



Fish Passage Center

# Weekly Report #03 - 21

August 15, 2003

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## Summary of Events:

**Water Supply:** Precipitation throughout the Columbia Basin has been variable over the first portion of August. Of the sites in Table 1, recorded precipitation has ranged between 18% and 143% of average in August. Over the entire water year, precipitation has ranged between 70% and 100% of average at the listed sites.

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

Location	August 1-11, 2003		Cumulative October, 1 2002 to August 11, 2003	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	0.25	42	18.76	82
Snake River Above Ice Harbor	0.29	94	14.73	90
Columbia Above The Dalles	0.27	63	18.50	87
Kootenai	0.17	28	17.64	75
Clark Fork	0.34	73	13.71	86
Flathead	0.15	26	15.79	75
Pend Oreille/Spokane	0.48	107	26.44	91
Central Washington	0.18	134	8.48	100
Snake River Plain	0.29	143	7.24	70
Salmon/Boise/Payette	0.18	73	17.93	96
Clearwater	0.25	59	28.19	98
SW Washington Cascades/Cowlitz	0.10	18	57.18	85
Willamette Valley	0.37	97	51.44	90

The River Forecast Center (RFC) has released 2003 actual January through July runoff volumes at multiple projects within the Columbia Basin. Table 2 displays these runoff volumes along with the RFC April Final and July Final Runoff Volume Forecasts. Actual runoff volumes (Jan-July) have varied between 56% (Brownlee) and 101% (Dworshak) of the 1971-2000 average; the actual runoff at The Dalles has been 82% of average.

**Table 2. Summary of actual 2003 January through July runoff volumes at multiple projects within the Columbia Basin along with the RFC April Final and July Final Runoff Volume Forecasts.**

Site	April Final Jan-July Forecast (Kaf)	July Final Jan-July Forecast (Kaf)	Actual Jan-July Runoff Volume (Kaf)	Actual Jan-July Runoff Volume Percent Average (1971-2000)
The Dalles	85300	89300	87688	82
Grand Coulee	52900	55900	54181	86
Libby	4960	5600	5188	82
Hungry Horse	1800	1890	1817	82
Lower Granite	24200	24800	23809	79
Dworshak	3660	3600	3564	101
Brownlee	5810	5940	5964	56

The summer Biological Opinion Flow objectives are 50.7 Kcfs at Lower Granite (June 21st-August 31st) and 200 Kcfs at McNary (July 1st-August 31st). To date (August 13th 2003), flows have averaged 35.1 Kcfs at Lower Granite and 138.3 Kcfs at McNary.

Libby Reservoir is currently at an elevation of 2446.8 feet, and has drafted 3.6 feet in the last week. Outflows are currently 18.0 Kcfs.

Hungry Horse Reservoir is at an elevation of 3544.6 feet and has been drafted approximately 2.4 feet over the last week.

Dworshak Reservoir is currently at an elevation of 1550.1 feet, and has drafted 8.8 feet in the last week. Supplemental outflows from Dworshak to moderate temperatures in the Lower Snake River were reduced to a daily average of 10.0 Kcfs on August 5th.

Grand Coulee Reservoir ended August 14th at an elevation of 1282.5, remaining steady over the last week.

Brownlee Reservoir was at an elevation of 2062.5 feet on August 14th, 3.6 feet in the last week. Outflows at Brownlee have been fluctuating between 8.9 and 16.1 Kcfs over the week.

**Spill:** The Biological Opinion does not call for a summer spill program at Lower Granite, Little Goose and Lower Monumental dams. The transportation of juvenile fall chinook continues at these projects. At Ice Harbor Dam a modified 12-hour spill program continues to be implemented. Spill over the past week averaged 35% of average daily flow at this project.

The summer spill program is being implemented at John Day, The Dalles and Bonneville dams. Spill averaged 24%, 37%, and 59% of average daily flow, respectively.

Total dissolved gas levels are presently below the gas waiver limits at all the federal projects. GBT monitoring is presently being implemented at Rock Island, McNary and Bonneville dams. One fish was detected with signs of GBT this past week at Rock Island Dam.

**Smolt Monitoring:** The sub-yearling passage index at Lower Granite Dam has totaled 33,958 for the August 1 through August 15 period. This is similar to passage indices for this time frame in recent years.

At Lower Granite Dam the average daily index for subyearling chinook decreased from 2,900 last week to 1,800 per day this week. Little Goose Dam saw a decrease in the index to 900 this week compared to 1,900 last week. At Lower Monumental there was also a decrease, as subyearling indices averaged 400 this week compared to 820 last week.

At Rock Island Dam, in the mid-Columbia, subyearling chinook indices decreased last week with the daily average at 90 compared to 200 per day the previous week.

In the Lower Columbia, at McNary, the daily average index for subyearling chinook was down about 20% at 36,000 per day this week compared to 45,000 last week. Samples on the 13th and 14th at McNary were incomplete, because the project was operated in primary bypass for 1 to 3 hours each day as the Vertical Barrier Screens were cleaned of debris. At John Day Dam the average daily index for subyearling chinook increased to 13,500 this week compared to 13,200 last week. The past three days at John Day showed marked increases in the index with the index ranging from 19,000 to 31,000. At Bonneville Dam, the average daily index for subyearling chinook was at 6,700 this week compared to 11,100 last week.

**Hatchery Releases** - The preliminary total of juvenile salmonids released from hatcheries above Bonneville Dam for the 2003 migration season is estimated near 87.3 million from Columbia River Basin hatcheries. For this summer and fall, some hatcheries will be releasing supplemental and other hatchery-reared fish that will be part of the 2004 migration season. The Zone Release Report below summarizes hatchery releases from State, federal or Tribal hatcheries or acclimation ponds for the 2003 Migration Season. These totals will be updated and finalized through the year.

Hatchery Zone Release Report	Friday 15-August-2003			
	Snake River	Mid-Columbia	Lower Columbia	Total Release
Fall Chinook	4,057,928	12,354,538	25,446,818	41,859,284
Spring Chinook	10,473,976	3,474,730	5,441,505	19,390,211
Summer Chinook	2,332,578	3,001,618		5,334,196
Coho	1,248,216	1,876,158	5,631,793	8,756,167
Sockeye	140,410	208,986		349,396
Summer Steelhead	9,687,941	1,344,613	490,667	11,523,221
Winter Steelhead			94,900	94,900
Total	27,941,049	22,260,643	37,105,683	87,307,375

**Adult Fish Passage** - Adult summer chinook passage is complete at all Lower Columbia projects, as well as at Ice Harbor and Lower Monumental dams on the Snake River and at Priest rapids Dam on the Mid Columbia River. Fall chinook are now being counted at these projects. The adult fall chinook count at Bonneville Dam was 9,734, about 97% of the 2002 count and 141% of the 10-year average.

Most sockeye salmon are nearing completion in the lower Columbia River. At Rock Island Dam, about 34,700 have been counted with about 30,200 counted at Rocky Reach Dam (Lake Osoyoos sockeye). The 2003 sockeye Run is primarily comprised of Lake Osoyoos stock sock-

eye. The Rock Island count minus the Rocky Reach count should approximate the Lake Wenatchee Run. In the Snake River, only 11 adult sockeye have been counted at Lower Granite Dam; destination of these sockeye should be the upper Salmon River basin.

Numbers of steelhead at Bonneville Dam were about 5,000 per day for this week. The cumulative count through August 14 was 185,825 and compares to 236,876 in 2002 and 137,888 for the 10-year average. The steelhead count differential between Bonneville Dam and The Dalles Dam has risen to greater than 132,000 at present. At McNary Dam, daily counts of adult steelhead continued in the 200 to 500 range, while counts of steelhead averaged about 150 per day at Priest Rapids Dam. At Ice Harbor Dam and other Snake River projects, steelhead counts averaged slightly more than 200 per day. The cumulative count for Priest Rapids Dam was 5,654 with Ice Harbor at 18,776 through August 14.

**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
08/01/03	97.5	0.1	100.3	0.0	105.0	7.7	104.2	16.0	105.3	21.6	112.3	33.8	111.5	62.7
08/02/03	60.6	0.1	61.5	0.0	63.3	5.1	62.0	14.7	65.3	19.7	95.8	28.8	98.3	55.3
08/03/03	58.0	0.1	61.2	0.0	58.7	4.9	59.0	9.7	61.1	13.7	57.0	17.3	61.1	34.3
08/04/03	104.9	0.1	102.8	0.0	102.7	7.3	98.6	16.8	98.8	22.6	76.1	22.8	71.9	40.4
08/05/03	102.6	0.1	103.8	0.0	108.4	7.4	106.4	12.1	105.9	19.7	114.6	34.9	106.3	60.4
08/06/03	85.9	0.2	86.8	0.0	85.2	6.4	87.1	11.9	91.0	18.5	99.5	30.6	96.9	54.0
08/07/03	96.6	0.1	98.5	0.0	100.3	6.9	95.6	11.1	95.5	17.7	96.6	30.1	95.8	53.9
08/08/03	95.6	0.1	100.1	0.0	100.9	7.0	100.6	9.5	101.2	15.0	101.4	30.9	97.4	54.4
08/09/03	83.5	0.1	80.2	0.0	83.0	6.2	83.4	9.8	86.5	13.4	101.7	31.3	101.2	56.8
08/10/03	68.9	0.1	73.9	0.0	72.8	6.0	70.2	9.5	71.5	12.5	79.6	24.7	76.8	43.1
08/11/03	116.6	0.1	110.5	0.0	111.3	7.5	110.6	13.6	112.0	19.5	111.9	35.0	103.9	58.4
08/12/03	84.2	0.1	90.4	0.0	90.5	7.2	88.0	16.5	90.7	22.3	103.2	32.4	104.0	58.6
08/13/03	91.4	0.1	90.7	0.0	93.1	7.4	89.3	17.2	89.4	23.2	92.1	8.6	91.6	50.8
08/14/03	108.9	0.1	112.3	0.0	111.1	7.0	113.6	12.9	114.1	16.9	111.6	2.5	106.1	21.9

**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
08/01/03	11.9	1.9	8.9	12.5	29.5	0.0	29.1	0.0	30.1	0.0	30.3	12.2
08/02/03	11.9	1.9	7.1	8.7	30.9	0.0	29.7	0.0	31.9	0.0	29.5	16.6
08/03/03	11.9	1.9	7.7	7.6	26.0	0.0	24.9	0.0	27.5	0.0	27.3	15.5
08/04/03	11.9	1.9	8.7	10.8	26.0	0.0	24.6	0.0	24.3	0.0	22.6	11.3
08/05/03	10.0	0.0	8.8	11.2	26.9	0.0	28.1	0.0	30.6	0.0	29.7	11.6
08/06/03	10.0	0.0	8.3	13.6	27.7	0.0	28.0	0.0	29.0	0.0	28.8	10.8
08/07/03	10.0	0.0	9.8	15.8	30.9	0.0	29.5	0.0	31.5	0.0	30.0	11.9
08/08/03	9.9	0.0	9.4	14.7	31.4	0.0	31.3	0.0	32.3	0.0	32.0	12.3
08/09/03	10.1	0.0	9.2	15.2	29.5	0.0	30.0	0.0	31.1	0.0	30.8	12.0
08/10/03	10.1	0.0	9.7	14.6	30.2	0.0	30.0	0.0	31.9	0.0	30.8	9.6
08/11/03	10.1	0.0	9.0	14.9	29.7	0.0	29.3	0.0	30.3	0.0	30.8	11.5
08/12/03	10.1	0.0	8.2	10.4	30.2	0.0	30.5	0.0	31.5	0.0	30.4	10.1
08/13/03	10.1	0.0	8.0	11.5	24.0	0.0	25.1	0.0	25.2	0.0	23.9	8.5
08/14/03	10.1	0.0	---	---	22.4	0.0	29.0	0.0	31.1	0.0	31.4	10.2

**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		
08/01/03	146.2	0.0	148.2	30.2	145.1	53.0	165.6	88.7	1.9	68.2
08/02/03	139.0	0.0	137.9	34.9	136.4	53.4	171.4	90.9	0.0	73.8
08/03/03	95.3	0.0	89.5	21.4	91.6	33.0	134.1	87.2	0.0	40.2
08/04/03	117.1	0.0	129.0	28.2	132.2	50.3	152.1	85.1	3.8	56.5
08/05/03	116.8	0.0	112.5	22.8	114.1	36.6	139.7	86.9	0.0	46.1
08/06/03	126.5	0.0	120.4	30.1	117.5	42.8	142.4	87.2	0.0	48.7
08/07/03	123.2	0.0	116.2	27.7	119.1	45.1	143.8	85.9	0.0	51.2
08/08/03	115.1	0.0	114.5	30.8	109.5	39.8	144.5	86.9	0.0	50.8
08/09/03	134.4	0.0	128.2	31.7	131.5	48.3	147.2	88.1	0.0	52.4
08/10/03	112.1	0.0	109.9	27.5	111.3	43.8	141.4	87.5	0.0	47.2
08/11/03	126.3	0.0	125.5	28.0	123.4	45.6	146.3	84.7	0.0	54.9
08/12/03	140.4	0.0	143.9	34.3	144.2	55.5	172.6	94.8	0.0	71.1
08/13/03	128.3	0.0	128.8	28.2	130.6	48.4	163.6	96.3	0.0	60.6
08/14/03	201.8	0.0	123.3	28.8	123.2	45.0	154.2	90.3	0.0	57.3

## 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>											
	08/07/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/11/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Bonneville Dam</b>											
	08/07/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/11/03	Chinook + Steelhead	101	0	0	0.00%	0.00%	0	0	0	0
	08/14/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Rock Island Dam</b>											
	08/07/03	Chinook + Steelhead	100	4	4	4.00%	0.00%	4	0	0	0
	08/11/03	Chinook + Steelhead	50	1	1	2.00%	0.00%	1	0	0	0

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	Hungry H. Dnst			Boundary			Grand Coulee			Grand C. Tlwr			Chief Joseph							
	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#					
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High					
8/1	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
8/2	---	---	---	0	113	113	114	24	107	108	108	24	109	110	114	24	108	109	109	23
8/3	---	---	---	0	111	112	113	24	107	107	107	24	109	110	115	24	108	108	109	23
8/4	---	---	---	0	111	111	111	24	107	107	107	24	108	109	111	24	108	108	109	23
8/5	---	---	---	0	112	113	113	24	107	107	107	24	108	109	112	24	108	109	109	23
8/6	---	---	---	0	112	113	114	24	107	107	107	24	108	109	113	24	109	109	109	23
8/7	---	---	---	0	112	113	116	24	106	107	107	24	108	108	112	24	107	107	108	23
8/8	---	---	---	0	113	114	115	24	106	107	107	24	108	109	113	24	107	108	108	23
8/9	---	---	---	0	113	114	115	24	106	107	107	24	108	109	111	24	108	108	109	23
8/10	---	---	---	0	106	107	111	24	106	106	106	24	108	109	113	24	107	108	108	23
8/11	---	---	---	0	106	106	107	24	106	106	106	24	107	107	111	24	107	107	108	23
8/12	---	---	---	0	106	107	109	24	106	106	106	24	107	108	110	24	107	107	108	23
8/13	---	---	---	0	106	106	107	24	106	106	107	24	106	107	110	24	107	107	107	23
8/14	---	---	---	0	106	106	107	24	106	107	107	24	106	107	110	24	106	106	107	23

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	Chief J. Dnst			Wells			Wells Dwnstrm			Rocky Reach			Rocky R. Tlwr							
	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#					
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High					
8/1	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
8/2	109	110	111	23	108	109	110	24	111	112	112	24	112	112	112	23	112	113	113	22
8/3	108	109	110	23	107	107	108	24	110	110	112	24	110	111	112	23	111	111	112	21
8/4	108	108	109	23	107	108	108	23	109	110	110	23	109	110	110	23	110	111	111	23
8/5	108	108	108	23	108	109	109	24	110	111	111	24	110	110	110	17	110	110	111	17
8/6	109	110	110	23	107	108	109	23	110	110	111	23	109	109	110	20	110	110	111	20
8/7	108	108	109	23	107	108	109	24	109	110	111	24	109	109	110	17	110	110	110	17
8/8	108	109	109	23	108	108	109	24	110	110	110	24	109	110	110	20	110	110	111	18
8/9	107	108	110	23	107	108	110	24	109	110	111	24	109	110	110	22	110	110	111	20
8/10	107	108	110	23	107	108	109	24	110	112	117	24	110	110	111	19	110	111	112	17
8/11	106	107	107	23	107	108	108	24	109	110	110	24	109	109	109	17	109	110	110	16
8/12	107	108	109	23	106	107	108	24	108	109	110	24	109	109	110	13	110	110	110	13
8/13	107	107	109	22	107	108	111	24	108	109	110	24	109	109	110	17	110	110	110	16
8/14	106	107	108	23	107	108	109	24	109	110	113	24	109	109	109	19	110	110	110	19

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	Rock Island			Rock I. Tlwr			Wanapum			Wanapum Tlwr			Priest Rapids							
	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#					
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High					
8/1	---	---	---	0	---	---	---	0	109	109	109	24	114	115	115	22	111	111	113	24
8/2	111	111	112	23	116	117	118	22	108	108	109	24	113	114	114	23	110	111	112	24
8/3	111	111	111	20	114	115	117	19	106	107	108	24	113	113	114	24	110	110	110	24
8/4	110	110	111	21	115	116	118	21	107	108	109	24	114	115	115	23	111	112	114	24
8/5	110	111	111	17	116	116	119	15	108	109	110	24	115	116	116	23	113	113	115	24
8/6	110	110	111	17	116	117	119	16	107	107	108	24	115	115	116	24	111	112	114	24
8/7	109	109	110	16	115	115	118	16	---	---	---	0	---	---	---	0	---	---	---	0
8/8	110	110	110	20	115	115	118	19	108	108	110	24	115	116	117	23	112	113	114	24
8/9	109	110	110	21	114	115	117	19	107	108	109	24	115	115	116	21	113	114	115	24
8/10	109	110	110	18	114	115	116	17	106	107	107	24	114	115	116	23	110	112	114	24
8/11	109	109	110	16	115	116	118	15	106	106	107	24	114	114	115	10	109	111	113	24
8/12	110	110	111	13	116	116	119	12	105	105	106	24	113	114	115	24	110	111	112	24
8/13	110	110	111	17	116	117	118	15	---	---	---	0	---	---	---	0	---	---	---	0
8/14	110	110	110	18	115	117	120	17	---	---	---	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	Priest R. Dnst				Pasco				Dworshak				Clrwtr-Peck				Anatone			
	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr	
8/1	116	117	119	24	111	112	113	24	104	105	105	24	105	107	108	24	101	102	103	24
8/2	114	116	117	24	110	111	112	24	104	104	105	21	105	106	107	24	101	101	102	24
8/3	111	112	115	24	107	108	108	24	104	104	104	24	104	104	105	24	100	101	101	24
8/4	112	114	115	24	107	107	107	24	103	104	104	24	104	106	107	24	101	102	104	24
8/5	114	117	119	24	107	108	109	24	100	100	100	24	103	104	105	24	102	103	104	24
8/6	115	116	118	24	108	110	111	24	100	100	100	24	102	104	105	24	101	102	104	24
8/7	---	---	---	0	109	110	111	24	100	100	100	21	102	104	105	24	102	103	104	24
8/8	114	116	119	24	109	110	110	24	100	100	100	24	102	104	105	24	102	103	105	24
8/9	116	117	119	24	110	111	111	24	100	100	100	24	102	104	105	24	102	103	104	24
8/10	112	114	115	24	111	111	112	24	100	100	100	21	102	104	105	24	102	103	104	24
8/11	114	116	118	24	108	108	109	23	99	99	100	20	102	103	105	24	101	102	103	24
8/12	115	116	117	24	108	110	110	24	99	100	100	21	102	103	104	24	102	102	104	24
8/13	---	---	---	0	109	109	110	24	99	99	100	21	102	103	104	24	102	102	104	22
8/14	---	---	---	0	109	109	110	21	99	100	100	24	102	103	104	24	102	103	105	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		12 h		#	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr	
8/1	106	106	108	9	106	106	107	24	103	103	103	24	103	103	104	24	101	102	102	24
8/2	103	104	105	24	105	105	106	24	103	103	104	24	102	103	104	23	101	102	104	23
8/3	102	103	104	24	103	104	104	24	102	102	103	24	103	104	104	23	101	101	103	23
8/4	104	106	108	24	104	104	105	24	102	103	104	24	103	104	107	24	101	102	109	24
8/5	103	105	106	24	104	105	106	24	102	103	111	24	105	105	106	24	101	102	102	24
8/6	103	105	107	24	104	105	106	24	100	100	101	24	101	102	103	24	101	101	103	24
8/7	103	105	107	24	102	103	104	24	100	100	104	24	102	102	103	24	101	101	101	24
8/8	103	105	107	24	104	106	107	24	101	101	101	24	103	104	106	24	101	102	104	24
8/9	103	105	107	24	104	105	106	24	101	101	102	24	103	104	105	24	101	101	102	24
8/10	103	105	107	24	103	104	104	24	100	101	101	24	102	102	104	24	100	101	102	24
8/11	103	105	107	24	102	103	104	24	100	100	101	24	99	100	100	24	99	99	100	24
8/12	103	105	107	24	104	106	108	24	100	101	101	24	100	101	103	21	99	100	100	21
8/13	103	105	106	24	106	108	111	24	106	113	126	24	103	104	105	24	100	101	102	24
8/14	103	105	107	24	108	110	111	24	126	129	131	22	107	110	111	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		12 h		#	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr	
8/1	102	103	105	24	101	102	103	22	102	103	104	24	108	114	116	24	111	113	115	24
8/2	102	103	103	24	101	102	103	24	102	103	104	24	112	116	118	24	110	111	112	24
8/3	102	103	104	24	101	101	102	24	101	101	102	24	109	114	116	24	107	108	109	24
8/4	102	103	103	24	101	102	102	22	101	102	104	24	109	114	116	24	107	109	112	24
8/5	103	104	106	24	101	101	102	23	102	104	106	24	108	114	116	24	107	109	111	24
8/6	101	102	103	24	100	101	102	23	101	102	105	24	107	112	114	24	106	107	109	24
8/7	102	103	104	24	101	102	104	24	101	102	104	24	108	113	115	24	107	108	110	24
8/8	103	104	106	24	101	102	103	24	102	104	106	24	108	113	116	24	108	110	113	24
8/9	102	102	104	24	101	101	102	24	101	103	106	24	109	114	116	24	110	112	114	24
8/10	101	102	104	24	100	101	101	23	100	101	103	24	107	113	116	24	107	108	110	24
8/11	102	103	104	24	100	101	101	24	101	102	104	24	108	113	115	24	107	109	111	24
8/12	104	105	107	23	101	101	102	24	103	104	109	24	108	113	115	24	109	110	111	24
8/13	104	104	105	24	101	101	102	24	104	107	111	24	108	113	115	24	109	111	112	24
8/14	106	108	110	24	100	101	103	24	103	105	110	24	108	113	115	24	110	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>High</u>		<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>	
8/1	109	110	112	24	108	109	109	24	103	103	103	11	109	114	117	24	104	106	107	23
8/2	109	110	111	24	108	108	109	24	---	---	---	0	109	115	118	24	103	104	106	23
8/3	107	107	108	24	106	107	108	24	---	---	---	0	108	113	116	24	104	106	107	23
8/4	106	107	110	24	106	106	107	24	---	---	---	0	109	115	117	24	104	106	107	23
8/5	107	108	109	24	106	106	107	24	102	102	103	12	108	113	118	24	105	107	108	23
8/6	105	105	106	24	105	105	105	24	102	102	103	23	108	115	118	24	104	106	107	23
8/7	104	105	106	24	104	105	105	24	102	102	103	23	108	114	117	24	104	105	107	23
8/8	106	107	108	24	105	105	105	24	102	103	103	23	109	115	118	24	106	107	108	23
8/9	106	107	108	24	105	106	106	24	102	102	103	23	108	114	116	24	106	108	108	23
8/10	108	109	111	24	106	107	107	24	102	102	103	23	108	115	118	24	104	106	108	23
8/11	106	107	108	23	106	106	106	24	102	102	102	23	108	114	117	24	105	106	107	23
8/12	108	108	108	24	106	106	107	24	102	102	102	23	108	115	117	24	103	104	108	23
8/13	110	110	114	24	106	107	108	24	102	102	102	23	108	114	117	24	105	107	109	23
8/14	110	112	114	24	106	106	107	24	103	105	107	23	108	115	118	24	105	108	109	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>High</u>		<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>	
8/1	112	113	114	24	104	104	105	23	109	110	111	23	107	108	109	24
8/2	112	113	113	24	103	103	104	23	110	112	116	22	107	108	110	24
8/3	112	113	113	24	103	103	104	23	110	112	114	23	106	108	109	24
8/4	112	113	114	24	104	105	105	23	110	111	111	23	108	110	111	24
8/5	111	112	113	24	105	105	105	23	111	112	114	23	108	109	110	24
8/6	112	113	114	24	105	105	105	23	111	112	114	23	108	110	111	24
8/7	113	114	115	24	105	105	105	23	111	112	113	23	108	109	110	24
8/8	113	114	115	24	105	105	105	23	111	113	114	23	107	109	110	24
8/9	113	114	115	24	105	105	105	23	111	111	112	23	107	108	109	24
8/10	114	115	116	24	104	105	105	23	112	114	116	23	107	109	111	24
8/11	113	114	115	24	104	104	104	23	110	111	111	23	106	107	109	24
8/12	113	114	114	24	105	105	106	23	111	113	114	23	107	109	110	24
8/13	114	114	116	24	106	106	107	23	113	115	118	23	107	110	112	24
8/14	114	114	115	24	107	107	107	23	113	114	116	23	109	111	113	24



## Two-Week Summary of Passage Indices

<b>COMBINED YEARLING CHINOOK</b>												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
08/01/2003	*	---	---	---	---	0	0	4	0	0	118	85
08/02/2003		---	---	---	---	0	0	8	0	0	0	0
08/03/2003	*	---	---	---	---	5	0	12	0	0	0	0
08/04/2003		---	---	---	---	5	0	12	0	0	0	0
08/05/2003		---	---	---	---	0	0	0	0	30	0	0
08/06/2003	*	---	---	---	---	0	0	4	0	0	0	0
08/07/2003		---	---	---	---	0	0	4	0	0	0	0
08/08/2003		---	---	---	---	0	0	4	0	0	0	0
08/09/2003		---	---	---	---	5	0	4	0	0	0	0
08/10/2003		---	---	---	---	0	0	0	0	0	0	0
08/11/2003		---	---	---	---	0	0	0	0	0	0	0
08/12/2003		---	---	---	---	0	0	4	1	0	0	0
08/13/2003	*	---	---	---	---	0	0	3	1	0	0	0
08/14/2003	*	---	---	---	---	0	0	0	0	0	0	0
08/15/2003		---	---	---	---	---	---	---	---	---	---	---
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>59</b>	<b>2</b>	<b>30</b>	<b>118</b>	<b>85</b>
<b># Days:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>8</b>	<b>6</b>
<b>YTD</b>		<b>32,064</b>	<b>34,028</b>	<b>11,123</b>	<b>2,417</b>	<b>3,599,180</b>	<b>2,503,025</b>	<b>785,243</b>	<b>15,353</b>	<b>1,624,038</b>	<b>2,074,655</b>	<b>4,043,736</b>

<b>COMBINED SUBYEARLING CHINOOK</b>												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
08/01/2003	*	---	---	---	---	1,160	3,311	872	435	41,300	14,988	20,758
08/02/2003		---	---	---	---	1,145	1,953	676	170	59,700	24,158	11,589
08/03/2003	*	---	---	---	---	2,615	1,727	644	161	75,200	13,758	6,691
08/04/2003		---	---	---	---	4,475	1,341	696	120	22,300	11,441	10,474
08/05/2003		---	---	---	---	4,575	1,853	1,140	131	47,230	7,523	8,196
08/06/2003	*	---	---	---	---	3,718	1,653	864	269	38,400	14,618	10,267
08/07/2003		---	---	---	---	2,640	1,158	816	165	35,650	5,924	9,407
08/08/2003		---	---	---	---	1,740	1,990	444	132	50,400	2,877	11,969
08/09/2003		---	---	---	---	2,000	1,200	376	109	42,300	8,210	4,758
08/10/2003		---	---	---	---	2,930	772	608	105	55,600	5,396	3,921
08/11/2003		---	---	---	---	1,880	624	424	93	48,850	7,010	3,693
08/12/2003		---	---	---	---	1,625	620	472	76	32,650	20,479	4,602
08/13/2003	*	---	---	---	---	1,150	605	234	91	11,250	31,445	9,237
08/14/2003	*	---	---	---	---	1,430	441	200	53	13,475	19,003	8,938
08/15/2003		---	---	---	---	---	---	---	---	---	---	---
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33,083</b>	<b>19,248</b>	<b>8,466</b>	<b>2,110</b>	<b>574,305</b>	<b>186,830</b>	<b>124,500</b>
<b># Days:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,363</b>	<b>1,375</b>	<b>605</b>	<b>151</b>	<b>41,022</b>	<b>13,345</b>	<b>8,893</b>
<b>YTD</b>		<b>1</b>	<b>118</b>	<b>74</b>	<b>355</b>	<b>1,384,484</b>	<b>662,695</b>	<b>333,042</b>	<b>27,421</b>	<b>7,577,813</b>	<b>2,674,426</b>	<b>7,846,894</b>

\* 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.

## Two-Week Summary of Passage Indices

COMBINED COHO												
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)	
08/01/2003	*	---	---	---	45	5	0	5	0	157	0	
08/02/2003		---	---	---	5	7	8	4	0	0	0	
08/03/2003	*	---	---	---	20	13	8	1	0	0	0	
08/04/2003		---	---	---	30	7	0	0	0	0	0	
08/05/2003		---	---	---	15	20	8	1	30	0	54	
08/06/2003	*	---	---	---	18	20	4	5	0	0	0	
08/07/2003		---	---	---	25	17	0	4	0	0	0	
08/08/2003		---	---	---	35	0	4	0	0	0	0	
08/09/2003		---	---	---	40	15	16	0	0	0	0	
08/10/2003		---	---	---	55	20	0	0	0	47	0	
08/11/2003		---	---	---	65	8	4	0	0	40	0	
08/12/2003		---	---	---	25	12	4	0	0	0	0	
08/13/2003	*	---	---	---	25	12	0	0	0	0	0	
08/14/2003	*	---	---	---	35	10	0	0	0	0	0	
08/15/2003		---	---	---	---	---	---	---	---	---	---	
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>438</b>	<b>166</b>	<b>56</b>	<b>20</b>	<b>30</b>	<b>244</b>	<b>54</b>	
<b># Days:</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>31</b>	<b>12</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>17</b>	<b>4</b>	
<b>YTD</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>132,660</b>	<b>117,924</b>	<b>37,589</b>	<b>41,681</b>	<b>113,579</b>	<b>258,260</b>	<b>2,116,425</b>

COMBINED STEELHEAD												
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)	
08/01/2003	*	---	---	---	120	25	4	0	0	79	85	
08/02/2003		---	---	---	130	7	12	0	0	0	0	
08/03/2003	*	---	---	---	115	33	12	0	0	0	0	
08/04/2003		---	---	---	155	80	20	0	0	0	0	
08/05/2003		---	---	---	65	40	4	0	0	0	0	
08/06/2003	*	---	---	---	47	40	4	0	0	0	0	
08/07/2003		---	---	---	40	21	4	0	0	0	0	
08/08/2003		---	---	---	70	10	0	1	0	0	0	
08/09/2003		---	---	---	45	20	0	1	50	0	0	
08/10/2003		---	---	---	85	28	4	0	0	0	0	
08/11/2003		---	---	---	60	12	0	1	0	0	0	
08/12/2003		---	---	---	45	12	0	0	0	0	0	
08/13/2003	*	---	---	---	20	12	0	1	0	0	0	
08/14/2003	*	---	---	---	25	10	1	0	0	0	0	
08/15/2003		---	---	---	---	---	---	---	---	---	---	
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>1,022</b>	<b>350</b>	<b>65</b>	<b>4</b>	<b>50</b>	<b>79</b>	<b>85</b>	
<b># Days:</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>73</b>	<b>25</b>	<b>5</b>	<b>0</b>	<b>4</b>	<b>6</b>	<b>6</b>	
<b>YTD</b>		<b>2,347</b>	<b>48,404</b>	<b>2,521</b>	<b>5,601</b>	<b>3,354,988</b>	<b>2,593,187</b>	<b>1,865,425</b>	<b>15,499</b>	<b>245,583</b>	<b>553,482</b>	<b>1,635,139</b>

\* See sampling comments

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

## Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE										
	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
08/01/2003 *	---	---	---	---	0	0	0	1	0	0	0
08/02/2003	---	---	---	---	0	0	0	1	200	258	0
08/03/2003 *	---	---	---	---	0	0	0	0	0	0	0
08/04/2003	---	---	---	---	0	0	0	0	0	0	0
08/05/2003	---	---	---	---	0	0	0	0	60	63	54
08/06/2003 *	---	---	---	---	0	0	0	3	100	103	0
08/07/2003	---	---	---	---	0	0	0	0	0	0	0
08/08/2003	---	---	---	---	0	0	0	0	150	0	0
08/09/2003	---	---	---	---	0	0	0	0	50	45	0
08/10/2003	---	---	---	---	0	0	0	1	100	0	56
08/11/2003	---	---	---	---	0	0	0	1	150	0	0
08/12/2003	---	---	---	---	0	0	0	0	50	91	0
08/13/2003 *	---	---	---	---	0	0	0	1	0	0	16
08/14/2003 *	---	---	---	---	0	0	1	0	25	0	0
08/15/2003	---	---	---	---	---	---	---	---	---	---	---
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>885</b>	<b>560</b>	<b>126</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>63</b>	<b>40</b>	<b>9</b>
<b>YTD</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>16,384</b>	<b>8,123</b>	<b>4,545</b>	<b>10,306</b>	<b>841,516</b>	<b>726,073</b>	<b>1,261,342</b>

\* See sampling comments <http://www.fpc.org/currentDaily/smpcomments.htm>

### 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)}

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.

**Cumulative Adult Passage at Mainstem Dams Through: 08/14**

DAM	Spring Chinook						Summer Chinook						Fall Chinook					
	2003		2002		10-Yr Avg.		2003		2002		10-Yr Avg.		2003		2002		10-Yr Avg.	
	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	192,010	14,258	268,813	6,477	122,177	6,086	114,685	13,358	127,436	7,952	38,022	5,207	9,734	1,508	10,000	806	6,915	901
TDA	131,207	11,522	181,176	3,870	80,975	4,136	101,513	10,441	113,069	5,743	32,585	3,775	4,946	1,185	5,635	590	3,176	557
JDA	101,436	10,206	139,887	2,403	67,822	3,122	95,554	10,193	105,354	5,615	30,300	3,298	3,248	887	3,109	708	1,565	364
MCN	95,550	11,123	129,357	3,872	62,536	3,162	94,045	11,116	109,937	6,810	31,244	3,358	2,089	637	1,527	202	963	185
IHR	78,170	8,020	85,207	1,826	38,964	1,925	20,742	4,603	26,607	2,437	7,616	1,067	47	5	66	3	26	1
LMN	70,603	7,344	76,304	1,537	38,073	1,899	18,718	3,589	23,744	1,710	7,642	945	7	1	23	7	7	3
LGS	69,017	7,079	77,232	1,815	37,097	2,034	14,285	3,537	20,838	2,252	6,940	1,194	0	0	0	0	0	0
LWG	70,609	8,295	75,025	2,089	35,689	2,016	16,367	4,120	22,101	1,945	6,969	1,258	0	0	0	0	0	0
PRD	18,136	656	34,083	196	15,528	317	83,004	3,933	96,326	1,455	27,332	1,075	625	114	445	24	189	16
RIS	16,881	753	24,017	827	11,565	538	79,278	6,221	84,946	3,065	23,407	3,213	0	0	0	0	0	0
RRH	4,216	450	9,999	161	4,017	126	60,628	5,380	69,632	2,577	15,843	1,354	0	0	0	0	0	0
WEL	4,313	172	7,585	41	2,377	152	35,818	951	57,146	296	11,240	824	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2003		2002		10-Yr Avg.		2003	2002	10-Yr Avg.	2003	2002	10-Yr Avg.	Wild 2003
	Adult	Jack	Adult	Jack	Adult	Jack							
BON	169	6	29	10	74	11	39,293	49,590	46,746	185,825	236,876	137,888	71,661
TDA	0	0	0	0	0	0	34,178	40,553	37,475	53,430	110,639	56,975	23,914
JDA	0	0	0	0	2	0	35,403	41,909	40,477	40,360	81,637	39,162	16,048
MCN	0	0	0	0	0	0	32,033	39,167	36,929	29,686	56,028	29,761	11,487
IHR	0	0	0	0	0	0	37	60	17	18,776	22,880	14,856	5,131
LMN	0	0	0	0	0	0	14	46	24	13,744	21,113	13,122	4,471
LGS	0	0	0	0	0	0	22	38	26	9,832	16,454	7,880	3,862
LWG	0	0	0	0	0	0	11	54	24	21,084	20,768	9,861	5,481
PRD	4	5	37	8	5	0	36,533	47,863	45,380	5,654	6,479	3,098	n/a
RIS	9	0	3	0	1	0	34,728	44,126	40,678	3,477	4,472	2,026	2,190
RRH	2	0	21	0	1	0	30,241	12,197	24,049	2,611	3,040	1,211	1,573
WEL	0	0	0	0	0	0	28,226	10,328	23,576	903	2,192	717	507

RIS and RRH are through 08/12; WEL is through 08/13.

LGR is missing data for 3/6.

\*\*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: 8/15/03

BON counts from January 1, 2003 to March 14, 2003 (our counts begin March 15)

Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
3,758	0	3,443	408

## Two Week Transportation Summary

08/02/03 TO 08/15/03

		Species						
Site	Data	CH0	CH1	CO	SO	ST	Grand Total	
<b>LGR</b>	Sum of NumberCollected	33,083	15	438		1,022	34,558	
	Sum of NumberBarged	32,708	14	428		1,012	34,162	
	Sum of NumberBypassed	35	0	0		0	35	
	Sum of Numbertrucked	0	0	0		0	0	
	Sum of TotalProjectMortalities	340	1	10		10	361	
<b>LGS</b>	Sum of NumberCollected	19,248			166	350	19,764	
	Sum of NumberBarged	18,941			154	342	19,437	
	Sum of NumberBypassed	0			0	0	0	
	Sum of Numbertrucked	0			0	0	0	
	Sum of TotalProjectMortalities	307			12	8	327	
<b>LMN</b>	Sum of NumberCollected	8,466	59	56		1	65	8,647
	Sum of NumberBarged	8,222	59	54		1	65	8,401
	Sum of NumberBypassed	0	0	0		0	0	0
	Sum of Numbertrucked	0	0	0		0	0	0
	Sum of TotalProjectMortalities	244	0	2		0	0	246
<b>MCN</b>	Sum of NumberCollected	574,305	30	30	885	50	575,300	
	Sum of NumberBarged	602,468	24	54	1,052	19	603,617	
	Sum of NumberBypassed	0	0	0	0	0	0	
	Sum of Numbertrucked	0	0	0	0	0	0	
	Sum of TotalProjectMortalities	6,396	6	26	8	31	6,467	
Total Sum of NumberCollected		635,102	104	690	886	1,487	638,269	
Total Sum of NumberBarged		662,339	97	690	1,053	1,438	665,617	
Total Sum of NumberBypassed		35	0	0	0	0	35	
Total Sum of Numbertrucked		0	0	0	0	0	0	
Total Sum of TotalProjectMortalities		7,287	7	50	8	49	7,401	

### YTD Transportation Summary

TO: 08/15/03

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	1,141,687	2,576,965	89,817	9,748	2,336,316	6,154,533
	Sum of NumberBarged	1,119,878	2,470,888	89,165	9,549	2,265,709	5,955,189
	Sum of NumberBypassed	2,862	45,590	7	0	53,142	101,601
	Sum of NumberTrucked	816	54,208	40	78	15,402	70,544
	Sum of TotalProjectMortalities	18,127	5,980	605	121	2,064	26,897
<b>LGS</b>	Sum of NumberCollected	580,330	1,849,309	87,784	5,435	1,946,615	4,469,473
	Sum of NumberBarged	573,659	1,795,258	87,351	5,398	1,942,839	4,404,505
	Sum of NumberBypassed	0	22	0	0	3	25
	Sum of NumberTrucked	5	52,601	0	0	850	53,456
	Sum of TotalProjectMortalities	6,665	3,389	433	37	2,923	13,447
<b>LMN</b>	Sum of NumberCollected	282,113	463,298	26,539	3,307	1,229,789	2,005,046
	Sum of NumberBarged	246,532	440,280	25,840	3,262	1,150,918	1,866,832
	Sum of NumberBypassed	34,112	6,866	681	0	75,945	117,604
	Sum of NumberTrucked	60	15,149	0	40	1,637	16,886
	Sum of TotalProjectMortalities	1,409	1,003	18	5	1,289	3,724
<b>MCN</b>	Sum of NumberCollected	6,924,375	1,041,772	71,922	545,913	155,070	8,739,052
	Sum of NumberBarged	4,560,346	5,470	8,989	10,884	701	4,586,390
	Sum of NumberBypassed	2,280,527	1,035,084	62,604	534,272	154,084	4,066,571
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	70,124	1,125	329	437	242	72,257
Total Sum of NumberCollected		8,928,505	5,931,344	276,062	564,403	5,667,790	21,368,104
Total Sum of NumberBarged		6,500,415	4,711,896	211,345	29,093	5,360,167	16,812,916
Total Sum of NumberBypassed		2,317,501	1,087,562	63,292	534,272	283,174	4,285,801
Total Sum of NumberTrucked		881	121,958	40	118	17,889	140,886
Total Sum of TotalProjectMortalities		96,325	11,497	1,385	600	6,518	116,325

