



Fish Passage Center

Weekly Report #01 - 20

July 27, 2001

2501 SW First Ave., Suite 230
 Portland, OR 97201-4752
 phone: 503/230-4582
 fax: 503/230-7559

SIGNIFICANT POINTS

- **Main stem migration flows continued to be significantly below the NMFS Biological Opinion target for the summer migration period. At Lower Granite, the weekly average flow was 28 kcfs compared to the summer target of 50 kcfs. At McNary Dam the weekly average flow for the past week was 83 kcfs compared to the summer target of 200 kcfs.**
- **In response to a request by the CRITFC and the state fish and wildlife agencies, the hydro system operators and regulators agreed to a limited summer spill for fish passage at Bonneville and The Dalles dams. The agreement is to spill 45 kcfs at Bonneville Dam from 8PM to 1AM daily. At The Dalles spill will occur at 30 % of daily average flow 24 hours per day.**

SUMMARY OF EVENTS:

Reservoir Operations: Reservoir elevation changes over the past week, from July 20 through July 26, are displayed in the following table:

Reservoir	Elevations (feet) July 20 to July 26
Libby	2435.87 – 2436.18
Hungry Horse	3543.18 – 3543.12
Grand Coulee	1281.86 – 1280.96
Dworshak	1572.01 – 1565.38
Brownlee	2073.17 – 2070.3 *

* Reservoir elevations July 20 – July 25

Dworshak Reservoir is maintaining an outflow of approximately 9.8 kcfs to improve temperature conditions and to augment flows in the Snake River. Outflow from Dworshak is being maintained at powerhouse capacity. Libby reservoir filled one foot over the past week while Grand Coulee, Dworshak and Brownlee drafted. Hungry Horse Reservoir elevation was essentially unchanged through the week, drafting .06 foot.

Upper Snake River Basin, Boise River and Payette river basin systems continue to be drafted for irrigation purposes. The Upper Snake River Basin system, Jackson Lake, Palisades, Grassy Lake, Island Park, Ririe, American Falls, Lake Walcott is presently drafted to 36 % of capacity. The Boise River system, Anderson Ranch, Arrowrock, and Lucky Peak is drafted to 43 % of capacity. The Payette River system, Cascade and Deadwood reservoirs, are drafted to 58% of capacity.

Flows: Mainstem flows continued to be far below the NMFS Biological Opinion target flows. The weekly average flow for the past week at Lower Granite Dam was 28.7 kcfs compared to the NMFS Biological Opinion summer flow target of 50 kcfs. The weekly average flow for the past week at McNary Dam was 83.3 kcfs compared to the summer flow target of 200 kcfs. Weekly average flow at Priest Rapids Dam was 56.1 kcfs for the past week.

Spill: In response to a request from the CRITFC and the state and federal fishery management agencies, the hydro system operators and regulators initiated a summer spill for the fish passage program at The Dalles and Bonneville Dams. At Bonneville Dam spill at 45 kcfs will be provided daily from 8PM to 1AM. The spill hours will be modified as day length decreases through the summer. At The Dalles Dam spill of 30% will be provided 24 hours per day. Spill at Bonneville and The Dalles dams began on July 24.

The summer spill program continued at Wells, Wanapum and Priest Rapids dams in the Mid-Columbia. Spill at Wells Dam ranged from a daily average of 3.6 kcfs to 6.8 kcfs over the past week. Daily average spill at Wanapum ranged from 22.6 kcfs to 13.9 kcfs over the same time period. Daily average spill at Priest Rapids Dam ranged from a daily average of 10.3 kcfs to 17.4 kcfs over the past week.

Smolt Monitoring Program. This week's collections of subyearling chinook dropped 63% at Lower Granite Dam, and 70% at both Little Goose and Lower Monumental dams. Subyearling chinook passage indices at Rock Island Dam dropped 46%. The migration of subyearling chinook remained fairly strong this week at McNary Dam, averaging nearly 150,000 fish per day (down less than 5% from last week's average). Subyearling chinook collections at John Day Dam increased 24% this week, while passage indices of subyearling chinook dropped 68% at Bonneville Dam.

Adult Fish Passage: At Bonneville Dam the cumulative count of adult summer chinook through July 26, was 72,709. This count is approximately 3.6 times larger than the ten-year average through this date. Cumulative passage counts of summer chinook through the same date for Ice Harbor and Priest Rapids show a similar magnitude increase in the summer chinook cumulative count compared to the ten-year average. The Dalles Dam adult summer chinook cumulative count is now 91% of the Bonneville adult count.

Daily steelhead counts at Bonneville Dam continued to increase through the week from approximately 10,000 to 13,000 per day. The cumulative steelhead count at Bonneville continues to be almost 4 times larger than the 10-year average. Unclipped steelhead represent about 38% of the total steelhead count at Bonneville Dam. Steelhead cumulative counts at McNary, Ice Harbor and Priest Rapids indicate that the number of steelhead migrating to the mid Columbia and Snake Rivers are approximately 3 times greater than the 10 year average.

Sockeye cumulative adult counts at Bonneville are 2.5 times more than the 10-year average. Ice Harbor and Priest Rapids cumulative counts show that the increase in adult sockeye returns are comprised of mid-Columbia stocks. The cumulative count of sockeye at Ice Harbor is equal to the ten year average and only 12% of the 2000 cumulative count for the same date. Lower Granite sockeye counts are similar to the ten-year average and only 12% of the 2000 count for this date.

Hatchery Releases: The only hatchery releases projected for the next week are sockeye from Sawtooth hatchery which will be releases into Pettit Lake and Alturas Lake.

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

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
07/13/01	63.9	0.1	66.3	0.0	66.9	5.2	64.9	0.0	64.6	0.0	67.4	21.1	61.1	14.7
07/14/01	45.9	0.1	48.7	0.0	46.8	4.0	48.3	0.0	52.4	0.0	64.1	19.9	62.7	15.0
07/15/01	29.8	0.1	29.1	0.0	31.0	2.3	33.4	0.0	34.4	0.0	48.1	15.0	47.0	11.3
07/16/01	54.3	0.1	55.1	0.0	56.3	4.2	61.8	0.0	62.6	0.0	51.7	16.0	50.3	12.1
07/17/01	57.3	0.1	60.3	0.0	61.9	4.8	56.9	0.0	55.8	0.0	70.3	21.8	70.1	16.7
07/18/01	55.7	0.1	56.5	0.0	57.5	4.4	54.7	0.0	56.4	0.0	53.7	16.8	59.1	14.0
07/19/01	60.5	0.1	60.9	0.0	61.9	4.6	61.3	0.0	63.0	0.0	68.8	21.5	61.5	14.7
07/20/01	47.8	0.1	48.9	0.0	53.1	4.2	56.0	0.0	55.6	0.0	58.2	18.2	61.1	14.6
07/21/01	37.5	0.1	38.4	0.0	35.1	3.6	31.5	0.0	33.0	0.0	44.9	13.9	48.1	11.6
07/22/01	40.5	0.1	41.2	0.0	45.8	4.0	48.2	0.0	49.7	0.0	45.8	14.3	42.1	10.3
07/23/01	60.8	0.1	62.6	0.0	61.5	5.2	64.1	0.0	65.3	0.0	72.8	22.6	72.3	17.4
07/24/01	49.1	0.1	49.3	0.0	47.6	5.3	44.8	0.0	44.6	0.0	53.1	16.6	53.7	12.9
07/25/01	57.2	0.1	59.0	0.0	62.5	6.8	64.6	0.0	65.6	0.0	61.1	19.0	57.6	14.0
07/26/01	52.8	0.1	52.8	0.0	53.6	5.4	54.6	0.0	53.3	0.0	58.1	18.1	57.8	13.9

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

Date	Dworshak		Brownlee Canyon		Hells Granite		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
07/13/01	9.7	0.0	8.1	8.8	26.3	0.0	26.9	0.0	27.3	0.0	25.5	0.0	25.5	0.0
07/14/01	9.7	0.0	7.5	7.6	27.5	0.0	27.5	0.0	26.9	0.0	26.8	0.0	26.8	0.0
07/15/01	9.8	0.0	7.4	7.1	24.0	0.0	23.2	0.0	24.6	0.0	23.3	0.0	23.3	0.0
07/16/01	9.8	0.0	8.5	7.7	24.4	0.0	26.0	0.0	26.6	0.0	25.9	0.0	25.9	0.0
07/17/01	9.8	0.0	7.6	7.7	29.0	0.0	29.1	0.0	30.7	0.0	29.9	0.0	29.9	0.0
07/18/01	9.8	0.0	8.0	8.3	25.2	0.0	25.5	0.0	26.2	0.0	25.6	0.0	25.6	0.0
07/19/01	9.8	0.0	7.9	8.5	27.6	0.0	27.4	0.0	28.5	0.0	28.5	0.0	28.5	0.0
07/20/01	9.8	0.0	8.0	11.0	26.9	0.0	26.6	0.0	27.4	0.0	26.4	0.0	26.4	0.0
07/21/01	9.8	0.0	7.8	7.9	27.0	0.0	28.1	0.0	29.8	0.0	28.1	0.0	28.1	0.0
07/22/01	9.8	0.0	7.9	8.4	26.0	0.0	25.3	0.0	25.6	0.0	24.9	0.0	24.9	0.0
07/23/01	9.9	0.0	8.3	15.1	26.4	0.0	26.4	0.0	26.2	0.0	25.8	0.0	25.8	0.0
07/24/01	9.9	0.0	8.0	14.4	31.7	0.0	32.2	0.0	33.2	0.0	32.2	0.0	32.2	0.0
07/25/01	9.9	0.0	7.7	15.7	31.1	0.0	31.3	0.0	33.1	0.0	32.7	0.0	32.7	0.0
07/26/01	9.9	0.0	---	---	32.3	0.0	32.7	0.0	33.8	0.0	32.6	0.0	32.6	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		
07/13/01	68.9	0.0	68.9	0.0	72.4	0.0	81.4	0.0	0.6	72.3
07/14/01	83.3	0.0	66.1	0.0	70.2	0.0	75.9	0.0	0.6	66.7
07/15/01	74.2	0.0	63.1	0.0	65.1	0.0	75.9	0.0	0.6	66.8
07/16/01	78.9	0.0	81.6	0.0	84.2	0.0	83.2	0.0	0.6	74.0
07/17/01	77.3	0.0	81.3	0.0	85.9	0.0	86.2	0.0	0.5	77.1
07/18/01	99.2	0.0	101.4	0.0	102.7	0.0	105.3	0.0	7.0	89.7
07/19/01	79.2	0.0	79.7	0.0	83.2	0.0	83.9	0.0	0.5	74.8
07/20/01	86.3	0.0	76.8	0.0	79.2	0.0	84.5	0.0	0.5	75.4
07/21/01	80.2	0.0	84.3	0.0	84.4	0.0	88.3	0.0	0.5	79.2
07/22/01	70.4	0.0	67.0	0.0	68.4	0.0	78.4	0.0	0.5	69.3
07/23/01	82.8	0.0	81.6	0.0	84.5	0.0	83.2	0.0	0.5	74.2
07/24/01	95.9	0.0	84.4	0.0	86.2	11.6	85.2	7.3	0.5	69.2
07/25/01	82.4	0.0	81.2	0.0	80.3	21.2	88.4	9.6	0.6	69.7
07/26/01	85.1	0.0	82.3	0.0	88.8	24.1	91.6	9.8	0.6	72.9

Gas Bubble Trauma Monitoring Results from Representative Sites on the Snake River and Columbia River

Site	Date	Species	Number of Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank				Fish with L. Line GBT	
								Rank 1	Rank 2	Rank 3	Rank 4	Num Fish	Avg. Rank
McNary Dam													
	07/23/01	Subyearling Chinook	100	1	0	0.00%	0.00%	0	0	0	0	1	1
	07/26/01	Subyearling Chinook	100	1	0	0.00%	0.00%	0	0	0	0	1	1
Bonneville Dam													
	07/17/01	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	07/19/01	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	07/24/01	Subyearling Chinook	80	0	0	0.00%	0.00%	0	0	0	0	0	0
Rock Island Dam													
	07/19/01	Subyearling Chinook	68	1	1	1.47%	0.00%	1	0	0	0	0	0
	07/23/01	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	07/26/01	Subyearling Chinook	100	1	1	1.00%	0.00%	1	0	0	0	0	0

HATCHERY RELEASE SUMMARY NEXT TWO WEEKS

Hatchery Release Summary									
From:		7/27/01		to		8/9/01			
Agency	Hatchery	Species	Race	MigrationYr	NumRel	RelStart	RelFinish	RelSite	RelRiver
IDFG	Sawtooth	Sockeye	UN	2001	6007	7/31/00	7/31/00	Pettit Lake	Salmon River
IDFG	Sawtooth	Sockeye	UN	2001	5986	7/31/00	7/31/00	Alturas Lake	Salmon River
IDFG TOTAL					11,993				
GRAND TOTAL					11,993				

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	#				
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High					
7/13	108	109	112	24	106	107	108	24	109	112	136	20	106	106	108	24	109	110	110	23
7/14	110	110	110	24	106	107	108	23	107	107	108	24	106	107	108	22	109	110	110	23
7/15	108	108	109	23	106	107	107	23	108	108	108	24	107	108	110	20	109	109	110	23
7/16	107	108	109	23	105	105	106	22	107	108	108	24	107	107	110	23	109	109	110	23
7/17	106	106	107	24	105	105	105	24	107	107	108	24	106	107	108	19	109	109	110	23
7/18	104	105	108	24	105	106	106	24	107	107	107	24	106	107	108	23	108	108	109	23
7/19	109	109	110	23	105	106	106	24	107	107	107	24	106	107	108	21	108	108	109	23
7/20	108	108	109	24	107	108	108	24	107	107	107	24	106	107	109	20	108	109	110	24
7/21	107	108	109	24	105	106	107	24	107	107	107	24	106	106	108	20	108	108	109	24
7/22	106	107	107	23	105	106	106	24	107	107	107	24	106	106	108	17	107	108	108	23
7/23	106	106	107	24	106	107	107	24	107	107	107	24	105	106	108	23	108	109	109	23
7/24	106	107	108	24	106	106	107	24	107	107	108	24	106	107	109	23	108	109	109	23
7/25	107	108	109	24	105	106	107	24	107	107	107	24	106	106	108	24	108	108	109	23
7/26	108	109	109	24	105	106	107	24	107	108	108	24	106	107	109	22	108	109	109	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	#				
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High					
7/13	110	111	111	23	110	110	111	23	110	111	112	23	111	112	112	22	111	111	111	20
7/14	110	111	112	23	110	111	112	23	109	111	112	23	111	111	112	19	111	111	112	19
7/15	110	111	112	23	110	110	111	24	108	110	111	24	111	111	111	20	111	111	111	20
7/16	110	110	111	23	109	110	110	22	109	110	111	22	109	110	110	19	110	110	110	19
7/17	109	109	110	23	109	110	111	23	110	111	112	23	108	109	109	20	109	109	109	19
7/18	108	109	110	23	110	111	121	23	109	110	111	23	107	108	108	22	108	108	108	22
7/19	108	108	109	23	110	111	112	24	110	111	112	24	109	109	110	20	108	108	109	20
7/20	109	110	110	24	111	111	112	22	111	111	112	22	111	111	112	22	110	111	111	21
7/21	108	109	109	24	109	110	111	14	110	110	112	14	111	111	112	19	110	110	111	19
7/22	108	109	110	23	110	110	112	24	110	111	111	24	111	111	112	20	110	110	111	19
7/23	108	109	109	23	110	111	111	24	110	111	112	24	111	111	111	16	110	110	111	15
7/24	108	109	109	23	110	111	112	21	110	111	112	21	111	111	111	18	110	111	111	18
7/25	108	108	109	23	110	111	112	22	110	111	111	22	111	111	111	21	110	110	111	21
7/26	109	109	110	23	110	111	112	24	110	111	112	24	111	111	112	21	110	111	111	19

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	#				
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High					
7/13	109	109	109	22	111	111	112	22	108	109	110	24	111	111	112	24	108	109	110	24
7/14	109	109	109	21	111	112	112	21	107	108	109	24	110	111	112	24	107	108	110	24
7/15	108	109	109	20	110	110	111	20	106	107	108	24	109	110	111	24	107	107	108	24
7/16	107	107	108	23	109	109	110	23	104	104	105	24	108	109	110	24	105	106	109	24
7/17	107	107	107	22	109	110	110	21	104	104	105	24	108	109	110	24	104	105	106	24
7/18	107	107	107	22	109	109	109	22	104	104	105	24	108	109	110	24	106	106	107	24
7/19	107	107	107	23	109	109	110	22	104	106	108	24	109	110	110	24	106	107	108	24
7/20	107	108	108	23	110	110	111	23	105	106	107	24	109	110	110	24	108	108	109	24
7/21	108	108	108	20	111	111	111	20	105	105	107	24	109	109	110	24	108	109	110	24
7/22	108	108	108	24	110	111	112	24	105	106	108	24	109	110	111	24	107	108	108	24
7/23	108	108	108	23	111	112	112	23	106	107	109	22	110	111	112	22	108	109	111	24
7/24	108	108	108	24	111	111	112	23	---	---	---	0	---	---	---	0	---	---	---	0
7/25	107	108	108	22	110	111	112	22	---	---	---	0	---	---	---	0	---	---	---	0
7/26	109	110	111	20	111	111	112	19	---	---	---	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				Clwtr-Peck				Anatone				#
	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#	
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		
7/13	108	109	110	24	106	107	107	24	100	100	101	24	103	104	105	24	102	104	106	24	
7/14	108	109	110	24	106	107	107	23	101	101	102	24	103	105	106	24	102	105	107	24	
7/15	107	108	108	24	106	107	107	24	101	101	101	24	103	104	106	24	102	104	107	24	
7/16	106	106	107	24	104	104	105	24	101	101	101	24	102	103	105	24	101	103	105	24	
7/17	105	106	106	24	102	102	103	24	100	100	101	24	102	103	104	24	101	103	105	24	
7/18	106	107	107	24	103	104	105	24	99	100	100	24	102	103	104	24	101	102	105	24	
7/19	107	108	108	24	104	105	106	21	100	100	101	24	102	104	105	24	102	104	106	24	
7/20	108	108	109	24	105	105	106	24	100	100	101	24	---	---	---	0	102	104	107	24	
7/21	108	109	109	24	104	104	105	24	100	100	100	23	---	---	---	0	103	105	107	24	
7/22	108	108	109	21	104	105	106	21	99	100	100	24	102	104	105	24	102	104	106	24	
7/23	108	109	109	17	107	108	108	24	100	100	100	24	102	104	105	24	103	105	107	24	
7/24	---	---	---	0	107	107	108	23	100	100	101	23	103	104	106	23	103	105	107	24	
7/25	---	---	---	0	106	106	107	21	100	100	100	24	102	104	105	24	103	105	108	24	
7/26	---	---	---	0	106	106	107	21	100	100	101	24	102	104	106	24	103	105	108	24	

Total Dissolved Gas Saturation Data at Snake River Sites

Date	Clwtr-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		#	
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		
7/13	103	105	106	24	107	108	110	24	101	101	102	24	102	103	104	24	99	100	100	24	
7/14	103	105	107	24	105	107	109	24	101	102	102	24	98	98	99	24	99	99	99	24	
7/15	103	105	106	24	103	103	104	24	101	102	102	24	96	97	98	24	98	98	98	24	
7/16	102	103	105	24	103	104	106	24	100	101	101	24	98	98	98	23	98	98	99	23	
7/17	102	103	105	24	103	104	105	24	101	101	101	24	98	98	99	24	98	99	99	24	
7/18	102	104	106	24	102	103	104	24	100	101	101	24	98	98	99	24	98	99	99	24	
7/19	103	105	106	24	103	104	105	24	100	100	101	24	98	98	99	24	98	99	99	24	
7/20	102	104	106	24	103	104	107	24	99	100	101	24	98	99	100	23	99	99	100	23	
7/21	102	104	106	23	102	104	106	24	99	99	100	24	98	99	99	23	98	99	99	23	
7/22	102	104	106	24	104	105	107	24	99	99	100	24	98	99	99	24	99	99	99	24	
7/23	103	105	106	24	105	106	108	24	99	100	101	23	100	100	101	24	99	100	100	24	
7/24	103	105	106	23	101	103	105	24	100	100	101	24	98	99	101	23	99	99	100	23	
7/25	103	105	106	24	101	102	103	24	100	100	101	24	99	101	101	23	98	99	100	23	
7/26	103	105	106	24	103	104	105	24	100	101	102	24	102	102	103	23	98	99	99	23	

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		#	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#	
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		
7/13	102	103	104	24	101	102	103	24	104	105	105	23	103	104	104	23	107	108	109	24	
7/14	103	103	104	24	101	102	103	24	103	105	106	24	104	105	106	24	107	107	110	23	
7/15	102	103	103	23	101	102	103	23	102	102	104	24	107	108	108	24	106	107	109	24	
7/16	101	101	101	24	100	101	103	24	101	102	103	24	126	129	130	24	103	103	104	24	
7/17	100	101	101	24	99	100	101	24	100	100	101	24	113	125	130	24	102	103	103	24	
7/18	99	99	100	24	99	100	101	24	98	99	99	24	101	102	103	24	102	103	103	24	
7/19	99	99	100	24	98	99	100	24	98	99	102	24	101	101	102	24	102	103	106	24	
7/20	99	99	99	24	98	99	100	24	98	99	99	23	101	101	102	23	103	104	105	24	
7/21	99	99	100	23	98	99	100	23	98	99	100	24	100	101	101	24	103	103	104	24	
7/22	99	100	101	23	99	100	100	23	99	99	101	24	101	101	103	24	103	103	104	24	
7/23	100	101	101	24	98	99	100	24	100	101	103	24	101	101	102	24	103	104	105	24	
7/24	99	99	100	23	98	99	100	23	100	101	105	24	100	100	101	24	105	106	108	23	
7/25	100	102	104	24	99	100	101	24	101	104	108	24	100	101	101	24	106	107	109	24	
7/26	102	102	103	23	100	101	103	23	102	103	106	24	101	102	103	24	108	109	110	24	

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	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				
7/13	106	107	108	24	105	106	107	24	101	102	102	23	101	102	102	24	101	101	102	23
7/14	107	108	109	23	106	106	107	23	101	101	102	23	101	102	102	24	101	102	102	23
7/15	105	105	105	24	105	105	105	24	101	101	101	23	101	102	102	24	101	101	101	23
7/16	104	104	104	24	103	104	104	24	100	100	101	23	100	101	101	24	100	100	101	23
7/17	102	102	103	24	102	103	103	24	99	100	100	23	100	100	100	24	100	100	100	23
7/18	101	101	102	24	102	102	102	24	99	100	100	23	99	100	100	24	99	100	100	23
7/19	101	102	104	24	101	102	103	24	100	100	101	23	100	100	100	24	100	100	101	23
7/20	102	103	104	24	101	102	102	24	99	99	100	24	99	100	100	24	100	100	100	24
7/21	101	101	102	24	101	102	102	24	98	99	99	24	99	99	99	24	99	99	100	23
7/22	102	103	104	24	102	102	103	20	98	98	99	23	99	100	100	24	99	100	100	23
7/23	104	106	108	24	103	103	104	24	98	99	99	23	99	99	100	24	99	100	100	23
7/24	104	105	105	23	103	104	104	23	98	98	98	23	98	98	99	23	100	100	100	23
7/25	107	108	108	24	103	104	104	24	98	98	99	23	99	99	99	24	99	100	100	23
7/26	107	108	110	24	104	104	105	20	97	98	99	23	99	100	100	24	99	99	100	23

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				
7/13	102	103	103	24	100	100	100	23	100	101	101	23	101	101	101	23	102	103	104	24
7/14	102	103	103	23	100	100	100	23	100	100	100	18	100	101	101	23	101	102	103	24
7/15	101	102	102	24	99	100	100	23	98	98	99	21	100	100	100	23	100	101	101	24
7/16	100	101	101	23	98	99	99	23	99	100	101	23	99	99	100	23	100	100	100	24
7/17	100	101	101	24	98	99	99	23	100	100	101	23	99	99	100	23	99	99	100	24
7/18	100	100	101	24	99	99	99	23	100	100	101	23	99	100	100	23	99	100	101	24
7/19	100	101	101	24	100	100	100	23	101	102	102	23	100	101	101	23	101	102	102	24
7/20	100	100	100	24	100	100	100	24	101	101	101	24	100	100	101	24	101	101	101	24
7/21	99	100	100	23	99	99	99	24	100	101	101	24	100	100	101	24	101	101	102	24
7/22	99	100	101	24	99	99	99	23	101	101	101	23	100	100	101	23	101	102	103	24
7/23	100	100	101	24	99	100	100	23	101	101	102	23	100	101	101	23	101	102	102	24
7/24	101	103	107	24	100	100	100	23	101	101	102	23	100	101	102	23	101	102	102	24
7/25	108	109	109	23	100	100	100	23	104	105	110	23	103	105	109	23	102	103	105	24
7/26	109	109	110	24	100	100	100	23	103	105	110	23	102	104	108	23	103	105	106	24

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)
07/13/2001	---	---	---	---	40	54	500	1	960	450	213
07/14/2001	---	---	---	---	60	254	240	0	700	800	327
07/15/2001	---	---	---	---	80	125	300	1	300	550	0
07/16/2001	---	---	---	---	60	48	120	0	1,400	100	0
07/17/2001	---	---	---	---	0	0	160	0	861	700	91
07/18/2001	---	---	---	---	20	44	135	0	100	200	111
07/19/2001	---	---	---	---	20	46	80	0	700	1,050	215
07/20/2001	---	---	---	---	0	50	70	0	780	450	0
07/21/2001	---	---	---	---	20	35	110	0	400	350	0
07/22/2001	---	---	---	---	20	24	30	0	300	375	0
07/23/2001	---	---	---	---	0	4	40	0	390	225	30
07/24/2001 *	---	---	---	---	10	12	40	0	240	0	75
07/25/2001	---	---	---	---	15	12	70	1	340	900	58
07/26/2001 *	---	---	---	---	15	28	78	0	500	300	29
07/27/2001	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	360	736	1,973	3	7,971	6,450	1,149
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	26	53	141	0	569	461	82
YTD	12,660	26,732	9,049	527	1,957,806	749,273	552,885	6,632	2,295,934	997,681	1,686,381

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)
07/13/2001	---	---	---	---	10,080	11,018	7,450	1,094	123,120	25,275	32,198
07/14/2001	---	---	---	---	8,420	7,368	2,280	1,074	103,200	16,250	30,531
07/15/2001	---	---	---	---	5,440	3,136	2,000	646	106,100	16,250	18,667
07/16/2001	---	---	---	---	5,160	3,443	1,780	613	104,100	24,600	31,031
07/17/2001	---	---	---	---	3,880	2,524	1,620	1,835	140,459	23,250	47,712
07/18/2001	---	---	---	---	7,500	2,308	2,070	1,513	245,200	26,300	45,289
07/19/2001	---	---	---	---	5,480	1,230	1,590	515	272,500	68,550	30,563
07/20/2001	---	---	---	---	5,140	1,220	1,050	752	119,320	23,300	18,728
07/21/2001	---	---	---	---	2,540	1,253	690	926	219,400	35,250	13,759
07/22/2001	---	---	---	---	2,270	1,578	1,700	534	154,000	29,325	9,181
07/23/2001	---	---	---	---	1,670	1,363	500	478	114,210	21,000	6,073
07/24/2001 *	---	---	---	---	1,460	1,137	470	484	121,610	52,575	7,423
07/25/2001	---	---	---	---	1,850	999	430	326	169,720	47,700	8,753
07/26/2001 *	---	---	---	---	2,095	1,619	792	406	146,100	39,450	12,162
07/27/2001	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	62,985	40,196	24,422	11,196	2,139,039	449,075	312,070
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	4,499	2,871	1,744	800	152,789	32,077	22,291
YTD	1	1	13	31	644,865	141,600	40,796	19,715	9,476,292	1,216,804	2,289,492

*The total, #days and average do not include the current day's data. *See sampling comments. [http://www.fpc.org/current daily/smpcomments.htm](http://www.fpc.org/current%20daily/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)
07/13/2001	---	---	---	---	660	1,675	120	33	180	75	61
07/14/2001	---	---	---	---	280	675	80	45	100	50	0
07/15/2001	---	---	---	---	340	350	40	16	0	150	0
07/16/2001	---	---	---	---	340	168	80	8	100	0	0
07/17/2001	---	---	---	---	340	160	20	18	40	0	30
07/18/2001	---	---	---	---	420	180	0	26	0	100	101
07/19/2001	---	---	---	---	260	100	30	18	100	50	0
07/20/2001	---	---	---	---	440	85	10	34	0	50	0
07/21/2001	---	---	---	---	220	50	0	19	0	150	0
07/22/2001	---	---	---	---	250	68	30	37	0	0	50
07/23/2001	---	---	---	---	210	100	40	14	90	0	30
07/24/2001 *	---	---	---	---	110	72	20	34	100	75	50
07/25/2001	---	---	---	---	75	124	10	35	220	150	0
07/26/2001 *	---	---	---	---	75	115	186	18	100	0	0
07/27/2001	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	4,020	3,922	666	355	1,030	850	322
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	287	280	48	25	74	61	23
YTD	0	0	0	6	56,120	19,477	1,786	45,307	145,843	60,263	2,162,197

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)
07/13/2001	---	---	---	---	4,220	2,065	700	9	0	225	244
07/14/2001	---	---	---	---	5,960	1,431	880	13	0	50	302
07/15/2001	---	---	---	---	5,160	1,156	540	10	100	0	202
07/16/2001	---	---	---	---	3,340	565	300	4	0	0	0
07/17/2001	---	---	---	---	3,340	245	200	4	100	50	91
07/18/2001	---	---	---	---	3,940	389	60	10	0	0	111
07/19/2001	---	---	---	---	2,040	355	190	8	0	100	108
07/20/2001	---	---	---	---	1,440	218	190	2	10	0	0
07/21/2001	---	---	---	---	1,260	288	70	16	100	0	0
07/22/2001	---	---	---	---	1,610	203	160	12	100	0	0
07/23/2001	---	---	---	---	1,040	80	90	8	120	150	0
07/24/2001 *	---	---	---	---	1,180	49	170	6	220	0	50
07/25/2001	---	---	---	---	1,535	177	170	6	160	0	0
07/26/2001 *	---	---	---	---	1,295	168	594	5	200	150	143
07/27/2001	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	37,360	7,389	4,314	113	1,110	725	1,251
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	2,669	528	308	8	79	52	89
YTD	4,567	34,103	4,357	5,399	5,535,556	828,625	345,115	17,872	560,763	189,289	488,252

Two-Week Summary of Passage Indices

COMBINED SOCKEYE

Date	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
07/13/2001	---	---	---	---	0	52	0	14	60	0	61
07/14/2001	---	---	---	---	0	50	0	3	0	150	63
07/15/2001	---	---	---	---	0	25	0	2	0	0	0
07/16/2001	---	---	---	---	20	1	0	5	0	0	0
07/17/2001	---	---	---	---	0	0	0	5	60	0	60
07/18/2001	---	---	---	---	0	0	0	4	0	50	0
07/19/2001	---	---	---	---	0	0	10	1	0	150	0
07/20/2001	---	---	---	---	0	0	0	2	0	150	0
07/21/2001	---	---	---	---	0	0	0	1	0	50	0
07/22/2001	---	---	---	---	0	4	0	1	0	0	0
07/23/2001	---	---	---	---	0	12	0	3	30	0	60
07/24/2001 *	---	---	---	---	0	4	0	4	100	75	0
07/25/2001	---	---	---	---	5	8	0	3	100	0	0
07/26/2001 *	---	---	---	---	0	4	0	0	0	150	29
07/27/2001	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	25	160	10	48	350	775	273
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	2	11	1	3	25	55	20
YTD	24	0	0	0	4,515	9,720	976	2,994	283,532	102,434	106,095

Definitions for Smolt Index Counts

WTB (Collection) = Salmon River Trap at Whitebird : Collection Counts

IMN (Collection) = Imnaha River Trap : Collection Counts

GRN (Collection) = Grande Ronde River Trap : Collection Counts

LEW (Collection) = Snake River Trap at Lewiston : Collection Counts

LGR (Index) = Lower Granite Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

BO1 (Index) = Bonneville Dam First Powerhouse Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 1 Flow / (Powerhouse 1 & 2 Flow + Spill)}

JDA and BO2 data collected for the FPC by Pacific States Marine Fisheries Commission.

RIS data collected for the FPC by Chelan Co. PUD/Washington Dept. of Fish and Wildlife.

LGR, LMN, and MCN data collected for the FPC by Washington Dept. of Fish and Wildlife.

LGS and GRN data collected for the FPC by Oregon Dept. of Fish and Wildlife.

IMN data collected for the FPC by the Nez Perce Tribe.

Cumulative Adult Passage at Mainstem Dams Through: 07/26

DAM	Spring Chinook						Summer Chinook						Fall Chinook					
	2001		2000		10-Yr Avg.		2001		2000		10-Yr Avg.		2001		2000		10-Yr Avg.	
	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	72,709	13,830	28,792	12,823	20,006	3,443	0	0	0	0	0	0
TDA	302,372	9,953	102,953	14,796	41,161	3,200	66,204	9,704	22,820	9,282	15,740	2,398	0	0	0	0	0	0
JDA	262,215	6,181	86,553	12,157	33,812	2,643	59,168	8,753	21,245	7,050	14,822	1,981	0	0	0	0	0	0
MCN	258,689	6,683	64,647	10,836	30,645	2,566	58,934	7,464	18,067	5,971	14,612	1,858	0	0	0	0	0	0
IHR	171,173	3,026	38,807	9,489	16,921	1,647	14,812	2,311	4,127	3,154	4,226	748	0	0	0	0	0	0
LMN	180,787	1,784	35,520	10,336	15,613	1,755	18,686	1,438	4,532	3,208	3,999	749	0	0	0	0	0	0
LGS	174,823	2,990	34,330	10,152	14,769	1,744	15,333	2,590	4,064	3,708	3,821	819	0	0	0	0	0	0
LWG	171,958	3,136	33,822	10,318	13,830	1,676	13,142	3,554	3,790	3,681	3,966	829	0	0	0	0	0	0
PRD	50,379	987	20,098	1,092	9,843	292	39,914	1,885	16,900	1,494	11,749	511	0	0	0	0	0	0
RIS	39,785	1,761	14,850	1,558	7,292	362	35,035	8,141	15,030	8,629	9,155	1,331	0	0	0	0	0	0
RRH	15,893	543	5,336	392	1,847	90	23,167	2,861	9,020	2,370	3,794	415	0	0	0	0	0	0
WEL	9,994	877	2,130	457	869	97	15,192	1,446	3,615	1,073	1,583	253	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2001		2000		10-Yr Avg.		10-Yr		10-Yr			Wild	
	Adult	Jack	Adult	Jack	Adult	Jack	2001	2000	Avg.	2001	2000	Avg.	2001
BON	4	0	0	0	12	3	114,825	93,209	46,089	163,685	77,814	44,187	62,875
TDA	0	0	0	0	0	0	102,347	73,195	35,788	83,961	37,715	19,115	38,196
JDA	46	3	2	0	0	0	109,540	88,092	38,357	51,331	25,668	14,741	20,304
MCN	1	0	0	0	0	0	95,465	60,013	36,405	38,062	14,237	10,524	14,204
IHR	0	0	0	0	0	0	26	205	26	18,280	7,125	5,878	4,517
LMN	0	0	0	0	0	0	32	276	33	18,636	5,755	5,052	5,331
LGS	0	0	0	0	0	0	67	272	33	10,371	3,912	2,844	3,718
LWG	0	0	0	0	0	0	33	267	31	11,795	5,019	6,028	3,713
PRD	6	9	33	3	3	0	107,938	88,381	42,268	3,265	1,373	848	**
RIS	29	0	12	0	2	0	102,083	75,245	34,469	2,323	984	621	1,081*
RRH	28	0	8	0	0	0	64,031	55,414	19,624	1,456	560	377	511*
WEL	0	0	0	0	0	0	68,640	55,469	15,694	567	220	193	234

PRD is through 7/25; RIS, RRH are through 7/25 and are from Chelan CO PUD.
WELL is through 7/23 and is from Douglas CO PUD. TDA duplicate counts for 7/22 & 7/23?

*As Chelan CO PUD does not report wild, these numbers are from the COE.

**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

		07/14/01 TO 07/27/01					
		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	62,985	360	4,020	25	37,360	104,750
	Sum of NumberBarged	69,616	400	4,412	25	39,432	113,885
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	368	3	32	0	251	654
LGS	Sum of NumberCollected	40,196	736	3,922	160	7,389	52,403
	Sum of NumberBarged	40,954	786	4,123	134	8,991	54,988
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	2,245	317	65	22	326	2,975
LMN	Sum of NumberCollected	24,422	1,973	666	10	4,314	31,385
	Sum of NumberBarged	25,042	2,010	530	19	4,841	32,442
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	321	131	0	1	125	578
MCN	Sum of NumberCollected	2,139,039	7,971	1,030	350	1,110	2,149,500
	Sum of NumberBarged	2,092,265	7,807	913	326	1,033	2,102,344
	Sum of NumberBypassed	14,159	0	0	0	0	14,159
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	32,615	164	117	24	77	32,997
Total Sum of NumberCollected		2,266,642	11,040	9,638	545	50,173	2,338,038
Total Sum of NumberBarged		2,227,877	11,003	9,978	504	54,297	2,303,659
Total Sum of NumberBypassed		14,159	0	0	0	0	14,159
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of TotalProjectMortalities		35,549	615	214	47	779	37,204

YTD Transportation Summary

TO: 07/27/01

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	644,865	1,957,806	56,120	4,515	5,535,556	8,198,862
	Sum of NumberBarged	641,256	1,867,763	54,939	4,115	5,263,582	7,831,655
	Sum of NumberBypassed	1	79,198	976	221	265,274	345,670
	Sum of NumberTrucked	0	6,433	30	167	3,386	10,016
	Sum of TotalProjectMortalities	1,566	4,396	101	12	2,025	8,100
LGS	Sum of NumberCollected	142,121	751,429	19,485	9,726	830,124	1,752,885
	Sum of NumberBarged	137,883	745,023	19,126	9,636	820,122	1,731,790
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of NumberTrucked	0	898	0	28	336	1,262
	Sum of TotalProjectMortalities	3,747	3,576	100	48	5,031	12,502
LMN	Sum of NumberCollected	40,796	552,885	1,786	976	345,115	941,558
	Sum of NumberBarged	39,508	529,423	1,599	971	341,243	912,744
	Sum of NumberBypassed	0	16,478	0	0	511	16,989
	Sum of NumberTrucked	0	5,519	0	0	319	5,838
	Sum of TotalProjectMortalities	504	1,402	1	5	2,455	4,367
MCN	Sum of NumberCollected	9,429,089	2,222,705	140,186	268,064	551,241	12,611,285
	Sum of NumberBarged	8,596,014	1,019,477	75,882	126,417	232,028	10,049,818
	Sum of NumberBypassed	456,258	1,162,074	57,288	136,862	303,005	2,115,487
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	58,549	6,247	763	537	4,041	70,137
Total Sum of NumberCollected		10,256,871	5,484,825	217,577	283,281	7,262,036	23,504,590
Total Sum of NumberBarged		9,414,661	4,161,686	151,546	141,139	6,656,975	20,526,007
Total Sum of NumberBypassed		456,259	1,257,750	58,264	137,083	568,790	2,478,146
Total Sum of NumberTrucked		0	12,850	30	195	4,041	17,116
Total Sum of TotalProjectMortalities		64,366	15,621	965	602	13,552	95,106