



## Fish Passage Center

# Weekly Report #00 - 25

August 25, 2000

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### SUMMARY OF EVENTS:

**Water Supply:** Precipitation for the period of August 1-22 continued to be below average for the entire basin. Precipitation for the Columbia above Coulee was 26% of average, for the Snake River above Ice Harbor was 26% of average and for the Columbia at The Dalles was 24% of average.

**Reservoir Operations:** The reservoirs continued to be operated for summer flow augmentation and for power generation during the week of August 18-24. Fishery Agencies requested drafting of Grand Coulee to 1281 ft through August 20 in order to meet a weekly flow objective of 160 kcfs at McNary for the juvenile fall chinook outmigration in lower Columbia. The federal operating agencies continued to shape available fish flow augmentation volume to meet load and reliability requirements rather than implementing the agencies shaping requests during the month of August.

A summary of actual elevations on August 24, and full pool elevations is shown in the following Table:

Project	Actual August 24 Elevation in [ft]	Actual Elevation on June 30 & Full Pool Elevation in [ft]
<i>Libby</i>	2435.68	2418.1/2459.0
<i>Hungry Horse</i>	3542.18*	3558.3/3560.0
<i>Grand Coulee</i>	1281.4*	1279.0/1290.0
<i>Brownlee</i>	2042.21*	2072.06/2077.0
<i>Dworshak</i>	1526.68	1598.6/1600.0

\* as of August 23

*Libby* reservoir was drafted from elevation of 2436.17 ft on August 18 to elevation 2435.68 ft on August 24 with inflows in the range of 8.7 kcfs to 4.4 kcfs for the period of August 18-24. Outflows were maintained at 8 Kcfs, for the bull trout operation, for August 18-24.

*Hungry Horse* continued drafting for summer flow augmentation at rates of 4.40 kcfs - 5 kcfs for the period of August 18-24.

*Grand Coulee* was operated with outflows in the range of 51.4 kcfs and 92 kcfs with elevations fluctuating between 1281.1 ft and 1281.6 ft for the period of August 18-24.

*Brownlee* reservoir was refilled from 2043.13 ft on August 18 to 2045.21 ft on August 23, despite a request by Fishery Agencies to pass inflow during August in order to improve flows at Lower Granite. Inflows to the reservoir fluctuated between 10.48 kcfs and 11.29 kcfs for the period of August 18-23. Outflow from Hells Canyon Dam for the past week, decreased from 10.87 kcfs on August 18 to 6.89 kcfs on August 23.

*Dworshak* continued drafting for flow augmentation. The outflow was decreased to maximum hydraulic capacity of the project of 10.7 kcfs with zero spill on August 22, as the reservoir is approaching elevation 1520 ft. Inflows to the reservoir fluctuated from 0.5 kcfs to 1 kcfs for the period of August 18-24.

*Upper Snake reservoirs:* As of August 24, the Upper Snake system was further drafted to 47% of capacity. American Falls is at 24% of the full capacity, and Palisades and Jackson Lake are at 41% and 86% of the full capacity respectively. The irrigation demands in the system continued to be high and current flow at diversions at Palisades and Minidoka are 9.2 kcfs and 9.6 kcfs, respectively. Salmon flow augmentation from American Falls continued at rate of 1.35 kcfs higher than the base flows of 0.2 kcfs at Milner, with 1.5 kcfs as total outflow.

*Boise and Payette River Basins:* As of August 24, the Boise River system was at 61% of capacity. Outflows from the system have increased .06 kcfs due to drafting of Arrowrock dam for repair work, compared with the previous week. As of August 21, the Payette River system was at 73% of capacity. Salmon augmentation flow continued at rates of about .06 kcfs above base flows.

**Streamflow:** The Biological Opinion summer flow target of 51.3 Kcfs at Lower Granite began on June 21 and 200 Kcfs for McNary began on July 1. Weekly average flows for McNary and Lower Granite remained below the flow targets for the period of August 18-24. Fishery Agencies requested drafting of Grand Coulee to 1281 ft on August 20 in attempt to exceed minimum flows of 160 kcfs at McNary for the week of August 14-20 for the fall chinook juvenile migration. The reservoir was not drafted to the requested elevation because of the BPA concerns for the energy supply reliability of the West Coast, and the requested flow of 160 kcfs was not met. The actual weekly average at McNary for the week of August 14-20 was 147.9 kcfs. The daily average flows for the run-of-river projects for the August 18-24 period decreased significantly compared with the previous week. A summary of the weekly average flows and the range of daily average flows are given in the following Table:

Project	Average daily discharge and range [kcfs]	
	August 18-24	August 11-17
<i>Priest Rapids</i>	88.7 (52.2-137.4)	134.1 (107.9-149.4)
<i>McNary</i>	119.1 (89.4-160.7)	160.0 (146.7-187.2)
<i>Lower Granite</i>	26.3 (22.9-30.3)	27.3 (26.6-28.7)
<i>Bonneville</i>	131.0 (103.9-160.1)	165.9 (147.3-175.9)

**Spill:** Spill at Dworshak Dam was reduced on August 21, and ended on August 22 as the project outflow was reduced to powerhouse capacity, resulting in lower flows for downstream migrants through the Snake River. Spill for fish passage continued at lower levels at Ice Harbor Dam, continuing to be restricted to hours when flows are sufficient to spill 15 kcfs. There is no spill at Lower Granite, Little Goose or Lower Monumental Dam, to facilitate the maximization of fish transportation at those projects. Spill was reduced periodically at John Day and The Dalles for energy purposes. There was no spill at McNary Dam from August 20 through August 24, as flows continue to decline.

Levels of dissolved Gas were below the the allowable levels, reflecting the current low flow and spill conditions.

**Smolt Monitoring Program.** Snake River basin: Subyearling chinook passage indices averaged about half of last week's level at Lower Granite and Little Goose dams, while they were up a quarter at Lower Monumental Dam. The weekly average was approximately 1,100 subyearling chinook at Lower Granite Dam and 300 subyearling chinook at the other two sites. Mid-Columbia River: Subyearling chinook passage indices at Rock Island Dam dropped over 40% from last week's average. Lower Columbia River: Subyearling chinook passage indices at McNary Dam dropped an average of approximately 70% from last week's level. The last five days of this reporting period saw McNary Dam's subyearling chinook passage indices stay below the weekly average of 13,000 fish. Subyearling chinook passage indices at John Day Dam averaged 12% lower than last week's level, with the lowest passage indices occurring during the middle of this reporting period. Subyearling chinook passage indices at Bonneville Dam are low since minimal flow passes through Powerhouse 2 where the sampling facility is located.

**Adult fish passage** – At Bonneville Dam, daily counts of fall chinook ranged from 3,344 on August 18 to 6,153 by August 24, the end of the report week. The cumulative count through August 24 is 47,784, about twice the 1999 count and 2.9 times greater than the 10-year average to date. Numbers of Tule adult fall chinook (Bonneville pool returnees) began increasing through the week with about 12.5% of the August 23 count of adult fall chinook being the “tule” component of the run. The majority of the fall chinook run is comprised of the “bright” component that “home” from the Bonneville pool up through the Mid-Columbia and Snake rivers. The adult fall chinook count at The Dalles Dam increased during the week with the high daily count of 4,074 and a cumulative count of 27,065. At McNary Dam, daily counts of adult fall chinook ranged from near 400 to 1,250 per day for the week with the cumulative count through August 24 of 7,804. The daily counts of adult fall chinook at Ice Harbor Dam are nearing 100 per day with Mid-Columbia count at Priest Rapids Dam also increasing to 400-500 per day.

Passage of sockeye salmon for the 2000 migration is nearing completion at all sites. About 81% of the adult sockeye are destined for the Okanogan River Basin (Lake Osoyoos) with the remaining 19% destined for the Wenatchee River Basin. Approximately 300 adult sockeye were counted past the Snake River dams this year.

At Bonneville Dam, the daily steelhead counts leveled off at about 4000 per day through the week ending August 24. The cumulative count for the project is 181,001 about 1.3 times and 1.5 times greater than the respective 1999 and 10-year average. At The Dalles Dam, the cumulative count is only 73,092; greater than 100,000 steelhead differential exists between Bonneville and The Dalles projects. At Bonneville Dam about 34% of the passage are listed as “unclipped” steelhead or “wild”. The passage of steelhead into the Snake River began increasing to a high of 356 on 8/23 at Ice Harbor with the cumulative count 13,345. Of this total, about 30% of the Ice Harbor count were unclipped or “wild”. The passage of steelhead into the Mid-Columbia projects reduced this past week to about 70 per day at Priest Rapids Dam with the

cumulative count now 4,108 and upstream at Rock Island, 3,195.

Coho salmon are arriving at Bonneville Dam in fairly high numbers, (600 the past 2 days), and are presently 24 times greater than the 10-year average through August 24. As noted with the chinook salmon races, the jack count of coho salmon is also far greater than the 1999 and 10-year average to date.

**Hatchery Releases** –Based on preliminary data, about 82.8 million yearling and subyearling fish were released from State, Federal or Tribal hatcheries or Acclimation Ponds for the Year 2000 Migration. There were no hatchery releases for the past two weeks, nor are there any scheduled in the upcoming two weeks. There will be additional releases this fall at some upriver and lower river sites.

**Daily Average Flow and Spill (in kcfs) at Mid-Columbia Projects**

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
08/11/00	122.6	0.0	128.0	0.0	135.7	10.0	139.4	15.6	136.0	19.7	139.6	36.3	144.0	72.0
08/12/00	117.3	0.0	117.1	0.0	121.9	8.1	121.7	10.9	122.8	20.3	129.4	33.8	132.0	66.2
08/13/00	102.8	0.0	105.2	0.0	102.6	7.2	103.2	0.0	104.1	20.2	106.2	27.9	107.9	54.2
08/14/00	125.8	0.0	127.7	0.0	130.6	8.2	131.9	0.0	129.9	20.0	132.9	35.7	134.0	67.1
08/15/00	130.8	0.0	133.6	0.0	134.3	8.5	132.8	0.0	131.2	20.3	147.0	41.0	149.4	74.6
08/16/00	124.3	0.0	126.2	0.0	130.6	7.8	123.2	0.0	133.8	20.4	128.6	35.9	132.5	65.2
08/17/00	124.6	0.0	129.2	0.0	125.5	8.2	125.5	0.0	126.7	16.9	135.3	40.2	138.8	67.8
08/18/00	92.0	0.1	111.3	0.0	119.6	7.6	124.2	0.0	124.3	11.8	131.3	42.1	137.4	65.7
08/19/00	51.4	0.1	47.4	0.0	51.9	3.5	54.4	0.0	56.1	11.8	75.8	24.2	77.3	38.9
08/20/00	70.0	0.1	72.2	0.0	68.6	5.1	64.4	0.0	63.4	11.8	49.6	16.0	52.2	26.3
08/21/00	84.3	0.1	82.3	0.0	85.4	5.9	86.2	0.0	86.8	11.2	88.8	29.0	87.4	44.1
08/22/00	74.8	0.1	78.2	0.0	86.0	6.1	87.0	0.0	89.1	11.4	114.8	41.4	119.3	62.6
08/23/00	76.2	0.1	78.4	0.0	72.9	6.5	60.9	0.0	60.3	11.8	68.7	24.8	71.5	36.9
08/24/00	---	---	96.7	0.0	100.3	8.2	---	---	---	---	80.6	28.3	75.5	38.1

**Daily Average Flow and Spill (in kcfs) at Snake Basin Projects**

Date	Dworshak		Brownlee Canyon		Hells Granite		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
08/11/00	13.3	3.1	9.4	6.6	28.7	0.0	30.3	0.0	30.4	0.0	31.5	25.6		
08/12/00	13.4	3.2	10.4	6.6	25.9	0.0	27.0	0.0	27.1	0.0	29.2	23.5		
08/13/00	13.7	3.4	10.5	6.6	27.8	0.0	26.4	0.0	26.5	0.0	29.0	22.3		
08/14/00	13.7	3.4	9.2	6.6	27.3	0.0	30.2	0.0	32.2	0.0	36.4	29.9		
08/15/00	13.7	3.4	8.7	7.3	26.5	0.0	24.9	0.0	24.3	0.0	26.0	19.4		
08/16/00	13.9	3.5	10.3	8.4	26.6	0.0	28.9	0.0	30.0	0.0	31.9	24.9		
08/17/00	14.0	3.6	10.5	10.9	28.2	0.0	25.6	15.1	28.8	0.0	29.1	21.9		
08/18/00	14.1	3.6	10.8	7.3	27.1	0.0	26.7	0.0	28.1	0.0	30.8	23.4		
08/19/00	14.0	3.6	11.2	7.2	30.3	0.0	29.1	0.3	30.5	0.0	34.7	28.6		
08/20/00	14.1	3.5	10.9	7.1	27.8	0.0	29.7	0.0	31.2	0.0	34.0	27.7		
08/21/00	12.9	2.7	11.3	7.0	27.8	0.0	25.8	0.0	27.7	0.0	29.3	22.6		
08/22/00	10.7	0.0	11.0	6.9	22.9	0.0	23.7	0.0	25.0	0.0	25.7	19.2		
08/23/00	10.7	0.0	---	---	23.9	0.0	24.3	0.0	26.1	0.0	29.8	23.8		
08/24/00	10.7	0.0	---	---	24.4	0.0	24.8	0.0	24.6	0.0	26.6	19.6		

**Daily Average Flow and Spill (in kcfs) at Lower Columbia Projects**

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
08/11/00	147.2	0.0	156.3	69.6	155.4	61.8	165.9	90.4	50.9	15.4
08/12/00	166.2	19.6	157.9	44.5	159.6	62.9	173.3	132.8	25.7	5.7
08/13/00	157.1	11.0	145.7	42.1	137.8	54.5	147.3	107.5	25.2	5.4
08/14/00	146.7	0.0	162.3	48.9	157.0	62.4	163.3	113.7	34.9	5.5
08/15/00	162.1	18.3	163.2	73.5	160.2	60.2	161.0	91.7	50.5	9.6
08/16/00	153.6	10.3	160.3	72.0	156.3	61.4	174.5	98.1	53.2	14.1
08/17/00	187.2	36.1	174.0	76.2	170.6	67.0	175.9	101.1	47.8	17.8
08/18/00	135.1	0.0	128.1	54.0	128.8	52.6	160.1	94.3	44.5	12.1
08/19/00	160.7	7.1	159.0	68.5	152.8	60.9	144.8	84.9	42.2	8.6
08/20/00	90.2	0.0	103.9	48.2	105.0	42.1	122.2	83.9	25.0	4.2
08/21/00	111.2	0.0	115.0	29.1	113.5	42.5	127.5	78.4	35.7	4.1
08/22/00	118.4	0.0	119.8	35.5	116.1	42.3	118.1	71.0	34.0	3.9
08/23/00	128.6	0.0	132.9	36.4	134.1	52.8	140.4	99.7	26.6	5.0
08/24/00	89.4	0.0	94.2	24.1	88.9	34.5	103.9	63.8	27.2	3.7

**Gas Bubble Trauma Monitoring Results from Representative Sites  
on the Snake River and Columbia River**

Date	Species	Number Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank				Fish with L. Line GBT	
							Rank 1	Rank 2	Rank 3	Rank 4	Num Fish	Avg. Rank
08/17/00	Subyearling Chinook	100	4	0	0.00%	0.00%	0	0	0	0	4	1
08/21/00	Subyearling Chinook	100	4	0	0.00%	0.00%	0	0	0	0	4	1
08/15/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
08/17/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
08/22/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
08/24/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
08/17/00	Subyearling Chinook	51	0	0	0.00%	0.00%	0	0	0	0	0	0
08/21/00	Subyearling Chinook	40	0	0	0.00%	0.00%	0	0	0	0	0	0

## Two-Week Summary of Passage Indices

The Total, # Days, and Average are calculated on the last two weeks of data and do not include the current day's passage index.

### COMBINED YEARLING CHINOOK

	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/11/00	---	---	---	---	6	3	6	0	0	0	0
08/12/00	---	---	---	---	12	0	1	0	0	0	0
08/13/00	---	---	---	---	6	0	5	1	0	0	0
08/14/00	---	---	---	---	12	10	1	0	0	0	0
08/15/00	---	---	---	---	12	2	5	0	0	0	0
08/16/00	---	---	---	---	4	3	0	0	0	16	0
08/17/00	---	---	---	---	12	0	1	0	0	0	0
08/18/00	---	---	---	---	16	0	2	0	0	0	0
08/19/00	---	---	---	---	12	1	3	1	0	0	0
08/20/00	---	---	---	---	12	2	4	0	0	0	0
08/21/00	---	---	---	---	0	1	2	0	0	0	0
08/22/00	---	---	---	---	8	1	1	2	0	0	0
08/23/00	---	---	---	---	0	3	3	0	0	0	0
08/24/00	---	---	---	---	0	1	3	1	0	0	0
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>112</b>	<b>27</b>	<b>37</b>	<b>5</b>	<b>0</b>	<b>16</b>	<b>0</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>

### COMBINED SUBYEARLING CHINOOK

	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/11/00	---	---	---	---	2,328	1,195	168	94	80,882	3,264	1,734
08/12/00	---	---	---	---	2,316	891	292	150	57,499	2,219	1,310
08/13/00	---	---	---	---	2,526	728	201	106	48,620	4,976	0
08/14/00	---	---	---	---	2,544	769	195	96	27,102	2,575	200
08/15/00	---	---	---	---	1,518	590	221	87	37,030	2,595	450
08/16/00	---	---	---	---	1,436	459	146	97	22,570	2,106	260
08/17/00	---	---	---	---	1,284	497	230	70	32,244	2,833	260
08/18/00	---	---	---	---	1,196	612	308	60	25,135	4,573	1,163
08/19/00	---	---	---	---	872	269	215	67	14,764	3,156	2,757
08/20/00	---	---	---	---	1,052	301	338	21	11,855	1,847	203
08/21/00	---	---	---	---	1,452	335	269	60	8,820	1,284	0
08/22/00	---	---	---	---	1,172	321	288	100	12,820	1,390	0
08/23/00	---	---	---	---	960	274	197	40	8,910	2,731	105
08/24/00	---	---	---	---	1,040	202	257	39	7,760	3,180	111
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21,696</b>	<b>7,443</b>	<b>3,325</b>	<b>1,087</b>	<b>396,011</b>	<b>38,729</b>	<b>8,553</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,550</b>	<b>532</b>	<b>238</b>	<b>78</b>	<b>28,287</b>	<b>2,766</b>	<b>611</b>

\* See sampling comments <http://www.fpc.org/2000Daily/smpcomments.htm>

These data are preliminary and have been derived from various sources. For verification and/or origin of these data, contact the operators of the Fish Passage Data System at (503) 230-4099.

## Two-Week Summary of Passage Indices

### COMBINED COHO

	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/11/00	---	---	---	---	30	18	42	0	0	0	0
08/12/00	---	---	---	---	12	33	17	0	0	0	0
08/13/00	---	---	---	---	24	14	15	0	222	0	0
08/14/00	---	---	---	---	12	18	10	0	0	0	0
08/15/00	---	---	---	---	12	4	17	0	30	0	0
08/16/00	---	---	---	---	8	10	16	0	0	0	0
08/17/00	---	---	---	---	12	10	11	0	34	0	0
08/18/00	---	---	---	---	4	20	9	0	68	0	0
08/19/00	---	---	---	---	4	9	9	0	31	0	0
08/20/00	---	---	---	---	0	14	6	0	0	0	0
08/21/00	---	---	---	---	0	7	2	0	0	0	0
08/22/00	---	---	---	---	12	13	6	0	0	0	0
08/23/00	---	---	---	---	0	8	12	0	0	20	0
08/24/00	---	---	---	---	0	4	8	0	0	0	0
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>130</b>	<b>182</b>	<b>180</b>	<b>0</b>	<b>385</b>	<b>20</b>	<b>0</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>13</b>	<b>13</b>	<b>0</b>	<b>28</b>	<b>1</b>	<b>0</b>

### COMBINED STEELHEAD

	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/11/00	---	---	---	---	150	30	43	0	0	0	0
08/12/00	---	---	---	---	144	22	30	2	0	0	0
08/13/00	---	---	---	---	96	20	60	1	0	0	0
08/14/00	---	---	---	---	84	10	29	0	0	0	0
08/15/00	---	---	---	---	102	4	20	0	30	0	0
08/16/00	---	---	---	---	48	4	27	1	35	16	0
08/17/00	---	---	---	---	36	4	13	0	0	0	0
08/18/00	---	---	---	---	48	15	36	0	0	0	0
08/19/00	---	---	---	---	12	3	31	1	0	0	0
08/20/00	---	---	---	---	36	7	11	0	0	0	0
08/21/00	---	---	---	---	16	5	16	0	0	0	0
08/22/00	---	---	---	---	24	5	5	0	0	0	0
08/23/00	---	---	---	---	28	1	12	0	0	0	0
08/24/00	---	---	---	---	28	2	25	0	0	0	0
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>852</b>	<b>132</b>	<b>358</b>	<b>5</b>	<b>65</b>	<b>16</b>	<b>0</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>61</b>	<b>9</b>	<b>26</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>0</b>

Smolt indices, clipped & unclipped or combined, are presented in the following order: yearling chinook (chinook 1's), subyearling chinook (chinook 0's), steelhead, coho, and sockeye. Two classes of fish counts are shown in these tables: collection counts, which account for sample rates but are not adjusted for flow; and passage indices, which are collection counts divided by the proportion of water passing through the sampled powerhouse. Passage indices are not population estimates, but are used to adjust collection counts for daily fluctuations in the site's or project's operations. The classes of counts presented in the report are defined below for each site. Most samples occur over a 24-hr period that spans two calendar days. In this report, the date shown corresponds with the sample end date.

## Two-Week Summary of Passage Indices

### COMBINED SOCKEYE

	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/11/00	---	---	---	---	18	12	0	0	249	17	0
08/12/00	---	---	---	---	0	9	2	9	216	18	0
08/13/00	---	---	---	---	6	6	0	7	665	53	0
08/14/00	---	---	---	---	12	6	0	7	463	0	0
08/15/00	---	---	---	---	18	6	0	7	361	29	0
08/16/00	---	---	---	---	0	8	0	3	245	0	0
08/17/00	---	---	---	---	0	8	1	3	378	11	0
08/18/00	---	---	---	---	16	5	0	4	513	57	0
08/19/00	---	---	---	---	8	2	1	0	92	17	0
08/20/00	---	---	---	---	0	7	3	0	124	0	0
08/21/00	---	---	---	---	0	1	0	0	40	0	0
08/22/00	---	---	---	---	0	3	1	0	270	0	0
08/23/00	---	---	---	---	0	3	0	0	135	48	0
08/24/00	---	---	---	---	0	2	1	0	160	46	0
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>78</b>	<b>78</b>	<b>9</b>	<b>40</b>	<b>3,911</b>	<b>296</b>	<b>0</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>279</b>	<b>21</b>	<b>0</b>

#### Definitions for Smolt Index Counts

WTB (Collection) = Salmon River Trap at Whitebird : Collection Counts

IMN (Collection) = Imnaha River Trap : Collection Counts

GRN (Collection) = Grande Ronde River Trap : Collection Counts

LEW (Collection) = Snake River Trap at Lewiston : Collection Counts

LGR (Index) = Lower Granite Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

LEW and WTB data collected for the FPC by Idaho Dept. of Fish and Game.

JDA and BO2 data collected for the FPC by Pacific States Marine Fisheries Commission.

RIS data collected for the FPC by Chelan Co. PUD/Washington Dept. of Fish and Wildlife.

LGR, LMN, and MCN data collected for the FPC by Washington Dept. of Fish and Wildlife.

LGS and GRN data collected for the FPC by Oregon Dept. of Fish and Wildlife.

IMN data collected for the FPC by the Nez Perce Tribe.



**Cumulative Adult Passage at Mainstem Dams Through 08/24**

DAM	Spring Chinook						Summer Chinook						Fall Chinook					
	2000		1999		10-Yr Avg.		2000		1999		10-Yr Avg.		2000		1999		10-Yr Avg.	
	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	178,302	21,259	38,669	8,691	62,347	2,737	30,598	13,386	26,169	4,022	20,522	2,637	47,784	5,224	23,840	2,235	16,553	1,410
TDA	102,953	14,796	17,563	6,180	36,497	1,828	25,024	10,409	21,730	3,207	16,441	1,905	27,065	3,094	11,506	2,044	7,034	786
JDA	86,502	12,133	15,409	5,089	29,402	1,505	23,069	8,146	22,210	2,504	15,458	1,691	18,292	2,599	6,389	564	3,687	422
MCN	64,947	10,998	9,260	3,972	28,536	1,577	20,776	7,098	19,275	2,343	16,138	1,747	7,804	1,167	3,696	364	2,557	365
IHR	38,776	9,389	5,351	2,657	15,091	720	4,241	3,182	3,900	1,311	4,465	461	269	30	169	9	92	8
LMN	35,520	10,336	3,924	2,726	14,041	753	4,678	3,288	3,372	1,344	4,195	468	175	88	102	17	60	8
LGS	34,330	10,152	3,445	2,690	**	**	4,160	3,776	3,273	1,583	**	**	90	55	51	17	**	**
LWG	33,822	10,318	3,296	2,507	12,180	669	3,933	3,736	3,260	1,584	4,222	494	46	36	40	17	28	3
PRD	20,098	1,085	4,139	761	9,052	194	22,406	2,503	20,896	517	14,069	596	1,904	329	1,804	41	858	105
RIS	14,400	1,429	3,309	915	6,567	218	18,717	11,367	18,588	1,548	11,793	977	104	57	124	12	57	17
RRH	5,336	392	1,389	233	1,501	54	13,385	3,954	10,449	1,051	5,139	456	0	0	0	0	0	0
WEL	2,143	457	141	199	752	53	6,112	3,358	6,755	446	3,047	323	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2000		1999		10-Yr Avg.		10-Yr			10-Yr			Wild
	Adult	Jack	Adult	Jack	Adult	Jack	2000	1999	Avg.	2000	1999	Avg.	2000
BON	3,249	560	145	8	135	32	93,152	17,872	42,097	181,001	134,945	123,543	61,806
TDA	564	135	2	1	7	1	73,342	13,711	32,864	73,092	72,623	45,280	28,666
JDA	192	16	1	0	2	0	88,216	14,801	34,255	53,522	53,390	30,193	18,068
MCN	13	0	0	1	1	1	58,238	11,790	35,731	32,682	27,434	24,034	11,236
IHR	0	0	0	0	0	0	213	7	8	13,345	13,214	11,828	4,032
LMN	0	0	0	0	0	0	289	13	8	10,861	8,985	9,992	3,593
LGS	0	0	0	0	**	**	299	16	**	7,047	6,658	**	2,497
LWG	0	0	0	0	0	0	279	14	6	8,059	7,398	8,508	2,908
PRD	38	4	41	4	6	0	89,866	16,327	40,455	***	2,534	2,798	***
RIS	12	0	0	0	2	0	73,301	17,818	35,738	4,108	1,490	1,819	1,331
RRH	62	0	22	0	2	0	54,122	13,846	18,407	3,195	767	1,128	503
WEL	0	0	0	0	0	0	59,770	12,085	17,052	1,964	635	879	271

Note: RIS, RRH are through 08/18; IHR, LMN, LGS and WEL are through 08/23; PRD is through 08/22.

Note: IHR is missing 08/22; LGR is missing 08/18; LGR is missing 7/12 and 07/31. RIS and RRH are missing 07/16 to 07/18.

These numbers were collected from the COE's Running Sums text files.

Wild steelhead numbers are included in the total.

\*\*Adult count records at Little Goose Dam have been maintained since 1991, visual counts were not conducted at Little Goose Dam between 1982 and 1990.

\*\*\*PRD is not reporting Wild Steelhead numbers.

Historic counts (pre-1996) were obtained from CRITFC and compiled by the FPC.

Historic counts 1997 to present were obtained from the Corps of Engineers.

### Two Week Transportation Summary

08/11/00 TO 08/24/00

Site	Data	Species					Grand Total
		CH0	CH1	CO	SO	ST	
LGR	Sum Of NumberCollected	21,696	112	130	78	852	22,868
	Sum Of NumberBarged	0	0	0	0	0	0
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	21,562	111	130	75	849	22,727
	Sum Of TotalProjectMort	134	1	0	3	3	141
LGS	Sum Of NumberCollected	7,057	27	170	75	123	7,452
	Sum Of NumberBarged	0	0	0	0	0	0
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	6,970	18	166	62	118	7,334
	Sum Of TotalProjectMort	87	9	4	13	5	118
LMN	Sum Of NumberCollected	3,325	37	180	9	358	3,909
	Sum Of NumberBarged	0	0	0	0	0	0
	Sum Of NumberBypassed	2	0	166	0	350	518
	Sum Of NumberTrucked	3,286	36	1	9	4	3,336
	Sum Of TotalProjectMort	37	1	13	0	4	55
MCN	Sum Of NumberCollected	359,235		350	3,616	60	363,261
	Sum Of NumberBarged	0		0	0	0	0
	Sum Of NumberBypassed	36,568		30	357	29	36,984
	Sum Of NumberTrucked	311,170		277	3,043	30	314,520
	Sum Of TotalProjectMort	3,873		43	56	1	3,973
Total Sum Of NumberCollected		391,313	176	830	3,778	1,393	397,490
Total Sum Of NumberBarged		0	0	0	0	0	0
Total Sum Of NumberBypassed		36,570	0	196	357	379	37,502
Total Sum Of NumberTrucked		342,988	165	574	3,189	1,001	347,917
Total Sum Of TotalProjectMort		4,131	11	60	72	13	4,287

### YTD Transportation Summary

TO: 08/24/00

Site	Data	Species					Grand Total
		CH0	CH1	CO	SO	ST	
LGR	Sum Of NumberCollected	612,444	2,449,901	121,935	6,051	5,038,544	8,228,875
	Sum Of NumberBarged	533,095	2,324,209	121,045	5,697	4,795,307	7,779,353
	Sum Of NumberBypassed	46	115,444	400	16	226,270	342,176
	Sum Of NumberTrucked	76,605	6,946	443	306	16,739	101,039
	Sum Of TotalProjectMort	2,698	3,303	47	32	728	6,808
LGS	Sum Of NumberCollected	314,700	1,357,123	41,565	3,491	1,055,083	2,771,962
	Sum Of NumberBarged	282,653	1,348,003	40,149	3,281	1,045,300	2,719,386
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	53,183	4,462	1,384	180	8,736	67,945
	Sum Of TotalProjectMort	2,203	5,321	91	50	1,442	9,107
LMN	Sum Of NumberCollected	178,712	608,550	19,072	4,268	765,898	1,576,500
	Sum Of NumberBarged	146,077	556,132	18,198	4,239	761,544	1,486,190
	Sum Of NumberBypassed	19,841	24,873	216	0	1,846	46,776
	Sum Of NumberTrucked	11,857	25,992	624	26	1,771	40,270
	Sum Of TotalProjectMort	937	1,565	34	3	738	3,277
MCN	Sum Of NumberCollected	9,103,525	1,164,638	169,051	94,156	365,747	10,897,117
	Sum Of NumberBarged	7,902,533	25,995	26,993	28,657	10,650	7,994,828
	Sum Of NumberBypassed	696,232	1,137,415	140,966	59,679	354,530	2,388,822
	Sum Of NumberTrucked	441,278	16	278	4,936	54	446,562
	Sum Of TotalProjectMort	55,859	1,212	813	724	513	59,121
Total Sum Of NumberCollected		10,209,381	5,580,212	351,623	107,966	7,225,272	23,474,454
Total Sum Of NumberBarged		8,864,358	4,254,339	206,385	41,874	6,612,801	19,979,757
Total Sum Of NumberBypassed		716,119	1,277,732	141,582	59,695	582,646	2,777,774
Total Sum Of NumberTrucked		582,923	37,416	2,729	5,448	27,300	655,816
Total Sum Of TotalProjectMort		61,697	11,401	985	809	3,421	78,313

