



Fish Passage Center

Weekly Report #04 - 24

August 20, 2004

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Highlights:

- Flows have averaged 34.1Kcfs at Lower Granite over the summer flow period and the flow objective is 50 Kcfs.
- Flows have averaged 134.4 Kcfs at McNary over the summer season and the flow objective is 200Kcfs.

Summary of Events:

Water Supply: Columbia Basin precipitation throughout the first sixteen days of August has generally been below average in most basins. Over the entire water year, precipitation remains slightly below average in most basins.

Table 1. Summary of August precipitation and cumulative October through August precipitation with respect to average (1971-2000), at select locations within the Columbia and Snake River Basins.

Location	Water Year 2004		Water Year 2004	
	August 1-16		October 1, 2003 to August 16, 2004	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	0.65	74	21.26	92
Snake River Above Ice Harbor	0.27	61	15.35	93
Columbia Above The Dalles	0.50	82	20.47	95
Kootenai	0.68	78	21.44	90
Clark Fork	0.44	66	14.50	90
Flathead	0.69	83	19.17	90
Pend Oreille/Spokane	0.70	107	27.22	93
Central Washington	0.41	210	8.01	94
Snake River Plain	0.07	22	8.70	83
Salmon/Boise/Payette	0.29	79	17.08	91
Clearwater	0.30	48	29.11	101
SW Washington Cascades/Cowlitz	0.85	107	59.35	88
Willamette Valley	0.24	43	52.59	92

The summer Flow Objective period started in the Lower Snake River on June 21st, 2004 and will end on August 31st, 2004. Flows have averaged 34.1 Kcfs over the summer flow period; the flow objective is 50 Kcfs. Flows at Lower Granite have averaged 23.9 Kcfs over the last week.

The summer flow period began at McNary on July 1st with a flow objective of 200 Kcfs. Flows have averaged 134.4 Kcfs at McNary over the summer season and 126.8 Kcfs last week.

Grand Coulee is currently at an elevation of 1278.9 feet and has drafted 1.9 feet over the past week. The summer draft limit at Grand Coulee is 1278 feet.

The Libby Reservoir has released a constant 12.5 Kcfs for the entire month of July and most of the month of August. Libby is currently at an elevation of 2444.8 feet. Current projections have Libby drafting to an elevation of 2441.6 feet on August 31st, 2004, which is approximately 112 Kaf of storage above 2439 feet.

The Hungry Horse Reservoir has been drafting for summer flow augmentation and is currently at an elevation of 3545.6 feet. Outflows at Hungry Horse have been 5.2 Kcfs over the last week. Current projections have Hungry Horse drafting to an elevation of 3540.9 feet on August 31st, 2004, which is approximately 21 Kaf of storage above 3540.0 feet.

The Dworshak Reservoir is currently at an elevation of 1546.5 feet and has been drafting for flow and temperature augmentation in the Lower Snake River. Outflows at Dworshak have been approximately 10 Kcfs over the last week with a temperature between 45-46°F.

The Brownlee Reservoir is currently at an elevation of 2060.4 feet and has held relatively steady over the last week. Outflows to Brownlee have ranged between 7.0 and 10.8 Kcfs over the last week.

Spill: Spill at Dworshak ended on August 8, as augmentation flows were reduced to less than powerhouse capacity. There has been no spill at Lower Granite, Little Goose or Lower Monumental dams on the Snake River to facilitate the present policy of maximization of fall chinook juvenile transportation. Summer spill for fish passage is continuing at Ice Harbor Dam, with spill averaging 66% of daily average flow from August 13 through August 19. During the same time period, Biological Opinion summer spill continued at the Lower Columbia projects with spill averaging 30% of daily average flow at John Day dam, 38% at The Dalles Dam and 63% at Bonneville Dam. There is no summer spill program at McNary Dam as the present Biological Opinion focuses on the maximization of transportation of fall chinook juveniles.

The percentage of water spilled at Bonneville Dam remains increased this past week. This, however, does not represent an increase in spill volumes, but is necessary due to a discrepancy identified by the COE last week in the calibration of the spill gate openings. This incorrect calibration at Bonneville Lock and Dam caused less water to be released than reported. Because of this calibration error the daytime spill quantity reported at Bonneville Dam will continue to be approximately 85 kcfs, while the actual spill quantity is about 75 kcfs. This discrepancy in actual and reported spill quantities will continue until a plan for calibration is prepared by the COE.

Gas bubble trauma monitoring is continuing at Rock Island, and at McNary and Bonneville dams. One fish was observed with minor signs of gas bubble trauma at Rock Island Dam over the past week.

Smolt Monitoring: Subyearling chinook indices decreased at all sites in the Snake River and Lower Columbia over the past week compared to the previous week.

At Lower Granite Dam, subyearling chinook indices were down from an average index of 730 per day last week to 450 per day this week. Of the wild subyearling PIT-tags passing Lower Granite Dam, Snake River origin tagged fish passed in relatively small numbers this week with 3 detected in the past week compared to 1 the previous week for a total of 32% of released tags detected to date. There were 8 detections of subyearlings marked in the Clearwater River compared to 20 last week, representing nearly 7% of total tags detected to date at Lower Granite Dam. Little Goose and Lower Monumental dams also had drops in subyearling chinook passage indices over the past week, with the index averaging 430 per day at Little Goose, and 80 per day at Lower Monumental compared to 860 and 180 last week, respectively.

At Rock Island Dam the numbers of subyearling chinook decreased, with the index averaging 40 per day this week compared to 80 last week. In the Lower Columbia, at McNary Dam, subyearling chinook indices averaged 1,400 per

day this week compared to nearly 3,400 per day last week. At John Day Dam the subyearling average index was 580 per day this week compared to 1,400 last week, while at Bonneville Dam the average index was 1,300 compared to 1,800 last week.

Hatchery Releases: For the 2004 juvenile migration, about 83.3 million yearling chinook, coho, steelhead, sockeye, and subyearling chinook salmon were released from Columbia River Basin hatcheries above Bonneville Dam. Salmon species released into streams or lakes (sockeye) during this summer and fall, 2004, normally reside in the streams or rivers through the winter and then migrate to the ocean the following spring (2005). Hatchery release numbers will be updated and finalized through the year; however, the numbers below represent most of the hatchery releases for the 2004 migration season.

Race/Species	Friday 20-August-2004			
	Snake River	Mid-Columbia	Lower Columbia	Total Release
Fall Chinook	2,580,499	12,511,808	21,958,796	37,051,103
Spring Chinook	10,487,462	3,975,400	5,226,390	19,689,252
Summer Chinook	2,374,050	3,125,983		5,500,033
Coho	1,367,111	2,387,178	5,959,828	9,714,117
Sockeye	76,927	315,790		392,717
Summer Steelhead	9,214,209	1,184,775	454,392	10,848,923
Winter Steelhead			79,070	79,070
Total	26,100,258	23,500,934	33,674,023	83,275,215

Adult Fish Passage: At Bonneville Dam, final count of summer chinook for the 2004 season was 92,143 through July 31. This total was less than recorded during the preceding two years, but was near double the 10-year average. Summer chinook passage at projects above McNary Dam totaled 67,060 at Priest Rapids Dam in the Mid-Columbia River and about 12,600 adult chinook at Ice Harbor Dam for the Snake River portion. For the season, summer chinook passage into the Snake River is reduced from 2003 (about 61% of 2003 count) but about 1.4 times greater than the 10-year average. Mid-Columbia passage of adult summer chinook in 2004 is returning at about 81% of the 2003 count at Priest Rapids Dam, but about double the 10-year average count for the season. Upstream at Rock Island Dam, the count now exceeds 62,000 with more than 41,000 above Rocky Reach Dam. A portion of the summer chinook is destined for the Wenatchee River, and these fish entering the Wenatchee River should be fairly close to the difference between the Rock Island and Rocky Reach count. Summer chinook above Rocky Reach will be entering River systems such as the Entiat, Methow, and Okanogan with the major hatchery of return being Wells Hatchery. In the Snake River, most of the summer chinook are bound for the Salmon River, principally the S. Fork Salmon and the Pahsimeroi rivers.

On August 1st, the counts of chinook changed to "fall chinook" and will be designated as such through the remainder of the fish counting season at Bonneville Dam. Through August 19, adult fall chinook appear to be passing satisfactorily as 12,619 have been counted compared to 13,289 in 2003 and 10,765 for the 10-year average. The TAC projects another excellent run of fall chinook for the 2004 season and although this is just a start of the run, it has at least started on the right foot, despite warm water temperatures and other factors that might reduce or delay the run.

Steelhead passage at Bonneville Dam have averaged 2,170 per day for the week ending on August 19. Steelhead counts passing upstream of The Dalles Dam ranged from 160 to 500 per day with the season total at 41,092. At Bonneville, the

steelhead run totals 168,435 through August 19, and this count was about 79% and 103% of the respective 2003 and 10-year average. Steelhead passage in the Snake River decreased from the preceding week with daily counts that were between 129 and 254 at Ice Harbor Dam, and a season total of 15,736 through August 19. In the Mid-Columbia River, steelhead counts at Priest Rapids Dam averaged 75 per day, a decrease from the previous week. The total steelhead count is about 5,800 for the season. Warm water temperatures remain present in the lower Columbia River, and a portion of the fish bound for upriver sites are residing in some of the backwater areas and tributaries in the Bonneville pool as these rivers and streams have cooler water temperatures than the mainstem Columbia River. Once past The Dalles Dam, additional steelhead hold in the Deschutes River as it also has cooler water temperatures than the main Columbia River. Water temperatures measured at Snake and Columbia River sites are near the 70°F point, not great temperatures for salmon species.

Sockeye passage is winding down in the upper Columbia as Rock Island and Rocky Reach dams have about 12 or fewer sockeye per day now passing the projects. The Rock Island count was near 106,500 with about 81,000 counted upstream at Rocky Reach Dam. To date, at least 78% of the sockeye run will be bound for the Okanogan River system with the remaining total (currently 22%) to the Wenatchee River system. Overall, the 2004 count of adult sockeye will be highest count recorded since 1985 at Bonneville Dam with the majority of these fish migrating to the Mid- and Upper-Columbia. This year's count of 110 sockeye at Lower Granite Dam is one of the higher totals in recent years. These Snake River sockeye are mainly destined for several of the lakes in the upper Salmon River basin.

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

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
08/06/04	57.3	0.1	59.5	0.0	62.3	5.8	65.8	0.0	69.0	0.0	81.1	1.8	83.4	44.8
08/07/04	54.8	0.2	54.2	0.0	56.0	5.4	53.0	0.0	53.5	0.0	46.0	1.8	44.7	0.8
08/08/04	64.4	0.1	61.8	0.0	65.1	5.3	60.8	0.0	62.4	0.0	65.6	1.9	61.6	1.1
08/09/04	99.3	0.1	100.0	0.0	101.3	7.3	95.0	0.0	95.2	0.0	92.2	1.9	85.1	1.1
08/10/04	101.8	0.1	107.1	0.0	109.7	7.7	106.7	5.2	105.8	0.0	112.8	4.7	110.0	3.1
08/11/04	104.3	0.1	104.9	0.0	108.7	7.5	107.2	9.0	107.3	0.0	119.6	1.8	121.4	0.9
08/12/04	102.7	0.2	102.6	0.0	104.1	7.5	105.3	9.6	108.8	0.0	108.3	1.9	103.4	1.0
08/13/04	104.0	0.1	102.4	0.0	105.1	7.3	104.0	10.0	103.6	0.0	106.1	1.9	101.0	0.9
08/14/04	81.9	0.1	82.6	0.0	86.4	6.6	85.4	6.5	87.2	0.0	95.1	2.0	92.9	1.1
08/15/04	80.2	0.1	83.2	0.0	86.9	6.4	86.7	5.3	86.2	0.0	91.0	1.8	89.9	1.0
08/16/04	103.7	0.1	108.7	0.0	105.5	7.2	98.8	7.9	99.5	0.0	101.0	1.8	95.9	0.9
08/17/04	113.0	0.2	106.6	0.0	107.4	7.4	106.8	9.7	107.3	0.0	112.7	2.0	108.9	1.0
08/18/04	108.5	0.2	108.8	0.0	112.5	7.5	112.3	9.6	111.0	0.0	115.4	2.0	114.3	0.8
08/19/04	105.5	0.2	107.2	0.0	110.1	7.8	105.6	10.0	105.7	0.0	113.7	1.9	115.3	0.9

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
08/06/04	11.5	1.6	7.8	8.7	28.0	0.0	27.6	0.0	27.2	0.0	26.2	15.7
08/07/04	11.5	1.6	7.7	8.5	25.3	0.0	25.9	0.0	26.5	0.0	27.9	18.4
08/08/04	11.4	1.6	7.3	9.1	25.7	0.0	25.7	0.0	25.8	0.0	26.7	17.5
08/09/04	9.9	0.0	8.2	10.6	25.5	0.0	26.1	0.0	26.8	0.0	26.8	17.0
08/10/04	10.0	0.0	8.2	11.4	25.8	0.0	27.4	0.0	28.9	0.0	30.1	21.0
08/11/04	10.0	0.0	8.9	13.1	26.8	0.0	25.9	0.0	25.0	0.0	24.9	16.0
08/12/04	10.1	0.0	8.1	8.7	28.8	0.0	29.1	0.0	29.7	0.0	28.9	18.0
08/13/04	10.1	0.0	7.9	8.7	23.6	0.0	22.4	0.0	21.8	0.0	24.0	14.5
08/14/04	10.1	0.0	7.8	8.7	23.9	0.0	24.3	0.0	24.1	0.0	24.3	14.6
08/15/04	10.1	0.0	8.7	8.6	23.8	0.0	24.7	0.0	25.3	0.0	23.8	15.1
08/16/04	10.1	0.0	8.8	8.6	24.0	0.0	23.7	0.0	24.8	0.0	27.4	19.8
08/17/04	10.1	0.0	8.7	10.0	24.9	0.0	24.9	0.0	24.0	0.0	24.1	17.1
08/18/04	10.2	0.0	10.2	8.5	22.8	0.0	22.5	0.0	22.2	0.0	25.0	17.8
08/19/04	10.2	0.0	---	---	24.7	0.0	25.4	0.0	26.4	0.0	26.5	17.5

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

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
08/06/04	105.7	0.0	97.6	29.5	96.9	38.5	129.5	87.8	0.0	30.4
08/07/04	100.6	0.0	101.2	30.3	103.1	40.6	126.6	84.7	0.0	30.5
08/08/04	74.3	0.0	76.7	22.9	87.0	27.5	124.3	82.1	0.0	30.8
08/09/04	113.5	0.0	109.7	32.7	104.2	34.8	123.8	81.2	0.0	31.2
08/10/04	125.8	0.0	124.8	37.9	122.4	44.5	141.8	87.2	0.0	42.9
08/11/04	155.1	0.0	154.4	45.7	156.4	61.8	181.3	97.6	1.8	70.4
08/12/04	136.1	0.0	138.0	41.9	136.2	54.5	162.2	95.2	0.0	55.8
08/13/04	126.4	0.0	126.4	37.7	127.8	49.5	152.9	90.1	0.0	51.3
08/14/04	115.3	0.0	99.2	28.9	96.4	34.4	129.8	87.3	0.0	31.1
08/15/04	100.7	0.0	100.0	30.0	101.0	38.3	128.5	84.9	0.0	32.1
08/16/04	135.7	0.0	139.3	41.6	137.3	49.0	153.6	94.8	0.2	47.2
08/17/04	126.0	0.0	125.3	38.1	124.2	50.2	151.4	96.2	0.0	43.8
08/18/04	135.6	0.0	142.0	43.2	144.0	55.6	169.5	103.4	0.0	54.7
08/19/04	148.1	0.0	139.7	41.6	136.9	54.4	164.0	101.1	0.0	51.5

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			
								Rank 1	Rank 2	Rank 3	Rank 4
McNary Dam											
	08/12/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/16/04	Chinook + Steelhead	31	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	08/10/04	Chinook + Steelhead	95	0	0	0.00%	0.00%	0	0	0	0
	08/17/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Rock Island Dam											
	08/12/04	Chinook + Steelhead	62	1	1	1.61%	0.00%	1	0	0	0
	08/19/04	Chinook + Steelhead	25	0	0	0.00%	0.00%	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>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
8/6	---	---	---	0	112	115	118	24	105	107	109	23	108	109	110	24	109	109	110	23
8/7	---	---	---	0	111	111	111	24	106	106	107	21	107	108	110	24	108	109	109	23
8/8	---	---	---	0	109	112	115	24	104	106	107	24	108	109	110	24	108	108	108	23
8/9	---	---	---	0	107	108	111	24	105	106	107	24	109	109	110	24	109	110	110	24
8/10	---	---	---	0	109	113	116	24	105	105	106	24	107	108	108	24	110	111	111	23
8/11	---	---	---	0	106	107	111	24	104	105	106	24	108	108	109	24	110	111	111	23
8/12	---	---	---	0	113	114	117	24	105	105	106	24	108	109	110	24	109	109	110	23
8/13	---	---	---	0	108	109	112	24	104	105	105	24	108	109	109	24	109	109	110	23
8/14	---	---	---	0	109	109	113	24	105	105	106	24	108	109	110	24	109	109	109	23
8/15	---	---	---	0	113	115	119	24	105	106	106	21	107	109	109	24	109	109	110	23
8/16	---	---	---	0	110	110	111	24	105	106	106	24	108	109	110	24	109	109	109	23
8/17	---	---	---	0	111	112	119	24	105	106	106	24	107	108	109	24	109	109	109	23
8/18	---	---	---	0	112	115	121	24	105	105	106	24	107	108	110	24	108	109	109	23
8/19	---	---	---	0	110	110	110	24	105	105	105	24	107	108	108	24	108	108	109	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>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
8/6	110	111	112	23	108	109	109	24	110	111	113	24	110	110	111	24	110	110	110	24
8/7	109	109	110	23	108	109	111	23	108	109	110	23	109	109	110	24	109	109	110	24
8/8	108	109	110	23	107	109	111	24	108	109	109	24	109	110	111	24	109	110	110	24
8/9	109	110	111	24	109	110	111	24	109	111	111	24	110	110	111	24	110	110	111	24
8/10	110	111	111	23	109	110	110	24	110	111	111	24	109	110	110	24	110	110	111	24
8/11	111	112	112	23	110	111	113	24	111	112	112	24	111	111	111	24	111	112	112	24
8/12	110	110	111	23	111	112	113	24	112	113	113	24	111	112	112	24	112	112	113	24
8/13	109	110	110	23	110	111	111	24	111	112	112	24	112	113	113	24	112	113	114	24
8/14	109	110	111	23	110	111	112	24	110	111	112	24	113	113	114	24	113	114	114	24
8/15	109	110	110	23	109	110	111	24	109	110	111	24	112	113	113	24	112	112	113	24
8/16	109	110	110	23	108	110	111	24	110	111	111	24	111	111	111	24	111	112	112	24
8/17	109	110	111	23	108	109	110	23	109	110	111	23	110	110	111	24	111	111	111	24
8/18	109	109	110	23	108	109	110	23	109	110	111	23	110	110	111	24	110	111	111	24
8/19	108	109	110	23	108	109	110	24	110	110	111	24	110	110	110	24	111	111	111	24

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>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
8/6	109	109	109	24	109	109	109	24	110	110	111	23	110	110	113	23	109	110	111	23
8/7	108	109	110	24	108	109	109	24	108	109	110	23	109	109	109	23	108	108	109	23
8/8	108	109	109	24	108	109	109	24	109	112	113	23	109	110	110	23	108	108	110	23
8/9	109	110	111	24	110	110	111	24	111	112	113	23	109	110	110	23	109	110	112	23
8/10	109	109	110	24	109	110	110	24	110	111	112	23	109	109	115	23	110	110	111	23
8/11	110	111	111	24	110	111	112	24	110	112	113	23	109	109	110	23	109	109	110	23
8/12	110	111	112	24	111	112	112	24	111	112	114	23	110	110	110	23	109	110	111	23
8/13	111	112	112	24	112	112	113	24	111	113	115	23	110	110	111	23	110	110	111	23
8/14	112	112	113	24	112	113	113	24	111	112	112	23	110	110	111	23	110	110	110	23
8/15	112	112	112	24	112	112	112	24	110	111	113	23	110	110	111	23	109	109	110	23
8/16	111	111	111	24	111	111	112	24	111	112	113	23	110	110	111	23	109	110	110	23
8/17	110	110	111	24	110	111	111	24	109	110	111	23	109	109	110	23	108	108	109	23
8/18	109	110	111	24	110	110	111	24	110	111	112	23	109	109	110	23	108	108	109	23
8/19	110	111	111	24	110	111	111	24	111	112	114	23	109	110	110	23	109	110	111	23

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	Priest R. Dnst			#	Pasco			#	Dworshak			#	Clrwtr-Peck			#	Anatone			#
	24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High	
8/6	---	---	---	0	106	106	107	24	102	102	103	24	102	103	104	24	100	101	102	24
8/7	---	---	---	0	105	106	106	24	101	101	102	24	102	102	103	24	100	102	103	24
8/8	---	---	---	0	106	107	108	24	101	101	102	24	102	103	103	24	101	103	104	24
8/9	---	---	---	0	106	107	107	24	99	100	100	23	102	102	102	23	102	104	104	24
8/10	109	109	110	7	106	107	108	24	99	99	100	24	101	101	102	24	102	103	105	24
8/11	---	---	---	0	107	108	108	24	99	100	100	24	101	102	104	24	102	104	105	24
8/12	---	---	---	0	107	107	108	24	99	99	100	24	101	103	104	24	102	104	105	24
8/13	---	---	---	0	107	107	108	24	100	100	101	24	101	103	104	24	102	103	105	24
8/14	---	---	---	0	106	107	107	24	100	100	101	24	101	103	104	24	102	103	105	22
8/15	---	---	---	0	105	106	106	24	100	100	100	24	101	102	103	24	101	102	104	24
8/16	---	---	---	0	106	106	107	24	100	100	100	24	101	102	103	24	101	101	102	24
8/17	---	---	---	0	106	106	107	24	100	100	100	24	101	102	104	24	100	101	102	24
8/18	---	---	---	0	105	106	106	24	99	100	100	24	101	102	103	24	101	102	104	24
8/19	---	---	---	0	105	106	106	24	100	100	101	24	101	102	104	24	101	101	102	24

Total Dissolved Gas Saturation Data at Snake River Sites

Date	Clrwtr-Lewiston			#	Lower Granite			#	L. Granite Tlwr			#	Little Goose			#	L. Goose Tlwr			#
	24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High	
8/6	102	104	106	24	103	104	104	24	101	102	102	24	102	103	105	24	99	100	102	24
8/7	102	104	105	24	103	104	106	23	100	100	101	23	99	100	101	19	99	99	100	19
8/8	103	105	107	24	107	108	109	24	101	101	101	24	105	109	111	24	100	101	101	24
8/9	104	106	106	23	109	109	110	24	101	101	102	24	108	109	109	24	101	101	101	24
8/10	102	105	106	24	109	110	111	24	101	101	102	24	107	109	111	24	99	99	100	13
8/11	103	105	107	24	109	110	111	24	101	101	102	24	110	112	113	24	100	100	100	16
8/12	103	105	107	24	109	109	110	24	101	102	102	24	112	113	113	24	100	100	101	24
8/13	103	105	106	24	108	109	109	24	102	102	102	24	109	110	112	24	100	100	100	24
8/14	103	105	107	24	107	108	108	24	102	102	103	24	105	108	109	24	100	101	101	24
8/15	102	103	105	24	106	107	107	24	101	102	102	24	103	105	106	24	100	101	101	24
8/16	102	103	104	24	106	106	106	24	101	102	102	24	104	105	105	24	99	100	101	24
8/17	102	104	105	24	104	105	105	24	101	101	102	24	102	102	104	24	99	99	100	24
8/18	103	105	106	24	104	105	105	24	101	101	102	24	101	102	103	24	99	100	101	24
8/19	102	104	105	24	105	106	107	24	101	101	101	24	104	105	106	24	100	101	102	24

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

Date	Lower Mon.			#	L. Mon. Tlwr			#	Ice Harbor			#	Ice Harbor Tlwr			#	McNary-Oregon			#
	24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High	
8/6	101	102	103	24	99	100	101	24	101	102	103	24	110	111	113	24	105	106	106	24
8/7	100	100	101	23	99	99	99	23	99	99	100	20	111	112	114	20	104	105	108	24
8/8	102	103	104	24	99	100	101	24	101	103	106	23	110	111	113	23	107	109	111	24
8/9	103	103	103	24	100	100	101	24	101	101	102	24	110	111	112	24	107	108	112	24
8/10	104	107	108	24	99	99	100	24	99	100	102	24	111	113	115	24	108	110	115	24
8/11	106	107	107	24	100	100	101	24	101	102	105	24	111	113	115	24	111	113	114	24
8/12	106	107	107	24	100	100	101	24	103	105	106	24	111	112	114	24	111	113	114	24
8/13	105	107	107	24	100	100	101	24	103	105	108	24	110	112	114	24	111	113	115	24
8/14	104	107	108	24	100	100	101	24	101	103	106	24	111	112	113	24	111	112	113	24
8/15	100	101	102	24	99	100	100	24	100	101	102	24	110	111	112	24	108	109	112	24
8/16	102	102	103	24	99	100	101	24	101	102	103	24	111	114	114	24	110	113	116	24
8/17	100	101	102	24	99	99	101	24	100	101	102	24	111	112	114	24	109	111	113	24
8/18	102	104	105	24	100	100	103	24	102	102	103	24	112	113	114	24	110	112	114	24
8/19	108	109	110	24	100	101	102	24	102	103	104	24	111	111	112	24	109	112	115	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	<u>McNary-Wash</u>				<u>McNary Tlwr</u>				<u>John Day</u>				<u>John Day Tlwr</u>				<u>The Dalles</u>			
	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24h</u>		<u>12h</u>		#	<u>24h</u>		<u>12h</u>		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr	
8/6	105	105	106	24	104	104	105	24	101	101	101	23	113	113	114	23	104	105	105	23
8/7	105	105	109	24	104	104	104	24	100	100	101	23	113	114	114	24	104	104	105	17
8/8	108	109	111	24	104	104	105	24	102	103	105	23	111	112	112	24	105	106	106	23
8/9	107	109	110	24	105	105	106	24	102	102	103	24	114	114	115	24	107	107	107	24
8/10	108	110	113	24	105	106	106	24	101	102	104	23	114	114	115	24	108	109	109	23
8/11	111	113	115	24	107	107	108	24	102	103	104	23	115	115	115	24	108	108	108	23
8/12	110	111	113	24	107	108	108	24	104	105	105	23	115	115	115	24	108	108	108	23
8/13	110	112	115	24	107	108	108	24	105	105	107	23	114	115	115	24	107	108	108	23
8/14	109	110	112	24	107	108	108	24	105	106	107	23	113	114	115	24	107	107	107	23
8/15	108	108	109	24	107	107	107	24	103	104	105	23	112	114	114	24	105	105	106	23
8/16	108	109	110	24	107	107	108	24	103	103	104	23	113	115	116	24	105	105	106	23
8/17	108	109	111	24	107	107	107	24	103	103	103	23	113	114	115	23	104	104	105	22
8/18	108	109	112	24	107	107	108	24	103	103	104	23	114	116	118	24	104	105	105	23
8/19	110	112	113	24	107	108	108	24	103	104	104	23	114	115	115	24	107	107	107	23

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>				<u>Bonneville</u>				<u>Warrendale</u>				<u>Camas\Washugal</u>			
	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24h</u>		<u>12h</u>		#	
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg
8/6	112	112	112	24	104	104	105	23	113	115	115	23	110	111	112	24
8/7	111	112	112	17	103	104	104	23	114	114	115	23	122	125	126	23
8/8	110	111	112	24	105	105	105	23	112	113	114	23	125	125	126	24
8/9	110	111	113	24	105	105	106	24	112	113	114	24	125	126	126	24
8/10	112	113	114	24	107	108	109	23	114	115	115	23	121	125	126	24
8/11	113	114	114	24	108	108	109	23	115	116	117	23	113	115	116	24
8/12	113	114	115	24	109	109	110	23	116	117	118	23	111	113	115	24
8/13	113	114	114	24	109	109	109	23	115	115	116	23	112	113	114	24
8/14	113	113	114	24	107	107	108	23	116	116	117	23	112	113	114	24
8/15	112	113	113	24	105	106	106	23	114	114	115	23	112	113	114	24
8/16	111	112	112	24	104	105	105	23	114	114	114	23	112	113	114	24
8/17	111	112	112	22	103	103	103	23	114	115	117	23	111	112	113	24
8/18	112	112	112	24	103	103	104	23	114	115	116	23	110	112	113	24
8/19	113	113	114	24	104	105	105	23	115	116	117	23	111	113	114	24

Two-Week Summary of Passage Indices

COMBINED YEARLING CHINOOK												
	ENT	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
/06/2004 *	---	---	---	---	---	0	14	0	0	0	0	0
/07/2004	---	---	---	---	---	0	16	0	0	0	0	0
/08/2004	---	---	---	---	---	4	32	3	0	0	0	0
/09/2004	---	---	---	---	---	4	10	0	0	0	0	0
/10/2004	---	---	---	---	---	4	18	3	0	5	0	0
/11/2004	---	---	---	---	---	4	18	3	0	0	0	0
/12/2004	---	---	---	---	---	0	20	0	0	0	0	0
/13/2004 *	---	---	---	---	---	0	30	3	0	8	0	0
/14/2004	---	---	---	---	---	0	32	3	0	0	0	0
/15/2004	---	---	---	---	---	0	4	0	0	0	7	0
/16/2004	---	---	---	---	---	0	7	0	0	0	0	0
/17/2004 *	---	---	---	---	---	0	11	2	0	8	7	0
/18/2004 *	---	---	---	---	---	0	15	2	0	0	0	0
/19/2004 *	---	---	---	---	---	4	21	0	0	0	0	0

total:	0	0	0	0	0	20	248	19	0	21	14	0
Days:	0	0	0	0	0	14	14	14	14	14	14	14
average:	0	0	0	0	0	1	18	1	0	2	1	0
'D	835	29,063	66,832	9,904	4,053	5,175,952	2,658,535	913,813	12,574	1,069,748	1,005,416	1,466,443

COMBINED SUBYEARLING CHINOOK												
	ENT	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
/06/2004 *	---	---	---	---	---	835	1,249	162	61	4,660	3,164	2,009
/07/2004	---	---	---	---	---	1,352	1,422	351	41	7,192	2,185	821
/08/2004	---	---	---	---	---	480	849	243	40	3,472	1,239	1,331
/09/2004	---	---	---	---	---	580	746	144	55	1,834	948	1,393
/10/2004	---	---	---	---	---	580	716	138	117	2,785	1,216	1,414
/11/2004	---	---	---	---	---	692	530	165	158	1,520	822	2,390
/12/2004	---	---	---	---	---	588	515	84	105	2,392	671	3,829
/13/2004 *	---	---	---	---	---	340	500	90	68	2,796	497	2,448
/14/2004	---	---	---	---	---	236	390	78	43	2,088	308	896
/15/2004	---	---	---	---	---	252	280	36	37	1,120	350	1,308
/16/2004	---	---	---	---	---	692	217	63	25	912	344	795
/17/2004 *	---	---	---	---	---	584	332	50	20	943	1,029	954
/18/2004 *	---	---	---	---	---	500	513	184	35	1,160	834	1,070
/19/2004 *	---	---	---	---	---	588	796	193	40	680	676	1,390

total:	0	0	0	0	0	8,299	9,055	1,981	845	33,554	14,283	22,048
Days:	0	0	0	0	0	14	14	14	14	14	14	14
average:	0	0	0	0	0	593	647	142	60	2,397	1,020	1,575
'D	1,579	0	29	80	935	1,006,303	475,007	187,430	25,670	8,407,918	1,718,375	4,728,588

* See sampling comments <http://www.fpc.org/currentDaily/smpcomments.htm>
 this means that one or more of the sites on this date had an incomplete or biased sample.

For clip information see: [Daily Catch Report](#)

For sockeye and yearling chinook (Snake only) race information see: [Current Passage Index Query](#)

If the text appears garbled, please hit the refresh button on your browser

NOTE for 2002 Lower Monumental Data: Due to the non-standard operation of Lower Monumental this year, the passage index reliability is in question and is being looked into.

Fall (post SMP season) trapping at the Imnaha River Fish Trap (IMN) is funded by the Lower Snake River Compensation Program (LSRCP)

Two-Week Summary of Passage Indices

COMBINED COHO												
	ENT	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/06/2004 *	---	---	---	---	---	4	2	0	0	0	0	0
08/07/2004	---	---	---	---	---	0	14	0	1	0	0	0
08/08/2004	---	---	---	---	---	4	68	0	0	0	0	0
08/09/2004	---	---	---	---	---	4	58	0	1	0	0	0
08/10/2004	---	---	---	---	---	0	30	0	0	5	0	0
08/11/2004	---	---	---	---	---	0	38	0	0	0	0	0
08/12/2004	---	---	---	---	---	0	41	3	0	0	0	0
08/13/2004 *	---	---	---	---	---	8	14	0	1	0	0	0
08/14/2004	---	---	---	---	---	0	36	3	0	0	0	0
08/15/2004	---	---	---	---	---	0	10	0	0	0	0	0
08/16/2004	---	---	---	---	---	12	25	0	2	0	0	0
08/17/2004 *	---	---	---	---	---	4	16	0	0	0	0	0
08/18/2004 *	---	---	---	---	---	0	27	1	0	0	0	0
08/19/2004 *	---	---	---	---	---	0	24	0	0	0	0	0

Total:	0	0	0	0	0	36	403	7	5	5	0	0
# Days:	0	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	0	3	29	1	0	0	0	0
YTD	0	0	0	0	45	259,465	127,824	15,926	28,667	90,681	175,311	938,019

COMBINED STEELHEAD												
	ENT	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/06/2004 *	---	---	---	---	---	89	182	12	1	0	0	0
08/07/2004	---	---	---	---	---	84	134	3	0	0	14	0
08/08/2004	---	---	---	---	---	12	92	3	0	0	0	0
08/09/2004	---	---	---	---	---	32	38	9	2	0	0	0
08/10/2004	---	---	---	---	---	40	78	0	0	0	0	0
08/11/2004	---	---	---	---	---	72	76	18	1	0	10	0
08/12/2004	---	---	---	---	---	40	86	15	1	0	14	0
08/13/2004 *	---	---	---	---	---	52	79	12	0	0	0	0
08/14/2004	---	---	---	---	---	48	108	9	2	0	0	0
08/15/2004	---	---	---	---	---	76	70	3	0	0	14	0
08/16/2004	---	---	---	---	---	84	22	3	0	0	7	0
08/17/2004 *	---	---	---	---	---	48	55	11	1	0	0	0
08/18/2004 *	---	---	---	---	---	48	87	23	0	0	7	0
08/19/2004 *	---	---	---	---	---	32	54	6	1	0	0	0

Total:	0	0	0	0	0	757	1,161	127	9	0	66	0
# Days:	0	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	0	54	83	9	1	0	5	0
YTD	195	2,106	36,387	1,857	8,418	5,827,949	1,917,575	343,314	10,724	124,610	257,267	155,670

* See sampling comments

Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE											
	ENT (Coll)	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
08/06/2004 *	---	---	---	---	---	0	2	0	1	0	0	0
08/07/2004	---	---	---	---	---	0	0	0	0	8	0	0
08/08/2004	---	---	---	---	---	0	0	0	0	0	0	0
08/09/2004	---	---	---	---	---	0	0	0	0	0	0	0
08/10/2004	---	---	---	---	---	0	0	0	1	5	0	0
08/11/2004	---	---	---	---	---	4	2	0	1	0	0	0
08/12/2004	---	---	---	---	---	4	0	0	0	0	0	0
08/13/2004 *	---	---	---	---	---	0	2	0	1	8	0	0
08/14/2004	---	---	---	---	---	0	1	0	0	8	0	0
08/15/2004	---	---	---	---	---	0	0	0	0	0	0	0
08/16/2004	---	---	---	---	---	0	0	3	0	0	0	0
08/17/2004 *	---	---	---	---	---	0	0	0	0	0	0	0
08/18/2004 *	---	---	---	---	---	0	1	0	0	0	0	0
08/19/2004 *	---	---	---	---	---	0	4	0	0	0	0	0

Total:	0	0	0	0	0	8	12	3	4	29	0	0
# Days:	0	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	0	1	1	0	0	2	0	0
YTD	6	9	0	0	25	7,577	4,732	958	7,114	308,942	235,899	189,679

* See sampling comments

<http://www.fpc.org/currentDaily/smpcomments.htm>

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.

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

ENT (Collection) = Entiat River Trap : 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)}

BO1 (Index) = Bonneville Dam First Powerhouse Bypass Collection System : Passage Index Counts

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

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. ENT data collected for the FPC by USFWS.

Two Week Transportation Summary

Source: Fish Passage Center

Updated:

8/20/04 11:10 AM

		08/07/04 TO 08/20/04					
		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	8,904	20	36	8	824	9,792
	Sum of NumberBarged	6,947	16	43	8	758	7,772
	Sum of NumberBypassed	32	0	0	0	0	32
	Sum of Numbertrucked	2,229	4	4	0	191	2,428
	Sum of TotalProjectMortalities	127	0	1	0	11	139
LGS	Sum of NumberCollected	9,595	252	413	13	1,178	11,451
	Sum of NumberBarged	8,325	212	370	9	1,048	9,964
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	2,146	49	76	6	211	2,488
	Sum of TotalProjectMortalities	118	9	11	0	7	145
LMN	Sum of NumberCollected	2,171	19	8	3	138	2,339
	Sum of NumberBarged	1,678	10	6	3	96	1,793
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	579	4	2	0	51	636
	Sum of TotalProjectMortalities	66	5	0	0	0	71
MCN	Sum of NumberCollected	33,554	21		29		33,604
	Sum of NumberBarged	30,890	11		23		30,924
	Sum of NumberBypassed	0	0		0		0
	Sum of Numbertrucked	1,141	0		0		1,141
	Sum of TotalProjectMortalities	951	10		6		967
Total Sum of NumberCollected		54,224	312	457	53	2,140	57,186
Total Sum of NumberBarged		47,840	249	419	43	1,902	50,453
Total Sum of NumberBypassed		32	0	0	0	0	32
Total Sum of Numbertrucked		6,095	57	82	6	453	6,693
Total Sum of TotalProjectMortalities		1,262	24	12	6	18	1,322

YTD Transportation Summary

Source: Fish Passage Center

Updated:

8/20/04 11:10 AM

TO: **08/20/04**

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	976,077	4,846,429	252,846	7,266	5,676,782	11,759,400
	Sum of NumberBarged	922,264	4,627,911	238,962	6,745	5,368,247	11,164,129
	Sum of NumberBypassed	46,403	151,332	13,352	285	289,607	500,979
	Sum of NumberTrucked	2,358	43,995	224	181	15,687	62,445
	Sum of TotalProjectMortalities	5,052	23,191	308	55	3,238	31,844
LGS	Sum of NumberCollected	474,740	2,573,009	124,567	4,680	1,871,479	5,048,475
	Sum of NumberBarged	471,597	2,569,307	124,333	4,667	1,867,841	5,037,745
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of NumberTrucked	2,146	2,145	76	8	1,544	5,919
	Sum of TotalProjectMortalities	994	1,516	61	5	2,090	4,666
LMN	Sum of NumberCollected	179,467	843,346	14,891	904	288,158	1,326,766
	Sum of NumberBarged	171,441	834,167	14,882	903	284,666	1,306,059
	Sum of NumberBypassed	6,666	6,333	3	1	2,141	15,144
	Sum of NumberTrucked	589	1,356	2	0	655	2,602
	Sum of TotalProjectMortalities	771	1,490	4	0	696	2,961
MCN	Sum of NumberCollected	7,670,265	658,044	56,924	190,590	76,314	8,652,137
	Sum of NumberBarged	6,549,868	8,073	5,009	10,355	1,384	6,574,689
	Sum of NumberBypassed	1,044,727	646,944	51,742	179,173	74,612	1,997,198
	Sum of NumberTrucked	1,141	0	0	0	0	1,141
	Sum of TotalProjectMortalities	68,957	2,920	173	1,062	318	73,430
Total Sum of NumberCollected		9,300,549	8,920,828	449,228	203,440	7,912,733	26,786,778
Total Sum of NumberBarged		8,115,170	8,039,458	383,186	22,670	7,522,138	24,082,622
Total Sum of NumberBypassed		1,097,796	804,609	65,097	179,459	366,360	2,513,321
Total Sum of NumberTrucked		6,234	47,496	302	189	17,886	72,107
Total Sum of TotalProjectMortalities		75,774	29,117	546	1,122	6,342	112,901

Cumulative Adult Passage at Mainstem Dams Through: 08/19

DAM	Spring Chinook						Summer Chinook						Fall Chinook					
	2004		2003		10-Yr Avg.		2004		2003		10-Yr Avg.		2004		2003		10-Yr Avg.	
	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	170,152	8,885	192,010	14,258	130,296	7,371	92,143	12,889	114,808	13,358	47,301	6,386	12,619	1,467	13,289	1,911	10,765	1,335
TDA	130,240	7,717	131,207	11,522	87,249	5,199	79,495	8,430	101,490	10,441	40,826	4,723	5,082	872	7,572	1,740	5,335	912
JDA	112,153	6,367	101,436	10,206	72,403	4,083	72,547	10,542	95,542	10,073	38,101	4,222	2,478	933	4,906	1,385	2,931	662
MCN	107,497	7,682	95,550	11,123	66,222	4,195	65,457	8,760	93,844	11,104	38,682	4,382	1,364	363	3,719	1,006	2,083	407
IHR	76,806	4,646	78,170	8,020	44,313	2,700	12,633	2,871	20,742	4,601	9,011	1,513	54	22	148	17	54	3
LMN	71,673	3,786	70,603	7,344	42,703	2,607	10,574	2,196	18,718	3,589	8,791	1,290	58	10	144	26	58	16
LGS	62,458	3,404	69,017	7,079	41,666	2,708	9,304	2,263	14,340	3,537	7,673	1,531	38	11	92	3	33	4
LWG	70,742	4,482	70,609	8,295	40,647	2,828	8,813	2,507	16,422	4,137	7,839	1,655	3	2	6	6	6	2
PRD	13,521	1,020	18,136	656	14,413	382	67,060	5,613	82,904	3,933	33,981	1,384	720	104	2,810	635	918	132
RIS	10,917	958	16,881	753	11,256	609	62,311	4,834	81,543	6,858	30,895	4,014	0	0	0	0	0	0
RRH	4,365	734	4,216	450	4,023	171	41,262	8,001	62,272	5,961	22,294	2,048	0	0	0	0	0	0
WEL	4,610	178	4,504	198	2,563	172	30,161	1,225	42,084	1,572	15,552	1,046	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2004		2003		10-Yr Avg.		2004	2003	10-Yr Avg.	2004	2003	10-Yr Avg.	Wild 2004
	Adult	Jack	Adult	Jack	Adult	Jack							
BON	171	16	826	134	196	41	123,280	39,270	42,656	168,435	214,190	163,032	64,492
TDA	1	0	35	0	9	1	107,460	34,173	34,660	41,092	59,938	64,943	18,851
JDA	1	2	4	0	5	0	113,482	35,413	37,899	35,660	43,997	44,147	15,460
MCN	1	2	0	1	0	0	89,685	32,035	33,487	24,271	31,292	33,302	9,766
IHR	0	0	0	0	0	0	83	37	18	15,736	20,222	15,604	4,509
LMN	0	0	0	0	0	0	77	14	24	11,417	15,024	13,981	3,449
LGS	0	0	1	0	0	0	78	22	26	7,811	10,852	8,942	2,814
LWG	0	0	0	0	0	0	110	10	22	11,434	21,967	11,012	4,012
PRD	2	1	7	5	5	0	124,904	36,533	40,797	5,858	6,391	3,891	*
RIS	1	0	9	0	1	0	106,554	34,755	37,703	4,844	4,159	2,710	4,078
RRH	0	0	2	0	1	0	80,683	30,284	24,339	3,869	3,148	1,729	3,138
WEL	0	0	0	0	0	0	77,216	28,951	23,834	1,938	1,751	1,012	1,433

IHR, RIS, and RRH are through 8/17; WEL is through 8/18.

IHR is missing 7/2; LGR has duplicate data 7/14 and 7/15.

*PRD is not posting wild steelhead numbers.

These numbers were collected from the COE's Running Sums text files, except where otherwise noted.

Wild steelhead numbers are included in the total.

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.

Page last updated on: 08/20/04

BON counts from January 1, 2004 to March 14, 2004 (our traditional counts begin March 15)

Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
156	1	1,489	238

