



Fish Passage Center

# Weekly Report #00 - 21

July 28, 2000

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**SUMMARY OF EVENTS:**

**Water Supply:** During July 1 through 25, the highest precipitation was recorded at: Okanogan with 130% of average, Upper John Day with 109% of average and Columbia above Castlegar with 107% of average. The lowest precipitation was recorded at Salmon/Boise/Payette with 26% of average, Burnt/Grande Ronde with 41% of average, South East Washington with 42% of average and Clearwater with 46% of average. Precipitation at Columbia above Coulee was 84% of average, at Snake River above Ice Harbor was 56% of average and at Columbia above The Dalles was 84% of average.

**Reservoir Operations:** Reservoirs were operated for summer flow augmentation or continued refilling toward full pool elevations, during the week of July 21 through July 27. A summary of actual elevations on July 27, and full pool elevations is shown in the following Table:

Project	Actual July 27 Elevation in [ft]	Actual Elevation on June 30 & Full Pool Elevation in [ft]
<i>Libby</i>	2434.47	2418.1/2459.0
<i>Hungry Horse</i>	3551.68	3558.3/3560.0
<i>Grand Coulee</i>	1284.3	1279.0/1290.0
<i>Brownlee</i>	2044.82*	2072.06/2077.0
<i>Dworshak</i>	1572.15	1598.6/1600.0

\* as of July 26

*Libby* reservoir did not refill by June 30 as required by 95 Biological Opinion and 1998 Supplement Biological Opinion. The most recent decrease of July Final Runoff Volume Forecast resulted in inability of COE to refill the reservoir after the surgeon operation was finished. Outflows were maintained on the level of 8 Kcfs, for the period of July 21-27. The reservoir continues with refill at slower pace than previously anticipated, at rates of 14 kcfs-17.8 kcfs.

*Hungry Horse* continued drafting for summer flow augmentation at rates in the range of 5.20 kcfs-5.83 kcfs for the period of July 21-27. Inflows were fluctuating in the range of 0.70 kcfs-2.8 kcfs for the same period of July 21-27. Grand Coulee was operated to support flows at *Grand Coulee* during July 21-27, from elevation of 1283.3 ft on July 21 to elevation 1284.3 ft on July 27. Inflows fluctuated from 95.2 kcfs on July 21 to 135.3 kcfs on July 26.

*Brownlee* continued drafting for summer salmon flow augmentation. Inflows to reservoir fluctuated between 9.59 kcfs to 11.17 kcfs for the period of July 21-26. Outflow from Hells Canyon Dam for the past week fluctuated between 11.91 kcfs on July 22 to 20.16 kcfs on July 24.

*Dworshak* continued drafting for flow augmentation since July 1. The outflow was held in the range of 12.5 kcfs-12.8 kcfs in order not to exceed total dissolved gas limit. Inflows in the reservoir fluctuated in the range of 1.5 kcfs-1.9 kcfs for the period of July 21-27.

*Upper Snake reservoirs:* As of July 27, the Upper Snake system was drafted to 66% of capacity. American Falls was drafted to 49% of capacity, while Palisades and Jackson Lake were at 64% and 94% of capacity, respectively. The irrigation demands in the system continued to be high and current flow at diversions at Palisades and Minidoka are 10 kcfs and 10.3 kcfs respectively. Salmon flow augmentation from American Falls continued at rate of 1.5 Kcfs at Milner, which is the lowest point in the Upper Snake system.

*Boise and Payette River Basins:* As of July 27, the Boise River system was at 80% of capacity. Salmon augmentation continued with flows of 660

-680 cfs. As of July 21, the Payette River system was at 86% of capacity. Salmon augmentation continued at rates of 860-880 cfs.

**Streamflow:** The 1995 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 July 14-July 27. The average flows for the major run-of-river projects for July 14-July 27 period were decreasing compared with the flows 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 discharge [kcf]	
	July 21-27	July 14-20
<i>Priest Rapids</i>	120.3 (86.5-131.0)	125.7 (88.7-141.8)
<i>McNary</i>	159.9 (126.9-181.1)	167.1 (132.5-193.1)
<i>Lower Granite</i>	36.95 (35.5-38.7)	40.5 (37.9-43.3)
<i>Bonneville</i>	169.9 (148.1-192.4)	176.7 (155.6-199.6)

**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.

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. The summer spill program is being implemented at the Mid Columbia projects.

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 continued to decline this week at all Snake River dams with an average 57% drop from last week's level at Lower Granite Dam, 27% drop at Little Goose Dam, and 11% drop at Lower Monumental Dam. *Mid-Columbia River:* This week's subyearling chinook passage indices at Rock Island Dam averaged 61% higher than last week's level. *Lower Columbia River:* Subyearling chinook passage at McNary Dam increased an average of 36% this week from last week's level. Increased movement of subyearling chinook out of the Mid-Columbia River reach appears to be contributing to this week's higher passage indices at McNary Dam. Subyearling chinook passage indices at John Day Dam declined an average of 55% this week from last week's level. But with increased passage of subyearling chinook into the lower Columbia River this week, the John Day Dam subyearling chinook passage indices are expected to rise again later. Passage indices at Bonneville Dam remain exceedingly low due to little flow passing through Powerhouse 2 where the sampling facility is located.

**Adult fish passage** – At Bonneville Dam, numbers of adult summer chinook ranged between 246 and 452. The cumulative count for summer chinook through July 26 was 28,646. This total was 117% and 147% of the respective 1999 and 10-year average. Summer chinook counts at The Dalles averaged 244 per day through the week with the cumulative count 22,465 through July 26 (missing 7/21). At McNary Dam, daily counts of adult summer chinook averaged 253 per day for the week with the cumulative count through July 26 of 18,299. The cumulative count of adult summer chinook at Ice Harbor Dam was near 4,100 with the Mid-Columbia River count at Priest Rapids about 16,900 through July 25. The combined adult summer chinook counts from Ice Harbor and Priest Rapids exceed the total McNary Dam, summer chinook count to date.

Based on sampling at the Bonneville adult trapping site, about 4% of the summer chinook and sockeye had marine mammal wounds through the

July 22 sampling date. During the past two sampling weeks, approximately 70% of the summer chinook had adipose clips. About 95% of the sockeye sampled were 4-year old fish, i.e., 2-ocean age fish averaging 50 cm in length. The jack (1-ocean) summer chinook had mean average length of 53.7 cm; 2-ocean age chinook at 73.9 cm; and 3-ocean age 85 cm. Information was supplied by CRITFC.

The number of jack, summer chinook salmon counted at Bonneville Dam surpassed 12,500 for the season. This total compares to 3,800 in 1999 and 2,400 for the 10-year average. The 2000 count of jack summer chinook into the Snake River topped 3,000 and was the highest total of jack "summers" dating back to the early 1970s and late 1960s when Ice Harbor began counting.

Through July 26, the Bonneville Dam count of sockeye exceeded 92,900. Year 2000 count was 5.2 times and 2.2 times the respective 1999 and 10-year average. Sockeye are passing the Mid-Columbia projects with greater than 88,000 counted at Priest Rapids, 75,000 at Rock Island and 56,000 at Wells Dam. So far, about 75% of the adult sockeye are destined for the Okanogan River Basin (Lake Osoyoos) with the remaining 25% destined for the Wenatchee River Basin. About 290 adult sockeye have been counted at Lower Granite Dam with only 16 of the 290 not having an adipose clip. Most of the sockeye have been marked (clipped) and should be part of the Captive Brood Program to restore sockeye to the Salmon River basin.

At Bonneville Dam, the daily steelhead counts averaged greater than 3,000 through the week. The cumulative count for the project now exceeds 75,000, about 1.9 and 1.8 times greater than the respective 1999 and 10-year average. The Bonneville Dam counts remained well above (about double) The Dalles counts indicating that a portion of the steelhead will be holding in the Bonneville pool tributaries. The COE revised the steelhead counts at The Dalles Dam and should have proper totals of "wild" steelhead counts. At Bonneville Dam about 42.3% of the passage have been recorded as "unclipped" steelhead or "wild". The passage of steelhead into the Snake River averaged about 310 per day at Ice Harbor with the cumulative count

6,945. Of this total, about 31% 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 between 40-100 per day at Priest Rapids Dam with the cumulative count now 1,374

**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.

**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
07/14/00	121.6	0.1	126.7	0.0	135.3	8.5	136.9	16.9	139.3	9.3	140.3	49.9	135.9	67.7
07/15/00	98.4	0.1	100.9	0.0	104.9	8.0	106.1	12.9	111.1	9.3	120.1	43.2	117.1	58.1
07/16/00	80.3	0.1	80.6	0.0	88.3	7.5	110.0	0.0	92.3	9.3	95.5	34.6	88.7	44.6
07/17/00	115.9	0.1	115.6	0.0	120.9	8.5	127.0	0.0	124.4	9.3	130.6	45.9	123.0	61.0
07/18/00	127.7	0.1	129.9	0.0	133.7	8.4	130.7	1.4	129.7	13.6	142.8	48.6	141.8	71.8
07/19/00	120.1	0.1	126.9	0.0	134.6	8.1	139.2	11.9	140.8	20.3	141.0	48.2	139.3	71.1
07/20/00	128.8	0.1	129.7	0.0	134.6	8.2	133.3	11.0	135.1	20.4	147.2	50.4	134.3	70.1
07/21/00	105.9	0.1	113.1	0.0	119.3	7.6	128.4	12.6	133.1	20.2	137.9	47.9	130.8	66.1
07/22/00	91.7	0.1	87.8	0.0	89.8	6.4	86.9	11.0	91.3	20.1	107.5	33.9	110.3	55.4
07/23/00	82.2	0.1	80.1	0.0	84.9	6.3	87.5	0.0	91.3	20.3	93.2	29.9	86.5	43.9
07/24/00	111.9	0.1	120.9	0.0	123.6	7.4	122.7	0.0	120.1	20.4	132.3	41.8	131.0	64.2
07/25/00	123.0	0.1	118.9	0.0	124.7	7.7	127.3	2.6	129.1	20.3	134.4	43.5	125.9	63.2
07/26/00	108.5	0.1	115.1	0.0	125.7	7.3	126.1	12.3	127.1	20.4	126.3	40.2	125.2	63.8
07/27/00	117.7	0.1	118.1	0.0	112.0	6.8	117.1	10.0	118.6	20.0	133.6	42.8	132.4	67.7

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

Date	Hells Dworshak		Canyon Brownlee		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
07/14/00	13.0	3.4	10.7	17.8	43.4	0.0	43.3	0.0	43.8	0.0	46.9	39.4
07/15/00	12.4	2.7	10.4	20.0	41.8	0.0	42.3	0.0	44.6	0.0	49.2	39.8
07/16/00	12.6	3.0	9.9	18.5	41.0	0.0	41.9	0.0	42.6	0.0	46.0	34.9
07/17/00	12.7	3.1	10.5	13.8	41.9	0.0	41.2	3.6	43.3	0.0	44.5	36.4
07/18/00	12.5	2.8	10.4	15.2	38.4	0.0	39.6	0.0	39.1	0.0	44.6	34.3
07/19/00	12.4	2.7	10.9	16.1	37.9	0.0	39.2	0.0	38.8	0.0	40.8	32.5
07/20/00	12.5	2.8	10.4	12.0	38.8	0.0	41.8	0.0	41.8	0.0	44.6	37.6
07/21/00	12.5	2.8	10.2	12.0	38.7	0.0	38.1	0.0	37.7	0.0	42.6	32.7
07/22/00	12.5	2.8	10.0	16.3	36.3	0.0	34.9	0.0	34.4	0.0	38.6	31.9
07/23/00	12.5	2.8	10.6	17.6	36.3	0.0	38.4	0.0	35.8	0.0	39.2	32.2
07/24/00	12.6	2.8	9.6	14.9	35.5	0.0	36.0	0.0	35.5	0.0	41.0	33.9
07/25/00	12.6	2.8	11.2	15.0	37.1	0.0	38.7	0.0	40.5	0.0	44.5	37.1
07/26/00	12.8	3.0	---	---	38.0	0.0	38.8	0.0	38.9	0.0	41.0	34.4
07/27/00	12.8	3.0	---	---	36.8	0.0	37.6	0.0	39.4	0.0	41.6	32.9

**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		
07/14/00	193.1	20.7	191.3	49.4	189.5	75.6	199.6	110.9	73.0	5.3
07/15/00	171.3	0.0	180.7	40.1	173.1	67.9	181.6	112.4	53.0	5.8
07/16/00	132.5	0.0	137.8	59.8	138.8	54.1	155.6	84.9	54.8	5.5
07/17/00	165.6	0.0	155.1	68.0	150.0	58.8	164.1	83.7	66.6	3.4
07/18/00	171.7	0.0	178.4	75.3	176.6	68.1	175.4	82.8	76.6	5.6
07/19/00	168.2	0.0	173.6	74.6	170.0	66.2	180.9	81.8	77.4	11.3
07/20/00	167.4	0.0	173.7	74.0	171.3	67.2	180.0	82.4	79.0	7.8
07/21/00	181.1	6.8	180.3	76.1	178.9	70.7	192.4	82.8	87.5	11.7
07/22/00	157.5	7.1	145.0	40.0	140.8	56.9	158.1	101.4	40.9	5.4
07/23/00	126.9	0.0	146.2	39.0	141.8	56.2	148.1	98.8	33.4	5.5
07/24/00	167.4	0.0	167.4	44.5	164.9	65.3	173.8	91.9	66.1	5.4
07/25/00	170.3	0.0	159.7	67.5	157.7	63.2	170.0	81.5	72.7	5.4
07/26/00	159.3	0.0	161.1	68.9	158.4	62.2	169.3	81.4	72.1	5.4
07/27/00	157.0	0.0	165.1	69.2	164.1	64.0	177.8	81.3	77.4	8.6

## 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
<b>McNary Dam</b>													
	07/20/00	Subyearling Chinook	100	3	0	0.00%	0.00%	0	0	0	0	3	1
	07/24/00	Subyearling Chinook	100	3	0	0.00%	0.00%	0	0	0	0	3	1
	07/27/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
<b>Bonneville Dam</b>													
	07/18/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	07/20/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	07/25/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	07/27/00	Subyearling Chinook	100	2	0	0.00%	0.00%	0	0	0	0	2	1
<b>Rock Island Dam</b>													
	07/20/00	Subyearling Chinook	100	1	1	1.00%	0.00%	0	1	0	0	0	0
	07/24/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	07/27/00	Subyearling Chinook	100	2	2	2.00%	0.00%	2	0	0	0	0	0

## Total Dissolved Gas Saturation (%) - Average of 12 Highest Hours, 24 h Average and 24 h High

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	Hungry H. Dnst			Boundary			Grand Coulee			Grand C. Tlwr			Chief Joseph							
	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#				
	Avg	Avg		Avg	Avg	Avg		Avg	Avg	Avg		Avg	Avg	Avg		Avg				
7/14	131	133	134	24	111	113	115	24	113	114	114	24	111	111	112	24	110	111	111	23
7/15	132	135	140	24	110	111	112	21	114	114	127	24	111	111	113	22	109	110	110	23
7/16	137	140	142	24	113	113	114	24	114	114	114	24	111	112	115	24	110	111	112	23
7/17	139	139	140	24	112	112	113	24	114	114	114	24	111	112	113	24	111	112	112	23
7/18	129	139	142	24	111	112	113	24	114	114	115	24	111	112	113	24	112	112	113	23
7/19	105	105	106	24	111	112	112	24	113	114	114	23	111	112	114	24	112	112	112	23
7/20	105	106	106	24	111	112	113	24	113	114	114	24	112	112	114	24	112	112	113	23
7/21	106	106	106	24	111	112	114	24	114	114	114	24	113	113	115	24	112	113	113	23
7/22	106	106	107	24	113	113	114	24	114	114	115	24	113	115	116	24	112	113	113	23
7/23	106	106	106	24	112	113	115	24	113	113	113	24	113	114	116	24	111	112	112	23
7/24	107	108	139	24	114	114	116	23	113	113	113	24	112	113	114	24	112	112	112	23
7/25	106	106	106	24	114	115	116	24	113	114	114	24	113	114	115	24	112	113	113	23
7/26	106	107	107	24	116	117	117	24	113	114	114	23	113	115	117	24	112	113	113	23
7/27	108	109	142	22	116	117	118	20	113	114	121	24	113	114	116	24	111	112	112	21

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	Chief J. Dnst			Wells			Wells Dwnstrm			Rocky Reach			Rocky R. Tlwr							
	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#				
	Avg	Avg		Avg	Avg	Avg		Avg	Avg	Avg		Avg	Avg	Avg						
7/14	110	110	111	23	109	109	110	24	110	111	111	24	109	110	110	23	111	111	112	20
7/15	109	110	111	23	108	109	110	24	109	110	111	24	109	110	110	24	111	111	111	22
7/16	110	111	112	23	109	111	112	24	110	111	111	24	109	109	110	24	110	110	111	23
7/17	111	112	113	23	110	111	111	24	111	112	112	24	109	110	111	20	111	111	111	18
7/18	111	112	113	23	110	111	111	24	111	111	112	24	109	110	110	22	111	111	111	22
7/19	112	112	114	23	111	111	112	23	111	112	113	23	109	110	111	21	111	112	113	19
7/20	112	112	114	23	111	112	113	24	112	113	113	24	110	111	112	23	112	113	114	21
7/21	112	112	113	23	112	112	113	24	112	113	113	24	111	112	113	23	114	114	114	23
7/22	113	114	114	23	112	112	114	22	112	113	113	22	111	111	112	24	113	114	114	24
7/23	112	112	113	23	110	111	111	24	111	111	112	24	109	110	111	23	111	112	112	22
7/24	112	112	113	23	110	111	112	24	111	112	112	24	109	110	111	24	111	111	111	21
7/25	112	113	114	23	111	111	112	23	112	113	114	23	110	111	112	24	112	112	113	24
7/26	113	114	114	23	111	111	112	24	112	112	113	24	111	111	111	20	112	113	113	20
7/27	112	112	114	21	110	111	111	24	111	112	112	24	109	110	111	24	112	113	114	24

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	Rock Island			Rock I. Tlwr			Wanapum			Wanapum Tlwr			Priest Rapids							
	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#				
	Avg	Avg		Avg	Avg	Avg		Avg	Avg	Avg		Avg	Avg	Avg						
7/14	107	107	107	23	113	113	113	22	108	109	109	24	114	115	117	24	112	112	114	24
7/15	106	106	107	24	113	113	114	22	109	111	112	23	113	114	115	24	114	116	119	23
7/16	106	106	106	22	113	113	114	19	112	114	116	24	114	114	115	24	116	117	118	24
7/17	106	106	107	21	---	---	---	0	114	115	117	24	115	115	117	24	115	116	118	24
7/18	106	106	107	24	---	---	---	0	111	111	112	24	114	115	116	21	114	115	116	24
7/19	106	107	107	22	---	---	---	0	111	112	115	24	113	114	115	24	113	114	116	24
7/20	107	107	107	24	---	---	---	0	112	114	116	24	114	115	116	24	114	115	116	24
7/21	108	108	109	22	---	---	---	0	115	117	119	24	114	115	117	24	116	117	120	24
7/22	108	108	109	23	---	---	---	0	113	115	115	24	113	113	115	24	115	116	118	24
7/23	106	107	107	24	---	---	---	0	109	109	110	24	111	112	112	24	112	112	115	24
7/24	106	106	107	12	---	---	---	0	111	113	114	24	113	113	115	24	113	114	116	24
7/25	---	---	---	0	---	---	---	0	112	112	113	8	114	115	116	24	115	115	117	23
7/26	---	---	---	0	---	---	---	0	---	---	---	0	113	113	116	24	114	114	115	24
7/27	105	105	106	16	116	116	120	14	---	---	---	0	---	---	---	0	---	---	---	0

## Total Dissolved Gas Saturation (%) - Average of 12 Highest Hours, 24 h Average and 24 h High

### Total Dissolved Gas Saturation Data at Lower Columbia and Snake River Sites

Date	<u>Priest R. Dnst</u>			<u>Pasco</u>			<u>Dworshak</u>			<u>Clrwrtr-Peck</u>			<u>Anatone</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
7/14	119	119	121	24	111	112	112	24	108	109	110	24	107	109	110	24	99	100	101	24
7/15	118	119	119	24	110	111	112	24	108	108	108	24	107	108	108	24	100	101	102	24
7/16	117	117	118	24	111	112	113	24	109	109	110	24	108	109	109	24	100	101	102	24
7/17	119	120	121	24	111	111	112	24	109	109	111	24	108	109	111	24	100	101	102	24
7/18	120	121	121	24	111	112	113	24	108	108	108	24	107	108	109	24	99	100	101	24
7/19	119	120	121	23	112	112	113	21	108	108	108	24	107	108	109	24	98	98	98	10
7/20	119	120	121	24	112	113	114	24	107	107	107	9	107	108	109	24	---	---	---	0
7/21	120	121	121	24	113	113	114	24	108	108	108	15	107	108	109	24	---	---	---	0
7/22	119	120	122	24	110	112	113	24	107	108	108	24	107	108	109	24	97	98	100	22
7/23	116	116	117	24	108	109	110	24	107	107	107	24	106	107	108	24	98	99	101	24
7/24	117	120	122	24	109	111	111	24	107	107	108	23	107	108	109	24	99	101	102	24
7/25	119	120	121	24	110	112	113	24	107	108	109	24	107	108	109	24	99	101	102	24
7/26	119	120	121	24	110	111	112	23	108	108	108	24	107	108	109	24	99	100	102	24
7/27	---	---	---	0	110	111	111	24	107	108	108	23	107	108	109	24	99	100	101	24

### Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clrwrtr-Lewiston</u>			<u>Lower Granite</u>			<u>L. Granite Tlwr</u>			<u>Little Goose</u>			<u>L. Goose Tlwr</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
7/14	105	107	109	24	105	106	107	24	103	103	104	24	99	100	104	24	99	100	100	24
7/15	105	107	109	24	106	107	109	24	103	103	104	24	101	103	105	24	99	100	101	24
7/16	105	107	109	24	110	112	113	24	104	104	105	24	105	106	108	24	101	101	101	24
7/17	105	106	108	23	110	111	112	24	104	104	105	24	105	107	109	24	106	110	117	24
7/18	105	107	108	24	106	107	107	24	102	103	103	24	101	102	103	24	101	101	101	24
7/19	105	108	110	24	106	107	108	24	102	103	104	24	102	102	103	21	101	101	102	21
7/20	105	107	109	24	106	107	108	24	103	103	104	24	104	106	109	24	102	103	103	24
7/21	105	107	109	24	111	113	115	24	104	104	105	24	108	110	112	24	102	103	103	24
7/22	104	106	108	24	108	110	112	24	103	104	104	24	104	107	110	24	101	102	103	24
7/23	104	106	108	24	105	105	106	24	102	103	103	24	100	101	101	24	99	100	100	24
7/24	104	106	108	22	108	111	112	24	103	104	106	24	101	102	104	24	100	101	101	24
7/25	104	107	108	24	107	110	112	24	103	103	104	24	101	102	103	23	100	101	101	23
7/26	104	106	108	23	103	104	105	24	102	102	102	24	100	101	102	24	100	100	101	24
7/27	105	106	108	19	103	104	105	23	101	102	102	22	100	101	101	24	100	100	100	24

### Total Dissolved Gas Saturation Data at Snake and Lower Columbia River Sites

Date	<u>Lower Mon.</u>			<u>L. Mon. Tlwr</u>			<u>Ice Harbor</u>			<u>Ice Harbor Tlwr</u>			<u>McNary-Oregon</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
7/14	100	100	102	24	99	100	100	24	100	100	101	24	111	111	112	14	109	110	112	24
7/15	100	100	102	24	99	99	100	24	99	100	101	24	110	112	113	24	109	111	114	24
7/16	101	102	106	24	99	100	101	24	99	100	100	24	110	112	112	24	111	112	115	24
7/17	101	102	103	24	100	101	102	24	99	100	102	24	110	112	113	24	113	116	118	24
7/18	100	101	104	24	100	100	100	24	98	99	100	24	110	112	113	24	112	113	115	24
7/19	100	101	101	24	100	100	101	24	99	100	102	24	108	110	112	21	111	112	114	21
7/20	102	102	103	24	101	102	103	24	99	100	101	24	110	112	113	24	112	115	117	24
7/21	106	109	112	24	102	102	103	24	103	105	108	24	111	112	113	24	110	112	115	24
7/22	103	106	109	24	101	102	103	24	100	100	103	24	109	110	110	24	108	108	109	24
7/23	101	101	102	24	100	101	102	24	99	99	100	24	109	110	111	24	108	109	110	24
7/24	101	101	102	24	100	101	102	24	100	101	102	24	110	111	112	24	112	114	116	24
7/25	101	101	102	24	100	101	102	24	100	101	101	24	110	111	112	24	108	109	110	24
7/26	101	101	103	24	100	101	101	24	101	102	104	24	110	113	113	24	108	110	111	23
7/27	101	101	101	23	100	101	103	24	100	101	103	24	111	112	114	24	109	110	111	24

## Total Dissolved Gas Saturation (%) - Average of 12 Highest Hours, 24 h Average and 24 h High

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	McNary-Wash			#	McNary Tlwr			#	John Day			#	John Day Tlwr			#	The Dalles			#
	24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24h Avg	12h Avg	High		24h Avg	12h Avg	High		24h Avg	12h Avg	High	
7/14	108	109	110	24	111	113	114	24	102	102	102	23	109	116	117	24	105	107	109	23
7/15	109	111	112	24	108	108	109	24	103	105	106	23	110	116	117	23	104	105	110	21
7/16	111	112	112	24	109	109	110	24	105	106	107	23	116	117	118	24	105	107	113	23
7/17	110	111	111	24	109	109	110	24	104	105	106	23	115	116	117	24	110	112	113	23
7/18	110	110	111	24	109	110	110	21	103	103	103	23	115	116	116	23	107	109	110	23
7/19	109	109	110	21	109	109	110	24	103	103	104	23	116	117	117	24	106	107	108	23
7/20	108	109	110	24	108	108	108	24	103	103	104	23	116	117	118	24	107	109	111	23
7/21	111	111	113	24	110	111	114	24	104	105	106	23	117	118	118	24	109	110	112	23
7/22	108	109	109	24	109	110	114	24	103	104	105	23	110	116	118	24	106	108	112	22
7/23	107	107	108	24	107	107	107	24	101	102	102	23	110	116	118	24	102	103	104	23
7/24	109	109	111	24	107	107	107	24	102	102	102	23	110	116	118	23	106	108	109	23
7/25	107	108	110	24	106	106	107	24	102	102	102	23	116	117	118	24	105	107	110	22
7/26	107	107	108	23	106	107	107	23	102	102	102	23	116	117	118	24	106	107	109	22
7/27	106	107	107	23	106	106	106	18	101	101	102	23	116	117	118	22	106	108	109	21

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	The Dalles Dnst			#	Bonneville			#	Warrendale			#	Skamania			#	CamasWashugal			#
	24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24h Avg	12h Avg	High		24h Avg	12h Avg	High		24h Avg	12h Avg	High	
7/14	112	113	115	24	106	106	107	23	117	117	118	23	118	118	118	23	112	113	114	24
7/15	112	113	115	24	106	107	108	23	120	121	121	23	119	120	120	23	113	115	116	24
7/16	113	114	115	24	108	108	110	23	119	120	121	23	117	118	119	23	114	115	116	24
7/17	112	114	115	24	111	111	112	23	120	121	123	21	117	118	120	23	114	115	117	24
7/18	112	112	113	23	108	109	109	23	118	119	121	23	116	117	119	23	112	114	115	23
7/19	111	112	113	24	106	106	106	23	116	117	118	23	115	116	118	23	112	114	115	24
7/20	114	115	115	24	106	106	107	23	117	118	120	23	116	117	120	23	112	114	116	24
7/21	116	116	116	24	107	108	108	19	115	118	120	23	116	118	120	23	113	115	116	24
7/22	113	115	116	24	---	---	---	0	115	116	118	22	119	120	121	22	111	112	114	24
7/23	112	112	112	24	---	---	---	0	116	116	117	21	120	120	121	23	115	115	129	15
7/24	113	114	116	24	---	---	---	0	113	114	116	20	118	119	120	23	130	131	131	24
7/25	113	114	115	24	---	---	---	0	112	112	113	20	116	117	119	22	119	124	131	24
7/26	113	114	114	24	106	107	107	20	112	113	115	23	116	117	119	23	112	114	115	24
7/27	113	114	114	23	106	106	106	22	111	112	113	20	116	117	118	21	112	114	115	22



## 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)
07/14/00	---	---	---	---	100	0	36	1	139	27	0
07/15/00	---	---	---	---	200	0	42	0	11	15	0
07/16/00	---	---	---	---	280	0	78	6	150	0	0
07/17/00	---	---	---	---	190	0	48	4	50	25	0
07/18/00	---	---	---	---	130	31	66	4	100	0	0
07/19/00	---	---	---	---	150	31	18	0	90	0	0
07/20/00	---	---	---	---	10	12	24	3	150	0	0
07/21/00	---	---	---	---	80	12	24	9	225	21	0
07/22/00	---	---	---	---	96	12	30	0	0	0	0
07/23/00	---	---	---	---	54	0	66	3	105	0	0
07/24/00	---	---	---	---	18	25	30	0	0	16	0
07/25/00	---	---	---	---	12	16	24	0	100	50	0
07/26/00	---	---	---	---	40	12	12	1	0	0	0
07/27/00	---	---	---	---	70	18	4	3	0	0	0
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,430</b>	<b>169</b>	<b>502</b>	<b>34</b>	<b>1,120</b>	<b>154</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>102</b>	<b>12</b>	<b>36</b>	<b>2</b>	<b>80</b>	<b>11</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)
07/14/00	---	---	---	---	5,220	5,208	984	90	57,220	26,536	1,054
07/15/00	---	---	---	---	7,790	6,525	600	88	29,914	20,045	2,842
07/16/00	---	---	---	---	8,040	5,611	726	93	53,850	16,866	1,713
07/17/00	---	---	---	---	8,070	3,212	444	109	40,660	15,748	1,125
07/18/00	---	---	---	---	5,020	2,058	1,122	157	57,900	20,875	1,457
07/19/00	---	---	---	---	3,960	2,908	702	274	61,845	7,855	1,615
07/20/00	---	---	---	---	3,570	3,282	930	327	51,600	4,969	3,395
07/21/00	---	---	---	---	2,900	2,523	420	251	73,225	4,982	3,437
07/22/00	---	---	---	---	4,800	5,876	996	333	86,525	14,728	3,882
07/23/00	---	---	---	---	2,970	4,045	1,572	321	57,749	4,921	518
07/24/00	---	---	---	---	1,884	2,253	594	285	33,600	2,382	244
07/25/00	---	---	---	---	1,920	1,576	384	275	49,800	11,220	643
07/26/00	---	---	---	---	1,935	2,499	390	206	69,600	7,080	284
07/27/00	---	---	---	---	1,420	2,246	568	163	108,900	5,623	300
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>59,499</b>	<b>49,822</b>	<b>10,432</b>	<b>2,972</b>	<b>832,388</b>	<b>163,830</b>	<b>22,509</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>4,250</b>	<b>3,559</b>	<b>745</b>	<b>212</b>	<b>59,456</b>	<b>11,702</b>	<b>1,608</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)
07/14/00	---	---	---	---	80	501	78	0	139	5	0
07/15/00	---	---	---	---	120	230	66	0	7	11	0
07/16/00	---	---	---	---	50	210	162	0	150	197	0
07/17/00	---	---	---	---	140	281	102	0	120	30	0
07/18/00	---	---	---	---	60	378	132	0	150	54	0
07/19/00	---	---	---	---	80	240	36	0	150	0	0
07/20/00	---	---	---	---	30	78	36	1	75	21	162
07/21/00	---	---	---	---	50	228	48	3	75	0	0
07/22/00	---	---	---	---	30	144	42	0	156	83	0
07/23/00	---	---	---	---	48	176	108	0	0	0	0
07/24/00	---	---	---	---	18	88	24	0	0	16	0
07/25/00	---	---	---	---	0	80	42	0	400	66	0
07/26/00	---	---	---	---	20	84	48	0	550	0	0
07/27/00	---	---	---	---	0	18	40	0	400	0	0
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>726</b>	<b>2,736</b>	<b>964</b>	<b>4</b>	<b>2,372</b>	<b>483</b>	<b>162</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>52</b>	<b>195</b>	<b>69</b>	<b>0</b>	<b>169</b>	<b>35</b>	<b>12</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)
07/14/00	---	---	---	---	520	210	264	1	104	3	0
07/15/00	---	---	---	---	530	182	162	4	29	414	0
07/16/00	---	---	---	---	490	131	120	3	100	7	0
07/17/00	---	---	---	---	690	83	90	0	40	4	0
07/18/00	---	---	---	---	520	263	276	1	0	0	0
07/19/00	---	---	---	---	290	139	114	0	45	0	0
07/20/00	---	---	---	---	230	84	90	0	0	43	162
07/21/00	---	---	---	---	190	72	84	0	0	21	0
07/22/00	---	---	---	---	774	320	192	1	0	21	0
07/23/00	---	---	---	---	720	617	402	3	210	0	0
07/24/00	---	---	---	---	162	161	102	0	100	16	0
07/25/00	---	---	---	---	84	48	96	1	100	0	0
07/26/00	---	---	---	---	115	72	24	4	50	0	0
07/27/00	---	---	---	---	30	72	52	1	0	0	0
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,345</b>	<b>2,454</b>	<b>2,068</b>	<b>19</b>	<b>778</b>	<b>529</b>	<b>162</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>382</b>	<b>175</b>	<b>148</b>	<b>1</b>	<b>56</b>	<b>38</b>	<b>12</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)
07/14/00	---	---	---	---	0	10	18	12	623	11	0
07/15/00	---	---	---	---	10	0	6	15	732	5	0
07/16/00	---	---	---	---	0	0	0	13	850	196	0
07/17/00	---	---	---	---	0	20	0	5	700	9	0
07/18/00	---	---	---	---	0	13	6	3	900	0	0
07/19/00	---	---	---	---	0	18	0	12	1,050	0	231
07/20/00	---	---	---	---	0	0	0	10	750	0	0
07/21/00	---	---	---	---	0	0	0	9	1,050	63	0
07/22/00	---	---	---	---	0	7	0	9	937	0	0
07/23/00	---	---	---	---	0	0	6	3	421	0	0
07/24/00	---	---	---	---	0	0	0	4	500		0
07/25/00	---	---	---	---	0	0	0	7	1,100	100	0
07/26/00	---	---	---	---	0	12	0	9	1,400	0	0
07/27/00	---	---	---	---	0	0	0	1	500	0	0
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>80</b>	<b>36</b>	<b>112</b>	<b>11,513</b>	<b>384</b>	<b>231</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>13</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>8</b>	<b>822</b>	<b>30</b>	<b>17</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 07/26

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	28,646	12,533	24,520	3,773	19,461	2,439	0	0	0	0	0	0
TDA	102,953	14,796	17,563	6,180	36,497	1,828	22,465	9,094	19,692	2,834	15,348	1,682	0	0	0	0	0	0
JDA	86,502	12,133	15,409	5,089	29,402	1,505	21,290	7,089	19,554	2,109	14,429	1,473	0	0	0	0	0	0
MCN	64,947	10,998	9,260	3,972	28,536	1,577	18,299	5,917	16,342	1,941	14,629	1,448	0	0	0	0	0	0
IHR	38,776	9,389	5,351	2,657	15,091	720	4,087	3,118	3,736	1,294	4,362	448	0	0	0	0	0	0
LMN	35,520	10,336	3,924	2,726	14,041	753	4,522	3,208	3,233	1,294	4,081	445	0	0	0	0	0	0
LGS	34,330	10,152	3,445	2,690	**	**	3,659	3,396	3,118	1,504	**	**	0	0	0	0	**	**
LWG	33,822	10,318	3,296	2,507	12,180	669	3,790	3,669	3,091	1,516	4,086	473	0	0	0	0	0	0
PRD	20,098	1,092	4,139	761	9,052	194	16,900	1,494	15,256	350	11,413	395	0	0	0	0	0	0
RIS	14,400	1,429	3,309	915	6,567	218	14,479	8,155	10,144	771	8,232	468	0	0	0	0	0	0
RRH	5,336	392	1,389	233	1,501	54	8,441	2,129	4,657	300	2,900	172	0	0	0	0	0	0
WEL	2,143	457	141	199	752	53	3,772	1,142	2,747	222	1,634	170	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2000		1999		10-Yr Avg.		2000	1999	10-Yr Avg.	2000	1999	10-Yr Avg.	Wild
	Adult	Jack	Adult	Jack	Adult	Jack						2000	
BON	0	0	1	0	12	4	92,906	17,706	41,679	75,087	39,853	41,151	31,790
TDA	-5	0	0	0	0	0	73,109	13,525	32,445	29,996	19,257	17,438	15,034
JDA	1	0	0	0	0	0	87,967	14,477	33,701	26,752	17,950	13,629	9,277
MCN	0	0	0	1	0	0	58,012	11,446	34,910	14,202	6,488	10,325	4,959
IHR	0	0	0	0	0	0	197	6	6	6,945	4,088	5,695	2,169
LMN	0	0	0	0	0	0	273	12	5	5,240	2,560	4,776	1,806
LGS	0	0	0	0	**	**	216	15	**	3,104	1,997	**	1,110
LWG	0	0	0	0	0	0	252	11	4	4,964	4,022	6,186	1,751
PRD	33	3	1	0	0	0	88,381	14,652	37,766	1,374	453	818	***
RIS	12		0	0	0	0	74,716	11,888	28,807	863	275	553	nc
RRH	7		22	0	2	0	54,739	8,997	13,469	510	205	329	nc
WEL	0	0	0	0	0	0	56,626	7,025	11,677	244	89	213	47

Note: RIS/RRH current year numbers are from Chelan Co. PUD and are through 07/23 (no wild ST counts).

Note: PRD current year numbers are from Grant Co. PUD and are through 07/25.

Note:LMN, WEL are through 07/25, LGS is through 07/24. BON, TDA, JDA, MCN, IHR, LGR are through 07/26.

Note: TDA missing 7/21; LGR is missing 7/12; LGS is missing 7/05, 7/06, 7/08, 7/09; WEL is missing 6/11.

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**  
07/14/00 TO 07/27/00

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum Of NumberCollected	59,499	1,430	726	10	5,345	67,010
	Sum Of NumberBarged	44,306	1,130	608	10	3,439	49,493
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	14,751	279	116	0	1,871	17,017
	Sum Of TotalProjectMort	442	21	2	0	35	500
LGS	Sum Of NumberCollected	49,608	166	2,697	79	2,428	54,978
	Sum Of NumberBarged	30,763	74	2,100	59	1,114	34,110
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	18,299	70	581	17	1,276	20,243
	Sum Of TotalProjectMort	546	22	16	3	38	625
LMN	Sum Of NumberCollected	10,432	502	964	36	2,068	14,002
	Sum Of NumberBarged	5,865	317	654	29	1,179	8,044
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	4,435	152	299	6	855	5,747
	Sum Of TotalProjectMort	132	33	11	1	34	211
MCN	Sum Of NumberCollected	815,524	1,095	2,346	11,300	751	831,016
	Sum Of NumberBarged	794,521	1,066	2,112	11,739	819	810,257
	Sum Of NumberBypassed	10,138	0	0	0	0	10,138
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	10,120	29	135	165	31	10,480
Total	Sum Of NumberCollected	935,063	3,193	6,733	11,425	10,592	967,006
Total	Sum Of NumberBarged	875,455	2,587	5,474	11,837	6,551	901,904
Total	Sum Of NumberBypassed	10,138	0	0	0	0	10,138
Total	Sum Of NumberTrucked	37,485	501	996	23	4,002	43,007
Total	Sum Of TotalProjectMort	11,240	105	164	169	138	11,816

**YTD Transportation Summary**  
TO: 07/27/00

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum Of NumberCollected	550,314	2,449,310	121,624	5,928	5,034,901	8,162,077
	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	14,868	6,363	132	187	13,109	34,659
	Sum Of TotalProjectMort	2,305	3,295	47	28	715	6,390
LGS	Sum Of NumberCollected	279,471	1,357,029	40,750	3,389	1,054,338	2,734,977
	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	18,299	4,378	586	93	8,067	31,423
	Sum Of TotalProjectMort	1,858	5,289	74	32	1,426	8,679
LMN	Sum Of NumberCollected	171,185	608,450	18,521	4,258	764,856	1,567,270
	Sum Of NumberBarged	146,077	556,120	18,198	4,239	761,544	1,486,178
	Sum Of NumberBypassed	19,839	24,873	0	0	905	45,617
	Sum Of NumberTrucked	4,435	25,893	309	16	1,665	32,318
	Sum Of TotalProjectMort	834	1,564	14	3	725	3,140
MCN	Sum Of NumberCollected	8,003,740	1,164,508	168,071	78,745	365,657	9,780,721
	Sum Of NumberBarged	7,198,694	25,896	26,160	18,731	10,650	7,280,131
	Sum Of NumberBypassed	659,664	1,137,415	140,936	59,322	354,501	2,351,838
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	37,022	1,196	578	199	506	39,501
Total	Sum Of NumberCollected	9,004,710	5,579,297	348,966	92,320	7,219,752	22,245,045
Total	Sum Of NumberBarged	8,160,519	4,254,228	205,552	31,951	6,612,740	19,264,990
Total	Sum Of NumberBypassed	679,549	1,277,732	141,336	59,338	581,676	2,739,631
Total	Sum Of NumberTrucked	37,602	36,634	1,027	296	22,841	98,400
Total	Sum Of TotalProjectMort	42,019	11,344	713	262	3,372	57,710

