1	24.0	143.80	76.17 %	0	0	0	99.8%
7/28	1	24.0	111.50	83.26 %	1	1	1	100.0%

TOTAL					296	296	531	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateweils sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (PH 2) / (PH1 + PH2 + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

ROCK ISLAND

* * *

STEELHEAD

* * *

LA-N7-1 SU STEELHEAD LOT ID # 86234-01

557 RELEASED AT: METHOW R
AGENCY: WDG

FROM: 5/09/86 TO 5/09/86
HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS					
5/21	1 24.0	144.00	80.88 %	2	2	2 28.6%
5/22	1 24.0	138.00	80.85 %	1	1	1 42.9%
5/23	1 24.0	122.40	81.01 %	1	1	1 57.1%
5/24	1 24.0	103.60	82.52 %	1	1	1 71.4%
5/25	1 24.0	103.70	86.30 %	0	0	0 71.4%
5/26	1 24.0	120.70	88.54 %	0	0	0 71.4%
5/27	1 24.0	116.80	86.23 %	0	0	0 71.4%
5/28	7 24.0	141.50	82.74 %	1 *	1 *	1 * 85.7%
5/29	1 24.0	153.60	84.26 %	1	1	1 100.0%
TOTAL				7	7	7

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (PH 2) / (PH1 + PH2 + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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ROCK ISLAND

* * *

STEELHEAD

* * *

LA-N7-3 SU STEELHEAD LOT ID # 86234-02

213 RELEASED AT: METHUEN R
AGENCY: WDG

FROM: 5/09/86 TO 5/09/86
HATCHERY: WELLS HATCHERY

DATE	.. PARAMETERS ..	(1) RIVER FLOW	(2) INDEX FLOW	(3) NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4) DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS						
5/21	1 24.0	144.00	80.88 %	2	2	2	50.0%
5/22	1 24.0	138.00	80.85 %	2	2	2	100.0%
TOTAL				4	4	4	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (PH 2) / (PH1 + PH2 + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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ROCK ISLAND

* * *

STEELHEAD

* * *

LD-N7-1 SU STEELHEAD LOT ID # 86234-03

190 RELEASED AT: METHOW R
AGENCY: WDG

FROM: 5/15/86 TO 5/15/86
HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4) DAILY COUNT CUMULATIVE
1986	SC	#D	GW	HR.S	FLOW	FLOW			
5/24	1	24.0	103.60	82.52 %	1	1	1	50.0%	
5/25	1	24.0	103.70	86.30 %	0	0	0	50.0%	
5/26	1	24.0	120.70	88.54 %	1	1	1	100.0%	
TOTAL						2	2	2	

- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (PH 2) / (PH1 + PH2 + SPILL) ***
4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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ROCK ISLAND

* * *

STEELHEAD

* * *

RA-P7-1 SU STEELHEAD LOT ID # 86234-04

216 RELEASED AT: METHOW R
AGENCY: WDG

FROM: 5/05/86 TO 5/05/86
HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1)		RIVER FLOW	INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	PASSAGE INDEX (4)	
	SC	#D-GW-HRS					DAILY COUNT	CUMULATIVE
1986	SC	#D-GW-HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
5/22	1	24.0	138.00	80.85 %	1	1	1	50.0%
5/23	1	24.0	122.40	81.01 %	1	1	1	100.0%
TOTAL					2	2	2	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateweils sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (PH 2) / (PH1 + PH2 + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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ROCK ISLAND

* * *

STEELHEAD

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RA-P7-3 SU STEELHEAD LOT ID # 86234-05

456 RELEASED AT: METHOW R
AGENCY: WDG

FROM: 5/09/86 TO 5/09/86
HATCHERY: WELLS HATCHERY

DATE	.. PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE INDEX ...	(4)
1986	SC-#D-GW-HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
5/21	1 24.0	144.00	80.88 %	1	1	1	20.0%
5/22	1 24.0	138.00	80.85 %	0	0	0	20.0%
5/23	1 24.0	122.40	81.01 %	2	2	2	60.0%
5/24	1 24.0	103.60	82.52 %	0	0	0	60.0%
5/25	1 24.0	103.70	86.30 %	0	0	0	60.0%
5/26	1 24.0	120.70	88.54 %	0	0	0	60.0%
5/27	1 24.0	116.80	86.23 %	0	0	0	60.0%
5/28	7 24.0	141.50	82.74 %	0 *	0 *	0 *	60.0%
5/29	1 24.0	153.60	84.26 %	0	0	0	60.0%
5/30	1 24.0	129.36	75.25 %	0	0	0	60.0%
5/31	1 24.0	128.40	61.05 %	1	1	2	100.0%
TOTAL				4	4	5	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (PH 2) / (PH1 + PH2 + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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ROCK ISLAND

* * *

STEELHEAD

* * *

LA-7N-1 SU STEELHEAD LOT ID # 86203-01

29,451

RELEASED AT: METHOW R
AGENCY: WDG

FROM: 5/01/86 TO 5/01/86
HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS .. SC--#D--GW--HR.S	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
5/05	1	24.0	108.00	86.24 %	4	4	5 0.6%
5/06	1	24.0	149.40	87.91 %	13	13	15 2.6%
5/07	1	24.0	134.70	84.41 %	33	33	39 7.5%
5/08	1	24.0	135.00	83.47 %	42	42	50 13.9%
5/09	1	24.0	128.30	87.49 %	52	52	59 21.4%
5/10	1	24.0	157.30	79.94 %	67	67	84 32.1%
5/11	1	24.0	134.80	78.50 %	40	40	51 38.6%
5/12	1	24.0	143.20	84.70 %	55	55	65 46.9%
5/13	1	24.0	150.70	82.69 %	60	60	73 56.3%
5/14	1	24.0	152.30	77.04 %	32	32	42 61.6%
5/15	1	24.0	155.90	74.45 %	36	36	48 67.7%
5/16	1	24.0	134.10	80.95 %	26	26	32 71.8%
5/17	1	24.0	146.70	83.91 %	28	28	33 76.0%
5/18	1	24.0	129.70	80.22 %	19	19	24 79.1%
5/19	1	24.0	122.10	87.26 %	17	17	19 81.5%
5/20	1	24.0	141.60	85.11 %	23	23	27 84.9%
5/21	1	24.0	144.00	80.88 %	21	21	26 88.3%
5/22	1	24.0	138.00	80.85 %	19	19	24 91.3%
5/23	1	24.0	122.40	81.01 %	12	12	15 93.2%
5/24	1	24.0	103.60	82.52 %	14	14	17 95.4%
5/25	1	24.0	103.70	86.30 %	5	5	6 96.2%
5/26	1	24.0	120.70	88.54 %	5	5	6 96.9%
5/27	1	24.0	116.80	86.23 %	6	6	7 97.8%
5/28	7	24.0	141.50	82.74 %	2 *	2 *	2 * 98.1%
5/29	1	24.0	153.60	84.26 %	2	2	2 98.3%
5/30	1	24.0	129.36	75.25 %	3	3	4 98.9%
5/31	1	24.0	128.40	61.05 %	2	2	3 99.2%
6/01	1	24.0	154.30	65.42 %	0	0	0 99.2%
6/02	1	24.0	141.70	66.83 %	0	0	0 99.2%
6/03	1	24.0	167.00	63.13 %	0	0	0 99.2%
6/04	1	24.0	163.70	43.81 %	0	0	0 99.2%
6/05	1	24.0	162.80	37.45 %	1	1	3 99.6%
6/06	1	24.0	157.20	35.35 %	1	1	3 100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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ROCK ISLAND

* * *

STEELHEAD

* * *

LA-7N-1 SU STEELHEAD LOT ID # 86203-01

29,451

RELEASED AT: METHUEN R
AGENCY: WDG

FROM: 5/01/86 TO 5/01/86
HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	(4) ... PASSAGE INDEX ...
1986	SC--#D--GW--HRS	FLOW	FLOW			DAILY COUNT CUMULATIVE

***** CONTINUED *****

TOTAL				640	640	784
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
- (2) River Flow: Data acquired from CATCH DATA
- (3) Index Flow: *** (PH 2) / (PH1 + PH2 + SPILL) ***
- (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
- (*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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ROCK ISLAND

* * *

STEELHEAD

* * *

LA-7N-3 SU STEELHEAD LOT ID # 86203-02

30,046 RELEASED AT: METHOW R
AGENCY: WDG

FROM: 5/05/86 TO 5/05/86
HATCHERY: WELLS HATCHERY

DATE	.. SAMPLE (1) SC - #D - GW - HRS	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
5/09	1 24.0	128.30	87.49 %	3	3	3	0.4%
5/10	1 24.0	157.30	79.94 %	55	55	69	9.5%
5/11	1 24.0	134.80	78.50 %	31	31	39	14.7%
5/12	1 24.0	143.20	84.70 %	85	85	100	27.9%
5/13	1 24.0	150.70	82.69 %	75	75	91	39.9%
5/14	1 24.0	152.30	77.04 %	53	53	69	49.0%
5/15	1 24.0	155.90	74.45 %	60	60	81	59.7%
5/16	1 24.0	134.10	80.95 %	55	55	68	68.7%
5/17	1 24.0	146.70	83.91 %	40	40	48	75.0%
5/18	1 24.0	129.70	80.22 %	27	27	34	79.5%
5/19	1 24.0	122.10	87.26 %	25	25	29	83.4%
5/20	1 24.0	141.60	85.11 %	13	13	15	85.3%
5/21	1 24.0	144.00	80.88 %	16	16	20	88.0%
5/22	1 24.0	138.00	80.85 %	15	15	19	90.5%
5/23	1 24.0	122.40	81.01 %	21	21	26	93.9%
5/24	1 24.0	103.60	82.52 %	10	10	12	95.5%
5/25	1 24.0	103.70	86.30 %	11	11	13	97.2%
5/26	1 24.0	120.70	88.54 %	6	6	7	98.2%
5/27	1 24.0	116.80	86.23 %	4	4	5	98.8%
5/28	7 24.0	141.50	82.74 %	1 *	1 *	1 *	98.9%
5/29	1 24.0	153.60	84.26 %	0	0	0	98.9%
5/30	1 24.0	129.36	75.25 %	1	1	1	99.1%
5/31	1 24.0	128.40	61.05 %	3	3	5	99.7%
6/01	1 24.0	154.30	65.42 %	1	1	2	100.0%
TOTAL				611	611	757	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (PH 2) / (PH1 + PH2 + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

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ROCK ISLAND

* * *

STEELHEAD

* * *

LD-7N-1 SU STEELHEAD LOT ID # 86203-03

29,992

RELEASED AT: METHOW R

FROM: 5/09/86 TO 5/09/86

AGENCY: WDG

HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--RD--GW--BR.S	FLOW	FLOW				
5/13	1	24.0	150.70	82.69 %	2	2	0.7%
5/14	1	24.0	152.30	77.04 %	10	10	5.2%
5/15	1	24.0	155.90	74.45 %	25	25	16.9%
5/16	1	24.0	134.10	80.95 %	28	28	29.0%
5/17	1	24.0	146.70	83.91 %	21	21	37.6%
5/18	1	24.0	129.70	80.22 %	16	16	44.5%
5/19	1	24.0	122.10	87.26 %	14	14	50.0%
5/20	1	24.0	141.60	85.11 %	10	10	54.1%
5/21	1	24.0	144.00	80.88 %	26	26	65.2%
5/22	1	24.0	138.00	80.85 %	17	17	72.4%
5/23	1	24.0	122.40	81.01 %	20	20	81.0%
5/24	1	24.0	103.60	82.52 %	15	15	87.2%
5/25	1	24.0	103.70	86.30 %	6	6	89.7%
5/26	1	24.0	120.70	88.54 %	7	7	92.4%
5/27	1	24.0	116.80	86.23 %	4	4	94.1%
5/28	7	24.0	141.50	82.74 %	4 *	4 *	95.9%
5/29	1	24.0	153.60	84.26 %	0	0	95.9%
5/30	1	24.0	129.36	75.25 %	0	0	95.9%
5/31	1	24.0	128.40	61.05 %	2	2	96.9%
6/01	1	24.0	154.30	65.42 %	2	2	97.9%
6/02	1	24.0	141.70	66.83 %	1	1	98.3%
6/03	1	24.0	167.00	63.13 %	0	0	98.3%
6/04	1	24.0	163.70	43.81 %	1	1	99.0%
6/05	1	24.0	162.80	37.45 %	0	0	99.0%
6/06	1	24.0	157.20	35.35 %	0	0	99.0%
6/07	1	24.0	162.60	37.55 %	0	0	99.0%
6/08	1	24.0	163.70	38.06 %	0	0	99.0%
6/09	1	24.0	147.20	31.23 %	1	1	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

ROCK ISLAND

* * *

STEELHEAD

* * *

LD-7N-1 SU STEELHEAD LOT ID # 86203-03

29,992 RELEASED AT: METHOW R
AGENCY: WDG

FROM: 5/09/86 TO 5/09/86
HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4) DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW				

***** CONTINUED *****

TOTAL				232	232		290
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
- (2) River Flow: Data acquired from CATCH DATA
- (3) Index Flow: *** (PH 2) / (PH1 + FH2 + SPILL) ***
- (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
- (*) Sample deviates from "normal" conditions (i.e. SC code > 1)

D. McNary Dam

Contractor: National Marine Fisheries Service

Project Leader: Richard Johnson (503-739-2303)

Location: Columbia River, River Mile 292.0

Monitoring Dates: March 26 - September 26, 1986

Sampling Method: A smolt bypass collection system was used to sample fish 24 hours each day. Fish passing through the collection system were subsampled at a variable rate based on the number of fish passing the project. Species and brand composition were assessed for the subsample. The sample period was noon to noon. Additional information on the sampling procedures at McNary Dam is presented in the NMFS annual report (Johnsen and Wood, 1986).

Separator cleanouts sometimes required modification of the sample period. The separator was cleaned out two times during 1986. The purpose of cleanouts was to remove debris, or to modify and maintain the separator. The method used to examine fish from the separator cleanout was as follows: once the sample taken prior to the cleanout was completed, the pinch valve leading into the separator was closed. The fish that typically moved into the separator accumulated in the upwell tank and the pipe (approximately 200 ft) leading into the upwell. Fish from the cleanout were moved out of the separator into the sample holding tanks and examined for species composition and brands. After examining the fish from the cleanout, the pinch valve was replaced and fish were accumulated for the next day's sample.

Analysis of Data: Data from McNary were used for in-season management, assessment of survival, travel time, and migration characteristics. The flow proportion used to expand collection counts to a passage index was estimated as follows:

$$\text{Powerhouse flow} / (\text{Powerhouse flow} + \text{Spill})$$

For separator cleanouts, flow parameters were averaged over the 3 day (72 hour) period following the cleanout (1200 on day of cleanout to 1159 of the third day following the cleanout).

Notes on Data Presentation: Samples taken prior to a separator cleanout are indicated with a sample quality code of 2.

Separator cleanout counts are indicated with a sample quality code of 10. FTOT includes separator counts with the collection counts for the sample taken prior to the cleanout. In these data listings the cleanout counts are shown separately.

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

LA-T -1 FA CHINOOK LOT ID # 86156-01 100,276 RELEASED AT: PRIEST RAPIDS H FROM: 6/10/86 TO 6/10/86
AGENCY: WDF HATCHERY: PRIEST RAPIDS H

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
5/07	1 24.0	267.15	82.56 %	1	6	7 100.0%
TOTAL				1	6	7

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateweills sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

LD-Y -1 SP CHINOOK LOT ID # 86013-01 44,692 RELEASED AT: RAPID RIVER FROM: 4/04/86 TO 4/07/86
AGENCY: IDFG HATCHERY: RAPID RIVER H

DATE	SAMPLE (1) .. PARAMETERS .. SC--GD--GW--HR.S	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
4/14	1	24.0	275.74	82.15 %	1	13	16 0.5%
4/15	1	24.0	262.18	79.34 %	0	0	0 0.5%
4/16	1	24.0	266.79	84.31 %	0	0	0 0.5%
4/17	1	24.0	295.75	75.39 %	0	0	0 0.5%
4/18	1	24.0	255.31	90.35 %	0	0	0 0.5%
4/19	1	24.0	247.37	93.43 %	2	29	31 1.4%
4/20	1	24.0	206.00	100.00 %	5	71	71 3.6%
4/21	1	24.0	207.48	100.00 %	0	0	0 3.6%
4/22	1	24.0	210.52	95.95 %	0	0	0 3.6%
4/23	1	24.0	265.63	82.31 %	5	71	86 6.2%
4/24	1	24.0	296.90	76.52 %	3	33	43 7.6%
4/25	1	24.0	274.79	82.17 %	4	44	54 9.2%
4/26	1	24.0	292.83	74.41 %	2	25	34 10.3%
4/27	1	23.0	264.40	83.31 %	16	160	192 16.1%
4/28	1	24.0	239.84	92.34 %	0	0	0 16.1%
4/29	1	24.0	258.40	84.68 %	12	150	177 21.5%
4/30	1	24.0	288.48	80.78 %	16	200	248 29.1%
5/01	1	24.0	239.83	95.57 %	16	178	186 34.8%
5/02	1	24.0	254.22	90.27 %	17	243	269 43.1%
5/03	1	24.0	246.23	93.79 %	13	108	115 46.6%
5/04	1	24.0	228.96	100.00 %	21	175	175 51.9%
5/05	1	24.0	232.73	100.00 %	12	100	100 55.0%
5/06	1	24.0	211.62	97.52 %	19	106	109 58.3%
5/07	1	24.0	267.15	82.56 %	25	139	168 63.5%
5/08	1	24.0	251.32	90.75 %	8	80	88 66.2%
5/09	1	24.0	243.93	93.22 %	15	150	161 71.1%
5/10	1	24.0	245.24	93.80 %	16	160	171 76.3%
5/11	1	24.0	268.87	85.83 %	20	200	233 83.4%
5/12	1	24.0	249.31	92.20 %	8	80	87 86.1%
5/13	1	24.0	261.87	87.67 %	3	30	34 87.1%
5/14	1	24.0	267.54	86.91 %	5	50	58 88.9%
5/15	1	24.0	269.22	87.22 %	5	50	57 90.7%
5/16	1	24.0	258.48	90.21 %	8	80	89 93.4%
5/17	1	24.0	243.01	94.41 %	3	30	32 94.4%
5/18	1	24.0	223.76	97.04 %	2	20	21 95.0%
5/19	1	24.0	198.30	100.00 %	3	30	30 95.9%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *
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* * *

LD-Y -1 SP CHINOOK LOT ID # 86013-01 44,692 RELEASED AT: RAPID RIVER FROM: 4/04/86 TO 4/07/86
AGENCY: IDFG HATCHERY: RAPID RIVER H

[illegible]

* * * * * CONTINUED * * * * *

5/20	1	24.0	247.85	85.43 %	1	10	12	96.3%
5/21	1	24.0	268.30	76.83 %	2	20	26	97.1%
5/22	1	24.0	276.61	75.20 %	2	20	27	97.9%
5/23	1	24.0	282.36	67.75 %	2	20	30	98.8%
5/24	1	24.0	257.28	80.40 %	1	10	12	99.2%
5/25	1	24.0	205.70	97.74 %	1	11	11	99.5%
5/26	1	24.0	187.50	79.87 %	0	0	0	99.5%
5/27	1	24.0	232.22	82.88 %	0	0	0	99.5%
5/28	1	24.0	282.26	66.81 %	0	0	0	99.5%
5/29	1	24.0	346.54	59.56 %	0	0	0	99.5%
5/30	1	24.0	329.83	69.38 %	0	0	0	99.5%
5/31	1	24.0	356.90	65.02 %	1	10	15	100.0%

10161	295	2.906	3.268
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(1) Sample parameters: SC = Sample quality code AD = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled

(2) River Flow: Data acquired from Corps data site - MCN

(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***

(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

DIV 61

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * CHINOOK 1'S * * *

LD-Y -3 SP CHINOOK LOT ID # 86014-01 44,754 RELEASED AT: HELLS CANYON FROM: 3/26/86 TO 3/27/86
AGENCY: IDFG HATCHERY: RAPID RIVER H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX CUMULATIVE
1986	SC-ID-GW-HRS						
4/13	1	24.0	241.31	94.78 %	1	13	14
4/14	1	24.0	275.74	82.15 %	1	13	16
4/15	1	24.0	262.18	79.34 %	2	21	26
4/16	1	24.0	266.79	84.31 %	1	10	12
4/17	1	24.0	295.75	75.39 %	2	22	29
4/18	1	24.0	255.31	90.35 %	4	40	44
4/19	1	24.0	247.37	93.43 %	2	29	31
4/20	1	24.0	206.00	100.00 %	5	71	71
4/21	1	24.0	207.48	100.00 %	4	57	57
4/22	1	24.0	210.52	95.95 %	12	171	178
4/23	1	24.0	265.63	82.31 %	8	114	139
4/24	1	24.0	296.90	76.52 %	8	89	116
4/25	1	24.0	274.79	82.17 %	18	200	243
4/26	1	24.0	292.83	74.41 %	6	75	101
4/27	1	23.0	264.40	83.31 %	23	230	276
4/28	1	24.0	239.84	92.34 %	20	250	271
4/29	1	24.0	258.40	84.68 %	25	313	370
4/30	1	24.0	288.48	80.78 %	14	175	217
5/01	1	24.0	239.83	95.57 %	13	144	151
5/02	1	24.0	254.22	90.27 %	8	114	126
5/03	1	24.0	246.23	93.79 %	12	100	107
5/04	1	24.0	228.96	100.00 %	5	42	42
5/05	1	24.0	232.73	100.00 %	3	25	25
5/06	1	24.0	211.62	97.52 %	16	89	91
5/07	1	24.0	267.15	82.56 %	18	100	121
5/08	1	24.0	251.32	90.75 %	6	60	66
5/09	1	24.0	243.93	93.22 %	5	50	54
5/10	1	24.0	245.24	93.80 %	7	70	75
5/11	1	24.0	268.87	85.83 %	7	70	82
5/12	1	24.0	249.31	92.20 %	7	70	76
5/13	1	24.0	261.87	87.67 %	6	60	68
5/14	1	24.0	267.54	86.91 %	3	30	35
5/15	1	24.0	269.22	87.22 %	6	60	69
5/16	1	24.0	258.48	90.21 %	1	10	11

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

LD-Y -3 SP CHINOOK LOT ID # 86014-01 44,754 RELEASED AT: HELLS CANYON FROM: 3/26/86 TO 3/27/86
AGENCY: IDFG HATCHERY: RAPID RIVER H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW				
***** CONTINUED *****							
5/17	1	24.0	243.01	94.41 %	2	20	21 98.5X
5/18	1	24.0	223.76	97.04 %	0	0	0 98.5X
5/19	1	24.0	198.30	100.00 %	1	10	10 98.8X
5/20	1	24.0	247.85	85.43 %	0	0	0 98.8X
5/21	1	24.0	268.30	76.83 %	0	0	0 98.8X
5/22	1	24.0	276.61	75.20 %	1	10	13 99.1X
5/23	1	24.0	282.36	67.75 %	1	10	15 99.6X
5/24	1	24.0	257.28	80.40 %	0	0	0 99.6X
5/25	1	24.0	205.70	97.74 %	0	0	0 99.6X
5/26	1	24.0	187.50	79.87 %	0	0	0 99.6X
5/27	1	24.0	232.22	82.88 %	0	0	0 99.6X
5/28	1	24.0	282.26	66.81 %	0	0	0 99.6X
5/29	1	24.0	346.54	59.56 %	0	0	0 99.6X
5/30	1	24.0	329.83	69.38 %	0	0	0 99.6X
5/31	1	24.0	356.90	65.02 %	1	10	15 100.0X
TOTAL					285	3,047	3,484

- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateweills sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL FISH AND WILDLIFE SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

RA-Y -2 SP CHINOOK LOT ID # 86108-01

40,675

RELEASED AT: N F CLEARWATER

FROM: 4/02/86 TO 4/03/86

AGENCY: USFWS

HATCHERY: DWORSHAK NFH

DATE	.. SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE	
1986	SC--#D--GW--HR.S	FLOW	FLOW					
4/21	1	24.0	207.48	100.00 %	2	29	29	0.7%
4/22	1	24.0	210.52	95.95 %	0	0	0	0.7%
4/23	1	24.0	265.63	82.31 %	1	14	17	1.2%
4/24	1	24.0	296.90	76.52 %	2	22	29	1.9%
4/25	1	24.0	274.79	82.17 %	4	44	54	3.2%
4/26	1	24.0	292.83	74.41 %	0	0	0	3.2%
4/27	1	23.0	264.40	83.31 %	2	20	24	3.8%
4/28	1	24.0	239.84	92.34 %	3	38	41	4.9%
4/29	1	24.0	258.40	84.68 %	1	13	15	5.2%
4/30	1	24.0	288.48	80.78 %	4	50	62	6.8%
5/01	1	24.0	239.83	95.57 %	7	78	82	8.9%
5/02	1	24.0	254.22	90.27 %	9	129	143	12.5%
5/03	1	24.0	246.23	93.79 %	14	117	125	15.6%
5/04	1	24.0	228.96	100.00 %	20	167	167	19.8%
5/05	1	24.0	232.73	100.00 %	13	108	108	22.5%
5/06	1	24.0	211.62	97.52 %	21	117	120	25.5%
5/07	1	24.0	267.15	82.56 %	30	167	202	30.6%
5/08	1	24.0	251.32	90.75 %	22	220	242	36.7%
5/09	1	24.0	243.93	93.22 %	12	120	129	39.9%
5/10	1	24.0	245.24	93.80 %	15	150	160	43.9%
5/11	1	24.0	268.87	85.83 %	15	150	175	48.3%
5/12	1	24.0	249.31	92.20 %	22	220	239	54.3%
5/13	1	24.0	261.87	87.67 %	16	160	183	58.9%
5/14	1	24.0	267.54	86.91 %	13	130	150	62.7%
5/15	1	24.0	269.22	87.22 %	13	130	149	66.4%
5/16	1	24.0	258.48	90.21 %	15	150	166	70.6%
5/17	1	24.0	243.01	94.41 %	16	160	169	74.8%
5/18	1	24.0	223.76	97.04 %	12	120	124	78.0%
5/19	1	24.0	198.30	100.00 %	10	100	100	80.5%
5/20	1	24.0	247.85	85.43 %	10	100	117	83.4%
5/21	1	24.0	268.30	76.83 %	5	50	65	85.0%
5/22	1	24.0	276.61	75.20 %	8	80	106	87.7%
5/23	1	24.0	282.36	67.75 %	6	60	89	89.9%
5/24	1	24.0	257.28	80.40 %	6	60	75	91.8%
5/25	1	24.0	205.70	97.74 %	2	21	21	92.3%
5/26	1	24.0	187.50	79.87 %	4	53	66	94.0%

***** CONTINUED *****

NATIONAL FISH PASSAGE SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY * * * CHINOOK 1'S * * *

RA-Y -2 SP CHINOOK LOT ID # 86108-01 40,675 RELEASED AT: N F CLEARWATER FROM: 4/02/86 TO 4/03/86
AGENCY: USFWS HATCHERY: IMORSHAK NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX CUMULATIVE
1986	SC-#D-GW-HRS						

* * * * * CONTINUED * * * * *

5/27	1	24.0	232.22	82.88 %	2	20	24	94.6X
5/28	1	24.0	282.26	66.81 %	2	20	30	95.4X
5/29	1	24.0	346.54	59.56 %	3	30	50	96.6X
5/30	1	24.0	329.83	69.38 %	4	40	58	98.1X
5/31	1	24.0	356.90	65.02 %	0	0	0	98.1X
6/01	1	24.0	348.27	67.26 %	0	0	0	98.1X
6/02	1	24.0	386.03	60.40 %	0	0	0	98.1X
6/03	1	24.0	381.22	55.13 %	1	10	18	98.5X
6/04	1	24.0	367.68	54.36 %	0	0	0	98.5X
6/05	1	24.0	392.36	49.08 %	0	0	0	98.5X
6/06	1	24.0	338.85	61.77 %	0	0	0	98.5X
6/07	1	24.0	377.35	46.23 %	2	20	43	99.6X
6/08	1	24.0	325.28	60.92 %	0	0	0	99.6X
6/09	1	24.0	325.45	63.10 %	0	0	0	99.6X
6/10	1	24.0	292.42	62.49 %	0	0	0	99.6X
6/11	1	24.0	302.70	62.98 %	0	0	0	99.6X
6/12	1	24.0	264.15	79.64 %	0	0	0	99.6X
6/13	1	24.0	253.88	83.09 %	0	0	0	99.6X
6/14	1	24.0	243.88	92.05 %	0	0	0	99.6X
6/15	1	24.0	247.33	87.28 %	1	13	15	100.0X
6/16	2	22.0	236.54	87.39 %	0 *	0 *	0 *	100.0X
6/16	10	0.0	236.19	88.19 %	1 *	1 *	1 *	100.0X

TOTAL 371 3,501 3,982

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

RD-Y -1 SP CHINOOK LOT ID # 86017-01

35,851

RELEASED AT: SAWTOOTH H

FROM: 3/17/86 TO 3/17/86

AGENCY: IDFG

HATCHERY: SAWTOOTH H

DATE	.. SAMPLE (1) SC--ID--GW--HR.S	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX CUMULATIVE
1986							
4/17	1	24.0	295.75	75.39 %	1	11	15 2.0%
4/18	1	24.0	255.31	90.35 %	0	0	0 2.0%
4/19	1	24.0	247.37	93.43 %	0	0	0 2.0%
4/20	1	24.0	206.00	100.00 %	0	0	0 2.0%
4/21	1	24.0	207.48	100.00 %	2	29	29 5.9%
4/22	1	24.0	210.52	95.95 %	1	14	15 8.0%
4/23	1	24.0	265.63	82.31 %	0	0	0 8.0%
4/24	1	24.0	296.90	76.52 %	0	0	0 8.0%
4/25	1	24.0	274.79	82.17 %	5	56	68 17.1%
4/26	1	24.0	292.83	74.41 %	0	0	0 17.1%
4/27	1	23.0	264.40	83.31 %	1	10	12 18.8%
4/28	1	24.0	239.84	92.34 %	10	125	135 37.0%
4/29	1	24.0	258.40	84.68 %	0	0	0 37.0%
4/30	1	24.0	288.48	80.78 %	3	38	47 43.3%
5/01	1	24.0	239.83	95.57 %	1	11	12 44.9%
5/02	1	24.0	254.22	90.27 %	2	29	32 49.3%
5/03	1	24.0	246.23	93.79 %	11	92	98 62.5%
5/04	1	24.0	228.96	100.00 %	4	33	33 66.9%
5/05	1	24.0	232.73	100.00 %	2	17	17 69.2%
5/06	1	24.0	211.62	97.52 %	1	6	6 70.0%
5/07	1	24.0	267.15	82.56 %	3	17	21 72.9%
5/08	1	24.0	251.32	90.75 %	3	30	33 77.3%
5/09	1	24.0	243.93	93.22 %	0	0	0 77.3%
5/10	1	24.0	245.24	93.80 %	2	20	21 80.2%
5/11	1	24.0	268.87	85.83 %	2	20	23 83.3%
5/12	1	24.0	249.31	92.20 %	3	30	33 87.7%
5/13	1	24.0	261.87	87.67 %	1	10	11 89.2%
5/14	1	24.0	267.54	86.91 %	1	10	12 90.8%
5/15	1	24.0	269.22	87.22 %	2	20	23 93.9%
5/16	1	24.0	258.48	90.21 %	2	20	22 96.9%
5/17	1	24.0	243.01	94.41 %	0	0	0 96.9%
5/18	1	24.0	223.76	97.04 %	0	0	0 96.9%
5/19	1	24.0	198.30	100.00 %	0	0	0 96.9%
5/20	1	24.0	247.85	85.43 %	2	20	23 100.0%

***** C O N T I N U E D *****

FISH PASSAGE DATA SYSTEM
 ** Brand Recapture Summary **

 * These data are preliminary and have been derived from various sources. For *
 * verification and/or origin of data, contact the operators of the Fish Passage Data *
 * System at (503) 230-4290. *

MCNARY

CHINOOK 1'S

RD-Y -1 SP CHINOOK LOT ID # 86017-01 35,851 RELEASED AT: SAWTOOTH H FROM: 3/17/86 TO 3/17/86
 AGENCY: IDFG HATCHERY: SAWTOOTH H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4) DAILY COUNT CUMULATIVE
1986	SC-ID-GW-HRS	FLOW	FLOW				

***** CONTINUED *****

TOTAL				65	668		741
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- (1) Sample parameters: SC = Sample quality code ID = Number of accumulated days for sample
 GW = Number of gateways sampled Hrs = Number of hours sampled
 (2) River Flow: Data acquired from Corps data site - MCN
 (3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
 (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

RD-Y -3 SU CHINOOK LOT ID ÷ 86018-01 43,487 RELEASED AT: S F SALMON R FROM: 3/24/86 TO 3/31/86
AGENCY: IDFG HATCHERY: MCCALL

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1)		(2)	(3)	NUMBER		(4)	
	.. PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE	INDEX ...	
1986	SC--SD--GW--HR.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE	
4/25	1	24.0	274.79	82.17 %	1	11	13	0.6%
4/26	1	24.0	292.83	74.41 %	0	0	0	0.6%
4/27	1	23.0	264.40	83.31 %	4	40	48	3.0%
4/28	1	24.0	239.84	92.34 %	5	63	68	6.3%
4/29	1	24.0	258.40	84.68 %	0	0	0	6.3%
4/30	1	24.0	288.48	80.78 %	4	50	62	9.4%
5/01	1	24.0	239.83	95.57 %	7	78	82	13.4%
5/02	1	24.0	254.22	90.27 %	6	86	95	18.0%
5/03	1	24.0	246.23	93.79 %	4	33	35	19.8%
5/04	1	24.0	228.96	100.00 %	6	50	50	22.2%
5/05	1	24.0	232.73	100.00 %	6	50	50	24.7%
5/06	1	24.0	211.62	97.52 %	2	11	11	25.2%
5/07	1	24.0	267.15	82.56 %	7	39	47	27.5%
5/08	1	24.0	251.32	90.75 %	6	60	66	30.8%
5/09	1	24.0	243.93	93.22 %	3	30	32	32.3%
5/10	1	24.0	245.24	93.80 %	8	80	85	36.5%
5/11	1	24.0	268.87	85.83 %	4	40	47	38.8%
5/12	1	24.0	249.31	92.20 %	3	30	33	40.4%
5/13	1	24.0	261.87	87.67 %	7	70	80	44.3%
5/14	1	24.0	267.54	86.91 %	6	60	69	47.7%
5/15	1	24.0	269.22	87.22 %	7	70	80	51.6%
5/16	1	24.0	258.48	90.21 %	11	110	122	57.6%
5/17	1	24.0	243.01	94.41 %	5	50	53	60.2%
5/18	1	24.0	223.76	97.04 %	6	60	62	63.3%
5/19	1	24.0	198.30	100.00 %	7	70	70	66.7%
5/20	1	24.0	247.85	85.43 %	5	50	59	69.6%
5/21	1	24.0	268.30	76.83 %	2	20	26	70.9%
5/22	1	24.0	276.61	75.20 %	1	10	13	71.5%
5/23	1	24.0	282.36	67.75 %	2	20	30	73.0%
5/24	1	24.0	257.28	80.40 %	3	30	37	74.8%
5/25	1	24.0	205.70	97.74 %	4	42	43	76.9%
5/26	1	24.0	187.50	79.87 %	0	0	0	76.9%
5/27	1	24.0	232.22	82.88 %	0	0	0	76.9%
5/28	1	24.0	282.26	66.81 %	3	30	45	79.1%
5/29	1	24.0	346.54	59.56 %	2	20	34	80.8%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
 ** Brand Recapture Summary **

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 * verification and/or origin of data, contact the operators of the Fish Passage Data *
 * System at (503) 230-4290. *

MCNARY

CHINOOK 1'S

RD-Y -3 SU CHINOOK LOT ID # 86018-01

43,487

RELEASED AT: S F SALMON R

FROM: 3/24/86 TO 3/31/86

AGENCY: IDFG

HATCHERY: MCCALL

*** USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HRS						

***** CONTINUED *****

5/30	1	24.0	329.83	69.38 %	0	0	0	80.8%
5/31	1	24.0	356.90	65.02 %	6	60	92	85.3%
6/01	1	24.0	348.27	67.26 %	0	0	0	85.3%
6/02	1	24.0	386.03	60.40 %	5	50	83	89.4%
6/03	1	24.0	381.22	55.13 %	1	10	18	90.2%
6/04	1	24.0	367.68	54.36 %	1	10	18	91.1%
6/05	1	24.0	392.36	49.08 %	1	10	20	92.1%
6/06	1	24.0	338.85	61.77 %	2	20	32	93.7%
6/07	1	24.0	377.35	46.23 %	3	30	65	96.9%
6/08	1	24.0	325.28	60.92 %	1	10	16	97.6%
6/09	1	24.0	325.45	63.10 %	0	0	0	97.6%
6/10	1	24.0	292.42	62.49 %	3	30	48	100.0%

TOTAL					170	1,693	2,039	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
 GW = Number of gateways sampled Hrs= Number of hours sampled
 (2) River Flow: Data acquired from Corps data site - MCN
 (3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
 (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

LA-7C-1 SP CHINOOK LOT ID # 86126-02 11,989 RELEASED AT: BELOW PRD DAM FROM: 4/25/86 TO 4/25/86
AGENCY: USFWS HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--4D--GW--HR.S	FLOW	FLOW				
4/30	1	24.0	288.48	80.78 %	6	75	93 1.4%
5/01	1	24.0	239.83	95.57 %	4	44	46 2.1%
5/02	1	24.0	254.22	90.27 %	5	71	79 3.3%
5/03	1	24.0	246.23	93.79 %	2	17	18 3.6%
5/04	1	24.0	228.96	100.00 %	11	92	92 5.0%
5/05	1	24.0	232.73	100.00 %	8	67	67 6.0%
5/06	1	24.0	211.62	97.52 %	20	111	114 7.7%
5/07	1	24.0	267.15	82.56 %	30	167	202 10.8%
5/08	1	24.0	251.32	90.75 %	30	300	331 15.9%
5/09	1	24.0	243.93	93.22 %	21	210	225 19.3%
5/10	1	24.0	245.24	93.80 %	18	180	192 22.2%
5/11	1	24.0	268.87	85.83 %	29	290	338 27.4%
5/12	1	24.0	249.31	92.20 %	40	400	434 34.0%
5/13	1	24.0	261.87	87.67 %	36	360	411 40.2%
5/14	1	24.0	267.54	86.91 %	34	340	391 46.2%
5/15	1	24.0	269.22	87.22 %	43	430	493 53.7%
5/16	1	24.0	258.48	90.21 %	30	300	333 58.8%
5/17	1	24.0	243.01	94.41 %	36	360	381 64.6%
5/18	1	24.0	223.76	97.04 %	30	300	309 69.3%
5/19	1	24.0	198.30	100.00 %	20	200	200 72.3%
5/20	1	24.0	247.85	85.43 %	34	340	398 78.4%
5/21	1	24.0	268.30	76.83 %	23	230	299 82.9%
5/22	1	24.0	276.61	75.20 %	12	120	160 85.4%
5/23	1	24.0	282.36	67.75 %	24	240	354 90.7%
5/24	1	24.0	257.28	80.40 %	8	80	100 92.3%
5/25	1	24.0	205.70	97.74 %	5	53	54 93.1%
5/26	1	24.0	187.50	79.87 %	14	187	234 96.7%
5/27	1	24.0	232.22	82.86 %	4	40	48 97.4%
5/28	1	24.0	282.26	66.81 %	3	30	45 98.1%
5/29	1	24.0	346.54	59.56 %	4	40	67 99.1%
5/30	1	24.0	329.83	69.38 %	1	10	14 99.3%
5/31	1	24.0	356.90	65.02 %	2	20	31 99.8%
6/01	1	24.0	348.27	67.26 %	1	10	15 100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * CHINOOK 1'S * * *

LA-7C-1 SP CHINOOK LOT ID # 86126-02 11,989 RELEASED AT: BELOW PRO DAM FROM: 4/25/86 TO 4/25/86
AGENCY: USFWS HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC--#D--GW--HRS						

***** CONTINUED *****

TOTAL				588	5,714		6,568
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY * * * CHINOOK 1'S * * *

LA-7C-3 SP CHINOOK LOT ID # 86126-01 12,001 RELEASED AT: BELOW PRD DAM FROM: 4/21/86 TO 4/21/86
AGENCY: USFWS HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS .. SC-ID-GW-HRS	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE	
4/25	1	24.0	274.79	82.17 %	1	11	13	0.2X
4/26	1	24.0	292.83	74.41 %	0	0	0	0.2X
4/27	1	23.0	264.40	83.31 %	4	40	48	1.1X
4/28	1	24.0	239.84	92.34 %	1	13	14	1.3X
4/29	1	24.0	258.40	84.68 %	4	50	59	2.4X
4/30	1	24.0	288.48	80.78 %	5	63	78	3.8X
5/01	1	24.0	239.83	95.57 %	1	11	12	4.0X
5/02	1	24.0	254.22	90.27 %	2	29	32	4.5X
5/03	1	24.0	246.23	93.79 %	14	117	125	6.8X
5/04	1	24.0	228.96	100.00 %	5	42	42	7.5X
5/05	1	24.0	232.73	100.00 %	19	158	158	10.3X
5/06	1	24.0	211.62	97.52 %	13	72	74	11.6X
5/07	1	24.0	267.15	82.56 %	31	172	208	15.3X
5/08	1	24.0	251.32	90.75 %	31	310	342	21.4X
5/09	1	24.0	243.93	93.22 %	18	180	193	24.8X
5/10	1	24.0	245.24	93.80 %	13	130	139	27.2X
5/11	1	24.0	268.87	85.83 %	27	270	315	32.8X
5/12	1	24.0	249.31	92.20 %	24	240	260	37.4X
5/13	1	24.0	261.87	87.67 %	38	380	433	45.1X
5/14	1	24.0	267.54	86.91 %	32	320	368	51.6X
5/15	1	24.0	269.22	87.22 %	24	240	275	56.5X
5/16	1	24.0	258.48	90.21 %	31	310	344	62.6X
5/17	1	24.0	243.01	94.41 %	26	260	275	67.5X
5/18	1	24.0	223.76	97.04 %	27	270	278	72.4X
5/19	1	24.0	198.30	100.00 %	18	180	180	75.6X
5/20	1	24.0	247.85	85.43 %	31	310	363	82.0X
5/21	1	24.0	268.30	76.83 %	16	160	208	85.7X
5/22	1	24.0	276.61	75.20 %	12	120	160	88.5X
5/23	1	24.0	282.36	67.75 %	15	150	221	92.5X
5/24	1	24.0	257.28	80.40 %	5	50	62	93.5X
5/25	1	24.0	205.70	97.74 %	4	42	43	94.3X
5/26	1	24.0	187.50	79.87 %	11	147	184	97.6X
5/27	1	24.0	232.22	82.88 %	4	40	48	98.4X
5/28	1	24.0	282.26	66.81 %	4	40	60	99.5X
5/29	1	24.0	346.54	59.56 %	0	0	0	99.5X
5/30	1	24.0	329.83	69.38 %	1	10	14	99.7X

***** CONTINUED *****

1114 2/

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

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CHINOOK 1'S

* * *

RA-7C-1 SP CHINOOK LOT ID # 86125-01

34,466 RELEASED AT: METHOW R

FROM: 4/21/86 TO 4/21/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HB.S						
5/01	1	24.0	239.83	95.57 %	1	11	0.1%
5/02	1	24.0	254.22	90.27 %	1	14	0.3%
5/03	1	24.0	246.23	93.79 %	5	42	0.8%
5/04	1	24.0	228.96	100.00 %	9	75	1.6%
5/05	1	24.0	232.73	100.00 %	12	100	2.6%
5/06	1	24.0	211.62	97.52 %	22	122	4.0%
5/07	1	24.0	267.15	82.56 %	29	161	6.0%
5/08	1	24.0	251.32	90.75 %	20	200	8.4%
5/09	1	24.0	243.93	93.22 %	20	200	215 10.7%
5/10	1	24.0	245.24	93.80 %	10	100	107 11.8%
5/11	1	24.0	268.87	85.83 %	35	350	408 16.1%
5/12	1	24.0	249.31	92.20 %	36	360	390 20.3%
5/13	1	24.0	261.87	87.67 %	24	240	274 23.2%
5/14	1	24.0	267.54	86.91 %	32	320	368 27.1%
5/15	1	24.0	269.22	87.22 %	37	370	424 31.6%
5/16	1	24.0	258.48	90.21 %	35	350	388 35.7%
5/17	1	24.0	243.01	94.41 %	36	360	381 39.8%
5/18	1	24.0	223.76	97.04 %	44	440	453 44.6%
5/19	1	24.0	198.30	100.00 %	33	330	330 48.1%
5/20	1	24.0	247.85	85.43 %	53	530	620 54.7%
5/21	1	24.0	268.30	76.83 %	43	430	560 60.6%
5/22	1	24.0	276.61	75.20 %	44	440	585 66.8%
5/23	1	24.0	282.36	67.75 %	32	320	472 71.8%
5/24	1	24.0	257.28	80.40 %	17	170	211 74.1%
5/25	1	24.0	205.70	97.74 %	17	179	183 76.0%
5/26	1	24.0	187.50	79.87 %	25	333	417 80.5%
5/27	1	24.0	232.22	82.88 %	17	170	205 82.6%
5/28	1	24.0	282.26	66.81 %	34	340	509 88.0%
5/29	1	24.0	346.54	59.56 %	13	130	218 90.4%
5/30	1	24.0	329.83	69.38 %	11	110	159 92.1%
5/31	1	24.0	356.90	65.02 %	8	80	123 93.4%
6/01	1	24.0	348.27	67.26 %	6	60	89 94.3%
6/02	1	24.0	386.03	60.40 %	6	60	99 95.4%
6/03	1	24.0	381.22	55.13 %	6	60	109 96.5%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

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CHINOOK 1'S

* * *

RA-7C-1 SP CHINOOK LOT ID # 86125-01

34,466 RELEASED AT: METHOW R
AGENCY: USFWS

FROM: 4/21/86 TO 4/21/86
HATCHERY: WINTHROP NFH

DATE	.. SAMPLE (1) ..	(2)	(3)	NUMBER	NUMBER	... PASSAGE INDEX ...	(4)
1986	SC-#D-GW-HRS	RIVER FLOW	INDEX FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE

***** CONTINUED *****

6/04	1	24.0	367.68	54.36 %	3	30	55	97.1%
6/05	1	24.0	392.36	49.08 %	5	50	102	98.2%
6/06	1	24.0	338.85	61.77 %	1	10	16	98.4%
6/07	1	24.0	377.35	46.23 %	2	20	43	98.8%
6/08	1	24.0	325.28	60.92 %	2	20	33	99.2%
6/09	1	24.0	325.45	63.10 %	0	0	0	99.2%
6/10	1	24.0	292.42	62.49 %	4	40	64	99.8%
6/11	1	24.0	302.70	62.98 %	0	0	0	99.8%
6/12	1	24.0	264.15	79.64 %	0	0	0	99.8%
6/13	1	24.0	253.88	83.09 %	1	12	14	100.0%
6/14	1	24.0	243.88	92.05 %	0	0	0	100.0%
6/15	1	24.0	247.33	87.28 %	0	0	0	100.0%
6/16	2	22.0	236.54	87.39 %	0 *	0 *	0 *	100.0%
6/16	10	0.0	236.19	88.19 %	1 *	1 *	1 *	100.0%

TOTAL					792	7,740	9,413	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

RA-7C-3 SP CHINOOK LOT ID # 86125-02

34,485 RELEASED AT: METHOW R
AGENCY: USFWS

FROM: 4/25/86 TO 4/25/86
HATCHERY: WINTHROP NFH

DATE	.. PARAMETERS ..	(1) RIVER	(2) INDEX	(3) NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX CUMULATIVE
1986	SC--#D--GW--HR.S	FLOW	FLOW				
5/01	1	24.0	239.83	95.57 %	1	11	12
5/02	1	24.0	254.22	90.27 %	0	0	0
5/03	1	24.0	246.23	93.79 %	1	8	9
5/04	1	24.0	228.96	100.00 %	2	17	17
5/05	1	24.0	232.73	100.00 %	3	25	25
5/06	1	24.0	211.62	97.52 %	6	33	34
5/07	1	24.0	267.15	82.56 %	7	39	47
5/08	1	24.0	251.32	90.75 %	4	40	44
5/09	1	24.0	243.93	93.22 %	5	50	54
5/10	1	24.0	245.24	93.80 %	4	40	43
5/11	1	24.0	268.87	85.83 %	16	160	186
5/12	1	24.0	249.31	92.20 %	8	80	87
5/13	1	24.0	261.87	87.67 %	12	120	137
5/14	1	24.0	267.54	86.91 %	21	210	242
5/15	1	24.0	269.22	87.22 %	19	190	218
5/16	1	24.0	258.48	90.21 %	18	180	200
5/17	1	24.0	243.01	94.41 %	21	210	222
5/18	1	24.0	223.76	97.04 %	15	150	155
5/19	1	24.0	198.30	100.00 %	28	280	280
5/20	1	24.0	247.85	85.43 %	37	370	433
5/21	1	24.0	268.30	76.83 %	29	290	377
5/22	1	24.0	276.61	75.20 %	33	330	439
5/23	1	24.0	282.36	67.75 %	27	270	399
5/24	1	24.0	257.28	80.40 %	19	190	236
5/25	1	24.0	205.70	97.74 %	27	284	291
5/26	1	24.0	187.50	79.87 %	25	333	417
5/27	1	24.0	232.22	82.88 %	20	200	241
5/28	1	24.0	282.26	66.81 %	25	250	374
5/29	1	24.0	346.54	59.56 %	22	220	369
5/30	1	24.0	329.83	69.38 %	21	210	303
5/31	1	24.0	356.90	65.02 %	15	150	231
6/01	1	24.0	348.27	67.26 %	8	80	119
6/02	1	24.0	386.03	60.40 %	4	40	66
6/03	1	24.0	381.22	55.13 %	7	70	127
6/04	1	24.0	367.68	54.36 %	2	20	37

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

RA-7C-3 SP CHINOOK LOT ID # 86125-02

34,485

RELEASED AT: METHOW R

FROM: 4/25/86 TO 4/25/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--SD--GW--HR.S						

* * * * * C O N T I N U E D * * * * *

6/05	1	24.0	392.36	49.08 %	0	0	0	92.7%
6/06	1	24.0	338.85	61.77 %	1	10	16	93.0%
6/07	1	24.0	377.35	46.23 %	5	50	108	94.5%
6/08	1	24.0	325.28	60.92 %	4	40	66	95.4%
6/09	1	24.0	325.45	63.10 %	1	10	16	95.7%
6/10	1	24.0	292.42	62.49 %	5	50	80	96.8%
6/11	1	24.0	302.70	62.98 %	2	20	32	97.3%
6/12	1	24.0	264.15	79.64 %	1	10	13	97.5%
6/13	1	24.0	253.88	83.09 %	2	24	29	97.9%
6/14	1	24.0	243.88	92.05 %	2	24	26	98.3%
6/15	1	24.0	247.33	87.28 %	3	38	44	98.9%
6/16	2	22.0	236.54	87.39 %	0 *	0 *	0 *	98.9%
6/16	10	0.0	236.19	88.19 %	3 *	3 *	3 *	98.9%
6/17	5	26.0	248.22	82.68 %	2 *	22 *	27 *	99.3%
6/18	1	24.0	239.74	86.04 %	0	0	0	99.3%
6/19	1	24.0	219.99	97.18 %	1	20	21	99.6%
6/20	1	24.0	215.73	96.25 %	0	0	0	99.6%
6/21	1	24.0	205.80	100.00 %	0	0	0	99.6%
6/22	1	24.0	179.84	100.00 %	0	0	0	99.6%
6/23	1	24.0	171.71	100.00 %	1	13	13	99.8%
6/24	1	24.0	205.98	100.00 %	0	0	0	99.8%
6/25	1	24.0	192.23	100.00 %	0	0	0	99.8%
6/26	1	24.0	200.30	100.00 %	0	0	0	99.8%
6/27	1	24.0	178.89	100.00 %	0	0	0	99.8%
6/28	1	24.0	157.06	100.00 %	0	0	0	99.8%
6/29	1	24.0	163.47	100.00 %	0	0	0	99.8%
6/30	1	24.0	148.23	100.00 %	1	14	14	100.0%

* * * * * C O N T I N U E D * * * * *

FISH PASSAGE DATA SYSTEM

* * Brand Recapture Summary * *

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 * verification and/or origin of data, contact the operators of the Fish Passage Data *
 * System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

RA-7C-3 SP CHINOOK LOT ID # 86125-02 34,485 RELEASED AT: METHOW R FROM: 4/25/86 TO 4/25/86
 AGENCY: USFWS HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS					

* * * * * CONTINUED * * * * *

TOTAL				546	5,498	6,979
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
 GW = Number of gateweills sampled Hrs= Number of hours sampled
 (2) River Flow: Data acquired from Corps data site - MCN
 (3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
 (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
 (*) Sample deviates from "normal" conditions (i.e. SC code > 1)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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MCNARY * * * CHINOOK 1'S * * *

RA-7K-1 FA CHINOOK LOT ID # B6154-01 40,168 RELEASED AT: LYONS FERRY FROM: 4/02/86 TO 4/03/86
AGENCY: WDF HATCHERY: LYONS FERRY

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--D--GW--HR.S	FLOW	FLOW				
4/09	1	24.0	209.98	100.00 %	3	35	35 0.2%
4/10	1	24.0	224.02	99.70 %	1	14	14 0.3%
4/11	1	24.0	241.92	93.36 %	1	14	15 0.4%
4/12	1	24.0	246.35	91.75 %	7	88	96 1.0%
4/13	1	24.0	241.31	94.78 %	3	38	40 1.3%
4/14	1	24.0	275.74	82.15 %	8	107	130 2.2%
4/15	1	24.0	262.18	79.34 %	8	84	106 2.8%
4/16	1	24.0	266.79	84.31 %	13	130	154 3.9%
4/17	1	24.0	295.75	75.39 %	22	244	324 6.0%
4/18	1	24.0	255.31	90.35 %	18	180	199 7.3%
4/19	1	24.0	247.37	93.43 %	27	386	413 10.0%
4/20	1	24.0	206.00	100.00 %	38	543	543 13.5%
4/21	1	24.0	207.48	100.00 %	33	471	471 16.6%
4/22	1	24.0	210.52	95.95 %	41	586	611 20.6%
4/23	1	24.0	265.63	82.31 %	55	786	955 26.8%
4/24	1	24.0	296.90	76.52 %	58	644	842 32.3%
4/25	1	24.0	274.79	82.17 %	77	856	1,042 39.1%
4/26	1	24.0	292.83	74.41 %	41	513	689 43.6%
4/27	1	23.0	264.40	83.31 %	99	990	1,188 51.4%
4/28	1	24.0	239.84	92.34 %	52	650	704 56.0%
4/29	1	24.0	258.40	84.68 %	56	700	827 61.4%
4/30	1	24.0	288.48	80.78 %	46	575	712 66.0%
5/01	1	24.0	239.83	95.57 %	48	533	558 69.7%
5/02	1	24.0	254.22	90.27 %	49	700	775 74.7%
5/03	1	24.0	246.23	93.79 %	48	400	426 77.5%
5/04	1	24.0	228.96	100.00 %	37	308	308 79.5%
5/05	1	24.0	232.73	100.00 %	37	308	308 81.5%
5/06	1	24.0	211.62	97.52 %	63	350	359 83.9%
5/07	1	24.0	267.15	82.56 %	58	322	390 86.4%
5/08	1	24.0	251.32	90.75 %	34	340	375 88.9%
5/09	1	24.0	243.93	93.22 %	16	160	172 90.0%
5/10	1	24.0	245.24	93.80 %	19	190	203 91.3%
5/11	1	24.0	268.87	85.83 %	24	240	280 93.2%
5/12	1	24.0	249.31	92.20 %	12	120	130 94.0%

***** CONTINUED *****

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* System at (503) 230-4290. *
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* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

***** CONTINUED *****

TOTAL	1.229	13.376	15.311
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103

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

LA-7T-1 SP CHINOOK LOT ID # 86122-01 40,602 RELEASED AT: LEAVENWORTH NFH FROM: 4/23/86 TO 4/23/86
AGENCY: USFWS HATCHERY: LEAVENWORTH NFH

DATE	.. SAMPLE (1) ..	PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER	NUMBER	... PASSAGE	INDEX ..
1986	SC--SD--GW--UR.S		FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
5/06	1	24.0	211.62	97.52 %	8	44	45	0.41
5/07	1	24.0	267.15	82.56 %	15	83	101	1.21
5/08	1	24.0	251.32	90.75 %	10	100	110	2.11
5/09	1	24.0	243.93	93.22 %	9	90	97	2.91
5/10	1	24.0	245.24	93.80 %	11	110	117	3.81
5/11	1	24.0	268.87	85.83 %	19	190	221	5.61
5/12	1	24.0	249.31	92.20 %	15	150	163	6.91
5/13	1	24.0	261.87	87.67 %	19	190	217	8.71
5/14	1	24.0	267.54	86.91 %	30	300	345	11.41
5/15	1	24.0	269.22	87.22 %	22	220	252	13.51
5/16	1	24.0	258.48	90.21 %	35	350	388	16.61
5/17	1	24.0	243.01	94.41 %	38	380	402	19.91
5/18	1	24.0	223.76	97.04 %	46	460	474	23.71
5/19	1	24.0	198.30	100.00 %	48	480	480	27.61
5/20	1	24.0	247.85	85.43 %	65	650	761	33.71
5/21	1	24.0	268.30	76.83 %	66	660	859	40.71
5/22	1	24.0	276.61	75.20 %	56	560	745	46.71
5/23	1	24.0	282.36	67.75 %	72	720	1,063	55.31
5/24	1	24.0	257.28	80.40 %	39	390	485	59.21
5/25	1	24.0	205.70	97.74 %	45	474	485	63.11
5/26	1	24.0	187.50	79.87 %	49	653	818	69.71
5/27	1	24.0	232.22	82.88 %	30	300	362	72.71
5/28	1	24.0	282.26	66.81 %	62	620	928	80.21
5/29	1	24.0	346.54	59.56 %	30	300	504	84.21
5/30	1	24.0	329.83	69.38 %	38	380	548	88.71
5/31	1	24.0	356.90	65.02 %	14	140	215	90.41
6/01	1	24.0	348.27	67.26 %	13	130	193	92.01
6/02	1	24.0	386.03	60.40 %	13	130	215	93.71
6/03	1	24.0	381.22	55.13 %	5	50	91	94.41
6/04	1	24.0	367.68	54.36 %	9	90	166	95.81
6/05	1	24.0	392.36	49.08 %	6	60	122	96.81
6/06	1	24.0	338.85	61.77 %	3	30	49	97.21
6/07	1	24.0	377.35	46.23 %	4	40	87	97.91

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

LA-7T-1 SP CHINOOK LOT ID # 86122-01 40,602 RELEASED AT: LEAVENWORTH NFH FROM: 4/23/86 TO 4/23/86
AGENCY: USFWS HATCHERY: LEAVENWORTH NFH

DATE	.. PARAMETERS ..	(1) RIVER	(2) INDEX	(3) NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW				

* * * * * C O N T I N U E D * * * * *

6/08	1	24.0	325.28	60.92 %	0	0	0	97.9%
6/09	1	24.0	325.45	63.10 %	3	30	48	98.3%
6/10	1	24.0	292.42	62.49 %	4	40	64	98.8%
6/11	1	24.0	302.70	62.98 %	2	20	32	99.0%
6/12	1	24.0	264.15	79.64 %	1	10	13	99.1%
6/13	1	24.0	253.88	83.09 %	0	0	0	99.1%
6/14	1	24.0	243.88	92.05 %	3	35	38	99.5%
6/15	1	24.0	247.33	87.28 %	1	13	15	99.6%
6/16	2	22.0	236.54	87.39 %	2 *	22 *	25 *	99.8%
'16	10	0.0	236.19	88.19 %	2 *	2 *	2 *	99.8%
6/17	5	26.0	248.22	82.68 %	0 *	0 *	0 *	99.8%
6/18	1	24.0	239.74	86.04 %	1	11	13	99.9%
6/19	1	24.0	219.99	97.18 %	0	0	0	99.9%
6/20	1	24.0	215.73	96.25 %	0	0	0	99.9%
6/21	1	24.0	205.80	100.00 %	0	0	0	99.9%
6/22	1	24.0	179.84	100.00 %	0	0	0	99.9%
6/23	1	24.0	171.71	100.00 %	0	0	0	99.9%
6/24	1	24.0	205.98	100.00 %	0	0	0	99.9%
6/25	1	24.0	192.23	100.00 %	1	13	13	100.0%

TOTAL					964	9,720	12,371	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL FISH AND WILDLIFE SERVICE
FISH PASSAGE DATA SYSTEM
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MCNARY

* * *

CHINOOK 1'S

* * *

RA-7T-3 SP CHINOOK LOT ID # 86125-03

34,353

RELEASED AT: METHOW R

FROM: 4/29/86 TO 4/29/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	.. SAMPLE (1) SC--#D--GW--HR.S	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE	
1986								
5/09	1	24.0	243.93	93.22 %	2	20	21	0.3%
5/10	1	24.0	245.24	93.80 %	3	30	32	0.6%
5/11	1	24.0	268.87	85.83 %	2	20	23	0.9%
5/12	1	24.0	249.31	92.20 %	2	20	22	1.2%
5/13	1	24.0	261.87	87.67 %	7	70	80	2.1%
5/14	1	24.0	267.54	86.91 %	13	130	150	4.0%
5/15	1	24.0	269.22	87.22 %	14	140	161	5.9%
5/16	1	24.0	258.48	90.21 %	21	210	233	8.7%
5/17	1	24.0	243.01	94.41 %	35	350	371	13.2%
5/18	1	24.0	223.76	97.04 %	27	270	278	16.5%
5/19	1	24.0	198.30	100.00 %	29	290	290	20.0%
5/20	1	24.0	247.85	85.43 %	58	580	679	28.2%
5/21	1	24.0	268.30	76.83 %	33	330	430	33.4%
5/22	1	24.0	276.61	75.20 %	48	480	638	41.1%
5/23	1	24.0	282.36	67.75 %	37	370	546	47.7%
5/24	1	24.0	257.28	80.40 %	26	260	323	51.6%
5/25	1	24.0	205.70	97.74 %	37	389	398	56.4%
5/26	1	24.0	187.50	79.87 %	41	547	685	64.6%
5/27	1	24.0	232.22	82.88 %	11	110	133	66.2%
5/28	1	24.0	282.26	66.81 %	42	420	629	73.8%
5/29	1	24.0	346.54	59.56 %	31	310	520	80.1%
5/30	1	24.0	329.83	69.38 %	29	290	418	85.1%
5/31	1	24.0	356.90	65.02 %	15	150	231	87.9%
6/01	1	24.0	348.27	67.26 %	5	50	74	88.8%
6/02	1	24.0	386.03	60.40 %	5	50	83	89.8%
6/03	1	24.0	381.22	55.13 %	5	50	91	90.9%
6/04	1	24.0	367.68	54.36 %	6	60	110	92.2%
6/05	1	24.0	392.36	49.08 %	3	30	61	93.3%
6/06	1	24.0	338.85	61.77 %	9	90	146	94.7%
6/07	1	24.0	377.35	46.23 %	6	60	130	96.3%
6/08	1	24.0	325.28	60.92 %	0	0	0	96.3%
6/09	1	24.0	325.45	63.10 %	3	30	48	96.9%
6/10	1	24.0	292.42	62.49 %	8	80	128	98.4%
6/11	1	24.0	302.70	62.98 %	1	10	16	98.6%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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* System at (503) 230-4290. *

MCNARY * * * CHINOOK 1'S * * *

RA-7T-3 SP CHINOOK LOT ID # 86125-03 34,353 RELEASED AT: METHUEN R FROM: 4/29/86 TO 4/29/86
AGENCY: USFWS HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-ID-GW-BRIS						

* * * * * C O N T I N U E D * * * * *

6/12	1	24.0	264.15	79.64 %	1	10	13	98.8%
6/13	1	24.0	253.88	83.09 %	2	24	29	99.1%
6/14	1	24.0	243.88	92.05 %	2	24	26	99.4%
6/15	1	24.0	247.33	87.28 %	2	25	29	99.8%
6/16	2	22.0	236.54	87.39 %	0 *	0 *	0 *	99.8%
6/16	10	0.0	236.19	88.19 %	3 *	3 *	3 *	99.8%
6/17	5	26.0	248.22	82.68 %	0 *	0 *	0 *	99.8%
6/18	1	24.0	239.74	86.04 %	0	0	0	99.8%
6/19	1	24.0	219.99	97.18 %	0	0	0	99.8%
6/20	1	24.0	215.73	96.25 %	0	0	0	99.8%
6/21	1	24.0	205.80	100.00 %	0	0	0	99.8%
6/22	1	24.0	179.84	100.00 %	0	0	0	99.8%
6/23	1	24.0	171.71	100.00 %	0	0	0	99.8%
6/24	1	24.0	205.98	100.00 %	0	0	0	99.8%
6/25	1	24.0	192.23	100.00 %	0	0	0	99.8%
6/26	1	24.0	200.30	100.00 %	0	0	0	99.8%
6/27	1	24.0	178.89	100.00 %	0	0	0	99.8%
6/28	1	24.0	157.06	100.00 %	0	0	0	99.8%
6/29	1	24.0	163.47	100.00 %	0	0	0	99.8%
6/30	1	24.0	148.23	100.00 %	0	0	0	99.8%
7/01	1	24.0	158.26	100.00 %	0	0	0	99.8%
7/02	1	24.0	150.45	100.00 %	0	0	0	99.8%
7/03	1	24.0	106.71	100.00 %	0	0	0	99.8%
7/04	1	24.0	119.55	100.00 %	0	0	0	99.8%
7/05	1	24.0	104.38	100.00 %	0	0	0	99.8%
7/06	1	24.0	97.65	100.00 %	0	0	0	99.8%
7/07	1	24.0	91.88	100.00 %	0	0	0	99.8%
7/08	1	24.0	105.18	100.00 %	0	0	0	99.8%
7/09	1	24.0	121.95	100.00 %	0	0	0	99.8%
7/10	1	24.0	134.25	100.00 %	0	0	0	99.8%
7/11	1	24.0	183.27	100.00 %	0	0	0	99.8%
7/12	1	24.0	171.55	100.00 %	0	0	0	99.8%
7/13	1	24.0	157.90	100.00 %	1	14	14	100.0%

* * * * * C O N T I N U E D * * * * *

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

 * These data are preliminary and have been derived from various sources. For *
 * verification and/or origin of data, contact the operators of the Fish Passage Data *
 * System at (503) 230-4290. *

MCNARY * * * CHINOOK 1'S * * *

RA-7T-3 SP CHINOOK LOT ID # 86125-03 34,353 RELEASED AT: METHOW R FROM: 4/29/86 TO 4/29/86
 AGENCY: USFWS HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	(4) ... PASSAGE INDEX ...
1986	SC--#D--GW--HRS	FLOW	FLOW			DAILY COUNT CUMULATIVE

***** CONTINUED *****

TOTAL				625	6,396	8,292
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
 GW = Number of gatewells sampled Hrs= Number of hours sampled
 (2) River Flow: Data acquired from Corps data site - MCN
 (3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
 (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
 (*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY * * * CHINOOK 1'S * * *

LA-7U-1 SP CHINOOK LOT ID # 86126-03 11,904 RELEASED AT: BELOW PRD DAM FROM: 4/29/86 TO 4/29/86
AGENCY: USFWS HATCHERY: WINTHROP NFH

DATE	.. SAMPLE (1) PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE	
1986	SC--ID--GW--HR.S	FLOW	FLOW					
5/02	1	24.0	254.22	90.27 %	1	14	16	0.3%
5/03	1	24.0	246.23	93.79 %	5	42	45	1.0%
5/04	1	24.0	228.96	100.00 %	12	100	100	2.5%
5/05	1	24.0	232.73	100.00 %	12	100	100	4.1%
5/06	1	24.0	211.62	97.52 %	23	128	131	6.2%
5/07	1	24.0	267.15	82.56 %	34	189	229	9.8%
5/08	1	24.0	251.32	90.75 %	27	270	298	14.5%
5/09	1	24.0	243.93	93.22 %	18	180	193	17.5%
5/10	1	24.0	245.24	93.80 %	20	200	213	20.9%
5/11	1	24.0	268.87	85.83 %	22	220	256	24.9%
5/12	1	24.0	249.31	92.20 %	22	220	239	28.7%
5/13	1	24.0	261.87	87.67 %	42	420	479	36.2%
5/14	1	24.0	267.54	86.91 %	38	380	437	43.1%
5/15	1	24.0	269.22	87.22 %	28	280	321	48.2%
5/16	1	24.0	258.48	90.21 %	33	330	366	54.0%
5/17	1	24.0	243.01	94.41 %	43	430	455	61.1%
5/18	1	24.0	223.76	97.04 %	39	390	402	67.5%
5/19	1	24.0	198.30	100.00 %	41	410	410	73.9%
5/20	1	24.0	247.85	85.43 %	36	360	421	80.6%
5/21	1	24.0	268.30	76.83 %	25	250	325	85.7%
5/22	1	24.0	276.61	75.20 %	19	190	253	89.7%
5/23	1	24.0	282.36	67.75 %	21	210	310	94.6%
5/24	1	24.0	257.28	80.40 %	5	50	62	95.6%
5/25	1	24.0	205.70	97.74 %	5	53	54	96.4%
5/26	1	24.0	187.50	79.87 %	5	67	84	97.7%
5/27	1	24.0	232.22	82.88 %	2	20	24	98.1%
5/28	1	24.0	282.26	66.81 %	6	60	90	99.5%
5/29	1	24.0	346.54	59.56 %	0	0	0	99.5%
5/30	1	24.0	329.83	69.38 %	0	0	0	99.5%
5/31	1	24.0	356.90	65.02 %	1	10	15	99.8%
6/01	1	24.0	348.27	67.26 %	1	10	15	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK 1'S

* * *

LA-7U-1 SP CHINOOK LOT ID ÷ 86126-03 11,904 RELEASED AT: BELOW PRD DAM FROM: 4/29/86 TO 4/29/86
AGENCY: USFWS HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4)
	SC--#D--GW--HRS	FLOW	FLOW			DAILY COUNT	CUMULATIVE
1986							

***** CONTINUED *****

TOTAL				586	5,583	6,343	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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MCNARY * * * CHINOOK 1'S * * *

RA-7U-3 FA CHINOOK LOT ID # 86157-01 50,000 RELEASED AT: RINGOLD H FROM: 4/01/86 TO 4/06/86
AGENCY: WDF HATCHERY: RINGOLD H

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC--#D--GW--HR.S	FLOW	FLOW				
4/04	1	24.0	278.98	69.88 %	5	56	80 0.4%
4/05	1	24.0	258.22	86.37 %	62	620	718 4.1%
4/06	1	24.0	248.39	79.91 %	134	1,787	2,236 15.6%
4/07	1	24.0	248.33	79.83 %	238	2,380	2,981 30.9%
4/08	1	24.0	243.82	86.88 %	222	2,220	2,555 44.0%
4/09	1	24.0	209.98	100.00 %	149	1,753	1,753 53.0%
4/10	1	24.0	224.02	99.70 %	101	1,443	1,447 60.5%
4/11	1	24.0	241.92	93.36 %	87	1,243	1,331 67.3%
4/12	1	24.0	246.35	91.75 %	54	675	736 71.1%
4/13	1	24.0	241.31	94.78 %	40	500	528 73.8%
4/14	1	24.0	275.74	82.15 %	30	400	487 76.3%
4/15	1	24.0	262.18	79.34 %	33	347	437 78.5%
4/16	1	24.0	266.79	84.31 %	34	340	403 80.6%
4/17	1	24.0	295.75	75.39 %	34	378	501 83.2%
4/18	1	24.0	255.31	90.35 %	29	290	321 84.8%
4/19	1	24.0	247.37	93.43 %	20	286	306 86.4%
4/20	1	24.0	206.00	100.00 %	19	271	271 87.8%
4/21	1	24.0	207.48	100.00 %	25	357	357 89.6%
4/22	1	24.0	210.52	95.95 %	19	271	282 91.1%
4/23	1	24.0	265.63	82.31 %	20	286	347 92.9%
4/24	1	24.0	296.90	76.52 %	22	244	319 94.5%
4/25	1	24.0	274.79	82.17 %	18	200	243 95.7%
4/26	1	24.0	292.83	74.41 %	4	50	67 96.1%
4/27	1	23.0	264.40	83.31 %	10	100	120 96.7%
4/28	1	24.0	239.84	92.34 %	6	75	81 97.1%
4/29	1	24.0	258.40	84.68 %	3	38	45 97.3%
4/30	1	24.0	288.48	80.78 %	4	50	62 97.7%
5/01	1	24.0	239.83	95.57 %	3	33	35 97.8%
5/02	1	24.0	254.22	90.27 %	0	0	0 97.8%
5/03	1	24.0	246.23	93.79 %	5	42	45 98.1%
5/04	1	24.0	228.96	100.00 %	2	17	17 98.2%
5/05	1	24.0	232.73	100.00 %	1	8	8 98.2%
5/06	1	24.0	211.62	97.52 %	3	17	17 98.3%
5/07	1	24.0	267.15	82.56 %	6	33	40 98.5%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * CHINOOK 1'S * * *

RA-7U-3 FA CHINOOK LOT ID # 86157-01 50,000 RELEASED AT: RINGOLD H FROM: 4/01/86 TO 4/06/86
AGENCY: WDF HATCHERY: RINGOLD H

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HRS						

* * * * * C O N T I N U E D * * * * *

5/08	1	24.0	251.32	90.75 %	6	60	66	98.8%
5/09	1	24.0	243.93	93.22 %	2	20	21	98.9%
5/10	1	24.0	245.24	93.80 %	5	50	53	99.2%
5/11	1	24.0	268.87	85.83 %	0	0	0	99.2%
5/12	1	24.0	249.31	92.20 %	2	20	22	99.3%
5/13	1	24.0	261.87	87.67 %	1	10	11	99.4%
5/14	1	24.0	267.54	86.91 %	2	20	23	99.5%
5/15	1	24.0	269.22	87.22 %	0	0	0	99.5%
5/16	1	24.0	258.48	90.21 %	1	10	11	99.6%
5/17	1	24.0	243.01	94.41 %	1	10	11	99.6%
5/18	1	24.0	223.76	97.04 %	1	10	10	99.7%
5/19	1	24.0	198.30	100.00 %	1	10	10	99.7%
5/20	1	24.0	247.85	85.43 %	0	0	0	99.7%
5/21	1	24.0	268.30	76.83 %	1	10	13	99.8%
5/22	1	24.0	276.61	75.20 %	2	20	27	99.9%
5/23	1	24.0	282.36	67.75 %	0	0	0	99.9%
5/24	1	24.0	257.28	80.40 %	0	0	0	99.9%
5/25	1	24.0	205.70	97.74 %	0	0	0	99.9%
5/26	1	24.0	187.50	79.87 %	0	0	0	99.9%
5/27	1	24.0	232.22	82.88 %	0	0	0	99.9%
5/28	1	24.0	282.26	66.81 %	1	10	15	100.0%

TOTAL					1,468	17,070	19,469	
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
- (2) River Flow: Data acquired from Corps data site - MCN
- (3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
- (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
 ** Brand Recapture Summary **

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 * System at (503) 230-4290. *

MCNARY

CHINOOK O'S

RD-S -1 SU CHINOOK LOT ID # 86162-01 100,447 RELEASED AT: WELLS HATCHERY FROM: 5/29/86 TO 5/29/86
 AGENCY: WDF HATCHERY: WELLS HATCHERY

DATE	.. SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--RD--GW--HR.S	FLOW	FLOW				
6/11	1 24.0	302.70	62.98 %	9	90	143	1.5%
6/12	1 24.0	264.15	79.64 %	13	130	163	3.2%
6/13	1 24.0	253.88	83.09 %	15	176	212	5.4%
6/14	1 24.0	243.88	92.05 %	28	329	357	9.1%
6/15	1 24.0	247.33	87.28 %	37	463	530	14.5%
6/16	2 22.0	236.54	87.39 %	39 *	433 *	495 *	19.7%
6/16	10 0.0	236.19	88.19 %	44 *	44 *	50 *	20.2%
6/17	5 26.0	248.22	82.68 %	34 *	378 *	457 *	24.9%
6/18	1 24.0	239.74	86.04 %	28	311	361	28.7%
6/19	1 24.0	219.99	97.18 %	16	320	329	32.1%
6/20	1 24.0	215.73	96.25 %	16	235	244	34.6%
6/21	1 24.0	205.80	100.00 %	6	80	80	35.4%
6/22	1 24.0	179.84	100.00 %	5	71	71	36.1%
6/23	1 24.0	171.71	100.00 %	5	67	67	36.8%
6/24	1 24.0	205.98	100.00 %	0	0	0	36.8%
6/25	1 24.0	192.23	100.00 %	2	27	27	37.1%
6/26	1 24.0	200.30	100.00 %	0	0	0	37.1%
6/27	1 24.0	178.89	100.00 %	1	14	14	37.3%
6/28	1 24.0	157.06	100.00 %	0	0	0	37.3%
6/29	1 24.0	163.47	100.00 %	0	0	0	37.3%
6/30	1 24.0	148.23	100.00 %	0	0	0	37.3%
7/01	1 24.0	158.26	100.00 %	0	0	0	37.3%
7/02	1 24.0	150.45	100.00 %	3	43	43	37.7%
7/03	1 24.0	106.71	100.00 %	1	14	14	37.9%
7/04	1 24.0	119.55	100.00 %	1	14	14	38.0%
7/05	1 24.0	104.38	100.00 %	1	14	14	38.1%
7/06	1 24.0	97.65	100.00 %	0	0	0	38.1%
7/07	1 24.0	91.88	100.00 %	1	14	14	38.3%
7/08	1 24.0	105.18	100.00 %	0	0	0	38.3%
7/09	1 24.0	121.95	100.00 %	2	29	29	38.6%
7/10	1 24.0	134.25	100.00 %	4	57	57	39.2%
7/11	1 24.0	183.27	100.00 %	1	14	14	39.3%
7/12	1 24.0	171.55	100.00 %	4	57	57	39.9%
7/13	1 24.0	157.90	100.00 %	3	43	43	40.4%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY * * * CHINOOK O'S * * *

RD-S -1 SU CHINOOK LOT ID # 86162-01 100,447 RELEASED AT: WELLS HATCHERY FROM: 5/29/86 TO 5/29/86
AGENCY: WDF HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HR.S						

***** CONTINUED *****

7/14	1	24.0	168.29	100.00 %	8	114	114	41.5X
7/15	1	24.0	183.41	100.00 %	28	400	400	45.7X
7/16	1	24.0	183.62	100.00 %	17	243	243	48.2X
7/17	1	24.0	157.54	100.00 %	13	186	186	50.1X
7/18	1	24.0	179.05	100.00 %	9	129	129	51.5X
7/19	1	24.0	162.68	100.00 %	23	329	329	54.9X
7/20	1	24.0	160.60	100.00 %	24	343	343	58.4X
7/21	1	24.0	167.05	100.00 %	26	371	371	62.3X
7/22	1	24.0	184.46	100.00 %	42	646	646	68.9X
7/23	1	24.0	180.98	100.00 %	27	386	386	72.9X
7/24	1	24.0	150.06	100.00 %	16	229	229	75.3X
7/25	1	24.0	160.70	100.00 %	17	243	243	77.8X
7/26	1	24.0	169.35	100.00 %	30	429	429	82.3X
7/27	1	24.0	164.05	100.00 %	17	243	243	84.8X
7/28	1	24.0	162.50	100.00 %	16	229	229	87.2X
7/29	1	24.0	147.05	100.00 %	17	243	243	89.7X
7/30	1	24.0	139.65	100.00 %	10	143	143	91.1X
7/31	1	24.0	135.18	100.00 %	18	257	257	93.8X
8/01	1	24.0	137.18	100.00 %	8	114	114	95.0X
8/02	1	24.0	133.66	100.00 %	12	171	171	96.8X
8/03	1	24.0	136.36	100.00 %	6	86	86	97.7X
8/04	1	24.0	118.68	100.00 %	4	57	57	98.2X
8/05	1	24.0	105.99	100.00 %	1	14	14	98.4X
8/06	1	24.0	131.16	100.00 %	2	29	29	98.7X
8/07	1	24.0	120.80	100.00 %	0	0	0	98.7X
8/08	1	24.0	137.91	100.00 %	1	14	14	98.8X
8/09	1	24.0	134.97	100.00 %	0	0	0	98.8X
8/10	1	24.0	141.90	100.00 %	0	0	0	98.8X
8/11	1	24.0	130.14	100.00 %	1	14	14	99.0X
8/12	1	24.0	128.05	100.00 %	0	0	0	99.0X
8/13	1	24.0	146.67	100.00 %	0	0	0	99.0X
8/14	1	24.0	142.78	100.00 %	2	29	29	99.3X
8/15	1	24.0	142.16	100.00 %	1	14	14	99.4X

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM

* * Brand Recapture Summary * *

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 * verification and/or origin of data, contact the operators of the Fish Passage Data *
 * System at (503) 230-4290. *

MCNARY * * * CHINOOK O'S * * *

RD-S -1 SU CHINOOK LOT ID # 86162-01 100,447 RELEASED AT: WELLS HATCHERY FROM: 5/29/86 TO 5/29/86
 AGENCY: WDF HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-ID-GW-HRS						

***** CONTINUED *****

8/16	1	24.0	136.07	100.00 %	0	0	0	99.4%
8/17	1	24.0	102.47	100.00 %	0	0	0	99.4%
8/18	1	24.0	109.99	100.00 %	0	0	0	99.4%
8/19	1	24.0	132.20	100.00 %	0	0	0	99.4%
8/20	1	24.0	134.62	100.00 %	0	0	0	99.4%
8/21	1	24.0	129.59	100.00 %	0	0	0	99.4%
8/22	1	24.0	122.03	100.00 %	0	0	0	99.4%
8/23	1	24.0	113.63	100.00 %	0	0	0	99.4%
8/24	1	24.0	97.99	100.00 %	0	0	0	99.4%
8/25	1	24.0	94.92	100.00 %	0	0	0	99.4%
8/26	1	24.0	106.14	100.00 %	1	14	14	99.6%
8/27	1	24.0	125.81	100.00 %	0	0	0	99.6%
8/28	1	24.0	126.05	100.00 %	0	0	0	99.6%
8/29	1	24.0	111.08	100.00 %	1	14	14	99.7%
8/30	1	24.0	82.83	100.00 %	0	0	0	99.7%
8/31	1	24.0	77.88	100.00 %	0	0	0	99.7%
9/01	1	24.0	77.16	100.00 %	0	0	0	99.7%
9/02	1	24.0	86.13	100.00 %	1	14	14	99.9%
9/03	1	24.0	127.42	100.00 %	0	0	0	99.9%
9/04	1	24.0	138.25	100.00 %	0	0	0	99.9%
9/05	1	24.0	143.87	100.00 %	0	0	0	99.9%
9/06	1	24.0	137.50	100.00 %	0	0	0	99.9%
9/07	1	24.0	130.50	100.00 %	0	0	0	99.9%
9/08	1	24.0	124.66	100.00 %	0	0	0	99.9%
9/09	1	24.0	129.79	100.00 %	1	14	14	100.0%

TOTAL ----- 719 ----- 9,228 ----- 9,660 -----

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
 GW = Number of gatewells sampled Hrs = Number of hours sampled
 (2) River Flow: Data acquired from Corps data site - MCN
 (3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
 (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
 (*) Sample deviates from "normal" conditions (i.e. SC code > 1)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK O'S

* * *

LA-T -1 FA CHINOOK LOT ID # 86156-01 100,276 RELEASED AT: PRIEST RAPIDS H FROM: 6/10/86 TO 6/10/86
AGENCY: WDF HATCHERY: PRIEST RAPIDS H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HR.S						
6/14	1 24.0	243.88	92.05 %	1	12	13	0.0%
6/15	1 24.0	247.33	87.28 %	1	13	15	0.1%
6/16	2 22.0	236.54	87.39 %	6 *	67 *	77 *	0.4%
6/16	10 0.0	236.19	88.19 %	15 *	15 *	17 *	0.4%
6/17	5 26.0	248.22	82.68 %	63 *	700 *	847 *	3.3%
6/18	1 24.0	239.74	86.04 %	297	3,300	3,835	16.4%
6/19	1 24.0	219.99	97.18 %	148	2,960	3,046	26.9%
6/20	1 24.0	215.73	96.25 %	235	3,456	3,591	39.1%
6/21	1 24.0	205.80	100.00 %	80	1,067	1,067	42.8%
6/22	1 24.0	179.84	100.00 %	92	1,314	1,314	47.3%
6/23	1 24.0	171.71	100.00 %	86	1,147	1,147	51.2%
6/24	1 24.0	205.98	100.00 %	91	1,213	1,213	55.4%
6/25	1 24.0	192.23	100.00 %	46	613	613	57.5%
6/26	1 24.0	200.30	100.00 %	34	486	486	59.1%
6/27	1 24.0	178.89	100.00 %	45	643	643	61.3%
6/28	1 24.0	157.06	100.00 %	37	529	529	63.1%
6/29	1 24.0	163.47	100.00 %	18	257	257	64.0%
6/30	1 24.0	148.23	100.00 %	8	114	114	64.4%
7/01	1 24.0	158.26	100.00 %	27	386	386	65.7%
7/02	1 24.0	150.45	100.00 %	24	343	343	66.9%
7/03	1 24.0	106.71	100.00 %	18	257	257	67.8%
7/04	1 24.0	119.55	100.00 %	16	229	229	68.5%
7/05	1 24.0	104.38	100.00 %	13	186	186	69.2%
7/06	1 24.0	97.65	100.00 %	14	200	200	69.9%
7/07	1 24.0	91.88	100.00 %	31	443	443	71.4%
7/08	1 24.0	105.18	100.00 %	17	243	243	72.2%
7/09	1 24.0	121.95	100.00 %	39	557	557	74.1%
7/10	1 24.0	134.25	100.00 %	22	314	314	75.2%
7/11	1 24.0	183.27	100.00 %	21	300	300	76.2%
7/12	1 24.0	171.55	100.00 %	18	257	257	77.1%
7/13	1 24.0	157.90	100.00 %	50	714	714	79.5%
7/14	1 24.0	168.29	100.00 %	69	986	986	82.9%
7/15	1 24.0	183.41	100.00 %	71	1,014	1,014	86.4%
7/16	1 24.0	183.62	100.00 %	42	600	600	88.4%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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MCNARY * * * CHINOOK O'S * * *

LA-T -1 FA CHINOOK LOT ID # 86156-01 100,276 RELEASED AT: PRIEST RAPIDS H FROM: 6/10/86 TO 6/10/86
AGENCY: WDF HATCHERY: PRIEST RAPIDS H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS						

* * * * * C O N T I N U E D * * * * *

7/17	1	24.0	157.54	100.00 %	18	257	257	89.3%
7/18	1	24.0	179.05	100.00 %	33	471	471	90.9%
7/19	1	24.0	162.68	100.00 %	26	371	371	92.2%
7/20	1	24.0	160.60	100.00 %	8	114	114	92.6%
7/21	1	24.0	167.05	100.00 %	10	143	143	93.1%
7/22	1	24.0	184.46	100.00 %	50	769	769	95.7%
7/23	1	24.0	180.98	100.00 %	16	229	229	96.5%
7/24	1	24.0	150.06	100.00 %	5	71	71	96.7%
7/25	1	24.0	160.70	100.00 %	3	43	43	96.9%
7/26	1	24.0	169.35	100.00 %	0	0	0	96.9%
7/27	1	24.0	164.05	100.00 %	5	71	71	97.1%
7/28	1	24.0	162.50	100.00 %	9	129	129	97.6%
7/29	1	24.0	147.05	100.00 %	5	71	71	97.8%
7/30	1	24.0	139.65	100.00 %	10	143	143	98.3%
7/31	1	24.0	135.18	100.00 %	26	371	371	99.6%
8/01	1	24.0	137.18	100.00 %	4	57	57	99.8%
8/02	1	24.0	133.66	100.00 %	2	29	29	99.9%
8/03	1	24.0	136.36	100.00 %	1	14	14	99.9%
8/04	1	24.0	118.68	100.00 %	0	0	0	99.9%
8/05	1	24.0	105.99	100.00 %	0	0	0	99.9%
8/06	1	24.0	131.16	100.00 %	1	14	14	100.0%
8/07	1	24.0	120.80	100.00 %	0	0	0	100.0%
8/08	1	24.0	137.91	100.00 %	1	14	14	100.0%

TOTAL 2,028 28,316 29,234

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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MCNARY

* * *

CHINOOK O'S

* * *

LA-T -4 FA CHINOOK LOT ID # 86156-02 100,374 RELEASED AT: PRIEST RAPIDS H FROM: 6/19/86 TO 6/19/86
AGENCY: WDF HATCHERY: PRIEST RAPIDS H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE	
1986	SC-#D-GW-HRS							
6/24	1	24.0	205.98	100.00 %	1	13	13	0.1%
6/25	1	24.0	192.23	100.00 %	1	13	13	0.1%
6/26	1	24.0	200.30	100.00 %	6	86	86	0.6%
6/27	1	24.0	178.89	100.00 %	20	286	286	2.2%
6/28	1	24.0	157.06	100.00 %	19	271	271	3.8%
6/29	1	24.0	163.47	100.00 %	20	286	286	5.4%
6/30	1	24.0	148.23	100.00 %	14	200	200	6.5%
7/01	1	24.0	158.26	100.00 %	30	429	429	8.9%
7/02	1	24.0	150.45	100.00 %	34	486	486	11.6%
7/03	1	24.0	106.71	100.00 %	28	400	400	13.9%
7/04	1	24.0	119.55	100.00 %	15	214	214	15.1%
7/05	1	24.0	104.38	100.00 %	14	200	200	16.2%
7/06	1	24.0	97.65	100.00 %	28	400	400	18.4%
7/07	1	24.0	91.88	100.00 %	31	443	443	20.9%
7/08	1	24.0	105.18	100.00 %	31	443	443	23.4%
7/09	1	24.0	121.95	100.00 %	57	814	814	28.0%
7/10	1	24.0	134.25	100.00 %	28	400	400	30.2%
7/11	1	24.0	183.27	100.00 %	15	214	214	31.4%
7/12	1	24.0	171.55	100.00 %	19	271	271	32.9%
7/13	1	24.0	157.90	100.00 %	58	829	829	37.6%
7/14	1	24.0	168.29	100.00 %	151	2,157	2,157	49.7%
7/15	1	24.0	183.41	100.00 %	140	2,000	2,000	60.9%
7/16	1	24.0	183.62	100.00 %	88	1,257	1,257	67.9%
7/17	1	24.0	157.54	100.00 %	27	386	386	70.1%
7/18	1	24.0	179.05	100.00 %	54	771	771	74.4%
7/19	1	24.0	162.68	100.00 %	76	1,086	1,086	80.5%
7/20	1	24.0	160.60	100.00 %	30	429	429	82.9%
7/21	1	24.0	167.05	100.00 %	30	429	429	85.3%
7/22	1	24.0	184.46	100.00 %	89	1,369	1,369	93.0%
7/23	1	24.0	180.98	100.00 %	28	400	400	95.3%
7/24	1	24.0	150.06	100.00 %	9	129	129	96.0%
7/25	1	24.0	160.70	100.00 %	2	29	29	96.2%
7/26	1	24.0	169.35	100.00 %	2	29	29	96.3%
7/27	1	24.0	164.05	100.00 %	5	71	71	96.7%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * CHINOOK O'S * * *

LA-T -4 FA CHINOOK LOT ID # 86156-02 100,374 RELEASED AT: PRIEST RAPIDS H FROM: 6/19/86 TO 6/19/86
AGENCY: WDF HATCHERY: PRIEST RAPIDS H

DATE	.. SAMPLE (1) SC-#D-GW-HRS	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
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* * * * * C O N T I N U E D * * * * *

7/28	1	24.0	162.50	100.00 %	3	43	43	97.0%
7/29	1	24.0	147.05	100.00 %	6	86	86	97.4%
7/30	1	24.0	139.65	100.00 %	3	43	43	97.7%
7/31	1	24.0	135.18	100.00 %	15	214	214	98.9%
8/01	1	24.0	137.18	100.00 %	7	100	100	99.4%
8/02	1	24.0	133.66	100.00 %	2	29	29	99.6%
8/03	1	24.0	136.36	100.00 %	2	29	29	99.8%
8/04	1	24.0	118.68	100.00 %	0	0	0	99.8%
8/05	1	24.0	105.99	100.00 %	0	0	0	99.8%
8/06	1	24.0	131.16	100.00 %	1	14	14	99.8%
8/07	1	24.0	120.80	100.00 %	0	0	0	99.8%
8/08	1	24.0	137.91	100.00 %	0	0	0	99.8%
8/09	1	24.0	134.97	100.00 %	1	14	14	99.9%
8/10	1	24.0	141.90	100.00 %	0	0	0	99.9%
8/11	1	24.0	130.14	100.00 %	0	0	0	99.9%
8/12	1	24.0	128.05	100.00 %	0	0	0	99.9%
8/13	1	24.0	146.67	100.00 %	0	0	0	99.9%
8/14	1	24.0	142.78	100.00 %	1	14	14	100.0%

TOTAL					1,241	17,826	17,826	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY

* * *

CHINOOK O'S

* * *

RA-T -3 FA CHINOOK LOT ID # 86155-01

81,003 RELEASED AT: LYONS FERRY

FROM: 6/10/86 TO 6/10/86

AGENCY: WDF

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--D--GW--HR.S						
6/16	2	22.0	236.54	87.39 %	0 *	0 *	0.0%
6/16	10	0.0	236.19	88.19 %	2 *	2 *	0.0%
6/17	5	26.0	248.22	82.68 %	7 *	78 *	0.5%
6/18	1	24.0	239.74	86.04 %	59	656	4.4%
6/19	1	24.0	219.99	97.18 %	59	1,180	10.6%
6/20	1	24.0	215.73	96.25 %	87	1,279	17.4%
6/21	1	24.0	205.80	100.00 %	70	933	22.1%
6/22	1	24.0	179.84	100.00 %	128	1,829	31.5%
6/23	1	24.0	171.71	100.00 %	70	933	36.3%
6/24	1	24.0	205.98	100.00 %	78	1,040	41.6%
6/25	1	24.0	192.23	100.00 %	65	867	46.0%
6/26	1	24.0	200.30	100.00 %	59	843	50.3%
6/27	1	24.0	178.89	100.00 %	103	1,471	57.8%
6/28	1	24.0	157.06	100.00 %	42	600	60.9%
6/29	1	24.0	163.47	100.00 %	37	529	63.6%
6/30	1	24.0	148.23	100.00 %	17	243	64.8%
7/01	1	24.0	158.26	100.00 %	50	714	68.5%
7/02	1	24.0	150.45	100.00 %	59	843	72.8%
7/03	1	24.0	106.71	100.00 %	19	271	74.2%
7/04	1	24.0	119.55	100.00 %	11	157	75.0%
7/05	1	24.0	104.38	100.00 %	13	186	75.9%
7/06	1	24.0	97.65	100.00 %	14	200	77.0%
7/07	1	24.0	91.88	100.00 %	13	186	77.9%
7/08	1	24.0	105.18	100.00 %	13	186	78.9%
7/09	1	24.0	121.95	100.00 %	19	271	80.2%
7/10	1	24.0	134.25	100.00 %	11	157	81.0%
7/11	1	24.0	183.27	100.00 %	25	357	82.9%
7/12	1	24.0	171.55	100.00 %	21	300	84.4%
7/13	1	24.0	157.90	100.00 %	17	243	85.6%
7/14	1	24.0	168.29	100.00 %	24	343	87.4%
7/15	1	24.0	183.41	100.00 %	20	286	88.9%
7/16	1	24.0	183.62	100.00 %	22	314	90.5%
7/17	1	24.0	157.54	100.00 %	10	143	91.2%
7/18	1	24.0	179.05	100.00 %	7	100	91.7%
7/19	1	24.0	162.68	100.00 %	6	86	92.1%

***** CONTINUED *****

* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

81.003

FROM: 6/10/86 TO 6/10/86

HATCHERY: LYONS FERRY

[illegible]

***** CONTINUED *****

7/20	1	24.0	160.60	100.00 %	7	100	100	92.7%
7/21	1	24.0	167.05	100.00 %	4	57	57	92.9%
7/22	1	24.0	184.46	100.00 %	19	292	292	94.4%
7/23	1	24.0	180.98	100.00 %	4	57	57	94.7%
7/24	1	24.0	150.06	100.00 %	2	29	29	94.9%
7/25	1	24.0	160.70	100.00 %	3	43	43	95.1%
7/26	1	24.0	169.35	100.00 %	1	14	14	95.2%
7/27	1	24.0	164.05	100.00 %	6	86	86	95.6%
7/28	1	24.0	162.50	100.00 %	5	71	71	96.0%
7/29	1	24.0	147.05	100.00 %	9	129	129	96.6%
7/30	1	24.0	139.65	100.00 %	7	100	100	97.1%
7/31	1	24.0	135.18	100.00 %	13	186	186	98.1%
8/01	1	24.0	137.18	100.00 %	2	29	29	98.2%
8/02	1	24.0	133.66	100.00 %	4	57	57	98.5%
8/03	1	24.0	136.36	100.00 %	1	14	14	98.6%
8/04	1	24.0	118.68	100.00 %	0	0	0	98.6%
8/05	1	24.0	105.99	100.00 %	1	14	14	98.7%
8/06	1	24.0	131.16	100.00 %	2	29	29	98.8%
8/07	1	24.0	120.80	100.00 %	1	14	14	98.9%
8/08	1	24.0	137.91	100.00 %	1	14	14	99.0%
8/09	1	24.0	134.97	100.00 %	1	14	14	99.0%
8/10	1	24.0	141.90	100.00 %	0	0	0	99.0%
8/11	1	24.0	130.14	100.00 %	1	14	14	99.1%
8/12	1	24.0	128.05	100.00 %	1	14	14	99.2%
8/13	1	24.0	146.67	100.00 %	0	0	0	99.2%
8/14	1	24.0	142.78	100.00 %	1	14	14	99.2%
8/15	1	24.0	142.16	100.00 %	0	0	0	99.2%
8/16	1	24.0	136.07	100.00 %	0	0	0	99.2%
8/17	1	24.0	102.47	100.00 %	1	14	14	99.3%
8/18	1	24.0	109.99	100.00 %	0	0	0	99.3%
8/19	1	24.0	132.20	100.00 %	0	0	0	99.3%
8/20	1	24.0	134.62	100.00 %	0	0	0	99.3%
8/21	1	24.0	129.59	100.00 %	0	0	0	99.3%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
 ** Brand Recapture Summary **

 * These data are preliminary and have been derived from various sources. For *
 * verification and/or origin of data, contact the operators of the Fish Passage Data *
 * System at (503) 230-4290. *

MCNARY

CHINOOK O'S

RA-T -3 FA CHINOOK LOT ID # 86155-01

81,003

RELEASED AT: LYONS FERRY

FROM: 6/10/86 TO 6/10/86

AGENCY: MDF

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC--RD--GW--HR.S	FLOW	FLOW			

***** CONTINUED *****

8/22	1	24.0	122.03	100.00 %	0	0	0	99.3%
8/23	1	24.0	113.63	100.00 %	1	14	14	99.4%
8/24	1	24.0	97.99	100.00 %	0	0	0	99.4%
8/25	1	24.0	94.92	100.00 %	0	0	0	99.4%
8/26	1	24.0	106.14	100.00 %	0	0	0	99.4%
8/27	1	24.0	125.81	100.00 %	0	0	0	99.4%
8/28	1	24.0	126.05	100.00 %	0	0	0	99.4%
8/29	1	24.0	111.08	100.00 %	0	0	0	99.4%
8/30	1	24.0	82.83	100.00 %	0	0	0	99.4%
8/31	1	24.0	77.88	100.00 %	0	0	0	99.4%
9/01	1	24.0	77.16	100.00 %	0	0	0	99.4%
9/02	1	24.0	86.13	100.00 %	0	0	0	99.4%
9/03	1	24.0	127.42	100.00 %	1	14	14	99.5%
9/04	1	24.0	138.25	100.00 %	0	0	0	99.5%
9/05	1	24.0	143.87	100.00 %	0	0	0	99.5%
9/06	1	24.0	137.50	100.00 %	0	0	0	99.5%
9/07	1	24.0	130.50	100.00 %	0	0	0	99.5%
9/08	1	24.0	124.66	100.00 %	0	0	0	99.5%
9/09	1	24.0	129.79	100.00 %	0	0	0	99.5%
9/10	1	24.0	104.96	100.00 %	0	0	0	99.5%
9/11	1	24.0	103.93	100.00 %	0	0	0	99.5%
9/12	1	24.0	112.44	100.00 %	1	14	14	99.5%
9/13	1	24.0	101.52	100.00 %	1	14	14	99.6%
9/14	1	24.0	103.02	100.00 %	2	29	29	99.8%
9/15	1	24.0	106.30	100.00 %	1	14	14	99.8%
9/16	1	24.0	125.93	100.00 %	1	14	14	99.9%
9/17	1	24.0	117.12	100.00 %	1	14	14	100.0%
9/18	1	24.0	112.05	100.00 %	0	0	0	100.0%
9/19	1	24.0	108.99	100.00 %	0	0	0	100.0%
9/20	1	24.0	102.74	100.00 %	0	0	0	100.0%
9/21	1	24.0	95.97	100.00 %	0	0	0	100.0%
9/22	1	24.0	92.98	100.00 %	0	0	0	100.0%
9/23	1	24.0	106.23	100.00 %	0	0	0	100.0%
9/24	1	24.0	116.29	100.00 %	0	0	0	100.0%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

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RA-T -3 FA CHINOOK LOT ID # 86155-01 81,003 RELEASED AT: LYONS FERRY FROM: 6/10/86 TO 6/10/86
AGENCY: WDF HATCHERY: LYONS FERRY

SAMPLE (1)		(2)	(3)				(4)
DATE	.. PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE	INDEX ...
1986	SC--ID--GW--UR.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE

* * * * * C O N T I N U E D * * * * *

9/25	1	24.0	118.61	100.00 %	0	0	0	100.0%
9/26	1	24.0	121.35	100.00 %	0	0	0	100.0%
9/26	10	0.0	89.98	100.00 %	6 *	6 *	6 *	100.0%

TOTAL	1,369	19,364	19,570
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(1) Sample parameters:  SC = Sample quality code          #D = Number of accumulated days for sample
                        GW = Number of gatewells sampled    Hrs= Number of hours sampled
(2) River Flow:        Data acquired from Corps data site - MCN
(3) Index Flow:        *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index:     Calculated as the (number collected) / (100 * percent index flow)
(*)                    Sample deviates from "normal" conditions (i.e. SC code > 1)

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FISH PASSAGE DATA SYSTEM
 ** Brand Recapture Summary **

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 * verification and/or origin of data, contact the operators of the Fish Passage Data *
 * System at (503) 230-4290. *

MCNARY

STEELHEAD

LA-N7-1 SU STEELHEAD LOT ID # 86234-01

557 RELEASED AT: METHOW R
 AGENCY: WDG

FROM: 5/09/86 TO 5/09/86
 HATCHERY: WELLS HATCHERY

DATE	.. SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW				
5/20	1 24.0	247.85	85.43 %	1	10	12	28.6X
5/21	1 24.0	268.30	76.83 %	0	0	0	28.6X
5/22	1 24.0	276.61	75.20 %	0	0	0	28.6X
5/23	1 24.0	282.36	67.75 %	0	0	0	28.6X
5/24	1 24.0	257.28	80.40 %	0	0	0	28.6X
5/25	1 24.0	205.70	97.74 %	0	0	0	28.6X
5/26	1 24.0	187.50	79.87 %	0	0	0	28.6X
5/27	1 24.0	232.22	82.88 %	0	0	0	28.6X
5/28	1 24.0	282.26	66.81 %	2	20	30	100.0X
TOTAL				3	30	42	

- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
 GW = Number of gatewells sampled Hrs= Number of hours sampled
 (2) River Flow: Data acquired from Corps data site - MCN
 (3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
 (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

RA-P7-3 SU STEELHEAD LOT ID # 86234-05 456 RELEASED AT: METHOW R FROM: 5/09/86 TO 5/09/86
AGENCY: WDG HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..		(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D GW HRS	FLOW	FLOW				
5/26	1	24.0	187.50	79.87 %	1	13	16	35.6%
5/27	1	24.0	232.22	82.88 %	0	0	0	35.6%
5/28	1	24.0	282.26	66.81 %	0	0	0	35.6%
5/29	1	24.0	346.54	59.56 %	0	0	0	35.6%
5/30	1	24.0	329.83	69.38 %	2	20	29	100.0%
TOTAL					3	33	45	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

RD-P7-1 SU STEELHEAD LOT ID # 86234-06 126 RELEASED AT: METHOW R FROM: 5/15/86 TO 5/15/86
AGENCY: WDG HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4) ...
	SC-#D-GW-HRS	FLOW	FLOW			DAILY COUNT	CUMULATIVE
5/29	1 24.0	346.54	59.56 %	1	10	17	100.0%
TOTAL				1	10	17	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

LD-T -2 STEELHEAD LOT ID # 86101-01 52,300 RELEASED AT: SANTOOTH H FROM: 4/08/86 TO 4/10/86
AGENCY: USFWS HATCHERY: HAGERMAN NFH

DATE	.. SAMPLE (1) PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--ID--GW--UB.S	FLOW	FLOW				
5/05	1	24.0	232.73	100.00 %	1	8	3.4%
5/06	1	24.0	211.62	97.52 %	0	0	3.4%
5/07	1	24.0	267.15	82.56 %	1	6	6.4%
5/08	1	24.0	251.32	90.75 %	0	0	6.4%
5/09	1	24.0	243.93	93.22 %	0	0	6.4%
5/10	1	24.0	245.24	93.80 %	0	0	6.4%
5/11	1	24.0	268.87	85.83 %	0	0	6.4%
5/12	1	24.0	249.31	92.20 %	0	0	6.4%
5/13	1	24.0	261.87	87.67 %	0	0	6.4%
5/14	1	24.0	267.54	86.91 %	1	10	11.6%
5/15	1	24.0	269.22	87.22 %	0	0	11.6%
5/16	1	24.0	258.48	90.21 %	0	0	11.6%
5/17	1	24.0	243.01	94.41 %	0	0	11.6%
5/18	1	24.0	223.76	97.04 %	0	0	11.6%
5/19	1	24.0	198.30	100.00 %	0	0	11.6%
5/20	1	24.0	247.85	85.43 %	0	0	11.6%
5/21	1	24.0	268.30	76.83 %	0	0	11.6%
5/22	1	24.0	276.61	75.20 %	0	0	11.6%
5/23	1	24.0	282.36	67.75 %	0	0	11.6%
5/24	1	24.0	257.28	80.40 %	0	0	11.6%
5/25	1	24.0	205.70	97.74 %	0	0	11.6%
5/26	1	24.0	187.50	79.87 %	0	0	11.6%
5/27	1	24.0	232.22	82.88 %	0	0	11.6%
5/28	1	24.0	282.26	66.81 %	0	0	11.6%
5/29	1	24.0	346.54	59.56 %	0	0	11.6%
5/30	1	24.0	329.83	69.38 %	1	10	17.6%
5/31	1	24.0	356.90	65.02 %	2	20	30.9%
6/01	1	24.0	348.27	67.26 %	0	0	30.9%
6/02	1	24.0	386.03	60.40 %	0	0	30.9%
6/03	1	24.0	381.22	55.13 %	1	10	38.6%
6/04	1	24.0	367.68	54.36 %	1	10	46.4%
6/05	1	24.0	392.36	49.08 %	2	20	63.9%
6/06	1	24.0	338.85	61.77 %	1	10	70.8%
6/07	1	24.0	377.35	46.23 %	0	0	70.8%
6/08	1	24.0	325.28	60.92 %	0	0	70.8%

***** CONTINUED *****

 * These data are preliminary and have been derived from various sources. For *
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 * System at (503) 230-4290. *

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FROM: 4/08/86 TO 4/10/86
HATCHERY: HAGERMAN NFH

SAMPLE (1)		(2)	(3)				(4)
DATE	PARAMETERS	RIVER	INDEX	NUMBER	NUMBER	PASSAGE	INDEX
1984	SC-4D-GW-UB.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE

***** CONTINUED *****

6/09	1	24.0	325.45	63.10 %	0	0	0	70.8%
6/10	1	24.0	292.42	62.49 %	0	0	0	70.8%
6/11	1	24.0	302.70	62.98 %	0	0	0	70.8%
6/12	1	24.0	264.15	79.64 %	1	10	13	76.4%
6/13	1	24.0	253.88	83.09 %	1	12	14	82.4%
6/14	1	24.0	243.88	92.05 %	1	12	13	88.0%
6/15	1	24.0	247.33	87.28 %	0	0	0	88.0%
6/16	2	22.0	236.54	87.39 %	1 *	11 *	13 *	93.6%
6/16	10	0.0	236.19	88.19 %	2 *	2 *	2 *	94.4%
6/17	5	26.0	248.22	82.68 %	0 *	0 *	0 *	94.4%
6/18	1	24.0	239.74	86.04 %	1	11	13	100.0%

TOTAL	18	162	233
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(1) Sample parameters:  SC = Sample quality code          #D = Number of accumulated days for sample
                        GW = Number of gatewells sampled    Hrs= Number of hours sampled
(2) River Flow:        Data acquired from Corps data site - MCN
(3) Index Flow:        *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index:     Calculated as the (number collected) / (100 * percent index flow)
(*)                    Sample deviates from "normal" conditions (i.e. SC code > 1 )

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* System at (503) 230-4290. *
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SAMPLE (1)			(2)		(3)		(4)	
DATE	.. PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE	INDEX ...	
1984	SC--#D--GW--UB.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE	
5/07	1	24.0	267.15	82.56 %	1	6	7	3.5%
5/08	1	24.0	251.32	90.75 %	0	0	0	3.5%
5/09	1	24.0	243.93	93.22 %	0	0	0	3.5%
5/10	1	24.0	245.24	93.80 %	0	0	0	3.5%
5/11	1	24.0	268.87	85.83 %	0	0	0	3.5%
5/12	1	24.0	249.31	92.20 %	0	0	0	3.5%
5/13	1	24.0	261.87	87.67 %	0	0	0	3.5%
5/14	1	24.0	267.54	86.91 %	0	0	0	3.5%
5/15	1	24.0	269.22	87.22 %	0	0	0	3.5%
5/16	1	24.0	258.48	90.21 %	0	0	0	3.5%
5/17	1	24.0	243.01	94.41 %	0	0	0	3.5%
5/18	1	24.0	223.76	97.04 %	0	0	0	3.5%
5/19	1	24.0	198.30	100.00 %	0	0	0	3.5%
5/20	1	24.0	247.85	85.43 %	0	0	0	3.5%
5/21	1	24.0	268.30	76.83 %	0	0	0	3.5%
5/22	1	24.0	276.61	75.20 %	0	0	0	3.5%
5/23	1	24.0	282.36	67.75 %	0	0	0	3.5%
5/24	1	24.0	257.28	80.40 %	0	0	0	3.5%
5/25	1	24.0	205.70	97.74 %	0	0	0	3.5%
5/26	1	24.0	187.50	79.87 %	0	0	0	3.5%
5/27	1	24.0	232.22	82.88 %	0	0	0	3.5%
5/28	1	24.0	282.26	66.81 %	0	0	0	3.5%
5/29	1	24.0	346.54	59.56 %	0	0	0	3.5%
5/30	1	24.0	329.83	69.38 %	0	0	0	3.5%
5/31	1	24.0	356.90	65.02 %	1	10	15	11.0%
6/01	1	24.0	348.27	67.26 %	1	10	15	18.5%
6/02	1	24.0	386.03	60.40 %	0	0	0	18.5%
6/03	1	24.0	381.22	55.13 %	0	0	0	18.5%
6/04	1	24.0	367.68	54.36 %	2	20	37	37.0%
6/05	1	24.0	392.36	49.08 %	0	0	0	37.0%
6/06	1	24.0	338.85	61.77 %	0	0	0	37.0%
6/07	1	24.0	377.35	46.23 %	3	30	65	69.5%
6/08	1	24.0	325.28	60.92 %	0	0	0	69.5%
6/09	1	24.0	325.45	63.10 %	0	0	0	69.5%
6/10	1	24.0	292.42	62.49 %	1	10	16	77.5%
6/11	1	24.0	302.70	62.98 %	1	10	16	85.5%

129

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

LD-T -4 STEELHEAD LOT ID # 86103-01 51,325 RELEASED AT: E F SALMON R FROM: 4/07/86 TO 4/09/86
AGENCY: USFWS HATCHERY: HAGERMAN NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS						

***** CONTINUED *****

6/12	1	24.0	264.15	79.64 %	0	0	0	85.5X
6/13	1	24.0	253.88	83.09 %	0	0	0	85.5X
6/14	1	24.0	243.88	92.05 %	0	0	0	85.5X
6/15	1	24.0	247.33	87.28 %	0	0	0	85.5X
6/16	2	22.0	236.54	87.39 %	0 *	0 *	0 *	85.5X
6/16	10	0.0	236.19	88.19 %	0 *	0 *	0 *	85.5X
6/17	5	26.0	248.22	82.68 %	0 *	0 *	0 *	85.5X
6/18	1	24.0	239.74	86.04 %	0	0	0	85.5X
6/19	1	24.0	219.99	97.18 %	0	0	0	85.5X
6/20	1	24.0	215.73	96.25 %	1	15	16	93.5X
6/21	1	24.0	205.80	100.00 %	0	0	0	93.5X
6/22	1	24.0	179.84	100.00 %	0	0	0	93.5X
6/23	1	24.0	171.71	100.00 %	0	0	0	93.5X
6/24	1	24.0	205.98	100.00 %	1	13	13	100.0X

TOTAL					12	124	200	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

FISH PASSAGE DATA SYSTEM

* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290.                                                       *
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RD-T -2 STEELHEAD LOT ID # 86004-01 51,328 RELEASED AT: HELLS CANYON FROM: 4/25/86 TO 4/29/86
 AGENCY: IDFG HATCHERY: NIAGARA SPRING

SAMPLE (1)			(2)		(3)		(4)	
DATE	.. PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE	INDEX ...	
1986	SC--TD--GW--HR.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE	
5/10	1	24.0	245.24	93.80 %	1	10	11	9.2%
5/11	1	24.0	268.87	85.83 %	0	0	0	9.2%
5/12	1	24.0	249.31	92.20 %	1	10	11	18.5%
5/13	1	24.0	261.87	87.67 %	1	10	11	27.7%
5/14	1	24.0	267.54	86.91 %	0	0	0	27.7%
5/15	1	24.0	269.22	87.22 %	0	0	0	27.7%
5/16	1	24.0	258.48	90.21 %	0	0	0	27.7%
5/17	1	24.0	243.01	94.41 %	0	0	0	27.7%
5/18	1	24.0	223.76	97.04 %	0	0	0	27.7%
5/19	1	24.0	198.30	100.00 %	0	0	0	27.7%
5/20	1	24.0	247.85	85.43 %	1	10	12	37.8%
5/21	1	24.0	268.30	76.83 %	1	10	13	48.7%
5/22	1	24.0	276.61	75.20 %	0	0	0	48.7%
5/23	1	24.0	282.36	67.75 %	2	20	30	73.9%
5/24	1	24.0	257.28	80.40 %	0	0	0	73.9%
5/25	1	24.0	205.70	97.74 %	0	0	0	73.9%
5/26	1	24.0	187.50	79.87 %	0	0	0	73.9%
5/27	1	24.0	232.22	82.88 %	0	0	0	73.9%
5/28	1	24.0	282.26	66.81 %	0	0	0	73.9%
5/29	1	24.0	346.54	59.56 %	0	0	0	73.9%
5/30	1	24.0	329.83	69.38 %	0	0	0	73.9%
5/31	1	24.0	356.90	65.02 %	1	10	15	86.6%
6/01	1	24.0	348.27	67.26 %	0	0	0	86.6%
6/02	1	24.0	386.03	60.40 %	0	0	0	86.6%
6/03	1	24.0	381.22	55.13 %	0	0	0	86.6%
6/04	1	24.0	367.68	54.36 %	0	0	0	86.6%
6/05	1	24.0	392.36	49.08 %	0	0	0	86.6%
6/06	1	24.0	338.85	61.77 %	1	10	16	100.0%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM

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* These data are preliminary and have been derived from various sources. For      *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290.                                                       *
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✱ ✱ ✱

RD-T -2 STEELHEAD LOT ID # 86004-01 51,328 RELEASED AT: HELLS CANYON FROM: 4/25/86 TO 4/29/86
 AGENCY: IDFG HATCHERY: NIAGARA SPRING

[illegible]

***** CONTINUED *****

TOTAL 9 90 119

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled

(2) River Flow: Data acquired from Corps data site - MCN

(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***

(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM

* * Brand Recapture Summary * *

 * These data are preliminary and have been derived from various sources. For *
 * verification and/or origin of data, contact the operators of the Fish Passage Data *
 * System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

RA-7F-1 SU STEELHEAD LOT ID # 86215-01

20,035 RELEASED AT: BELOW LGS DAM
AGENCY: WDGFROM: 4/21/86 TO 4/29/86
HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--RD--GW--HB.S						
4/26	1	24.0	292.83	74.41 %	1	13	17
4/27	1	23.0	264.40	83.31 %	5	50	60
4/28	1	24.0	239.84	92.34 %	18	225	244
4/29	1	24.0	258.40	84.68 %	23	288	340
4/30	1	24.0	288.48	80.78 %	11	138	171
5/01	1	24.0	239.83	95.57 %	14	156	163
5/02	1	24.0	254.22	90.27 %	17	243	269
5/03	1	24.0	246.23	93.79 %	19	158	168
5/04	1	24.0	228.96	100.00 %	27	225	225
5/05	1	24.0	232.73	100.00 %	26	217	217
5/06	1	24.0	211.62	97.52 %	37	206	211
5/07	1	24.0	267.15	82.56 %	61	339	411
5/08	1	24.0	251.32	90.75 %	34	340	375
5/09	1	24.0	243.93	93.22 %	21	210	225
5/10	1	24.0	245.24	93.80 %	26	260	277
5/11	1	24.0	268.87	85.83 %	20	200	233
5/12	1	24.0	249.31	92.20 %	24	240	260
5/13	1	24.0	261.87	87.67 %	15	150	171
5/14	1	24.0	267.54	86.91 %	31	310	357
5/15	1	24.0	269.22	87.22 %	19	190	218
5/16	1	24.0	258.48	90.21 %	38	380	421
5/17	1	24.0	243.01	94.41 %	23	230	244
5/18	1	24.0	223.76	97.04 %	19	190	196
5/19	1	24.0	198.30	100.00 %	24	240	240
5/20	1	24.0	247.85	85.43 %	16	160	187
5/21	1	24.0	268.30	76.83 %	16	160	208
5/22	1	24.0	276.61	75.20 %	12	120	160
5/23	1	24.0	282.36	67.75 %	16	160	236
5/24	1	24.0	257.28	80.40 %	12	120	149
5/25	1	24.0	205.70	97.74 %	7	74	76
5/26	1	24.0	187.50	79.87 %	3	40	50
5/27	1	24.0	232.22	82.88 %	6	60	72
5/28	1	24.0	282.26	66.81 %	11	110	165
5/29	1	24.0	346.54	59.56 %	1	10	17

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

RA-7F-1 SU STEELHEAD LOT ID # 86215-01 20,035 RELEASED AT: BELOW LGS DAM FROM: 4/21/86 TO 4/29/86
AGENCY: WIG HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HRS						

* * * * * C O N T I N U E D * * * * *

5/30	1	24.0	329.83	69.38 %	3	30	43	96.8%
5/31	1	24.0	356.90	65.02 %	5	50	77	97.8%
6/01	1	24.0	348.27	67.26 %	3	30	45	98.4%
6/02	1	24.0	386.03	60.40 %	0	0	0	98.4%
6/03	1	24.0	381.22	55.13 %	2	20	36	98.9%
6/04	1	24.0	367.68	54.36 %	0	0	0	98.9%
6/05	1	24.0	392.36	49.08 %	1	10	20	99.2%
6/06	1	24.0	338.85	61.77 %	0	0	0	99.2%
6/07	1	24.0	377.35	46.23 %	2	20	43	99.8%
6/08	1	24.0	325.28	60.92 %	0	0	0	99.8%
6/09	1	24.0	325.45	63.10 %	0	0	0	99.8%
6/10	1	24.0	292.42	62.49 %	0	0	0	99.8%
6/11	1	24.0	302.70	62.98 %	1	10	16	100.0%
TOTAL					670	6,382	7,313	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

RA-7F-3 SU STEELHEAD LOT ID # 86215-02

20,063

RELEASED AT: BELOW LGS DAM

FROM: 4/25/86 TO 4/25/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-ID-GW-BR.S	FLOW	FLOW				
4/30	1	24.0	288.48	80.78 %	7	88	109 1.6%
5/01	1	24.0	239.83	95.57 %	9	100	105 3.2%
5/02	1	24.0	254.22	90.27 %	10	143	158 5.5%
5/03	1	24.0	246.23	93.79 %	20	167	178 8.2%
5/04	1	24.0	228.96	100.00 %	28	233	233 11.6%
5/05	1	24.0	232.73	100.00 %	26	217	217 14.9%
5/06	1	24.0	211.62	97.52 %	31	172	176 17.5%
5/07	1	24.0	267.15	82.56 %	47	261	316 22.2%
5/08	1	24.0	251.32	90.75 %	31	310	342 27.2%
5/09	1	24.0	243.93	93.22 %	23	230	247 30.9%
5/10	1	24.0	245.24	93.80 %	23	230	245 34.5%
5/11	1	24.0	268.87	85.83 %	18	180	210 37.7%
5/12	1	24.0	249.31	92.20 %	17	170	184 40.4%
5/13	1	24.0	261.87	87.67 %	29	290	331 45.3%
5/14	1	24.0	267.54	86.91 %	13	130	150 47.5%
5/15	1	24.0	269.22	87.22 %	22	220	252 51.3%
5/16	1	24.0	258.48	90.21 %	32	320	355 56.5%
5/17	1	24.0	243.01	94.41 %	34	340	360 61.9%
5/18	1	24.0	223.76	97.04 %	35	350	361 67.3%
5/19	1	24.0	198.30	100.00 %	22	220	220 70.5%
5/20	1	24.0	247.85	85.43 %	19	190	222 73.8%
5/21	1	24.0	268.30	76.83 %	17	170	221 77.1%
5/22	1	24.0	276.61	75.20 %	18	180	239 80.7%
5/23	1	24.0	282.36	67.75 %	15	150	221 83.9%
5/24	1	24.0	257.28	80.40 %	15	150	187 86.7%
5/25	1	24.0	205.70	97.74 %	10	105	107 88.3%
5/26	1	24.0	187.50	79.87 %	4	53	66 89.3%
5/27	1	24.0	232.22	82.88 %	13	130	157 91.6%
5/28	1	24.0	282.26	66.81 %	6	60	90 92.9%
5/29	1	24.0	346.54	59.56 %	10	100	168 95.4%
5/30	1	24.0	329.83	69.38 %	3	30	43 96.1%
5/31	1	24.0	356.90	65.02 %	4	40	62 97.0%
6/01	1	24.0	348.27	67.26 %	5	50	74 98.1%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

RA-7F-3 SU STEELHEAD LOT ID # 86215-02

20,063

RELEASED AT: BELOW LGS DAM

FROM: 4/25/86 TO 4/25/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HRS						

***** CONTINUED *****

6/02	1	24.0	386.03	60.40 %	0	0	0	98.1%
6/03	1	24.0	381.22	55.13 %	2	20	36	98.6%
6/04	1	24.0	367.68	54.36 %	2	20	37	99.2%
6/05	1	24.0	392.36	49.08 %	2	20	41	99.8%
6/06	1	24.0	338.85	61.77 %	0	0	0	99.8%
6/07	1	24.0	377.35	46.23 %	0	0	0	99.8%
6/08	1	24.0	325.28	60.92 %	0	0	0	99.8%
6/09	1	24.0	325.45	63.10 %	0	0	0	99.8%
6/10	1	24.0	292.42	62.49 %	0	0	0	99.8%
6/11	1	24.0	302.70	62.98 %	0	0	0	99.8%
6/12	1	24.0	264.15	79.64 %	0	0	0	99.8%
6/13	1	24.0	253.88	83.09 %	0	0	0	99.8%
6/14	1	24.0	243.88	92.05 %	0	0	0	99.8%
6/15	1	24.0	247.33	87.28 %	0	0	0	99.8%
6/16	2	22.0	236.54	87.39 %	0 *	0 *	0 *	99.8%
6/16	10	0.0	236.19	88.19 %	0 *	0 *	0 *	99.8%
6/17	5	26.0	248.22	82.68 %	0 *	0 *	0 *	99.8%
6/18	1	24.0	239.74	86.04 %	0	0	0	99.8%
6/19	1	24.0	219.99	97.18 %	0	0	0	99.8%
6/20	1	24.0	215.73	96.25 %	0	0	0	99.8%
6/21	1	24.0	205.80	100.00 %	0	0	0	99.8%
6/22	1	24.0	179.84	100.00 %	0	0	0	99.8%
6/23	1	24.0	171.71	100.00 %	0	0	0	99.8%
6/24	1	24.0	205.98	100.00 %	0	0	0	99.8%
6/25	1	24.0	192.23	100.00 %	0	0	0	99.8%
6/26	1	24.0	200.30	100.00 %	0	0	0	99.8%
6/27	1	24.0	178.89	100.00 %	0	0	0	99.8%
6/28	1	24.0	157.06	100.00 %	0	0	0	99.8%
6/29	1	24.0	163.47	100.00 %	0	0	0	99.8%
6/30	1	24.0	148.23	100.00 %	1	14	14	100.0%

***** CONTINUED *****

* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

RA-7F-3 SU STEELHEAD LOT ID # B6215-02 20,063 RELEASED AT: BELOW LGS DAM FROM: 4/25/86 TO 4/25/86
AGENCY: WDG HATCHERY: LYONS FERRY

[illegible]

***** CONTINUED *****

TOTAL	623	5.853	6.734
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(1) Sample parameters: SC = Sample quality code          #D = Number of accumulated days for sample
                       GW = Number of gatewells sampled      Hrs= Number of hours sampled
(2) River Flow:       Data acquired from Corps data site - MCN
(3) Index Flow:       *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index:    Calculated as the (number collected) / (100 * percent index flow)
(*)                   Sample deviates from "normal" conditions (i.e. SC code > 1)
```

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

RD-7F-1 SU STEELHEAD LOT ID # 86215-03

20,069

RELEASED AT: BELOW LGS DAM

FROM: 4/29/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--GD--GW--HR.S						
5/05	1	24.0	232.73	100.00 %	7	58	1.1%
5/06	1	24.0	211.62	97.52 %	13	72	2.4%
5/07	1	24.0	267.15	82.56 %	27	150	5.8%
5/08	1	24.0	251.32	90.75 %	16	160	9.1%
5/09	1	24.0	243.93	93.22 %	8	80	10.7%
5/10	1	24.0	245.24	93.80 %	10	100	12.7%
5/11	1	24.0	268.87	85.83 %	16	160	16.1%
5/12	1	24.0	249.31	92.20 %	14	140	18.9%
5/13	1	24.0	261.87	87.67 %	17	170	22.5%
5/14	1	24.0	267.54	86.91 %	22	220	27.2%
5/15	1	24.0	269.22	87.22 %	21	210	31.7%
5/16	1	24.0	258.48	90.21 %	35	350	38.9%
5/17	1	24.0	243.01	94.41 %	32	320	45.2%
5/18	1	24.0	223.76	97.04 %	19	190	48.8%
5/19	1	24.0	198.30	100.00 %	35	350	55.3%
5/20	1	24.0	247.85	85.43 %	33	330	62.5%
5/21	1	24.0	268.30	76.83 %	11	110	65.1%
5/22	1	24.0	276.61	75.20 %	21	210	70.3%
5/23	1	24.0	282.36	67.75 %	26	260	77.4%
5/24	1	24.0	257.28	80.40 %	11	110	80.0%
5/25	1	24.0	205.70	97.74 %	16	168	83.2%
5/26	1	24.0	187.50	79.87 %	11	147	86.6%
5/27	1	24.0	232.22	82.88 %	9	90	88.6%
5/28	1	24.0	282.26	66.81 %	5	50	90.0%
5/29	1	24.0	346.54	59.56 %	7	70	92.2%
5/30	1	24.0	329.83	69.38 %	5	50	93.5%
5/31	1	24.0	356.90	65.02 %	7	70	95.5%
6/01	1	24.0	348.27	67.26 %	3	30	96.4%
6/02	1	24.0	386.03	60.40 %	2	20	97.0%
6/03	1	24.0	381.22	55.13 %	2	20	97.6%
6/04	1	24.0	367.68	54.36 %	2	20	98.3%
6/05	1	24.0	392.36	49.08 %	3	30	99.5%
6/06	1	24.0	338.85	61.77 %	0	0	99.5%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

RD-7F-1 SU STEELHEAD LOT ID # 86215-03 20,069 RELEASED AT: BELOW LGS DAM FROM: 4/29/86 TO 4/29/86
AGENCY: WDG HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE

* * * * * C O N T I N U E D * * * * *

6/07	1	24.0	377.35	46.23 %	0	0	0	99.5%
6/08	1	24.0	325.28	60.92 %	0	0	0	99.5%
6/09	1	24.0	325.45	63.10 %	0	0	0	99.5%
6/10	1	24.0	292.42	62.49 %	0	0	0	99.5%
6/11	1	24.0	302.70	62.98 %	0	0	0	99.5%
6/12	1	24.0	264.15	79.64 %	1	10	13	99.7%
6/13	1	24.0	253.88	83.09 %	0	0	0	99.7%
6/14	1	24.0	243.88	92.05 %	0	0	0	99.7%
6/15	1	24.0	247.33	87.28 %	0	0	0	99.7%
6/16	2	22.0	236.54	87.39 %	0 *	0 *	0 *	99.7%
6/16	10	0.0	236.19	88.19 %	0 *	0 *	0 *	99.7%
6/17	5	26.0	248.22	82.68 %	0 *	0 *	0 *	99.7%
6/18	1	24.0	239.74	86.04 %	0	0	0	99.7%
6/19	1	24.0	219.99	97.18 %	0	0	0	99.7%
6/20	1	24.0	215.73	96.25 %	1	15	16	100.0%

TOTAL ----- 468 ----- 4,540 ----- 5,390 -----

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

LA-7N-1 SU STEELHEAD LOT ID # 86203-01

29,451

RELEASED AT: METHOW R

FROM: 5/01/86 TO 5/01/86

AGENCY: WDG

HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--D--GW--HR.S	FLOW	FLOW				
5/11	1 24.0	268.87	85.83 %	1	10	12	0.2%
5/12	1 24.0	249.31	92.20 %	16	160	174	2.4%
5/13	1 24.0	261.87	87.67 %	35	350	399	7.6%
5/14	1 24.0	267.54	86.91 %	52	520	598	15.4%
5/15	1 24.0	269.22	87.22 %	40	400	459	21.4%
5/16	1 24.0	258.48	90.21 %	63	630	698	30.5%
5/17	1 24.0	243.01	94.41 %	54	540	572	37.9%
5/18	1 24.0	223.76	97.04 %	58	580	598	45.7%
5/19	1 24.0	198.30	100.00 %	63	630	630	53.9%
5/20	1 24.0	247.85	85.43 %	45	450	527	60.8%
5/21	1 24.0	268.30	76.83 %	45	450	586	68.4%
5/22	1 24.0	276.61	75.20 %	37	370	492	74.8%
5/23	1 24.0	282.36	67.75 %	27	270	399	80.0%
5/24	1 24.0	257.28	80.40 %	15	150	187	82.5%
5/25	1 24.0	205.70	97.74 %	15	158	162	84.6%
5/26	1 24.0	187.50	79.87 %	6	80	100	85.9%
5/27	1 24.0	232.22	82.88 %	13	130	157	87.9%
5/28	1 24.0	282.26	66.81 %	7	70	105	89.3%
5/29	1 24.0	346.54	59.56 %	4	40	67	90.2%
5/30	1 24.0	329.83	69.38 %	10	100	144	92.0%
5/31	1 24.0	356.90	65.02 %	7	70	108	93.4%
6/01	1 24.0	348.27	67.26 %	6	60	89	94.6%
6/02	1 24.0	386.03	60.40 %	1	10	17	94.8%
6/03	1 24.0	381.22	55.13 %	1	10	18	95.1%
6/04	1 24.0	367.68	54.36 %	7	70	129	96.7%
6/05	1 24.0	392.36	49.08 %	4	40	81	97.8%
6/06	1 24.0	338.85	61.77 %	1	10	16	98.0%
6/07	1 24.0	377.35	46.23 %	0	0	0	98.0%
6/08	1 24.0	325.28	60.92 %	3	30	49	98.6%
6/09	1 24.0	325.45	63.10 %	1	10	16	98.9%
6/10	1 24.0	292.42	62.49 %	0	0	0	98.9%
6/11	1 24.0	302.70	62.98 %	0	0	0	98.9%
6/12	1 24.0	264.15	79.64 %	1	10	13	99.0%

***** CONTINUED *****

* * Brand Recapture Summary * *

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# These data are preliminary and have been derived from various sources. For #  
# verification and/or origin of data, contact the operators of the Fish Passage Data #  
# System at (503) 230-4290. #
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✱ ✱ ✱

STEELHEAD

✱ ✱ ✱

29,451

RELEASED AT: METHUEN R

FROM: 5/01/86 TO 5/01/86

AGENCY: WDG

HATCHERY: WELLS HATCHERY

[illegible]

***** CONTINUED *****

6/13	1	24.0	253.88	83.09 %	0	0	0	99.0%
6/14	1	24.0	243.88	92.05 %	2	24	26	99.4%
6/15	1	24.0	247.33	87.28 %	0	0	0	99.4%
6/16	2	22.0	236.54	87.39 %	1 *	11 *	13 *	99.5%
6/16	10	0.0	236.19	88.19 %	2 *	2 *	2 *	99.6%
6/17	5	26.0	248.22	82.68 %	0 *	0 *	0 *	99.6%
6/18	1	24.0	239.74	86.04 %	0	0	0	99.6%
6/19	1	24.0	219.99	97.18 %	1	20	21	99.8%
6/20	1	24.0	215.73	96.25 %	0	0	0	99.8%
6/21	1	24.0	205.80	100.00 %	0	0	0	99.8%
6/22	1	24.0	179.84	100.00 %	0	0	0	99.8%
6/23	1	24.0	171.71	100.00 %	1	13	13	100.0%

TOTAL	645	6,478	7,677
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(1) Sample parameters:  SC = Sample quality code          #D = Number of accumulated days for sample
                        GW = Number of gatewells sampled    Hrs= Number of hours sampled
(2) River Flow:        Data acquired from Corps data site - MCN
(3) Index Flow:        *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index:     Calculated as the (number collected) / (100 * percent index flow)
(#)                   Sample deviates from "normal" conditions (i.e. SC code > 1)

```

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

LA-7N-3 SU STEELHEAD LOT ID # 86203-02

30,046 RELEASED AT: METHUEN R
AGENCY: WDG

FROM: 5/05/86 TO 5/05/86
HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--URS						
5/14	1	24.0	267.54	86.91 %	9	90	104 1.7%
5/15	1	24.0	269.22	87.22 %	8	80	92 3.2%
5/16	1	24.0	258.48	90.21 %	22	220	244 7.2%
5/17	1	24.0	243.01	94.41 %	41	410	434 14.3%
5/18	1	24.0	223.76	97.04 %	61	610	629 24.5%
5/19	1	24.0	198.30	100.00 %	58	580	580 34.0%
5/20	1	24.0	247.85	85.43 %	55	550	644 44.5%
5/21	1	24.0	268.30	76.83 %	44	440	573 53.8%
5/22	1	24.0	276.61	75.20 %	32	320	426 60.8%
5/23	1	24.0	282.36	67.75 %	39	390	576 70.2%
5/24	1	24.0	257.28	80.40 %	27	270	336 75.7%
5/25	1	24.0	205.70	97.74 %	13	137	140 78.0%
5/26	1	24.0	187.50	79.87 %	15	200	250 82.0%
5/27	1	24.0	232.22	82.88 %	8	80	97 83.6%
5/28	1	24.0	282.26	66.81 %	8	80	120 85.6%
5/29	1	24.0	346.54	59.56 %	1	10	17 85.9%
5/30	1	24.0	329.83	69.38 %	16	160	231 89.6%
5/31	1	24.0	356.90	65.02 %	8	80	123 91.6%
6/01	1	24.0	348.27	67.26 %	5	50	74 92.8%
6/02	1	24.0	386.03	60.40 %	4	40	66 93.9%
6/03	1	24.0	381.22	55.13 %	4	40	73 95.1%
6/04	1	24.0	367.68	54.36 %	3	30	55 96.0%
6/05	1	24.0	392.36	49.08 %	2	20	41 96.7%
6/06	1	24.0	338.85	61.77 %	1	10	16 96.9%
6/07	1	24.0	377.35	46.23 %	5	50	108 98.7%
6/08	1	24.0	325.28	60.92 %	1	10	16 99.0%
6/09	1	24.0	325.45	63.10 %	0	0	0 99.0%
6/10	1	24.0	292.42	62.49 %	1	10	16 99.2%
6/11	1	24.0	302.70	62.98 %	0	0	0 99.2%
6/12	1	24.0	264.15	79.64 %	0	0	0 99.2%
6/13	1	24.0	253.88	83.09 %	2	24	29 99.7%
6/14	1	24.0	243.88	92.05 %	0	0	0 99.7%
6/15	1	24.0	247.33	87.28 %	0	0	0 99.7%
6/16	2	22.0	236.54	87.39 %	0 *	0 *	0 * 99.7%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

LA-7N-3 SU STEELHEAD LOT ID # 86203-02

30,046

RELEASED AT: METHOW R

FROM: 5/05/86 TO 5/05/86

AGENCY: WDG

HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-ID-GW-HRS						

***** CONTINUED *****

6/16	10	0.0	236.19	88.19 %	4 *	4 *	5 *	99.8%
6/17	5	26.0	248.22	82.68 %	0 *	0 *	0 *	99.8%
6/18	1	24.0	239.74	86.04 %	0	0	0	99.8%
6/19	1	24.0	219.99	97.18 %	0	0	0	99.8%
6/20	1	24.0	215.73	96.25 %	0	0	0	99.8%
6/21	1	24.0	205.80	100.00 %	0	0	0	99.8%
6/22	1	24.0	179.84	100.00 %	0	0	0	99.8%
6/23	1	24.0	171.71	100.00 %	0	0	0	99.8%
6/24	1	24.0	205.98	100.00 %	0	0	0	99.8%
6/25	1	24.0	192.23	100.00 %	0	0	0	99.8%
6/26	1	24.0	200.30	100.00 %	0	0	0	99.8%
6/27	1	24.0	178.89	100.00 %	0	0	0	99.8%
6/28	1	24.0	157.06	100.00 %	0	0	0	99.8%
6/29	1	24.0	163.47	100.00 %	0	0	0	99.8%
6/30	1	24.0	148.23	100.00 %	0	0	0	99.8%
7/01	1	24.0	158.26	100.00 %	0	0	0	99.8%
7/02	1	24.0	150.45	100.00 %	0	0	0	99.8%
7/03	1	24.0	106.71	100.00 %	0	0	0	99.8%
7/04	1	24.0	119.55	100.00 %	0	0	0	99.8%
7/05	1	24.0	104.38	100.00 %	0	0	0	99.8%
7/06	1	24.0	97.65	100.00 %	0	0	0	99.8%
7/07	1	24.0	91.88	100.00 %	0	0	0	99.8%
7/08	1	24.0	105.18	100.00 %	0	0	0	99.8%
7/09	1	24.0	121.95	100.00 %	0	0	0	99.8%
7/10	1	24.0	134.25	100.00 %	0	0	0	99.8%
7/11	1	24.0	183.27	100.00 %	0	0	0	99.8%
7/12	1	24.0	171.55	100.00 %	0	0	0	99.8%
7/13	1	24.0	157.90	100.00 %	0	0	0	99.8%
7/14	1	24.0	168.29	100.00 %	0	0	0	99.8%
7/15	1	24.0	183.41	100.00 %	1	14	14	100.0%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

LA-7N-3 SU STEELHEAD LOT ID # 86203-02 30,046 RELEASED AT: METHOW R FROM: 5/05/86 TO 5/05/86
AGENCY: WDG HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC--#D--GW--HR.S	FLOW	FLOW			

* * * * * C O N T I N U E D * * * * *

TOTAL				498	5,009	6,129
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

LD-7N-1 SU STEELHEAD LOT ID # 86203-03

29,992 RELEASED AT: METHOW R
AGENCY: WDG

FROM: 5/09/86 TO 5/09/86
HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--SD--GW--HR.S						
5/18	1	24.0	223.76	97.04 %	5	50	52 1.4%
5/19	1	24.0	198.30	100.00 %	10	100	100 4.2%
5/20	1	24.0	247.85	85.43 %	19	190	222 10.3%
5/21	1	24.0	268.30	76.83 %	27	270	351 20.0%
5/22	1	24.0	276.61	75.20 %	25	250	332 29.2%
5/23	1	24.0	282.36	67.75 %	39	390	576 45.1%
5/24	1	24.0	257.28	80.40 %	25	250	311 53.7%
5/25	1	24.0	205.70	97.74 %	13	137	140 57.6%
5/26	1	24.0	187.50	79.87 %	13	173	217 63.6%
5/27	1	24.0	232.22	82.88 %	12	120	145 67.6%
5/28	1	24.0	282.26	66.81 %	13	130	195 73.0%
5/29	1	24.0	346.54	59.56 %	9	90	151 77.2%
5/30	1	24.0	329.83	69.38 %	15	150	216 83.2%
5/31	1	24.0	356.90	65.02 %	7	70	108 86.1%
6/01	1	24.0	348.27	67.26 %	2	20	30 87.0%
6/02	1	24.0	386.03	60.40 %	1	10	17 87.4%
6/03	1	24.0	381.22	55.13 %	1	10	18 87.9%
6/04	1	24.0	367.68	54.36 %	5	50	92 90.5%
6/05	1	24.0	392.36	49.08 %	6	60	122 93.9%
6/06	1	24.0	338.85	61.77 %	1	10	16 94.3%
6/07	1	24.0	377.35	46.23 %	3	30	65 96.1%
6/08	1	24.0	325.28	60.92 %	4	40	66 97.9%
6/09	1	24.0	325.45	63.10 %	2	20	32 98.8%
6/10	1	24.0	292.42	62.49 %	0	0	0 98.8%
6/11	1	24.0	302.70	62.98 %	0	0	0 98.8%
6/12	1	24.0	264.15	79.64 %	0	0	0 98.8%
6/13	1	24.0	253.88	83.09 %	0	0	0 98.8%
6/14	1	24.0	243.88	92.05 %	1	12	13 99.2%
6/15	1	24.0	247.33	87.28 %	1	13	15 99.6%
6/16	2	22.0	236.54	87.39 %	1 *	11 *	13 * 99.9%
6/16	10	0.0	236.19	88.19 %	2 *	2 *	2 * 100.0%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

LD-7N-1 SU STEELHEAD LOT ID # 86203-03

29,992

RELEASED AT: METHOW R
AGENCY: WDG

FROM: 5/09/86 TO 5/09/86
HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS						

* * * * * C O N T I N U E D * * * * *

TOTAL				262	2,658	3,617	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

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19.983

FROM: 5/06/85 TO 5/06/85

HATCHERY: LYONS FERRY

SAMPLE (1)			(2)		(3)		(4)	
DATE	.. PARAMETERS ..		RIVER	INDEX	NUMBER	NUMBER	... PASSAGE	INDEX ...
1986	SC--ID--GW--HR.S		FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
3/28	1	24.0	228.73	86.94 %	1	12	14	4.7%
3/29	1	24.0	239.16	78.10 %	0	0	0	4.7%
3/30	1	24.0	256.11	66.81 %	0	0	0	4.7%
3/31	1	24.0	314.61	71.93 %	2	20	28	14.1%
4/01	1	24.0	277.96	77.93 %	0	0	0	14.1%
4/02	1	24.0	289.15	76.72 %	1	11	14	18.8%
4/03	1	24.0	286.26	80.01 %	0	0	0	18.8%
4/04	1	24.0	278.98	69.88 %	1	11	16	24.2%
4/05	1	24.0	258.22	86.37 %	2	20	23	31.9%
4/06	1	24.0	248.39	79.91 %	2	27	34	43.3%
4/07	1	24.0	248.33	79.83 %	0	0	0	43.3%
4/08	1	24.0	243.82	86.88 %	0	0	0	43.3%
4/09	1	24.0	209.98	100.00 %	1	12	12	47.3%
4/10	1	24.0	224.02	99.70 %	0	0	0	47.3%
4/11	1	24.0	241.92	93.36 %	0	0	0	47.3%
4/12	1	24.0	246.35	91.75 %	1	13	14	52.0%
4/13	1	24.0	241.31	94.78 %	0	0	0	52.0%
4/14	1	24.0	275.74	82.15 %	0	0	0	52.0%
4/15	1	24.0	262.18	79.34 %	0	0	0	52.0%
4/16	1	24.0	266.79	84.31 %	1	10	12	56.0%
4/17	1	24.0	295.75	75.39 %	1	11	15	61.1%
4/18	1	24.0	255.31	90.35 %	0	0	0	61.1%
4/19	1	24.0	247.37	93.43 %	1	14	15	66.1%
4/20	1	24.0	206.00	100.00 %	1	14	14	70.8%
4/21	1	24.0	207.48	100.00 %	2	29	29	80.5%
4/22	1	24.0	210.52	95.95 %	1	14	15	85.6%
4/23	1	24.0	265.63	82.31 %	1	14	17	91.3%
4/24	1	24.0	296.90	76.52 %	1	11	14	96.0%
4/25	1	24.0	274.79	82.17 %	0	0	0	96.0%
4/26	1	24.0	292.83	74.41 %	0	0	0	96.0%
4/27	1	23.0	264.40	83.31 %	0	0	0	96.0%
4/28	1	24.0	239.84	92.34 %	0	0	0	96.0%
4/29	1	24.0	258.40	84.68 %	0	0	0	96.0%
4/30	1	24.0	288.48	80.78 %	0	0	0	96.0%
5/01	1	24.0	239.83	95.57 %	1	11	12	100.0%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

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RA-7N-1 SU STEELHEAD LOT ID # 86227-01 19,983 RELEASED AT: BELOW LGS DAM FROM: 5/06/85 TO 5/06/85
AGENCY: WDG HATCHERY: LYONS FERRY

[illegible]

***** CONTINUED *****

TOTAL	21	254	298
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled

(2) River Flow: Data acquired from Corps data site - MCN

(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***

(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

RA-7N-3 SU STEELHEAD LOT ID # B6227-02

19,906

RELEASED AT: BELOW LGS DAM

FROM: 5/10/85 TO 5/10/85

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-ID-GW-UG.S	FLOW	FLOW				
4/01	1	24.0	277.96	77.93 %	1	10	13 10.9%
4/02	1	24.0	289.15	76.72 %	0	0	0 10.9%
4/03	1	24.0	286.26	80.01 %	0	0	0 10.9%
4/04	1	24.0	278.98	69.88 %	1	11	16 24.4%
4/05	1	24.0	258.22	86.37 %	0	0	0 24.4%
4/06	1	24.0	248.39	79.91 %	0	0	0 24.4%
4/07	1	24.0	248.33	79.83 %	1	10	13 35.3%
4/08	1	24.0	243.82	86.88 %	0	0	0 35.3%
4/09	1	24.0	209.98	100.00 %	0	0	0 35.3%
4/10	1	24.0	224.02	99.70 %	1	14	14 47.1%
4/11	1	24.0	241.92	93.36 %	0	0	0 47.1%
4/12	1	24.0	246.35	91.75 %	0	0	0 47.1%
4/13	1	24.0	241.31	94.78 %	0	0	0 47.1%
4/14	1	24.0	275.74	82.15 %	0	0	0 47.1%
4/15	1	24.0	262.18	79.34 %	0	0	0 47.1%
4/16	1	24.0	266.79	84.31 %	2	20	24 67.2%
4/17	1	24.0	295.75	75.39 %	0	0	0 67.2%
4/18	1	24.0	255.31	90.35 %	0	0	0 67.2%
4/19	1	24.0	247.37	93.43 %	0	0	0 67.2%
4/20	1	24.0	206.00	100.00 %	0	0	0 67.2%
4/21	1	24.0	207.48	100.00 %	1	14	14 79.0%
4/22	1	24.0	210.52	95.95 %	0	0	0 79.0%
4/23	1	24.0	265.63	82.31 %	0	0	0 79.0%
4/24	1	24.0	296.90	76.52 %	0	0	0 79.0%
4/25	1	24.0	274.79	82.17 %	0	0	0 79.0%
4/26	1	24.0	292.83	74.41 %	0	0	0 79.0%
4/27	1	23.0	264.40	83.31 %	0	0	0 79.0%
4/28	1	24.0	239.84	92.34 %	1	13	14 90.8%
4/29	1	24.0	258.40	84.68 %	0	0	0 90.8%
4/30	1	24.0	288.48	80.78 %	0	0	0 90.8%
5/01	1	24.0	239.83	95.57 %	0	0	0 90.8%
5/02	1	24.0	254.22	90.27 %	0	0	0 90.8%
5/03	1	24.0	246.23	93.79 %	0	0	0 90.8%
5/04	1	24.0	228.96	100.00 %	0	0	0 90.8%
5/05	1	24.0	232.73	100.00 %	0	0	0 90.8%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

RA-7N-3 SU STEELHEAD LOT ID # 86227-02

19,906 RELEASED AT: BELOW LGS DAM

FROM: 5/10/85 TO 5/10/85

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	.. SAMPLE (1) SC--#D--GW--HRS	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX CUMULATIVE
1986							

***** CONTINUED *****

5/06	1	24.0	211.62	97.52 %	0	0	0	90.8%
5/07	1	24.0	267.15	82.56 %	0	0	0	90.8%
5/08	1	24.0	251.32	90.75 %	0	0	0	90.8%
5/09	1	24.0	243.93	93.22 %	0	0	0	90.8%
5/10	1	24.0	245.24	93.80 %	0	0	0	90.8%
5/11	1	24.0	268.87	85.83 %	0	0	0	90.8%
5/12	1	24.0	249.31	92.20 %	0	0	0	90.8%
5/13	1	24.0	261.87	87.67 %	0	0	0	90.8%
5/14	1	24.0	267.54	86.91 %	0	0	0	90.8%
5/15	1	24.0	269.22	87.22 %	0	0	0	90.8%
5/16	1	24.0	258.48	90.21 %	0	0	0	90.8%
5/17	1	24.0	243.01	94.41 %	1	10	11	100.0%

TOTAL					9	102	119	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

RA-7P-1 SU STEELHEAD LOT ID # 86226-01

11,780

RELEASED AT: BELOW PRD DAM

FROM: 5/01/86 TO 5/01/86

AGENCY: WDG

HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HR.S						
5/05	1 24.0	232.73	100.00 %	1	8	8	0.2%
5/06	1 24.0	211.62	97.52 %	28	156	160	4.3%
5/07	1 24.0	267.15	82.56 %	49	272	329	12.7%
5/08	1 24.0	251.32	90.75 %	34	340	375	22.2%
5/09	1 24.0	243.93	93.22 %	29	290	311	30.2%
5/10	1 24.0	245.24	93.80 %	15	150	160	34.2%
5/11	1 24.0	268.87	85.83 %	19	190	221	39.9%
5/12	1 24.0	249.31	92.20 %	20	200	217	45.4%
5/13	1 24.0	261.87	87.67 %	12	120	137	48.9%
5/14	1 24.0	267.54	86.91 %	19	190	219	54.5%
5/15	1 24.0	269.22	87.22 %	25	250	287	61.8%
5/16	1 24.0	258.48	90.21 %	12	120	133	65.2%
5/17	1 24.0	243.01	94.41 %	20	200	212	70.6%
5/18	1 24.0	223.76	97.04 %	16	160	165	74.8%
5/19	1 24.0	198.30	100.00 %	14	140	140	78.4%
5/20	1 24.0	247.85	85.43 %	13	130	152	82.3%
5/21	1 24.0	268.30	76.83 %	9	90	117	85.2%
5/22	1 24.0	276.61	75.20 %	16	160	213	90.7%
5/23	1 24.0	282.36	67.75 %	6	60	89	92.9%
5/24	1 24.0	257.28	80.40 %	6	60	75	94.8%
5/25	1 24.0	205.70	97.74 %	0	0	0	94.8%
5/26	1 24.0	187.50	79.87 %	2	27	34	95.7%
5/27	1 24.0	232.22	82.88 %	2	20	24	96.3%
5/28	1 24.0	282.26	66.81 %	4	40	60	97.9%
5/29	1 24.0	346.54	59.56 %	0	0	0	97.9%
5/30	1 24.0	329.83	69.38 %	2	20	29	98.6%
5/31	1 24.0	356.90	65.02 %	1	10	15	99.0%
6/01	1 24.0	348.27	67.26 %	0	0	0	99.0%
6/02	1 24.0	386.03	60.40 %	0	0	0	99.0%
6/03	1 24.0	381.22	55.13 %	0	0	0	99.0%
6/04	1 24.0	367.68	54.36 %	1	10	18	99.4%
6/05	1 24.0	392.36	49.08 %	0	0	0	99.4%
6/06	1 24.0	338.85	61.77 %	0	0	0	99.4%
6/07	1 24.0	377.35	46.23 %	1	10	22	100.0%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

RA-7P-1 SU STEELHEAD LOT ID # 86226-01

11,780

RELEASED AT: BELOW PRD DAM
AGENCY: WDG

FROM: 5/01/86 TO 5/01/86
HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC-ID-GW-HRS					

***** CONTINUED *****

TOTAL				376	3,423	3,922
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- (1) Sample parameters: SC = Sample quality code ID = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
- (2) River Flow: Data acquired from Corps data site - MCN
- (3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
- (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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MCNARY

* * *

STEELHEAD

* * *

RA-7P-3 SU STEELHEAD LOT ID # 86226-02

11,575

RELEASED AT: BELOW PRD DAM

FROM: 5/05/86 TO 5/05/86

AGENCY: WDG

HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX CUMULATIVE
1986	SC--#D--GW--HR.S						
5/09	1	24.0	243.93	93.22 %	10	100	107 3.3%
5/10	1	24.0	245.24	93.80 %	24	240	256 11.3%
5/11	1	24.0	268.87	85.83 %	23	230	268 19.7%
5/12	1	24.0	249.31	92.20 %	18	180	195 25.8%
5/13	1	24.0	261.87	87.67 %	20	200	228 32.9%
5/14	1	24.0	267.54	86.91 %	18	180	207 39.4%
5/15	1	24.0	269.22	87.22 %	16	160	183 45.1%
5/16	1	24.0	258.48	90.21 %	20	200	222 52.0%
5/17	1	24.0	243.01	94.41 %	17	170	180 57.7%
5/18	1	24.0	223.76	97.04 %	16	160	165 62.8%
5/19	1	24.0	198.30	100.00 %	21	210	210 69.4%
5/20	1	24.0	247.85	85.43 %	14	140	164 74.5%
5/21	1	24.0	268.30	76.83 %	5	50	65 76.5%
5/22	1	24.0	276.61	75.20 %	7	70	93 79.4%
5/23	1	24.0	282.36	67.75 %	11	110	162 84.5%
5/24	1	24.0	257.28	80.40 %	6	60	75 86.8%
5/25	1	24.0	205.70	97.74 %	2	21	21 87.5%
5/26	1	24.0	187.50	79.87 %	5	67	84 90.1%
5/27	1	24.0	232.22	82.88 %	5	50	60 92.0%
5/28	1	24.0	282.26	66.81 %	3	30	45 93.4%
5/29	1	24.0	346.54	59.56 %	1	10	17 93.9%
5/30	1	24.0	329.83	69.38 %	4	40	58 95.7%
5/31	1	24.0	356.90	65.02 %	2	20	31 96.7%
6/01	1	24.0	348.27	67.26 %	0	0	0 96.7%
6/02	1	24.0	386.03	60.40 %	0	0	0 96.7%
6/03	1	24.0	381.22	55.13 %	0	0	0 96.7%
6/04	1	24.0	367.68	54.36 %	4	40	74 99.0%
6/05	1	24.0	392.36	49.08 %	0	0	0 99.0%
6/06	1	24.0	338.85	61.77 %	0	0	0 99.0%
6/07	1	24.0	377.35	46.23 %	0	0	0 99.0%
6/08	1	24.0	325.28	60.92 %	1	10	16 99.5%
6/09	1	24.0	325.45	63.10 %	0	0	0 99.5%
6/10	1	24.0	292.42	62.49 %	1	10	16 100.0%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

RA-7P-3 SU STEELHEAD LOT ID # 86226-02 11,575 RELEASED AT: BELOW PRD DAM FROM: 5/05/86 TO 5/05/86
AGENCY: WDG HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER NUMBER	NUMBER NUMBER	... PASSAGE INDEX ...	(4)
	SC-#D-GW-HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
1986							

* * * * * C O N T I N U E D * * * * *

TOTAL				274	2,758	3,202	
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

1971 APR 27 PM 4 45

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* System at (503) 230-4290. *

HATCHERY: WELLS HATCHERY

SAMPLE (1)			(2)		(3)		(4)	
DATE	.. PARAMETERS ..		RIVER	INDEX	NUMBER	NUMBER	... PASSAGE	INDEX ...
1986	SC--D--GW--HR.S		FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
5/11	1	24.0	268.87	85.83 %	1	10	12	0.5%
5/12	1	24.0	249.31	92.20 %	0	0	0	0.5%
5/13	1	24.0	261.87	87.67 %	8	80	91	4.6%
5/14	1	24.0	267.54	86.91 %	15	150	173	12.4%
5/15	1	24.0	269.22	87.22 %	12	120	138	18.6%
5/16	1	24.0	258.48	90.21 %	12	120	133	24.5%
5/17	1	24.0	243.01	94.41 %	20	200	212	34.1%
5/18	1	24.0	223.76	97.04 %	12	120	124	39.6%
5/19	1	24.0	198.30	100.00 %	15	150	150	46.3%
5/20	1	24.0	247.85	85.43 %	14	140	164	53.7%
5/21	1	24.0	268.30	76.83 %	6	60	78	57.2%
5/22	1	24.0	276.61	75.20 %	15	150	199	66.1%
5/23	1	24.0	282.36	67.75 %	15	150	221	76.0%
5/24	1	24.0	257.28	80.40 %	7	70	87	79.9%
5/25	1	24.0	205.70	97.74 %	8	84	86	83.8%
5/26	1	24.0	187.50	79.87 %	2	27	34	85.3%
5/27	1	24.0	232.22	82.88 %	5	50	60	88.0%
5/28	1	24.0	282.26	66.81 %	2	20	30	89.4%
5/29	1	24.0	346.54	59.56 %	3	30	50	91.6%
5/30	1	24.0	329.83	69.38 %	3	30	43	93.5%
5/31	1	24.0	356.90	65.02 %	2	20	31	94.9%
6/01	1	24.0	348.27	67.26 %	0	0	0	94.9%
6/02	1	24.0	386.03	60.40 %	0	0	0	94.9%
6/03	1	24.0	381.22	55.13 %	2	20	36	96.5%
6/04	1	24.0	367.68	54.36 %	1	10	18	97.4%
6/05	1	24.0	392.36	49.08 %	0	0	0	97.4%
6/06	1	24.0	338.85	61.77 %	1	10	16	98.1%
6/07	1	24.0	377.35	46.23 %	0	0	0	98.1%
6/08	1	24.0	325.28	60.92 %	1	10	16	98.8%
6/09	1	24.0	325.45	63.10 %	0	0	0	98.8%
6/10	1	24.0	292.42	62.49 %	0	0	0	98.8%
6/11	1	24.0	302.70	62.98 %	0	0	0	98.8%
6/12	1	24.0	264.15	79.64 %	1	10	13	99.4%
6/13	1	24.0	253.88	83.09 %	1	12	14	100.0%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
 * * Brand Recapture Summary * *

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 * System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

RD-7P-1 SU STEELHEAD LOT ID # 86226-03 11,943 RELEASED AT: BELOW PRD DAM FROM: 5/09/86 TO 5/09/86
 AGENCY: WDG HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	(4) ... PASSAGE INDEX ...
1986	SC-ID-GW-HRS	FLOW	FLOW			DAILY COUNT CUMULATIVE

* * * * * C O N T I N U E D * * * * *

TOTAL				184	1,853	2,229
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- (1) Sample parameters: SC = Sample quality code ID = Number of accumulated days for sample
 GW = Number of gatewells sampled Hrs = Number of hours sampled
 (2) River Flow: Data acquired from Corps data site - MCN
 (3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
 (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM

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* System at (503) 230-4290. *

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LA-75-1 SU STEELHEAD LOT ID # 86228-01 4,076 RELEASED AT: BELOW IHR DAM FROM: 5/08/85 TO 5/08/85
AGENCY: WDG HATCHERY: LYONS FERRY

SAMPLE (1)		(2)	(3)	(4)				
DATE	.. PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE INDEX ...		
1986	SC--ID--GW--HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT CUMULATIVE		
3/28	1	24.0	228.73	86.94 %	1	12	14	100.0%
TOTAL				1	12	14		

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled

(2) River Flow: Data acquired from Corps data site - MCN

(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***

(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
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MCNARY * * * STEELHEAD * * *

RA-7S-1 SU STEELHEAD LOT ID # 86228-03 4,159 RELEASED AT: BELOW IHR DAM FROM: 5/10/85 TO 5/10/85
AGENCY: WDG HATCHERY: LYONS FERRY

DATE	.. PARAMETERS ..	(1) RIVER	(2) FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HR.S							
4/05	1	24.0	258.22	86.37 %	1	10	12	33.3%
4/06	1	24.0	248.39	79.91 %	0	0	0	33.3%
4/07	1	24.0	248.33	79.83 %	0	0	0	33.3%
4/08	1	24.0	243.82	86.88 %	0	0	0	33.3%
4/09	1	24.0	209.98	100.00 %	0	0	0	33.3%
4/10	1	24.0	224.02	99.70 %	0	0	0	33.3%
4/11	1	24.0	241.92	93.36 %	0	0	0	33.3%
4/12	1	24.0	246.35	91.75 %	0	0	0	33.3%
4/13	1	24.0	241.31	94.78 %	0	0	0	33.3%
4/14	1	24.0	275.74	82.15 %	0	0	0	33.3%
4/15	1	24.0	262.18	79.34 %	0	0	0	33.3%
4/16	1	24.0	266.79	84.31 %	0	0	0	33.3%
4/17	1	24.0	295.75	75.39 %	0	0	0	33.3%
4/18	1	24.0	255.31	90.35 %	0	0	0	33.3%
4/19	1	24.0	247.37	93.43 %	0	0	0	33.3%
4/20	1	24.0	206.00	100.00 %	0	0	0	33.3%
4/21	1	24.0	207.48	100.00 %	0	0	0	33.3%
4/22	1	24.0	210.52	95.95 %	0	0	0	33.3%
4/23	1	24.0	265.63	82.31 %	0	0	0	33.3%
4/24	1	24.0	296.90	76.52 %	0	0	0	33.3%
4/25	1	24.0	274.79	82.17 %	0	0	0	33.3%
4/26	1	24.0	292.83	74.41 %	0	0	0	33.3%
4/27	1	23.0	264.40	83.31 %	0	0	0	33.3%
4/28	1	24.0	239.84	92.34 %	0	0	0	33.3%
4/29	1	24.0	258.40	84.68 %	0	0	0	33.3%
4/30	1	24.0	288.48	80.78 %	0	0	0	33.3%
5/01	1	24.0	239.83	95.57 %	0	0	0	33.3%
5/02	1	24.0	254.22	90.27 %	0	0	0	33.3%
5/03	1	24.0	246.23	93.79 %	0	0	0	33.3%
5/04	1	24.0	228.96	100.00 %	0	0	0	33.3%
5/05	1	24.0	232.73	100.00 %	0	0	0	33.3%
5/06	1	24.0	211.62	97.52 %	0	0	0	33.3%
5/07	1	24.0	267.15	82.56 %	0	0	0	33.3%
5/08	1	24.0	251.32	90.75 %	0	0	0	33.3%
5/09	1	24.0	243.93	93.22 %	1	10	11	63.9%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

RA-7S-1 SU STEELHEAD LOT ID # 86228-03

4,159 RELEASED AT: BELOW IHR DAM
AGENCY: WDG

FROM: 5/10/85 TO 5/10/85
HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HRS						

***** CONTINUED *****

5/10	1	24.0	245.24	93.80 %	0	0	0	63.9%
5/11	1	24.0	268.87	85.83 %	0	0	0	63.9%
5/12	1	24.0	249.31	92.20 %	0	0	0	63.9%
5/13	1	24.0	261.87	87.67 %	0	0	0	63.9%
5/14	1	24.0	267.54	86.91 %	0	0	0	63.9%
5/15	1	24.0	269.22	87.22 %	0	0	0	63.9%
5/16	1	24.0	258.48	90.21 %	0	0	0	63.9%
5/17	1	24.0	243.01	94.41 %	0	0	0	63.9%
5/18	1	24.0	223.76	97.04 %	0	0	0	63.9%
5/19	1	24.0	198.30	100.00 %	0	0	0	63.9%
5/20	1	24.0	247.85	85.43 %	0	0	0	63.9%
5/21	1	24.0	268.30	76.83 %	1	10	13	100.0%

TOTAL					3	30	36	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

RD-7S-1 SU STEELHEAD LOT ID # 86228-06 4,219 RELEASED AT: BELOW IHR DAM FROM: 5/14/85 TO 5/14/85
AGENCY: WDG HATCHERY: LYONS FERRY

DATE	.. PARAMETERS ..	(1) RIVER	(2) INDEX	(3) NUMBER	NUMBER	... PASSAGE	INDEX	(4)
1986	SC-ID-GW-HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE	
4/16	1 24.0	266.79	84.31 %	1	10	12	100.0%	
TOTAL				1	10	12		

(1) Sample parameters: SC = Sample quality code ID = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

LA-7U-1 SU STEELHEAD LOT ID # 86216-01

11,998 RELEASED AT: BELOW IHR DAM
AGENCY: WDG

FROM: 4/21/86 TO 4/29/86
HATCHERY: LYONS FERRY

DATE	.. PARAMETERS ..	(1)	(2)	(3)	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HR.S		FLOW	INDEX FLOW				
4/24	1	24.0	296.90	76.52 %	7	78	102	2.8%
4/25	1	24.0	274.79	82.17 %	17	189	230	9.1%
4/26	1	24.0	292.83	74.41 %	9	113	152	13.3%
4/27	1	23.0	264.40	83.31 %	49	490	588	29.5%
4/28	1	24.0	239.84	92.34 %	7	88	95	32.1%
4/29	1	24.0	258.40	84.68 %	15	188	222	38.3%
4/30	1	24.0	288.48	80.78 %	9	113	140	42.1%
5/01	1	24.0	239.83	95.57 %	6	67	70	44.0%
5/02	1	24.0	254.22	90.27 %	6	86	95	46.7%
5/03	1	24.0	246.23	93.79 %	13	108	115	49.8%
5/04	1	24.0	228.96	100.00 %	14	117	117	53.1%
5/05	1	24.0	232.73	100.00 %	9	75	75	55.1%
5/06	1	24.0	211.62	97.52 %	20	111	114	58.3%
5/07	1	24.0	267.15	82.56 %	22	122	148	62.3%
5/08	1	24.0	251.32	90.75 %	5	50	55	63.9%
5/09	1	24.0	243.93	93.22 %	6	60	64	65.6%
5/10	1	24.0	245.24	93.80 %	9	90	96	68.3%
5/11	1	24.0	268.87	85.83 %	12	120	140	72.1%
5/12	1	24.0	249.31	92.20 %	10	100	108	75.1%
5/13	1	24.0	261.87	87.67 %	11	110	125	78.5%
5/14	1	24.0	267.54	86.91 %	6	60	69	80.4%
5/15	1	24.0	269.22	87.22 %	12	120	138	84.2%
5/16	1	24.0	258.48	90.21 %	8	80	89	86.7%
5/17	1	24.0	243.01	94.41 %	6	60	64	88.5%
5/18	1	24.0	223.76	97.04 %	4	40	41	89.6%
5/19	1	24.0	198.30	100.00 %	6	60	60	91.2%
5/20	1	24.0	247.85	85.43 %	2	20	23	91.9%
5/21	1	24.0	268.30	76.83 %	3	30	39	92.9%
5/22	1	24.0	276.61	75.20 %	2	20	27	93.7%
5/23	1	24.0	282.36	67.75 %	5	50	74	95.7%
5/24	1	24.0	257.28	80.40 %	3	30	37	96.7%
5/25	1	24.0	205.70	97.74 %	5	53	54	98.2%
5/26	1	24.0	187.50	79.87 %	2	27	34	99.2%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

LA-7U-1 SU STEELHEAD LOT ID # 86216-01 11,998 RELEASED AT: BELOW IHR DAM FROM: 4/21/86 TO 4/29/86
AGENCY: WDG HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HRS						

* * * * * C O N T I N U E D * * * * *

5/27	1	24.0	232.22	82.88 %	0	0	0	99.2%
5/28	1	24.0	282.26	66.81 %	1	10	15	99.6%
5/29	1	24.0	346.54	59.56 %	0	0	0	99.6%
5/30	1	24.0	329.83	69.38 %	0	0	0	99.6%
5/31	1	24.0	356.90	65.02 %	0	0	0	99.6%
6/01	1	24.0	348.27	67.26 %	0	0	0	99.6%
6/02	1	24.0	386.03	60.40 %	0	0	0	99.6%
6/03	1	24.0	381.22	55.13 %	0	0	0	99.6%
6/04	1	24.0	367.68	54.36 %	0	0	0	99.6%
6/05	1	24.0	392.36	49.08 %	0	0	0	99.6%
6/06	1	24.0	338.85	61.77 %	0	0	0	99.6%
6/07	1	24.0	377.35	46.23 %	0	0	0	99.6%
6/08	1	24.0	325.28	60.92 %	0	0	0	99.6%
6/09	1	24.0	325.45	63.10 %	0	0	0	99.6%
6/10	1	24.0	292.42	62.49 %	0	0	0	99.6%
6/11	1	24.0	302.70	62.98 %	0	0	0	99.6%
6/12	1	24.0	264.15	79.64 %	0	0	0	99.6%
6/13	1	24.0	253.88	83.09 %	1	12	14	100.0%
6/14	1	24.0	243.88	92.05 %	0	0	0	100.0%
6/15	1	24.0	247.33	87.28 %	0	0	0	100.0%
6/16	2	22.0	236.54	87.39 %	0 *	0 *	0 *	100.0%
6/16	10	0.0	236.19	88.19 %	1 *	1 *	1 *	100.0%

TOTAL					323	3,148	3,630	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateweils sampled Hrs= Number of hours sampled

(2) River Flow: Data acquired from Corps data site - MCN

(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***

(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY * * * STEELHEAD * * *

LA-7U-3 SU STEELHEAD LOT ID # 86216-02 12,034 RELEASED AT: BELOW IHR DAM FROM: 4/25/86 TO 4/25/86
AGENCY: WDG HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC-4D-GW-HRS					
4/28	1	24.0	239.84	92.34 %	14	175
4/29	1	24.0	258.40	84.68 %	50	625
4/30	1	24.0	288.48	80.78 %	33	413
5/01	1	24.0	239.83	95.57 %	20	222
5/02	1	24.0	254.22	90.27 %	12	171
5/03	1	24.0	246.23	93.79 %	16	133
5/04	1	24.0	228.96	100.00 %	15	125
5/05	1	24.0	232.73	100.00 %	18	150
5/06	1	24.0	211.62	97.52 %	26	144
5/07	1	24.0	267.15	82.56 %	45	250
5/08	1	24.0	251.32	90.75 %	17	170
5/09	1	24.0	243.93	93.22 %	11	110
5/10	1	24.0	245.24	93.80 %	11	110
5/11	1	24.0	268.87	85.83 %	9	90
5/12	1	24.0	249.31	92.20 %	7	70
5/13	1	24.0	261.87	87.67 %	8	80
5/14	1	24.0	267.54	86.91 %	15	150
5/15	1	24.0	269.22	87.22 %	12	120
5/16	1	24.0	258.48	90.21 %	11	110
5/17	1	24.0	243.01	94.41 %	11	110
5/18	1	24.0	223.76	97.04 %	10	100
5/19	1	24.0	198.30	100.00 %	10	100
5/20	1	24.0	247.85	85.43 %	4	40
5/21	1	24.0	268.30	76.83 %	7	70
5/22	1	24.0	276.61	75.20 %	4	40
5/23	1	24.0	282.36	67.75 %	2	20
5/24	1	24.0	257.28	80.40 %	2	20
5/25	1	24.0	205.70	97.74 %	2	21
5/26	1	24.0	187.50	79.87 %	1	13
5/27	1	24.0	232.22	82.88 %	0	0
5/28	1	24.0	282.26	66.81 %	1	10
5/29	1	24.0	346.54	59.56 %	1	10
5/30	1	24.0	329.83	69.38 %	0	0
5/31	1	24.0	356.90	65.02 %	1	10

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

LA-7U-3 SU STEELHEAD LOT ID # 86216-02

12,034

RELEASED AT: BELOW IHR DAM

FROM: 4/25/86 TO 4/25/86

AGENCY: WDC

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX CUMULATIVE
1986	SC--#D--GW--HR.S	ELDW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE

***** CONTINUED *****

6/01	1	24.0	348.27	67.26 %	0	0	0	99.0%
6/02	1	24.0	386.03	60.40 %	0	0	0	99.0%
6/03	1	24.0	381.22	55.13 %	1	10	18	99.4%
6/04	1	24.0	367.68	54.36 %	0	0	0	99.4%
6/05	1	24.0	392.36	49.08 %	0	0	0	99.4%
6/06	1	24.0	338.85	61.77 %	0	0	0	99.4%
6/07	1	24.0	377.35	46.23 %	0	0	0	99.4%
6/08	1	24.0	325.28	60.92 %	0	0	0	99.4%
6/09	1	24.0	325.45	63.10 %	0	0	0	99.4%
6/10	1	24.0	292.42	62.49 %	0	0	0	99.4%
6/11	1	24.0	302.70	62.98 %	0	0	0	99.4%
6/12	1	24.0	264.15	79.64 %	0	0	0	99.4%
6/13	1	24.0	253.88	83.09 %	1	12	14	99.7%
6/14	1	24.0	243.88	92.05 %	0	0	0	99.7%
6/15	1	24.0	247.33	87.28 %	0	0	0	99.7%
6/16	2	22.0	236.54	87.39 %	0 *	0 *	0 *	99.7%
6/16	10	0.0	236.19	88.19 %	0 *	0 *	0 *	99.7%
6/17	5	26.0	248.22	82.68 %	0 *	0 *	0 *	99.7%
6/18	1	24.0	239.74	86.04 %	0	0	0	99.7%
6/19	1	24.0	219.99	97.18 %	0	0	0	99.7%
6/20	1	24.0	215.73	96.25 %	0	0	0	99.7%
6/21	1	24.0	205.80	100.00 %	0	0	0	99.7%
6/22	1	24.0	179.84	100.00 %	0	0	0	99.7%
6/23	1	24.0	171.71	100.00 %	0	0	0	99.7%
6/24	1	24.0	205.98	100.00 %	0	0	0	99.7%
6/25	1	24.0	192.23	100.00 %	0	0	0	99.7%
6/26	1	24.0	200.30	100.00 %	0	0	0	99.7%
6/27	1	24.0	178.89	100.00 %	0	0	0	99.7%
6/28	1	24.0	157.06	100.00 %	0	0	0	99.7%
6/29	1	24.0	163.47	100.00 %	0	0	0	99.7%
6/30	1	24.0	148.23	100.00 %	0	0	0	99.7%
7/01	1	24.0	158.26	100.00 %	0	0	0	99.7%
7/02	1	24.0	150.45	100.00 %	0	0	0	99.7%
7/03	1	24.0	106.71	100.00 %	0	0	0	99.7%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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MCNARY * * * STEELHEAD * * *

LA-7U-3 SU STEELHEAD LOT ID # 86216-02 12,034 RELEASED AT: BELOW IHR DAM FROM: 4/25/86 TO 4/25/86
AGENCY: WDG HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS					

* * * * * CONTINUED * * * * *

7/04	1	24.0	119.55	100.00 %	0	0	0	99.7%
7/05	1	24.0	104.38	100.00 %	0	0	0	99.7%
7/06	1	24.0	97.65	100.00 %	0	0	0	99.7%
7/07	1	24.0	91.88	100.00 %	0	0	0	99.7%
7/08	1	24.0	105.18	100.00 %	0	0	0	99.7%
7/09	1	24.0	121.95	100.00 %	0	0	0	99.7%
7/10	1	24.0	134.25	100.00 %	0	0	0	99.7%
7/11	1	24.0	183.27	100.00 %	0	0	0	99.7%
7/12	1	24.0	171.55	100.00 %	0	0	0	99.7%
7/13	1	24.0	157.90	100.00 %	0	0	0	99.7%
7/14	1	24.0	168.29	100.00 %	0	0	0	99.7%
7/15	1	24.0	183.41	100.00 %	1	14	14	100.0%
TOTAL					409	4,018	4,551	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

MCNARY

* * *

STEELHEAD

* * *

LD-7U-1 SU STEELHEAD LOT ID # 86216-03

12,018

RELEASED AT: BELOW IHR DAM

FROM: 4/29/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--SD--GW--HR.S						
5/01	1	24.0	239.83	95.57 %	3	33	1.1%
5/02	1	24.0	254.22	90.27 %	11	157	6.6%
5/03	1	24.0	246.23	93.79 %	22	183	12.8%
5/04	1	24.0	228.96	100.00 %	24	200	19.2%
5/05	1	24.0	232.73	100.00 %	17	142	23.7%
5/06	1	24.0	211.62	97.52 %	39	217	30.8%
5/07	1	24.0	267.15	82.56 %	37	206	38.8%
5/08	1	24.0	251.32	90.75 %	21	210	46.1%
5/09	1	24.0	243.93	93.22 %	13	130	50.5%
5/10	1	24.0	245.24	93.80 %	19	190	57.0%
5/11	1	24.0	268.87	85.83 %	9	90	60.3%
5/12	1	24.0	249.31	92.20 %	12	120	64.5%
5/13	1	24.0	261.87	87.67 %	8	80	67.4%
5/14	1	24.0	267.54	86.91 %	10	100	71.0%
5/15	1	24.0	269.22	87.22 %	4	40	72.5%
5/16	1	24.0	258.48	90.21 %	10	100	76.0%
5/17	1	24.0	243.01	94.41 %	10	100	79.4%
5/18	1	24.0	223.76	97.04 %	11	110	83.0%
5/19	1	24.0	198.30	100.00 %	15	150	87.8%
5/20	1	24.0	247.85	85.43 %	9	90	91.1%
5/21	1	24.0	268.30	76.83 %	2	20	91.9%
5/22	1	24.0	276.61	75.20 %	2	20	92.8%
5/23	1	24.0	282.36	67.75 %	4	40	94.7%
5/24	1	24.0	257.28	80.40 %	2	20	95.5%
5/25	1	24.0	205.70	97.74 %	3	32	96.5%
5/26	1	24.0	187.50	79.87 %	1	13	97.0%
5/27	1	24.0	232.22	82.88 %	1	10	97.4%
5/28	1	24.0	282.26	66.81 %	1	10	97.9%
5/29	1	24.0	346.54	59.56 %	0	0	97.9%
5/30	1	24.0	329.83	69.38 %	1	10	98.3%
5/31	1	24.0	356.90	65.02 %	0	0	98.3%
6/01	1	24.0	348.27	67.26 %	0	0	98.3%
6/02	1	24.0	386.03	60.40 %	0	0	98.3%
6/03	1	24.0	381.22	55.13 %	1	10	98.9%

***** CONTINUED *****

FISH PASSAGE DATA SYSTEM
** Brand Recapture Summary **

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* System at (503) 230-4290. *

MCNARY

STEELHEAD

LD-7U-1 SU STEELHEAD LOT ID # 86216-03

12,018

RELEASED AT: BELOW IHR DAM

FROM: 4/29/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-ID-GW-HRS	FLOW	FLOW				

***** CONTINUED *****

6/04	1	24.0	367.68	54.36 %	0	0	0	98.9%
6/05	1	24.0	392.36	49.08 %	0	0	0	98.9%
6/06	1	24.0	338.85	61.77 %	0	0	0	98.9%
6/07	1	24.0	377.35	46.23 %	1	10	22	99.6%
6/08	1	24.0	325.28	60.92 %	0	0	0	99.6%
6/09	1	24.0	325.45	63.10 %	0	0	0	99.6%
6/10	1	24.0	292.42	62.49 %	0	0	0	99.6%
6/11	1	24.0	302.70	62.98 %	0	0	0	99.6%
6/12	1	24.0	264.15	79.64 %	0	0	0	99.6%
5/13	1	24.0	253.88	83.09 %	0	0	0	99.6%
6/14	1	24.0	243.88	92.05 %	0	0	0	99.6%
6/15	1	24.0	247.33	87.28 %	0	0	0	99.6%
6/16	2	22.0	236.54	87.39 %	0 *	0 *	0 *	99.6%
6/16	10	0.0	236.19	88.19 %	0 *	0 *	0 *	99.6%
6/17	5	26.0	248.22	82.68 %	0 *	0 *	0 *	99.6%
6/18	1	24.0	239.74	86.04 %	1	11	13	100.0%

TOTAL					324	2,854	3,144	
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(1) Sample parameters: SC = Sample quality code ID = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from Corps data site - MCN
(3) Index Flow: *** POWERHOUSE / (POWERHOUSE + SPILL) ***
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

E. John Day Dam

Contractor: National Marine Fisheries Service

Project Leader(s): Richard Johnsen (503-739-2303)

Location: Columbia River, River Mile 215.6

Monitoring Dates: March 28, 1985 - October 30, 1986

Sampling Method: Fish were collected with a gatewell sampling system from Unit 3B of the John Day Dam powerhouse. Fish were collected for a 24-hour period (1200-1200h). All sampled fish were examined for species composition and brands. Additional information on the sampling procedures at John Day Dam is presented in the NMFS annual report (Johnsen and Ranck, 1986).

Analysis of Data: Data from John Day were used for in-season management, assessment of survival, travel time, and migrational characteristics. The flow proportion used to expand collection counts to a passage index was estimated as follows:

Unit 3 flow/ River flow

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

LA-IF-1 SP CHINOOK LOT ID # 86259-00

0 RELEASED AT: BELOW MCN DAM
AGENCY: NMFS

FROM: 0/00/00 TO 0/00/00
HATCHERY: NON-HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW			
5/30	1 1 24.0	352.30	6.29 %	1	1	16 3.8%
5/31	1 1 24.0	363.80	5.37 %	7	7	130 34.4%
6/01	1 1 24.0	377.30	3.96 %	1	1	25 40.2%
6/02	1 1 24.0	400.90	4.40 %	1	1	23 45.6%
6/03	1 1 24.0	389.60	4.35 %	1	1	23 51.1%
6/04	1 1 24.0	397.00	3.92 %	2	2	51 63.1%
6/05	1 1 24.0	402.00	4.64 %	1	1	22 68.2%
6/06	1 1 24.0	351.70	4.76 %	2	2	42 78.1%
6/07	1 1 24.0	369.90	4.53 %	0	0	0 78.1%
6/08	1 1 24.0	345.10	4.62 %	0	0	0 78.1%
/09	1 1 24.0	337.70	5.38 %	5	5	93 100.0%
TOTAL				21	21	425

- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
- (2) River Flow: Data acquired from CATCH DATA
- (3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
- (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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JOHN DAY

* * *

CHINOOK 1'S

* * *

LA-IV-1 SP CHINOOK LOT ID # 86259-00

0 RELEASED AT: BELOW MCN DAM
AGENCY: NMFS

FROM: 0/00/00 TO 0/00/00
HATCHERY: NON-HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1984	SC	#D	GW	HR.S					
5/12	1	1	24.0	263.60	5.81 %	2	2	34	2.1%
5/13	1	1	24.0	272.70	6.07 %	0	0	0	2.1%
5/14	1	1	24.0	252.00	6.34 %	0	0	0	2.1%
5/15	1	1	24.0	266.60	6.60 %	0	0	0	2.1%
5/16	1	1	24.0	279.40	6.47 %	0	0	0	2.1%
5/17	1	1	24.0	264.50	6.64 %	0	0	0	2.1%
5/18	1	1	24.0	227.10	7.04 %	2	2	28	3.8%
5/19	1	1	24.0	234.20	7.50 %	11	11	147	12.8%
5/20	1	1	24.0	264.30	6.99 %	37	37	529	45.0%
5/21	1	1	24.0	264.80	6.91 %	43	43	622	83.0%
5/22	1	1	24.0	311.80	6.21 %	12	12	193	94.8%
5/23	1	1	24.0	301.10	6.67 %	3	3	45	97.5%
5/24	1	1	24.0	240.80	7.27 %	3	3	41	100.0%
TOTAL						113	113	1,639	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)


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*****
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*** USING RELEASE DATA OF DIFFERENT AGE/RACE

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled

(2) River Flow: Data acquired from CATCH DATA

(3) Index Flow: $*** (UNIT\ 3\ FLOW) / (POWERHOUSE + SPILL)$

4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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JOHN DAY

* * *

CHINOOK 1'S

* * *

LA-T -1 FA CHINOOK LOT ID # 86156-01 100,276 RELEASED AT: PRIEST RAPIDS H FROM: 6/10/86 TO 6/10/86
AGENCY: WDF HATCHERY: PRIEST RAPIDS H

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1)			RIVER FLOW	INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	(4)	
	.. PARAMETERS ..	SC	#D GW HRS					... PASSAGE INDEX ...	DAILY COUNT CUMULATIVE
1986	SC	#D	GW	HRS					
5/14	1	1	24.0	252.00	6.34 %	1	1	16	51.6%
5/15	1	1	24.0	266.60	6.60 %	1	1	15	100.0%
TOTAL						2	2	31	

- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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JOHN DAY

* * *

CHINOOK 1'S

* * *

LD-Y -1 SP CHINOOK LOT ID # 86013-01

44,692 RELEASED AT: RAPID RIVER

FROM: 4/04/86 TO 4/07/86

AGENCY: IDFG

HATCHERY: RAPID RIVER H

DATE	SAMPLE (1)				RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX CUMULATIVE
	.. PARAMETERS ..	SC	SD	GW						
1986										
4/17	1	1	24.0		284.60	6.15 %	1	1	16	0.9%
4/18	1	1	24.0		366.40	6.44 %	0	0	0	0.9%
4/19	1	1	24.0		275.80	6.92 %	0	0	0	0.9%
4/20	1	1	24.0		211.50	8.13 %	0	0	0	0.9%
4/21	5	1	21.0		210.60	8.10 %	0 *	0 *	0 *	0.9%
4/22	1	1	24.0		260.50	6.59 %	1	1	15	1.7%
4/23	1	1	24.0		247.80	7.35 %	1	1	14	2.4%
4/24	1	1	24.0		282.50	5.90 %	1	1	17	3.3%
4/25	1	1	24.0		298.20	6.06 %	2	2	33	5.1%
4/26	1	1	24.0		283.20	6.20 %	1	1	16	6.0%
4/27	1	1	23.0		287.00	6.23 %	4	4	64	9.4%
4/28	1	1	24.0		257.80	6.80 %	3	3	44	11.7%
4/29	5	1	21.0		270.80	6.56 %	6 *	6 *	91 *	16.6%
4/30	1	1	24.0		261.40	6.79 %	9	9	133	23.8%
5/01	1	1	24.0		261.20	6.81 %	3	3	44	26.1%
5/02	1	1	24.0		265.40	6.86 %	7	7	102	31.6%
5/03	1	1	24.0		245.80	7.40 %	2	2	27	33.0%
5/04	1	1	24.0		220.60	7.51 %	6	6	80	37.3%
5/05	1	1	24.0		230.50	7.49 %	6	6	80	41.6%
5/06	1	1	24.0		267.70	7.09 %	4	4	56	44.6%
5/07	1	1	24.0		249.20	8.02 %	17	17	212	56.0%
5/08	1	1	24.0		249.70	7.37 %	12	12	163	64.7%
5/09	1	1	24.0		261.80	6.87 %	5	5	73	68.6%
5/10	1	1	24.0		251.90	6.30 %	6	6	95	73.7%
5/11	1	1	24.0		271.10	5.97 %	9	9	151	81.8%
5/12	1	1	24.0		263.60	5.81 %	1	1	17	82.7%
5/13	1	1	24.0		272.70	6.07 %	2	2	33	84.5%
5/14	1	1	24.0		252.00	6.34 %	6	6	95	89.6%
5/15	1	1	24.0		266.60	6.60 %	2	2	30	91.2%
5/16	1	1	24.0		279.40	6.47 %	6	6	93	96.2%
5/17	1	1	24.0		264.50	6.64 %	2	2	30	97.8%
5/18	1	1	24.0		227.10	7.04 %	1	1	14	98.6%
5/19	1	1	24.0		234.20	7.50 %	1	1	13	99.2%
5/20	1	1	24.0		264.30	6.99 %	1	1	14	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

LD-Y -1 SP CHINOOK LOT ID # 86013-01 44,692 RELEASED AT: RAPID RIVER FROM: 4/04/86 TO 4/07/86
AGENCY: IDFG HATCHERY: RAPID RIVER H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	(4) ... PASSAGE INDEX ...
	SC-#D-GW-HRS	FLOW	FLOW			DAILY COUNT CUMULATIVE
1986						

***** CONTINUED *****

TOTAL				128	128	1.865
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
) Sample deviates from "normal" conditions (i.e. SC code > 1)

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JOHN DAY

* * *

CHINOOK 1'S

* * *

LD-Y -3 SP CHINOOK LOT ID # 86014-01

44,754 RELEASED AT: HELLS CANYON
AGENCY: IDFG

FROM: 3/26/86 TO 3/27/86
HATCHERY: RAPID RIVER H

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	WD	GW	HR.S	FLOW	FLOW			
4/20	1	1	24.0	211.50	8.13 %	1	1	12	0.7%
4/21	5	1	21.0	210.60	8.10 %	0 *	0 *	0 *	0.7%
4/22	1	1	24.0	260.50	6.59 %	3	3	46	3.4%
4/23	1	1	24.0	247.80	7.35 %	1	1	14	4.2%
4/24	1	1	24.0	282.50	5.90 %	1	1	17	5.2%
4/25	1	1	24.0	298.20	6.06 %	7	7	116	12.0%
4/26	1	1	24.0	283.20	6.20 %	1	1	16	12.9%
4/27	1	1	23.0	287.00	6.23 %	4	4	64	16.7%
4/28	1	1	24.0	257.80	6.80 %	3	3	44	19.2%
4/29	5	1	21.0	270.80	6.56 %	1 *	1 *	15 *	20.1%
4/30	1	1	24.0	261.40	6.79 %	15	15	221	33.0%
5/01	1	1	24.0	261.20	6.81 %	14	14	206	45.1%
5/02	1	1	24.0	265.40	6.86 %	6	6	87	50.2%
5/03	1	1	24.0	245.80	7.40 %	2	2	27	51.8%
5/04	1	1	24.0	220.60	7.51 %	5	5	67	55.7%
5/05	1	1	24.0	230.50	7.49 %	12	12	160	65.0%
5/06	1	1	24.0	267.70	7.09 %	5	5	71	69.2%
5/07	1	1	24.0	249.20	8.02 %	7	7	87	74.3%
5/08	1	1	24.0	249.70	7.37 %	7	7	95	79.8%
5/09	1	1	24.0	261.80	6.87 %	2	2	29	81.5%
5/10	1	1	24.0	251.90	6.30 %	2	2	32	83.4%
5/11	1	1	24.0	271.10	5.97 %	3	3	50	86.3%
5/12	1	1	24.0	263.60	5.81 %	2	2	34	88.3%
5/13	1	1	24.0	272.70	6.07 %	2	2	33	90.2%
5/14	1	1	24.0	252.00	6.34 %	3	3	47	93.0%
5/15	1	1	24.0	266.60	6.60 %	5	5	76	97.4%
5/16	1	1	24.0	279.40	6.47 %	0	0	0	97.4%
5/17	1	1	24.0	264.50	6.64 %	0	0	0	97.4%
5/18	1	1	24.0	227.10	7.04 %	1	1	14	98.2%
5/19	1	1	24.0	234.20	7.50 %	0	0	0	98.2%
5/20	1	1	24.0	264.30	6.99 %	1	1	14	99.1%
5/21	1	1	24.0	264.80	6.91 %	0	0	0	99.1%
5/22	1	1	24.0	311.80	6.21 %	1	1	16	100.0%

***** CONTINUED *****

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FISH PASSAGE DATA SYSTEM
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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

LD-Y -3 SP CHINOOK LOT ID # 86014-01 44,754 RELEASED AT: HELLS CANYON FROM: 3/26/86 TO 3/27/86
AGENCY: IDFG HATCHERY: RAPID RIVER H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4) DAILY COUNT CUMULATIVE
1986	SC-ID-GW-HRS	FLOW	FLOW				

***** CONTINUED *****

TOTAL				117	117		1,710
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
- (2) River Flow: Data acquired from CATCH DATA
- (3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
- (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
() Sample deviates from "normal" conditions (i.e. SC code) 1)

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JOHN DAY

* * *

CHINOOK 1'S

* * *

RA-Y -2 SP CHINOOK LOT ID # 86108-01

40,675 RELEASED AT: N F CLEARWATER

FROM: 4/02/86 TO 4/03/86

AGENCY: USFWS

HATCHERY: DWORSHAK NFH

DATE	.. SAMPLE (1) PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HR,S	FLOW	FLOW				
4/29	5 1 21.0	270.80	6.56 %	4 *	4 *	61 *	4.4%
4/30	1 1 24.0	261.40	6.79 %	0	0	0	4.4%
5/01	1 1 24.0	261.20	6.81 %	0	0	0	4.4%
5/02	1 1 24.0	265.40	6.86 %	2	2	29	6.6%
5/03	1 1 24.0	245.80	7.40 %	1	1	14	7.6%
5/04	1 1 24.0	220.60	7.51 %	0	0	0	7.6%
5/05	1 1 24.0	230.50	7.49 %	5	5	67	12.5%
5/06	1 1 24.0	267.70	7.09 %	2	2	28	14.5%
5/07	1 1 24.0	249.20	8.02 %	11	11	137	24.5%
5/08	1 1 24.0	249.70	7.37 %	3	3	41	27.5%
5/09	1 1 24.0	261.80	6.87 %	5	5	73	32.8%
5/10	1 1 24.0	251.90	6.30 %	9	9	143	43.2%
5/11	1 1 24.0	271.10	5.97 %	4	4	67	48.1%
5/12	1 1 24.0	263.60	5.81 %	2	2	34	50.5%
5/13	1 1 24.0	272.70	6.07 %	2	2	33	52.9%
5/14	1 1 24.0	252.00	6.34 %	7	7	110	61.0%
5/15	1 1 24.0	266.60	6.60 %	8	8	121	69.8%
5/16	1 1 24.0	279.40	6.47 %	4	4	62	74.3%
5/17	1 1 24.0	264.50	6.64 %	2	2	30	76.5%
5/18	1 1 24.0	227.10	7.04 %	1	1	14	77.5%
5/19	1 1 24.0	234.20	7.50 %	2	2	27	79.5%
5/20	1 1 24.0	264.30	6.99 %	10	10	143	89.9%
5/21	1 1 24.0	264.80	6.91 %	2	2	29	92.0%
5/22	1 1 24.0	311.80	6.21 %	0	0	0	92.0%
5/23	1 1 24.0	301.10	6.67 %	2	2	30	94.2%
5/24	1 1 24.0	240.80	7.27 %	2	2	28	96.2%
5/25	1 1 24.0	218.80	6.93 %	0	0	0	96.2%
5/26	1 1 24.0	190.60	7.50 %	0	0	0	96.2%
5/27	1 1 24.0	230.20	7.33 %	0	0	0	96.2%
5/28	1 1 24.0	304.90	6.23 %	1	1	16	97.4%
5/29	1 1 24.0	340.50	5.94 %	1	1	17	98.6%
5/30	1 1 24.0	352.30	6.29 %	0	0	0	98.6%
5/31	1 1 24.0	363.80	5.37 %	1	1	19	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

RA-Y -2 SP CHINOOK LOT ID # 86108-01 40,675 RELEASED AT: N F CLEARWATER FROM: 4/02/86 TO 4/03/86
AGENCY: USFWS HATCHERY: DWORSHAK NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC--#D--GW--HRS	FLOW	FLOW			

***** CONTINUED *****

TOTAL				93	93	1.373
-------	--	--	--	----	----	-------

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
) Sample deviates from "normal" conditions (i.e. SC code > 1)

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FISH PASSAGE DATA SYSTEM
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JOHN DAY

* * *

CHINOOK 1'S

* * *

RD-Y -1 SP CHINOOK LOT ID # 86017-01

35,851 RELEASED AT: SAWTOOTH H
AGENCY: IDFG

FROM: 3/17/86 TO 3/17/86
HATCHERY: SAWTOOTH H

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D	GW	HR.S					
5/07	1	1	24.0	249.20	8.02 %	2	2	25	26.0%
5/08	1	1	24.0	249.70	7.37 %	2	2	27	54.2%
5/09	1	1	24.0	261.80	6.87 %	0	0	0	54.2%
5/10	1	1	24.0	251.90	6.30 %	1	1	16	70.8%
5/11	1	1	24.0	271.10	5.97 %	0	0	0	70.8%
5/12	1	1	24.0	263.60	5.81 %	0	0	0	70.8%
5/13	1	1	24.0	272.70	6.07 %	0	0	0	70.8%
5/14	1	1	24.0	252.00	6.34 %	0	0	0	70.8%
5/15	1	1	24.0	266.60	6.60 %	1	1	15	86.5%
5/16	1	1	24.0	279.40	6.47 %	0	0	0	86.5%
5/17	1	1	24.0	264.50	6.64 %	0	0	0	86.5%
5/18	1	1	24.0	227.10	7.04 %	0	0	0	86.5%
5/19	1	1	24.0	234.20	7.50 %	1	1	13	100.0%
TOTAL						7	7	96	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

RD-Y -3 SU CHINOOK LOT ID # 86018-01 43,487 RELEASED AT: S F SALMON R FROM: 3/24/86 TO 3/31/86
AGENCY: IDFG HATCHERY: MCCALL

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC	TD	GW	HR.S	FLOW				
4/27	1	1	23.0	287.00	6.23 %	1	1	16	2.3%
4/28	1	1	24.0	257.80	6.80 %	0	0	0	2.3%
4/29	5	1	21.0	270.80	6.56 %	0 *	0 *	0 *	2.3%
4/30	1	1	24.0	261.40	6.79 %	1	1	15	4.5%
5/01	1	1	24.0	261.20	6.81 %	1	1	15	6.7%
5/02	1	1	24.0	265.40	6.86 %	1	1	15	8.9%
5/03	1	1	24.0	245.80	7.40 %	2	2	27	12.8%
5/04	1	1	24.0	220.60	7.51 %	0	0	0	12.8%
5/05	1	1	24.0	230.50	7.49 %	3	3	40	18.6%
5/06	1	1	24.0	267.70	7.09 %	0	0	0	18.6%
5/07	1	1	24.0	249.20	8.02 %	4	4	50	25.9%
5/08	1	1	24.0	249.70	7.37 %	3	3	41	31.9%
5/09	1	1	24.0	261.80	6.87 %	1	1	15	34.1%
5/10	1	1	24.0	251.90	6.30 %	1	1	16	36.4%
5/11	1	1	24.0	271.10	5.97 %	2	2	34	41.3%
5/12	1	1	24.0	263.60	5.81 %	0	0	0	41.3%
5/13	1	1	24.0	272.70	6.07 %	1	1	16	43.7%
5/14	1	1	24.0	252.00	6.34 %	7	7	110	59.7%
5/15	1	1	24.0	266.60	6.60 %	3	3	45	66.2%
5/16	1	1	24.0	279.40	6.47 %	2	2	31	70.7%
5/17	1	1	24.0	264.50	6.64 %	4	4	60	79.5%
5/18	1	1	24.0	227.10	7.04 %	3	3	43	85.7%
5/19	1	1	24.0	234.20	7.50 %	0	0	0	85.7%
5/20	1	1	24.0	264.30	6.99 %	1	1	14	87.8%
5/21	1	1	24.0	264.80	6.91 %	0	0	0	87.8%
5/22	1	1	24.0	311.80	6.21 %	0	0	0	87.8%
5/23	1	1	24.0	301.10	6.67 %	2	2	30	92.1%
5/24	1	1	24.0	240.80	7.27 %	1	1	14	94.2%
5/25	1	1	24.0	218.80	6.93 %	0	0	0	94.2%
5/26	1	1	24.0	190.60	7.50 %	0	0	0	94.2%
5/27	1	1	24.0	230.20	7.33 %	0	0	0	94.2%
5/28	1	1	24.0	304.90	6.23 %	0	0	0	94.2%
5/29	1	1	24.0	340.50	5.94 %	0	0	0	94.2%
5/30	1	1	24.0	352.30	6.29 %	0	0	0	94.2%
5/31	1	1	24.0	363.80	5.37 %	0	0	0	94.2%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

RD-Y -3 SU CHINOOK LOT ID # 86018-01 43,487 RELEASED AT: S F SALMON R FROM: 3/24/86 TO 3/31/86
AGENCY: IDFG HATCHERY: MCCALL

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1)			(2)	(3)	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
	.. PARAMETERS ..	RIVER	INDEX	FLOW	FLOW				
1986	SC-#D-GW-HRS								

***** CONTINUED *****

6/01	1	1	24.0	377.30	3.96 %	0	0	0	94.2%
6/02	1	1	24.0	400.90	4.40 %	0	0	0	94.2%
6/03	1	1	24.0	389.60	4.35 %	0	0	0	94.2%
6/04	1	1	24.0	397.00	3.92 %	0	0	0	94.2%
6/05	1	1	24.0	402.00	4.64 %	0	0	0	94.2%
6/06	1	1	24.0	351.70	4.76 %	1	1	21	97.2%
6/07	1	1	24.0	369.90	4.53 %	0	0	0	97.2%
6/08	1	1	24.0	345.10	4.62 %	0	0	0	97.2%
6/09	1	1	24.0	337.70	5.38 %	1	1	19	100.0%
TOTAL						46	46	687	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

LA-15-1 SP CHINOOK LOT ID # 86259-00

0 RELEASED AT: BELOW MCN DAM
AGENCY: NMFS

FROM: 0/00/00 TO 0/00/00
HATCHERY: NON-HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D	GW	HRS					
5/16	1	1	24.0	279.40	6.47 %	7	7	108	9.1%
5/17	1	1	24.0	264.50	6.64 %	12	12	181	24.5%
5/18	1	1	24.0	227.10	7.04 %	17	17	241	44.8%
5/19	1	1	24.0	234.20	7.50 %	14	14	187	60.7%
5/20	1	1	24.0	264.30	6.99 %	23	23	329	88.5%
5/21	1	1	24.0	264.80	6.91 %	6	6	87	95.9%
5/22	1	1	24.0	311.80	6.21 %	2	2	32	98.6%
5/23	1	1	24.0	301.10	6.67 %	0	0	0	98.6%
5/24	1	1	24.0	240.80	7.27 %	0	0	0	98.6%
5/25	1	1	24.0	218.80	6.93 %	0	0	0	98.6%
5/26	1	1	24.0	190.60	7.50 %	0	0	0	98.6%
5/27	1	1	24.0	230.20	7.33 %	0	0	0	98.6%
5/28	1	1	24.0	304.90	6.23 %	0	0	0	98.6%
5/29	1	1	24.0	340.50	5.94 %	1	1	17	100.0%
TOTAL						82	82	1,182	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

LA-7C-1 SP CHINOOK LOT ID # 86126-02

11,989

RELEASED AT: BELOW PRD DAM

FROM: 4/25/86 TO 4/25/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	.. SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HR.S	ELDW	ELDW				
5/04	1 1 24.0	220.60	7.51 %	1	1	13	0.6X
5/05	1 1 24.0	230.50	7.49 %	1	1	13	1.1X
5/06	1 1 24.0	267.70	7.09 %	0	0	0	1.1X
5/07	1 1 24.0	249.20	8.02 %	3	3	37	2.7X
5/08	1 1 24.0	249.70	7.37 %	0	0	0	2.7X
5/09	1 1 24.0	261.80	6.87 %	2	2	29	3.9X
5/10	1 1 24.0	251.90	6.30 %	4	4	63	6.6X
5/11	1 1 24.0	271.10	5.97 %	2	2	34	8.1X
5/12	1 1 24.0	263.60	5.81 %	5	5	86	11.7X
5/13	1 1 24.0	272.70	6.07 %	2	2	33	13.2X
5/14	1 1 24.0	252.00	6.34 %	7	7	110	17.8X
5/15	1 1 24.0	266.60	6.60 %	8	8	121	23.0X
5/16	1 1 24.0	279.40	6.47 %	5	5	77	26.3X
5/17	1 1 24.0	264.50	6.64 %	10	10	151	32.7X
5/18	1 1 24.0	227.10	7.04 %	13	13	185	40.6X
5/19	1 1 24.0	234.20	7.50 %	16	16	213	49.7X
5/20	1 1 24.0	264.30	6.99 %	19	19	272	61.4X
5/21	1 1 24.0	264.80	6.91 %	17	17	246	71.9X
5/22	1 1 24.0	311.80	6.21 %	9	9	145	78.1X
5/23	1 1 24.0	301.10	6.67 %	13	13	195	86.4X
5/24	1 1 24.0	240.80	7.27 %	7	7	96	90.5X
5/25	1 1 24.0	218.80	6.93 %	1	1	14	91.1X
5/26	1 1 24.0	190.60	7.50 %	1	1	13	91.6X
5/27	1 1 24.0	230.20	7.33 %	3	3	41	93.4X
5/28	1 1 24.0	304.90	6.23 %	2	2	32	94.7X
5/29	1 1 24.0	340.50	5.94 %	4	4	67	97.6X
5/30	1 1 24.0	352.30	6.29 %	1	1	16	98.3X
5/31	1 1 24.0	363.80	5.37 %	0	0	0	98.3X
6/01	1 1 24.0	377.30	3.96 %	0	0	0	98.3X
6/02	1 1 24.0	400.90	4.40 %	0	0	0	98.3X
6/03	1 1 24.0	389.60	4.35 %	1	1	23	99.3X
6/04	1 1 24.0	397.00	3.92 %	0	0	0	99.3X
6/05	1 1 24.0	402.00	4.64 %	0	0	0	99.3X
6/06	1 1 24.0	351.70	4.76 %	0	0	0	99.3X
6/07	1 1 24.0	369.90	4.53 %	0	0	0	99.3X

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

LA-7C-1 SP CHINOOK LOT ID # 86126-02 11,989 RELEASED AT: BELOW PRD DAM FROM: 4/25/86 TO 4/25/86
AGENCY: USFWS HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D	GW	HR.S					

* * * * * C O N T I N U E D * * * * *

6/08	1	1	24.0	345.10	4.62 %	0	0	0	99.3%
6/09	1	1	24.0	337.70	5.38 %	0	0	0	99.3%
6/10	1	1	24.0	309.40	5.77 %	1	1	17	100.0%

TOTAL						158	158	2,342	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

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*****
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# System at (503) 230-4290.
*****

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HATCHERY: WINTHROP NFH

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

LA-7C-3 SP CHINOOK LOT ID # 86126-01 12,001 RELEASED AT: BELOW PRD DAM FROM: 4/21/86 TO 4/21/86
AGENCY: USFWS HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4) DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW				

***** CONTINUED *****

TOTAL				160	160		2,382
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

RA-7C-1 SP CHINOOK LOT ID # 86125-01

34,466 RELEASED AT: METHOW R

FROM: 4/21/86 TO 4/21/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	.. SAMPLE (1) ..	(2)	(3)	NUMBER	NUMBER	... PASSAGE INDEX ...
1986	SC--ID--GW--HR.S	RIVER FLOW	INDEX FLOW	SAMPLED	COLLECTED	DAILY COUNT CUMULATIVE
5/07	1 1 24.0	249.20	8.02 %	2	2	25 1.2%
5/08	1 1 24.0	249.70	7.37 %	1	1	14 1.8%
5/09	1 1 24.0	261.80	6.87 %	5	5	73 5.2%
5/10	1 1 24.0	251.90	6.30 %	2	2	32 6.7%
5/11	1 1 24.0	271.10	5.97 %	2	2	34 8.3%
5/12	1 1 24.0	263.60	5.81 %	0	0	0 8.3%
5/13	1 1 24.0	272.70	6.07 %	1	1	16 9.0%
5/14	1 1 24.0	252.00	6.34 %	5	5	79 12.7%
5/15	1 1 24.0	266.60	6.60 %	3	3	45 14.8%
5/16	1 1 24.0	279.40	6.47 %	3	3	46 16.9%
5/17	1 1 24.0	264.50	6.64 %	6	6	90 21.1%
5/18	1 1 24.0	227.10	7.04 %	6	6	85 25.1%
5/19	1 1 24.0	234.20	7.50 %	10	10	133 31.3%
5/20	1 1 24.0	264.30	6.99 %	13	13	186 39.9%
5/21	1 1 24.0	264.80	6.91 %	19	19	275 52.7%
5/22	1 1 24.0	311.80	6.21 %	10	10	161 60.2%
5/23	1 1 24.0	301.10	6.67 %	12	12	180 68.6%
5/24	1 1 24.0	240.80	7.27 %	7	7	96 73.1%
5/25	1 1 24.0	218.80	6.93 %	1	1	14 73.7%
5/26	1 1 24.0	190.60	7.50 %	2	2	27 75.0%
5/27	1 1 24.0	230.20	7.33 %	1	1	14 75.7%
5/28	1 1 24.0	304.90	6.23 %	6	6	96 80.1%
5/29	1 1 24.0	340.50	5.94 %	10	10	168 87.9%
5/30	1 1 24.0	352.30	6.29 %	7	7	111 93.1%
5/31	1 1 24.0	363.80	5.37 %	6	6	112 98.3%
6/01	1 1 24.0	377.30	3.96 %	0	0	0 98.3%
6/02	1 1 24.0	400.90	4.40 %	0	0	0 98.3%
6/03	1 1 24.0	389.60	4.35 %	0	0	0 98.3%
6/04	1 1 24.0	397.00	3.92 %	0	0	0 98.3%
6/05	1 1 24.0	402.00	4.64 %	1	1	22 99.3%
6/06	1 1 24.0	351.70	4.76 %	0	0	0 99.3%
6/07	1 1 24.0	369.90	4.53 %	0	0	0 99.3%
6/08	1 1 24.0	345.10	4.62 %	0	0	0 99.3%
6/09	1 1 24.0	337.70	5.38 %	0	0	0 99.3%
6/10	1 1 24.0	309.40	5.77 %	0	0	0 99.3%
6/11	1 1 24.0	288.60	7.00 %	1	1	14 100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

RA-7C-1 SP CHINOOK LOT ID # 86125-01

34,466

RELEASED AT: METHOW R

FROM: 4/21/86 TO 4/21/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	(4) ... PASSAGE INDEX ...
1986	SC-#D-GW-HRS	FLOW	FLOW			DAILY COUNT CUMULATIVE

***** CONTINUED *****

TOTAL				142	142	2,148
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
- (2) River Flow: Data acquired from CATCH DATA
- (3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
- (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

WA-7C-3 SP CHINOOK LOT ID # 86125-02

34,485 RELEASED AT: METHOW R

FROM: 4/25/86 TO 4/25/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	SAMPLE (1)			(2)	(3)	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
	.. PARAMETERS ..	RIVER	INDEX	FLOW	FLOW				
986	SC--#D--GW--HR.S	FLOW	FLOW						
5/08	1 1 24.0	249.70	7.37 %			2	2	27	1.4%
5/09	1 1 24.0	261.80	6.87 %			0	0	0	1.4%
5/10	1 1 24.0	251.90	6.30 %			0	0	0	1.4%
5/11	1 1 24.0	271.10	5.97 %			0	0	0	1.4%
5/12	1 1 24.0	263.60	5.81 %			0	0	0	1.4%
5/13	1 1 24.0	272.70	6.07 %			2	2	33	3.1%
5/14	1 1 24.0	252.00	6.34 %			1	1	16	3.9%
5/15	1 1 24.0	266.60	6.60 %			3	3	45	6.2%
5/16	1 1 24.0	279.40	6.47 %			0	0	0	6.2%
5/17	1 1 24.0	264.50	6.64 %			4	4	60	9.2%
5/18	1 1 24.0	227.10	7.04 %			3	3	43	11.4%
5/19	1 1 24.0	234.20	7.50 %			5	5	67	14.9%
5/20	1 1 24.0	264.30	6.99 %			6	6	86	19.3%
5/21	1 1 24.0	264.80	6.91 %			17	17	246	31.8%
5/22	1 1 24.0	311.80	6.21 %			7	7	113	37.6%
5/23	1 1 24.0	301.10	6.67 %			8	8	120	43.7%
5/24	1 1 24.0	240.80	7.27 %			6	6	83	48.0%
5/25	1 1 24.0	218.80	6.93 %			3	3	43	50.2%
5/26	1 1 24.0	190.60	7.50 %			4	4	53	52.9%
5/27	1 1 24.0	230.20	7.33 %			3	3	41	55.0%
5/28	1 1 24.0	304.90	6.23 %			6	6	96	59.9%
5/29	1 1 24.0	340.50	5.94 %			14	14	236	71.9%
5/30	1 1 24.0	352.30	6.29 %			9	9	143	79.2%
5/31	1 1 24.0	363.80	5.37 %			16	16	298	94.4%
6/01	1 1 24.0	377.30	3.96 %			1	1	25	95.7%
6/02	1 1 24.0	400.90	4.40 %			0	0	0	95.7%
6/03	1 1 24.0	389.60	4.35 %			1	1	23	96.9%
6/04	1 1 24.0	397.00	3.92 %			1	1	26	98.2%
6/05	1 1 24.0	402.00	4.64 %			0	0	0	98.2%
6/06	1 1 24.0	351.70	4.76 %			0	0	0	98.2%
6/07	1 1 24.0	369.90	4.53 %			0	0	0	98.2%
6/08	1 1 24.0	345.10	4.62 %			0	0	0	98.2%
6/09	1 1 24.0	337.70	5.38 %			1	1	19	99.2%
6/10	1 1 24.0	309.40	5.77 %			0	0	0	99.2%
6/11	1 1 24.0	288.60	7.00 %			0	0	0	99.2%
6/12	1 1 24.0	282.10	6.27 %			1	1	16	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

RA-7C-3 SP CHINOOK LOT ID # 86125-02

34,485

RELEASED AT: METHOW R

FROM: 4/25/86 TO 4/25/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT	(4) CUMULATIVE
1986	SC--#D--GW--HRS						

***** CONTINUED *****

TOTAL				124	124	1,958	
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
- (2) River Flow: Data acquired from CATCH DATA
- (3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
- (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

RA-7K-1 FA CHINOOK LOT ID # 86154-01

40,168 RELEASED AT: LYONS FERRY
AGENCY: WDF

FROM: 4/02/86 TO 4/03/86
HATCHERY: LYONS FERRY

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	FD	GW	HR.S					
4/12	1	1	24.0	270.80	7.19 %	1	1	14	0.2%
4/13	1	1	24.0	247.50	6.90 %	0	0	0	0.2%
4/14	1	1	24.0	279.10	6.22 %	1	1	16	0.3%
4/15	1	1	24.0	281.70	6.91 %	2	2	29	0.7%
4/16	1	1	24.0	263.70	7.01 %	0	0	0	0.7%
4/17	1	1	24.0	284.60	6.15 %	1	1	16	0.9%
4/18	1	1	24.0	366.40	6.44 %	4	4	62	1.6%
4/19	1	1	24.0	275.80	6.92 %	1	1	14	1.7%
4/20	1	1	24.0	211.50	8.13 %	12	12	148	3.4%
4/21	5	1	21.0	210.60	8.10 %	10 *	10 *	123 *	4.8%
4/22	1	1	24.0	260.50	6.59 %	10	10	152	6.5%
4/23	1	1	24.0	247.80	7.35 %	6	6	82	7.4%
4/24	1	1	24.0	282.50	5.90 %	18	18	305	10.9%
4/25	1	1	24.0	298.20	6.06 %	22	22	363	15.0%
4/26	1	1	24.0	283.20	6.20 %	22	22	355	19.0%
4/27	1	1	23.0	287.00	6.23 %	16	16	257	22.0%
4/28	1	1	24.0	257.80	6.80 %	20	20	294	25.3%
4/29	5	1	21.0	270.80	6.56 %	29 *	29 *	442 *	30.3%
4/30	1	1	24.0	261.40	6.79 %	66	66	972	41.3%
5/01	1	1	24.0	261.20	6.81 %	36	36	529	47.3%
5/02	1	1	24.0	265.40	6.86 %	60	60	875	57.3%
5/03	1	1	24.0	245.80	7.40 %	37	37	500	62.9%
5/04	1	1	24.0	220.60	7.51 %	41	41	546	69.1%
5/05	1	1	24.0	230.50	7.49 %	37	37	494	74.7%
5/06	1	1	24.0	267.70	7.09 %	29	29	409	79.4%
5/07	1	1	24.0	249.20	8.02 %	34	34	424	84.2%
5/08	1	1	24.0	249.70	7.37 %	22	22	299	87.6%
5/09	1	1	24.0	261.80	6.87 %	14	14	204	89.9%
5/10	1	1	24.0	251.90	6.30 %	10	10	159	91.7%
5/11	1	1	24.0	271.10	5.97 %	7	7	117	93.0%
5/12	1	1	24.0	263.60	5.81 %	2	2	34	93.4%
5/13	1	1	24.0	272.70	6.07 %	7	7	115	94.7%
5/14	1	1	24.0	252.00	6.34 %	5	5	79	95.6%
5/15	1	1	24.0	266.60	6.60 %	1	1	15	95.8%
5/16	1	1	24.0	279.40	6.47 %	8	8	124	97.2%
5/17	1	1	24.0	264.50	6.64 %	5	5	75	98.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

RA-7K-1 FA CHINOOK LOT ID # B6154-01

40,168 RELEASED AT: LYONS FERRY
AGENCY: WDF

FROM: 4/02/86 TO 4/03/86
HATCHERY: LYONS FERRY

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4) ...
1986	SC-#D-GW-HRS	FLOW	FLOW			DAILY COUNT	CUMULATIVE

***** CONTINUED *****

5/18	1	1 24.0	227.10	7.04 %	2	2	28	98.3%
5/19	1	1 24.0	234.20	7.50 %	0	0	0	98.3%
5/20	1	1 24.0	264.30	6.99 %	3	3	43	98.8%
5/21	1	1 24.0	264.80	6.91 %	3	3	43	99.3%
5/22	1	1 24.0	311.80	6.21 %	0	0	0	99.3%
5/23	1	1 24.0	301.10	6.67 %	0	0	0	99.3%
5/24	1	1 24.0	240.80	7.27 %	0	0	0	99.3%
5/25	1	1 24.0	218.80	6.93 %	2	2	29	99.6%
5/26	1	1 24.0	190.60	7.50 %	0	0	0	99.6%
5/27	1	1 24.0	230.20	7.33 %	0	0	0	99.6%
5/28	1	1 24.0	304.90	6.23 %	1	1	16	99.8%
5/29	1	1 24.0	340.50	5.94 %	0	0	0	99.8%
5/30	1	1 24.0	352.30	6.29 %	1	1	16	100.0%

TOTAL					608	608	8,817	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

LA-7T-1 SP CHINOOK LOT ID # 86122-01 40,602 RELEASED AT: LEAVENWORTH NFH FROM: 4/23/86 TO 4/23/86
AGENCY: USFWS HATCHERY: LEAVENWORTH NFH

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	TD	GW	HR.S	FLOW				
5/09	1	1	24.0	261.80	6.87 %	1	1	15	0.5%
5/10	1	1	24.0	251.90	6.30 %	1	1	16	0.9%
5/11	1	1	24.0	271.10	5.97 %	0	0	0	0.9%
5/12	1	1	24.0	263.60	5.81 %	1	1	17	1.4%
5/13	1	1	24.0	272.70	6.07 %	3	3	49	2.9%
5/14	1	1	24.0	252.00	6.34 %	3	3	47	4.3%
5/15	1	1	24.0	266.60	6.60 %	3	3	45	5.7%
5/16	1	1	24.0	279.40	6.47 %	5	5	77	8.0%
5/17	1	1	24.0	264.50	6.64 %	9	9	136	12.1%
5/18	1	1	24.0	227.10	7.04 %	7	7	99	15.1%
5/19	1	1	24.0	234.20	7.50 %	11	11	147	19.6%
5/20	1	1	24.0	264.30	6.99 %	18	18	258	27.3%
5/21	1	1	24.0	264.80	6.91 %	25	25	362	38.3%
5/22	1	1	24.0	311.80	6.21 %	17	17	274	46.5%
5/23	1	1	24.0	301.10	6.67 %	14	14	210	52.9%
5/24	1	1	24.0	240.80	7.27 %	17	17	234	59.9%
5/25	1	1	24.0	218.80	6.93 %	6	6	87	62.6%
5/26	1	1	24.0	190.60	7.50 %	0	0	0	62.6%
5/27	1	1	24.0	230.20	7.33 %	1	1	14	63.0%
5/28	1	1	24.0	304.90	6.23 %	10	10	161	67.8%
5/29	1	1	24.0	340.50	5.94 %	20	20	337	78.0%
5/30	1	1	24.0	352.30	6.29 %	13	13	207	84.2%
5/31	1	1	24.0	363.80	5.37 %	16	16	298	93.2%
6/01	1	1	24.0	377.30	3.96 %	0	0	0	93.2%
6/02	1	1	24.0	400.90	4.40 %	1	1	23	93.9%
6/03	1	1	24.0	389.60	4.35 %	2	2	46	95.3%
6/04	1	1	24.0	397.00	3.92 %	1	1	26	96.1%
6/05	1	1	24.0	402.00	4.64 %	1	1	22	96.8%
6/06	1	1	24.0	351.70	4.76 %	1	1	21	97.4%
6/07	1	1	24.0	369.90	4.53 %	0	0	0	97.4%
6/08	1	1	24.0	345.10	4.62 %	1	1	22	98.1%
6/09	1	1	24.0	337.70	5.38 %	0	0	0	98.1%
6/10	1	1	24.0	309.40	5.77 %	2	2	35	99.1%
6/11	1	1	24.0	288.60	7.00 %	2	2	29	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

JOHN DAY

* * * CHINOOK 1'S * * *

LA-7T-1 SP CHINOOK LOT ID # 86122-01 40,602 RELEASED AT: LEAVENWORTH NFH FROM: 4/23/86 TO 4/23/86
AGENCY: USFWS HATCHERY: LEAVENWORTH NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW				

* * * * * C O N T I N U E D * * * * *

TOTAL				212	212	3.314	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

RA-7T-3 SP CHINOOK LOT ID # 86125-03

34,353

RELEASED AT: METHOW R

FROM: 4/29/86 TO 4/29/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	CD	GW	HB.S	FLOW				
5/14	1	1	24.0	252.00	6.34 %	2	2	32	1.7%
5/15	1	1	24.0	266.60	6.60 %	0	0	0	1.7%
5/16	1	1	24.0	279.40	6.47 %	3	3	46	4.0%
5/17	1	1	24.0	264.50	6.64 %	3	3	45	6.4%
5/18	1	1	24.0	227.10	7.04 %	1	1	14	7.1%
5/19	1	1	24.0	234.20	7.50 %	5	5	67	10.5%
5/20	1	1	24.0	264.30	6.99 %	9	9	129	17.2%
5/21	1	1	24.0	264.80	6.91 %	16	16	232	29.2%
5/22	1	1	24.0	311.80	6.21 %	11	11	177	38.3%
5/23	1	1	24.0	301.10	6.67 %	7	7	105	43.7%
5/24	1	1	24.0	240.80	7.27 %	8	8	110	49.4%
5/25	1	1	24.0	218.80	6.93 %	1	1	14	50.1%
5/26	1	1	24.0	190.60	7.50 %	2	2	27	51.5%
5/27	1	1	24.0	230.20	7.33 %	3	3	41	53.6%
5/28	1	1	24.0	304.90	6.23 %	4	4	64	56.9%
5/29	1	1	24.0	340.50	5.94 %	13	13	219	68.2%
5/30	1	1	24.0	352.30	6.29 %	12	12	191	78.1%
5/31	1	1	24.0	363.80	5.37 %	15	15	279	92.5%
6/01	1	1	24.0	377.30	3.96 %	1	1	25	93.8%
6/02	1	1	24.0	400.90	4.40 %	2	2	45	96.1%
6/03	1	1	24.0	389.60	4.35 %	1	1	23	97.3%
6/04	1	1	24.0	397.00	3.92 %	0	0	0	97.3%
6/05	1	1	24.0	402.00	4.64 %	0	0	0	97.3%
6/06	1	1	24.0	351.70	4.76 %	0	0	0	97.3%
6/07	1	1	24.0	369.90	4.53 %	1	1	22	98.5%
6/08	1	1	24.0	345.10	4.62 %	0	0	0	98.5%
6/09	1	1	24.0	337.70	5.38 %	0	0	0	98.5%
6/10	1	1	24.0	309.40	5.77 %	0	0	0	98.5%
6/11	1	1	24.0	288.60	7.00 %	1	1	14	99.2%
6/12	1	1	24.0	282.10	6.27 %	1	1	16	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

RA-7T-3 SP CHINOOK LOT ID # 86125-03

34,353

RELEASED AT: METHOW R

FROM: 4/29/86 TO 4/29/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW				

***** CONTINUED *****

TOTAL				122	122	1,937	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

LA-7U-1 SP CHINOOK LOT ID # 86126-03

11,904

RELEASED AT: BELOW PRO DAM

FROM: 4/29/86 TO 4/29/86

AGENCY: USFWS

HATCHERY: WINTHROP NFH

DATE	.. SAMPLE (1) ..	(2)	(3)	NUMBER	NUMBER	... PASSAGE INDEX ...	(4)
1986	SC-#D-GW-HRS	RIVER FLOW	INDEX FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
5/07	1 1 24.0	249.20	8.02 %	1	1	12	0.5%
5/08	1 1 24.0	249.70	7.37 %	1	1	14	1.0%
5/09	1 1 24.0	261.80	6.87 %	1	1	15	1.6%
5/10	1 1 24.0	251.90	6.30 %	2	2	32	2.8%
5/11	1 1 24.0	271.10	5.97 %	0	0	0	2.8%
5/12	1 1 24.0	263.60	5.81 %	1	1	17	3.4%
5/13	1 1 24.0	272.70	6.07 %	1	1	16	4.0%
5/14	1 1 24.0	252.00	6.34 %	11	11	174	10.7%
5/15	1 1 24.0	266.60	6.60 %	3	3	45	12.4%
5/16	1 1 24.0	279.40	6.47 %	6	6	93	15.9%
5/17	1 1 24.0	264.50	6.64 %	16	16	241	25.1%
5/18	1 1 24.0	227.10	7.04 %	23	23	327	37.6%
5/19	1 1 24.0	234.20	7.50 %	14	14	187	44.7%
5/20	1 1 24.0	264.30	6.99 %	23	23	329	57.3%
5/21	1 1 24.0	264.80	6.91 %	25	25	362	71.1%
5/22	1 1 24.0	311.80	6.21 %	11	11	177	77.8%
5/23	1 1 24.0	301.10	6.67 %	14	14	210	85.8%
5/24	1 1 24.0	240.80	7.27 %	9	9	124	90.5%
5/25	1 1 24.0	218.80	6.93 %	3	3	43	92.2%
5/26	1 1 24.0	190.60	7.50 %	0	0	0	92.2%
5/27	1 1 24.0	230.20	7.33 %	3	3	41	93.7%
5/28	1 1 24.0	304.90	6.23 %	3	3	48	95.6%
5/29	1 1 24.0	340.50	5.94 %	5	5	84	98.8%
5/30	1 1 24.0	352.30	6.29 %	2	2	32	100.0%
TOTAL				178	178	2,623	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK 1'S

* * *

RA-7U-3 FA CHINOOK LOT ID # 86157-01

50,000

RELEASED AT: RINGOLD H

FROM: 4/01/86 TO 4/06/86

AGENCY: WDF

HATCHERY: RINGOLD H

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC	#D	GW	HR.S					
4/10	1	1	24.0	233.80	7.61 %	7	7	92	2.1%
4/11	5	1	6.0	80.40	9.14 %	7 *	7 *	77 *	3.9%
4/12	1	1	24.0	270.80	7.19 %	43	43	598	17.7%
4/13	1	1	24.0	247.50	6.90 %	39	39	565	30.8%
4/14	1	1	24.0	279.10	6.22 %	23	23	370	39.3%
4/15	1	1	24.0	281.70	6.91 %	13	13	188	43.6%
4/16	1	1	24.0	263.70	7.01 %	4	4	57	45.0%
4/17	1	1	24.0	284.60	6.15 %	15	15	244	50.6%
4/18	1	1	24.0	366.40	6.44 %	30	30	466	61.4%
4/19	1	1	24.0	275.80	6.92 %	23	23	332	69.0%
4/20	1	1	24.0	211.50	8.13 %	15	15	185	73.3%
4/21	5	1	21.0	210.60	8.10 %	4 *	4 *	49 *	74.4%
4/22	1	1	24.0	260.50	6.59 %	11	11	167	78.3%
4/23	1	1	24.0	247.80	7.35 %	10	10	136	81.4%
4/24	1	1	24.0	282.50	5.90 %	8	8	136	84.6%
4/25	1	1	24.0	298.20	6.06 %	9	9	149	88.0%
4/26	1	1	24.0	283.20	6.20 %	5	5	81	89.9%
4/27	1	1	23.0	287.00	6.23 %	6	6	96	92.1%
4/28	1	1	24.0	257.80	6.80 %	2	2	29	92.8%
4/29	5	1	21.0	270.80	6.56 %	6 *	6 *	91 *	94.9%
4/30	1	1	24.0	261.40	6.79 %	7	7	103	97.3%
5/01	1	1	24.0	261.20	6.81 %	3	3	44	98.3%
5/02	1	1	24.0	265.40	6.86 %	3	3	44	99.3%
5/03	1	1	24.0	245.80	7.40 %	1	1	14	99.6%
5/04	1	1	24.0	220.60	7.51 %	0	0	0	99.6%
5/05	1	1	24.0	230.50	7.49 %	0	0	0	99.6%
5/06	1	1	24.0	267.70	7.09 %	0	0	0	99.6%
5/07	1	1	24.0	249.20	8.02 %	0	0	0	99.6%
5/08	1	1	24.0	249.70	7.37 %	0	0	0	99.6%
5/09	1	1	24.0	261.80	6.87 %	0	0	0	99.6%
5/10	1	1	24.0	251.90	6.30 %	0	0	0	99.6%
5/11	1	1	24.0	271.10	5.97 %	1	1	17	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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JOHN DAY

* * *

CHINOOK 1'S

* * *

RA-7U-3 FA CHINOOK LOT ID # 86157-01

50,000

RELEASED AT: RINGOLD H

AGENCY: WDF

FROM: 4/01/86 TO 4/06/86

HATCHERY: RINGOLD H

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4) DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW				

* * * * * C O N T I N U E D * * * * *

TOTAL				295	295		4,330
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
- (2) River Flow: Data acquired from CATCH DATA
- (3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
- (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
- (*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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JOHN DAY

* * *

CHINOOK O'S

* * *

RD-5 -1 SU CHINOOK LOT ID # 86162-01 100,447 RELEASED AT: WELLS HATCHERY FROM: 5/29/86 TO 5/29/86
AGENCY: WDF HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1)			RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
	SC	#D	GW HRS						
1986	SC	#D	GW HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
6/11	1	1	24.0	288.60	7.00 %	1	1	14	26.4%
6/12	1	1	24.0	282.10	6.27 %	0	0	0	26.4%
6/13	1	1	24.0	252.60	5.96 %	0	0	0	26.4%
6/14	1	1	24.0	250.60	5.93 %	0	0	0	26.4%
6/15	1	1	24.0	224.20	6.77 %	0	0	0	26.4%
6/16	1	1	24.0	248.20	6.51 %	0	0	0	26.4%
6/17	1	1	24.0	237.40	7.36 %	0	0	0	26.4%
6/18	1	1	24.0	241.30	6.79 %	0	0	0	26.4%
6/19	1	1	24.0	255.40	6.77 %	0	0	0	26.4%
6/20	1	1	24.0	224.50	7.31 %	1	1	14	52.8%
6/21	1	1	24.0	204.50	7.43 %	1	1	13	77.4%
6/22	1	1	24.0	188.80	8.15 %	0	0	0	77.4%
6/23	1	1	24.0	180.80	8.41 %	1	1	12	100.0%
TOTAL						4	4	53	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateweills sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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JOHN DAY

* * *

CHINOOK O'S

* * *

LA-T -1 FA CHINOOK LOT ID # 86156-01 100,276 RELEASED AT: PRIEST RAPIDS H FROM: 6/10/86 TO 6/10/86
AGENCY: WDF HATCHERY: PRIEST RAPIDS H

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D	GW	HR.S					
6/21	1	1	24.0	204.50	7.43 %	5	5	67	2.8%
6/22	1	1	24.0	188.80	8.15 %	8	8	98	6.8%
6/23	1	1	24.0	180.80	8.41 %	24	24	285	18.6%
6/24	1	1	24.0	198.20	9.38 %	13	13	139	24.3%
6/25	1	1	24.0	185.50	9.47 %	1	1	11	24.8%
6/26	1	1	24.0	181.80	9.07 %	1	1	11	25.2%
6/27	1	1	24.0	187.70	9.06 %	7	7	77	28.4%
6/28	1	1	24.0	160.50	11.16 %	2	2	18	29.2%
6/29	1	1	24.0	154.70	10.55 %	0	0	0	29.2%
6/30	1	1	24.0	143.80	12.77 %	1	1	8	29.5%
7/01	1	1	24.0	144.50	11.10 %	4	4	36	31.0%
7/02	1	1	24.0	141.40	10.91 %	2	2	18	31.7%
7/03	1	1	24.0	145.10	10.22 %	1	1	10	32.1%
7/04	5	1	16.0	90.60	16.22 %	2 *	2 *	12 *	32.6%
7/05	1	1	24.0	100.60	14.31 %	3	3	21	33.5%
7/06	1	1	24.0	101.80	14.68 %	1	1	7	33.8%
7/07	1	1	24.0	96.60	15.74 %	3	3	19	34.6%
7/08	1	1	24.0	96.60	17.68 %	3	3	17	35.3%
7/09	1	1	24.0	121.80	12.52 %	1	1	8	35.6%
7/10	1	1	24.0	143.30	11.50 %	1	1	9	36.0%
7/11	1	1	24.0	171.90	9.89 %	1	1	10	36.4%
7/12	1	1	24.0	181.20	9.21 %	0	0	0	36.4%
7/13	1	1	24.0	165.60	10.17 %	1	1	10	36.8%
7/14	1	1	24.0	174.70	10.48 %	7	7	67	39.6%
7/15	1	1	24.0	190.90	9.89 %	2	2	20	40.4%
7/16	1	1	24.0	195.10	8.61 %	4	4	46	42.3%
7/17	1	1	24.0	179.50	9.78 %	7	7	72	45.3%
7/18	1	1	24.0	180.40	9.55 %	4	4	42	47.0%
7/19	1	1	24.0	158.70	10.36 %	5	5	48	49.0%
7/20	1	1	24.0	154.00	10.20 %	0	0	0	49.0%
7/21	1	1	24.0	161.60	9.42 %	0	0	0	49.0%
7/22	5	1	24.0	232.80	7.64 %	0 *	0 *	0 *	49.0%
7/23	1	1	24.0	193.90	8.10 %	2	2	25	50.0%
7/24	1	1	24.0	165.30	8.96 %	5	5	56	52.3%
7/25	1	1	24.0	168.60	8.78 %	6	6	68	55.1%
7/26	1	1	24.0	161.30	9.81 %	11	11	112	59.8%

***** CONTINUED *****

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FISH PASSAGE DATA SYSTEM
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JOHN DAY

* * *

CHINOOK O'S

* * *

LA-T -1 FA CHINOOK LOT ID # 86156-01 100,276 RELEASED AT: PRIEST RAPIDS H FROM: 6/10/86 TO 6/10/86
AGENCY: WDF HATCHERY: PRIEST RAPIDS H

DATE	.. SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC-ID-GW-HR.S	FLOW	FLOW			

***** CONTINUED *****

7/27	1	1 24.0	159.50	10.06 %	25	25	249	70.1%
7/28	1	1 24.0	160.30	10.11 %	7	7	69	72.9%
7/29	1	1 24.0	151.70	10.23 %	9	9	88	76.5%
7/30	1	1 24.0	142.10	10.50 %	1	1	10	77.0%
7/31	1	1 24.0	146.00	10.57 %	5	5	47	78.9%
8/01	1	1 24.0	141.30	10.78 %	5	5	46	80.8%
8/02	1	1 24.0	155.70	10.42 %	6	6	58	83.2%
8/03	1	1 24.0	154.70	10.50 %	3	3	29	84.4%
3/04	1	1 24.0	149.90	10.09 %	7	7	69	87.2%
8/05	1	1 24.0	117.00	12.07 %	2	2	17	87.9%
8/06	1	1 24.0	128.30	10.87 %	2	2	18	88.7%
8/07	1	1 24.0	134.50	10.81 %	2	2	19	89.5%
8/08	1	1 24.0	122.80	11.11 %	1	1	9	89.8%
8/09	1	1 24.0	125.20	12.19 %	2	2	16	90.5%
8/10	5	1 24.0	143.60	11.64 %	2 *	2 *	17 *	91.2%
8/11	5	1 24.0	127.80	11.59 %	2 *	2 *	17 *	91.9%
8/12	1	1 24.0	132.80	10.71 %	4	4	37	93.4%
8/13	1	1 24.0	148.30	9.65 %	2	2	21	94.3%
8/14	1	1 24.0	147.80	10.03 %	1	1	10	94.7%
8/15	1	1 24.0	165.30	9.51 %	0	0	0	94.7%
8/16	1	1 24.0	132.10	11.09 %	3	3	27	95.8%
8/17	1	1 24.0	100.50	14.20 %	0	0	0	95.8%
8/18	1	1 24.0	105.20	14.07 %	0	0	0	95.8%
8/19	1	1 24.0	142.00	10.92 %	0	0	0	95.8%
8/20	1	1 24.0	128.80	11.43 %	0	0	0	95.8%
8/21	1	1 24.0	127.40	12.06 %	0	0	0	95.8%
8/22	1	1 24.0	130.10	11.62 %	0	0	0	95.8%
8/23	1	1 24.0	120.20	12.09 %	0	0	0	95.8%
8/24	1	1 24.0	106.50	13.51 %	1	1	7	96.1%
8/25	1	1 24.0	106.20	14.26 %	0	0	0	96.1%
8/26	1	1 24.0	106.60	13.08 %	0	0	0	96.1%
8/27	1	1 24.0	129.00	11.43 %	0	0	0	96.1%
8/28	1	1 24.0	109.00	12.79 %	0	0	0	96.1%
8/29	1	1 24.0	122.30	12.12 %	0	0	0	96.1%
8/30	1	1 24.0	99.30	15.29 %	6	6	39	97.7%
8/31	1	1 24.0	85.10	18.50 %	6	6	32	99.0%

***** CONTINUED *****

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FISH PASSAGE DATA SYSTEM
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JOHN DAY

* * *

CHINOOK O'S

* * *

LA-T -1 FA CHINOOK LOT ID # 86156-01 100,276 RELEASED AT: PRIEST RAPIDS H FROM: 6/10/86 TO 6/10/86
AGENCY: WDF HATCHERY: PRIEST RAPIDS H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC-ID-GW-HRS						

***** CONTINUED *****

9/01	1	1 24.0	85.10	17.26 %	0	0	0	99.0%
9/02	5	1 24.0	77.50	17.04 %	0 *	0 *	0 *	99.0%
9/03	5	1 24.0	110.20	12.12 %	0 *	0 *	0 *	99.0%
9/04	1	1 24.0	145.50	10.73 %	0	0	0	99.0%
9/05	1	1 24.0	150.20	10.14 %	0	0	0	99.0%
9/06	1	1 24.0	123.50	12.59 %	0	0	0	99.0%
9/07	1	1 24.0	134.70	12.97 %	0	0	0	99.0%
9/08	1	1 24.0	127.60	13.01 %	0	0	0	99.0%
9/09	1	1 24.0	129.10	12.25 %	0	0	0	99.0%
9/10	1	1 24.0	125.80	11.46 %	0	0	0	99.0%
9/11	1	1 24.0	106.80	13.45 %	2	2	15	99.7%
9/12	1	1 24.0	115.40	12.08 %	0	0	0	99.7%
9/13	1	1 24.0	106.00	14.11 %	0	0	0	99.7%
9/14	1	1 24.0	108.70	12.94 %	0	0	0	99.7%
9/15	1	1 24.0	113.20	12.73 %	1	1	8	100.0%

TOTAL					245	245	2,421	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

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JOHN DAY

* * *

CHINOOK O'S

* * *

LA-T -4 FA CHINOOK LOT ID # 86156-02 100,374 RELEASED AT: PRIEST RAPIDS H FROM: 6/19/86 TO 6/19/86
AGENCY: WDF HATCHERY: PRIEST RAPIDS H

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX CUMULATIVE
1986	SC	ID	GW	HRIS	FLOW	FLOW			
6/28	1	1	24.0	160.50	11.16 %	1	1	9	0.4%
6/29	1	1	24.0	154.70	10.55 %	0	0	0	0.4%
6/30	1	1	24.0	143.80	12.77 %	0	0	0	0.4%
7/01	1	1	24.0	144.50	11.10 %	3	3	27	1.5%
7/02	1	1	24.0	141.40	10.91 %	0	0	0	1.5%
7/03	1	1	24.0	145.10	10.22 %	0	0	0	1.5%
7/04	5	1	16.0	90.60	16.22 %	1 *	1 *	6 *	1.8%
7/05	1	1	24.0	100.60	14.31 %	1	1	7	2.1%
7/06	1	1	24.0	101.80	14.68 %	2	2	14	2.7%
7/07	1	1	24.0	96.60	15.74 %	2	2	13	3.2%
7/08	1	1	24.0	96.60	17.68 %	1	1	6	3.5%
7/09	1	1	24.0	121.80	12.52 %	1	1	8	3.8%
7/10	1	1	24.0	143.30	11.50 %	1	1	9	4.2%
7/11	1	1	24.0	171.90	9.89 %	0	0	0	4.2%
7/12	1	1	24.0	181.20	9.21 %	0	0	0	4.2%
7/13	1	1	24.0	165.60	10.17 %	0	0	0	4.2%
7/14	1	1	24.0	174.70	10.48 %	2	2	19	5.0%
7/15	1	1	24.0	190.90	9.89 %	6	6	61	7.6%
7/16	1	1	24.0	195.10	8.61 %	3	3	35	9.1%
7/17	1	1	24.0	179.50	9.78 %	2	2	20	9.9%
7/18	1	1	24.0	180.40	9.55 %	3	3	31	11.2%
7/19	1	1	24.0	158.70	10.36 %	2	2	19	12.0%
7/20	1	1	24.0	154.00	10.20 %	2	2	20	12.9%
7/21	1	1	24.0	161.60	9.42 %	0	0	0	12.9%
7/22	5	1	24.0	232.80	7.64 %	3 *	3 *	39 *	14.5%
7/23	1	1	24.0	193.90	8.10 %	10	10	123	19.7%
7/24	1	1	24.0	165.30	8.96 %	7	7	78	23.0%
7/25	1	1	24.0	168.60	8.78 %	2	2	23	24.0%
7/26	1	1	24.0	161.30	9.81 %	8	8	82	27.5%
7/27	1	1	24.0	159.50	10.06 %	23	23	229	37.2%
7/28	1	1	24.0	160.30	10.11 %	4	4	40	38.9%
7/29	1	1	24.0	151.70	10.23 %	33	33	323	52.6%
7/30	1	1	24.0	142.10	10.50 %	17	17	162	59.4%
7/31	1	1	24.0	146.00	10.57 %	7	7	66	62.2%
8/01	1	1	24.0	141.30	10.78 %	14	14	130	67.7%
7/02	1	1	24.0	155.70	10.42 %	12	12	115	72.6%

***** CONTINUED *****

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FISH PASSAGE DATA SYSTEM
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JOHN DAY

* * *

CHINOOK O'S

* * *

LA-T -4 FA CHINOOK LOT ID # B6156-02 100,374 RELEASED AT: PRIEST RAPIDS H FROM: 6/19/86 TO 6/19/86
AGENCY: WDF HATCHERY: PRIEST RAPIDS H

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC--ID--GW--UB.S	FLOW	FLOW			

***** CONTINUED *****

8/03	1	1	24.0	154.70	10.50 %	11	11	105	77.0%
8/04	1	1	24.0	149.90	10.09 %	7	7	69	80.0%
8/05	1	1	24.0	117.00	12.07 %	3	3	25	81.0%
8/06	1	1	24.0	128.30	10.87 %	3	3	28	82.2%
8/07	1	1	24.0	134.50	10.81 %	4	4	37	83.8%
8/08	1	1	24.0	122.80	11.11 %	1	1	9	84.2%
8/09	1	1	24.0	125.20	12.19 %	2	2	16	84.8%
8/10	5	1	24.0	143.60	11.64 %	1 *	1 *	9 *	85.2%
8/11	5	1	24.0	127.80	11.59 %	2 *	2 *	17 *	85.9%
8/12	1	1	24.0	132.80	10.71 %	8	8	75	89.1%
8/13	1	1	24.0	148.30	9.65 %	0	0	0	89.1%
8/14	1	1	24.0	147.80	10.03 %	0	0	0	89.1%
8/15	1	1	24.0	165.30	9.51 %	2	2	21	90.0%
8/16	1	1	24.0	132.10	11.09 %	1	1	9	90.4%
8/17	1	1	24.0	100.50	14.20 %	0	0	0	90.4%
8/18	1	1	24.0	105.20	14.07 %	3	3	21	91.3%
8/19	1	1	24.0	142.00	10.92 %	4	4	37	92.8%
8/20	1	1	24.0	128.80	11.43 %	0	0	0	92.8%
8/21	1	1	24.0	127.40	12.06 %	0	0	0	92.8%
8/22	1	1	24.0	130.10	11.62 %	1	1	9	93.2%
8/23	1	1	24.0	120.20	12.09 %	2	2	17	93.9%
8/24	1	1	24.0	106.50	13.51 %	1	1	7	94.2%
8/25	1	1	24.0	106.20	14.26 %	0	0	0	94.2%
8/26	1	1	24.0	106.60	13.08 %	0	0	0	94.2%
8/27	1	1	24.0	129.00	11.43 %	0	0	0	94.2%
8/28	1	1	24.0	109.00	12.79 %	0	0	0	94.2%
8/29	1	1	24.0	122.30	12.12 %	0	0	0	94.2%
8/30	1	1	24.0	99.30	15.29 %	5	5	33	95.6%
8/31	1	1	24.0	85.10	18.50 %	7	7	38	97.2%
9/01	1	1	24.0	85.10	17.26 %	1	1	6	97.5%
9/02	5	1	24.0	77.50	17.04 %	3 *	3 *	18 *	98.3%
9/03	5	1	24.0	110.20	12.12 %	0 *	0 *	0 *	98.3%
9/04	1	1	24.0	145.50	10.73 %	0	0	0	98.3%
9/05	1	1	24.0	150.20	10.14 %	0	0	0	98.3%
9/06	1	1	24.0	123.50	12.59 %	0	0	0	98.3%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK O'S

* * *

LA-T -4 FA CHINOOK LOT ID # 86156-02 100,374 RELEASED AT: PRIEST RAPIDS H FROM: 6/19/86 TO 6/19/86
AGENCY: WDF HATCHERY: PRIEST RAPIDS H

DATE	.. SAMPLE (1) ..	(2)	(3)	NUMBER	NUMBER	... PASSAGE INDEX ...
1986	SC--#D--GW--HRS	RIVER FLOW	INDEX FLOW	SAMPLED	COLLECTED	DAILY COUNT CUMULATIVE

* * * * * C O N T I N U E D * * * * *

9/07	1	1	24.0	134.70	12.97 %	0	0	0	98.3%
9/08	1	1	24.0	127.60	13.01 %	0	0	0	98.3%
9/09	1	1	24.0	129.10	12.25 %	1	1	8	98.6%
9/10	1	1	24.0	125.80	11.46 %	0	0	0	98.6%
9/11	1	1	24.0	106.80	13.45 %	0	0	0	98.6%
9/12	1	1	24.0	115.40	12.08 %	0	0	0	98.6%
9/13	1	1	24.0	106.00	14.11 %	0	0	0	98.6%
9/14	1	1	24.0	108.70	12.94 %	0	0	0	98.6%
9/15	1	1	24.0	113.20	12.73 %	1	1	8	98.9%
9/16	5	1	24.0	135.40	10.42 %	0 *	0 *	0 *	98.9%
9/17	1	1	24.0	125.90	11.55 %	1	1	9	99.3%
9/18	1	1	24.0	116.80	12.68 %	1	1	8	99.7%
9/19	1	1	24.0	110.40	12.80 %	0	0	0	99.7%
9/20	1	1	24.0	103.90	13.73 %	0	0	0	99.7%
9/21	1	1	24.0	101.60	15.48 %	0	0	0	99.7%
9/22	1	1	24.0	105.90	13.63 %	0	0	0	99.7%
9/23	1	1	24.0	111.20	12.78 %	0	0	0	99.7%
9/24	5	1	24.0	104.30	14.53 %	0 *	0 *	0 *	99.7%
9/25	1	1	24.0	125.20	11.61 %	0	0	0	99.7%
9/26	1	1	24.0	120.20	12.84 %	0	0	0	99.7%
9/27	1	1	24.0	111.20	13.51 %	0	0	0	99.7%
9/28	1	1	24.0	72.20	19.27 %	0	0	0	99.7%
9/29	1	1	24.0	94.70	16.13 %	0	0	0	99.7%
9/30	1	1	24.0	115.90	12.80 %	1	1	8	100.0%

TOTAL 250 250 2,361

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK O'S

* * *

RA-T -3 FA CHINOOK LOT ID # 86155-01

81,003 RELEASED AT: LYONS FERRY

FROM: 6/10/86 TO 6/10/86

AGENCY: WDF

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC	WD	GW	UB.S	FLOW	FLOW			
6/22	1	1	24.0	188.80	8.15 %	1	1	12	1.0%
6/23	1	1	24.0	180.80	8.41 %	0	0	0	1.0%
6/24	1	1	24.0	198.20	9.38 %	2	2	21	2.9%
6/25	1	1	24.0	185.50	9.47 %	2	2	21	4.7%
6/26	1	1	24.0	181.80	9.07 %	5	5	55	9.5%
6/27	1	1	24.0	187.70	9.06 %	3	3	33	12.4%
6/28	1	1	24.0	160.50	11.16 %	4	4	36	15.5%
6/29	1	1	24.0	154.70	10.55 %	2	2	19	17.1%
6/30	1	1	24.0	143.80	12.77 %	2	2	16	18.5%
7/01	1	1	24.0	144.50	11.10 %	1	1	9	19.3%
7/02	1	1	24.0	141.40	10.91 %	0	0	0	19.3%
7/03	1	1	24.0	145.10	10.22 %	0	0	0	19.3%
7/04	5	1	16.0	90.60	16.22 %	3 *	3 *	18 *	20.9%
7/05	1	1	24.0	100.60	14.31 %	2	2	14	22.1%
7/06	1	1	24.0	101.80	14.68 %	0	0	0	22.1%
7/07	1	1	24.0	96.60	15.74 %	1	1	6	22.6%
7/08	1	1	24.0	96.60	17.68 %	1	1	6	23.2%
7/09	1	1	24.0	121.80	12.52 %	0	0	0	23.2%
7/10	1	1	24.0	143.30	11.50 %	4	4	35	26.2%
7/11	1	1	24.0	171.90	9.89 %	0	0	0	26.2%
7/12	1	1	24.0	181.20	9.21 %	0	0	0	26.2%
7/13	1	1	24.0	165.60	10.17 %	2	2	20	27.9%
7/14	1	1	24.0	174.70	10.48 %	5	5	48	32.1%
7/15	1	1	24.0	190.90	9.89 %	5	5	51	36.6%
7/16	1	1	24.0	195.10	8.61 %	1	1	12	37.6%
7/17	1	1	24.0	179.50	9.78 %	3	3	31	40.3%
7/18	1	1	24.0	180.40	9.55 %	7	7	73	46.5%
7/19	1	1	24.0	158.70	10.36 %	0	0	0	46.5%
7/20	1	1	24.0	154.00	10.20 %	0	0	0	46.6%
7/21	1	1	24.0	161.60	9.42 %	0	0	0	46.6%
7/22	5	1	24.0	232.80	7.64 %	0 *	0 *	0 *	46.6%
7/23	1	1	24.0	193.90	8.10 %	1	1	12	47.7%
7/24	1	1	24.0	165.30	8.96 %	1	1	11	48.7%
7/25	1	1	24.0	168.60	8.78 %	1	1	11	49.6%
7/26	1	1	24.0	161.30	9.81 %	6	6	61	54.9%
7/27	1	1	24.0	159.50	10.06 %	11	11	109	64.4%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE

FISH PASSAGE DATA SYSTEM

* * Brand Recapture Summary * *

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 * System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK O'S

* * *

RA-T -3 FA CHINOOK LOT ID # 86155-01

81,003 RELEASED AT: LYONS FERRY

FROM: 6/10/86 TO 6/10/86

AGENCY: WDF

HATCHERY: LYONS FERRY

DATE	.. SAMPLE (1) ..	.. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER	NUMBER	... PASSAGE	INDEX	(4)
1986	SC-#D-GW-HRS		FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE	

***** CONTINUED *****

7/28	1	1	24.0	160.30	10.11 %	0	0	0	64.4%
7/29	1	1	24.0	151.70	10.23 %	1	1	10	65.3%
7/30	1	1	24.0	142.10	10.50 %	1	1	10	66.1%
7/31	1	1	24.0	146.00	10.57 %	5	5	47	70.2%
8/01	1	1	24.0	141.30	10.78 %	6	6	56	75.1%
8/02	1	1	24.0	155.70	10.42 %	3	3	29	77.6%
8/03	1	1	24.0	154.70	10.50 %	3	3	29	80.2%
8/04	1	1	24.0	149.90	10.09 %	0	0	0	80.2%
8/05	1	1	24.0	117.00	12.07 %	2	2	17	81.6%
8/06	1	1	24.0	128.30	10.87 %	0	0	0	81.6%
8/07	1	1	24.0	134.50	10.81 %	0	0	0	81.6%
8/08	1	1	24.0	122.80	11.11 %	0	0	0	81.6%
8/09	1	1	24.0	125.20	12.19 %	1	1	8	82.3%
8/10	5	1	24.0	143.60	11.64 %	4 *	4 *	34 *	85.3%
8/11	5	1	24.0	127.80	11.59 %	2 *	2 *	17 *	86.8%
8/12	1	1	24.0	132.80	10.71 %	6	6	56	91.6%
8/13	1	1	24.0	148.30	9.65 %	2	2	21	93.5%
8/14	1	1	24.0	147.80	10.03 %	1	1	10	94.3%
8/15	1	1	24.0	165.30	9.51 %	0	0	0	94.3%
8/16	1	1	24.0	132.10	11.09 %	1	1	9	95.1%
8/17	1	1	24.0	100.50	14.20 %	1	1	7	95.7%
8/18	1	1	24.0	105.20	14.07 %	0	0	0	95.7%
8/19	1	1	24.0	142.00	10.92 %	0	0	0	95.7%
8/20	1	1	24.0	128.80	11.43 %	0	0	0	95.7%
8/21	1	1	24.0	127.40	12.06 %	0	0	0	95.7%
8/22	1	1	24.0	130.10	11.62 %	0	0	0	95.7%
8/23	1	1	24.0	120.20	12.09 %	0	0	0	95.7%
8/24	1	1	24.0	106.50	13.51 %	1	1	7	96.3%
8/25	1	1	24.0	106.20	14.26 %	0	0	0	96.3%
8/26	1	1	24.0	106.60	13.08 %	1	1	8	97.0%
8/27	1	1	24.0	129.00	11.43 %	0	0	0	97.0%
8/28	1	1	24.0	109.00	12.79 %	0	0	0	97.0%
8/29	1	1	24.0	122.30	12.12 %	0	0	0	97.0%
8/30	1	1	24.0	99.30	15.29 %	1	1	7	97.7%
8/31	1	1	24.0	85.10	18.50 %	2	2	11	98.6%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINDOK O'S

* * *

RA-T -3 FA CHINDOK LOT ID # 86155-01 81,003 RELEASED AT: LYONS FERRY FROM: 6/10/86 TO 6/10/86
AGENCY: WDF HATCHERY: LYONS FERRY

DATE	SC	#D	GW	HRS	RIVER FLOW	INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	PASSAGE DAILY COUNT	INDEX CUMULATIVE
1986	SC	#D	GW	HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE

***** CONTINUED *****

9/01	1	1	24.0	85.10	17.26 %	0	0	0	98.6%
9/02	5	1	24.0	77.50	17.04 %	0 *	0 *	0 *	98.6%
9/03	5	1	24.0	110.20	12.12 %	0 *	0 *	0 *	98.6%
9/04	1	1	24.0	145.50	10.73 %	0	0	0	98.6%
9/05	1	1	24.0	150.20	10.14 %	0	0	0	98.6%
9/06	1	1	24.0	123.50	12.59 %	0	0	0	98.6%
9/07	1	1	24.0	134.70	12.97 %	0	0	0	98.6%
9/08	1	1	24.0	127.60	13.01 %	0	0	0	98.6%
9/09	1	1	24.0	129.10	12.25 %	0	0	0	98.6%
9/10	1	1	24.0	125.80	11.46 %	1	1	9	99.4%
9/11	1	1	24.0	106.80	13.45 %	1	1	7	100.0%
TOTAL						122	122	1,149	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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JOHN DAY

* * *

CHINOOK O'S

* * *

LD-Y -1 SP CHINOOK LOT ID # 86013-01 44,692 RELEASED AT: RAPID RIVER FROM: 4/04/86 TO 4/07/86
AGENCY: IDFG HATCHERY: RAPID RIVER H

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D	GW HRS						
8/31	1	1	24.0	85.10	18.50 %	1	1	5	100.0%
TOTAL						1	1	5	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY * * * CHINOOK O'S * * *

LA-7C-1 SP CHINOOK LOT ID # 86126-02 11,989 RELEASED AT: BELOW PRD DAM FROM: 4/25/86 TO 4/25/86
AGENCY: USFWS HATCHERY: WINTHROP NFH

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC	ID	GW	HR.S	FLOW				
7/12	1	1	24.0	181.20	9.21 %	1	1	11	28.9%
7/13	1	1	24.0	165.60	10.17 %	0	0	0	28.9%
7/14	1	1	24.0	174.70	10.48 %	0	0	0	28.9%
7/15	1	1	24.0	190.90	9.89 %	0	0	0	28.9%
7/16	1	1	24.0	195.10	8.61 %	0	0	0	28.9%
7/17	1	1	24.0	179.50	9.78 %	0	0	0	28.9%
7/18	1	1	24.0	180.40	9.55 %	0	0	0	28.9%
7/19	1	1	24.0	158.70	10.36 %	0	0	0	28.9%
7/20	1	1	24.0	154.00	10.20 %	0	0	0	28.9%
7/21	1	1	24.0	161.60	9.42 %	0	0	0	28.9%
7/22	5	1	24.0	232.80	7.64 %	0 *	0 *	0 *	28.9%
7/23	1	1	24.0	193.90	8.10 %	0	0	0	28.9%
7/24	1	1	24.0	165.30	8.96 %	0	0	0	28.9%
7/25	1	1	24.0	168.60	8.78 %	0	0	0	28.9%
7/26	1	1	24.0	161.30	9.81 %	0	0	0	28.9%
7/27	1	1	24.0	159.50	10.06 %	0	0	0	28.9%
7/28	1	1	24.0	160.30	10.11 %	0	0	0	28.9%
7/29	1	1	24.0	151.70	10.23 %	0	0	0	28.9%
7/30	1	1	24.0	142.10	10.50 %	0	0	0	28.9%
7/31	1	1	24.0	146.00	10.57 %	0	0	0	28.9%
8/01	1	1	24.0	141.30	10.78 %	0	0	0	28.9%
8/02	1	1	24.0	155.70	10.42 %	0	0	0	28.9%
8/03	1	1	24.0	154.70	10.50 %	0	0	0	28.9%
8/04	1	1	24.0	149.90	10.09 %	0	0	0	28.9%
8/05	1	1	24.0	117.00	12.07 %	0	0	0	28.9%
8/06	1	1	24.0	128.30	10.87 %	1	1	9	52.6%
8/07	1	1	24.0	134.50	10.81 %	0	0	0	52.6%
8/08	1	1	24.0	122.80	11.11 %	0	0	0	52.6%
8/09	1	1	24.0	125.20	12.19 %	0	0	0	52.6%
8/10	5	1	24.0	143.60	11.64 %	0 *	0 *	0 *	52.6%
8/11	5	1	24.0	127.80	11.59 %	0 *	0 *	0 *	52.6%
8/12	1	1	24.0	132.80	10.71 %	1	1	9	76.3%
8/13	1	1	24.0	148.30	9.65 %	0	0	0	76.3%
8/14	1	1	24.0	147.80	10.03 %	0	0	0	76.3%
8/15	1	1	24.0	165.30	9.51 %	0	0	0	76.3%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK O'S

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LA-7C-1 SP CHINOOK LOT ID # 86126-02 11,989 RELEASED AT: BELOW PRD DAM FROM: 4/25/86 TO 4/25/86
AGENCY: USFWS HATCHERY: WINTHROP NFH

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	..	SAMPLE (1) PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D GW HRS						
* * * * * C O N T I N U E D * * * * *								
8/16	1	1 24.0	132.10	11.09 %	0	0	0	76.3%
8/17	1	1 24.0	100.50	14.20 %	0	0	0	76.3%
8/18	1	1 24.0	105.20	14.07 %	0	0	0	76.3%
8/19	1	1 24.0	142.00	10.92 %	0	0	0	76.3%
8/20	1	1 24.0	128.80	11.43 %	0	0	0	76.3%
8/21	1	1 24.0	127.40	12.06 %	0	0	0	76.3%
1/22	1	1 24.0	130.10	11.62 %	1	1	9	100.0%
TOTAL					4	4	38	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

CHINOOK O'S

* * *

LA-7T-1 SP CHINOOK LOT ID # 86122-01 40,602 RELEASED AT: LEAVENWORTH NFH FROM: 4/23/86 TO 4/23/86
AGENCY: USFWS HATCHERY: LEAVENWORTH NFH

* * * USING RELEASE DATA OF DIFFERENT AGE/RACE

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D	GW-HRS						
8/07	1	1	24.0	134.50	10.81 %	3	3	28	28.9%
8/08	1	1	24.0	122.80	11.11 %	2	2	18	47.4%
8/09	1	1	24.0	125.20	12.19 %	1	1	8	55.7%
8/10	5	1	24.0	143.60	11.64 %	0 *	0 *	0 *	55.7%
8/11	5	1	24.0	127.80	11.59 %	1 *	1 *	9 *	64.9%
8/12	1	1	24.0	132.80	10.71 %	0	0	0	64.9%
8/13	1	1	24.0	148.30	9.65 %	0	0	0	64.9%
8/14	1	1	24.0	147.80	10.03 %	0	0	0	64.9%
8/15	1	1	24.0	165.30	9.51 %	0	0	0	64.9%
8/16	1	1	24.0	132.10	11.09 %	1	1	9	74.2%
8/17	1	1	24.0	100.50	14.20 %	0	0	0	74.2%
8/18	1	1	24.0	105.20	14.07 %	0	0	0	74.2%
8/19	1	1	24.0	142.00	10.92 %	0	0	0	74.2%
8/20	1	1	24.0	128.80	11.43 %	0	0	0	74.2%
8/21	1	1	24.0	127.40	12.06 %	1	1	8	82.5%
8/22	1	1	24.0	130.10	11.62 %	2	2	17	100.0%
TOTAL						11	11	97	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

LA-N7-1 SU STEELHEAD LOT ID # 86234-01

557 RELEASED AT: METHOW R
AGENCY: WDG

FROM: 5/09/86 TO 5/09/86
HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4) ...
1986	SC	#D	GW	HR.S	FLOW	FLOW	DAILY COUNT	CUMULATIVE	
5/21	1	1	24.0	264.80	6.91 %	1	1	14	100.0%
TOTAL						1	1	14	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

LD-T -2 STEELHEAD LOT ID # 86101-01

52,300 RELEASED AT: SAWTOOTH H
AGENCY: USFWS

FROM: 4/08/86 TO 4/10/86
HATCHERY: HAGERMAN NFH

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	ID	GW	HR.S					
5/10	1	1	24.0	251.90	6.30 %	1	1	16	43.2%
5/11	1	1	24.0	271.10	5.97 %	0	0	0	43.2%
5/12	1	1	24.0	263.60	5.81 %	0	0	0	43.2%
5/13	1	1	24.0	272.70	6.07 %	0	0	0	43.2%
5/14	1	1	24.0	252.00	6.34 %	0	0	0	43.2%
5/15	1	1	24.0	266.60	6.60 %	0	0	0	43.2%
5/16	1	1	24.0	279.40	6.47 %	0	0	0	43.2%
5/17	1	1	24.0	264.50	6.64 %	0	0	0	43.2%
5/18	1	1	24.0	227.10	7.04 %	0	0	0	43.2%
5/19	1	1	24.0	234.20	7.50 %	0	0	0	43.2%
5/20	1	1	24.0	264.30	6.99 %	0	0	0	43.2%
5/21	1	1	24.0	264.80	6.91 %	0	0	0	43.2%
5/22	1	1	24.0	311.80	6.21 %	0	0	0	43.2%
5/23	1	1	24.0	301.10	6.67 %	0	0	0	43.2%
5/24	1	1	24.0	240.80	7.27 %	0	0	0	43.2%
5/25	1	1	24.0	218.80	6.93 %	0	0	0	43.2%
5/26	1	1	24.0	190.60	7.50 %	0	0	0	43.2%
5/27	1	1	24.0	230.20	7.33 %	0	0	0	43.2%
5/28	1	1	24.0	304.90	6.23 %	0	0	0	43.2%
5/29	1	1	24.0	340.50	5.94 %	0	0	0	43.2%
5/30	1	1	24.0	352.30	6.29 %	0	0	0	43.2%
5/31	1	1	24.0	363.80	5.37 %	0	0	0	43.2%
6/01	1	1	24.0	377.30	3.96 %	0	0	0	43.2%
6/02	1	1	24.0	400.90	4.40 %	0	0	0	43.2%
6/03	1	1	24.0	389.60	4.35 %	0	0	0	43.2%
6/04	1	1	24.0	397.00	3.92 %	0	0	0	43.2%
6/05	1	1	24.0	402.00	4.64 %	0	0	0	43.2%
6/06	1	1	24.0	351.70	4.76 %	1	1	21	100.0%

***** CONTINUED *****

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*****
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# verification and/or origin of data, contact the operators of the Fish Passage Data
# System at (503) 230-4290.
*****

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***** CONTINUED *****

TOTAL	2	2	37
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216

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*****
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# System at (503) 230-4290. #
*****

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✱ ✱ ✱

FROM: 4/25/86 TO 4/29/86
HATCHERY: NIAGARA SPRING

SAMPLE (1)				(2)	(3)	(4)				
DATE	PARAMETERS			RIVER	INDEX	NUMBER	NUMBER	... PASSAGE INDEX ...		
1986	SC	ID	GW	HR.S	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE
5/22	1	1	24.0	311.80	6.21 %		1	1	16	100.0%
TOTAL							1	1	16	

217

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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JOHN DAY

* * *

STEELHEAD

* * *

RA-7F-1 SU STEELHEAD LOT ID # 86215-01

20,035

RELEASED AT: BELOW LGS DAM

FROM: 4/21/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HR.S						
4/29	5 1 21.0	270.80	6.56 %	2 *	2 *	30 *	0.7%
4/30	1 1 24.0	261.40	6.79 %	8	8	118	3.5%
5/01	1 1 24.0	261.20	6.81 %	11	11	162	7.3%
5/02	1 1 24.0	265.40	6.86 %	21	21	306	14.5%
5/03	1 1 24.0	245.80	7.40 %	19	19	257	20.6%
5/04	1 1 24.0	220.60	7.51 %	12	12	160	24.3%
5/05	1 1 24.0	230.50	7.49 %	11	11	147	27.8%
5/06	1 1 24.0	267.70	7.09 %	9	9	127	30.8%
5/07	1 1 24.0	249.20	8.02 %	9	9	112	33.4%
5/08	1 1 24.0	249.70	7.37 %	10	10	136	36.6%
5/09	1 1 24.0	261.80	6.87 %	10	10	146	40.1%
5/10	1 1 24.0	251.90	6.30 %	10	10	159	43.8%
5/11	1 1 24.0	271.10	5.97 %	2	2	34	44.6%
5/12	1 1 24.0	263.60	5.81 %	5	5	86	46.7%
5/13	1 1 24.0	272.70	6.07 %	6	6	99	49.0%
5/14	1 1 24.0	252.00	6.34 %	13	13	205	53.8%
5/15	1 1 24.0	266.60	6.60 %	7	7	106	56.3%
5/16	1 1 24.0	279.40	6.47 %	5	5	77	58.1%
5/17	1 1 24.0	264.50	6.64 %	13	13	196	62.7%
5/18	1 1 24.0	227.10	7.04 %	5	5	71	64.4%
5/19	1 1 24.0	234.20	7.50 %	10	10	133	67.6%
5/20	1 1 24.0	264.30	6.99 %	15	15	215	72.6%
5/21	1 1 24.0	264.80	6.91 %	10	10	145	76.0%
5/22	1 1 24.0	311.80	6.21 %	14	14	225	81.3%
5/23	1 1 24.0	301.10	6.67 %	6	6	90	83.5%
5/24	1 1 24.0	240.80	7.27 %	6	6	83	85.4%
5/25	1 1 24.0	218.80	6.93 %	6	6	87	87.5%
5/26	1 1 24.0	190.60	7.50 %	2	2	27	88.1%
5/27	1 1 24.0	230.20	7.33 %	1	1	14	88.4%
5/28	1 1 24.0	304.90	6.23 %	6	6	96	90.7%
5/29	1 1 24.0	340.50	5.94 %	6	6	101	93.1%
5/30	1 1 24.0	352.30	6.29 %	4	4	64	94.6%
5/31	1 1 24.0	363.80	5.37 %	3	3	56	95.9%
6/01	1 1 24.0	377.30	3.96 %	3	3	76	97.7%
6/02	1 1 24.0	400.90	4.40 %	2	2	45	98.8%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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JOHN DAY

* * *

STEELHEAD

* * *

RA-7F-1 SU STEELHEAD LOT ID # 86215-01

20,035

RELEASED AT: BELOW LGS DAM

FROM: 4/21/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D	GW	HRS					

***** CONTINUED *****

6/03	1	1	24.0	389.60	4.35 %	0	0	0	98.8%
6/04	1	1	24.0	397.00	3.92 %	0	0	0	98.8%
6/05	1	1	24.0	402.00	4.64 %	0	0	0	98.8%
6/06	1	1	24.0	351.70	4.76 %	0	0	0	98.8%
6/07	1	1	24.0	369.90	4.53 %	0	0	0	98.8%
6/08	1	1	24.0	345.10	4.62 %	0	0	0	98.8%
6/09	1	1	24.0	337.70	5.38 %	1	1	19	99.2%
6/10	1	1	24.0	309.40	5.77 %	1	1	17	99.6%
6/11	1	1	24.0	288.60	7.00 %	0	0	0	99.6%
6/12	1	1	24.0	282.10	6.27 %	0	0	0	99.6%
6/13	1	1	24.0	252.60	5.96 %	1	1	17	100.0%

TOTAL						285	285	4,244	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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JOHN DAY

* * *

STEELHEAD

* * *

RA-7F-3 SU STEELHEAD LOT ID # 86215-02

20,063 RELEASED AT: BELOW LGS DAM
AGENCY: WDG

FROM: 4/25/86 TO 4/25/86
HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	ID	GW	HR.S					
5/02	1	1	24.0	265.40	6.86 %	1	1	15	0.4%
5/03	1	1	24.0	245.80	7.40 %	3	3	41	1.5%
5/04	1	1	24.0	220.60	7.51 %	6	6	80	3.7%
5/05	1	1	24.0	230.50	7.49 %	21	21	280	11.2%
5/06	1	1	24.0	267.70	7.09 %	13	13	183	16.1%
5/07	1	1	24.0	249.20	8.02 %	18	18	224	22.1%
5/08	1	1	24.0	249.70	7.37 %	13	13	176	26.9%
5/09	1	1	24.0	261.80	6.87 %	6	6	87	29.2%
5/10	1	1	24.0	251.90	6.30 %	14	14	222	35.2%
5/11	1	1	24.0	271.10	5.97 %	4	4	67	37.0%
5/12	1	1	24.0	263.60	5.81 %	4	4	69	38.8%
5/13	1	1	24.0	272.70	6.07 %	7	7	115	41.9%
5/14	1	1	24.0	252.00	6.34 %	8	8	126	45.3%
5/15	1	1	24.0	266.60	6.60 %	6	6	91	47.8%
5/16	1	1	24.0	279.40	6.47 %	8	8	124	51.1%
5/17	1	1	24.0	264.50	6.64 %	9	9	136	54.8%
5/18	1	1	24.0	227.10	7.04 %	9	9	128	58.2%
5/19	1	1	24.0	234.20	7.50 %	3	3	40	59.3%
5/20	1	1	24.0	264.30	6.99 %	20	20	286	67.0%
5/21	1	1	24.0	264.80	6.91 %	7	7	101	69.7%
5/22	1	1	24.0	311.80	6.21 %	12	12	193	74.9%
5/23	1	1	24.0	301.10	6.67 %	10	10	150	78.9%
5/24	1	1	24.0	240.80	7.27 %	9	9	124	82.3%
5/25	1	1	24.0	218.80	6.93 %	4	4	58	83.8%
5/26	1	1	24.0	190.60	7.50 %	4	4	53	85.3%
5/27	1	1	24.0	230.20	7.33 %	1	1	14	85.6%
5/28	1	1	24.0	304.90	6.23 %	9	9	144	89.5%
5/29	1	1	24.0	340.50	5.94 %	3	3	51	90.9%
5/30	1	1	24.0	352.30	6.29 %	6	6	95	93.4%
5/31	1	1	24.0	363.80	5.37 %	8	8	149	97.4%
6/01	1	1	24.0	377.30	3.96 %	1	1	25	98.1%
6/02	1	1	24.0	400.90	4.40 %	0	0	0	98.1%
6/03	1	1	24.0	389.60	4.35 %	0	0	0	98.1%
6/04	1	1	24.0	397.00	3.92 %	1	1	26	98.8%
6/05	1	1	24.0	402.00	4.64 %	0	0	0	98.8%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

RA-7F-3 SU STEELHEAD LOT ID # 86215-02 20,063 RELEASED AT: BELOW LGS DAM FROM: 4/25/86 TO 4/25/86
AGENCY: WDG HATCHERY: LYONS FERRY

DATE	.. PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE INDEX ...
1986	SC-#D-GW-HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT CUMULATIVE

* * * * * C O N T I N U E D * * * * *

6/06	1 1 24.0	351.70	4.76 %	0	0	0 98.8%
6/07	1 1 24.0	369.90	4.53 %	1	1	22 99.4%
6/08	1 1 24.0	345.10	4.62 %	1	1	22 100.0%
TOTAL				250	250	3.717

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

RD-7F-1 SU STEELHEAD LOT ID # 86215-03

20,069 RELEASED AT: BELOW LGS DAM
AGENCY: WDG

FROM: 4/29/86 TO 4/29/86
HATCHERY: LYONS FERRY

DATE	SAMPLE (1)			RIVER FLOW	INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
	SC	ID	GW-HRS						
1986									
5/07	1	1	24.0	249.20	8.02 %	2	2	25	1.1%
5/08	1	1	24.0	249.70	7.37 %	2	2	27	2.2%
5/09	1	1	24.0	261.80	6.87 %	9	9	131	7.9%
5/10	1	1	24.0	251.90	6.30 %	13	13	206	16.8%
5/11	1	1	24.0	271.10	5.97 %	10	10	168	24.1%
5/12	1	1	24.0	263.60	5.81 %	4	4	69	27.1%
5/13	1	1	24.0	272.70	6.07 %	8	8	132	32.8%
5/14	1	1	24.0	252.00	6.34 %	7	7	110	37.5%
5/15	1	1	24.0	266.60	6.60 %	6	6	91	41.5%
5/16	1	1	24.0	279.40	6.47 %	2	2	31	42.8%
5/17	1	1	24.0	264.50	6.64 %	11	11	166	50.0%
5/18	1	1	24.0	227.10	7.04 %	4	4	57	52.5%
5/19	1	1	24.0	234.20	7.50 %	6	6	80	55.9%
5/20	1	1	24.0	264.30	6.99 %	8	8	114	60.9%
5/21	1	1	24.0	264.80	6.91 %	5	5	72	64.0%
5/22	1	1	24.0	311.80	6.21 %	9	9	145	70.2%
5/23	1	1	24.0	301.10	6.67 %	8	8	120	75.4%
5/24	1	1	24.0	240.80	7.27 %	10	10	138	81.4%
5/25	1	1	24.0	218.80	6.93 %	5	5	72	84.5%
5/26	1	1	24.0	190.60	7.50 %	0	0	0	84.5%
5/27	1	1	24.0	230.20	7.33 %	2	2	27	85.7%
5/28	1	1	24.0	304.90	6.23 %	1	1	16	86.4%
5/29	1	1	24.0	340.50	5.94 %	6	6	101	90.7%
5/30	1	1	24.0	352.30	6.29 %	7	7	111	95.5%
5/31	1	1	24.0	363.80	5.37 %	1	1	19	96.4%
6/01	1	1	24.0	377.30	3.96 %	0	0	0	96.4%
6/02	1	1	24.0	400.90	4.40 %	0	0	0	96.4%
6/03	1	1	24.0	389.60	4.35 %	0	0	0	96.4%
6/04	1	1	24.0	397.00	3.92 %	1	1	26	97.5%
6/05	1	1	24.0	402.00	4.64 %	0	0	0	97.5%
6/06	1	1	24.0	351.70	4.76 %	0	0	0	97.5%
6/07	1	1	24.0	369.90	4.53 %	0	0	0	97.5%
6/08	1	1	24.0	345.10	4.62 %	1	1	22	98.4%
6/09	1	1	24.0	337.70	5.38 %	1	1	19	99.3%
6/10	1	1	24.0	309.40	5.77 %	0	0	0	99.3%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

RD-7F-1 SU STEELHEAD LOT ID # 86215-03

20,069

RELEASED AT: BELOW LGS DAM

FROM: 4/29/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	.. PARAMETERS ..	(1) RIVER	(2) INDEX	(3) NUMBER	NUMBER	...	PASSAGE	INDEX	(4)
1986	SC-#D-GW-HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE		

***** C O N T I N U E D *****

6/11	1	1	24.0	288.60	7.00 %	0	0	0	99.3%
6/12	1	1	24.0	282.10	6.27 %	0	0	0	99.3%
6/13	1	1	24.0	252.60	5.96 %	0	0	0	99.3%
6/14	1	1	24.0	250.60	5.93 %	1	1	17	100.0%

TOTAL						150	150	2,312	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateweills sampled Hrs= Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

LA-7N-1 SU STEELHEAD LOT ID # 84203-01

29,451

RELEASED AT: METHOW R

FROM: 5/01/86 TO 5/01/86

AGENCY: WDG

HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC	#D	GW	HRS					
5/14	1	1	24.0	252.00	6.34 %	3	3	47	1.3%
5/15	1	1	24.0	266.60	6.60 %	24	24	364	11.3%
5/16	1	1	24.0	279.40	6.47 %	25	25	386	21.9%
5/17	1	1	24.0	264.50	6.64 %	19	19	286	29.8%
5/18	1	1	24.0	227.10	7.04 %	20	20	284	37.6%
5/19	1	1	24.0	234.20	7.50 %	17	17	227	43.9%
5/20	1	1	24.0	264.30	6.99 %	34	34	486	57.3%
5/21	1	1	24.0	264.80	6.91 %	16	16	232	63.7%
5/22	1	1	24.0	311.80	6.21 %	20	20	322	72.5%
5/23	1	1	24.0	301.10	6.67 %	13	13	195	77.9%
5/24	1	1	24.0	240.80	7.27 %	17	17	234	84.3%
5/25	1	1	24.0	218.80	6.93 %	14	14	202	89.9%
5/26	1	1	24.0	190.60	7.50 %	4	4	53	91.4%
5/27	1	1	24.0	230.20	7.33 %	1	1	14	91.7%
5/28	1	1	24.0	304.90	6.23 %	3	3	48	93.1%
5/29	1	1	24.0	340.50	5.94 %	1	1	17	93.5%
5/30	1	1	24.0	352.30	6.29 %	6	6	95	96.1%
5/31	1	1	24.0	363.80	5.37 %	4	4	74	98.2%
6/01	1	1	24.0	377.30	3.96 %	1	1	25	98.9%
6/02	1	1	24.0	400.90	4.40 %	0	0	0	98.9%
6/03	1	1	24.0	389.60	4.35 %	0	0	0	98.9%
6/04	1	1	24.0	397.00	3.92 %	0	0	0	98.9%
6/05	1	1	24.0	402.00	4.64 %	0	0	0	98.9%
6/06	1	1	24.0	351.70	4.76 %	0	0	0	98.9%
6/07	1	1	24.0	369.90	4.53 %	1	1	22	99.5%
6/08	1	1	24.0	345.10	4.62 %	0	0	0	99.5%
6/09	1	1	24.0	337.70	5.38 %	1	1	19	100.0%
TOTAL						244	244	3,632	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

LA-7N-3 SU STEELHEAD LOT ID # 86203-02

30,046

RELEASED AT: METHUEN R

FROM: 5/05/86 TO 5/05/86

AGENCY: WDG

HATCHERY: WELLS HATCHERY

DATE	.. SAMPLE (1) SC--#D--GW--HRS	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
5/16	1 1 24.0	279.40	6.47 %	1	1	15	0.61
5/17	1 1 24.0	264.50	6.64 %	4	4	60	3.11
5/18	1 1 24.0	227.10	7.04 %	6	6	85	6.61
5/19	1 1 24.0	234.20	7.50 %	10	10	133	12.01
5/20	1 1 24.0	264.30	6.99 %	35	35	501	32.51
5/21	1 1 24.0	264.80	6.91 %	10	10	145	38.51
5/22	1 1 24.0	311.80	6.21 %	21	21	338	52.31
5/23	1 1 24.0	301.10	6.67 %	17	17	255	62.81
5/24	1 1 24.0	240.80	7.27 %	8	8	110	67.31
5/25	1 1 24.0	218.80	6.93 %	5	5	72	70.21
5/26	1 1 24.0	190.60	7.50 %	7	7	93	74.31
5/27	1 1 24.0	230.20	7.33 %	8	8	109	78.51
5/28	1 1 24.0	304.90	6.23 %	3	3	48	80.51
5/29	1 1 24.0	340.50	5.94 %	8	8	135	86.31
5/30	1 1 24.0	352.30	6.29 %	7	7	111	90.51
5/31	1 1 24.0	363.80	5.37 %	3	3	56	92.81
6/01	1 1 24.0	377.30	3.96 %	2	2	51	94.31
6/02	1 1 24.0	400.90	4.40 %	0	0	0	94.31
6/03	1 1 24.0	389.60	4.35 %	0	0	0	94.31
6/04	1 1 24.0	397.00	3.92 %	0	0	0	94.31
6/05	1 1 24.0	402.00	4.64 %	2	2	43	96.71
6/06	1 1 24.0	351.70	4.76 %	2	2	42	98.41
6/07	1 1 24.0	369.90	4.53 %	1	1	22	99.31
6/08	1 1 24.0	345.10	4.62 %	0	0	0	99.31
6/09	1 1 24.0	337.70	5.38 %	0	0	0	99.31
6/10	1 1 24.0	309.40	5.77 %	1	1	17	100.31
TOTAL				161	161	2,441	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

LD-7N-1 SU STEELHEAD LOT ID # 86203-03

29,992

RELEASED AT: METHOW R

FROM: 5/09/86 TO 5/09/86

AGENCY: WDG

HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC	#D	GW	HR.S					
5/19	1	1	24.0	234.20	7.50 %	1	1	13	1.1%
5/20	1	1	24.0	264.30	6.99 %	2	2	29	3.5%
5/21	1	1	24.0	264.80	6.91 %	7	7	101	11.8%
5/22	1	1	24.0	311.80	6.21 %	13	13	209	29.1%
5/23	1	1	24.0	301.10	6.67 %	10	10	150	41.5%
5/24	1	1	24.0	240.80	7.27 %	9	9	124	51.7%
5/25	1	1	24.0	218.80	6.93 %	4	4	58	56.5%
5/26	1	1	24.0	190.60	7.50 %	4	4	53	60.9%
5/27	1	1	24.0	230.20	7.33 %	2	2	27	63.1%
5/28	1	1	24.0	304.90	6.23 %	2	2	32	65.7%
5/29	1	1	24.0	340.50	5.94 %	1	1	17	67.1%
5/30	1	1	24.0	352.30	6.29 %	7	7	111	76.3%
5/31	1	1	24.0	363.80	5.37 %	2	2	37	79.4%
6/01	1	1	24.0	377.30	3.96 %	2	2	51	83.6%
6/02	1	1	24.0	400.90	4.40 %	0	0	0	83.6%
6/03	1	1	24.0	389.60	4.35 %	4	4	92	91.2%
6/04	1	1	24.0	397.00	3.92 %	0	0	0	91.2%
6/05	1	1	24.0	402.00	4.64 %	1	1	22	93.0%
6/06	1	1	24.0	351.70	4.76 %	3	3	63	98.2%
6/07	1	1	24.0	369.90	4.53 %	1	1	22	100.0%
TOTAL						75	75	1,211	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

RA-7N-1 SU STEELHEAD LOT ID # 86227-01

19,983

RELEASED AT: BELOW LGS DAM

FROM: 5/06/85 TO 5/06/85

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT	(4) CUMULATIVE
1986	SC	ID	GW	HR.S					
4/07	1	1	24.0	252.90	4.98 %	1	1	20	18.7%
4/08	5	1	19.0	249.30	6.41 %	0 *	0 *	0 *	18.7%
4/09	5	1	2.0	253.90	8.10 %	0 *	0 *	0 *	18.7%
4/10	1	1	24.0	233.80	7.61 %	0	0	0	18.7%
4/11	5	1	6.0	80.40	9.14 %	0 *	0 *	0 *	18.7%
4/12	1	1	24.0	270.80	7.19 %	1	1	14	31.8%
4/13	1	1	24.0	247.50	6.90 %	0	0	0	31.8%
4/14	1	1	24.0	279.10	6.22 %	0	0	0	31.8%
4/15	1	1	24.0	281.70	6.91 %	0	0	0	31.8%
4/16	1	1	24.0	263.70	7.01 %	0	0	0	31.8%
4/17	1	1	24.0	284.60	6.15 %	0	0	0	31.8%
4/18	1	1	24.0	366.40	6.44 %	0	0	0	31.8%
4/19	1	1	24.0	275.80	6.92 %	0	0	0	31.8%
4/20	1	1	24.0	211.50	8.13 %	0	0	0	31.8%
4/21	5	1	21.0	210.60	8.10 %	1 *	1 *	12 *	43.0%
4/22	1	1	24.0	260.50	6.59 %	0	0	0	43.0%
4/23	1	1	24.0	247.80	7.35 %	0	0	0	43.0%
4/24	1	1	24.0	282.50	5.90 %	0	0	0	43.0%
4/25	1	1	24.0	298.20	6.06 %	0	0	0	43.0%
4/26	1	1	24.0	283.20	6.20 %	0	0	0	43.0%
4/27	1	1	23.0	287.00	6.23 %	0	0	0	43.0%
4/28	1	1	24.0	257.80	6.80 %	0	0	0	43.0%
4/29	5	1	21.0	270.80	6.56 %	1 *	1 *	15 *	57.0%
4/30	1	1	24.0	261.40	6.79 %	0	0	0	57.0%
5/01	1	1	24.0	261.20	6.81 %	0	0	0	57.0%
5/02	1	1	24.0	265.40	6.86 %	0	0	0	57.0%
5/03	1	1	24.0	245.80	7.40 %	0	0	0	57.0%
5/04	1	1	24.0	220.60	7.51 %	0	0	0	57.0%
5/05	1	1	24.0	230.50	7.49 %	0	0	0	57.0%
5/06	1	1	24.0	267.70	7.09 %	0	0	0	57.0%
5/07	1	1	24.0	249.20	8.02 %	0	0	0	57.0%
5/08	1	1	24.0	249.70	7.37 %	0	0	0	57.0%
5/09	1	1	24.0	261.80	6.87 %	1	1	15	71.0%
5/10	1	1	24.0	251.90	6.30 %	0	0	0	71.0%
5/11	1	1	24.0	271.10	5.97 %	0	0	0	71.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

RA-7N-1 SU STEELHEAD LOT ID # 86227-01 19,983 RELEASED AT: BELOW LGS DAM FROM: 5/06/85 TO 5/06/85
AGENCY: WDG HATCHERY: LYONS FERRY

DATE	.. PARAMETERS ..	RIVER	INDEX	NUMBER	NUMBER	... PASSAGE	INDEX ...
1986	SC-#D-GW-HRS	FLOW	FLOW	SAMPLED	COLLECTED	DAILY COUNT	CUMULATIVE

***** CONTINUED *****

5/12	1 1 24.0	263.60	5.81 %	0	0	0	71.0%
5/13	1 1 24.0	272.70	6.07 %	1	1	16	86.0%
5/14	1 1 24.0	252.00	6.34 %	0	0	0	86.0%
5/15	1 1 24.0	266.60	6.60 %	0	0	0	86.0%
5/16	1 1 24.0	279.40	6.47 %	0	0	0	86.0%
5/17	1 1 24.0	264.50	6.64 %	0	0	0	86.0%
5/18	1 1 24.0	227.10	7.04 %	0	0	0	86.0%
5/19	1 1 24.0	234.20	7.50 %	0	0	0	86.0%
5/20	1 1 24.0	264.30	6.99 %	0	0	0	86.0%
5/21	1 1 24.0	264.80	6.91 %	0	0	0	86.0%
5/22	1 1 24.0	311.80	6.21 %	0	0	0	86.0%
5/23	1 1 24.0	301.10	6.67 %	1	1	15	100.0%
TOTAL				7	7	107	

- 1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateweils sampled Hrs= Number of hours sampled
- 2) River Flow: Data acquired from CATCH DATA
- 3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
- 4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
- *) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

RA-7N-3 SU STEELHEAD LOT ID # 86227-02

19,906 RELEASED AT: BELOW LGS DAM
AGENCY: WDG

FROM: 5/10/85 TO 5/10/85
HATCHERY: LYONS FERRY

DATE	.. SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC--#D--GW--LBS	FLOW	FLOW			
4/22	1 1 24.0	260.50	6.59 %	1	1	15 40.5X
4/23	1 1 24.0	247.80	7.35 %	0	0	0 40.5X
4/24	1 1 24.0	282.50	5.90 %	0	0	0 40.5X
4/25	1 1 24.0	298.20	6.06 %	0	0	0 40.5X
4/26	1 1 24.0	283.20	6.20 %	0	0	0 40.5X
4/27	1 1 23.0	287.00	6.23 %	0	0	0 40.5X
4/28	1 1 24.0	257.80	6.80 %	0	0	0 40.5X
4/29	5 1 21.0	270.80	6.56 %	0 *	0 *	0 * 40.5X
4/30	1 1 24.0	261.40	6.79 %	0	0	0 40.5X
5/01	1 1 24.0	261.20	6.81 %	0	0	0 40.5X
5/02	1 1 24.0	265.40	6.86 %	0	0	0 40.5X
5/03	1 1 24.0	245.80	7.40 %	0	0	0 40.5X
5/04	1 1 24.0	220.60	7.51 %	0	0	0 40.5X
5/05	1 1 24.0	230.50	7.49 %	0	0	0 40.5X
5/06	1 1 24.0	267.70	7.09 %	0	0	0 40.5X
5/07	1 1 24.0	249.20	8.02 %	0	0	0 40.5X
5/08	1 1 24.0	249.70	7.37 %	0	0	0 40.5X
5/09	1 1 24.0	261.80	6.87 %	0	0	0 40.5X
5/10	1 1 24.0	251.90	6.30 %	0	0	0 40.5X
5/11	1 1 24.0	271.10	5.97 %	0	0	0 40.5X
5/12	1 1 24.0	263.60	5.81 %	0	0	0 40.5X
5/13	1 1 24.0	272.70	6.07 %	0	0	0 40.5X
5/14	1 1 24.0	252.00	6.34 %	0	0	0 40.5X
5/15	1 1 24.0	266.60	6.60 %	0	0	0 40.5X
5/16	1 1 24.0	279.40	6.47 %	0	0	0 40.5X
5/17	1 1 24.0	264.50	6.64 %	0	0	0 40.5X
5/18	1 1 24.0	227.10	7.04 %	0	0	0 40.5X
5/19	1 1 24.0	234.20	7.50 %	0	0	0 40.5X
5/20	1 1 24.0	264.30	6.99 %	0	0	0 40.5X
5/21	1 1 24.0	264.80	6.91 %	0	0	0 40.5X
5/22	1 1 24.0	311.80	6.21 %	0	0	0 40.5X
5/23	1 1 24.0	301.10	6.67 %	0	0	0 40.5X
5/24	1 1 24.0	240.80	7.27 %	0	0	0 40.5X
5/25	1 1 24.0	218.80	6.93 %	0	0	0 40.5X
5/26	1 1 24.0	190.60	7.50 %	0	0	0 40.5X

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

RA-7N-3 SU STEELHEAD LOT ID # 86227-02

19,906

RELEASED AT: BELOW LGS DAM

FROM: 5/10/85 TO 5/10/85

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	.. SAMPLE (1) PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW			

***** CONTINUED *****

5/27	1	1	24.0	230.20	7.33 %	0	0	0	40.5%
5/28	1	1	24.0	304.90	6.23 %	0	0	0	40.5%
5/29	1	1	24.0	340.50	5.94 %	0	0	0	40.5%
5/30	1	1	24.0	352.30	6.29 %	0	0	0	40.5%
5/31	1	1	24.0	363.80	5.37 %	0	0	0	40.5%
6/01	1	1	24.0	377.30	3.96 %	0	0	0	40.5%
6/02	1	1	24.0	400.90	4.40 %	0	0	0	40.5%
6/03	1	1	24.0	389.60	4.35 %	0	0	0	40.5%
6/04	1	1	24.0	397.00	3.92 %	0	0	0	40.5%
6/05	1	1	24.0	402.00	4.64 %	0	0	0	40.5%
6/06	1	1	24.0	351.70	4.76 %	0	0	0	40.5%
6/07	1	1	24.0	369.90	4.53 %	1	1	22	100.0%

TOTAL						2	2	37	
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(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
(*) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

RA-7P-1 SU STEELHEAD LOT ID # 86226-01

11,780

RELEASED AT: BELOW PRD DAM

FROM: 5/01/86 TO 5/01/86

AGENCY: WDG

HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D	GW	HR.S					
5/07	1	1	24.0	249.20	8.02 %	1	1	12	0.4%
5/08	1	1	24.0	249.70	7.37 %	12	12	163	6.0%
5/09	1	1	24.0	261.80	6.87 %	19	19	277	15.4%
5/10	1	1	24.0	251.90	6.30 %	27	27	429	30.1%
5/11	1	1	24.0	271.10	5.97 %	20	20	335	41.6%
5/12	1	1	24.0	263.60	5.81 %	6	6	103	45.1%
5/13	1	1	24.0	272.70	6.07 %	3	3	49	46.8%
5/14	1	1	24.0	252.00	6.34 %	8	8	126	51.1%
5/15	1	1	24.0	266.60	6.60 %	9	9	136	55.7%
5/16	1	1	24.0	279.40	6.47 %	10	10	155	61.0%
5/17	1	1	24.0	264.50	6.64 %	5	5	75	63.6%
5/18	1	1	24.0	227.10	7.04 %	10	10	142	68.4%
5/19	1	1	24.0	234.20	7.50 %	5	5	67	70.7%
5/20	1	1	24.0	264.30	6.99 %	9	9	129	75.1%
5/21	1	1	24.0	264.80	6.91 %	6	6	87	78.1%
5/22	1	1	24.0	311.80	6.21 %	8	8	129	82.5%
5/23	1	1	24.0	301.10	6.67 %	7	7	105	86.1%
5/24	1	1	24.0	240.80	7.27 %	5	5	69	88.4%
5/25	1	1	24.0	218.80	6.93 %	8	8	115	92.4%
5/26	1	1	24.0	190.60	7.50 %	3	3	40	93.7%
5/27	1	1	24.0	230.20	7.33 %	3	3	41	95.1%
5/28	1	1	24.0	304.90	6.23 %	2	2	32	96.2%
5/29	1	1	24.0	340.50	5.94 %	0	0	0	96.2%
5/30	1	1	24.0	352.30	6.29 %	3	3	48	97.9%
5/31	1	1	24.0	363.80	5.37 %	2	2	37	99.1%
6/01	1	1	24.0	377.30	3.96 %	1	1	25	100.0%
TOTAL						192	192	2,926	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

RA-7P-3 SU STEELHEAD LOT ID # 86226-02

11,575

RELEASED AT: BELOW PRD DAM

FROM: 5/05/86 TO 5/05/86

AGENCY: WDG

HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1)			RIVER FLOW	INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
	SC	#D	GW						
1986	SC	#D	GW	HR.S					
5/12	1	1	24.0	263.60	5.81 %	5	5	86	3.6%
5/13	1	1	24.0	272.70	6.07 %	24	24	395	20.3%
5/14	1	1	24.0	252.00	6.34 %	21	21	331	34.3%
5/15	1	1	24.0	266.60	6.60 %	22	22	333	48.4%
5/16	1	1	24.0	279.40	6.47 %	10	10	155	54.9%
5/17	1	1	24.0	264.50	6.64 %	6	6	90	58.7%
5/18	1	1	24.0	227.10	7.04 %	2	2	28	59.9%
5/19	1	1	24.0	234.20	7.50 %	5	5	67	62.7%
5/20	1	1	24.0	264.30	6.99 %	9	9	129	68.2%
5/21	1	1	24.0	264.80	6.91 %	6	6	87	71.8%
5/22	1	1	24.0	311.80	6.21 %	7	7	113	76.6%
5/23	1	1	24.0	301.10	6.67 %	2	2	30	77.9%
5/24	1	1	24.0	240.80	7.27 %	4	4	55	80.2%
5/25	1	1	24.0	218.80	6.93 %	1	1	14	80.8%
5/26	1	1	24.0	190.60	7.50 %	4	4	53	83.0%
5/27	1	1	24.0	230.20	7.33 %	2	2	27	84.2%
5/28	1	1	24.0	304.90	6.23 %	6	6	96	88.2%
5/29	1	1	24.0	340.50	5.94 %	2	2	34	89.7%
5/30	1	1	24.0	352.30	6.29 %	4	4	64	92.4%
5/31	1	1	24.0	363.80	5.37 %	7	7	130	97.8%
6/01	1	1	24.0	377.30	3.96 %	1	1	25	98.9%
6/02	1	1	24.0	400.90	4.40 %	0	0	0	98.9%
6/03	1	1	24.0	389.60	4.35 %	0	0	0	98.9%
6/04	1	1	24.0	397.00	3.92 %	1	1	26	100.0%
TOTAL						151	151	2,368	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

RD-7P-1 SU STEELHEAD LOT ID # 86226-03

11,943

RELEASED AT: BELOW PRD DAM
AGENCY: WDG

FROM: 5/09/86 TO 5/09/86
HATCHERY: WELLS HATCHERY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	(4) INDEX ... CUMULATIVE
1986	SC	#D	GW	HR.S					
5/14	1	1	24.0	252.00	6.34 %	1	1	16	0.9%
5/15	1	1	24.0	266.60	6.60 %	5	5	76	5.3%
5/16	1	1	24.0	279.40	6.47 %	17	17	263	20.6%
5/17	1	1	24.0	264.50	6.64 %	9	9	136	28.5%
5/18	1	1	24.0	227.10	7.04 %	8	8	114	35.1%
5/19	1	1	24.0	234.20	7.50 %	11	11	147	43.7%
5/20	1	1	24.0	264.30	6.99 %	13	13	186	54.5%
5/21	1	1	24.0	264.80	6.91 %	10	10	145	62.9%
5/22	1	1	24.0	311.80	6.21 %	6	6	97	68.5%
5/23	1	1	24.0	301.10	6.67 %	6	6	90	73.8%
5/24	1	1	24.0	240.80	7.27 %	5	5	69	77.8%
5/25	1	1	24.0	218.80	6.93 %	7	7	101	83.6%
5/26	1	1	24.0	190.60	7.50 %	1	1	13	84.4%
5/27	1	1	24.0	230.20	7.33 %	5	5	68	88.3%
5/28	1	1	24.0	304.90	6.23 %	1	1	16	89.3%
5/29	1	1	24.0	340.50	5.94 %	3	3	51	92.2%
5/30	1	1	24.0	352.30	6.29 %	4	4	64	95.9%
5/31	1	1	24.0	363.80	5.37 %	0	0	0	95.9%
6/01	1	1	24.0	377.30	3.96 %	2	2	51	98.9%
6/02	1	1	24.0	400.90	4.40 %	0	0	0	98.9%
6/03	1	1	24.0	389.60	4.35 %	0	0	0	98.9%
6/04	1	1	24.0	397.00	3.92 %	0	0	0	98.9%
6/05	1	1	24.0	402.00	4.64 %	0	0	0	98.9%
6/06	1	1	24.0	351.70	4.76 %	0	0	0	98.9%
6/07	1	1	24.0	369.90	4.53 %	0	0	0	98.9%
6/08	1	1	24.0	345.10	4.62 %	0	0	0	98.9%
6/09	1	1	24.0	337.70	5.38 %	1	1	19	100.0%
TOTAL						115	115	1,722	

(1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gateways sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

LA-7U-1 SU STEELHEAD LOT ID # 86216-01

11,998 RELEASED AT: BELOW IHR DAM
AGENCY: WDG

FROM: 4/21/86 TO 4/29/86
HATCHERY: LYONS FERRY

DATE	.. PARAMETERS ..	(1) RIVER FLOW	(2) INDEX FLOW	(3) NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HR.S						
4/27	1 1 23.0	287.00	6.23 %	3	3	48	1.6%
4/28	1 1 24.0	257.80	6.80 %	27	27	397	14.4%
4/29	5 1 21.0	270.80	6.56 %	17 *	17 *	259 *	22.8%
4/30	1 1 24.0	261.40	6.79 %	21	21	309	32.9%
5/01	1 1 24.0	261.20	6.81 %	18	18	264	41.4%
5/02	1 1 24.0	265.40	6.86 %	18	18	262	50.0%
5/03	1 1 24.0	245.80	7.40 %	10	10	135	54.3%
5/04	1 1 24.0	220.60	7.51 %	5	5	67	56.5%
5/05	1 1 24.0	230.50	7.49 %	7	7	93	59.5%
5/06	1 1 24.0	267.70	7.09 %	5	5	71	61.8%
5/07	1 1 24.0	249.20	8.02 %	12	12	150	66.7%
5/08	1 1 24.0	249.70	7.37 %	1	1	14	67.2%
5/09	1 1 24.0	261.80	6.87 %	5	5	73	69.5%
5/10	1 1 24.0	251.90	6.30 %	5	5	79	72.1%
5/11	1 1 24.0	271.10	5.97 %	8	8	134	76.4%
5/12	1 1 24.0	263.60	5.81 %	4	4	69	78.7%
5/13	1 1 24.0	272.70	6.07 %	0	0	0	78.7%
5/14	1 1 24.0	252.00	6.34 %	2	2	32	79.7%
5/15	1 1 24.0	266.60	6.60 %	7	7	106	83.2%
5/16	1 1 24.0	279.40	6.47 %	2	2	31	84.2%
5/17	1 1 24.0	264.50	6.64 %	6	6	90	87.1%
5/18	1 1 24.0	227.10	7.04 %	2	2	28	88.0%
5/19	1 1 24.0	234.20	7.50 %	2	2	27	88.9%
5/20	1 1 24.0	264.30	6.99 %	4	4	57	90.7%
5/21	1 1 24.0	264.80	6.91 %	4	4	58	92.6%
5/22	1 1 24.0	311.80	6.21 %	3	3	48	94.2%
5/23	1 1 24.0	301.10	6.67 %	1	1	15	94.6%
5/24	1 1 24.0	240.80	7.27 %	3	3	41	96.0%
5/25	1 1 24.0	218.80	6.93 %	1	1	14	96.4%
5/26	1 1 24.0	190.60	7.50 %	2	2	27	97.3%
5/27	1 1 24.0	230.20	7.33 %	0	0	0	97.3%
5/28	1 1 24.0	304.90	6.23 %	1	1	16	97.8%
5/29	1 1 24.0	340.50	5.94 %	0	0	0	97.8%
5/30	1 1 24.0	352.30	6.29 %	3	3	48	99.4%
5/31	1 1 24.0	363.80	5.37 %	1	1	19	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

LA-7U-1 SU STEELHEAD LOT ID # 86216-01

11,998

RELEASED AT: BELOW IHR DAM

FROM: 4/21/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC--#D--GW--HRS					

* * * * * C O N T I N U E D * * * * *

TOTAL				210	210	3,081
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs= Number of hours sampled
- (2) River Flow: Data acquired from CATCH DATA
- (3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
- (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)
) Sample deviates from "normal" conditions (i.e. SC code > 1)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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JOHN DAY

* * *

STEELHEAD

* * *

LA-7U-3 SU STEELHEAD LOT ID # 86216-02

12,034 RELEASED AT: BELOW IHR DAM

FROM: 4/25/86 TO 4/25/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC--#D--GW--HR.S						
5/01	1 1 24.0	261.20	6.81 %	4	4	59	1.9%
5/02	1 1 24.0	265.40	6.86 %	29	29	423	15.5%
5/03	1 1 24.0	245.80	7.40 %	15	15	203	22.1%
5/04	1 1 24.0	220.60	7.51 %	13	13	173	27.7%
5/05	1 1 24.0	230.50	7.49 %	30	30	401	40.6%
5/06	1 1 24.0	267.70	7.09 %	12	12	169	46.0%
5/07	1 1 24.0	249.20	8.02 %	9	9	112	49.6%
5/08	1 1 24.0	249.70	7.37 %	14	14	190	55.8%
5/09	1 1 24.0	261.80	6.87 %	8	8	116	59.5%
5/10	1 1 24.0	251.90	6.30 %	11	11	175	65.2%
5/11	1 1 24.0	271.10	5.97 %	7	7	117	68.9%
5/12	1 1 24.0	263.60	5.81 %	7	7	120	72.8%
5/13	1 1 24.0	272.70	6.07 %	4	4	66	74.9%
5/14	1 1 24.0	252.00	6.34 %	6	6	95	78.0%
5/15	1 1 24.0	266.60	6.60 %	2	2	30	78.9%
5/16	1 1 24.0	279.40	6.47 %	5	5	77	81.4%
5/17	1 1 24.0	264.50	6.64 %	5	5	75	83.8%
5/18	1 1 24.0	227.10	7.04 %	0	0	0	83.8%
5/19	1 1 24.0	234.20	7.50 %	4	4	53	85.6%
5/20	1 1 24.0	264.30	6.99 %	2	2	29	86.5%
5/21	1 1 24.0	264.80	6.91 %	3	3	43	87.9%
5/22	1 1 24.0	311.80	6.21 %	8	8	129	92.0%
5/23	1 1 24.0	301.10	6.67 %	5	5	75	94.5%
5/24	1 1 24.0	240.80	7.27 %	0	0	0	94.5%
5/25	1 1 24.0	218.80	6.93 %	2	2	29	95.4%
5/26	1 1 24.0	190.60	7.50 %	1	1	13	95.8%
5/27	1 1 24.0	230.20	7.33 %	0	0	0	95.8%
5/28	1 1 24.0	304.90	6.23 %	1	1	16	96.3%
5/29	1 1 24.0	340.50	5.94 %	2	2	34	97.4%
5/30	1 1 24.0	352.30	6.29 %	1	1	16	97.9%
5/31	1 1 24.0	363.80	5.37 %	1	1	19	98.5%
6/01	1 1 24.0	377.30	3.96 %	0	0	0	98.5%
6/02	1 1 24.0	400.90	4.40 %	2	2	45	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

LA-7U-3 SU STEELHEAD LOT ID # 86216-02

12,034

RELEASED AT: BELOW INR DAM

FROM: 4/25/86 TO 4/25/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ...	(4)
	SC #D GW HRS	FLOW	FLOW			DAILY COUNT	CUMULATIVE
1986							

***** CONTINUED *****

TOTAL				213	213	3,102	
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
- (2) River Flow: Data acquired from CATCH DATA
- (3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
- (4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

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JOHN DAY

* * *

STEELHEAD

* * *

LD-7U-1 SU STEELHEAD LOT ID # 86216-03

12,018

RELEASED AT: BELOW IHR DAM

FROM: 4/29/86 TO 4/29/86

AGENCY: WDG

HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..			(2) RIVER FLOW	(3) INDEX FLOW	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE DAILY COUNT	INDEX ... CUMULATIVE
1986	SC	TD	GW	HR.S					
5/05	1	1	24.0	230.50	7.49 %	3	3	40	2.6%
5/06	1	1	24.0	267.70	7.09 %	5	5	71	7.2%
5/07	1	1	24.0	249.20	8.02 %	16	16	200	20.1%
5/08	1	1	24.0	249.70	7.37 %	14	14	190	32.3%
5/09	1	1	24.0	261.80	6.87 %	11	11	160	42.6%
5/10	1	1	24.0	251.90	6.30 %	12	12	190	54.9%
5/11	1	1	24.0	271.10	5.97 %	3	3	50	58.1%
5/12	1	1	24.0	263.60	5.81 %	3	3	52	61.5%
5/13	1	1	24.0	272.70	6.07 %	2	2	33	63.6%
5/14	1	1	24.0	252.00	6.34 %	3	3	47	66.6%
5/15	1	1	24.0	266.60	6.60 %	1	1	15	67.6%
5/16	1	1	24.0	279.40	6.47 %	2	2	31	69.6%
5/17	1	1	24.0	264.50	6.64 %	2	2	30	71.5%
5/18	1	1	24.0	227.10	7.04 %	1	1	14	72.5%
5/19	1	1	24.0	234.20	7.50 %	1	1	13	73.3%
5/20	1	1	24.0	264.30	6.99 %	5	5	72	77.9%
5/21	1	1	24.0	264.80	6.91 %	3	3	43	80.7%
5/22	1	1	24.0	311.80	6.21 %	4	4	64	84.8%
5/23	1	1	24.0	301.10	6.67 %	6	6	90	90.6%
5/24	1	1	24.0	240.80	7.27 %	2	2	28	92.5%
5/25	1	1	24.0	218.80	6.93 %	1	1	14	93.4%
5/26	1	1	24.0	190.60	7.50 %	0	0	0	93.4%
5/27	1	1	24.0	230.20	7.33 %	0	0	0	93.4%
5/28	1	1	24.0	304.90	6.23 %	0	0	0	93.4%
5/29	1	1	24.0	340.50	5.94 %	2	2	34	95.5%
5/30	1	1	24.0	352.30	6.29 %	0	0	0	95.5%
5/31	1	1	24.0	363.80	5.37 %	0	0	0	95.5%
6/01	1	1	24.0	377.30	3.96 %	0	0	0	95.5%
6/02	1	1	24.0	400.90	4.40 %	0	0	0	95.5%
6/03	1	1	24.0	389.60	4.35 %	0	0	0	95.5%
6/04	1	1	24.0	397.00	3.92 %	1	1	26	97.2%
6/05	1	1	24.0	402.00	4.64 %	0	0	0	97.2%
6/06	1	1	24.0	351.70	4.76 %	1	1	21	98.6%
6/07	1	1	24.0	369.90	4.53 %	0	0	0	98.6%
6/08	1	1	24.0	345.10	4.62 %	1	1	22	100.0%

***** CONTINUED *****

NATIONAL MARINE FISHERIES SERVICE
FISH PASSAGE DATA SYSTEM
* * Brand Recapture Summary * *

* These data are preliminary and have been derived from various sources. For *
* verification and/or origin of data, contact the operators of the Fish Passage Data *
* System at (503) 230-4290. *

JOHN DAY

* * *

STEELHEAD

* * *

LD-7U-1 SU STEELHEAD LOT ID # 86216-03 12,018 RELEASED AT: BELOW IHR DAM FROM: 4/29/86 TO 4/29/86
AGENCY: WDG HATCHERY: LYONS FERRY

DATE	SAMPLE (1) .. PARAMETERS ..	(2) RIVER	(3) INDEX	NUMBER SAMPLED	NUMBER COLLECTED	... PASSAGE INDEX ... DAILY COUNT CUMULATIVE
1986	SC-#D-GW-HRS	FLOW	FLOW			

***** CONTINUED *****

TOTAL				105	105	1.550
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- (1) Sample parameters: SC = Sample quality code #D = Number of accumulated days for sample
GW = Number of gatewells sampled Hrs = Number of hours sampled
(2) River Flow: Data acquired from CATCH DATA
(3) Index Flow: *** (UNIT 3 FLOW) / (POWERHOUSE + SPILL)
(4) Passage Index: Calculated as the (number collected) / (100 * percent index flow)

IV. REFERENCES CITED

Johnsen, Richard C., L. Wood, and W. Smith, 1986.

Monitoring of downstream salmon and steelhead at federal hydroelectric facilities - 1986. National Marine Fisheries Service; Portland, Oregon; Annual Report of Project 84-14 (Agreement DE-AI79-85BP20733).