



Fish Passage Center

Weekly Report #00 - 23

August 11, 2000

2501 SW First Ave., Suite 230
 Portland, OR 97201-4752
 phone: 503/230-4582
 fax: 503/230-7559

SUMMARY OF EVENTS:

Water Supply: Precipitation for the period of August 1-8 was below normal for the entire basin. The Upper Snake with 77% of average and Snake River Plain with 55% of average. Precipitation for Columbia above Coulee was 22% of average, for Snake River above Ice Harbor was 63% of average and for Columbia at The Dalles was 30% of average.

Reservoir Operations: The reservoirs were operated for summer flow augmentation and for power generation during the week of August 4-10. The Fishery Agencies requested drafting Grand Coulee to 1282 ft in order to improve flows at McNary for migrating juvenile fall chinook in lower Columbia. The Bonneville Power Administration chose to shape available fish flow augmentation volume to meet load and potential reliability requirements for California utilities rather than implementing the agencies shaping request. The agencies request was to shape fish migration flows to accelerate passage in the first part of August when substantial numbers of fish were passing through the lower Columbia..

A summary of actual elevations on August 10, and full pool elevations is shown in the following Table:

Project	Actual August 10 Elevation in [ft]	Actual Elevation on June 30 & Full Pool Elevation in [ft]
<i>Libby</i>	2436.16	2418.1/2459.0
<i>Hungry Horse</i>	3546.69	3558.3/3560.0
<i>Grand Coulee</i>	1284.2	1279.0/1290.0
<i>Brownlee</i>	2043.09*	2072.06/2077.0
<i>Dworshak</i>	1551.04	1598.6/1600.0

* as of August 9

Libby reservoir continues to refill at a slower pace than previously anticipated, with inflows in the range of 2.5 kcfs-13.9 kcfs. Outflows were maintained on the level of 8 Kcfs, for the bull trout operation, for the period of August 4-10.

Hungry Horse continued drafting for summer flow augmentation at rates in the range of 4.39 kcfs-5.22 kcfs for the period of August 4-10. Outflow rates are decreased in anticipation of decreased inflows in the subbasin and projected operation to draft to elevation of 3540 ft by the end of August. Inflows fluctuated in the range of 0.20 kcfs-2.25 kcfs for the same period of August 4-10.

Grand Coulee was operated with outflows in the range of 98.8 kcfs and 149.1 kcfs with elevations fluctuating between 1284.2 ft and 1285.5 ft for the period of August 4-10. Currently, only the right powerhouse with 12 power generating units is in service and the left powerhouse remains in repair mode. Inflows fluctuated from 122.4 kcfs on August 4 to 130.4 kcfs on August 5 for the period of August 4-10.

Brownlee finished drafting for summer salmon flow augmentation. The reservoir was operated at elevations between 2042.79 ft and 2043.10 ft for the period of August 4-9. Inflows to reservoir fluctuated between 9.59 kcfs to 11.02 kcfs for the period of August 4-9. Outflow from

Hells Canyon Dam for the past week of August 4-10, fluctuated between 6.71 kcfs and 7.92 kcfs.

Dworshak continued drafting for flow augmentation. The outflow was held in the range of 12.8 kcfs-13.2 kcfs in order not to exceed total dissolved gas limit. Inflows to the reservoir fluctuated from 0.6 kcfs to 1.7 kcfs for the period of August 4-10.

Upper Snake reservoirs: As of August 10, the Upper Snake system was further drafted to 57% of capacity. American Falls was drafted to 37% of capacity, while Palisades and Jackson Lake were at 53% and 90% of capacity, respectively. The irrigation demands in the system continued to be high and current flow at diversions at Palisades and Minidoka are 8.97 kcfs and 9.7 kcfs, respectively. Salmon flow augmentation from American Falls continued at a rate of 1.3 kcfs higher than base flows of 0.2 kcfs at Milner, with 1.5 kcfs as total outflow.

Boise and Payette River Basins: As of August 10, the Boise River system was at 71% of capacity. Salmon augmentation continued with flows of .275 kcfs above base flows. As of August 10, the Payette River system was at 79% of capacity. Salmon augmentation continued at rates of about 0.6 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 4-10. Fishery Agencies requested drafting of Grand Coulee to 1282 ft on August 6 in attempt to increase flows to 175 kcfs at McNary for the week of July 31-August 6 for the fall chinook juvenile migration. Although there was initial agreement to implement the request, the operating agencies did not finally implement it. Failure to draft Grand Coulee to desired elevation resulted in decreased flows at McNary for the week of August 4-10. The daily average flow for the Lower Granite for August 4-10 period continued to decrease compared with the flow from 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 4-10	July 28-August 3
<i>Priest Rapids</i>	134.2 (107.8-163.2)	133.06 (114.3-157.9)
<i>McNary</i>	157.5 (139.0-191.0)	161.8 (138.1-186.2)
<i>Lower Granite</i>	27.3 (25.9-29.4)	29.6 (22.7-36.4)
<i>Bonneville</i>	162.5 (129.2-177.3)	171.2 (142.3-190.3)

Spill: Outflow from Dworshak Dam continued for summer flow augmentation and temperature regulation. The outflow exceeded hydraulic capacity and spill averaged 2.9 Kcfs over the past week. No dissolved gas waiver has been issued and, consequently, outflow is limited to the level that does not exceed the total dissolved gas standard. The Biological Opinion summer spill program is being implemented at the Lower Snake projects and only calls for spill at Ice Harbor Dam, as transportation is maximized at the collector projects. Spill at Ice Harbor Dam was modified because of concerns regarding predation at presently occurring low fish spill levels (4-11 Kcfs). The fishery agency recommendation was to flat load the project, operate one unit and spill the remainder of the river flow. BPA was not interested in pursuing this option because it would necessitate operating the other lower Snake River projects similarly, reducing power peaking capabilities. The project is consequently being operated to spill only at levels near 15 to 17 Kcfs. To accomplish this goal, the project will pond until there is enough water to spill 15 to 17 Kcfs for two hours. This operation is being implemented for several days and will be further evaluated.

Biological Opinion spill as modified by the NMFS and Action Agencies' Spill Plan continues at the lower Columbia River projects (John Day, The Dalles and Bonneville dams) through August 31. BPA declared a system emergency at about 2 p.m. August 9 as a result of fire related damage to the transmission lines leading from the Colstrip coal-fired plant in Montana. Fish spill at The Dalles was reduced to 30% of instantaneous flow for three hours.

Levels of total dissolved gas were below, or near, the allowable TDGS levels at all locations measured. Monitoring for signs of gas bubble trauma (GBT) on fish collected through the Smolt Monitoring Program showed only a few fish with signs of GBT in fins.

Smolt Monitoring Program. Snake River basin: Subyearling chinook passage indices at Lower Granite Dam jumped above 4,000 fish on two days this week, pushing the weekly average up 17% over last week's level. The weekly average passage index for subyearling chinook was unchanged at Little Goose Dam and 9% lower at Lower Monumental Dam than last week's average. *Mid-Columbia River:* Subyearling chinook passage indices at Rock Island Dam dropped an average of 35% this week from last week's level. *Lower Columbia River:* Subyearling chinook passage at McNary Dam dropped an average of 40% this week from last week's level, and averaged approximately 40,000 fish per day. Subyearling chinook passage indices at John Day Dam dropped an average of 45% this week from last week's level, and averaged less than 10,000 fish per day. Higher passage indices at Bonneville Dam occurred this week on days when increased flow went through Powerhouse 2, where the sampling facility is located.

Adult fish passage – At Bonneville Dam, counts of fall chinook steadily increased through the week with daily counts ranging between 354 on August 4 to 1100 per day by week's end. The cumulative count through August 10 is 5,825, about 180% of the 1999 and 10-year average to date. The fall chinook jack count is presently 2-3 times greater than the 1999 and 10-year average so the trend of higher jack counts appears to be continuing into the fall chinook run. The fall chinook passage counts at The Dalles Dam began a slow increase late during the week with the high daily count of 387.

At McNary Dam, daily counts of adult summer chinook ranged from 90 to 300 per day for the week with the cumulative count through August 8 of 20,776. McNary Dam switched to counting fall chinook beginning August 9. The cumulative count of adult summer chinook at Ice Harbor Dam was 4,234 with the Mid-Columbia River count at Priest Rapids about 21,713 through August 10.

Sockeye counts at the Mid-Columbia projects were greater than 89,000 at Priest Rapids, 76,000 at Rock Island and 59,000 at Wells Dam. About 77% of the adult sockeye are destined for the Okanogan River Basin (Lake Osoyoos) with the remaining 23% destined for the Wenatchee River Basin.

Update from COE: Redfish Lake Trap and Sawtooth Hatchery Sockeye Update. Sixty-two sockeye (7 unclipped) made it to the Redfish Lake Creek Trap and 63 (all clipped) made it to the Sawtooth Hatchery Weir as of August 6. A total of 311 adult sockeye were counted at Lower Granite Dam through July 29. Note: this count includes nighttime video counts. Seventeen were unclipped and the remainder were clipped fish from the Captive Brood Enhancement Program. These sockeye are now arriving at the trapping facility in the upper Salmon River (See above) and should continue returning to the upper Salmon River basin through this month and early September.

At Bonneville Dam, the daily steelhead counts dropped through the week, but were still near 3000 per day through the week ending August 10. The cumulative count for the project is 126,996, about 1.4 times and 1.5 times greater than the respective 1999 and 10-year average. Daily counts at Bonneville Dam remained greater than double the daily counts at The Dalles Dam with greater than 80,000-steelhead differential between the two projects. At Bonneville Dam about 38% of the passage have been recorded as "unclipped" steelhead or "wild". The passage of steelhead into the Snake River averaged about 300 per day at Ice Harbor with the cumulative count 11,523. Of this total, about 32% of the Ice Harbor count were unclipped or "wild". The passage of steelhead into the Mid-Columbia projects through the past week had counts ranging near 100 per day at Priest Rapids Dam with the cumulative count now 3,348 and upstream at Rock Island, 2,148.

Coho salmon are just beginning to arrive at Bonneville Dam (37 total), but should continue to increase through the month.

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.

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
07/28/00	119.3	0.0	119.9	0.0	121.5	7.8	122.0	12.6	123.8	20.3	124.2	39.8	124.1	62.0
07/29/00	96.5	0.0	101.8	0.0	105.5	8.0	107.4	11.6	108.8	20.3	115.2	36.8	114.3	57.9
07/30/00	113.5	0.0	114.5	0.0	115.7	7.4	118.3	6.6	117.3	20.0	125.3	40.1	120.4	59.7
07/31/00	135.1	0.0	133.9	0.0	136.1	8.1	138.9	6.7	137.1	20.3	149.5	46.4	155.1	77.9
08/01/00	115.7	0.0	125.6	0.0	132.3	8.0	136.0	2.6	139.3	20.3	153.3	46.2	157.9	80.6
08/02/00	119.5	0.0	121.9	0.0	123.9	8.0	121.5	11.9	121.0	20.0	121.8	36.7	125.5	63.4
08/03/00	119.0	0.0	119.9	0.0	122.6	7.6	126.1	10.0	126.9	20.3	135.1	39.6	134.1	68.8
08/04/00	124.6	0.0	128.8	0.0	129.4	8.0	128.3	9.6	127.7	20.3	128.7	35.9	128.6	64.6
08/05/00	98.8	0.0	104.0	0.0	108.1	7.1	111.3	9.4	113.5	20.3	123.1	35.0	120.0	60.8
08/06/00	101.6	0.0	100.4	0.0	102.6	6.9	102.9	10.0	101.7	19.8	107.7	30.1	107.8	54.7
08/07/00	118.9	0.0	127.2	0.0	126.5	7.7	125.9	9.1	126.3	20.3	128.3	34.1	127.7	64.6
08/08/00	124.8	0.0	120.8	0.0	125.1	7.7	125.8	2.9	125.1	20.4	134.1	34.7	133.0	66.1
08/09/00	145.3	0.0	147.0	0.0	148.2	8.8	149.4	13.8	147.8	20.2	153.7	39.8	159.3	79.2
08/10/00	149.1	0.0	152.9	0.0	153.5	9.8	154.1	14.2	154.7	20.4	161.5	42.8	163.2	80.2

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

Date	Dworshak		Brownlee Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
07/28/00	12.8	3.0	9.5	8.7	36.4	0.0	37.4	0.0	39.2	0.0	42.5	32.8
07/29/00	12.9	3.1	9.6	8.7	30.4	0.0	30.2	0.0	31.4	0.0	33.3	25.9
07/30/00	13.2	3.3	9.4	8.9	22.7	0.0	21.8	0.0	20.5	0.0	19.6	12.8
07/31/00	13.1	3.1	10.3	8.9	30.2	0.0	32.8	0.0	34.0	0.0	37.0	29.8
08/01/00	12.8	2.9	9.4	7.1	29.4	0.0	28.5	0.0	30.6	0.0	32.5	24.9
08/02/00	12.9	2.9	10.0	6.8	30.5	0.0	31.8	0.0	31.4	0.0	34.1	26.0
08/03/00	12.9	2.9	10.3	6.8	27.7	0.0	29.3	0.0	30.4	0.0	33.0	26.2
08/04/00	12.9	2.9	9.7	6.8	26.4	0.0	26.9	0.0	27.4	0.0	30.0	22.6
08/05/00	12.8	2.8	9.7	6.7	29.4	0.0	28.3	0.0	27.8	0.0	28.3	21.7
08/06/00	12.8	2.8	9.7	7.4	27.4	0.0	29.1	0.0	30.3	0.0	31.6	24.7
08/07/00	12.9	2.8	9.6	6.9	26.8	0.0	27.2	0.0	26.5	0.0	26.5	19.2
08/08/00	13.1	3.0	11.0	6.8	26.3	0.0	27.3	0.0	29.5	0.0	35.9	29.1
08/09/00	13.1	3.1	---	---	25.9	0.0	27.0	0.0	27.6	0.0	27.8	20.3
08/10/00	13.2	3.1	---	---	28.7	0.0	27.9	0.0	28.0	0.0	30.4	23.3

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		
07/28/00	154.9	0.0	165.2	43.8	160.5	63.5	164.0	98.5	48.8	6.3
07/29/00	154.6	0.0	156.1	43.2	159.7	63.6	181.3	98.6	66.8	5.5
07/30/00	138.1	0.0	137.6	36.8	131.7	52.9	142.3	91.2	36.0	4.7
07/31/00	186.2	14.3	169.3	36.0	164.0	64.0	167.7	95.0	52.6	9.7
08/01/00	169.8	0.0	162.4	39.4	162.5	64.8	173.4	95.0	52.7	15.3
08/02/00	173.6	14.1	181.2	48.0	175.9	68.5	179.4	96.0	51.1	22.4
08/03/00	155.5	0.0	178.3	76.0	177.5	70.4	190.3	82.3	67.7	31.0
08/04/00	153.1	0.0	154.1	64.9	152.3	60.8	177.3	84.5	61.3	22.3
08/05/00	139.0	0.0	142.7	59.9	138.0	55.1	152.3	82.9	46.4	13.9
08/06/00	143.8	0.0	133.1	39.5	129.0	52.0	129.2	87.5	27.3	5.1
08/07/00	155.8	0.0	156.6	45.8	156.0	60.1	166.0	113.0	38.5	5.3
08/08/00	170.0	8.5	173.8	50.2	166.6	66.2	176.2	119.3	42.2	5.5
08/09/00	150.1	0.0	151.0	67.3	153.3	58.9	170.2	88.7	51.5	20.8
08/10/00	191.0	36.1	177.2	74.2	172.2	66.8	166.2	88.7	52.9	15.4

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

Site	Date	Species	Number of 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
McNary Dam													
	08/03/00	Subyearling Chinook	100	12	0	0.00%	0.00%	0	0	0	0	11	1
	08/07/00	Subyearling Chinook	100	4	0	0.00%	0.00%	0	0	0	0	4	1
	08/10/00	Subyearling Chinook	100	3	0	0.00%	0.00%	0	0	0	0	3	1
Bonneville Dam													
	08/01/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	08/03/00	Subyearling Chinook	100	1	0	0.00%	0.00%	0	0	0	0	1	1
	08/08/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	08/10/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
Rock Island Dam													
	08/03/00	Subyearling Chinook	100	1	1	1.00%	0.00%	1	0	0	0	0	0
	08/07/00	Subyearling Chinook	69	3	3	4.34%	0.00%	3	0	0	0	0	0
	08/10/00	Subyearling Chinook	80	2	2	2.50%	0.00%	2	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)
07/28/00	---	---	---	---	56	12	4	0	0	0	0
07/29/00	---	---	---	---	32	12	12	0	100	167	0
07/30/00	---	---	---	---	10	0	8	0	0	62	0
07/31/00	---	---	---	---	5	0	0	1	0	19	0
08/01/00	---	---	---	---	20	0	9	0	0	60	0
08/02/00	---	---	---	---	25	10	3	0	0	0	0
08/03/00	---	---	---	---	85	5	2	0	0	0	0
08/04/00	---	---	---	---	54	12	7	0	0	0	0
08/05/00	---	---	---	---	66	5	0	1	0	0	0
08/06/00	---	---	---	---	30	5	1	0	0	0	0
08/07/00	---	---	---	---	42	5	9	0	0	0	0
08/08/00	---	---	---	---	24	4	2	0	30	0	0
08/09/00	---	---	---	---	6	4	2	0	0	0	0
08/10/00	---	---	---	---	24	0	4	2	0	0	0
Total:	0	0	0	0	479	74	63	4	130	308	0
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	34	5	5	0	9	22	0

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)
07/28/00	---	---	---	---	2,204	5,262	228	184	84,000	6,178	4,163
07/29/00	---	---	---	---	3,292	1,717	296	199	75,200	5,276	547
07/30/00	---	---	---	---	2,470	1,240	152	212	77,400	6,871	346
07/31/00	---	---	---	---	2,055	892	368	192	42,600	5,998	0
08/01/00	---	---	---	---	2,805	1,415	363	262	51,899	21,296	3,098
08/02/00	---	---	---	---	2,495	1,526	387	339	72,225	27,613	4,633
08/03/00	---	---	---	---	3,285	2,083	405	282	67,887	47,381	5,799
08/04/00	---	---	---	---	4,328	3,570	341	223	57,600	29,829	3,689
08/05/00	---	---	---	---	2,898	2,436	273	216	37,400	7,299	6,708
08/06/00	---	---	---	---	3,120	1,928	272	167	28,950	3,268	9,107
08/07/00	---	---	---	---	4,038	1,790	350	137	23,450	3,601	1,739
08/08/00	---	---	---	---	2,544	1,482	251	110	34,300	4,406	1,494
08/09/00	---	---	---	---	2,538	1,522	265	103	40,981	14,379	312
08/10/00	---	---	---	---	2,364	1,309	251	129	59,150	4,034	1,605
Total:	0	0	0	0	40,436	28,172	4,202	2,755	753,042	187,429	43,240
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	2,888	2,012	300	197	53,789	13,388	3,089

* 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)
07/28/00	---	---	---	---	4	210	32	0	100	0	0
07/29/00	---	---	---	---	56	66	12	0	300	21	0
07/30/00	---	---	---	---	20	42	52	0	0	0	0
07/31/00	---	---	---	---	25	55	20	0	100	57	0
08/01/00	---	---	---	---	5	40	29	0	0	0	0
08/02/00	---	---	---	---	5	25	30	0	0	0	0
08/03/00	---	---	---	---	0	28	22	0	0	70	52
08/04/00	---	---	---	---	0	40	27	0	0	0	25
08/05/00	---	---	---	---	24	60	30	0	0	0	0
08/06/00	---	---	---	---	12	10	22	0	50	52	0
08/07/00	---	---	---	---	18	30	25	0	0	22	0
08/08/00	---	---	---	---	6	4	21	0	30	17	0
08/09/00	---	---	---	---	6	8	22	0	0	0	0
08/10/00	---	---	---	---	0	27	27	0	50	0	0
Total:	0	0	0	0	181	645	371	0	630	239	77
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	13	46	27	0	45	17	6

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)
07/28/00	---	---	---	---	144	146	4	0	0	0	0
07/29/00	---	---	---	---	244	18	32	1	0	0	0
07/30/00	---	---	---	---	245	42	16	0	0	0	0
07/31/00	---	---	---	---	125	30	48	1	0	19	0
08/01/00	---	---	---	---	135	50	73	0	0	20	0
08/02/00	---	---	---	---	125	20	76	0	0	0	0
08/03/00	---	---	---	---	135	32	89	2	0	0	0
08/04/00	---	---	---	---	354	41	133	0	0	0	0
08/05/00	---	---	---	---	156	75	83	0	0	0	0
08/06/00	---	---	---	---	204	15	34	0	0	0	0
08/07/00	---	---	---	---	294	40	34	0	0	0	0
08/08/00	---	---	---	---	252	12	26	0	30	0	0
08/09/00	---	---	---	---	156	12	14	0	0	0	0
08/10/00	---	---	---	---	222	27	22	0	0	0	0
Total:	0	0	0	0	2,791	560	684	4	30	39	0
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	199	40	49	0	2	3	0

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)
07/28/00	---	---	---	---	4	0	0	10	900	0	0
07/29/00	---	---	---	---	4	0	0	9	1,800	42	0
07/30/00	---	---	---	---	0	0	0	9	1,400	103	0
07/31/00	---	---	---	---	5	0	0	4	1,000	19	0
08/01/00	---	---	---	---	0	0	0	5	1,060	100	0
08/02/00	---	---	---	---	15	0	0	4	1,050	331	45
08/03/00	---	---	---	---	5	12	0	8	492	704	0
08/04/00	---	---	---	---	0	4	0	4	1,100	1,041	0
08/05/00	---	---	---	---	0	5	0	3	300	103	30
08/06/00	---	---	---	---	0	0	0	4	400	0	0
08/07/00	---	---	---	---	0	0	0	7	500	22	0
08/08/00	---	---	---	---	0	4	1	0	720	29	0
08/09/00	---	---	---	---	6	0	0	1	693	157	0
08/10/00	---	---	---	---	6	3	0	2	550	100	0
Total:	0	0	0	0	45	28	1	70	11,965	2,751	75
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	3	2	0	5	855	197	5

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 08/10

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	5,825	1,339	3,174	520	3,185	389
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	2,064	743	1,420	419	1,211	196
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	751	427	616	108	404	75
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	333	98	223	44	216	44
IHR	38,776	9,389	5,351	2,657	15,091	720	4,234	3,182	3,892	1,311	4,459	460	0	0	0	0	0	0
LMN	35,520	10,336	3,924	2,726	14,041	753	4,650	3,279	3,346	1,339	4,176	465	0	0	0	0	0	0
LGS	34,330	10,152	3,445	2,690	**	**	4,125	3,761	3,235	1,572	**	**	0	0	0	0	**	**
LWG	33,822	10,318	3,296	2,507	12,180	669	3,891	3,715	3,213	1,561	4,194	490	0	0	0	0	0	0
PRD	20,098	1,085	4,139	761	8,052	194	21,713	2,374	20,336	504	13,729	565	0	0	0	0	0	0
RIS	14,400	1,429	3,309	915	6,567	218	19,097	12,370	16,000	1,178	10,859	790	0	0	0	0	0	0
RRH	5,336	392	1,389	233	1,501	54	12,577	5,288	8,301	469	4,455	314	0	0	0	0	0	0
WEL	2,143	457	141	199	752	53	5,335	2,358	5,419	316	2,577	252	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	37	0	7	0	29	10	93,143	17,861	42,071	126,996	88,428	84,256	48,614
TDA	0	0	0	0	2	0	73,316	13,704	32,840	46,735	47,658	32,537	21,903
JDA	1	0	0	0	0	0	88,192	14,792	34,221	36,105	35,591	21,823	13,229
MCN	0	0	0	1	0	0	58,234	11,786	35,695	25,165	16,364	17,759	9,247
IHR	0	0	0	0	0	0	212	6	7	11,523	8,088	8,913	3,690
LMN	0	0	0	0	0	0	289	12	7	8,728	5,079	7,260	3,057
LGS	0	0	0	0	**	**	295	16	**	5,584	3,530	**	2,051
LWG	0	0	0	0	0	0	273	14	6	6,175	5,061	7,143	2,365
PRD	37	5	36	4	5	0	89,366	16,231	40,287	3,348	1,269	1,782	***
RIS	12	0	0	0	0	0	76,403	16,147	35,151	2,148	279	11,432	667
RRH	62	0	22	0	2	0	57,166	13,119	17,912	1218	396	686	205
WEL	0	0	0	0	0	0	59,422	11,413	16,478	625	244	494	119

Note:JDA, LMN, LGS, WEL are through 08/09/00

Note:RRH, RIS are through 08/07/00

Note: 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

07/28/00 TO 08/10/00

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum Of NumberCollected	40,434	479	181	45	2,791	43,930
	Sum Of NumberBarged	0	0	0	0	0	0
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	40,175	472	181	44	2,781	43,653
	Sum Of TotalProjectMort	259	7	0	1	10	277
LGS	Sum Of NumberCollected	28,172	74	645	28	560	29,479
	Sum Of NumberBarged	0	0	0	0	0	0
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	27,914	66	632	25	551	29,188
	Sum Of TotalProjectMort	258	8	13	3	9	291
LMN	Sum Of NumberCollected	4,202	63	371	1	684	5,321
	Sum Of NumberBarged	0	0	0	0	0	0
	Sum Of NumberBypassed	0	0	50	0	575	625
	Sum Of NumberTrucked	4,136	63	314	1	102	4,616
	Sum Of TotalProjectMort	66	0	7	0	7	80
MCN	Sum Of NumberCollected	740,550	130	630	11,795	30	753,135
	Sum Of NumberBarged	703,839	99	833	9,926	0	714,697
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	130,108	16	1	1,893	24	132,042
	Sum Of TotalProjectMort	14,964	15	192	469	6	15,646
Total Sum Of NumberCollected		813,358	746	1,827	11,869	4,065	831,865
Total Sum Of NumberBarged		703,839	99	833	9,926	0	714,697
Total Sum Of NumberBypassed		0	0	50	0	575	625
Total Sum Of NumberTrucked		202,333	617	1,128	1,963	3,458	209,499
Total Sum Of TotalProjectMort		15,547	30	212	473	32	16,294

YTD Transportation Summary

TO: 08/10/00

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum Of NumberCollected	590,748	2,449,789	121,805	5,973	5,037,692	8,206,007
	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	55,043	6,835	313	231	15,890	78,312
	Sum Of TotalProjectMort	2,564	3,302	47	29	725	6,667
LGS	Sum Of NumberCollected	307,643	1,357,103	41,395	3,417	1,054,898	2,764,456
	Sum Of NumberBarged	282,653	1,348,003	40,149	3,284	1,045,239	2,719,328
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	46,213	4,444	1,218	118	8,618	60,611
	Sum Of TotalProjectMort	2,116	5,297	87	35	1,435	8,970
LMN	Sum Of NumberCollected	175,387	608,513	18,892	4,259	765,540	1,572,591
	Sum Of NumberBarged	146,077	556,120	18,198	4,239	761,544	1,486,178
	Sum Of NumberBypassed	19,839	24,873	50	0	1,496	46,258
	Sum Of NumberTrucked	8,571	25,956	623	17	1,767	36,934
	Sum Of TotalProjectMort	900	1,564	21	3	734	3,222
MCN	Sum Of NumberCollected	8,744,290	1,164,638	168,701	90,540	365,687	10,533,856
	Sum Of NumberBarged	7,902,533	25,995	26,993	28,657	10,650	7,994,828
	Sum Of NumberBypassed	659,664	1,137,415	140,936	59,322	354,501	2,351,838
	Sum Of NumberTrucked	130,108	16	1	1,893	24	132,042
	Sum Of TotalProjectMort	51,986	1,211	770	668	512	55,147
Total Sum Of NumberCollected		9,818,068	5,580,043	350,793	104,189	7,223,817	23,076,910
Total Sum Of NumberBarged		8,864,358	4,254,327	206,385	41,877	6,612,740	19,979,687
Total Sum Of NumberBypassed		679,549	1,277,732	141,386	59,338	582,267	2,740,272
Total Sum Of NumberTrucked		239,935	37,251	2,155	2,259	26,299	307,899
Total Sum Of TotalProjectMort		57,566	11,374	925	735	3,406	74,006

