Fish Passage Center

Weekly Report #02 - 26

September 6, 2002

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SUMMARY OF EVENTS:

- **The BiOp summer flow objective period has ended at Lower Granite and McNary. Flow Objectives were 51 Kcfs at Lower Granite and 200 Kcfs at McNary. Summer flows averaged 41.0 Kcfs at Lower Granite and 189.1 Kcfs at McNary; therefore, flow objectives were not met on a seasonal basis at either McNary or Lower Granite.**
- **Combined storage in the Upper Snake River System is less than 17% of capacity.**

Water Supply: River flows within the Columbia Basin are have been low for approximately the last six weeks.

Currently, storage reservoirs along the Columbia and Snake Rivers are varied in operation; some are continuing to draft and others are refilling.

Grand Coulee has refilled over the last week; beginning the week at 1279.8 feet (8-30-02) and ending at 1283.6 feet (9-5-02). Total outflows over the past week (8-30-02 to 9-5-02) have averaged 73.8 Kcfs.

The Libby Reservoir has drafted 0.3 feet over the past week (8-30-02 to 9-5-02); reservoir elevations have ranged from 2442.1 to 2441.8 feet. Outflows have ranged between 12.8 Kcfs and 6.0 Kcfs over the last week. Currently (9-5-02), Libby is at an elevation of 2441.8 feet. The current operation at Libby includes drafting approximately 140 Kaf in September.

The Dworshak Reservoir continues to draft. Over the last week, total outflows at Dworshak have dropped from 12.2 to 10.2 Kcfs (8-30-02 to 9-5-02) to supplement flows and temperatures at Lower Granite. Currently (midnight, 9-5-02) Dworshak is at an elevation of 1527.1 feet, drafting 8.5 feet over the last week. SOR #2002-07 (submitted on August 13th of 2002) outlined suggested operations at Dworshak between August 15th and September 14th, 2002. According to this SOR, Dworshak will reduce outflows to 10.0 Kcfs from September 1st through 10th, then ramp flows down at the standard project rate to the minimum discharge of 1.4 Kcfs.

Over the past week the Brownlee Reservoir has drafted 1.2 feet, beginning the week at 2055.8 and ending the week at 2054.6 feet. During the week, outflows have varied between 7.4 and 13.6 Kcfs.

The Hungry Horse Reservoir continues to draft; beginning the week at an elevation of 3545.4 feet and ending the week at 3543.6 feet. Total outflows at Hungry Horse have been steady at approximately 4.0 Kcfs over the last week (8-30-02 to 9-5-02). Currently (midnight, 9-5-02) Hungry Horse is at an elevation of 3543.6 feet. The remaining few feet of water left over from summer draft at Hungry Horse will be released during the month of September.

The BiOp summer flow objective season ended at both Lower Granite and McNary on 8-31-02. The summer objectives were 51 Kcfs at Lower Granite and 200 Kcfs at McNary. Over each respective summer period, flows have averaged 41.0 Kcfs at Lower Granite and 189.1 Kcfs at McNary. Summer BiOp flow objectives were not met at either McNary or Lower Granite.

Currently, as of September 5th, 2002, the entire Upper Snake River System is at 17% of capacity. Most reservoirs on the Upper Snake River have been drafting. Individually, American Falls is at 5% of capacity, Palisades is at 8% of capacity, Jackson Lake is at 43% of capacity, Island Park is at 19% of capacity, Lake Walcott is at 83% of capacity, Milner is at 95% of capacity, and Grassy Lake is at 76% of capacity.

Spill: The Biological Opinion spill program ended on August 31. Daytime spill was curtailed at both John Day and Ice Harbor dams prior to the end of the month in order to conduct a spill test at The Dalles Dam in October.

Monitoring fish for signs of GBT at Rock Island, McNary and Bonneville dams has ended for the year.

Smolt Monitoring: Low numbers of subyearling chinook are being captured at the dams in the Lower Snake River and Columbia River as the overall number of migrants continues to decline. At Granite the number of subyearling chinook was 20% below last week with the average daily index at 1,300 this week compared to 1,670 last week. At other Snake River dams the numbers of subyearlings continued to decrease with Little Goose and Lower Monumental having average weekly indices of 200 and 140 respectively.

At Rock Island Dam, in the mid-Columbia, the smolt monitoring ended for the season on August 31. In the lower Columbia, the passage index decreased at McNary from 15,800 per day last week to 3,400 per day this week. At John Day Dam passage index for subyearling chinook was down, with the index averaging 1,180 this week versus 2,300 last week. And at Bonneville Dam subyearling chinook numbers were down, with an average daily index this week of 680 versus 1,900 last week.

Adult Fish Passage: At Bonneville Dam, adult fall chinook counts averaged 14,004 per day for the week with the cumulative count through September 5 up to 220,250. Through September 4, the breakout of the Tule and Upriver Bright (URB) fall Chinook is estimated to be: Tules - 64,759; URBs - 134,697. This year's count of adult fall chinook is about 1.4 times and 2.4 times greater than the respective 2001 count and 10-year average through September 5. The daily counts of adult fall Chinook at The Dalles ranged between 4,200 and 9,700 per day with the season total exceeding 90,000. At McNary Dam, the adult fall chinook count was 40,563 through 9/5 with about 4,500 counted at Ice Harbor Dam and greater than 10,000 counted at Priest Rapids Dam. A large portion of the fall chinook past McNary Dam is destined for the Hanford Reach area as well as Priest Rapids Hatchery.

Steelhead passage at Bonneville Dam averaged 3,287 per day through the past week with a total of 334,311 counted through September 5. This total is 68% and 168% of the respective 2001 and 10-year average counts to date. Estimated wild steelhead in the passage total was 112,588 (based on visual missing adipose fin on the steelhead). Passage of steelhead at upstream projects is steadily increasing with 185,129 counted at The Dalles Dam. The McNary Dam count of steelhead totaled 97,247 with the turnoff into the Snake River about 57,500 at Ice Harbor Dam, and 11,625 counted above Priest Rapids Dam. At the Snake River projects, daily counts were generally between 1,500 and 2,000 per day while daily counts at the Mid-Columbia projects (above Priest Rapids Dam), were between 100-300.

Coho counts at Bonneville Dam and upriver projects are less than 10% of last year's record run. To date, the count of adult coho is 5,000 through September 5. A small portion of these fish will be moving to upstream tributaries such as the Umatilla, Yakima, Snake, and Mid-Columbia Rivers. A large percentage of coho passing Bonneville Dam are destined for Bonneville pool hatcheries and tributaries.

Hatchery Releases: All hatchery releases for the 2002 fish migration season are completed. The FPC will be updating and finalizing hatchery release groups during the next few months.

Hatchery Release Summary

From: 8/23/02 to 9/5/02

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
WDFW	East Bank	SO	UN	2003	96,500	08-28-02	08-28-02	Lake Wenatchee	Wenatchee River

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
08/23/02	109.6	0.1	114.1	0.0	119.5	7.8	116.5	0.0	122.2	22.8	128.9	1.8	132.7	1.1
08/24/02	90.3	0.2	95.4	0.0	96.8	7.4	95.8	0.0	96.0	19.2	105.9	1.7	109.7	0.9
08/25/02	70.7	0.2	70.0	0.0	73.5	5.5	69.1	0.0	71.4	21.4	72.1	1.5	79.6	0.7
08/26/02	113.5	0.2	111.2	0.0	116.3	4.0	112.5	0.0	113.9	0.1	109.5	1.8	100.5	0.8
08/27/02	104.8	0.2	108.8	0.0	109.7	0.0	109.1	0.0	111.7	0.0	122.9	1.7	125.2	0.8
08/28/02	120.1	0.1	116.5	0.0	118.3	0.0	116.3	0.0	119.3	0.0	113.3	1.6	114.5	0.8
08/29/02	106.9	0.2	107.7	0.0	107.4	0.0	108.8	0.0	113.1	0.0	118.2	1.8	119.2	1.1
08/30/02	112.1	0.1	111.5	0.0	111.0	0.0	105.7	0.0	106.4	0.0	94.4	7.2	89.8	4.7
08/31/02	77.3	0.1	82.5	0.0	89.5	0.0	92.7	0.0	96.9	0.0	110.3	9.7	113.3	7.0
09/01/02	36.0	0.1	43.7	0.0	46.1	0.0	49.3	0.0	51.6	0.0	56.5	1.9	56.8	1.1
09/02/02	67.8	0.1	63.7	0.0	64.9	0.0	65.3	0.0	66.4	0.0	69.4	1.6	67.6	1.0
09/03/02	84.3	0.1	91.6	0.0	92.5	0.0	91.5	0.0	93.2	0.0	89.4	1.9	91.3	1.0
09/04/02	70.1	0.1	68.3	0.0	68.1	0.0	65.9	0.0	68.2	0.0	76.2	1.3	76.1	0.9
09/05/02	69.2	0.1	64.9	0.0	69.9	0.0	70.7	0.0	72.3	0.0	82.8	1.8	86.7	1.0

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
08/23/02	13.7	3.5	9.0	14.0	31.3	0.0	37.8	0.0	40.1	0.0	41.0	35.4
08/24/02	13.6	3.4	9.0	11.9	31.1	0.0	32.2	0.0	33.7	0.0	39.8	34.0
08/25/02	12.1	1.9	8.5	9.9	29.0	0.0	28.6	0.0	28.8	0.0	27.5	13.5
08/26/02	12.1	1.9	9.9	14.8	27.1	0.0	27.2	0.0	29.1	0.0	30.5	16.2
08/27/02	12.1	1.9	9.6	11.1	31.7	0.0	31.4	0.0	31.6	0.0	31.5	12.4
08/28/02	12.1	1.9	10.2	14.4	28.1	0.0	27.1	0.0	28.8	0.0	29.7	14.4
08/29/02	12.0	1.8	10.7	18.0	29.8	0.0	30.2	0.0	30.7	0.0	32.5	14.4
08/30/02	12.1	1.8	9.9	12.7	32.8	0.0	30.2	0.0	29.5	0.0	29.2	13.0
08/31/02	12.2	1.8	9.9	8.4	30.9	0.0	31.3	0.0	30.2	0.0	29.6	16.2
09/01/02	10.3	0.0	9.4	7.6	24.0	0.0	23.7	0.0	23.4	0.0	21.3	0.3
09/02/02	10.3	0.0	10.5	10.4	23.6	2.2	13.6	0.0	15.0	0.0	12.6	0.0
09/03/02	10.1	0.0	10.2	13.6	26.3	0.0	25.6	0.0	23.6	0.0	22.3	0.0
09/04/02	10.0	0.0	10.6	13.9	28.0	0.0	27.4	0.0	29.2	0.0	30.1	0.0
09/05/02	10.0	0.0	---	---	27.6	0.0	28.5	0.0	28.8	0.0	27.7	0.0

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
08/23/02	159.1	0.0	139.1	41.8	132.0	52.1	156.6	91.9	0.0	58.0
08/24/02	129.2	0.0	145.1	42.8	147.7	58.5	163.3	86.3	3.9	66.4
08/25/02	122.1	0.0	118.1	35.7	123.3	48.7	135.8	85.9	0.0	43.3
08/26/02	142.5	0.0	141.3	30.2	140.0	55.2	140.8	87.9	0.9	45.3
08/27/02	134.1	0.0	142.2	41.5	141.1	55.7	139.4	85.2	2.8	44.7
08/28/02	142.8	0.0	142.0	29.3	139.5	55.1	157.7	77.8	1.5	71.7
08/29/02	140.2	0.0	126.3	18.9	125.9	49.4	137.9	54.2	0.5	76.5
08/30/02	131.2	0.0	129.7	26.2	129.4	50.8	142.6	89.1	0.0	45.6
08/31/02	139.0	0.0	139.8	43.0	139.9	54.9	159.4	120.6	0.0	32.2
09/01/02	114.7	0.0	111.0	0.0	113.2	0.0	123.7	1.8	3.8	111.4
09/02/02	96.7	0.0	95.8	0.0	102.2	0.0	100.4	1.7	1.8	90.1
09/03/02	95.7	0.0	94.1	0.0	100.1	0.0	100.7	1.6	1.1	91.2
09/04/02	132.1	0.0	122.9	0.0	123.2	0.0	119.0	1.9	9.6	100.6
09/05/02	201.8	0.0	101.8	0.0	107.6	0.0	115.1	1.8	5.9	100.8

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
8/23	103	103	104	24	106	107	107	24	110	110	110	24	110	111	114	24	110	110	111	23
8/24	103	103	103	24	107	107	108	24	110	111	111	24	111	111	114	24	110	110	111	23
8/25	103	103	104	24	107	107	108	24	110	111	111	24	111	112	115	24	109	109	110	23
8/26	103	103	103	24	106	106	107	24	110	111	111	24	110	110	112	24	109	109	109	23
8/27	102	102	103	9	107	107	107	5	110	110	110	24	109	109	111	8	109	109	110	23
8/28	103	103	104	24	107	108	109	24	110	111	111	24	109	110	112	24	109	110	110	23
8/29	103	104	104	24	108	109	110	24	111	111	111	24	109	110	112	24	110	110	111	23
8/30	103	103	103	24	107	108	108	24	110	110	110	24	108	109	111	24	109	109	110	23
8/31	103	103	103	23	108	109	110	24	108	109	109	24	108	109	111	24	108	108	108	23
9/1	103	103	104	23	108	108	109	24	108	109	109	24	109	111	113	24	107	107	107	24
9/2	103	103	103	24	107	107	108	24	108	109	109	24	109	110	114	24	107	107	107	23
9/3	103	103	104	24	107	107	107	24	109	109	109	24	108	109	111	23	106	107	107	23
9/4	103	103	103	24	106	106	106	24	108	108	109	24	108	109	110	24	106	106	107	23
9/5	103	103	104	24	106	106	106	24	108	108	108	24	107	108	109	24	106	106	107	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
8/23	110	111	112	21	109	110	110	24	111	112	112	24	109	109	110	24	109	110	110	24
8/24	111	112	112	22	109	110	111	24	111	112	112	24	110	110	110	23	110	110	110	23
8/25	110	110	112	23	109	109	110	24	110	110	111	24	109	110	110	24	109	110	110	24
8/26	109	109	110	23	108	108	109	24	109	110	111	24	109	110	110	24	109	110	110	24
8/27	109	109	110	21	107	108	108	24	107	107	107	24	109	110	110	24	109	110	110	24
8/28	108	110	111	22	108	109	109	23	107	108	108	23	109	109	110	24	109	109	110	24
8/29	110	111	112	23	109	109	109	23	108	108	109	23	108	108	109	23	108	109	109	23
8/30	109	110	111	21	108	109	109	23	108	108	108	23	108	108	108	24	108	108	108	23
8/31	108	108	108	23	108	108	108	24	107	107	107	24	107	107	107	23	107	107	108	23
9/1	107	107	108	24	107	107	108	24	106	107	107	24	107	107	107	24	107	107	107	24
9/2	107	108	108	23	107	107	108	23	106	107	108	23	107	107	107	24	107	107	108	24
9/3	107	107	108	23	106	106	107	24	106	106	106	24	106	106	107	23	106	106	107	21
9/4	106	107	108	23	105	106	106	24	104	105	105	24	104	104	105	24	104	105	105	24
9/5	107	108	109	23	105	105	105	24	104	105	105	24	104	104	104	11	104	104	104	11

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
8/23	109	109	110	24	114	115	118	24	---	---	---	0	---	---	---	0	---	---	---	0
8/24	109	109	110	23	114	115	115	23	---	---	---	0	---	---	---	0	---	---	---	0
8/25	108	108	109	24	116	117	117	24	---	---	---	0	---	---	---	0	---	---	---	0
8/26	108	108	108	24	117	117	117	24	---	---	---	0	---	---	---	0	---	---	---	0
8/27	108	108	108	24	117	117	117	24	---	---	---	0	---	---	---	0	---	---	---	0
8/28	108	109	110	24	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
8/29	108	108	109	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
8/30	107	108	108	24	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
8/31	106	107	107	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/1	105	106	107	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/2	106	107	108	24	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/3	106	106	107	22	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/4	103	104	105	24	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/5	103	103	104	11	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0

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

Total Dissolved Gas Saturation Data at 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
8/23	---	---	---	0	102	103	105	24	105	105	105	24	105	106	107	24	103	105	107	24
8/24	---	---	---	0	104	105	105	24	105	105	105	24	105	106	107	24	103	104	106	24
8/25	---	---	---	0	105	105	106	24	103	104	104	24	104	105	106	24	102	104	105	24
8/26	---	---	---	0	104	105	106	24	103	103	104	24	104	105	106	24	102	104	105	24
8/27	---	---	---	0	105	105	106	24	103	103	104	24	104	105	106	24	103	104	106	24
8/28	---	---	---	0	105	105	106	24	103	104	104	24	104	106	106	24	103	105	107	24
8/29	---	---	---	0	105	106	107	24	103	103	104	23	104	105	106	24	102	102	102	9
8/30	---	---	---	0	104	104	106	24	103	103	104	24	104	105	105	24	---	---	---	0
8/31	---	---	---	0	103	104	104	24	103	103	103	24	104	105	106	24	---	---	---	0
9/1	---	---	---	0	102	103	103	24	101	101	101	24	---	---	---	0	---	---	---	0
9/2	---	---	---	0	101	101	102	24	101	101	102	24	102	104	104	24	---	---	---	0
9/3	---	---	---	0	101	101	102	24	101	102	103	24	103	104	105	24	---	---	---	0
9/4	---	---	---	0	99	100	100	24	101	101	102	24	102	103	104	24	---	---	---	0
9/5	---	---	---	0	99	100	100	24	101	101	102	24	102	103	104	24	---	---	---	0

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
8/23	103	105	107	24	109	110	113	24	102	103	104	24	104	106	107	24	101	101	102	24
8/24	103	104	105	24	110	111	112	24	102	102	103	24	105	106	107	24	100	101	101	24
8/25	103	104	105	24	108	109	110	24	101	102	103	24	104	105	107	24	100	100	100	24
8/26	103	104	106	24	104	105	109	24	101	101	101	24	100	100	101	24	99	99	101	24
8/27	103	105	106	24	106	108	112	24	101	102	102	24	101	102	104	24	100	100	101	24
8/28	103	105	107	24	111	114	115	24	102	103	104	24	105	108	109	24	101	101	102	24
8/29	103	104	105	24	112	113	114	24	103	104	105	24	108	110	110	24	101	102	102	24
8/30	103	104	105	24	109	110	111	24	103	104	104	24	102	103	107	24	100	100	101	24
8/31	103	105	106	24	106	107	107	24	102	102	103	24	101	102	103	24	99	99	100	24
9/1	102	104	105	24	105	106	107	24	101	102	102	24	100	101	101	24	99	99	99	24
9/2	103	105	106	24	107	109	110	24	102	104	109	24	101	102	102	24	99	100	101	24
9/3	102	104	105	24	106	107	109	24	101	101	101	24	101	102	102	24	100	100	101	24
9/4	102	104	105	24	104	104	105	24	100	100	101	24	101	102	102	24	99	99	100	24
9/5	102	103	104	24	104	104	106	24	100	101	102	22	101	101	101	24	99	99	100	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
8/23	104	105	106	24	102	103	104	23	102	102	103	24	111	112	112	24	104	106	109	23
8/24	106	107	110	24	103	104	104	24	101	101	102	24	111	112	113	24	105	107	109	24
8/25	105	106	107	24	105	106	109	24	103	104	106	24	106	109	111	24	106	108	109	24
8/26	104	105	105	24	103	104	104	24	100	101	101	24	106	110	111	24	107	108	109	24
8/27	105	107	109	24	102	103	104	24	101	102	103	24	106	109	111	24	108	110	112	24
8/28	107	108	110	24	102	103	104	24	102	103	103	24	107	109	110	24	109	111	113	24
8/29	105	106	108	24	101	102	104	21	104	105	106	24	107	110	110	24	109	111	113	24
8/30	101	102	102	24	100	100	102	24	103	103	104	24	107	109	110	24	106	107	108	24
8/31	101	101	102	24	100	100	104	24	102	103	104	24	107	110	111	24	107	109	112	24
9/1	100	101	101	24	99	100	103	24	102	103	104	24	104	106	111	24	107	109	110	24
9/2	101	101	101	24	100	101	102	24	102	102	103	24	103	104	105	24	106	107	109	24
9/3	101	101	101	24	100	100	104	24	101	102	103	24	102	102	103	24	104	105	105	24
9/4	100	101	101	24	99	100	105	24	101	102	103	23	101	101	102	23	104	105	107	24
9/5	100	100	102	24	99	99	100	24	101	101	102	24	101	101	103	24	103	105	105	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
8/23	105	106	108	24	104	104	105	24	104	105	107	23	114	115	115	24	110	111	112	23
8/24	105	106	108	24	104	104	105	24	103	104	105	23	115	115	115	24	107	108	108	23
8/25	105	106	107	24	104	104	105	24	101	101	102	23	113	114	115	24	106	106	107	23
8/26	104	105	105	24	104	104	104	24	100	101	101	23	108	114	118	24	103	104	104	23
8/27	108	110	113	24	106	106	107	24	101	102	104	23	109	116	117	24	103	104	107	21
8/28	109	110	112	24	106	106	107	24	102	103	106	23	109	116	118	24	108	110	112	23
8/29	107	108	110	24	106	106	107	24	102	102	103	23	108	113	115	24	107	111	113	23
8/30	105	105	105	24	105	105	105	24	100	101	101	23	108	114	118	24	102	103	104	22
8/31	105	106	109	24	104	104	105	24	99	100	100	23	110	117	118	24	102	102	104	23
9/1	105	106	107	24	104	104	105	24	99	99	100	24	102	103	112	24	105	108	109	24
9/2	103	104	105	24	103	104	105	24	98	99	99	23	101	101	102	24	103	104	105	22
9/3	104	104	105	23	103	103	104	24	99	99	100	23	101	102	102	24	100	101	101	23
9/4	104	104	105	24	103	103	103	24	99	99	100	23	101	101	102	24	99	100	100	23
9/5	104	104	104	24	103	103	103	24	99	100	101	23	101	101	103	24	99	100	100	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
8/23	116	116	117	24	107	107	108	23	115	117	119	23	111	113	114	24
8/24	114	115	116	24	109	110	110	23	113	114	116	23	111	112	114	24
8/25	113	113	114	24	108	108	108	23	112	113	116	23	109	111	111	24
8/26	112	112	112	24	105	105	106	23	112	114	115	23	108	109	110	24
8/27	112	113	113	24	105	105	106	23	112	115	115	23	110	111	111	24
8/28	115	116	117	24	107	107	109	19	113	114	115	23	112	114	115	24
8/29	115	116	118	24	110	110	110	23	110	111	112	23	109	110	112	24
8/30	112	113	113	24	106	107	108	23	111	114	117	22	107	107	110	24
8/31	112	113	113	24	104	104	105	23	114	114	116	23	110	112	113	24
9/1	106	108	111	24	103	103	104	24	106	109	116	24	110	111	113	24
9/2	103	105	106	24	105	105	106	23	104	105	105	23	104	105	105	24
9/3	100	101	102	24	104	105	105	23	104	104	105	23	104	104	105	24
9/4	99	100	100	24	103	103	104	23	103	103	104	23	104	105	110	24
9/5	100	101	101	24	101	101	101	22	101	102	102	23	103	104	110	24

Source: Fish Passage Center Updated: 9/6/02 9:56

Two-Week Summary of Passage Indices

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

For clip information see: Daily Catch Report

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

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

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

COMBINED YEARLING CHINOOK

Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
08/23/2002	---	---	---	---	0	0	7	0	0	0	0
08/24/2002	---	---	---	---	0	0	4	0	0	0	0
08/25/2002	---	---	---	---	0	0	8	0	0	0	0
08/26/2002	---	---	---	---	0	0	5	0	0	0	0
08/27/2002 *	---	---	---	---	4	0	5	0	0	0	10
08/28/2002	---	---	---	---	0	0	5	0	0	0	0
08/29/2002	---	---	---	---	0	0	10	1	0	0	0
08/30/2002 *	---	---	---	---	0	0	2	0	0	12	0
08/31/2002 *	---	---	---	---	0	0	4	0	0	0	0
09/01/2002	---	---	---	---	0	0	2	---	0	0	11
09/02/2002	---	---	---	---	0	0	2	---	0	0	0
09/03/2002	---	---	---	---	0	0	0	---	7	0	0
09/04/2002	---	---	---	---	0	1	0	---	14	0	0
09/05/2002	---	---	---	---	0	0	0	---	0	0	4
Total:	**0**	**0**	**0**	**0**	**4**	**1**	**54**	**1**	**21**	**12**	**25**
# Days:	**0**	**0**	**0**	**0**	**14**	**14**	**14**	**9**	**14**	**14**	**14**
Average:	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**1**	**2**
YTD	**38,199**	**29,095**	**8,013**	**7,847**	**2,459,180**	**2,843,812**	**2,221,924**	**28,982**	**3,519,390**	**2,104,938**	**3,328,091**

COMBINED SUBYEARLING CHINOOK

Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
08/23/2002	---	---	---	---	1,300	212	253	101	17,976	4,503	3,152
08/24/2002	---	---	---	---	1,272	242	436	79	18,700	3,872	2,391
08/25/2002	---	---	---	---	1,788	248	636	80	21,533	2,353	2,435
08/26/2002	---	---	---	---	1,968	179	398	38	13,068	902	2,170
08/27/2002 *	---	---	---	---	1,880	132	250	39	17,577	844	1,338
08/28/2002	---	---	---	---	1,712	105	266	86	16,601	1,356	1,199
08/29/2002	---	---	---	---	1,776	124	289	71	5,425	1,995	1,013
08/30/2002 *	---	---	---	---	1,944	243	261	88	3,686	749	1,293
08/31/2002 *	---	---	---	---	2,160	248	183	37	5,170	1,143	771
09/01/2002	---	---	---	---	1,292	258	171	---	4,700	1,448	911
09/02/2002	---	---	---	---	820	136	80	---	3,280	1,610	493
09/03/2002	---	---	---	---	824	94	42	---	2,853	971	300
09/04/2002	---	---	---	---	752	222	59	---	2,314	868	380
09/05/2002	---	---	---	---	1,280	224	210	---	1,786	1,480	601
Total:	**0**	**0**	**0**	**0**	**20,768**	**2,667**	**3,534**	**619**	**134,669**	**24,094**	**18,447**
# Days:	**0**	**0**	**0**	**0**	**14**	**14**	**14**	**9**	**14**	**14**	**14**
Average:	**0**	**0**	**0**	**0**	**1,483**	**191**	**252**	**69**	**9,619**	**1,721**	**1,318**
YTD	**0**	**4**	**26**	**3,488**	**722,267**	**331,874**	**304,207**	**25,466**	**8,325,562**	**3,459,620**	**6,987,080**

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)
08/23/2002	---	---	---	---	0	1	0	0	0	0	0
08/24/2002	---	---	---	---	0	3	4	1	0	0	0
08/25/2002	---	---	---	---	0	3	2	0	0	0	0
08/26/2002	---	---	---	---	4	1	9	1	0	0	0
08/27/2002 *	---	---	---	---	0	1	4	0	0	0	0
08/28/2002	---	---	---	---	0	3	2	0	0	0	0
08/29/2002	---	---	---	---	4	7	4	0	0	0	0
08/30/2002 *	---	---	---	---	0	1	0	0	0	0	0
08/31/2002 *	---	---	---	---	4	2	1	0	0	0	0
09/01/2002	---	---	---	---	0	2	3	---	0	0	0
09/02/2002	---	---	---	---	0	1	3	---	0	0	0
09/03/2002	---	---	---	---	0	2	2	---	0	0	0
09/04/2002	---	---	---	---	0	2	1	---	0	0	0
09/05/2002	---	---	---	---	0	2	2	---	0	0	4
Total:	**0**	**0**	**0**	**0**	**12**	**31**	**37**	**2**	**0**	**0**	**4**
# Days:	**0**	**0**	**0**	**0**	**14**	**14**	**14**	**9**	**14**	**14**	**14**
Average:	**0**	**0**	**0**	**0**	**1**	**2**	**3**	**0**	**0**	**0**	**0**
YTD	**0**	**0**	**0**	**101**	**124,060**	**104,516**	**66,178**	**86,227**	**201,998**	**315,280**	**2,331,565**

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)
08/23/2002	---	---	---	---	12	17	74	0	0	0	0
08/24/2002	---	---	---	---	16	14	115	0	0	0	0
08/25/2002	---	---	---	---	4	6	241	1	0	0	0
08/26/2002	---	---	---	---	12	17	252	0	0	0	0
08/27/2002 *	---	---	---	---	8	13	131	1	0	0	0
08/28/2002	---	---	---	---	12	4	52	1	0	0	0
08/29/2002	---	---	---	---	0	2	80	1	0	0	0
08/30/2002 *	---	---	---	---	4	0	116	1	14	0	0
08/31/2002 *	---	---	---	---	24	13	64	0	0	0	0
09/01/2002	---	---	---	---	4	1	61	---	0	0	0
09/02/2002	---	---	---	---	8	1	7	---	0	0	0
09/03/2002	---	---	---	---	9	2	4	---	0	0	0
09/04/2002	---	---	---	---	0	3	2	---	0	0	0
09/05/2002	---	---	---	---	0	0	7	---	0	0	0
Total:	**0**	**0**	**0**	**0**	**113**	**93**	**1,206**	**5**	**14**	**0**	**0**
# Days:	**0**	**0**	**0**	**0**	**14**	**14**	**14**	**9**	**14**	**14**	**14**
Average:	**0**	**0**	**0**	**0**	**8**	**7**	**86**	**1**	**1**	**0**	**0**
YTD	**2,833**	**32,043**	**3,494**	**11,810**	**2,603,027**	**2,273,384**	**1,794,517**	**28,714**	**794,514**	**545,814**	**1,455,004**

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

These data are preliminary and have been derived from various sources. For verification and/or origin of these data, contact the operators of the Fish Passage Data System at (503) 230-4099.

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 SOCKEYE

Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
08/23/2002	---	---	---	---	0	0	1	1	25	0	0
08/24/2002	---	---	---	---	12	0	1	0	33	0	0
08/25/2002	---	---	---	---	12	0	0	3	67	0	0
08/26/2002	---	---	---	---	4	0	0	1	0	0	23
08/27/2002 *	---	---	---	---	12	1	0	0	25	0	0
08/28/2002	---	---	---	---	12	1	0	1	0	0	0
08/29/2002	---	---	---	---	4	0	0	1	0	0	0
08/30/2002 *	---	---	---	---	4	0	0	1	14	23	0
08/31/2002 *	---	---	---	---	0	1	0	8	0	0	0
09/01/2002	---	---	---	---	0	1	0	---	10	10	0
09/02/2002	---	---	---	---	0	0	0	---	0	10	4
09/03/2002	---	---	---	---	0	0	1	---	7	13	0
09/04/2002	---	---	---	---	0	2	0	---	0	0	0
09/05/2002	---	---	---	---	8	0	0	---	0	0	0
Total:	**0**	**0**	**0**	**0**	**68**	**6**	**3**	**16**	**181**	**56**	**27**
# Days:	**0**	**0**	**0**	**0**	**14**	**14**	**14**	**9**	**14**	**14**	**14**
Average:	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**2**	**13**	**4**	**2**
YTD	**18**	**0**	**0**	**261**	**77,578**	**66,609**	**38,982**	**20,629**	**1,409,482**	**934,082**	**848,192**

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: 09/05

	Spring Chinook						Summer Chinook						Fall Chinook					
	2002		2001		10-Yr Avg.		2002		2001		10-Yr Avg.		2002		2001		10-Yr Avg.	
DAM	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	268,813	6,477	391,367	14,172	104,143	5,654	127,436	7,952	76,156	14,723	26,786	4,828	220,250	11,296	152,214	22,565	93,125	8,457
TDA	181,176	3,870	303,912	9,953	68,558	3,895	113,069	5,743	71,462	10,926	22,478	3,504	90,377	5,797	51,929	9,449	40,889	4,022
JDA	139,887	2,403	264,177	6,208	58,196	3,052	105,354	5,615	64,186	10,049	20,885	3,005	50,341	4,593	26,333	5,591	26,097	2,530
MCN	129,357	3,872	258,689	6,683	54,462	2,970	109,937	6,818	67,914	9,600	21,443	2,927	40,563	3,123	18,016	4,473	16,260	1,717
IHR	85,207	1,826	171,173	3,026	32,988	1,807	26,607	2,437	15,270	2,397	5,356	857	4,543	553	1,776	439	920	114
LMN	76,304	1,537	180,787	1,784	32,792	1,811	23,743	1,686	19,287	1,612	5,597	792	3,282	417	1,505	425	619	112
LGS	77,232	1,815	174,823	2,990	31,528	1,921	20,844	2,253	15,929	2,803	5,147	995	2,315	200	966	234	366	55
LWG	75,025	2,132	171,958	3,135	30,329	1,865	22,159	1,953	13,735	3,804	5,072	1,094	1,902	189	584	214	264	50
PRD	34,083	196	50,379	987	14,082	343	96,326	1,455	53,170	3,207	18,552	1,069	10,833	594	6,440	1,431	7,001	573
RIS	24,017	827	39,785	1,761	10,725	505	86,825	4,762	48,844	13,086	16,340	3,328	5,150	423	2,938	1,856	1,879	545
RRH	9,999	161	15,895	543	3,314	135	73,104	2,807	39,174	5,548	9,858	1,394	3,917	377	2,909	988	1,344	452
WEL	7,587	39	9,989	892	1,799	176	62,564	389	33,244	4,882	6,718	1,165	1,045	40	295	111	873	438

	Coho						Sockeye			Steelhead			
	2002		2001		10-Yr Avg.				10-Yr			10-Yr	Wild
DAM	Adult	Jack	Adult	Jack	Adult	Jack	2002	2001	Avg.	2002	2001	Avg.	2002
BON	5,000	663	45,957	2,389	8,975	692	49,605	114,933	50,283	334,311	492,865	198,776	112,588
TDA	590	282	2,198	305	900	115	40,554	102,560	40,061	185,129	235,208	86,805	66,284
JDA	216	33	898	236	379	56	41,913	107,800	43,269	133,251	132,058	57,278	47,779
MCN	77	32	261	100	111	19	39,173	97,167	39,888	97,247	119,604	43,673	35,497
IHR	0	0	53	7	2	0	60	38	13	57,535	55,277	24,119	16,418
LMN	1	0	3	0	0	0	45	32	21	50,796	53,696	20,655	15,714
LGS	0	0	3	0	0	0	38	71	24	39,226	33,852	12,587	13,710
LWG	0	0	0	1	0	0	51	36	23	40,627	28,248	13,216	13,109
PRD	96	49	43	45	4	0	47,883	111,258	48,764	11,757	16,372	5,344	***
RIS	18	0	39	0	7	0	44,313	104,822	43,396	9,489	13,644	4,193	6,469
RRH	23	0	42	0	6	0	12,364	66,193	27,223	6,900	9,681	2,813	4,091
WEL	2	0	0	0	0	0	10,569	74,444	27,050	5,023	7,088	1,812	1,851

WEL is through 09/03.
RIS and RRH are through 09/04
RIS, RRH, PRD and WEL data for the last week are from the PUDs.
**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: 9/6

Two Week Transportation Summary

08/24/02 TO 09/06/02

		Species					
Site	Data	**CH0**	**CH1**	**CO**	**SO**	**ST**	**Grand Total**
LGR	Sum of NumberCollected	20,684	4	12	68	112	20,880
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	1	0	0	0	0	1
	Sum of Numbertrucked	20,566	4	12	65	112	20,759
	Sum of TotalProjectMortalities	107	0	0	3	0	110
LGS	Sum of NumberCollected	2,632	1	31	6	90	2,760
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	2,597	1	29	6	87	2,720
	Sum of TotalProjectMortalities	35	0	2	0	3	40
LMN	Sum of NumberCollected	3,534	54	37	3	1,206	4,834
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	0	0	0	0	1,186	1,186
	Sum of Numbertrucked	3,229	53	36	3	0	3,321
	Sum of TotalProjectMortalities	305	1	1	0	20	327
MCN	Sum of NumberCollected	134,669	21		181	14	134,885
	Sum of NumberBarged	0	0		0	0	0
	Sum of NumberBypassed	5,338	0		0	0	5,338
	Sum of Numbertrucked	127,884	20		180	13	128,097
	Sum of TotalProjectMortalities	1,446	1		1	1	1,449
Total Sum of NumberCollected		161,519	80	80	258	1,422	163,359
Total Sum of NumberBarged		0	0	0	0	0	0
Total Sum of NumberBypassed		5,339	0	0	0	1,186	6,525
Total Sum of Numbertrucked		154,276	78	77	254	212	154,897
Total Sum of TotalProjectMortalities		1,893	2	3	4	24	1,926

YTD Transportation Summary

TO: 09/06/02

		Species					
Site	Data	**CH0**	**CH1**	**CO**	**SO**	**ST**	**Grand Total**
LGR	Sum of NumberCollected	600,978	1,535,659	80,770	51,485	1,698,889	3,967,781
	Sum of NumberBarged	567,550	1,483,798	80,608	49,501	1,627,988	3,809,445
	Sum of NumberBypassed	210	38,152	5	7	65,895	104,269
	Sum of NumberTrucked	25,551	9,851	32	427	3,531	39,392
	Sum of TotalProjectMortalities	7,699	3,858	125	1,550	1,255	14,487
LGS	Sum of NumberCollected	288,203	1,907,378	79,926	48,198	1,562,815	3,886,520
	Sum of NumberBarged	282,631	1,904,701	79,281	47,412	1,559,479	3,873,504
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of NumberTrucked	4,448	1,037	76	95	1,209	6,865
	Sum of TotalProjectMortalities	1,124	1,640	569	691	2,130	6,154
LMN	Sum of NumberCollected	304,162	2,214,711	63,073	38,584	1,753,640	4,374,170
	Sum of NumberBarged	266,730	2,122,021	60,932	37,468	1,713,937	4,201,088
	Sum of NumberBypassed	29,272	68,125	1,994	208	33,868	133,467
	Sum of NumberTrucked	5,611	20,203	87	23	356	26,280
	Sum of TotalProjectMortalities	2,549	4,362	60	885	5,479	13,335
MCN	Sum of NumberCollected	5,342,707	2,205,117	111,899	909,111	464,634	9,033,468
	Sum of NumberBarged	1,785,415	792	2,094	4,976	979	1,794,256
	Sum of NumberBypassed	3,281,193	2,203,310	109,765	902,707	463,340	6,960,315
	Sum of NumberTrucked	236,301	20	0	533	13	236,867
	Sum of TotalProjectMortalities	39,764	995	40	894	302	41,995
Total Sum of NumberCollected		6,536,050	7,862,865	335,668	1,047,378	5,479,978	21,261,939
Total Sum of NumberBarged		2,902,326	5,511,312	222,915	139,357	4,902,383	13,678,293
Total Sum of NumberBypassed		3,310,675	2,309,587	111,764	902,922	563,103	7,198,051
Total Sum of NumberTrucked		271,911	31,111	195	1,078	5,109	309,404
Total Sum of TotalProjectMortalities		51,136	10,855	794	4,020	9,166	75,971