Fish Passage Center

Weekly Report #03 - 19

August 1, 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 (July 31st 2003), flows have averaged 37.1 Kcfs at Lower Granite and 144.0 Kcfs at McNary.

Libby Reservoir is currently at an elevation of 2453.7 feet, and has drafted 2.1 feet in the last week. At Libby, outflows are currently 18.0 Kcfs, on the 28th and 29th of July outflows were decreased due to a power issue.

Hungry Horse Reservoir is at an elevation of 3550.0 feet and has been drafted approximately 2.2 feet over the last week.

Dworshak Reservoir is currently at an elevation of 1568.0 feet, and has drafted 7.7 feet in the last week. Supplemental outflows from Dworshak to moderate temperatures in the Lower Snake River are currently 12.0 Kcfs.

Grand Coulee Reservoir ended July 31st at an elevation of 1281.4 feet and has drafted approximately 2.1 feet over the last week.

Brownlee Reservoir was at an elevation of 2070.7 feet on July 30th, drafting 0.5 feet in the last six days. Outflows at Brownlee have been fluctuating between 5.4 and 12.9 Kcfs over the same period.

Spill: Some spill has occurred at Dworshak Dam over the past few days as flow augmentation is implemented. 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 is now being prioritized at these projects. At Ice Harbor Dam a modified 12-hour spill program is being implemented. Spill over the past week averaged 43% of average daily flow at this project.

The summer spill program is being implemented at John Day, The Dalles and Bonneville dams. Spill averaged 22%, 37%, and 58% of average daily flow, respectively.

Total dissolved gas levels are presently below the gas waiver limits at all the federal projects, with the exception of the Oregon side McNary forebay. 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: In the Snake River the numbers of subyearling chinook continue to decrease while the Lower Columbia continues to see indices in the range of 50,000 fish per day at McNary with lower numbers at John Day and and Bonneville dams. At Lower Granite Dam the average daily index for subyearling chinook decreased from 5,800 last week to 1,000 this week. Little Goose also saw a decrease with with an average index of 2,400 this week compared to 3,900 last week. At Lower Monumental there was a decrease as well, as subyearling indices averaged 900 this week compared to 1,600 last week.

The bypass at Rock Island Dam continues to cause some mortality in fish due to undetermined problems despite repairs that have been done to the seals and guides in slide gates that feed water into the bypass. Subyearling chinook indices increased last week with the daily average at 390 compared to 230 per day the previous week.

In the Lower Columbia, at McNary, the daily average index for subyearling chinook was nearly level at 55,000 per day this week compared to 57,000 last week. At John Day Dam the average daily index for subyearling chinook increased to 28,000 this week compared to 10,500 last week. At Bonneville Dam, the average daily index for subyearling chinook was at 24,000 this week compared to 48,000 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 1-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 Bonneville Dam was completed for the season on July 31st with chinook changing to the Fall Race on August 1. Adult summer chinook passage ranged between 500 and 800 for the week ending July 31. The cumulative count though July 31 was 114,678 about 90% and 302% of the respective year 2002 and 10-year average count at Bonneville. A sport and tribal harvest of a limited number of these summer chinook was allowed in the Columbia River (Tribal is above Bonneville Dam) this year due to the high adult returns to the Columbia River. Numbers of adult summer chinook continued a slow decline through the week at the lower Columbia projects. The summer run is mainly distributed in the Mid-Columbia River at present with the Priest Rapids Dam count now exceeding 75,000 through July 31. The adult chinook counts at the upper mid-Columbia Chelan projects have been near 1,000 per day with 71,860 counted above Rock Island Dam through July 31 and 52,647 above Rocky Reach Dam. Passage numbers have decreased single digits at Snake River projects with the cumulative count at Lower Granite Dam of 16,116 for the season. This total was about 74% of the 2002 count and 235% of the 10-year average through July 31.

Most sockeye salmon are nearing completion in the lower Columbia River. At Rock Island Dam, about 34,500 have been counted with almost 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 reduced this week to about 3,000 per day for this week compared to 5,000 the prior week. The cumulative count through July 31 was 110,459 and compares to 143,636 in 2002 and 81,088 for the 10-year average. With the hot air temperatures in the Basin during the past few weeks, water temperatures continue to rise in the mainstem Columbia and Snake Rivers. The steelhead count differential between Bonneville Dam and The Dalles Dam has risen to greater than 67,000 at present. At McNary Dam, daily counts of adult steelhead began falling at the tail end of the week, while counts of steelhead rose to greater than 200 per day at Priest Rapids Dam. At Ice Harbor Dam and other Snake River projects, steelhead counts were starting to drop by the end of the count week. The warm/hot water temperatures have resulted in steelhead and salmon migrations slowing and nearing a standstill at Lower Granite Dam. The cumulative count for Priest Rapids Dam was 2,820 with Ice Harbor at 14,036 through July 31.

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

	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
07/18/03	102.3	0.1	103.0	0.0	106.1	7.0	105.2	14.5	104.5	20.4	105.6	30.5	111.6	62.7
07/19/03	100.6	0.1	98.3	0.0	99.9	7.0	102.8	12.3	105.3	17.2	113.5	32.9	103.5	57.3
07/20/03	70.6	0.2	74.6	0.0	77.7	6.2	77.6	8.3	78.9	11.0	88.7	25.7	84.3	47.6
07/21/03	132.7	0.2	123.7	0.0	123.7	7.9	115.4	17.2	115.9	23.1	112.9	32.8	103.1	57.5
07/22/03	114.2	0.1	120.1	0.0	122.6	14.1	121.5	18.3	122.8	24.9	137.4	39.9	136.0	75.4
07/23/03	114.8	0.2	122.2	0.0	123.8	7.9	124.8	20.2	127.0	27.0	133.9	39.2	129.1	72.8
07/24/03	101.6	0.2	101.8	0.0	106.5	6.9	108.0	18.8	111.3	25.1	124.0	36.0	124.9	70.1
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

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

	Dworshak		Brownlee	Hells Canyon	Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
Date	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
07/18/03	14.0	4.3	7.8	9.9	33.0	0.0	34.3	0.0	37.5	0.0	33.8	10.7
07/19/03	13.9	4.2	7.1	7.9	31.5	0.0	32.0	0.0	32.1	0.0	30.6	13.0
07/20/03	13.9	4.1	8.3	10.8	30.3	0.0	30.7	0.0	33.3	0.0	34.3	13.3
07/21/03	12.9	3.7	7.1	13.2	31.8	0.0	31.6	0.0	33.3	0.0	31.3	8.0
07/22/03	13.2	3.5	8.5	13.2	34.6	0.0	36.1	0.0	37.9	0.0	35.4	12.0
07/23/03	13.3	3.5	7.5	12.9	32.7	0.0	30.3	0.0	30.5	0.0	29.9	12.6
07/24/03	11.8	2.3	7.8	10.5	32.0	0.0	32.3	0.0	33.6	0.0	31.8	8.0
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	9.5	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	---	---	30.7	0.0	31.0	0.0	33.7	0.0	30.6	12.6

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

	McNary		John Day		The Dalles		Bonneville			
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
07/18/03	125.8	0.0	128.4	37.3	133.8	51.5	169.2	92.8	0.0	69.6
07/19/03	125.6	0.0	99.4	29.2	99.3	38.2	132.9	86.9	0.0	39.3
07/20/03	138.9	0.0	141.5	42.2	140.1	55.3	149.5	84.8	0.0	58.1
07/21/03	134.9	0.0	142.9	27.8	144.3	56.0	176.1	91.6	0.0	77.8
07/22/03	149.1	0.2	141.5	38.0	139.6	55.3	160.0	91.1	0.0	62.2
07/23/03	160.5	0.2	155.5	35.5	154.3	60.7	176.7	95.0	0.0	75.0
07/24/03	155.2	0.0	156.2	42.2	156.3	61.6	186.1	100.2	0.1	79.1
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	201.8	0.0	117.4	18.8	118.4	42.2	146.3	85.9	0.0	53.6

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
McNary Dam											
	07/24/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/28/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/31/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	07/24/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/28/03	Chinook + Steelhead	101	0	0	0.00%	0.00%	0	0	0	0
	07/31/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Rock Island Dam											
	07/24/03	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	07/28/03	Chinook + Steelhead	100	3	3	3.00%	0.00%	2	1	0	0
	07/31/03	Chinook + Steelhead	100	1	1	1.00%	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

	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		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
7/18	---	---	---	0	108	109	109	24	111	111	111	24	110	110	113	24	110	110	111	23
7/19	---	---	---	0	110	111	116	24	111	111	111	24	110	111	114	24	110	111	111	23
7/20	---	---	---	0	112	113	113	25	110	111	111	25	111	111	114	25	111	111	111	23
7/21	---	---	---	0	113	114	115	24	110	110	110	24	110	111	114	24	110	111	111	23
7/22	---	---	---	0	114	115	116	24	110	110	110	24	110	111	115	24	111	111	112	23
7/23	---	---	---	0	114	115	115	25	110	110	111	26	110	111	115	25	111	111	111	23
7/24	---	---	---	0	114	115	115	24	110	110	110	25	110	111	115	24	110	111	111	23
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

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

	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		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
7/18	110	110	111	23	110	111	112	24	112	113	113	24	112	112	113	24	112	112	113	23
7/19	111	111	113	23	110	111	112	24	112	113	113	24	112	112	113	24	113	113	114	22
7/20	111	112	112	23	110	111	111	25	111	112	113	25	112	113	114	24	113	113	113	23
7/21	110	111	112	23	110	111	112	24	112	113	113	24	112	112	112	22	112	113	113	22
7/22	111	112	112	23	111	111	113	14	112	113	116	14	112	112	113	23	113	113	114	23
7/23	111	111	112	23	112	112	113	18	113	114	114	18	113	113	114	23	114	114	115	22
7/24	111	111	113	23	111	112	113	25	113	113	114	25	114	114	115	22	114	115	115	21
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

Total Dissolved Gas Saturation at Mid Columbia River Sites

	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		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
7/18	113	113	114	24	117	119	121	24	110	111	113	24	115	116	117	24	114	115	117	24
7/19	112	113	113	24	116	117	118	24	110	111	112	24	115	116	116	24	114	115	117	24
7/20	112	112	113	24	115	117	118	24	110	110	110	24	115	115	116	24	112	113	113	24
7/21	112	113	113	21	117	118	119	21	110	111	113	24	115	116	117	24	111	112	116	23
7/22	112	113	114	22	117	118	120	22	110	111	113	24	116	116	117	24	114	115	116	24
7/23	113	113	114	23	118	118	120	23	110	110	111	24	115	115	116	24	112	113	115	24
7/24	113	114	115	22	118	118	119	22	109	110	111	24	115	115	116	24	111	112	113	24
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	---	---	---	0	---	---	---	0	---	---	---	0
7/31	112	113	113	22	117	117	119	20	---	---	---	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

	Priest R. Dnst				Pasco				Dworshak				Clrwtr-Peck				Anatone			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
7/18	116	118	119	24	111	112	113	24	105	106	106	24	106	107	108	24	103	105	106	24
7/19	116	117	119	24	112	113	113	24	105	106	106	24	106	107	108	23	103	105	106	24
7/20	115	116	117	24	112	112	112	25	105	105	105	25	106	107	108	25	102	104	105	25
7/21	114	116	118	24	111	112	112	24	107	109	111	24	107	109	111	22	103	105	106	23
7/22	118	119	120	24	111	112	113	24	109	109	110	22	109	110	111	24	103	105	106	24
7/23	117	118	119	24	113	114	115	26	109	109	110	26	108	110	111	26	103	104	106	26
7/24	116	118	118	24	112	112	113	25	106	108	109	25	107	108	109	25	103	104	106	25
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	---	---	---	0	112	112	113	21	105	105	105	24	106	107	108	24	103	104	106	24
7/31	---	---	---	0	111	113	113	24	105	105	105	24	106	107	108	24	101	102	102	24

Total Dissolved Gas Saturation Data at Snake River Sites

	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		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
7/18	105	107	109	24	106	107	108	24	103	103	103	24	103	104	106	24	100	101	101	24
7/19	105	107	109	24	107	108	109	24	103	104	104	24	103	105	106	24	101	102	102	24
7/20	105	107	108	25	105	105	106	25	103	103	104	25	102	103	106	25	101	102	103	25
7/21	105	107	109	24	105	106	108	17	103	103	104	16	104	106	107	24	101	102	103	24
7/22	106	108	110	24	108	109	110	24	104	104	106	24	107	108	109	24	101	102	102	24
7/23	106	108	110	26	108	109	110	26	104	104	105	26	104	105	107	17	101	102	102	17
7/24	105	107	109	25	107	107	109	25	103	104	104	25	102	103	104	25	102	103	105	25
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

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

	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		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
7/18	102	104	106	24	101	102	103	24	102	103	104	24	107	112	114	24	111	113	116	24
7/19	101	102	103	24	100	101	101	24	102	104	106	24	108	114	116	24	114	117	119	24
7/20	100	100	103	25	100	100	102	25	102	104	107	25	108	114	116	24	113	115	116	25
7/21	102	104	105	24	100	101	102	24	103	105	108	24	108	113	115	24	114	116	117	24
7/22	105	106	108	24	101	102	103	24	104	108	110	24	108	113	117	24	114	116	118	24
7/23	103	103	105	26	102	103	108	26	103	106	108	26	109	115	116	25	114	115	116	26
7/24	102	102	103	25	102	102	103	25	104	107	109	25	107	113	116	25	112	113	115	25
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

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

	McNary-Wash				McNary Tlwr				John Day				John Day Tlwr				The Dalles			
	24 h	12 h		#	24 h	12 h		#	24h	12h		#	24h	12h		#	24h	12h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr
7/18	111	113	115	24	109	109	109	24	102	102	103	23	114	114	115	24	109	110	112	23
7/19	110	111	113	24	108	109	109	24	102	102	102	23	112	113	114	24	106	106	106	23
7/20	110	111	112	25	109	109	110	25	102	102	103	23	114	114	118	25	105	105	105	23
7/21	111	111	113	24	109	109	110	24	103	103	103	23	108	114	118	24	106	106	107	23
7/22	112	113	115	24	110	110	110	24	104	104	105	23	109	113	118	21	105	107	108	23
7/23	111	111	113	26	109	110	110	26	104	104	104	23	110	116	118	25	107	109	111	23
7/24	109	109	110	25	109	109	109	25	104	104	104	23	110	117	118	25	104	106	109	23
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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

	The Dalles Dnst				Bonneville				Warrendale				Camas\Washugal			
	24 h	12 h		#	24 h	12 h		#	24h	12h		#	24h	12h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
7/18	116	117	117	24	107	107	108	23	113	114	118	23	109	112	114	24
7/19	114	114	114	24	108	108	109	23	112	113	116	23	109	110	112	24
7/20	113	114	114	25	106	107	108	23	111	111	111	23	107	108	110	25
7/21	114	115	115	24	108	108	109	23	112	114	116	23	107	109	111	24
7/22	114	115	115	24	108	109	109	23	113	114	117	23	106	108	110	24
7/23	114	115	116	26	106	107	108	23	112	114	116	23	107	110	113	26
7/24	113	114	115	25	104	104	105	23	111	114	118	23	109	112	114	25
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

Two-Week Summary of Passage Indices

COMBINED YEARLING CHINOOK

		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
07/18/2003	*	---	---	---	---	40	68	0	0	100	16	0
07/19/2003	*	---	---	---	---	50	14	36	0	0	0	0
07/20/2003	*	---	---	---	---	20	0	12	0	50	11	0
07/21/2003		---	---	---	---	50	0	0	0	0	0	0
07/22/2003		---	---	---	---	0	14	18	5	0	0	0
07/23/2003	*	---	---	---	---	20	14	6	1	0	0	0
07/24/2003	*	---	---	---	---	0	0	0	0	100	45	0
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
Total:		**0**	**0**	**0**	**0**	**190**	**160**	**110**	**9**	**350**	**72**	**225**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**14**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**14**	**11**	**8**	**1**	**25**	**5**	**16**
YTD		**32,064**	**34,028**	**11,123**	**2,417**	**3,599,165**	**2,503,025**	**785,184**	**15,351**	**1,624,008**	**2,074,537**	**4,043,651**

COMBINED SUBYEARLING CHINOOK

		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
07/18/2003	*	---	---	---	---	6,990	5,611	2,100	106	67,600	13,117	55,705
07/19/2003	*	---	---	---	---	9,520	5,686	1,368	60	32,400	4,264	56,550
07/20/2003	*	---	---	---	---	8,800	4,010	1,902	131	61,100	4,228	22,841
07/21/2003		---	---	---	---	5,420	3,260	1,602	415	37,800	6,054	39,468
07/22/2003		---	---	---	---	4,560	2,463	810	382	45,700	16,419	58,497
07/23/2003	*	---	---	---	---	3,590	4,144	2,208	280	85,862	10,169	43,433
07/24/2003	*	---	---	---	---	1,780	2,314	1,302	264	67,186	19,379	59,683
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
Total:		**0**	**0**	**0**	**0**	**47,899**	**44,136**	**17,502**	**4,346**	**784,968**	**272,235**	**503,469**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**14**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**3,421**	**3,153**	**1,250**	**310**	**56,069**	**19,445**	**35,962**
YTD		**1**	**118**	**74**	**355**	**1,351,401**	**643,447**	**324,576**	**25,311**	**7,003,508**	**2,487,596**	**7,722,394**

* 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								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
07/18/2003	*	---	---	---	---	50	14	6	6	0	34	107
07/19/2003	*	---	---	---	---	80	57	0	2	100	125	0
07/20/2003	*	---	---	---	---	120	14	6	7	150	23	0
07/21/2003		---	---	---	---	80	14	6	4	100	24	243
07/22/2003		---	---	---	---	30	29	6	5	50	45	0
07/23/2003	*	---	---	---	---	40	114	12	7	100	133	0
07/24/2003	*	---	---	---	---	20	70	0	11	200	68	0
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
Total:		**0**	**0**	**0**	**0**	**586**	**481**	**66**	**100**	**1,400**	**918**	**544**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**14**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**42**	**34**	**5**	**7**	**100**	**66**	**39**
YTD		**0**	**0**	**0**	**17**	**132,222**	**117,758**	**37,533**	**41,661**	**113,549**	**258,016**	**2,116,371**

				COMBINED STEELHEAD								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
07/18/2003	*	---	---	---	---	200	57	0	0	0	31	0
07/19/2003	*	---	---	---	---	120	43	6	0	0	0	0
07/20/2003	*	---	---	---	---	140	0	30	3	0	0	0
07/21/2003		---	---	---	---	100	14	12	3	0	11	0
07/22/2003		---	---	---	---	120	0	6	0	0	23	0
07/23/2003	*	---	---	---	---	220	14	30	0	0	23	0
07/24/2003	*	---	---	---	---	220	50	0	1	0	0	0
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
Total:		**0**	**0**	**0**	**0**	**2,266**	**408**	**156**	**10**	**0**	**88**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**14**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**162**	**29**	**11**	**1**	**0**	**6**	**0**
YTD		**2,347**	**48,404**	**2,521**	**5,601**	**3,353,966**	**2,592,837**	**1,865,360**	**15,495**	**245,533**	**553,403**	**1,635,054**

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

Two-Week Summary of Passage Indices

				COMBINED SOCKEYE								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
07/18/2003	*	---	---	---	---	0	14	6	3	900	0	0
07/19/2003	*	---	---	---	---	0	0	0	3	300	47	0
07/20/2003	*	---	---	---	---	0	0	0	6	350	11	0
07/21/2003		---	---	---	---	0	0	0	3	500	11	0
07/22/2003		---	---	---	---	0	0	0	9	650	11	0
07/23/2003	*	---	---	---	---	0	0	0	4	501	23	126
07/24/2003	*	---	---	---	---	0	0	0	1	300	46	0
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
Total:		**0**	**0**	**0**	**0**	**0**	**14**	**6**	**54**	**5,701**	**848**	**404**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**14**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**407**	**61**	**29**
YTD		**1**	**0**	**0**	**11**	**16,384**	**8,123**	**4,544**	**10,298**	**840,631**	**725,513**	**1,261,216**

* 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: 07/31

	Spring Chinook						Summer Chinook						Fall Chinook					
	2003		2002		10-Yr Avg.		2003		2002		10-Yr Avg.		2003		2002		10-Yr Avg.	
DAM	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	114,678	13,358	127,436	7,952	38,022	5,207	0	0	0	0	0	0
TDA	131,207	11,522	181,176	3,870	80,975	4,136	100,028	10,012	111,427	5,565	31,859	3,632	0	0	0	0	0	0
JDA	101,436	10,206	139,887	2,403	67,822	3,122	93,278	9,553	103,177	5,311	29,407	3,100	0	0	0	0	0	0
MCN	95,550	11,123	129,357	3,872	62,536	3,162	91,163	10,317	106,184	6,400	29,706	3,057	0	0	0	0	0	0
IHR	78,170	8,020	85,207	1,826	38,964	1,925	20,534	4,569	26,389	2,410	7,527	1,061	0	0	0	0	0	0
LMN	70,603	7,344	76,304	1,537	38,073	1,899	18,518	3,499	23,477	1,621	7,531	916	0	0	0	0	0	0
LGS	69,020	6,919	77,232	1,815	37,097	2,034	14,190	3,386	20,562	2,217	6,822	1,175	0	0	0	0	0	0
LWG	70,609	8,295	75,025	2,089	35,689	2,016	16,116	4,064	21,845	1,900	6,859	1,238	0	0	0	0	0	0
PRD	18,136	656	34,083	196	15,528	317	75,144	2,715	86,429	1,148	23,781	803	0	0	0	0	0	0
RIS	16,881	753	24,017	827	11,565	538	71,860	4,658	75,519	2,625	20,044	2,555	0	0	0	0	0	0
RRH	4,216	450	9,999	161	4,017	126	52,647	4,030	59,085	2,034	12,692	954	0	0	0	0	0	0
WEL	4,313	172	7,585	41	2,377	152	31,967	744	46,742	228	8,736	522	0	0	0	0	0	0

	Coho						Sockeye			Steelhead			
	2003		2002		10-Yr Avg.				10-Yr			10-Yr	Wild
DAM	Adult	Jack	Adult	Jack	Adult	Jack	2003	2002	Avg.	2003	2002	Avg.	2003
BON	9	0	8	1	9	2	39,183	49,521	46,662	110,459	143,636	81,088	46,704
TDA	0	0	0	0	0	0	34,104	40,461	37,390	42,914	76,906	37,837	19,618
JDA	0	0	0	0	1	0	35,251	41,817	40,347	34,483	56,344	26,650	13,599
MCN	0	0	0	0	0	0	32,009	39,017	36,767	24,200	37,857	19,365	9,268
IHR	0	0	0	0	0	0	37	58	17	14,036	18,344	9,711	4,027
LMN	0	0	0	0	0	0	14	43	24	10,468	16,661	8,873	3,542
LGS	0	0	0	0	0	0	15	35	26	7,444	12,475	5,356	3,156
LWG	0	0	0	0	0	0	11	51	24	19,455	17,609	8,119	4,871
PRD	2	1	14	0	3	0	36,092	47,378	44,557	2,820	3,181	1,448	0
RIS	9	0	3	0	1	0	34,512	43,217	39,421	1,629	2,275	990	1,099
RRH	2	0	18	0	1	0	29,816	11,559	22,945	1,146	1,527	582	725
WEL	0	0	0	0	0	0	28,270	9,246	21,909	463	1,013	300	265

PRD, RIS, RRH are WEL are through 07/30.
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.

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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

07/19/03 TO 08/01/03

		Species					
Site	Data	**CH0**	**CH1**	**CO**	**SO**	**ST**	**Grand Total**
LGR	Sum of NumberCollected	47,845	190	585		2,255	50,875
	Sum of NumberBarged	46,930	182	583		2,215	49,910
	Sum of NumberBypassed	75	0	0		0	75
	Sum of Numbertrucked	0	0	0		0	0
	Sum of TotalProjectMortalities	840	8	2		40	890
LGS	Sum of NumberCollected	44,136	160	481	14	408	45,199
	Sum of NumberBarged	43,146	105	451	13	390	44,105
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	990	55	30	1	18	1,094
LMN	Sum of NumberCollected	17,502	110	66	6	156	17,840
	Sum of NumberBarged	17,112	108	65	6	153	17,444
	Sum of NumberBypassed	62	0	0	0	0	62
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	328	2	1	0	3	334
MCN	Sum of NumberCollected	784,700	350	1,400	5,700		792,150
	Sum of NumberBarged	787,055	411	1,491	5,884		794,841
	Sum of NumberBypassed	0	0	0	0		0
	Sum of Numbertrucked	0	0	0	0		0
	Sum of TotalProjectMortalities	22,243	39	158	15		22,455
Total Sum of NumberCollected		894,183	810	2,532	5,720	2,819	906,064
Total Sum of NumberBarged		894,243	806	2,590	5,903	2,758	906,300
Total Sum of NumberBypassed		137	0	0	0	0	137
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of TotalProjectMortalities		24,401	104	191	16	61	24,773

YTD Transportation Summary

TO: 08/01/03

		Species					
Site	Data	**CH0**	**CH1**	**CO**	**SO**	**ST**	**Grand Total**
LGR	Sum of NumberCollected	1,108,604	2,576,950	89,379	9,748	2,335,294	6,119,975
	Sum of NumberBarged	1,087,170	2,470,874	88,737	9,549	2,264,697	5,921,027
	Sum of NumberBypassed	2,827	45,590	7	0	53,142	101,566
	Sum of NumberTrucked	816	54,208	40	78	15,402	70,544
	Sum of TotalProjectMortalities	17,787	5,979	595	121	2,054	26,536
LGS	Sum of NumberCollected	561,082	1,849,309	87,618	5,435	1,946,265	4,449,709
	Sum of NumberBarged	554,718	1,795,258	87,197	5,398	1,942,497	4,385,068
	Sum of NumberBypassed	0	22	0	0	3	25
	Sum of NumberTrucked	5	52,601	0	0	850	53,456
	Sum of TotalProjectMortalities	6,358	3,389	421	37	2,915	13,120
LMN	Sum of NumberCollected	273,647	463,239	26,483	3,306	1,229,724	1,996,399
	Sum of NumberBarged	238,310	440,221	25,786	3,261	1,150,853	1,858,431
	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	1,165	1,003	16	5	1,289	3,478
MCN	Sum of NumberCollected	6,350,070	1,041,742	71,892	545,028	155,020	8,163,752
	Sum of NumberBarged	3,957,878	5,446	8,935	9,832	682	3,982,773
	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	63,728	1,119	303	429	211	65,790
Total Sum of NumberCollected		8,293,403	5,931,240	275,372	563,517	5,666,303	20,729,835
Total Sum of NumberBarged		5,838,076	4,711,799	210,655	28,040	5,358,729	16,147,299
Total Sum of NumberBypassed		2,317,466	1,087,562	63,292	534,272	283,174	4,285,766
Total Sum of NumberTrucked		881	121,958	40	118	17,889	140,886
Total Sum of TotalProjectMortalities		89,038	11,490	1,335	592	6,469	108,924