



*Fish Passage Center*

# Weekly Report #04 - 22

August 6, 2004

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

**Highlights:**

- Flows have averaged 36.8 Kcfs over the summer flow period at Lower Granite; the flow objective is 50 Kcfs.
- Flows have averaged 139.5 Kcfs at McNary over the summer season; the summer flow objective is 200 Kcfs.
- The temperature of Dworshak outflows was increased on 8-4-04 from near 43°F to near 45°F. Outflows at Dworshak have averaged 11.6 Kcfs over the last week and are projected to decrease to approximately 9.5 Kcfs by Monday morning.

**Summary of Events:**

**Water Supply:** Columbia Basin precipitation throughout the first twenty-six days of July has generally been slightly below average in most basins. Over the entire water year, precipitation also remains slightly below average in most basins.

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

Location	Water Year 2004 July 1-26		Water Year 2004 October 1, 2003 to July 26, 2004	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	1.31	88	20.56	93
Snake River Above Ice Harbor	0.81	105	15.00	95
Columbia Above The Dalles	0.91	88	19.93	96
Kootenai	1.40	88	20.68	91
Clark Fork	0.69	70	13.93	92
Flathead	1.31	98	18.34	91
Pend Oreille/Spokane	0.53	46	26.35	93
Central Washington	0.24	77	7.65	93
Snake River Plain	0.61	121	8.64	86
Salmon/Boise/Payette	0.51	75	16.78	92
Clearwater	0.74	61	28.62	102
SW Washington Cascades/Cowlitz	0.19	16	58.52	88
Willamette Valley	0.12	17	52.37	93

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 36.8 Kcfs over the summer flow period; the flow objective is 50 Kcfs. Flows at Lower Granite have averaged 27.8 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 139.5 Kcfs at McNary over the summer season and 126.0 Kcfs last week.

Grand Coulee is currently at an elevation of 1283.3 feet and has drafted 1.4 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 the first several days of August. Libby is currently at an elevation of 2448.0 feet. Current projections have Libby drafting to an elevation of 2441.9 feet on August 31st, 2004, which is 124 Kaf of storage above 2439 feet

The Hungry Horse Reservoir has been drafting for summer flow augmentation and is currently at an elevation of 3551.1 feet. Outflows at Hungry Horse have ranged between 5.2 and 5.9 Kcfs over the last week. Current projections have Hungry Horse drafting to an elevation of 3542.2 feet on August 31st, 2004, which is 51 Kaf of storage above 3540.0 feet.

The Dworshak Reservoir is currently at an elevation of 1564.1 feet and has been drafting for flow and temperature augmentation in the Lower Snake River. On Wednesday 8-4-04, the TMT decided to raise the temperature of outflows at Dworshak from near 43°F to near 45°F. Outflows at Dworshak have averaged 11.6 Kcfs over the last week and are projected to decrease to approximately 9.5 Kcfs by Monday morning.

The Brownlee Reservoir is currently at an elevation of 2063.0 feet and has drafted 1.8 feet over the last week. Outflows to Brownlee have ranged between 8.0 and 11.8 Kcfs over the last week.

**Spill:** The summer spill program is continuing at the Mid-Columbia projects. Some spill at Dworshak Dam has been occurring since July 12, as augmentation flows exceed 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 67% of daily average flow from July 30 through August 5. 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, 40% at The Dalles Dam and 58% 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 appears to have 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. No signs of gas bubble trauma have been observed 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 1,700 per day last week to 1,100 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 down from 5 the previous week for a total of 32% of released tags detected to date. Detections of subyearlings marked in the Clearwater River began four weeks ago, and there were 19 detected last week and 17 this week, only 5% of total tags have been detected to date at Lower Granite Dam. Little Goose and Lower Monumental dams also had drops in subyearling chinook numbers over the past week, with the index averaging 660 per day at Little Goose, and 220 per day at Lower Monumental compared to 900 and 300 last week, respectively.

At Rock Island Dam the numbers of subyearling chinook decreased, with the index averaging 100 per day this week compared to 400 last week. In the Lower Columbia, at McNary Dam, based on full samples taken every day, subyearling chinook indices averaged nearly 23,000 per day this week compared to nearly 61,000 per day last week. At John Day Dam the subyearling average index was 11,000 per day this week compared to 14,000 last week, while at Bonneville Dam the average index was 5,000 compared to 10,000 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.

**2004 Hatchery Zone Report**

Race/Species	Friday 6-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 64,400 at Priest Rapids Dam in the Mid-Columbia River and about 12,500 adult chinook at Ice Harbor Dam for the Snake River portion. Daily counts of adult summer chinook at Ice Harbor Dam averaged only 15 per day, while adult summer chinook counts at Priest Rapids Dam averaged 327 per day for the week ending August 5. For the season, 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 58,500 with 37,900 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 5, adult fall chinook appear to be passing satisfactorily as 3,783 have been counted compared to 2,900 in 2003 and 1,475 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 rose from a low count of 1,500 early in the week to

7,500 by the end of the count week on August 5. Steelhead counts passing upstream of The Dalles Dam ranged from 300 to 1,000 per day with the season total at 35,542. At Bonneville, the steelhead run totals 112,571 through August 5, and this count was about 83% and 107% 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 200 and 410 at Ice Harbor Dam, and a season total of 13,600 through August 3. In the Mid-Columbia River, steelhead counts at Priest Rapids Dam averaged 120 per day, a decrease from the previous week. The total steelhead count is about 4,600 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 100 or fewer sockeye per day now passing the projects. The Rock Island count was near 102,600 with about 80,400 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
07/23/04	85.9	0.2	87.3	0.0	89.8	6.9	88.5	7.3	91.0	14.9	91.4	27.4	85.9	46.3
07/24/04	79.8	0.2	76.8	0.0	79.4	6.1	80.2	6.6	83.4	16.0	87.5	26.1	81.2	43.9
07/25/04	54.2	0.2	59.8	0.0	61.4	4.9	61.4	6.3	62.5	15.1	72.1	21.6	69.8	37.9
07/26/04	95.1	0.2	95.7	0.0	98.9	6.9	92.6	8.8	93.5	17.7	97.8	29.3	91.6	49.6
07/27/04	96.9	0.2	94.1	0.0	95.7	7.1	95.8	8.4	97.1	16.5	108.0	33.1	107.8	58.2
07/28/04	101.8	0.2	109.8	0.0	113.0	7.3	109.8	8.4	110.3	17.1	124.0	40.1	113.2	61.1
07/29/04	113.7	0.2	109.1	0.0	111.4	7.6	110.5	8.6	112.9	19.4	125.2	40.0	119.9	64.7
07/30/04	104.6	0.2	105.6	0.0	105.8	7.3	105.4	8.5	106.6	20.8	117.5	37.7	111.3	60.0
07/31/04	103.8	0.2	99.6	0.0	101.2	7.1	103.3	6.6	107.0	16.4	109.0	35.1	103.4	56.4
08/01/04	76.1	0.2	78.7	0.0	81.8	6.3	76.7	5.7	77.8	14.8	80.1	25.5	77.6	41.8
08/02/04	77.6	0.2	84.0	0.0	85.3	6.3	86.1	8.5	90.4	23.6	106.1	34.1	97.9	53.0
08/03/04	89.6	0.1	88.8	0.0	90.6	6.6	88.1	8.3	87.3	25.9	87.7	28.0	93.5	50.6
08/04/04	96.3	0.1	93.5	0.0	95.7	7.0	93.7	0.0	96.2	17.3	105.9	33.9	90.2	49.0
08/05/04	72.3	0.1	77.8	0.0	76.0	6.0	78.1	0.0	79.8	0.0	91.4	29.1	87.8	47.4

**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
07/23/04	12.3	2.7	9.3	11.3	34.4	0.0	34.7	0.0	35.4	0.0	35.1	26.6
07/24/04	13.6	3.9	8.1	9.3	32.9	0.0	32.1	0.0	32.9	0.0	36.1	29.0
07/25/04	13.6	3.9	9.2	10.6	31.5	0.0	31.2	0.0	31.4	0.0	31.5	22.4
07/26/04	12.2	2.9	8.5	10.5	32.1	0.0	32.7	0.0	33.4	0.0	34.0	23.9
07/27/04	11.6	1.9	8.2	8.1	28.8	0.0	29.6	0.0	31.0	0.0	30.1	19.9
07/28/04	11.6	1.8	7.5	9.8	27.3	0.0	28.4	0.0	29.9	0.0	32.4	25.0
07/29/04	11.6	1.8	7.5	9.8	28.7	0.0	28.2	0.0	28.2	0.0	27.9	20.2
07/30/04	11.6	1.8	7.8	8.7	29.4	0.0	29.1	0.0	31.1	0.0	33.6	26.0
07/31/04	11.6	1.8	7.7	8.5	26.6	0.0	26.9	0.0	26.1	0.0	26.3	18.7
08/01/04	11.6	1.8	7.6	9.5	26.6	0.0	26.4	0.0	27.0	0.0	27.8	17.4
08/02/04	11.6	1.8	6.9	10.9	27.6	0.0	27.5	0.0	27.1	0.0	28.5	18.8
08/03/04	11.6	1.8	8.6	8.2	28.9	0.0	28.2	0.0	28.8	0.0	29.7	20.5
08/04/04	11.5	1.7	7.4	11.2	26.3	0.0	26.7	0.0	26.8	0.0	26.4	15.4
08/05/04	11.6	---	---	---	29.5	0.2	29.1	0.0	29.5	0.0	33.4	20.8

**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		
07/23/04	126.7	0.0	124.5	37.9	125.8	50.0	147.0	51.5	2.0	82.2
07/24/04	115.6	0.0	110.3	33.5	113.0	45.4	140.5	72.8	0.8	55.5
07/25/04	117.8	0.0	112.3	34.2	110.2	43.3	131.3	82.0	0.0	37.9
07/26/04	129.7	0.0	136.1	40.2	137.2	53.6	161.2	84.6	2.7	62.6
07/27/04	116.2	0.0	125.8	37.4	128.8	51.1	161.2	93.8	0.0	56.0
07/28/04	142.3	0.0	127.8	38.7	129.1	51.0	152.3	66.3	3.3	71.7
07/29/04	137.5	0.0	134.5	40.3	135.1	54.0	157.6	50.6	7.5	88.1
07/30/04	149.9	0.0	150.7	45.3	146.4	58.0	172.0	76.4	2.1	82.2
07/31/04	144.4	0.0	143.7	43.1	143.4	56.1	168.9	88.8	5.6	63.1
08/01/04	114.2	0.0	106.4	32.3	108.2	44.2	145.5	94.2	0.0	39.9
08/02/04	118.7	0.0	122.7	36.8	123.1	49.5	142.8	88.7	0.0	42.7
08/03/04	117.8	0.0	117.4	35.3	118.7	47.2	144.4	89.7	0.0	43.2
08/04/04	116.4	0.0	121.6	36.1	123.0	49.1	157.4	92.8	6.3	46.9
08/05/04	120.8	0.0	119.0	35.7	120.7	47.8	144.7	89.3	0.4	43.6

## 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			
								Rank 1	Rank 2	Rank 3	Rank 4
<b>McNary Dam</b>											
	08/02/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/05/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Bonneville Dam</b>											
	07/27/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/31/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/03/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Rock Island Dam</b>											
	07/29/04	Chinook + Steelhead	100	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>	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	#		
7/23	---	---	---	0	114	116	117	24	110	110	111	21	110	110	111	24	111	111	112	23
7/24	---	---	---	0	116	116	117	24	110	111	112	24	110	111	112	24	111	112	113	23
7/25	---	---	---	0	117	117	118	24	110	111	111	24	109	110	111	24	112	113	114	23
7/26	---	---	---	0	116	117	118	24	110	111	111	24	111	112	114	24	112	112	113	23
7/27	---	---	---	0	116	117	117	24	110	111	112	24	110	110	111	24	111	111	112	23
7/28	---	---	---	0	116	117	118	24	110	110	111	21	110	111	112	24	111	112	112	23
7/29	---	---	---	0	116	117	118	24	111	112	112	24	111	112	114	24	111	111	112	23
7/30	---	---	---	0	117	118	119	24	111	111	112	24	111	111	112	24	111	111	111	24
7/31	---	---	---	0	118	118	118	24	110	111	112	24	111	112	113	24	111	111	112	24
8/1	---	---	---	0	118	118	119	24	110	110	111	24	111	111	114	24	111	111	112	23
8/2	---	---	---	0	118	119	119	24	110	110	111	24	109	110	111	24	111	111	112	23
8/3	---	---	---	0	116	117	119	23	108	109	110	23	109	110	110	23	110	111	111	23
8/4	---	---	---	0	116	117	118	24	107	108	109	24	110	111	113	24	110	111	111	23
8/5	---	---	---	0	114	115	118	24	108	109	110	24	108	109	109	24	110	110	110	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	#		
7/23	111	112	113	23	110	111	112	24	111	113	113	24	111	112	113	24	112	113	113	24
7/24	112	112	113	23	111	112	114	24	112	113	113	24	113	114	114	24	113	114	114	24
7/25	112	112	113	23	110	111	112	24	112	113	114	24	113	114	114	24	113	114	114	24
7/26	112	112	113	23	112	113	116	24	112	113	114	24	113	113	114	24	113	113	114	24
7/27	111	111	112	23	112	113	113	24	113	114	114	24	112	113	113	24	112	113	114	24
7/28	112	112	112	23	112	113	114	24	113	113	114	24	113	113	114	24	113	114	114	24
7/29	111	112	113	23	112	113	113	24	113	114	114	24	113	114	114	24	114	114	115	24
7/30	111	112	113	24	111	112	112	23	112	113	113	23	113	113	114	24	113	114	114	24
7/31	111	112	113	24	111	112	113	23	112	113	113	23	113	113	114	24	113	114	114	24
8/1	111	112	113	23	111	112	112	24	112	112	113	24	113	114	114	24	113	113	114	24
8/2	112	112	113	23	111	112	112	24	111	112	113	24	112	113	114	24	113	113	114	24
8/3	111	111	112	23	110	111	112	24	111	112	112	24	111	112	112	24	112	112	113	24
8/4	111	111	112	23	110	111	112	24	111	112	113	24	111	111	112	24	111	111	112	24
8/5	111	112	113	23	110	110	111	24	111	112	113	24	110	111	111	24	110	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>	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	#		
7/23	111	112	112	24	115	116	118	24	---	---	---	0	---	---	---	0	---	---	---	0
7/24	112	112	113	24	116	117	118	24	116	117	118	23	114	114	115	23	115	116	117	23
7/25	112	113	114	24	117	118	120	24	113	114	115	23	113	113	114	23	113	114	116	23
7/26	111	112	113	24	116	117	119	24	---	---	---	0	---	---	---	0	---	---	---	0
7/27	112	112	112	24	116	117	118	24	112	113	114	23	113	113	113	23	110	111	111	23
7/28	112	113	113	24	115	116	117	24	113	114	116	23	114	114	115	23	112	113	113	23
7/29	112	113	113	24	116	117	120	24	112	113	114	23	113	114	114	23	112	113	114	23
7/30	112	113	113	24	117	118	120	24	112	113	115	23	113	113	114	23	111	112	113	23
7/31	112	113	113	24	116	117	117	24	112	113	115	23	113	114	115	23	112	112	114	23
8/1	112	112	113	24	116	117	118	24	112	112	113	23	113	113	113	23	111	113	115	23
8/2	111	112	113	24	118	119	121	24	112	112	113	23	113	113	114	23	110	111	112	23
8/3	111	111	111	24	117	118	118	24	110	110	111	23	112	113	113	23	109	110	111	23
8/4	110	111	111	24	115	116	119	24	---	---	---	0	---	---	---	0	---	---	---	0
8/5	109	110	110	24	110	110	114	24	---	---	---	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>Clrwtr-Peck</u>			#	<u>Anatone</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	
7/23	---	---	---	0	110	111	112	24	104	106	108	24	105	107	109	24	102	104	105	24
7/24	---	---	---	0	112	113	114	24	108	108	108	24	108	109	110	24	102	104	105	24
7/25	---	---	---	0	109	110	111	24	108	108	108	24	108	109	110	24	102	103	104	24
7/26	---	---	---	0	109	110	111	24	105	107	108	24	106	108	110	24	101	103	104	24
7/27	115	115	116	6	108	109	109	24	101	101	101	24	102	104	105	24	102	103	104	24
7/28	---	---	---	0	110	111	111	24	101	101	102	24	102	104	105	24	102	103	104	23
7/29	---	---	---	0	110	112	112	24	101	102	102	21	103	104	105	24	102	104	105	24
7/30	---	---	---	0	111	112	112	24	101	102	102	24	---	---	---	0	102	104	105	24
7/31	---	---	---	0	110	111	111	24	101	102	102	24	---	---	---	0	102	104	105	24
8/1	---	---	---	0	110	110	110	24	101	102	102	24	103	104	104	24	102	103	105	24
8/2	---	---	---	0	109	110	111	24	101	102	102	23	103	103	104	23	101	102	104	24
8/3	---	---	---	0	107	108	109	24	101	101	102	24	102	103	103	24	101	102	103	23
8/4	---	---	---	0	108	109	110	24	101	102	102	24	102	103	103	24	101	102	103	24
8/5	---	---	---	0	107	108	109	24	102	102	103	22	103	103	104	22	101	102	104	24

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

Date	<u>Clrwtr-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>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	
7/23	104	106	108	24	112	114	115	24	102	102	103	24	110	111	113	24	102	103	104	24
7/24	105	108	109	24	112	113	114	24	102	102	102	24	110	111	112	24	102	102	103	24
7/25	105	107	109	24	109	111	112	24	102	102	102	24	104	106	107	24	101	102	102	24
7/26	105	107	109	24	104	105	106	24	101	102	102	24	101	101	103	24	101	101	102	24
7/27	103	105	107	24	104	105	106	24	101	102	102	24	103	104	104	24	102	102	103	24
7/28	103	106	107	24	108	111	113	24	102	103	104	21	104	105	108	24	101	102	103	24
7/29	104	106	107	24	112	112	113	24	103	104	104	24	104	105	106	24	101	102	103	24
7/30	103	105	107	24	110	112	113	24	103	103	103	24	101	103	105	24	100	101	101	24
7/31	103	106	107	24	110	111	111	24	103	103	105	24	102	103	104	24	101	101	102	24
8/1	104	106	108	24	111	111	111	24	102	103	103	24	105	107	109	24	101	102	102	24
8/2	103	104	106	23	106	108	111	24	103	103	103	24	105	106	108	24	100	101	101	24
8/3	103	104	106	24	105	105	106	24	102	102	102	24	100	101	103	24	100	100	100	24
8/4	103	104	106	24	106	107	107	24	102	102	103	24	106	109	113	24	102	103	103	24
8/5	103	104	106	22	105	106	107	24	102	102	102	24	104	105	108	24	101	101	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>			<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	
7/23	106	106	107	24	100	101	102	24	101	101	101	24	114	116	117	24	112	114	118	24
7/24	106	107	107	24	101	102	103	24	101	101	102	24	113	115	116	24	113	115	116	24
7/25	102	103	105	24	101	102	103	24	102	102	102	24	113	115	116	24	112	112	113	24
7/26	102	103	104	24	101	101	102	24	101	102	102	24	113	114	115	24	111	112	114	24
7/27	103	104	106	24	101	102	102	24	103	103	104	24	111	113	114	24	112	114	117	24
7/28	104	105	106	24	101	101	102	24	102	103	103	24	112	114	115	24	112	115	118	24
7/29	102	103	105	24	101	101	102	24	102	103	104	24	111	114	115	24	113	116	118	24
7/30	102	103	104	24	101	101	102	24	101	102	103	24	112	114	115	24	111	112	114	24
7/31	103	104	105	24	101	101	102	24	102	103	103	24	111	112	115	24	110	112	113	24
8/1	104	106	108	24	103	105	116	24	103	103	103	24	110	111	113	24	110	111	112	24
8/2	104	105	106	24	101	102	103	24	102	103	105	24	110	111	113	24	112	114	115	24
8/3	101	102	103	24	100	100	101	24	101	102	103	24	112	114	115	24	107	109	110	24
8/4	102	103	105	24	100	102	110	24	104	105	107	24	111	112	113	24	108	110	111	24
8/5	101	102	103	24	100	100	101	24	102	102	103	24	112	113	114	24	107	108	110	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>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>AVG</u>	<u>High</u>	<u>#</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>		
7/23	111	112	113	24	109	110	110	24	104	105	106	23	114	114	115	24	108	109	109	23
7/24	113	114	115	24	110	110	110	24	106	107	107	23	113	114	114	24	108	109	109	23
7/25	110	110	112	24	109	109	110	24	104	105	105	23	113	114	114	24	107	107	108	23
7/26	110	111	115	24	109	110	110	24	104	104	104	23	113	115	115	24	104	104	105	23
7/27	114	115	119	24	110	110	111	24	104	104	104	23	114	114	115	24	105	106	107	23
7/28	110	111	114	24	109	109	110	24	104	104	104	23	114	115	115	24	107	108	108	23
7/29	109	110	112	24	108	108	109	24	104	104	105	23	114	115	115	24	106	107	107	23
7/30	108	109	110	24	108	109	109	24	104	104	104	24	114	115	116	24	105	106	106	24
7/31	109	110	112	24	109	109	110	24	103	103	104	24	114	115	116	24	105	105	106	24
8/1	110	111	113	24	109	110	110	24	103	103	104	23	113	114	115	24	105	106	106	23
8/2	110	112	116	24	108	108	109	24	102	103	103	23	113	114	115	24	104	104	105	23
8/3	107	108	109	24	107	107	108	24	102	102	102	23	113	114	115	24	103	104	104	23
8/4	109	110	114	24	107	108	108	24	102	102	102	23	113	115	115	23	104	105	105	23
8/5	106	107	108	24	105	106	107	24	101	101	102	23	113	114	115	23	105	105	105	23

**Total Dissolved Gas Saturation Data at Lower Columbia River Sites**

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>CamasWashugal</u>						
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</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>		
7/23	114	114	115	24	109	109	110	23	113	113	114	23	110	111	111	24
7/24	114	114	114	24	110	111	111	23	114	115	116	23	110	111	112	24
7/25	113	113	114	24	108	109	110	23	114	114	115	23	110	111	112	24
7/26	112	112	113	24	105	105	106	23	112	113	114	23	111	112	113	24
7/27	112	113	113	24	104	104	104	23	114	115	117	23	111	113	115	24
7/28	113	113	114	24	105	105	105	23	113	115	117	23	111	113	114	24
7/29	113	113	113	24	105	105	106	23	110	111	111	23	108	109	112	24
7/30	112	112	113	24	104	104	105	24	110	111	112	24	106	107	107	24
7/31	112	113	113	24	104	104	104	24	113	115	116	24	108	110	113	24
8/1	112	113	113	24	104	104	104	23	113	114	116	23	109	111	112	24
8/2	111	112	112	24	103	103	104	23	112	113	114	23	110	110	111	24
8/3	111	111	111	24	102	102	103	23	113	114	114	23	109	111	113	24
8/4	111	112	112	23	103	103	103	23	113	114	115	23	111	112	112	24
8/5	112	112	112	24	103	103	104	23	113	114	115	23	109	111	112	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)
07/23/2004	---	---	---	---	---	40	53	8	0	0	4	3
07/24/2004	*	---	---	---	---	10	60	16	0	0	4	23
07/25/2004	*	---	---	---	---	15	72	8	0	25	4	0
07/26/2004	*	---	---	---	---	5	40	20	0	0	0	0
07/27/2004		---	---	---	---	0	38	3	0	0	0	0
07/28/2004	*	---	---	---	---	5	16	6	0	0	7	0
07/29/2004	*	---	---	---	---	5	12	0	0	0	0	0
07/30/2004	*	---	---	---	---	5	15	0	0	0	0	0
07/31/2004	*	---	---	---	---	0	26	3	0	0	0	0
08/01/2004	*	---	---	---	---	15	10	0	1	0	0	0
08/02/2004	*	---	---	---	---	0	16	0	0	0	0	0
08/03/2004	*	---	---	---	---	4	13	0	0	0	0	0
08/04/2004	*	---	---	---	---	4	8	0	0	25	0	0
08/05/2004	*	---	---	---	---	0	19	0	0	0	0	0
-----												
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>108</b>	<b>398</b>	<b>64</b>	<b>1</b>	<b>50</b>	<b>19</b>	<b>26</b>
<b># Days:</b>	<b>0</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>0</b>	<b>8</b>	<b>28</b>	<b>5</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>2</b>
<b>YTD</b>	<b>835</b>	<b>29,063</b>	<b>66,832</b>	<b>9,904</b>	<b>4,053</b>	<b>5,175,932</b>	<b>2,658,283</b>	<b>913,794</b>	<b>12,574</b>	<b>1,069,727</b>	<b>1,005,402</b>	<b>1,466,443</b>

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)
07/23/2004	---	---	---	---	---	1,240	1,669	396	631	30,960	15,836	8,444
07/24/2004	*	---	---	---	---	1,535	2,230	292	473	53,500	15,498	12,195
07/25/2004	*	---	---	---	---	1,785	566	248	352	36,000	10,582	7,500
07/26/2004	*	---	---	---	---	2,530	289	176	143	99,650	7,668	11,674
07/27/2004		---	---	---	---	1,495	329	450	284	50,800	10,767	11,864
07/28/2004	*	---	---	---	---	1,655	690	318	390	36,700	20,464	9,074
07/29/2004	*	---	---	---	---	1,705	498	288	512	117,400	14,438	9,323
07/30/2004	*	---	---	---	---	1,835	405	264	265	32,250	20,278	7,908
07/31/2004	*	---	---	---	---	2,068	447	207	130	37,350	13,646	9,373
08/01/2004	*	---	---	---	---	1,365	592	222	90	21,950	19,965	5,413
08/02/2004	*	---	---	---	---	545	762	270	73	15,400	7,966	3,506
08/03/2004	*	---	---	---	---	732	692	255	79	32,850	5,346	5,209
08/04/2004	*	---	---	---	---	908	730	186	55	14,375	3,815	2,299
08/05/2004	*	---	---	---	---	432	1,008	153	49	4,700	3,030	2,221
-----												
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19,830</b>	<b>10,907</b>	<b>3,725</b>	<b>3,526</b>	<b>583,885</b>	<b>169,299</b>	<b>106,003</b>
<b># Days:</b>	<b>0</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>0</b>	<b>1,416</b>	<b>779</b>	<b>266</b>	<b>252</b>	<b>41,706</b>	<b>12,093</b>	<b>7,572</b>
<b>YTD</b>	<b>1,579</b>	<b>0</b>	<b>29</b>	<b>80</b>	<b>935</b>	<b>997,392</b>	<b>465,412</b>	<b>185,259</b>	<b>24,796</b>	<b>8,374,364</b>	<b>1,703,635</b>	<b>4,706,540</b>

\* 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

Date	COMBINED COHO											
	ENT (Coll)	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
07/23/2004	---	---	---	---	---	0	152	16	3	20	12	3
07/24/2004	*	---	---	---	---	5	164	16	3	100	19	7
07/25/2004	*	---	---	---	---	5	60	12	6	0	7	6
07/26/2004	*	---	---	---	---	10	24	4	3	0	0	12
07/27/2004		---	---	---	---	0	46	6	2	100	4	0
07/28/2004	*	---	---	---	---	0	14	6	3	0	0	0
07/29/2004	*	---	---	---	---	5	23	6	0	0	0	0
07/30/2004	*	---	---	---	---	5	7	0	2	0	0	0
07/31/2004	*	---	---	---	---	0	3	3	0	0	0	0
08/01/2004	*	---	---	---	---	5	27	3	0	0	0	0
08/02/2004	*	---	---	---	---	5	40	3	0	0	0	45
08/03/2004	*	---	---	---	---	4	47	3	0	0	0	0
08/04/2004	*	---	---	---	---	0	33	6	0	0	0	0
08/05/2004	*	---	---	---	---	12	46	0	0	0	0	0
<hr/>												
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>686</b>	<b>84</b>	<b>22</b>	<b>220</b>	<b>42</b>	<b>73</b>
<b># Days:</b>	<b>0</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>0</b>	<b>4</b>	<b>49</b>	<b>6</b>	<b>2</b>	<b>16</b>	<b>3</b>	<b>5</b>
<b>YTD</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>259,429</b>	<b>127,411</b>	<b>15,918</b>	<b>28,661</b>	<b>90,676</b>	<b>175,311</b>	<b>938,019</b>

Date	COMBINED STEELHEAD											
	ENT (Coll)	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
07/23/2004	---	---	---	---	---	150	168	20	0	0	4	0
07/24/2004	*	---	---	---	---	325	193	44	0	0	16	3
07/25/2004	*	---	---	---	---	440	248	32	0	0	4	0
07/26/2004	*	---	---	---	---	265	164	8	0	0	1	0
07/27/2004		---	---	---	---	160	81	9	0	0	7	0
07/28/2004	*	---	---	---	---	130	67	6	0	0	0	0
07/29/2004	*	---	---	---	---	130	56	21	2	0	0	0
07/30/2004	*	---	---	---	---	195	58	6	2	50	0	0
07/31/2004	*	---	---	---	---	190	87	9	0	0	0	0
08/01/2004	*	---	---	---	---	165	27	9	0	50	7	0
08/02/2004	*	---	---	---	---	125	41	6	0	0	0	0
08/03/2004	*	---	---	---	---	152	108	3	0	0	0	0
08/04/2004	*	---	---	---	---	120	50	12	0	0	0	0
08/05/2004	*	---	---	---	---	136	88	9	0	0	0	0
<hr/>												
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,683</b>	<b>1,436</b>	<b>194</b>	<b>4</b>	<b>100</b>	<b>39</b>	<b>3</b>
<b># Days:</b>	<b>0</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>0</b>	<b>192</b>	<b>103</b>	<b>14</b>	<b>0</b>	<b>7</b>	<b>3</b>	<b>0</b>
<b>YTD</b>	<b>195</b>	<b>2,106</b>	<b>36,387</b>	<b>1,857</b>	<b>8,418</b>	<b>5,827,124</b>	<b>1,916,397</b>	<b>343,176</b>	<b>10,715</b>	<b>124,610</b>	<b>257,201</b>	<b>155,670</b>

\* See sampling comments

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

## Two-Week Summary of Passage Indices

COMBINED SOCKEYE													
	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)	(INDEX)
07/23/2004	---	---	---	---	---	0	0	0	0	40	4	7	
07/24/2004	*	---	---	---	---	0	0	0	0	60	12	10	
07/25/2004	*	---	---	---	---	0	0	0	0	225	4	0	
07/26/2004	*	---	---	---	---	0	0	0	0	50	0	0	
07/27/2004	*	---	---	---	---	0	0	0	2	200	4	0	
07/28/2004	*	---	---	---	---	0	0	0	2	0	22	5	
07/29/2004	*	---	---	---	---	0	0	0	0	100	0	17	
07/30/2004	*	---	---	---	---	0	0	0	0	50	29	0	
07/31/2004	*	---	---	---	---	0	0	0	0	50	0	0	
08/01/2004	*	---	---	---	---	5	0	0	1	0	7	0	
08/02/2004	*	---	---	---	---	0	1	0	0	0	97	0	
08/03/2004	*	---	---	---	---	0	0	0	0	0	0	0	
08/04/2004	*	---	---	---	---	0	0	0	0	0	0	0	
08/05/2004	*	---	---	---	---	0	2	0	1	0	19	0	
-----													
<b>Total:</b>		0	0	0	0	5	3	0	6	775	198	39	
<b># Days:</b>		0	0	0	0	14	14	14	14	14	14	14	
<b>Average:</b>		0	0	0	0	0	0	0	0	55	14	3	
<b>YTD</b>		6	9	0	0	25	7,569	4,719	955	7,110	308,913	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:

8/6/04 8:20 AM

**07/24/04 TO 08/06/04**

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	19,827	108	56	5	2,683	22,679
	Sum of NumberBarged	19,433	134	49	7	2,667	22,290
	Sum of NumberBypassed	1,522	0	0	0	0	1,522
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	367	4	1	2	30	404
<b>LGS</b>	Sum of NumberCollected	10,907	398	686		1,436	13,427
	Sum of NumberBarged	10,078	448	696		1,409	12,631
	Sum of NumberBypassed	0	0	0		0	0
	Sum of Numbertrucked	0	0	0		0	0
	Sum of TotalProjectMortalities	194	6	21		25	246
<b>LMN</b>	Sum of NumberCollected	3,725	64	84		194	4,067
	Sum of NumberBarged	3,757	58	92		200	4,107
	Sum of NumberBypassed	0	0	0		0	0
	Sum of Numbertrucked	0	0	0		0	0
	Sum of TotalProjectMortalities	53	6	0		1	60
<b>MCN</b>	Sum of NumberCollected	583,885	50	220	775	100	585,030
	Sum of NumberBarged	572,528	42	173	739	93	573,575
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	11,357	8	47	36	7	11,455
Total Sum of NumberCollected		618,344	620	1,046	780	4,413	625,203
Total Sum of NumberBarged		605,796	682	1,010	746	4,369	612,603
Total Sum of NumberBypassed		1,522	0	0	0	0	1,522
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of TotalProjectMortalities		11,971	24	69	38	63	12,165

### YTD Transportation Summary

Source: Fish Passage Center

Updated:

8/6/04 8:20 AM

TO: 08/06/04

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	967,173	4,846,409	252,810	7,258	5,675,958	11,749,608
	Sum of NumberBarged	915,317	4,627,895	238,915	6,741	5,367,489	11,156,357
	Sum of NumberBypassed	46,371	151,332	13,352	285	289,607	500,947
	Sum of NumberTrucked	129	43,991	220	181	15,496	60,017
	Sum of TotalProjectMortalities	4,925	23,191	307	55	3,227	31,705
<b>LGS</b>	Sum of NumberCollected	465,145	2,572,757	124,154	4,667	1,870,301	5,037,024
	Sum of NumberBarged	463,272	2,569,095	123,963	4,658	1,866,793	5,027,781
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of NumberTrucked	0	2,096	0	2	1,333	3,431
	Sum of TotalProjectMortalities	876	1,507	50	5	2,083	4,521
<b>LMN</b>	Sum of NumberCollected	177,296	843,327	14,883	901	288,020	1,324,427
	Sum of NumberBarged	169,763	834,157	14,876	900	284,570	1,304,266
	Sum of NumberBypassed	6,666	6,333	3	1	2,141	15,144
	Sum of NumberTrucked	10	1,352	0	0	604	1,966
	Sum of TotalProjectMortalities	705	1,485	4	0	696	2,890
<b>MCN</b>	Sum of NumberCollected	7,636,711	658,023	56,919	190,561	76,314	8,618,528
	Sum of NumberBarged	6,518,978	8,062	5,009	10,332	1,384	6,543,765
	Sum of NumberBypassed	1,044,727	646,944	51,742	179,173	74,612	1,997,198
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	68,006	2,910	168	1,055	318	72,457
Total Sum of NumberCollected		9,246,325	8,920,516	448,766	203,387	7,910,593	26,729,587
Total Sum of NumberBarged		8,067,330	8,039,209	382,763	22,631	7,520,236	24,032,169
Total Sum of NumberBypassed		1,097,764	804,609	65,097	179,459	366,360	2,513,289
Total Sum of NumberTrucked		139	47,439	220	183	17,433	65,414
Total Sum of TotalProjectMortalities		74,512	29,093	529	1,115	6,324	111,573

**Cumulative Adult Passage at Mainstem Dams Through: 08/05**

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	3,783	399	2,904	601	1,475	271
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	1,245	155	602	192	256	52
JDA	112,153	6,367	101,436	10,206	72,403	4,083	72,523	10,544	95,542	10,073	37,934	4,178	0	0	0	0	0	0
MCN	107,497	7,682	95,550	11,123	66,222	4,195	64,395	8,559	93,370	10,891	37,940	4,225	0	0	0	0	0	0
IHR	76,806	4,646	78,170	8,020	44,313	2,700	12,528	2,851	20,596	4,574	8,927	1,506	0	0	0	0	0	0
LMN	71,673	3,786	70,603	7,344	42,703	2,607	10,518	2,183	18,605	3,519	8,716	1,264	0	0	0	0	0	0
LGS	62,458	3,404	69,017	7,079	41,666	2,708	9,242	2,247	14,169	3,501	7,585	1,513	0	0	0	0	0	0
LWG	70,742	4,482	70,609	8,295	40,647	2,828	8,764	2,484	16,128	4,048	7,735	1,635	0	0	0	0	0	0
PRD	13,521	1,020	18,136	656	14,413	382	64,372	5,362	79,455	3,174	31,672	1,124	0	0	0	0	0	0
RIS	10,267	957	16,881	753	11,256	609	58,506	5,318	75,074	5,338	27,728	3,281	0	0	0	0	0	0
RRH	4,365	734	4,216	450	4,023	171	37,842	7,248	56,519	4,638	19,197	1,513	0	0	0	0	0	0
WEL	4,615	178	4,504	198	2,563	172	25,871	876	34,587	1,012	12,635	680	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2004		2003		10-Yr Avg.		10-Yr		10-Yr			Wild	
	Adult	Jack	Adult	Jack	Adult	Jack	2004	2003	Avg.	2004	2003	Avg.	2004
BON	3	3	12	1	11	1	123,123	39,204	42,620	112,571	134,873	105,382	48,457
TDA	0	0	0	0	0	0	107,419	34,152	34,628	35,542	46,001	46,602	16,862
JDA	0	0	0	0	2	0	112,794	35,346	37,851	30,820	36,264	32,302	13,814
MCN	0	0	0	0	0	0	89,667	32,032	33,436	21,071	26,518	23,330	8,652
IHR	0	0	0	0	0	0	83	37	18	13,607	15,868	10,386	4,020
LMN	0	0	0	0	0	0	72	14	24	9,999	11,522	9,621	3,095
LGS	0	0	0	0	0	0	78	22	26	6,163	7,947	6,189	2,321
LWG	0	0	0	0	0	0	110	10	22	10,907	19,649	9,093	3,804
PRD	0	0	2	3	3	0	124,744	36,447	40,471	4,612	4,222	2,190	0
RIS	0	0	9	0	1	0	102,601	34,666	37,106	3,540	2,194	1,369	2,919
RRH	0	0	2	0	1	0	80,436	30,102	23,771	2,814	1,673	851	2,267
WEL	0	0	0	0	0	0	76,426	28,557	22,795	1,193	642	399	907

IHR and WEL are through 08/03; RIS and RRH are through 08/04.

IHR is missing 07/02. LGR has duplicate data 07/14 and 07/15.

\*\*PRD is not reporting 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: 08/06/04

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

