



Fish Passage Center

Weekly Report #00 - 20

July 21, 2000

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SUMMARY OF EVENTS:

Water Supply: During July 1 through 18 the highest precipitation was recorded at: Upper John Day with 125% of average, Central Washington with 122% of average, and Okanogan with 119% of average. The lowest precipitation was recorded at Salmon/Boise/Payette with 24% of average, NW Slope Washington Cascades with 51% of average, and at the Snake River Plain with 65% of average. Precipitation at Columbia above Coulee was 100% of average, at Snake River above Ice Harbor was 62% of average and at Columbia above The Dalles was 94% of average.

The new July-Final Runoff Volume Forecast has been issued. Projected runoff volumes have decreased for the entire Columbia basin and confirming the earlier July Early Runoff Volume Forecast. The highest decrease is at Libby with 22% decrease compared to the June Final Runoff volume forecast, resulting in a failure to refill the reservoir for summer flow augmentation. Lower Granite and The Dalles forecasts have decreased 4% and 2% compared with the June Final forecast. The July-Final forecast compared with previous forecasts are presented in the following table:

Site	April-Final Runoff Volume Forecast		May-Final Runoff Volume Forecast		June-Final Runoff Volume Forecast		July Final Runoff Volume Forecast	
	Runoff Volume [KAF]	% of avg	Runoff Volume [KAF]	% of avg	Runoff Volume [KAF]	% of avg	Runoff Volume [KAF]	% of avg
Mica (April-Sept.)	13.1	103	13.2	104	12.9	101	11.9	93
Hungry Horse (April-Sept.)	2.09	96	2.08	95	2.13	98	2.08	95
Libby (April-Sept.)	7.29	108	7.08	105	7.18	106	5.72	84
Grand Coulee (Jan.-July)	65.8	104	65.8	104	64.8	102	61.5	97
The Dalles (Jan.-July)	105.0	99	105.0	99	102.0	96	97.9	92
Brownlee (April-July)	3.93	68	4.08	70	3.86	67	4.12	71
Dworshak (April-July)	2.67	99	2.56	95	2.56	95	2.64	98
Lower Granite (Jan.-July)	26.7	90	26.4	89	25.7	86	24.9	84
Heise NR-ID (April-July)	2.94	85	2.83	82	2.91	84	2.85	83
Weiser-ID (April-July)	3.62	66	3.69	68	3.49	64	3.67	67

Reservoir Operations: Reservoirs were operated for summer flow augmentation or continued refilling toward full pool elevations, during the week of July 14 through July 20. A summary of actual elevations on July 20, and full pool elevations are shown in the following Table:

Project	Actual July 20 Elevation in [ft]	Actual Elevation on June 30 & Full Pool Elevation in [ft]
<i>Libby</i>	2430.75	2418.1/2459.0
<i>Hungry Horse</i>	3554.1	3558.3/3560.0
<i>Grand Coulee</i>	1283.8	1279.0/1290.0
<i>Brownlee</i>	2054.02*	2072.06/2077.0
<i>Dworshak</i>	1581.35	1598.6/1600.0

* as of July 19

Libby reservoir did not refill by June 30 as required by 95 Biological Opinion and 1998 Supplement Biological Opinion. The most recent decrease of runoff volume forecast resulted in inability of COE to refill the reservoir after the sturgeon operation was finished. Outflows were maintained at 8 Kcfs as required for the bull trout, for the period of July 14-20. The reservoir is currently refilling with inflows in the range of 16.8 kcfs-21.8 kcfs.

Hungry Horse continued drafting for summer flow augmentation at rates of 5.85 kcfs for the period of July 14-20. Inflows fluctuated in the range of 0.82 kcfs-3.82 kcfs for the same period of July 14-20.

Grand Coulee was drafted to support flows at McNary during July 14-20 period from elevation of 1286 ft on July 16 to elevation 1283.8 ft on July 20. Inflows fluctuated from 100.1 kcfs on July 20 to 132.4 kcfs on July 14.

Brownlee continued drafting for summer salmon flow augmentation. Outflow from Hells Canyon Dam for the past week fluctuated between 13.86 kcfs on July 18 to 21.73 kcfs on July 16.

Dworshak continued drafting for flow augmentation since July 1. The outflow was held in the range of 12.4kcfs-13 kcfs in order not to exceed total dissolved gas limit in the tailrace. Inflows in the reservoir fluctuated in the range of 1.4 kcfs-2.1 kcfs for the period of July 14-20.

Upper Snake reservoirs: As of July 20, the Upper Snake system was drafted to 71% of capacity. American Falls was drafted to 56% of capacity, while Palisades and Jackson Lake were at 69% and 96% of capacity, respectively. The irrigation demands in the system continued to be high and current flow at diversions at Palisades and Minidoka are 10.8 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 20, the Boise River system was at 85% of capacity. Salmon augmentation continued with flows of 660 - 680 cfs. As of July 20, the Payette River system was at 90% of capacity. Salmon augmentation continued at rates of 860-880 cfs.

Streamflow: The Biological Opinion of 1995 established a summer flow target of 51.3 Kcfs at Lower Granite began on June 21 and 200 Kcfs for McNary beginning on July 1. Weekly average flows for McNary and Lower Granite remained below the flow targets for the period of July 7-July 20. The average flows for the major run-of-river projects for July 7-July 20 period are given in the following table:

Project	Average discharge [kcfs]	
	July 7-13	July 14-20
Priest Rapids	139.3 (92.5-176.9)	125.7 (88.7-141.8)
McNary	185.9 (163.6-212.2)	167.1 (132.5-193.1)
Lower Granite	42.3 (39.6-45.2)	40.5 (37.9-43.3)
Bonneville	192.7 (180.5-235.2)	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 their decline this week at all Snake River dams with an average 47% drop from last week's level at Lower Granite Dam and Lower Monumental Dam and an average 32% drop at Little Goose Dam. *Mid-Columbia River:* Last week's declining trend in subyearling chinook passage indices at Rock Island Dam continued into the early part of this week. Afterwards the passage indices rapidly

rose again, reaching levels above 300 fish by July 20. Lower Columbia River: Subyearling chinook passage at McNary Dam dropped an average of 76% this week from last week's level. This week's McNary Dam passage indices of subyearling chinook fluctuated between 29,914 and 61,845 fish, well below the daily levels above 100,000 fish last week. Subyearling chinook passage indices at John Day Dam declined an average of 34% this week from last week's level. Passage indices at Bonneville Dam continue to be exceedingly low due to the minimal flow passing through Powerhouse 2 where the sampling facility is located.

Adult fish passage: During the week of July 14 to July 18, numbers of adult summer chinook passing Bonneville Dam ranged between 336 and 663. The cumulative count for summer chinook through July 18 was 26,202. This total was 120% and 147% of the respective 1999 and 10-year average. Summer chinook counts at The Dalles averaged 343 per day through the week with the cumulative count 21,014 through July 19. At McNary Dam, daily counts of adult summer chinook averaged 325 per day for the week with the cumulative count through July 19 of 15,983 (July 4 count missing). The Snake River count of adult summer chinook at Ice Harbor Dam was 3,987 with the Mid-Columbia River count at Priest Rapids about 14,600 through July 19. The combined adult summer chinook counts from Ice Harbor and Priest Rapids exceed the total McNary Dam, summer chinook count to date.

The number of jack, summer chinook salmon counted at Bonneville Dam surpassed 11,000 for the season. This total compares to 3,375 in 1999 and 2,115 for the 10-year average. The 2000 count of jack summer chinook at Bonneville Dam has the highest total of jack "summers" dating back to the mid 1970s and there are 13 more days of counting remaining before the fall chinook counts begin.

Through July 18, the Bonneville Dam count of sockeye exceeded 92,300. Year 2000 count was 5.4 times and 2.3 times the respective 1999 and 10-year average. Sockeye are passing the Mid-Columbia projects with greater than 86,000 counted at Priest Rapids, 69,000 at Rock Island and 52,000 at Wells Dam. So far, about 70% of the adult sockeye are destined for the Okanogan

River Basin (Lake Osoyoos) with the remaining 30% destined for the Wenatchee River Basin. About 235 adult sockeye have been counted at Lower Granite Dam with numbers declining through the week. These fish should be arriving at Redfish Lake and other upper Salmon River lakes during the next month; none had arrived as of July 20. 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 continued their upward progression with counts ranging from 2,000 early in the week to 4,400 by July 18. The cumulative count for the project is near 50,000, about double the 1999 and 181% of the 10-year average. The Bonneville Dam counts remained well above The Dalles counts indicating that a portion of the steelhead must be holding in the Bonneville pool tributaries. This is a normal occurrence and is a result of the higher water temperatures that are present in the mainstem Columbia River compared to the cooler water temperatures recorded in tributaries such as the Little White Salmon R and Klickitat R. The COE is currently revising the steelhead counts at The Dalles Dam. Hatchery steelhead fish counts were entered in the total steelhead column during July. These corrections will be completed early next week and these changes will be reflected in next week's Report. At Bonneville Dam about 43.6% of the passage have been recorded as "unclipped" steelhead or "wild". The passage of steelhead into the Snake River averaged about 150 per day (reduced from the past two weeks) at Ice Harbor with the cumulative count 4,773. Of this total, about 31% of the Ice Harbor count were unclipped or "wild". The passage of steelhead into the Mid-Columbia projects increased through the week. The counts ranged between 40-80 per day at Priest Rapids Dam with the cumulative count now 949. At Rock Island Dam, approximately 43% of the steelhead were unclipped.

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
07/07/00	153.8	0.3	156.6	0.0	167.4	9.6	172.2	13.5	174.2	0.0	181.3	81.1	176.9	79.6
07/08/00	113.7	0.1	117.7	0.0	129.1	8.9	138.0	11.9	144.8	0.0	158.4	61.3	157.1	78.8
07/09/00	80.6	0.1	81.9	0.0	86.8	6.4	84.6	0.0	88.8	0.0	94.1	36.6	92.5	46.4
07/10/00	118.0	0.1	119.9	0.0	129.7	8.4	133.8	0.0	137.9	0.0	132.5	50.9	123.1	60.7
07/11/00	120.3	0.1	121.9	0.0	127.6	8.0	131.3	4.4	136.0	0.0	146.6	57.7	144.8	72.0
07/12/00	124.9	0.1	129.5	0.0	136.9	8.6	132.3	12.5	139.4	0.0	146.0	55.4	140.8	69.4
07/13/00	125.4	0.1	122.2	0.0	127.6	8.7	123.1	16.4	136.5	1.9	141.8	51.8	139.8	67.7
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

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

Date	Dworshak		Hells Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
07/07/00	6.8	0.0	10.4	11.5	39.6	0.0	38.6	0.0	39.5	0.0	43.3	36.1
07/08/00	10.7	1.2	11.8	11.4	37.4	0.0	39.2	0.0	40.0	0.0	42.9	35.0
07/09/00	12.6	3.0	10.6	16.3	44.0	0.0	44.2	0.0	45.9	0.0	48.2	38.0
07/10/00	12.9	3.3	11.7	16.0	42.3	0.0	43.0	0.0	44.7	0.0	47.0	39.2
07/11/00	13.3	3.7	10.8	19.3	42.5	0.0	44.6	0.0	46.4	0.0	49.8	41.5
07/12/00	13.5	3.9	11.2	15.3	45.0	0.0	44.1	0.0	43.3	0.0	46.3	37.6
07/13/00	13.3	3.7	9.5	15.7	45.2	0.0	47.5	0.0	50.3	0.0	52.9	47.6
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	---	---	37.9	0.0	39.2	0.0	38.8	0.0	40.8	32.5
07/20/00	12.5	2.8	---	---	38.8	0.0	41.8	0.0	41.8	0.0	44.6	37.6

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		
07/07/00	212.2	39.6	226.1	95.6	228.3	87.3	235.2	80.4	93.6	50.6
07/08/00	200.4	32.5	178.3	78.7	178.7	70.3	196.2	80.6	90.7	14.5
07/09/00	178.3	13.5	179.9	77.2	173.8	68.6	180.5	81.5	83.1	5.5
07/10/00	163.6	0.0	173.9	40.3	161.5	63.5	184.1	109.0	60.9	3.7
07/11/00	185.4	16.1	184.7	48.7	179.9	70.2	187.2	108.9	64.2	3.7
07/12/00	169.2	0.0	172.3	44.8	169.8	66.0	180.5	108.4	55.8	5.9
07/13/00	192.3	25.4	184.1	47.8	178.9	71.0	185.0	108.9	59.8	5.9
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

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													
	07/13/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	07/17/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	07/20/00	Subyearling Chinook	100	3	0	0.00%	0.00%	0	0	0	0	3	1
Bonneville Dam													
	07/11/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	07/13/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	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
Rock Island Dam													
	07/13/00	Subyearling Chinook	55	0	0	0.00%	0.00%	0	0	0	0	0	0
	07/17/00	Subyearling Chinook	85	1	1	1.17%	0.00%	1	0	0	0	0	0
	07/20/00	Subyearling Chinook	100	1	1	1.00%	0.00%	0	1	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	<u>Hungry H. Dnst</u>			<u>Boundary</u>			<u>Grand Coulee</u>			<u>Grand C. Tlwr</u>			<u>Chief Joseph</u>							
	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg		
7/7	102	102	103	24	115	117	118	24	112	113	113	24	109	110	110	24	110	110	110	23
7/8	102	103	103	24	115	117	118	24	114	114	114	24	110	111	112	24	110	110	111	23
7/9	103	103	103	24	115	115	117	15	114	114	114	24	111	112	114	24	110	110	111	23
7/10	103	104	105	24	---	---	---	0	113	114	114	24	110	111	113	24	110	110	111	23
7/11	104	104	105	24	---	---	---	0	114	114	114	24	110	111	112	24	111	111	112	23
7/12	104	105	105	24	113	113	115	8	114	114	114	24	111	111	113	24	111	112	112	23
7/13	109	113	125	23	111	113	115	24	114	114	114	24	111	111	113	24	111	111	112	23
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

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	<u>Chief J. Dnst</u>			<u>Wells</u>			<u>Wells Dwnstrm</u>			<u>Rocky Reach</u>			<u>Rocky R. Tlwr</u>							
	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg		
7/7	109	110	111	23	109	109	110	24	110	110	110	24	111	112	112	22	112	112	113	21
7/8	110	111	111	23	109	110	110	24	110	111	111	24	111	111	112	24	112	112	113	24
7/9	110	111	111	23	109	110	111	24	110	110	111	24	110	110	111	23	110	111	111	22
7/10	109	110	112	23	109	109	110	24	110	110	111	24	110	110	111	22	110	111	111	21
7/11	110	111	112	23	109	109	110	24	110	111	111	24	110	111	111	23	111	111	112	20
7/12	111	111	112	23	110	111	111	24	111	112	112	24	111	111	111	22	111	112	112	20
7/13	110	111	112	23	110	111	111	24	111	112	112	24	110	110	111	23	112	112	113	22
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

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	<u>Rock Island</u>			<u>Rock I. Tlwr</u>			<u>Wanapum</u>			<u>Wanapum Tlwr</u>			<u>Priest Rapids</u>							
	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg		
7/7	107	107	107	20	111	112	112	19	109	109	110	24	120	120	123	14	120	120	121	24
7/8	107	107	107	23	112	112	112	22	109	109	110	24	117	118	118	24	116	117	119	24
7/9	107	107	108	22	111	111	112	22	109	109	110	24	114	115	116	24	113	114	116	24
7/10	106	106	107	24	109	110	110	24	110	111	113	21	115	116	118	23	113	114	115	22
7/11	106	106	107	23	110	110	110	22	111	111	113	24	116	118	118	24	116	117	118	22
7/12	106	107	107	23	111	111	112	21	111	111	112	24	116	116	117	24	116	117	119	24
7/13	107	107	107	24	111	112	112	21	109	110	110	24	115	116	117	24	115	116	116	24
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	---	---	---	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>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
7/7	122	123	125	24	105	106	108	24	103	104	104	24	103	104	105	24	100	101	102	24
7/8	122	122	124	24	109	110	110	24	104	106	108	24	103	104	106	24	99	100	100	24
7/9	117	118	121	24	106	107	109	24	107	108	108	24	106	107	108	24	99	100	101	24
7/10	117	119	121	22	103	104	105	24	107	108	109	24	106	107	109	24	100	101	101	24
7/11	120	121	121	24	109	113	114	23	108	109	109	24	107	108	109	24	100	101	101	24
7/12	120	121	122	24	113	114	114	24	109	109	110	24	108	109	110	24	100	100	101	24
7/13	119	121	121	24	112	113	113	24	109	109	110	24	108	109	110	24	100	101	102	24
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	---	---	---	0	112	113	114	24	107	107	107	9	107	108	109	24	---	---	---	0

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>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
7/7	104	106	108	24	103	105	107	24	100	100	101	24	102	103	105	24	100	101	101	24
7/8	102	103	104	24	105	106	109	24	101	101	102	24	101	102	104	24	100	100	101	24
7/9	104	107	108	24	102	103	105	24	101	101	101	24	97	98	98	24	98	98	98	24
7/10	104	107	108	24	104	105	106	24	101	102	103	24	98	98	99	24	98	98	98	24
7/11	105	107	109	24	105	106	107	24	102	102	102	24	101	103	106	24	98	99	99	24
7/12	105	108	110	24	106	107	108	24	102	103	104	24	103	105	106	24	99	100	100	24
7/13	106	108	110	24	105	106	108	24	103	103	104	24	101	103	106	22	99	100	100	24
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

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>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
7/7	104	105	105	24	102	103	105	24	102	103	104	24	110	111	112	24	105	107	110	24
7/8	102	103	105	24	101	102	103	24	102	102	104	24	110	111	112	24	107	108	110	24
7/9	100	101	101	24	100	102	103	24	101	102	102	24	110	111	112	24	108	109	111	24
7/10	101	102	103	24	101	102	103	24	101	102	103	24	110	111	112	24	111	114	117	24
7/11	101	102	104	24	100	102	103	24	101	102	103	24	111	112	112	24	112	115	118	24
7/12	101	103	104	24	100	102	104	24	102	103	104	24	110	111	112	16	114	116	117	24
7/13	100	101	102	24	99	100	101	24	101	102	103	24	112	112	112	3	110	112	113	24
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

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	# hr	24 h Avg	12 h Avg	High	# hr	24h Avg	12h Avg	High	# hr	24h Avg	12h Avg	High	# hr				
7/7	107	108	108	24	111	112	112	24	103	103	104	23	118	119	119	24	107	110	113	23
7/8	107	108	110	24	111	111	111	24	103	103	103	23	116	117	118	24	108	108	110	23
7/9	106	107	107	24	109	110	112	24	102	102	102	23	116	117	118	24	106	107	108	23
7/10	108	109	111	24	108	109	109	24	102	102	103	22	109	116	118	24	107	108	111	23
7/11	111	112	113	24	110	112	114	23	102	102	103	23	110	116	118	24	105	108	111	23
7/12	111	112	113	24	110	110	111	24	103	103	103	23	110	116	117	24	105	107	110	23
7/13	110	111	111	24	112	113	114	24	103	103	103	23	109	115	117	23	105	107	109	23
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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	The Dalles Dnst			Bonneville			Warrendale			Skamania			Camas\Washugal							
	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24h Avg	12h Avg	High	# hr	24h Avg	12h Avg	High	# hr	24h Avg	12h Avg	High	# hr
7/7	115	116	118	24	109	110	112	23	112	113	113	23	113	115	117	23	115	116	118	24
7/8	114	115	117	24	109	110	111	23	112	113	114	23	114	114	115	23	110	111	112	24
7/9	113	114	114	24	107	107	108	23	110	111	111	23	114	115	116	23	110	111	112	24
7/10	114	114	115	24	106	106	107	19	114	115	116	23	119	119	120	23	111	113	115	24
7/11	113	114	115	24	106	107	107	23	115	116	117	23	118	119	119	23	113	114	114	24
7/12	113	114	115	24	107	107	107	23	117	118	119	23	118	119	119	23	113	115	115	24
7/13	112	113	113	24	106	106	107	23	118	119	119	23	118	118	119	23	113	114	115	24
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

Hatchery Release Summary

From 7/7/00 to 7/20/00

Hatchery	Species...	Migration Year	Number Released	...Release Dates... Begin... ..End	Release Site	River Name
WDFW						
Klickitat	FA Chinook	2000	2,500,000	06/12/00 07/10/00	Klickitat H	Klickitat River
		Agency Totals:	2,500,000		
		Total Release..	2,500,000			

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)
07/07/00	---	---	---	---	300	40	84	3	850	7	0
07/08/00	---	---	---	---	180	0	60	3	890	12	85
07/09/00	---	---	---	---	60	0	60	2	360	282	0
07/10/00	---	---	---	---	40	0	60	2	452	33	0
07/11/00	---	---	---	---	80	24	90	0	200	0	0
07/12/00	---	---	---	---	160	52	60	0	263	33	0
07/13/00	---	---	---	---	0	10	156	1	0	18	0
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
Total:	0	0	0	0	1,880	200	882	29	3,705	452	85
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	134	14	63	2	265	32	6

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)
07/07/00	---	---	---	---	10,400	3,626	3,174	352	306,149	48,743	8,592
07/08/00	---	---	---	---	10,420	5,558	1,632	265	335,136	43,335	26,376
07/09/00	---	---	---	---	12,200	8,292	1,284	186	173,550	16,769	11,148
07/10/00	---	---	---	---	7,800	2,828	1,062	146	149,293	16,063	3,404
07/11/00	---	---	---	---	15,960	8,767	1,152	128	112,217	20,246	5,464
07/12/00	---	---	---	---	14,060	6,624	762	132	271,842	8,944	10,477
07/13/00	---	---	---	---	7,280	6,776	1,368	101	109,885	17,064	2,518
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
Total:	0	0	0	0	119,790	71,275	15,942	2,448	1,811,061	284,058	81,180
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	8,556	5,091	1,139	175	129,362	20,290	5,799

* 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)
07/07/00	---	---	---	---	100	220	174	6	728	4	0
07/08/00	---	---	---	---	120	105	240	6	1,399	278	43
07/09/00	---	---	---	---	140	240	96	1	480	2	0
07/10/00	---	---	---	---	60	135	42	2	181	12	0
07/11/00	---	---	---	---	100	48	54	3	300	413	0
07/12/00	---	---	---	---	0	80	24	0	461	220	0
07/13/00	---	---	---	---	40	480	336	0	305	4	0
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
Total:	0	0	0	0	1,120	3,226	1,578	19	4,645	1,251	205
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	80	230	113	1	332	89	15

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)
07/07/00	---	---	---	---	750	262	498	3	182	225	0
07/08/00	---	---	---	---	800	241	318	3	0	269	0
07/09/00	---	---	---	---	680	300	204	2	0	5	2,064
07/10/00	---	---	---	---	700	122	204	3	151	5	0
07/11/00	---	---	---	---	340	114	180	3	200	206	0
07/12/00	---	---	---	---	420	231	138	5	197	5	0
07/13/00	---	---	---	---	400	222	324	0	102	4	0
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
Total:	0	0	0	0	7,360	2,584	2,982	28	1,150	1,190	2,226
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	526	185	213	2	82	85	159

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											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
07/07/00	---	---	---	---	0	0	12	30	1,093	4	0
07/08/00	---	---	---	---	20	0	0	21	636	5	213
07/09/00	---	---	---	---	0	15	6	25	480	11	0
07/10/00	---	---	---	---	0	0	6	16	1,206	2	0
07/11/00	---	---	---	---	0	16	6	18	800	200	0
07/12/00	---	---	---	---	0	10	0	31	1,316	8	0
07/13/00	---	---	---	---	0	0	0	27	1,118	3	0
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	12	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
Total:	0	0	0	0	30	102	72	238	12,254	454	444
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	2	7	5	17	875	32	32

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 07/19

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	26,202	11,154	21,928	3,375	17,860	2,115	0	0	0	0	0	0
TDA	102,953	14,796	17,563	6,180	36,497	1,828	21,014	8,289	17,716	2,614	14,295	1,488	0	0	0	0	0	0
JDA	86,502	12,133	15,409	5,089	29,402	1,505	19,412	6,224	17,792	1,974	13,537	1,310	0	0	0	0	0	0
MCN	64,947	10,998	9,260	3,972	28,536	1,577	15,983	5,010	14,222	1,706	13,413	1,230	0	0	0	0	0	0
IHR	38,776	9,389	5,351	2,657	15,091	720	3,987	3,053	3,632	1,259	4,276	431	0	0	0	0	0	0
LMN	34,518	9,899	3,924	2,726	14,041	753	4,373	3,094	3,107	1,261	3,981	429	0	0	0	0	0	0
LGS	34,330	10,152	3,445	2,690	**	**	3,472	3,293	2,987	1,411	**	**	0	0	0	0	**	**
LWG	33,822	10,318	3,296	2,507	12,180	669	3,616	3,526	2,976	1,440	3,977	447	0	0	0	0	0	0
PRD	20,098	1,092	4,139	761	8,052	194	14,591	1,260	11,099	261	9,817	312	0	0	0	0	0	0
RIS	14,400	1,429	3,309	915	6,567	218	10,470	5,953	5,983	476	5,889	287	0	0	0	0	0	0
RRH	5,336	392	1,389	233	1,501	54	5,621	1,451	2,396	183	1,753	89	0	0	0	0	0	0
WEL	2,143	457	141	199	752	53	2,700	729	1,419	170	1,005	114	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	0	0	1	0	0	0	92,391	17,027	40,394	49,839	24,892	27,538	21,733
TDA	-5	0	0	0	0	0	72,799	12,999	31,485	16,548	11,804	12,216	10,971
JDA	1	0	0	0	0	0	87,180	13,849	32,466	18,515	13,393	10,532	6,341
MCN	0	0	0	1	0	0	56,157	10,769	33,041	8,713	3,971	7,755	2,802
IHR	0	0	0	0	0	0	182	6	4	4,773	2,479	4,586	1,468
LMN	0	0	0	0	0	0	251	9	4	3,864	1,459	3,907	1,348
LGS	0	0	0	0	**	**	196	4	**	2,457	1,447	**	892
LWG	0	0	0	0	0	0	235	6	3	4,178	3,536	5,851	1,466
PRD	29	3	0	0	0	0	86,308	12,245	33,246	949	308	577	***
RIS	12	0	0	0	0	0	69,335	6,635	18,429	494	177	364	211
RRH	0	0	4	0	0	0	48,872	3,553	8,266	304	158	217	92
WEL	0	0	0	0	0	0	51,684	2,684	7,417	138	64	140	29

Note: The Army Corp of Engineer's web server is down, so this report is through 07/19.

Note: PRD's numbers are from Grant Co. PUD and are through 07/19; LGS is through 07/17.

Note: RRH and RIS are through 07/15; BON, LMN through 07/18. LGR is missing 07/12; WEL is missing 06/11.

Note: JDA is missing the left ladder count for 07/12. MCN is missing 07/04; LGS is missing 07/05, 07/06, 07/08, 07/09.

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
07/07/00 TO 07/20/00

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum Of NumberCollected	119,790	1,880	1,120	30	7,360	130,180
	Sum Of NumberBarged	127,100	2,107	1,136	30	8,150	138,523
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	603	13	4	0	76	696
LGS	Sum Of NumberCollected	71,061	197	3,187	101	2,558	77,104
	Sum Of NumberBarged	73,163	191	3,220	100	2,697	79,371
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	756	14	9	1	57	837
LMN	Sum Of NumberCollected	15,942	882	1,578	72	2,982	21,456
	Sum Of NumberBarged	16,139	847	1,552	71	3,208	21,817
	Sum Of NumberBypassed	0	0	0	2	0	2
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	188	21	3	1	68	281
MCN	Sum Of NumberCollected	1,619,486	3,260	4,071	11,550	1,081	1,639,448
	Sum Of NumberBarged	1,585,885	3,110	3,950	11,489	1,013	1,605,447
	Sum Of NumberBypassed	21,043	0	0	0	0	21,043
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	12,558	150	121	61	68	12,958
Total Sum Of NumberCollected		1,826,279	6,219	9,956	11,753	13,981	1,868,188
Total Sum Of NumberBarged		1,802,287	6,255	9,858	11,690	15,068	1,845,158
Total Sum Of NumberBypassed		21,043	0	0	2	0	21,045
Total Sum Of NumberTrucked		0	0	0	0	0	0
Total Sum Of TotalProjectMort		14,105	198	137	63	269	14,772

YTD Transportation Summary
TO: 07/20/00

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum Of NumberCollected	532,485	2,448,940	121,458	5,928	5,032,826	8,141,637
	Sum Of NumberBarged	526,654	2,324,119	120,965	5,697	4,794,890	7,772,325
	Sum Of NumberBypassed	46	115,444	400	16	226,270	342,176
	Sum Of NumberTrucked	117	6,084	16	187	11,238	17,642
	Sum Of TotalProjectMort	2,113	3,284	47	28	699	6,171
LGS	Sum Of NumberCollected	258,453	1,356,934	39,932	3,370	1,052,976	2,711,665
	Sum Of NumberBarged	276,926	1,347,981	39,844	3,284	1,045,085	2,713,120
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	0	4,308	5	76	6,791	11,180
	Sum Of TotalProjectMort	1,634	5,275	64	30	1,412	8,415
LMN	Sum Of NumberCollected	166,261	608,260	18,169	4,264	763,904	1,560,858
	Sum Of NumberBarged	144,746	556,075	18,117	4,249	761,377	1,484,564
	Sum Of NumberBypassed	19,839	24,873	0	2	905	45,619
	Sum Of NumberTrucked	0	25,741	10	10	810	26,571
	Sum Of TotalProjectMort	753	1,548	6	3	709	3,019
MCN	Sum Of NumberCollected	7,530,615	1,164,083	166,496	72,895	365,207	9,299,296
	Sum Of NumberBarged	6,839,822	25,480	25,062	13,490	10,213	6,914,067
	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	31,130	1,187	497	83	493	33,390
Total Sum Of NumberCollected		8,487,814	5,578,217	346,055	86,457	7,214,913	21,713,456
Total Sum Of NumberBarged		7,788,148	4,253,655	203,988	26,720	6,611,565	18,884,076
Total Sum Of NumberBypassed		679,549	1,277,732	141,336	59,340	581,676	2,739,633
Total Sum Of NumberTrucked		117	36,133	31	273	18,839	55,393
Total Sum Of TotalProjectMort		35,630	11,294	614	144	3,313	50,995

