Fish Passage Center

Weekly Report #01 - 28

September 28, 2001

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SUMMARY OF EVENTS:

Reservoir Operations: Reservoir elevation changes over the past two weeks are illustrated in the following table. Libby outflow continues at 6 Kcfs. Releases from Hungry Horse will be maintained to provide a minimum flow at Columbia falls of 3.26 Kcfs. Grand Coulee will be refilled to elevation 1283 feet by September 30 for kokanee spawning.

Reservoir	Elevations (feet) September 14 –September 27
Libby	2433.21 – 2431.44
Hungry Horse	3536.97 – 3534.32
Grand Coulee	1280.00 – 1282.80
Dworshak	1518.79 – 1517.07
Brownlee	2051.46 – 2049.53*

*As of midnight September 26, 2001.

The Upper Snake River, Boise River and Payette River system of reservoirs continue drafting slightly. The Boise system, Anderson Ranch, Arrowrock, Lucky Peak remained at 19% of capacity. The Payette River system comprised of Cascade and Deadwood reservoirs is at 38% of capacity compared to 40% two weeks ago. The Upper Snake River system comprised of Jackson Lake, Palisades, Grassy Lake, Island Park, Ririe, American Falls and Lake Walcott is at 10% of capacity compared to 13% two weeks ago.

Flows: Flows at McNary, Lower Granite, and Priest Rapids dams over the past two weeks averaged 80.5 Kcfs, 14.3 Kcfs and 66.6 Kcfs, respectively.

Smolt Monitoring Program. Beginning September 23, the daily collection of subyearling chinook at Lower Granite Dam rose to between 500 and 1000 fish, levels not seen since August 30. From the first to second week of this two-week reporting period, collection of subyearling chinook at Little Goose, Lower Monumental, and McNary dams dropped about 50%, while passage indices at Bonneville Dam dropped only 12%. Monitoring at John Day Dam ended on September 17 for the 2001 season.

Adult Fish Passage: At Bonneville Dam, counts of adult fall chinook ranged between 2,000 and 10,000 per day through the past two weeks with the cumulative count now 379,349 (end date 9/27). This compares with 185,037 for year 2000 and 168,729 for the 10-year average. Although past this year's peak, fall chinook, coho, and steelhead counts at Bonneville remained well above the average counts during the past two weeks. The numbers and percentage of "tule" and "bright" fall chinook through September 26 are (128,264; 34.0%) and (249,332; 66.0%), respectively (data supplied by WDFW). The "tule" fall chinook are destined for Bonneville Pool tributaries and Spring Creek National Fish Hatchery while the "bright" component of the fall chinook run are destined for most larger tributaries and streams in the basin including the Hanford Reach area. The "Tule" fall chinook are actively spawning in Bonneville pool tributaries and at Spring Creek National Fish Hatchery and passage is basically concluded for the Tule Run for the season. About 43% of the adult fall chinook counted at Bonneville Dam had passed The Dalles Dam with 91,476 adult fall chinook past McNary Dam through September 27. About

11,000 adult fall chinook have been counted at Ice Harbor Dam, with the mid-Columbia count at Priest Rapids exceeding 16,000. The majority of fall chinook counted at McNary Dam generally migrate to the Hanford Reach (including Priest Rapids Hatchery) and the Yakama River basin. Note: This year's fall chinook run total at Bonneville Dam has now exceeded the record count total back to the start of counting at the Dam in 1938, thanks mainly to the large increase in Tule fall chinook passage this year.

Steelhead counts at Bonneville Dam ranged between 2,000 and 8,000 for the past two weeks with the cumulative count now surpassing 600,000, about 2.3 and 2.8 times greater than the respective year 2000 and 10-year average counts. The official count of B-Run steelhead started August 26 and will continue through the end of the count season. Returns of unclipped (mostly wild) steelhead exceed 145,500 to date and account for about 24% of the total run. About 46% of the fish counted at Bonneville have arrived at McNary Dam (N=278,805). The steelhead passage into the Snake River is now at peak numbers with more than 10,000 counted on peak days to date. The cumulative count at Ice Harbor Dam now exceeds 171,000. This total was 2.1 and 3.1 times greater than the respective 2000 and 10-year average. Steelhead counts at Priest Rapids Dam have been more than 200 per day through the two weeks with the season total exceeding 25,000, about 2.3 and 3.3 times greater than the respective 2000 and 10-year average. Steelhead passing Rocky Reach Dam will be destined for the Entiat, Methow, and Okanogan River basins or to Wells Hatchery. Already, more than 13,000 steelhead have passed Wells Dam. Note: Both the Snake River and upper Columbia River dams should post record or near record returns based on passage of adult steelhead into both Reaches to date and the continued high numbers of steelhead still passing Bonneville Dam.

Coho salmon counts at Bonneville Dam ranged from nearly 10,000 per day early in the Report Week to almost 1,000 per day by September 27. The season total is now 222,915 and compares with 56,892 in year 2000 and the 10-year average count of 22,204. Note: This year's run of coho has already exceeded the previous high count of coho salmon recorded at Bonneville Dam. The former record was set in 1986. Adult coho salmon normally spend two summers in the ocean with this season's large return from the 2000 migration year of juvenile coho. Most coho salmon that pass Bonneville Dam are destined for the Bonneville pool tributaries and hatcheries with other coho returning to the Umatilla, Yakama, Snake, and upper Columbia River basins. So far, this run of coho is considered part of the Early Return, or Type-S Coho with the later run coho (still to come) returning in the late October and November time frame.

Commercial fisheries were conducted in parts of Zones 1-5 downstream from Bonneville Dam during the past two weeks as well as above the dam in the Tribal gill-net fishery in Zone 6 that encompasses the area from above Bonneville Dam to McNary Dam.

Hatchery Releases.

Snake River – Releases of yearling and subyearling chinook, sockeye, and coho salmon and steelhead are completed for the 2001 migration season. Sockeye salmon will be released into Pettit, Alturas, and Redfish lakes in early October. Most of these fish will reside in the lakes through the fall and winter months and will migrate from the lakes in spring 2002.

Mid-Columbia [above McNary Dam] – Releases of yearling and subyearling chinook, sockeye, and coho salmon and steelhead are completed for the 2001 migration season. The final release of hatchery sockeye was completed into Lake Wenatchee on 9/27. The August/ September releases of sockeye are expected to reside in the Lake through the fall and winter and migrate in spring 2002.

Lower Columbia [McNary Dam to Bonneville Dam]– Releases of yearling chinook and coho salmon, and steelhead are completed for the 2001 migration season.

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
09/14/01	65.4	0.0	65.1	0.0	62.5	0.0	58.8	0.0	57.8	0.0	60.5	1.5	63.2	0.9
09/15/01	44.0	0.0	42.9	0.0	41.5	0.0	38.2	0.0	38.0	0.0	44.5	1.8	49.1	0.8
09/16/01	32.1	0.0	40.1	0.0	39.4	0.0	40.0	0.0	41.3	0.0	46.2	1.9	44.5	0.6
09/17/01	61.8	0.1	57.5	0.0	55.8	0.0	54.9	0.0	55.2	0.0	52.6	1.7	55.6	0.8
09/18/01	61.7	0.1	66.5	0.0	64.7	0.0	64.4	0.0	64.5	0.0	70.5	1.9	64.4	0.9
09/19/01	73.2	0.1	72.9	0.0	71.8	0.0	72.4	0.0	72.3	0.0	66.2	1.8	68.5	1.1
09/20/01	78.8	0.1	76.4	0.0	74.7	0.0	77.5	0.0	80.4	0.0	85.7	1.9	86.4	1.1
09/21/01	72.5	0.1	75.0	0.0	72.6	0.0	73.3	0.0	73.4	0.0	78.9	1.8	81.2	1.0
09/22/01	45.6	0.1	50.8	0.0	52.7	0.0	53.9	0.0	53.7	0.0	58.5	1.8	58.6	1.0
09/23/01	51.0	0.1	53.4	0.0	50.4	0.0	52.1	0.0	53.6	0.0	64.3	1.7	64.8	1.1
09/24/01	89.0	0.1	82.6	0.0	81.9	0.0	80.1	0.0	78.4	0.0	70.5	1.7	69.8	1.1
09/25/01	68.0	0.1	74.4	0.0	73.2	0.0	75.0	0.0	75.5	0.0	82.9	1.8	83.8	1.1
09/26/01	66.5	0.1	66.4	0.0	63.0	0.0	64.5	0.0	64.5	0.0	70.8	1.8	73.6	1.1
09/27/01	64.6	0.1	66.5	0.0	62.9	0.0	66.6	0.0	67.6	0.0	70.2	1.8	69.3	1.1

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
09/14/01	1.4	0.0	9.0	8.3	14.4	0.0	14.7	0.0	14.7	0.0	14.0	0.0
09/15/01	1.4	0.0	9.0	7.6	12.7	0.0	14.6	0.0	15.4	0.0	15.2	0.0
09/16/01	1.4	0.0	9.0	7.0	13.5	0.0	13.5	0.0	14.2	0.0	14.9	0.0
09/17/01	1.4	0.0	9.4	9.0	12.4	0.0	13.4	0.0	14.5	0.0	12.9	0.0
09/18/01	1.4	0.0	10.3	13.0	14.4	0.0	12.6	0.0	13.9	0.0	13.0	0.0
09/19/01	1.4	0.0	9.5	9.9	16.3	0.0	12.5	0.0	14.1	0.0	13.8	0.0
09/20/01	1.4	0.0	10.0	14.2	11.3	0.0	11.5	0.0	11.8	0.0	11.5	0.0
09/21/01	1.4	0.0	9.1	13.0	15.9	0.0	12.8	0.0	13.7	0.0	13.3	0.0
09/22/01	1.5	0.0	9.1	8.2	16.1	0.0	13.6	0.0	13.7	0.0	12.3	0.0
09/23/01	1.5	0.0	9.2	7.1	13.9	0.0	13.5	0.0	14.3	0.0	12.1	0.0
09/24/01	1.6	0.0	10.1	13.3	12.8	0.0	12.3	0.0	14.0	0.0	13.1	0.0
09/25/01	1.5	0.0	9.0	11.0	15.2	0.0	12.9	0.0	13.3	0.0	12.7	0.0
09/26/01	1.5	0.0	9.8	10.3	15.3	0.0	16.6	0.0	18.2	0.0	16.8	0.0
09/27/01	1.5	0.0	---	---	15.5	0.0	14.4	0.0	15.8	0.0	16.8	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
09/14/01	92.6	0.0	88.4	0.0	90.1	0.0	95.2	2.3	0.5	85.7
09/15/01	63.4	0.0	70.1	0.0	71.9	0.0	80.5	2.3	0.5	71.0
09/16/01	62.0	0.0	60.2	0.0	63.2	0.0	76.8	2.3	0.5	67.3
09/17/01	70.2	0.0	70.4	0.0	76.0	0.0	78.5	2.3	2.5	67.0
09/18/01	67.6	0.0	67.7	0.0	67.1	0.0	78.3	2.3	0.5	68.8
09/19/01	76.0	0.0	78.5	0.0	82.2	0.0	80.4	2.3	0.6	70.8
09/20/01	85.5	0.0	84.7	0.0	84.7	0.0	83.7	2.3	2.6	72.1
09/21/01	89.3	0.0	76.8	0.0	79.9	0.0	86.4	2.3	8.0	69.4
09/22/01	88.7	0.0	88.5	0.0	91.2	0.0	94.3	2.3	0.5	84.8
09/23/01	70.0	0.0	71.1	0.0	73.7	0.0	80.9	2.3	0.5	71.4
09/24/01	81.2	0.0	82.4	0.0	84.7	0.0	89.2	2.3	0.6	79.6
09/25/01	100.0	0.0	97.8	0.0	101.7	0.0	106.3	2.3	0.6	96.7
09/26/01	89.5	0.0	97.9	0.0	99.9	0.0	104.6	2.3	0.5	95.1
09/27/01	90.8	0.0	91.1	0.0	89.5	0.0	97.8	2.3	0.5	88.3

HATCHERY RELEASE SUMMARY LAST TWO WEEKS

Hatchery Release Summary
From: 9/14/01 to 9/27/01

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
WDFW	East Bank	SO	UN	2002	95,000	09-27-01	09-27-01	Lake Wenatchee	Wenatchee River
WDFW Total					**95,000**				
Grand Total					**95,000**				

HATCHERY RELEASE SUMMARY NEXT TWO WEEKS

Hatchery Release Summary
From: 9/28/01 to 10/11/01

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
IDFG	Sawtooth	SO	UN	2002	10,000	10-01-01	10-01-01	Pettit Lake	Salmon River
IDFG	Sawtooth	SO	UN	2002	20,000	10-01-01	10-01-01	Alturas Lake	Salmon River
IDFG	Sawtooth	SO	UN	2002	90,000	10-01-01	10-01-01	Redfish Lake	Salmon River
IDFG Total					**120,000**				
Grand Total					**120,000**				

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
9/14	101	101	102	24	104	105	106	24	100	100	101	24	99	100	101	24	101	101	102	23
9/15	101	101	102	24	106	106	107	24	100	101	101	24	100	101	103	24	101	101	102	23
9/16	101	101	102	24	105	106	106	24	100	101	101	24	101	102	104	24	102	102	102	23
9/17	101	102	102	24	105	105	106	24	100	100	101	24	100	101	102	24	101	102	102	23
9/18	101	102	102	24	104	105	109	24	101	101	108	24	100	100	102	22	101	101	102	23
9/19	101	102	102	24	103	103	106	24	100	100	101	24	99	99	102	16	100	101	101	23
9/20	101	101	101	24	102	103	103	24	100	100	100	21	99	99	100	20	101	101	101	23
9/21	100	100	101	24	102	102	103	24	100	100	100	24	98	99	101	21	100	100	101	23
9/22	100	100	100	24	102	103	103	24	100	100	100	24	99	100	102	24	99	100	100	23
9/23	100	101	101	24	103	103	104	24	100	100	100	24	99	100	103	24	100	100	101	23
9/24	101	101	102	24	103	103	103	24	100	100	101	24	99	99	102	20	100	100	100	23
9/25	102	102	103	24	103	104	104	24	101	101	102	24	99	100	103	18	100	100	101	23
9/26	102	102	103	23	103	103	104	24	100	101	101	24	99	99	101	24	99	100	100	23
9/27	101	101	102	24	102	102	103	24	100	100	100	24	98	99	100	24	99	99	100	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
9/14	102	103	104	23	102	103	103	23	101	102	103	23	102	102	102	21	---	---	---	0
9/15	102	103	104	23	103	104	105	22	102	103	104	22	102	102	103	18	---	---	---	0
9/16	103	103	104	23	103	104	105	24	102	103	104	24	103	103	104	22	---	---	---	0
9/17	102	103	104	23	102	102	103	24	102	103	103	24	103	103	104	22	---	---	---	0
9/18	103	103	104	23	101	101	101	8	100	100	101	8	102	103	103	23	---	---	---	0
9/19	101	102	103	23	---	---	---	0	---	---	---	0	102	102	103	23	---	---	---	0
9/20	102	103	104	23	---	---	---	0	---	---	---	0	101	101	101	22	---	---	---	0
9/21	101	102	103	23	---	---	---	0	---	---	---	0	100	101	101	20	---	---	---	0
9/22	100	102	103	23	---	---	---	0	---	---	---	0	100	100	101	24	---	---	---	0
9/23	100	102	103	23	---	---	---	0	---	---	---	0	100	101	101	23	---	---	---	0
9/24	100	101	102	23	---	---	---	0	---	---	---	0	100	101	101	21	---	---	---	0
9/25	101	102	104	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/26	101	102	103	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/27	101	102	103	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0

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
9/14	101	102	102	21	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/15	101	102	103	17	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/16	101	102	103	21	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/17	101	102	103	18	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/18	101	102	102	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/19	101	102	102	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/20	101	102	102	20	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/21	100	101	102	18	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/22	100	100	101	22	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/23	100	101	101	22	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/24	100	100	100	22	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/25	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/26	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/27	---	---	---	0	---	---	---	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
9/14	---	---	---	0	102	103	103	24	105	106	108	24	---	---	---	0	100	102	104	24
9/15	---	---	---	0	102	102	103	24	105	106	108	24	---	---	---	0	101	103	105	24
9/16	---	---	---	0	101	102	102	17	105	106	107	24	---	---	---	0	100	102	106	24
9/17	---	---	---	0	101	102	102	24	105	107	108	24	---	---	---	0	99	101	103	24
9/18	---	---	---	0	101	101	101	13	106	107	108	24	---	---	---	0	98	98	99	9
9/19	---	---	---	0	100	101	102	23	105	106	108	24	---	---	---	0	---	---	---	0
9/20	---	---	---	0	101	102	103	24	105	106	108	21	---	---	---	0	---	---	---	0
9/21	---	---	---	0	101	101	102	24	105	106	107	24	---	---	---	0	---	---	---	0
9/22	---	---	---	0	101	102	102	24	105	106	107	24	---	---	---	0	---	---	---	0
9/23	---	---	---	0	102	102	103	24	106	107	108	24	---	---	---	0	---	---	---	0
9/24	---	---	---	0	102	103	103	24	106	107	108	24	---	---	---	0	---	---	---	0
9/25	---	---	---	0	101	102	102	24	106	106	107	24	---	---	---	0	---	---	---	0
9/26	---	---	---	0	100	100	101	20	105	106	107	24	---	---	---	0	---	---	---	0
9/27	---	---	---	0	100	101	101	24	106	107	108	24	---	---	---	0	---	---	---	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
9/14	---	---	---	0	98	100	102	24	96	96	97	16	102	104	106	24	98	99	99	24
9/15	---	---	---	0	103	104	106	23	96	97	98	24	105	106	109	24	99	99	99	24
9/16	---	---	---	0	103	104	107	24	96	97	98	24	104	104	106	24	98	98	98	24
9/17	---	---	---	0	104	106	110	24	96	97	98	21	103	104	105	24	98	98	99	24
9/18	---	---	---	0	99	100	103	24	97	98	98	24	100	102	103	24	97	97	98	24
9/19	---	---	---	0	98	98	98	24	96	97	97	24	98	98	98	24	96	96	96	19
9/20	---	---	---	0	100	103	104	24	98	100	102	22	99	100	101	24	97	97	98	21
9/21	---	---	---	0	101	103	104	24	98	99	100	24	99	100	107	24	97	97	97	24
9/22	---	---	---	0	103	105	111	24	98	99	100	24	98	99	106	24	97	97	98	24
9/23	---	---	---	0	106	108	109	24	99	100	101	24	102	104	107	24	97	98	98	24
9/24	---	---	---	0	101	103	107	24	98	98	100	24	100	102	105	24	96	97	97	24
9/25	---	---	---	0	101	103	105	23	98	98	99	24	104	104	105	9	96	96	97	9
9/26	---	---	---	0	96	96	96	13	96	96	98	23	---	---	---	0	---	---	---	0
9/27	---	---	---	0	97	97	98	7	96	96	97	12	---	---	---	0	---	---	---	0

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
9/14	99	100	101	24	99	99	100	24	101	102	102	24	100	101	101	24	103	106	109	24
9/15	103	104	105	24	99	100	101	24	103	103	105	24	100	101	102	24	106	107	108	24
9/16	99	99	99	24	98	99	100	24	99	100	102	24	100	100	101	24	105	106	108	24
9/17	98	99	99	24	98	99	99	24	98	98	99	24	99	100	101	24	104	105	106	24
9/18	98	98	99	24	97	98	99	24	97	98	99	24	99	100	101	24	104	105	106	24
9/19	98	98	98	24	97	98	99	24	98	98	99	24	101	102	110	21	103	104	105	24
9/20	99	100	101	24	99	100	102	24	99	100	101	24	104	107	113	24	103	104	105	24
9/21	100	100	101	24	99	100	101	24	99	99	100	24	104	108	115	24	103	104	105	24
9/22	99	99	100	24	98	99	100	24	100	100	101	24	104	108	115	24	100	102	104	24
9/23	101	101	102	24	98	99	100	24	100	100	101	24	101	102	102	20	101	102	104	24
9/24	99	99	100	24	97	97	98	24	100	101	101	24	103	106	113	24	103	105	108	24
9/25	99	99	100	9	97	97	98	9	98	100	102	24	105	109	114	24	102	103	105	24
9/26	---	---	---	0	---	---	---	0	97	97	98	24	101	104	111	24	100	101	102	24
9/27	---	---	---	0	---	---	---	0	97	97	98	24	100	101	104	24	101	102	103	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
9/14	105	106	110	24	102	102	103	24	100	102	102	23	98	98	99	24	98	98	99	23
9/15	104	105	106	24	102	102	103	24	100	100	101	23	98	99	99	24	98	99	99	23
9/16	103	104	105	24	102	102	102	24	97	98	98	23	98	99	99	24	99	99	99	23
9/17	103	104	106	24	101	102	102	24	97	97	98	23	98	98	99	24	98	98	99	23
9/18	103	104	105	24	101	102	102	24	98	98	98	23	98	99	99	24	98	98	98	22
9/19	102	102	104	24	101	102	103	24	97	97	98	23	98	99	99	24	98	98	98	23
9/20	104	105	106	24	102	102	104	21	96	96	97	11	98	98	99	13	98	98	99	23
9/21	103	104	104	24	101	101	102	24	---	---	---	0	---	---	---	0	98	98	98	7
9/22	102	103	105	24	100	101	101	24	---	---	---	0	---	---	---	0	---	---	---	0
9/23	102	103	107	24	101	101	102	24	---	---	---	0	---	---	---	0	---	---	---	0
9/24	101	101	104	24	100	101	102	24	---	---	---	0	---	---	---	0	---	---	---	0
9/25	101	102	104	24	101	101	102	24	---	---	---	0	---	---	---	0	---	---	---	0
9/26	101	101	103	24	100	101	101	24	---	---	---	0	---	---	---	0	---	---	---	0
9/27	101	102	103	24	100	100	101	24	---	---	---	0	---	---	---	0	---	---	---	0

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

	The Dalles Dnst				Bonneville				Warrendale				Skamania				Camas\Washugal			
	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
9/14	100	100	100	24	101	101	101	23	102	102	103	23	100	100	101	23	101	101	102	24
9/15	100	100	101	24	100	100	101	23	102	102	103	23	100	101	101	23	101	101	102	24
9/16	100	101	101	24	100	100	100	23	101	102	102	23	99	100	100	23	100	101	101	24
9/17	100	100	100	24	99	99	99	23	100	101	101	23	98	99	99	23	99	100	100	24
9/18	99	100	100	24	99	99	99	23	100	100	101	23	98	98	99	23	99	99	99	24
9/19	99	100	100	24	98	99	99	17	100	100	101	17	98	98	98	7	98	98	99	12
9/20	99	99	100	24	99	99	99	23	101	101	102	23	---	---	---	0	---	---	---	0
9/21	98	98	98	12	99	99	99	23	100	101	102	23	---	---	---	0	---	---	---	0
9/22	---	---	---	0	99	99	100	23	101	101	102	23	---	---	---	0	---	---	---	0
9/23	---	---	---	0	100	100	100	23	101	102	102	23	---	---	---	0	---	---	---	0
9/24	---	---	---	0	100	100	100	23	101	102	102	23	---	---	---	0	---	---	---	0
9/25	---	---	---	0	99	99	100	23	100	100	101	23	---	---	---	0	---	---	---	0
9/26	---	---	---	0	99	99	99	23	100	101	101	23	---	---	---	0	---	---	---	0
9/27	---	---	---	0	98	98	99	23	100	100	101	23	---	---	---	0	---	---	---	0

Two-Week Summary of Passage Indices

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)
09/14/2001 *	---	---	---	---	0	0	2	---	0	36	0
09/15/2001	---	---	---	---	1	0	2	---	0	48	0
09/16/2001	---	---	---	---	0	0	0	---	0	12	0
09/17/2001	---	---	---	---	0	0	0	---	0	8	0
09/18/2001	---	---	---	---	0	0	2	---	0	---	4
09/19/2001	---	---	---	---	0	0	0	---	0	---	0
09/20/2001	---	---	---	---	0	0	0	---	0	---	4
09/21/2001	---	---	---	---	0	0	0	---	0	---	0
09/22/2001	---	---	---	---	0	0	0	---	0	---	0
09/23/2001	---	---	---	---	1	0	0	---	0	---	4
09/24/2001	---	---	---	---	0	0	0	---	0	---	0
09/25/2001	---	---	---	---	1	0	0	---	0	---	0
09/26/2001	---	---	---	---	0	0	0	---	8	---	0
09/27/2001	---	---	---	---	0	0	1	---	0	---	0
Total:	**0**	**0**	**0**	**0**	**3**	**0**	**7**	**0**	**8**	**104**	**12**
# Days:	**0**	**0**	**0**	**0**	**14**	**14**	**14**	**0**	**14**	**4**	**14**
Average:	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**26**	**1**
YTD	**12,660**	**26,732**	**9,049**	**527**	**1,957,959**	**749,737**	**553,423**	**6,575**	**2,299,296**	**1,006,078**	**1,687,826**

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)
09/14/2001 *	---	---	---	---	323	151	40	---	1,854	2,016	557
09/15/2001	---	---	---	---	290	144	41	---	1,374	1,728	417
09/16/2001	---	---	---	---	222	385	32	---	1,086	1,144	246
09/17/2001	---	---	---	---	236	367	27	---	618	844	306
09/18/2001	---	---	---	---	200	564	12	---	564	---	634
09/19/2001	---	---	---	---	307	396	8	---	336	---	674
09/20/2001	---	---	---	---	160	311	9	---	412	---	749
09/21/2001	---	---	---	---	260	205	9	---	696	---	660
09/22/2001	---	---	---	---	370	180	8	---	728	---	468
09/23/2001	---	---	---	---	682	197	10	---	560	---	587
09/24/2001	---	---	---	---	1,000	134	15	---	372	---	142
09/25/2001	---	---	---	---	926	133	14	---	288	---	199
09/26/2001	---	---	---	---	658	81	17	---	276	---	374
09/27/2001	---	---	---	---	509	65	18	---	444	---	738
Total:	**0**	**0**	**0**	**0**	**6,143**	**3,313**	**260**	**0**	**9,608**	**5,732**	**6,751**
# Days:	**0**	**0**	**0**	**0**	**14**	**14**	**14**	**0**	**14**	**4**	**14**
Average:	**0**	**0**	**0**	**0**	**439**	**237**	**19**	**0**	**686**	**1,433**	**482**
YTD	**1**	**1**	**13**	**31**	**730,388**	**175,305**	**52,766**	**22,638**	**10,723,440**	**2,849,766**	**2,930,230**

*The total, #days and average do not include the current day's data. *See sampling comments. http://www.fpc.org/current daily/smpcomments.htm. This means that one or more of the sites on this date had an incomplete or biased sample.

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 COHO

Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
09/14/2001 *	---	---	---	---	1	8	5	---	6	60	0
09/15/2001	---	---	---	---	5	8	5	---	0	60	0
09/16/2001	---	---	---	---	7	4	2	---	0	32	4
09/17/2001	---	---	---	---	5	9	1	---	0	44	4
09/18/2001	---	---	---	---	5	11	2	---	0	---	0
09/19/2001	---	---	---	---	11	7	1	---	0	---	0
09/20/2001	---	---	---	---	8	4	0	---	0	---	0
09/21/2001	---	---	---	---	7	8	1	---	0	---	0
09/22/2001	---	---	---	---	1	4	0	---	4	---	0
09/23/2001	---	---	---	---	6	5	0	---	4	---	4
09/24/2001	---	---	---	---	11	4	0	---	0	---	0
09/25/2001	---	---	---	---	5	2	2	---	0	---	0
09/26/2001	---	---	---	---	2	4	0	---	4	---	0
09/27/2001	---	---	---	---	3	4	0	---	0	---	4
Total:	**0**	**0**	**0**	**0**	**77**	**82**	**19**	**0**	**18**	**196**	**16**
# Days:	**0**	**0**	**0**	**0**	**14**	**14**	**14**	**0**	**14**	**4**	**14**
Average:	**0**	**0**	**0**	**0**	**6**	**6**	**1**	**0**	**1**	**49**	**1**
YTD	**0**	**0**	**0**	**6**	**58,240**	**21,770**	**2,686**	**45,428**	**147,021**	**81,644**	**2,163,711**

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)
09/14/2001 *	---	---	---	---	50	43	16	---	6	48	0
09/15/2001	---	---	---	---	48	55	40	---	12	24	0
09/16/2001	---	---	---	---	60	156	31	---	6	22	4
09/17/2001	---	---	---	---	80	101	22	---	0	8	0
09/18/2001	---	---	---	---	45	145	13	---	0	---	0
09/19/2001	---	---	---	---	70	164	12	---	0	---	0
09/20/2001	---	---	---	---	43	81	14	---	16	---	0
09/21/2001	---	---	---	---	33	54	22	---	12	---	4
09/22/2001	---	---	---	---	49	66	51	---	12	---	0
09/23/2001	---	---	---	---	93	75	18	---	0	---	4
09/24/2001	---	---	---	---	144	101	22	---	12	---	0
09/25/2001	---	---	---	---	106	71	38	---	0	---	12
09/26/2001	---	---	---	---	63	58	26	---	8	---	8
09/27/2001	---	---	---	---	49	66	31	---	8	---	4
Total:	**0**	**0**	**0**	**0**	**933**	**1,236**	**356**	**0**	**92**	**102**	**36**
# Days:	**0**	**0**	**0**	**0**	**14**	**14**	**14**	**0**	**14**	**4**	**14**
Average:	**0**	**0**	**0**	**0**	**67**	**88**	**25**	**0**	**7**	**26**	**3**
YTD	**4,567**	**34,103**	**4,357**	**5,399**	**5,578,307**	**837,822**	**359,195**	**17,846**	**561,970**	**191,132**	**489,311**

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)
09/14/2001 *	---	---	---	---	1	0	0	---	24	48	8
09/15/2001	---	---	---	---	2	0	0	---	30	12	8
09/16/2001	---	---	---	---	3	0	0	---	12	10	0
09/17/2001	---	---	---	---	3	0	0	---	0	16	0
09/18/2001	---	---	---	---	0	0	0	---	6	---	0
09/19/2001	---	---	---	---	2	0	0	---	8	---	4
09/20/2001	---	---	---	---	0	0	0	---	4	---	0
09/21/2001	---	---	---	---	2	0	1	---	4	---	4
09/22/2001	---	---	---	---	1	6	0	---	8	---	18
09/23/2001	---	---	---	---	8	1	0	---	8	---	8
09/24/2001	---	---	---	---	5	0	0	---	4	---	4
09/25/2001	---	---	---	---	1	0	0	---	4	---	0
09/26/2001	---	---	---	---	2	1	0	---	4	---	0
09/27/2001	---	---	---	---	3	0	1	---	4	---	8
Total:	**0**	**0**	**0**	**0**	**33**	**8**	**2**	**0**	**120**	**86**	**62**
# Days:	**0**	**0**	**0**	**0**	**14**	**14**	**14**	**0**	**14**	**4**	**14**
Average:	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**9**	**22**	**4**
YTD	**24**	**0**	**0**	**0**	**4,652**	**9,830**	**1,020**	**3,028**	**284,721**	**103,971**	**106,859**

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: 09/27

	Spring Chinook						Summer Chinook						Fall Chinook					
	2001		2000		10-Yr Avg.		2001		2000		10-Yr Avg.		2001		2000		10-Yr Avg.	
DAM	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	391,367	14,172	178,302	21,259	70,775	4,654	76,156	14,723	30,616	13,554	21,085	3,689	379,349	61,600	185,037	48,287	168,729	25,715
TDA	302,372	9,953	102,953	14,796	41,161	3,200	71,462	10,926	25,147	10,433	16,934	2,708	163,191	40,010	118,483	30,988	92,130	16,748
JDA	262,221	6,181	86,553	12,157	33,812	2,643	64,186	10,049	23,023	8,113	15,922	2,287	114,523	31,133	96,174	29,673	69,201	12,420
MCN	258,689	6,683	64,647	10,836	30,645	2,566	67,914	9,600	20,544	7,152	16,193	2,237	91,476	25,038	59,605	13,670	53,387	9,972
IHR	171,173	3,026	38,807	9,489	16,921	1,647	15,270	2,397	4,241	3,179	4,326	762	10,933	7,161	5,225	5,197	2,964	1,099
LMN	180,787	1,784	35,520	10,336	15,613	1,755	19,287	1,612	4,680	3,277	4,108	777	10,803	5,272	4,170	4,771	2,118	952
LGS	174,823	2,990	34,330	10,152	14,769	1,744	15,929	2,803	4,204	3,788	3,944	847	6,984	3,565	2,289	2,492	1,191	474
LWG	171,958	3,136	33,822	10,318	13,830	1,676	13,735	3,804	3,939	3,756	4,106	857	5,970	4,253	2,652	2,640	1,024	441
PRD	50,379	987	20,098	1,092	9,843	292	53,170	3,207	22,306	2,504	14,742	806	17,292	4,645	32,131	4,289	12,371	1,507
RIS	39,785	1,761	14,850	1,558	7,292	362	48,844	13,086	20,251	12,056	12,475	2,102	6,350	3,280	5,810	1,791	3,357	770
RRH	15,895	543	5,336	392	1,847	90	39,174	5,548	14,633	4,198	6,239	868	5,690	2,131	4,045	938	2,071	698
WEL	9,994	887	2,130	457	869	97	33,244	4,882	6,447	3,709	3,571	703	3,504	1,583	1,480	913	816	252

	Coho						Sockeye			Steelhead			
	2001		2000		10-Yr Avg.				10-Yr			10-Yr	Wild
DAM	Adult	Jack	Adult	Jack	Adult	Jack	2001	2000	Avg.	2001	2000	Avg.	2001
BON	222,915	5,171	56,892	8,908	22,204	2,607	114,933	93,398	46,485	605,707	266,073	216,346	145,678
TDA	34,937	1,412	18,357	3,599	5,102	931	102,711	73,383	36,195	414,502	185,978	136,054	110,473
JDA	21,623	1,319	13,241	2,118	3,702	708	107,889	88,371	38,894	325,685	177,122	110,289	79,890
MCN	9,085	808	7,124	659	1,386	225	97,183	60,242	37,155	278,805	97,108	81,357	71,602
IHR	375	33	394	76	43	8	28	215	30	171,407	80,898	54,714	33,494
LMN	115	12	126	51	13	6	32	291	37	158,358	71,750	45,833	31,328
LGS	61	0	78	0	8	0	72	296	40	105,426	56,971	31,578	24,998
LWG	19	7	162	23	16	2	36	299	37	100,256	60,616	32,897	24,089
PRD	1,152	315	241	14	33	2	111,319	89,547	44,813	25,522	10,373	7,305	**
RIS	186	0	435	0	46	0	104,845	76,512	39,182	20,716	8,748	5,365	11,867
RRH	62	0	132	0	13	0	66,218	57,428	23,361	15,249	6,500	3,575	7,454
WEL	1	0	0	0	0	0	74,490	59,944	22,398	13,010	4,943	2,766	5,833

LGS, PRD is through 09/26; RIS, RRH are through 09/21.
WEL is through 09/25 and is from Douglas CO PUD.
**PRD is not reporting Wild Steelhead numbers.
These numbers were collected from the COE's Running Sums text files.
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.

Two Week Transportation Summary

09/15/01 TO 09/28/01

		Species					
Site	Data	**CH0**	**CH1**	**CO**	**SO**	**ST**	**Grand Total**
LGR	Sum of NumberCollected	6,143	3	77	33	933	7,189
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	0	0	0	0	925	925
	Sum of Numbertrucked	5,991	3	68	24	0	6,086
	Sum of TotalProjectMortalities	152	0	9	9	8	178
LGS	Sum of NumberCollected	3,313		82	8	1,236	4,639
	Sum of NumberBarged	0		0	0	0	0
	Sum of NumberBypassed	0		0	0	1,225	1,225
	Sum of Numbertrucked	3,204		76	3	0	3,283
	Sum of TotalProjectMortalities	109		6	5	11	131
LMN	Sum of NumberCollected	260	7	19	2	356	644
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	0	0	0	0	351	351
	Sum of Numbertrucked	251	7	19	2	0	279
	Sum of TotalProjectMortalities	9	0	0	0	5	14
MCN	Sum of NumberCollected	9,608	8	18	120	92	9,846
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	9,464	6	16	119	87	9,692
	Sum of TotalProjectMortalities	144	2	2	1	4	153
Total Sum of NumberCollected		19,324	18	196	163	2,617	22,318
Total Sum of NumberBarged		0	0	0	0	0	0
Total Sum of NumberBypassed		0	0	0	0	2,501	2,501
Total Sum of Numbertrucked		18,910	16	179	148	87	19,340
Total Sum of TotalProjectMortalities		414	2	17	15	28	476

YTD Transportation Summary

TO: 09/28/01

		Species					
Site	Data	**CH0**	**CH1**	**CO**	**SO**	**ST**	**Grand Total**
LGR	Sum of NumberCollected	729,686	1,957,956	58,222	4,652	5,577,993	8,328,509
	Sum of NumberBarged	651,045	1,867,778	55,289	4,115	5,270,209	7,848,436
	Sum of NumberBypassed	1	79,198	976	221	268,583	348,979
	Sum of NumberTrucked	74,919	6,581	1,814	283	36,926	120,523
	Sum of TotalProjectMortalities	3,721	4,398	143	33	2,274	10,569
LGS	Sum of NumberCollected	176,340	751,905	21,809	9,842	839,368	1,799,264
	Sum of NumberBarged	144,995	745,094	19,896	9,648	820,895	1,740,528
	Sum of NumberBypassed	2,531	53	47	1	4,425	7,057
	Sum of NumberTrucked	23,358	1,104	1,488	111	4,342	30,403
	Sum of TotalProjectMortalities	5,456	3,724	228	72	5,238	14,718
LMN	Sum of NumberCollected	52,678	553,421	2,670	1,020	359,060	968,849
	Sum of NumberBarged	42,822	529,615	1,868	983	343,630	918,918
	Sum of NumberBypassed	338	16,478	293	0	7,277	24,386
	Sum of NumberTrucked	8,664	5,809	502	30	5,529	20,534
	Sum of TotalProjectMortalities	854	1,519	7	7	2,624	5,011
MCN	Sum of NumberCollected	10,676,237	2,226,067	141,364	269,253	552,448	13,865,369
	Sum of NumberBarged	9,728,580	1,037,644	80,195	128,948	236,020	11,211,387
	Sum of NumberBypassed	529,460	1,181,681	60,173	139,208	310,382	2,220,904
	Sum of NumberTrucked	337,539	372	107	532	637	339,187
	Sum of TotalProjectMortalities	80,658	6,370	889	565	4,098	92,580
Total Sum of NumberCollected		11,634,941	5,489,349	224,065	284,767	7,328,869	24,961,991
Total Sum of NumberBarged		10,567,442	4,180,131	157,248	143,694	6,670,754	21,719,269
Total Sum of NumberBypassed		532,330	1,277,410	61,489	139,430	590,667	2,601,326
Total Sum of NumberTrucked		444,480	13,866	3,911	956	47,434	510,647
Total Sum of TotalProjectMortalities		90,689	16,011	1,267	677	14,234	122,878