



## Fish Passage Center

# Weekly Report #03 - 20

August 8, 2003

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### Summary of Events:

**Water Supply:** Precipitation throughout the Columbia Basin has been very low in June and July. All of the sites in Table 1 recorded precipitation that was equal to or less than 54% of average in July; however, most of the locations contained precipitation that was less than 30% of average. Over the entire water year, precipitation has ranged between 69% 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	July 1-28, 2003		Cumulative October, 1 2002 to July 28, 2003	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	0.31	19	18.48	84
Snake River Above Ice Harbor	0.33	39	14.43	91
Columbia Above The Dalles	0.26	24	18.24	88
Kootenai	0.26	15	17.53	77
Clark Fork	0.28	26	13.32	87
Flathead	0.14	10	15.64	77
Pend Oreille/Spokane	0.19	16	25.89	91
Central Washington	0.00	0	8.30	100
Snake River Plain	0.29	54	7.00	69
Salmon/Boise/Payette	0.29	41	17.74	97
Clearwater	0.48	36	28.02	100
SW Washington Cascades/Cowlitz	0.26	21	57.14	86
Willamette Valley	0.02	3	51.08	90

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 7th 2003), flows have averaged 35.8 Kcfs at Lower Granite and 140.2 Kcfs at McNary.

Libby Reservoir is currently at an elevation of 2450.4 feet, and has drafted 2.9 feet in the last week. Outflows are currently 18.0 Kcfs.

Hungry Horse Reservoir is at an elevation of 3547.4 feet and has been drafted approximately 2.3 feet over the last week.

Dworshak Reservoir is currently at an elevation of 1558.9 feet, and has drafted 7.7 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 7th at an elevation of 1282.5 feet and has refilled approximately 1.3 feet over the last week.

Brownlee Reservoir was at an elevation of 2066.8 feet on August 7th, 2.7 feet in the last week. Outflows at Brownlee have been fluctuating between 7.5 and 17.8 Kcfs over the week.

**Spill:** Flow at Dworshak Dam was decreased to powerhouse capacity on August 5, 2003 and spill was terminated. 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 is being implemented. Spill over the past week averaged 46% of average daily flow at this project.

The summer spill program is being implemented at John Day, The Dalles and Bonneville dams. Spill averaged 23%, 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. A few fish were detected with signs of GBT this past week at Rock Island Dam.

**Smolt Monitoring:** This week there were increasing numbers of subyearling chinook seen at Lower Granite Dam, in the Snake River, while in the Lower Columbia numbers declined. At Lower Granite Dam the average daily index for subyearling chinook increased from 1,000 last week to 2,900 this week. Little Goose Dam saw a decrease in the index to 1,900 this week compared to 2,400 last week. At Lower Monumental there was a small decrease, as subyearling indices averaged 820 this week compared to 880 last week.

At Rock Island Dam, in the mid-Columbia, subyearling chinook indices decreased last week with the daily average at 210 compared to 390 per day the previous week.

In the Lower Columbia, at McNary, the daily average index for subyearling chinook was down about 17% at 45,000 per day this week compared to 55,000 last week. At John Day Dam the average daily index for subyearling chinook decreased to 13,000 this week compared to 28,000 last week. At Bonneville Dam, the average daily index for subyearling chinook was at 11,100 this week compared to 24,000 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 8-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 at The Dalles Dam was completed on August 3, and on August 5 at John Day Dam. The cumulative count for summer chinook at The Dalles was 101,026 about 89% and 310% of the respective year 2002 and 10-year average count at The Dalles. The summer run is mainly distributed in the Mid-Columbia River at present with the Priest Rapids Dam count now exceeding 79,000 through August 7. The adult chinook counts at the upper mid-Columbia Chelan projects have been decreasing over the past week with 74,484 counted above Rock Island Dam through August 7 and 56,383 above Rocky Reach Dam. Passage numbers have increased slightly at Snake River projects with

the cumulative count at Lower Granite Dam of 16,203 for the season. This total was about 74% of the 2002 count and 234% of the 10-year average through August 7.

Adult fall chinook count at Bonneville Dam was 4111, about 95% of the 2002 count and 157% of the 10 year average.

Most sockeye salmon are nearing completion in the lower Columbia River. At Rock Island Dam, about 34,500 have been counted with about 30,000 counted at Rocky Reach Dam (Lake Osoyoos sockeye). The 2003 sockeye Run is primarily comprised of Lake Osoyoos stock sockeye. 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 7 was 141,785 and compares to 192,537 in 2002 and 111,081 for the 10-year average. The steelhead count differential between Bonneville Dam and The Dalles Dam has risen to greater than 94,000 at present. At McNary Dam, daily counts of adult steelhead continued to decrease, while counts of steelhead averaged about 200 per day at Priest Rapids Dam. At Ice Harbor Dam and other Snake River projects, steelhead counts were starting to increase by the end of the count week. The cumulative count for Priest Rapids Dam was 4,144 with Ice Harbor at 16,779 through August 7.

**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
07/25/03	101.5	0.1	105.7	0.0	109.0	7.2	106.5	17.0	107.1	22.6	114.1	34.1	109.0	60.9
07/26/03	89.7	0.2	85.6	0.0	89.6	6.4	87.1	14.2	89.8	21.8	100.9	30.4	103.8	58.5
07/27/03	51.1	0.1	55.4	0.0	58.8	5.0	60.3	9.9	60.6	16.1	64.8	19.4	64.6	36.4
07/28/03	108.9	0.1	106.6	0.0	110.3	7.7	109.0	18.3	108.3	24.9	118.9	35.7	108.5	60.7
07/29/03	117.6	0.1	117.5	0.0	121.9	8.1	115.9	17.3	117.1	23.7	114.5	34.5	110.1	62.0
07/30/03	122.2	0.1	120.6	0.0	118.0	7.8	115.7	16.7	116.8	22.9	126.6	38.4	121.6	68.4
07/31/03	106.1	0.1	111.5	0.0	114.7	7.7	116.2	17.0	118.7	22.9	128.3	38.2	124.8	71.1
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

**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
07/25/03	12.2	2.4	7.6	8.0	28.8	0.0	28.8	0.0	30.6	0.0	29.3	13.0
07/26/03	12.2	2.4	8.0	8.4	27.8	0.0	26.3	0.0	25.7	0.0	24.1	11.1
07/27/03	12.2	2.4	8.1	8.6	28.7	0.0	30.5	0.0	33.0	0.0	32.4	16.4
07/28/03	12.1	2.2	10.1	8.7	28.8	0.0	28.3	0.0	29.1	0.0	27.6	13.4
07/29/03	11.8	1.9	9.7	10.5	27.8	0.0	27.3	0.0	30.5	0.0	28.5	10.9
07/30/03	11.8	1.9	9.6	13.0	28.9	1.9	28.0	0.0	28.0	0.0	28.2	9.0
07/31/03	11.8	1.9	7.2	11.0	30.7	0.0	31.0	0.0	33.7	0.0	30.6	12.6
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	---	---	30.9	0.0	29.5	0.0	31.5	0.0	30.0	11.9

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

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
07/25/03	132.9	0.1	147.3	40.7	144.5	57.2	168.4	94.8	0.0	66.9
07/26/03	144.2	0.1	118.8	28.2	120.5	44.6	144.0	88.1	0.0	49.1
07/27/03	103.6	0.0	104.2	22.0	107.5	39.8	144.9	89.0	0.0	49.2
07/28/03	144.2	0.0	144.7	32.9	141.6	52.0	157.5	87.5	0.0	63.3
07/29/03	140.8	0.0	154.5	31.4	158.6	59.7	180.9	96.4	7.2	70.4
07/30/03	138.3	0.0	127.1	26.0	128.7	47.7	157.4	89.7	0.7	60.3
07/31/03	135.6	0.0	117.4	18.8	118.4	42.2	146.3	85.9	0.0	53.6
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	201.8	0.0	116.2	27.7	119.1	45.1	143.8	85.9	0.0	51.2

## 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>											
	07/31/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/04/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/07/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Bonneville Dam</b>											
	07/31/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/04/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/07/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Rock Island Dam</b>											
	07/31/03	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	08/04/03	Chinook + Steelhead	67	2	2	2.98%	0.00%	2	0	0	0
	08/07/03	Chinook + Steelhead	100	4	4	4.00%	0.00%	4	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>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
7/25	---	---	---	0	112	113	113	24	110	110	110	24	110	111	114	24	110	110	110	23
7/26	---	---	---	0	112	112	113	24	109	109	110	24	109	110	114	24	109	109	110	23
7/27	---	---	---	0	112	113	113	24	109	109	109	24	110	112	115	24	109	110	110	23
7/28	---	---	---	0	113	113	114	24	109	109	109	24	109	110	114	24	110	110	111	23
7/29	---	---	---	0	111	111	113	9	108	109	109	24	109	109	113	12	110	110	111	23
7/30	---	---	---	0	---	---	---	0	108	108	108	24	---	---	---	0	111	111	111	23
7/31	---	---	---	0	111	111	112	24	108	108	108	24	109	110	113	24	109	110	110	23
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

### 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>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
7/25	109	110	111	23	110	111	112	24	111	112	112	24	112	112	113	24	113	113	113	23
7/26	109	109	110	23	110	111	112	24	111	111	112	24	112	112	112	23	112	113	113	22
7/27	109	109	110	23	109	110	112	24	110	111	112	24	111	112	113	22	112	112	112	21
7/28	109	110	110	22	110	111	112	21	111	112	113	21	111	112	112	23	112	113	113	23
7/29	109	110	110	23	110	111	111	24	111	112	113	24	111	112	112	24	112	112	113	23
7/30	110	110	111	23	111	112	113	24	112	113	114	24	112	112	113	21	113	113	114	20
7/31	109	110	111	23	110	111	112	24	112	113	114	24	112	112	112	23	113	113	113	23
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

### 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>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
7/25	112	113	113	24	117	118	119	24	109	110	111	24	114	115	115	24	111	112	115	24
7/26	112	112	112	22	117	118	120	21	109	110	111	24	115	116	116	24	112	113	114	24
7/27	111	112	112	22	116	117	118	22	109	109	110	24	115	116	117	24	112	113	115	24
7/28	112	112	113	23	116	117	119	21	109	110	113	24	116	116	116	24	113	114	116	24
7/29	112	112	113	23	117	117	119	20	109	110	111	24	116	116	116	24	113	114	115	24
7/30	112	113	113	20	117	117	119	20	109	110	112	24	116	116	116	23	114	115	117	24
7/31	112	113	113	22	117	117	119	20	109	110	110	24	115	115	116	24	112	113	115	24
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

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

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

Date	<u>Priest R. Dnst</u>			<u>Pasco</u>			<u>Dworshak</u>			<u>Clrwrtr-Peck</u>			<u>Anatone</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg	Avg		
7/25	115	116	118	24	111	111	112	21	105	105	105	24	106	107	108	24	102	103	105	24
7/26	115	116	117	24	110	111	111	24	104	104	104	24	105	106	107	24	101	103	103	24
7/27	113	114	115	24	110	111	111	21	104	104	104	24	105	106	108	24	102	104	106	23
7/28	115	118	119	24	111	111	112	24	104	105	106	24	105	107	109	24	103	104	106	24
7/29	117	118	119	24	110	113	113	24	105	105	105	24	106	107	108	24	102	104	106	24
7/30	117	118	119	24	112	112	113	21	105	105	105	24	106	107	108	24	103	104	106	24
7/31	117	118	119	24	111	113	113	24	105	105	105	24	106	107	108	24	101	102	102	24
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

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

Date	<u>Clrwrtr-Lewiston</u>			<u>Lower Granite</u>			<u>L. Granite Tlwr</u>			<u>Little Goose</u>			<u>L. Goose Tlwr</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg	Avg		
7/25	104	106	107	24	106	106	107	24	103	103	104	24	103	103	104	22	103	103	104	22
7/26	104	105	106	24	106	107	108	24	103	103	104	24	104	105	105	24	102	103	103	24
7/27	104	107	108	24	107	107	108	24	102	103	103	24	105	106	106	24	102	102	103	24
7/28	104	106	108	24	107	108	109	24	102	102	103	24	104	105	106	24	102	102	103	24
7/29	104	107	108	24	107	108	109	24	102	102	102	24	105	106	107	24	102	102	104	24
7/30	104	107	108	24	107	108	108	24	103	105	113	24	105	105	106	24	102	102	104	24
7/31	104	106	108	21	107	107	108	24	103	103	103	24	102	103	104	24	101	102	103	24
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

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

Date	<u>Lower Mon.</u>			<u>L. Mon. Tlwr</u>			<u>Ice Harbor</u>			<u>Ice Harbor Tlwr</u>			<u>McNary-Oregon</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg	Avg		
7/25	103	104	106	24	102	102	103	23	102	103	105	24	108	113	117	24	109	111	112	24
7/26	101	102	104	24	101	101	102	24	101	102	104	24	108	113	116	24	111	113	115	24
7/27	103	104	105	24	101	102	102	22	102	104	108	24	110	114	116	24	108	109	109	24
7/28	105	105	106	24	101	102	103	24	102	104	106	24	109	114	117	24	113	114	116	24
7/29	105	105	107	24	102	102	103	23	103	105	106	24	108	113	117	24	114	116	117	23
7/30	104	105	106	24	102	103	106	24	103	105	107	24	108	112	114	23	114	116	117	24
7/31	102	103	104	24	102	102	103	22	101	103	105	24	108	113	116	24	113	115	117	24
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

## 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>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24h</u>	<u>12h</u>	High	#	<u>24h</u>	<u>12h</u>	High		#			
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg						
7/25	108	108	110	24	108	108	109	24	104	104	105	23	110	117	118	24	105	107	110	23
7/26	108	109	111	24	109	109	110	24	103	104	104	23	109	114	118	24	106	108	110	23
7/27	108	109	109	24	107	108	108	24	103	103	104	23	108	113	118	24	105	106	107	23
7/28	108	110	113	24	107	108	108	24	103	103	104	23	108	113	118	24	107	109	110	23
7/29	112	113	116	24	108	109	110	24	104	104	105	23	109	114	117	24	106	107	112	23
7/30	112	113	116	24	109	109	110	24	103	104	104	23	109	114	117	24	106	108	112	23
7/31	111	112	113	24	109	109	109	24	103	103	104	23	108	112	117	24	105	107	109	23
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

### 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>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24h</u>	<u>12h</u>	High	#				
	Avg	Avg			Avg	Avg			Avg	Avg						
7/25	114	115	115	24	104	104	104	23	111	113	116	23	107	110	112	24
7/26	114	115	116	24	103	104	104	23	110	111	112	23	107	109	110	24
7/27	114	115	115	24	104	105	106	23	111	113	116	23	109	111	113	23
7/28	113	115	116	24	105	106	107	23	111	111	112	23	110	111	112	24
7/29	114	114	115	24	108	109	110	23	113	115	117	23	110	113	116	24
7/30	115	116	117	24	109	109	110	23	113	114	117	23	111	113	115	24
7/31	113	114	115	24	107	107	108	23	111	112	114	23	109	110	111	24
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



## 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)	(INDEX)
07/25/2003	*	---	---	---	---	0	30	18	1	0	0	0
07/26/2003		---	---	---	---	5	20	0	0	0	0	0
07/27/2003	*	---	---	---	---	0	0	12	1	0	0	144
07/28/2003		---	---	---	---	0	0	4	0	0	0	0
07/29/2003		---	---	---	---	5	0	0	0	50	0	0
07/30/2003		---	---	---	---	0	0	4	0	50	0	0
07/31/2003		---	---	---	---	0	0	0	1	0	0	81
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
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>50</b>	<b>82</b>	<b>3</b>	<b>130</b>	<b>118</b>	<b>310</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>4</b>	<b>6</b>	<b>0</b>	<b>9</b>	<b>8</b>	<b>22</b>
<b>YTD</b>		<b>32,064</b>	<b>34,028</b>	<b>11,123</b>	<b>2,417</b>	<b>3,599,175</b>	<b>2,503,025</b>	<b>785,228</b>	<b>15,351</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)	(INDEX)
07/25/2003	*	---	---	---	---	1,595	1,310	1,206	306	71,100	19,527	22,144
07/26/2003		---	---	---	---	1,165	1,020	942	344	77,700	19,591	24,724
07/27/2003	*	---	---	---	---	960	1,275	906	404	88,570	22,155	27,488
07/28/2003		---	---	---	---	935	3,155	780	374	26,700	13,839	24,549
07/29/2003		---	---	---	---	945	4,701	572	331	41,850	35,760	26,579
07/30/2003		---	---	---	---	800	2,773	980	541	33,150	69,002	26,175
07/31/2003		---	---	---	---	839	2,414	824	408	48,250	18,731	15,633
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
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>27,567</b>	<b>29,644</b>	<b>11,918</b>	<b>4,159</b>	<b>707,100</b>	<b>291,015</b>	<b>244,674</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>1,969</b>	<b>2,117</b>	<b>851</b>	<b>297</b>	<b>50,507</b>	<b>20,787</b>	<b>17,477</b>
<b>YTD</b>		<b>1</b>	<b>118</b>	<b>74</b>	<b>355</b>	<b>1,371,729</b>	<b>656,443</b>	<b>330,284</b>	<b>26,762</b>	<b>7,323,288</b>	<b>2,580,006</b>	<b>7,799,776</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

		<b>COMBINED COHO</b>										
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
07/25/2003	*	---	---	---	---	30	30	0	8	100	54	112
07/26/2003		---	---	---	---	30	27	6	3	100	168	0
07/27/2003	*	---	---	---	---	25	15	0	9	200	0	0
07/28/2003		---	---	---	---	25	30	16	6	0	58	0
07/29/2003		---	---	---	---	20	40	4	12	200	0	82
07/30/2003		---	---	---	---	15	22	0	7	50	186	0
07/31/2003		---	---	---	---	21	5	4	13	50	0	0
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
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>324</b>	<b>258</b>	<b>58</b>	<b>78</b>	<b>730</b>	<b>623</b>	<b>248</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>23</b>	<b>18</b>	<b>4</b>	<b>6</b>	<b>52</b>	<b>45</b>	<b>18</b>
<b>YTD</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>132,380</b>	<b>117,847</b>	<b>37,561</b>	<b>41,681</b>	<b>113,579</b>	<b>258,173</b>	<b>2,116,425</b>

		<b>COMBINED STEELHEAD</b>										
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
07/25/2003	*	---	---	---	---	160	30	18	0	0	0	0
07/26/2003		---	---	---	---	155	40	0	0	0	0	0
07/27/2003	*	---	---	---	---	155	60	6	0	0	0	0
07/28/2003		---	---	---	---	170	25	8	0	0	0	0
07/29/2003		---	---	---	---	160	15	16	1	0	0	0
07/30/2003		---	---	---	---	175	30	16	1	0	0	0
07/31/2003		---	---	---	---	171	30	8	1	0	0	0
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
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,818</b>	<b>476</b>	<b>132</b>	<b>3</b>	<b>0</b>	<b>79</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>130</b>	<b>34</b>	<b>9</b>	<b>0</b>	<b>0</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>3,354,638</b>	<b>2,593,083</b>	<b>1,865,420</b>	<b>15,495</b>	<b>245,533</b>	<b>553,482</b>	<b>1,635,139</b>

\* See sampling comments

## Two-Week Summary of Passage Indices

<b>COMBINED SOCKEYE</b>												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
07/25/2003	*	---	---	---	---	0	0	0	3	400	136	0
07/26/2003		---	---	---	---	0	0	0	1	500	63	0
07/27/2003	*	---	---	---	---	0	0	0	9	600	71	144
07/28/2003		---	---	---	---	0	0	0	3	200	58	134
07/29/2003		---	---	---	---	0	0	0	3	150	0	0
07/30/2003		---	---	---	---	0	0	0	3	150	371	0
07/31/2003		---	---	---	---	0	0	0	3	200	0	0
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
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>2,560</b>	<b>1,123</b>	<b>332</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>2</b>	<b>183</b>	<b>80</b>	<b>24</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>4,544</b>	<b>10,303</b>	<b>840,991</b>	<b>725,937</b>	<b>1,261,270</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: 08/07**

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	113,908	13,184	127,436	7,952	38,022	5,207	4,111	807	4,337	353	2,616	434
TDA	131,207	11,522	181,176	3,870	80,975	4,136	101,026	10,282	113,069	5,743	32,585	3,775	1,554	471	1,797	170	916	174
JDA	101,436	10,206	139,887	2,403	67,822	3,122	94,529	10,108	105,354	5,615	30,300	3,298	412	191	601	88	338	75
MCN	95,550	11,123	129,357	3,872	62,536	3,162	93,568	10,988	109,530	6,770	31,058	3,327	0	0	0	0	0	0
IHR	78,170	8,020	85,207	1,826	38,964	1,925	20,673	4,589	26,501	2,423	7,584	1,066	0	0	0	0	0	0
LMN	70,603	7,344	76,304	1,537	38,073	1,899	18,612	3,520	23,646	1,688	7,599	931	0	0	0	0	0	0
LGS	69,017	7,079	77,232	1,815	37,097	2,034	14,263	3,510	20,718	2,230	6,893	1,186	0	0	0	0	0	0
LWG	70,609	8,295	75,025	2,089	35,689	2,016	16,203	4,116	21,993	1,924	6,929	1,251	0	0	0	0	0	0
PRD	18,136	656	34,083	196	15,528	317	79,374	3,170	94,226	1,325	26,269	972	0	0	0	0	0	0
RIS	16,881	753	24,017	827	11,565	538	74,484	5,242	81,626	2,833	22,126	2,930	0	0	0	0	0	0
RRH	4,216	450	9,999	161	4,017	126	56,383	4,616	66,366	2,335	14,738	1,166	0	0	0	0	0	0
WEL	4,313	172	7,585	41	2,377	152	35,968	1,112	52,491	264	10,089	660	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2003		2002		10-Yr Avg.		10-Yr		10-Yr			Wild	
	Adult	Jack	Adult	Jack	Adult	Jack	2003	2002	Avg.	2003	2002	Avg.	2003
BON	18	0	10	1	16	2	39,238	49,567	46,734	141,785	192,537	111,081	57,950
TDA	0	0	0	0	0	0	34,153	40,534	37,458	47,321	92,414	49,262	21,499
JDA	0	0	0	0	2	0	35,340	41,898	40,457	36,366	65,492	33,228	14,453
MCN	0	0	0	0	0	0	32,024	39,121	36,898	26,637	47,905	24,923	10,270
IHR	0	0	0	0	0	0	37	60	17	16,779	20,708	12,293	4,616
LMN	0	0	0	0	0	0	14	46	24	11,910	19,421	10,983	3,963
LGS	0	0	0	0	0	0	15	38	26	8,110	14,397	6,648	3,436
LWG	0	0	0	0	0	0	11	54	24	20,059	19,315	8,995	5,099
PRD	2	3	21	2	4	0	36,295	47,786	45,196	4,144	5,198	2,291	n/a
RIS	9	0	3	0	1	0	34,580	43,920	40,359	2,264	3,513	1,476	1,436
RRH	2	0	19	0	1	0	30,016	12,055	23,750	1,686	2,338	879	1,024
WEL	0	0	0	0	0	0	28,576	9,951	22,965	784	1,436	445	441

RIS and RRH are through 08/06; WEL is through 08/05.

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: 8/8/03

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

		07/26/03 TO 08/08/03					
		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	27,513	20	323		1,807	29,663
	Sum of NumberBarged	26,053	19	314		1,953	28,339
	Sum of NumberBypassed	32	0	0		0	32
	Sum of Numbertrucked	0	0	0		0	0
	Sum of TotalProjectMortalities	539	1	4		32	576
<b>LGS</b>	Sum of NumberCollected	29,644	50	258		476	30,428
	Sum of NumberBarged	30,245	24	289		490	31,048
	Sum of NumberBypassed	0	0	0		0	0
	Sum of Numbertrucked	0	0	0		0	0
	Sum of TotalProjectMortalities	494	26	21		15	556
<b>LMN</b>	Sum of NumberCollected	11,918	82	58		132	12,190
	Sum of NumberBarged	12,083	76	57		127	12,343
	Sum of NumberBypassed	0	0	0		0	0
	Sum of Numbertrucked	0	0	0		0	0
	Sum of TotalProjectMortalities	298	2	1		1	302
<b>MCN</b>	Sum of NumberCollected	707,030	130	730	2,560		710,450
	Sum of NumberBarged	696,036	88	620	2,547		699,291
	Sum of NumberBypassed	0	0	0	0		0
	Sum of Numbertrucked	0	0	0	0		0
	Sum of TotalProjectMortalities	10,994	42	110	13		11,159
Total Sum of NumberCollected		776,105	282	1,369	2,560	2,415	782,731
Total Sum of NumberBarged		764,417	207	1,280	2,547	2,570	771,021
Total Sum of NumberBypassed		32	0	0	0	0	32
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of TotalProjectMortalities		12,325	71	136	13	48	12,593

### YTD Transportation Summary

TO: 08/08/03

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	1,128,932	2,576,960	89,537	9,748	2,335,966	6,141,143
	Sum of NumberBarged	1,104,659	2,470,883	88,867	9,549	2,265,322	5,939,280
	Sum of NumberBypassed	2,855	45,590	7	0	53,142	101,594
	Sum of NumberTrucked	816	54,208	40	78	15,402	70,544
	Sum of TotalProjectMortalities	17,991	5,980	598	121	2,062	26,752
<b>LGS</b>	Sum of NumberCollected	574,078	1,849,309	87,707	5,435	1,946,511	4,463,040
	Sum of NumberBarged	566,413	1,795,258	87,262	5,398	1,942,719	4,397,050
	Sum of NumberBypassed	0	22	0	0	3	25
	Sum of NumberTrucked	5	52,601	0	0	850	53,456
	Sum of TotalProjectMortalities	6,519	3,389	428	37	2,920	13,293
<b>LMN</b>	Sum of NumberCollected	279,355	463,283	26,511	3,306	1,229,784	2,002,239
	Sum of NumberBarged	243,084	440,261	25,814	3,261	1,150,909	1,863,329
	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	1,304	1,003	16	5	1,289	3,617
<b>MCN</b>	Sum of NumberCollected	6,669,850	1,041,772	71,922	545,388	155,020	8,483,952
	Sum of NumberBarged	4,321,487	5,470	8,989	10,385	682	4,347,013
	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	67,836	1,125	329	436	211	69,937
Total Sum of NumberCollected		8,652,215	5,931,324	275,677	563,877	5,667,281	21,090,374
Total Sum of NumberBarged		6,235,643	4,711,872	210,932	28,593	5,359,632	16,546,672
Total Sum of NumberBypassed		2,317,494	1,087,562	63,292	534,272	283,174	4,285,794
Total Sum of NumberTrucked		881	121,958	40	118	17,889	140,886
Total Sum of TotalProjectMortalities		93,650	11,497	1,371	599	6,482	113,599

