



Fish Passage Center

Weekly Report #00 - 28

September 22, 2000

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SUMMARY OF EVENTS:

Water Supply: The highest precipitation was recorded Umatilla/LWR John Day with 345% of average and the lowest precipitation was recorded at Upper Snake with 85% of average for the period of September 1-12. Precipitation at Columbia above Coulee was 193% of average, at Snake above Ice Harbor was 232% of average, and at Columbia above The Dalles was 207% of average for the period of September 1-12.

Reservoir Operations: The summer flow augmentation period for salmon ended on August 31, although fish passage continues beyond that date. The reservoirs continue to be operated for power generation and various fish needs. A summary of actual elevations on September 21, and full pool elevations is shown in the following table:

Project	Actual September 21 Elevation in [ft]	Full Pool Elevation in [ft]&Actual Elevation on August 31
<i>Libby</i>	2432.9	2459.0/2434.89
<i>Hungry Horse</i>	3537.29	3560.0/3539.75
<i>Grand Coulee</i>	1285.1	1290.0/1280.4
<i>Brownlee</i>	2040.9*	2077.0/2047.13
<i>Dworshak</i>	1519.35	1600.0/1520.07

* as of September 20

Libby reservoir continued to be drafted from elevation 2434.9 ft. on September 7 to elevation 2432.9 ft on September 21 with inflows in the range of 4.8 kcfs to 7 kcfs for the same period. The reservoir continues to be managed at steady flow of 8 kcfs for bull trout requirements.

Hungry Horse finished drafting for summer flow augmentation. The reservoir continued drafting during September 8-21 from elevation of 3539.8 ft

on September 7 to elevation of 3537.3 ft on September 21 with outflows of 1.5 kcfs-1.78 kcfs.

Grand Coulee operated with outflows in between 61.6 kcfs and 116.1 kcfs, with elevations increasing from 1280.6 ft on September 7 to 1285.1 ft on September 21. The reservoir is being held at elevation of 1280-1283 ft during September for kokanee artificial propagation programs.

Brownlee reservoir drafted for power generation to elevation of 2040.9 ft on September 21. Outflow from Hells Canyon Dam for the past week, fluctuated between 11.67 kcfs on September 15 to 20.35 kcfs on September 21.

Dworshak reached the Biological Opinion reservoir target of 1520 on August 30. The reservoir was slightly drafted to 1519.35 ft on September 21. The outflow fluctuated between 1.5 kcfs-1.7 kcfs for the period of September 8-21.

Upper Snake reservoirs: As of September 21, the Upper Snake system was further drafted to 33% of capacity. American Falls is at 9% of full capacity, and Palisades and Jackson Lake are at 24% and 79% of the full capacity respectively. The irrigation demands in the system are decreasing and current flow at diversions at Palisades and Minidoka diversions are 7.3 kcfs. Salmon flow augmentation from American Falls has been delivered and currently the outflow from Milner is 1.2 kcfs.

Boise and Payette River Basins: As of September 21, the Boise River system is at 44% of capacity. It was operated for flood control and repair work at Arrowrock reservoir with inflow in Snake River of about 1.1 kcfs. As of September 21, Payette River is at 57% of capacity. The outflow from the system is 1.5 kcfs.

Streamflow: The daily average flows for run-of-river for September 8-21 period increased due to high precipitation in the basin. A summary of the weekly average flows and the range of daily average flows are given in the following Table:

Project	Average daily discharge and range [kcfs]		
	September 1-7	September 8-14	September 15-21
<i>Priest Rapids</i>	85.03 (61.2-106)	89.1 (62.9-108.7)	97.7 (68.7-117.5)
<i>McNary</i>	104.5 (84.3-127.0)	108.5 (82.9-139.7)	125.1 (101.3-145.4)
<i>Lower Granite</i>	18.47 (14.6-26.8)	23.01 (18.3-26.5)	25 (19.4-27.2)
<i>Bonneville</i>	112.9 (99.3-139.7)	117.0 (91.4-136.6)	134.9 (117-167.6)

Smolt Monitoring Program. During the past two weeks in the Snake River, subyearling chinook passage indices averaged daily 1,302 fish at Lower Granite Dam, 533 fish at Little Goose Dam, and 292 fish at Lower Monumental Dam. During this same time in the lower Columbia River, subyearling chinook passage indices averaged daily 1,194 fish at McNary Dam, 625 fish at John Day Dam, and 310 fish at Bonneville Dam. Starting the second half of this two-week reporting period, subyearling chinook passage indices at McNary Dam have dropped and remained below 1,000 fish daily, while at Lower Granite Dam they dropped below 1,000 fish daily for only four days before returning above 1,000 fish daily for the latter part of the week. Beginning September 14, most flow is now passing Bonneville Dam through Powerhouse 2 where the sampling facility is located, so daily passage indices for subyearling chinook should better reflect actual daily passage patterns.

Adult fish passage – At Bonneville Dam, passage of adult fall chinook salmon had daily counts ranging between a high of 6,181 on 9/8 to the low of 1,427 on 9/21 for the two week period (September 8 – 21). The cumulative count of adult fall chinook was 180,671, about 85% and 114% of the respective 1999 and 10-year average. The upriver bright stocks still comprise the majority of fall chinook passing the project. Spawning of the “tule” stock fall chinook at Spring Creek NFH is already about 50% completed for the year. The cumulative counts of adult “upriver bright” chinook at The Dalles Dam [114,257], John Day Dam [90,863] and McNary Dam [54,145] were still above the 1999 and 10-year averages at these dams. For this Report week, turnoff into the Snake River averaged 158 adult chinook per day at Ice Harbor Dam with the season total now 4,675. The Mid-Columbia count at Priest Rapids Dam averaged 711 per day from 9/8-13 and had a season total of 28,037 through September 19.

Note: The initial estimated return of fall chinook to the mouth of the Columbia River was 328,900. That forecasted number has been downgraded by WA and OR biologists to 264,900 fall chinook to the mouth of the Columbia River. It appears that adult fall chinook salmon continued the trend of returning early to the river, similar to the spring and summer adult chinook runs for year 2000.

Steelhead passage at Bonneville Dam held up fairly well through the 2-week period with counts averaging 2,722 per day. The cumulative count through September 21 was 261,197. This count was 136% and 131% of the respective 1999 and 10-year average. The cumulative count at The Dalles Dam was 171,876, about 90,000 less than the Bonneville Dam count. During this Report period, the daily counts at The Dalles averaged 3,949 as steelhead holding in the Bonneville tributaries began migrating into the mainstem Columbia River and upstream to their origin streams. Daily counts of steelhead at Ice Harbor Dam averaged 2,730 per day with a cumulative count of 65,284 through September 21. The Priest Rapids counts (through 9/19) are much stronger this year with a cumulative total of 9,482 compared to 6,600 in 1999.

Coho passage at Bonneville Dam averaged 1,574 per day through the two week period. The cumulative total through September 21 was 55,194, a 2- and 4-fold increase above the respective 1999 count and 10-year average at the project. Coho passage at The Dalles Dam had daily counts between 330-1,185 with those fish bound for the Umatilla, Yakama, upper Columbia River, or the Snake River. One note of interest: adult coho are being captured at the Dryden facilities on the Wenatchee River and taken to the Chiwawa Hatchery site for later spawning. At Rock Island Dam, 381 adult coho have been counted through September 17.

Note: Fishing seasons for Tribal fishers and sports fishing have been established and removals via those fisheries will affect numbers of fish counted between the projects.

Hatchery Releases – A volitional release of approximately 83,000 juvenile spring chinook from Warm Springs NFH will begin on September 28 and go through November 14 [These fish will be considered as Year 2001 migrants even though a portion of them might migrate in fall 2000.

Hatchery sockeye in the Columbia and Snake River basins are scheduled for release in October or early November 2000. These sockeye will normally hold in the Lakes through the winter and early spring months before initiating their juvenile migration to the ocean during late April through early June.

Check the FPC website for more detailed information on hatchery releases for the year 2000 migration.

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

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
09/08/00	69.2	0.1	68.1	0.0	70.3	0.0	73.0	0.0	73.5	0.0	75.3	1.9	75.9	2.0
09/09/00	61.7	0.1	61.7	0.0	60.2	0.0	57.5	0.0	58.5	0.0	65.0	1.8	66.3	1.9
09/10/00	63.1	0.1	68.6	0.0	71.0	0.0	73.7	0.0	69.0	0.0	64.0	2.0	62.2	2.0
09/11/00	99.6	0.1	100.0	0.0	98.5	0.0	101.7	0.0	99.7	0.0	102.3	2.1	101.2	2.0
09/12/00	93.3	0.1	95.2	0.0	97.1	0.0	101.0	0.0	98.9	0.0	102.8	1.7	104.7	2.0
09/13/00	96.2	0.1	103.7	0.0	101.8	0.0	102.0	0.0	102.7	0.0	102.1	1.8	101.4	1.7
09/14/00	101.5	0.1	99.5	0.0	101.5	0.0	102.7	0.0	102.8	0.0	107.6	1.9	109.7	1.9
09/15/00	84.1	0.1	88.3	0.0	92.0	0.0	92.3	0.0	97.3	0.0	106.3	1.9	109.4	1.9
09/16/00	61.6	0.1	60.7	0.0	62.5	0.0	64.6	0.0	62.5	0.0	67.9	1.7	71.6	1.8
09/17/00	79.0	0.1	81.9	0.0	78.9	0.0	76.1	0.0	74.2	0.0	70.0	1.8	68.7	1.8
09/18/00	109.5	0.1	107.6	0.0	103.9	0.0	102.9	0.0	101.8	0.0	100.2	1.9	99.0	1.9
09/19/00	105.6	0.1	107.2	0.0	107.8	0.0	107.2	0.0	110.7	0.0	113.7	2.0	117.5	2.0
09/20/00	99.1	0.1	101.9	0.0	103.9	0.0	109.4	0.2	107.8	0.0	111.7	2.0	116.5	2.1
09/21/00	78.1	0.1	82.1	0.0	82.2	0.0	83.6	0.0	84.3	0.0	94.6	1.9	100.9	1.7

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

Date	Dworshak		Hells Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
09/08/00	1.7	0.0	14.4	9.7	25.1	0.0	23.4	0.0	24.4	0.0	23.1	0.0
09/09/00	1.7	0.0	14.7	8.7	20.8	0.0	22.9	0.0	22.2	0.0	15.8	0.0
09/10/00	1.6	0.0	13.8	11.9	19.1	0.0	17.2	0.0	14.6	0.0	14.9	0.0
09/11/00	1.6	0.0	13.9	11.9	18.3	0.0	16.0	0.0	15.7	0.0	14.8	0.0
09/12/00	1.6	0.0	13.9	11.9	28.8	0.0	17.0	0.0	17.5	0.0	18.4	0.0
09/13/00	1.7	0.0	13.6	12.8	26.5	0.0	23.8	0.0	26.1	0.7	23.9	0.0
09/14/00	1.7	0.0	13.2	11.2	22.5	0.0	22.3	0.0	24.9	0.0	24.2	0.0
09/15/00	1.7	0.0	12.2	11.7	24.7	0.0	25.1	0.0	24.6	0.0	25.8	0.0
09/16/00	1.7	0.0	11.8	15.9	24.6	0.0	24.7	0.0	26.1	0.0	24.8	0.0
09/17/00	1.7	0.0	12.6	18.6	19.4	0.0	19.3	0.0	21.2	0.0	20.4	0.0
09/18/00	1.7	0.0	13.7	16.7	26.3	0.0	24.6	0.0	25.0	0.0	24.3	0.0
09/19/00	1.6	0.0	12.0	15.8	26.4	0.0	28.4	0.0	30.2	0.0	31.8	0.0
09/20/00	1.6	0.0	---	---	26.2	0.0	28.3	0.0	28.0	0.0	26.5	0.0
09/21/00	1.6	0.0	---	---	27.2	0.0	27.6	0.0	27.9	0.0	27.1	0.0

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

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
09/08/00	111.6	0.0	109.8	1.0	110.3	0.0	118.8	0.0	70.5	39.1
09/09/00	83.3	0.0	82.8	1.0	82.7	0.0	93.6	0.0	65.4	19.0
09/10/00	82.9	0.0	81.0	0.9	81.5	0.0	91.4	0.0	63.7	18.5
09/11/00	95.2	0.0	101.6	1.0	103.9	0.0	114.6	0.0	66.2	39.2
09/12/00	124.2	0.0	130.8	1.0	134.6	0.0	129.1	0.0	68.1	51.8
09/13/00	122.7	0.0	134.4	1.0	131.3	0.0	136.6	0.0	52.8	74.6
09/14/00	139.7	0.0	132.3	1.1	127.7	0.0	134.9	0.0	17.6	108.1
09/15/00	122.0	0.0	118.5	1.0	117.1	0.0	132.5	0.0	6.4	116.9
09/16/00	113.6	0.0	126.1	1.1	128.3	0.0	150.1	0.0	18.2	122.7
09/17/00	101.3	0.0	99.1	0.8	110.4	0.0	115.0	0.0	1.2	104.6
09/18/00	120.6	0.0	120.4	1.0	116.0	0.0	117.0	0.0	0.5	107.3
09/19/00	139.8	0.0	143.8	1.0	136.9	0.0	122.8	0.0	7.4	106.2
09/20/00	132.8	0.0	130.0	1.0	129.2	0.0	139.1	0.0	11.3	118.6
09/21/00	145.4	0.0	161.5	1.0	158.1	0.0	167.6	0.0	32.0	126.4

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	Hungry H. Dnst				Boundary				Grand Coulee				Grand C. Tlwr				Chief Joseph			
	24 h 12 h			#	24 h 12 h			#	24 h 12 h			#	24 h 12 h			#	24 h 12 h			#
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
9/8	102	103	103	24	109	110	113	24	109	111	112	24	109	110	115	24	108	109	109	23
9/9	102	103	103	24	112	113	113	24	110	111	112	24	109	110	114	24	106	107	107	23
9/10	102	102	103	24	112	113	114	24	107	108	108	24	109	110	113	24	106	107	107	23
9/11	101	101	102	24	111	111	112	24	106	106	106	24	107	108	111	24	105	105	106	23
9/12	101	102	102	24	111	112	113	24	105	106	106	24	107	108	113	24	106	107	108	23
9/13	102	102	102	24	112	112	113	24	105	105	106	24	106	107	111	24	108	108	108	23
9/14	104	106	135	23	112	112	114	24	106	106	106	24	106	107	112	24	107	108	108	23
9/15	102	103	103	24	110	111	112	24	106	106	106	24	107	107	112	24	107	107	107	23
9/16	102	103	103	24	110	111	112	24	105	105	106	24	107	109	112	24	106	107	107	23
9/17	102	102	103	24	105	105	105	24	106	106	106	21	106	107	109	21	106	106	107	23
9/18	102	103	103	24	104	104	105	24	106	107	108	24	105	106	109	24	105	106	106	23
9/19	102	102	102	24	102	103	104	24	105	106	106	24	105	106	108	24	105	106	107	23
9/20	101	101	101	24	102	102	103	24	105	106	106	24	105	105	108	24	105	106	106	23
9/21	100	101	101	24	101	102	103	24	105	105	106	24	105	106	109	24	104	105	105	23

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	Chief J. Dnst				Wells				Wells Dwnstrm				Rocky Reach				Rocky R. Tlwr			
	24 h 12 h			#	24 h 12 h			#	24 h 12 h			#	24 h 12 h			#	24 h 12 h			#
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
9/8	108	109	109	23	106	107	107	21	106	107	111	21	106	106	106	22	106	106	106	9
9/9	106	107	108	23	104	104	104	22	103	104	104	22	104	104	105	23	---	---	---	0
9/10	107	108	109	23	103	103	103	23	102	103	103	23	104	104	104	23	---	---	---	0
9/11	107	107	108	23	103	103	104	19	102	103	104	19	102	103	103	22	---	---	---	0
9/12	107	108	110	23	104	105	105	23	104	105	106	23	100	100	101	10	---	---	---	0
9/13	107	108	108	23	104	105	106	23	104	105	105	23	---	---	---	0	---	---	---	0
9/14	108	109	110	23	106	107	108	20	106	107	108	20	---	---	---	0	---	---	---	0
9/15	108	108	109	23	107	107	107	21	106	107	107	21	---	---	---	0	---	---	---	0
9/16	108	108	109	23	105	106	107	22	105	105	106	22	---	---	---	0	---	---	---	0
9/17	107	108	108	23	105	106	106	22	105	105	106	22	---	---	---	0	---	---	---	0
9/18	106	107	108	23	105	105	106	23	104	105	105	23	---	---	---	0	---	---	---	0
9/19	107	107	109	23	104	104	104	14	104	104	104	14	---	---	---	0	---	---	---	0
9/20	107	107	108	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/21	106	107	107	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	Rock Island				Rock I. Tlwr				Wanapum				Wanapum Tlwr				Priest Rapids			
	24 h 12 h			#	24 h 12 h			#	24 h 12 h			#	24 h 12 h			#	24 h 12 h			#
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
9/8	102	103	104	19	---	---	---	0	104	104	105	24	105	106	106	24	109	109	110	12
9/9	100	101	102	21	---	---	---	0	102	103	103	24	104	104	104	24	107	108	108	24
9/10	99	100	100	24	---	---	---	0	102	102	103	24	104	105	106	24	107	108	108	24
9/11	99	100	101	23	---	---	---	0	102	103	103	24	103	103	104	24	107	108	108	24
9/12	98	98	99	10	---	---	---	0	102	103	105	16	104	104	105	24	107	108	109	24
9/13	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/15	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/16	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/17	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/18	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/19	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/20	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/21	---	---	---	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

Date	Priest R. Dnst			Pasco			Dworshak			Clrwr-Peck			Anatone			#				
	24 h	12 h	High	24 h	12 h	High	24 h	12 h	High	24 h	12 h	High	24 h	12 h	High					
	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr					
9/8	109	109	110	24	102	103	104	24	106	107	108	24	---	---	---	0	102	103	104	24
9/9	108	109	110	24	101	102	103	24	106	107	108	24	---	---	---	0	101	103	105	24
9/10	108	108	109	24	102	102	102	24	107	108	111	24	---	---	---	0	101	101	102	24
9/11	108	108	108	24	102	103	103	24	107	108	109	24	---	---	---	0	101	103	105	24
9/12	108	109	109	24	103	103	104	24	107	108	109	24	---	---	---	0	102	104	106	24
9/13	---	---	---	0	103	104	104	24	107	108	111	24	---	---	---	0	102	103	105	24
9/14	---	---	---	0	104	104	105	23	106	107	109	24	---	---	---	0	103	104	106	23
9/15	---	---	---	0	103	104	104	24	106	107	109	24	---	---	---	0	102	103	105	24
9/16	---	---	---	0	102	103	103	24	106	107	108	24	---	---	---	0	102	103	104	24
9/17	---	---	---	0	---	---	---	0	105	107	108	24	---	---	---	0	109	111	112	24
9/18	---	---	---	0	103	103	104	24	103	104	106	24	---	---	---	0	112	113	115	24
9/19	---	---	---	0	102	102	103	24	104	105	107	24	---	---	---	0	113	115	115	24
9/20	---	---	---	0	102	102	103	24	104	105	107	24	---	---	---	0	113	114	115	24
9/21	---	---	---	0	101	101	102	24	105	106	106	24	---	---	---	0	114	114	115	9

Total Dissolved Gas Saturation Data at Snake River Sites

Date	Clrwr-Lewiston			Lower Granite			L. Granite Tlwr			Little Goose			L. Goose Tlwr			#				
	24 h	12 h	High	24 h	12 h	High	24 h	12 h	High	24 h	12 h	High	24 h	12 h	High					
	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr					
9/8	---	---	---	0	101	102	107	24	99	99	100	24	99	99	99	24	98	98	99	12
9/9	---	---	---	0	98	99	99	24	97	97	97	24	98	98	99	24	98	98	99	24
9/10	---	---	---	0	98	98	98	24	97	97	97	24	97	98	98	24	98	98	98	24
9/11	---	---	---	0	99	101	106	24	98	98	99	24	97	97	97	24	97	98	99	24
9/12	---	---	---	0	105	108	111	24	99	100	101	24	103	107	112	24	98	99	100	24
9/13	---	---	---	0	104	106	109	24	100	100	100	24	105	111	117	24	98	99	100	24
9/14	---	---	---	0	105	106	109	24	101	101	102	24	104	107	111	24	97	97	98	24
9/15	---	---	---	0	100	101	104	24	99	99	100	24	99	99	103	11	95	96	96	19
9/16	---	---	---	0	100	101	103	24	99	99	100	24	97	97	97	15	96	96	96	13
9/17	---	---	---	0	102	105	107	24	100	101	102	24	96	97	98	24	96	96	96	12
9/18	---	---	---	0	103	103	105	24	100	101	101	24	97	97	97	24	96	96	97	14
9/19	---	---	---	0	101	102	102	24	99	100	101	24	98	99	101	24	97	97	97	16
9/20	---	---	---	0	102	103	105	24	100	101	102	24	99	99	99	9	97	97	97	9
9/21	---	---	---	0	101	102	102	24	100	101	101	24	---	---	---	0	---	---	---	0

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

Date	Lower Mon.			L. Mon. Tlwr			Ice Harbor			Ice Harbor Tlwr			McNary-Oregon			#				
	24 h	12 h	High	24 h	12 h	High	24 h	12 h	High	24 h	12 h	High	24 h	12 h	High					
	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr					
9/8	100	100	100	24	99	99	101	24	99	99	100	24	99	100	100	24	102	102	104	24
9/9	99	99	99	24	99	100	101	24	98	99	99	24	100	101	103	24	101	101	102	24
9/10	98	99	99	24	98	99	100	24	98	99	99	24	100	101	102	24	101	101	102	24
9/11	97	98	98	24	98	98	99	24	98	98	99	24	100	101	102	24	101	102	104	24
9/12	98	98	98	24	98	99	100	24	101	102	106	24	99	101	102	24	102	104	105	24
9/13	99	101	106	24	98	98	99	24	102	105	108	24	100	101	102	24	102	104	106	24
9/14	108	111	115	24	98	99	100	24	103	105	111	24	100	101	102	24	102	104	106	23
9/15	98	99	100	24	98	98	99	24	98	99	100	24	99	99	100	24	105	105	106	24
9/16	100	100	102	24	98	99	100	24	101	102	103	24	100	100	101	24	104	105	107	24
9/17	100	101	102	24	99	100	101	23	101	102	104	24	100	101	103	24	---	---	---	0
9/18	100	101	102	24	98	99	101	24	101	102	103	24	100	101	102	24	107	110	111	24
9/19	103	107	109	24	99	100	103	24	103	106	110	24	100	101	102	24	105	107	109	24
9/20	101	101	104	13	99	100	101	13	104	105	106	24	101	102	103	24	102	103	106	24
9/21	---	---	---	0	---	---	---	0	101	102	104	24	101	102	103	24	102	102	102	24

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	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						
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High		hr			
9/8	102	102	102	24	101	102	102	24	99	100	100	23	101	102	103	24	100	100	100	23
9/9	100	100	101	24	100	101	102	24	98	99	99	23	101	101	103	24	99	99	99	23
9/10	100	101	102	24	100	100	101	24	99	99	99	23	101	101	102	24	99	99	99	23
9/11	100	101	103	24	100	100	100	24	98	99	101	23	100	101	102	24	99	99	99	23
9/12	101	102	103	24	100	100	101	24	100	100	101	23	99	100	101	24	99	100	100	23
9/13	103	104	106	24	101	101	101	24	101	102	104	23	100	100	101	24	99	99	100	23
9/14	104	105	106	23	102	102	103	23	102	103	105	23	101	102	102	24	100	100	100	23
9/15	103	104	105	24	102	102	102	24	99	99	100	23	100	101	101	24	100	100	100	23
9/16	102	103	105	24	102	102	103	24	99	99	99	23	101	101	102	24	99	99	100	23
9/17	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/18	103	104	105	24	102	102	103	24	99	99	100	22	100	101	101	23	99	100	100	23
9/19	103	104	105	24	102	102	103	24	99	99	100	11	100	100	100	9	99	100	100	23
9/20	103	104	105	24	102	103	104	24	---	---	---	0	---	---	---	0	99	99	100	7
9/21	101	102	102	24	102	102	102	24	---	---	---	0	---	---	---	0	---	---	---	0

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	The Dalles Dnst			Bonneville			Warrendale			Skamania			Camas/Washugal			#				
	24 h	12 h		24 h	12 h		24h	12h		24h	12h		24h	12h						
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High		hr			
9/8	100	100	100	24	99	100	100	23	101	101	101	23	95	96	96	18	100	101	101	24
9/9	99	100	101	24	98	98	98	23	100	101	101	23	96	96	96	7	100	100	101	24
9/10	99	100	100	24	98	98	98	23	100	100	100	23	---	---	---	0	100	100	101	24
9/11	99	100	100	24	98	98	98	23	99	100	100	23	95	95	95	2	100	101	101	24
9/12	100	100	101	24	98	99	99	23	100	101	101	23	95	95	95	1	101	101	102	24
9/13	100	100	101	24	99	99	100	23	101	101	102	23	96	96	96	11	101	102	103	24
9/14	100	100	101	24	100	100	101	23	101	101	104	23	95	95	96	8	101	102	102	24
9/15	100	100	100	24	100	100	100	23	101	101	101	23	---	---	---	0	101	101	101	24
9/16	99	100	100	24	99	99	100	23	100	101	101	23	---	---	---	0	100	101	101	24
9/17	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
9/18	99	99	100	24	99	99	100	23	100	101	101	23	---	---	---	0	100	100	100	8
9/19	99	99	100	12	100	100	100	23	101	102	102	23	---	---	---	0	---	---	---	0
9/20	---	---	---	0	100	101	101	23	102	102	103	23	---	---	---	0	---	---	---	0
9/21	---	---	---	0	100	101	101	23	102	102	103	23	---	---	---	0	---	---	---	0

Two-Week Summary of Passage Indices

The Total, # Days, and Average are calculated on the last two weeks of data and do not include the current day's passage index.

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)
09/08/00	---	---	---	---	8	0	0	---	0	0	0
09/09/00	---	---	---	---	12	2	0	---	0	0	0
09/10/00	---	---	---	---	12	0	1	---	0	0	0
09/11/00	---	---	---	---	0	0	1	---	0	0	0
09/12/00	---	---	---	---	12	0	0	---	0	0	0
09/13/00	---	---	---	---	0	0	0	---	0	0	0
09/14/00	---	---	---	---	0	2	1	---	0	0	0
09/15/00	---	---	---	---	0	2	1	---	0	0	0
09/16/00	---	---	---	---	0	0	4	---	0	0	9
09/17/00	---	---	---	---	0	0	5	---	0	0	9
09/18/00	---	---	---	---	4	0	1	---	0	0	0
09/19/00	---	---	---	---	8	0	2	---	0	---	0
09/20/00	---	---	---	---	4	0	6	---	0	---	0
09/21/00	---	---	---	---	4	0	1	---	0	---	0
Total:	0	0	0	0	64	6	23	0	0	0	18
# Days:	0	0	0	0	14	14	14	0	14	11	14
Average:	0	0	0	0	5	0	2	0	0	0	1

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)
09/08/00	---	---	---	---	4,372	333	342	---	1,272	1,538	595
09/09/00	---	---	---	---	1,974	576	233	---	1,764	767	360
09/10/00	---	---	---	---	978	365	242	---	1,968	612	136
09/11/00	---	---	---	---	1,032	235	235	---	1,732	359	178
09/12/00	---	---	---	---	1,416	262	118	---	1,368	761	519
09/13/00	---	---	---	---	1,560	434	69	---	1,416	725	226
09/14/00	---	---	---	---	1,188	1,475	335	---	1,230	718	351
09/15/00	---	---	---	---	684	1,470	372	---	1,302	751	317
09/16/00	---	---	---	---	504	768	412	---	950	282	396
09/17/00	---	---	---	---	396	260	342	---	630	242	282
09/18/00	---	---	---	---	500	238	221	---	560	121	346
09/19/00	---	---	---	---	1,124	272	376	---	846	---	201
09/20/00	---	---	---	---	1,412	400	427	---	900	---	0
09/21/00	---	---	---	---	1,084	374	362	---	774	---	117
Total:	0	0	0	0	18,224	7,462	4,086	0	16,712	6,876	4,024
# Days:	0	0	0	0	14	14	14	0	14	11	14
Average:	0	0	0	0	1,302	533	292	0	1,194	625	287

* See sampling comments <http://www.fpc.org/2000Daily/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.

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)
09/08/00	---	---	---	---	16	1	0	---	0	0	0
09/09/00	---	---	---	---	0	7	0	---	0	0	0
09/10/00	---	---	---	---	6	3	0	---	0	0	0
09/11/00	---	---	---	---	0	1	0	---	0	0	0
09/12/00	---	---	---	---	0	2	0	---	0	0	0
09/13/00	---	---	---	---	0	1	0	---	0	10	0
09/14/00	---	---	---	---	0	5	0	---	0	0	0
09/15/00	---	---	---	---	8	3	3	---	0	0	0
09/16/00	---	---	---	---	4	0	2	---	0	0	0
09/17/00	---	---	---	---	4	0	4	---	0	0	0
09/18/00	---	---	---	---	0	0	1	---	0	0	0
09/19/00	---	---	---	---	0	2	1	---	0	---	0
09/20/00	---	---	---	---	8	1	5	---	0	---	0
09/21/00	---	---	---	---	0	1	4	---	0	---	0
Total:	0	0	0	0	46	27	20	0	0	10	0
# Days:	0	0	0	0	14	14	14	0	14	11	14
Average:	0	0	0	0	3	2	1	0	0	1	0

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)
09/08/00	---	---	---	---	96	0	7	---	0	5	0
09/09/00	---	---	---	---	78	1	4	---	0	10	0
09/10/00	---	---	---	---	48	2	4	---	0	0	0
09/11/00	---	---	---	---	0	1	2	---	0	0	0
09/12/00	---	---	---	---	12	4	6	---	6	5	0
09/13/00	---	---	---	---	24	5	3	---	6	0	0
09/14/00	---	---	---	---	20	46	7	---	0	0	6
09/15/00	---	---	---	---	36	74	9	---	0	5	4
09/16/00	---	---	---	---	8	36	9	---	0	0	0
09/17/00	---	---	---	---	24	28	6	---	0	0	0
09/18/00	---	---	---	---	4	4	7	---	0	5	0
09/19/00	---	---	---	---	8	2	7	---	0	---	0
09/20/00	---	---	---	---	12	5	8	---	6	---	0
09/21/00	---	---	---	---	8	11	11	---	0	---	0
Total:	0	0	0	0	378	219	90	0	18	30	10
# Days:	0	0	0	0	14	14	14	0	14	11	14
Average:	0	0	0	0	27	16	6	0	1	3	1

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

	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
09/08/00	---	---	---	---	12	9	3	---	48	15	0
09/09/00	---	---	---	---	6	9	0	---	60	0	0
09/10/00	---	---	---	---	24	5	3	---	32	0	0
09/11/00	---	---	---	---	72	3	0	---	56	0	0
09/12/00	---	---	---	---	30	4	0	---	60	5	0
09/13/00	---	---	---	---	36	8	0	---	36	0	0
09/14/00	---	---	---	---	24	10	1	---	24	16	0
09/15/00	---	---	---	---	28	10	3	---	48	8	4
09/16/00	---	---	---	---	16	8	0	---	20	15	9
09/17/00	---	---	---	---	20	12	2	---	0	6	0
09/18/00	---	---	---	---	4	4	2	---	10	0	0
09/19/00	---	---	---	---	20	6	2	---	6	---	0
09/20/00	---	---	---	---	4	1	3	---	6	---	0
09/21/00	---	---	---	---	4	4	0	---	24	---	0
Total:	0	0	0	0	300	93	19	0	430	65	13
# Days:	0	0	0	0	14	14	14	0	14	11	14
Average:	0	0	0	0	21	7	1	0	31	6	1

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)}

LEW and WTB data collected for the FPC by Idaho Dept. of Fish and Game.

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 09/21

DAM	Spring Chinook						Summer Chinook						Fall Chinook					
	2000		1999		10-Yr Avg.		2000		1999		10-Yr Avg.		2000		1999		10-Yr Avg.	
	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	178,302	21,259	38,669	8,691	62,347	2,737	30,598	13,386	26,169	4,022	20,522	2,637	180,671	42,948	212,735	15,332	159,008	20,435
TDA	102,953	14,796	17,563	6,180	36,497	1,828	25,024	10,409	21,730	3,207	16,441	1,905	114,257	25,382	105,904	11,981	81,602	12,730
JDA	86,502	12,133	15,409	5,089	29,402	1,505	23,069	8,146	22,210	2,504	15,458	1,691	90,863	22,195	78,717	6,807	58,260	8,051
MCN	64,647	10,839	9,260	3,972	28,536	1,577	20,776	7,098	19,275	2,343	16,138	1,747	54,145	9,568	51,278	3,818	43,859	7,031
IHR	38,234	9,129	5,351	2,657	15,091	720	4,241	3,182	3,900	1,311	4,465	461	4,675	3,188	4,082	720	2,181	340
LMN	35,634	10,389	3,924	2,726	14,041	753	4,678	3,288	3,372	1,344	4,195	468	3,256	2,425	3,010	651	1,350	261
LGS	34,468	10,152	3,445	2,690	**	**	4,160	3,776	3,273	1,583	**	**	1,862	1,249	1,991	370	**	**
LWG	33,822	10,318	3,296	2,507	12,180	669	3,933	3,736	3,260	1,584	4,222	494	2,006	1,406	1,643	431	576	108
PRD	20,098	1,092	4,139	761	9,052	194	22,306	2,504	20,896	517	14,069	596	28,037	2,938	23,520	532	8,834	866
RIS	14,400	1,429	3,309	915	6,567	218	18,717	11,367	18,588	1,548	11,793	977	7,200	2,358	4,569	460	2,702	565
RRH	5,336	392	1,389	233	1,501	54	13,422	3,991	10,536	1,140	5,185	476	5,000	1,060	3,082	3,436	1,614	574
WEL	2,143	457	141	199	752	53	6,354	3,596	7,335	541	3,247	354	966	477	1,011	374	631	142

DAM	Coho						Sockeye			Steelhead			Wild 2000
	2000		1999		10-Yr Avg.		10-Yr			10-Yr			
	Adult	Jack	Adult	Jack	Adult	Jack	2000	1999	Avg.	2000	1999	Avg.	
BON	55,154	8,272	26,434	1,987	14,300	2,258	93,152	17,874	42,103	261,197	191,387	199,331	74,096
TDA	16,841	3,156	7,565	775	2,565	561	73,348	13,713	32,879	171,876	133,669	113,961	47,182
JDA	11,583	1,673	5,475	656	1,619	418	88,224	14,802	34,263	160,668	118,364	83,961	40,195
MCN	4,736	484	1,260	70	329	117	58,271	11,792	35,743	86,517	60,408	62,381	21,434
IHR	255	54	10	0	1	0	213	8	9	65,284	46,763	37,398	13,938
LMN	60	31	3	1	0	0	289	15	8	51,000	34,504	28,939	10,674
LGS	40	0	1	0	**	**	299	16	**	36,468	24,735	**	7,121
LWG	83	8	431	1	0	0	282	14	7	38,846	27,178	20,185	8,704
PRD	184	11	46	4	10	0	89,611	16,360	40,492	9,482	6,644	6,123	***
RIS	381	NA	0	0	4	0	76,512	18,321	35,931	7,952	4,614	4,531	2,629
RRH	115	NA	0	0	0	0	57,428	14,107	18,547	5830	3,260	2,980	1,245
WEL	0	0	0	0	1	0	59,851	12,224	17,196	4,447	2,365	2,209	717

Note: PRD's data is from Grant CO PUD and is through 9/19; RIS, RRRH are from Chelan CO PUD and are through 9/17.

Note: LGS is through 9/19; LMN, WEL are through 9/20.

Note: LGR is missing 7/12, 7/31, 8/18, 8/31. RIS and RRRH are missing 07/16 to 07/18.

Note: MCN has a partial ST count on 08/28 (Rt bank missing); LGR has duplicate counts for 08/24 and 08/25.

Note: LMN is missing 09/05; WEL is missing 8/21, 8/28, 9/1, 9/2, 9/6, 9/8 to 9/10 and 9/14 to 9/18.

These numbers were collected from the COE's Running Sums text files.

Wild steelhead numbers are included in the total.

**Adult count records at Little Goose Dam have been maintained since 1991, visual counts were not conducted at Little Goose Dam between 1982 and 1990.

***PRD is not reporting Wild Steelhead numbers.

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

09/08/00 TO 09/21/00

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum Of NumberCollected	18,224	64	46	300	378	19,012
	Sum Of NumberBarged	0	0	0	0	0	0
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	18,084	63	46	279	358	18,830
	Sum Of TotalProjectMort	140	1	0	21	6	168
LGS	Sum Of NumberCollected	7,462	6	27	93	219	7,807
	Sum Of NumberBarged	0	0	0	0	0	0
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	7,370	6	27	83	217	7,703
	Sum Of TotalProjectMort	92	0	0	10	2	104
LMN	Sum Of NumberCollected	4,086	23	20	19	90	4,238
	Sum Of NumberBarged	0	0	0	0	0	0
	Sum Of NumberBypassed	0	0	18	0	86	104
	Sum Of NumberTrucked	4,059	23	2	19	4	4,107
	Sum Of TotalProjectMort	27	0	0	0	0	27
MCN	Sum Of NumberCollected	16,712			430	18	17,160
	Sum Of NumberBarged	0			0	0	0
	Sum Of NumberBypassed	0			0	0	0
	Sum Of NumberTrucked	16,428			421	17	16,866
	Sum Of TotalProjectMort	284			9	1	294
Total Sum Of NumberCollected		46,484	93	93	842	705	48,217
Total Sum Of NumberBarged		0	0	0	0	0	0
Total Sum Of NumberBypassed		0	0	18	0	86	104
Total Sum Of NumberTrucked		45,941	92	75	802	596	47,506
Total Sum Of TotalProjectMort		543	1	0	40	9	593

YTD Transportation Summary

TO: 09/21/00

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum Of NumberCollected	660,524	2,449,985	122,033	6,499	5,039,178	8,278,219
	Sum Of NumberBarged	533,095	2,324,209	121,045	5,697	4,795,307	7,779,353
	Sum Of NumberBypassed	46	115,444	400	16	226,270	342,176
	Sum Of NumberTrucked	124,409	7,029	541	718	17,350	150,047
	Sum Of TotalProjectMort	2,974	3,304	47	68	737	7,130
LGS	Sum Of NumberCollected	326,158	1,357,136	41,661	3,638	1,055,345	2,783,938
	Sum Of NumberBarged	282,653	1,348,003	40,149	3,281	1,045,300	2,719,386
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	64,503	4,474	1,479	311	8,995	79,762
	Sum Of TotalProjectMort	2,341	5,322	92	66	1,445	9,266
LMN	Sum Of NumberCollected	185,666	608,596	19,152	4,307	766,126	1,583,847
	Sum Of NumberBarged	146,077	556,132	18,198	4,239	761,544	1,486,190
	Sum Of NumberBypassed	19,841	24,873	293	0	2,062	47,069
	Sum Of NumberTrucked	18,758	26,038	626	65	1,783	47,270
	Sum Of TotalProjectMort	990	1,565	35	3	738	3,331
MCN	Sum Of NumberCollected	9,195,362	1,164,638	169,051	95,441	365,765	10,990,257
	Sum Of NumberBarged	7,902,533	25,995	26,993	28,657	10,650	7,994,828
	Sum Of NumberBypassed	704,394	1,137,415	140,966	59,779	354,530	2,397,084
	Sum Of NumberTrucked	531,344	16	278	6,266	71	537,975
	Sum Of TotalProjectMort	57,092	1,212	813	739	514	60,370
Total Sum Of NumberCollected		10,367,710	5,580,355	351,897	109,885	7,226,414	23,636,261
Total Sum Of NumberBarged		8,864,358	4,254,339	206,385	41,874	6,612,801	19,979,757
Total Sum Of NumberBypassed		724,281	1,277,732	141,659	59,795	582,862	2,786,329
Total Sum Of NumberTrucked		739,014	37,557	2,924	7,360	28,199	815,054
Total Sum Of TotalProjectMort		63,397	11,403	987	876	3,434	80,097

