



Fish Passage Center

Weekly Report #08 - 18

July 3, 2008

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 70% and 147% of average at individual sub-basins over the first 23 days of June. Precipitation above The Dalles has been 107% of average over June. Over the entire water year, precipitation has generally been near or above average.

Table 1. Summary of June 1-23 precipitation and cumulative October through June precipitation with respect to average (1971-2000), at select locations within the Columbia and Snake River Basins.

Location	Water Year 2008 June 1-23		Water Year 2008 October 1, 2007 to June 23, 2008	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	2.06	113	19.98	100
Snake River Above Ice Harbor	1.03	92	14.91	101
Columbia Above The Dalles	1.47	107	19.43	101
Kootenai	1.92	102	18.62	91
Clark Fork	1.84	124	14.66	107
Flathead	2.57	127	18.62	102
Pend Oreille/ Spokane	1.99	119	27.10	101
Central Washington	0.41	83	5.67	73
Snake River Plain	0.51	70	7.69	82
Salmon/Boise/ Payette	0.94	83	17.37	100
Clearwater	2.80	147	27.25	104
SW Washington Cascades/Cowlitz	2.78	123	60.36	93
Willamette Valley	1.68	98	56.88	103

Table 2 displays the June Final and July Early Bird runoff volume forecasts for multiple reservoirs. Water Supply Forecasts generally increased between the June Final and July Early Bird forecasts with Dworshak showing the biggest change by increasing 21% from the June Final to July Early Bird forecast. The current forecast (July Early Bird) at The Dalles between January and July is 102000 Kaf (95% of average).

Table 2. June Final and July Early Bird Runoff Volume Forecasts for various reservoirs within the Columbia and Snake River Basins.

Location	June Final		July Early Bird	
	% Average (1971- 2000)	Probable Runoff Volume (Kaf)	% Average (1971- 2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	92	98200	95	102000
Grand Coulee (Jan-July)	95	59800	98	61700
Libby Res. Inflow, MT (Jan-July)	93	5840	93	5860
Hungry Horse Res. Inflow, MT (Jan-July)	99	2200	107	2370
Lower Granite Res. Inflow (Apr- July)	102	21900	108	23300
Brownlee Res. Inflow (Apr-July)	76	4780	72	4550
Dworshak Res. Inflow (Apr-July)	109	2880	130	3450

The Biological Opinion spring flow periods have ended in the lower Snake River (Lower Granite), mid Columbia (Priest Rapids) and lower (McNary) Columbia River. The spring flow objectives this spring were 100 Kcfs at Lower Granite, 260 Kcfs at McNary, and 135 Kcfs at Priest Rapids. Over the spring period, flows averaged 98.4 kcfs at Lower Granite, 286.7 kcfs at McNary, and 167.6 Kcfs at Priest Rapids.

The summer Biological Opinion flow at Lower Granite Dam is determined by the June Final Water Supply Forecast and is 52.5 Kcfs this year. Flows at Lower Granite dam averaged 115.6 Kcfs between June 21st, 2008 and July 2nd, 2008.

The summer Biological Opinion flow at McNary Dam is 200 Kcfs and began on July 1, 2008. Flows at McNary Dam have averaged 324.3 Kcfs over the first two days of the summer flow period.

Grand Coulee Reservoir is at 1285.1 feet (7-2-08) and has drafted 0.7 feet over the last week. Grand Coulee is currently 4.9 feet from full (1290 feet). Outflows at Grand Coulee have ranged between 175.8 and 212.1 Kcfs over the last week. Inflows last week have ranged between 180.5 Kcfs and 210.9 Kcfs.

The Libby Reservoir is currently at elevation 2441.3 feet (7-2-08) and refilled 3.9 feet last week. Libby is 17.7 feet from full (2459 feet). Outflows at Libby are currently 17 Kcfs. Inflows at Libby have ranged between 27.7 Kcfs to 37.5 Kcfs over the last week. The State of Montana submitted SOR 2008 MT-2 to the Technical Management Team (TMT) on July 2, 2008. SOR 2008 MT-2 asked for an outflow from Libby of 17 Kcfs in July and 12 Kcfs in August. The TMT discussed that 2008 operations should be a “roll over” of operations that occurred at Libby in 2007 according to the 2008 Fish Operating Plan. In 2007, a flat flow (July through August) was decided upon that would reach the 20 foot draft at Libby (2439 ft) by the end of August. Currently, the State of Montana is considering this operation and may raise the issue to the IT (Implementation Team) level. The COE has also stated that they would need some extra time this year in determining a flow rate that will reach the 20 foot draft elevation at Libby due to uncertainty in water supply estimates.

Hungry Horse is currently at an elevation of 3558.2 ft (7-2-08) and has refilled 2.8 feet last week. Hungry Horse is currently 1.8 feet from full (3560 ft). Outflows were 7.7–10.1 Kcfs last week; inflows ranged between 13.7 Kcfs and 16.3 Kcfs last week. The State of Montana submitted SOR 2008 MT-2 to the

Technical Management Team (TMT) on July 2, 2008. SOR 2008 MT-2 asked for an outflow from Hungry Horse of 4.5 Kcfs from July through August. The TMT discussed that 2008 operations should be a “roll over” of operations that occurred at Hungry Horse in 2007 according to the 2008 Fish Operating Plan. In 2007, a flat flow (July through August) was decided upon that would reach the 20 foot draft at Hungry Horse (3540 ft) by the end of August. Currently, the State of Montana is considering this operation and may raise the issue to the IT (Implementation Team) level. The BOR has also stated that they would need some extra time this year in determining a flow rate that will reach the 20 foot draft elevation at Hungry Horse due to uncertainty in water supply estimates.

Dworshak is currently at an elevation of 1599.4 feet (7-2-08) and refilled 3.8 feet last week. Dworshak is currently only 0.6 feet from full (1600 feet). Outflows at Dworshak have increased to approximately 16 Kcfs over the last several days. Dworshak inflows have ranged between 17.9 and 19.8 Kcfs last week.

The Brownlee Reservoir is at an elevation of 2073.7 feet (July 2nd, 2008), and has drafted 2.4 feet last week. Brownlee is currently 3.3 feet from full (2077 feet). Outflows at Brownlee Dam have been 12.8 to 17.6 Kcfs over the last week. Inflows at Brownlee Dam have been 12 to 14.4 Kcfs over the last week.

Spill: The spring spill period in the Snake River ended on June 20th and the summer spill season was initiated on June 21, 2008. The Court Order calls for the following spill levels at the Federal Snake River Projects:

Project	Day/Night Spill
Lower Granite	18 Kcfs/18 Kcfs
Little Goose	30%/30%
Lower Monumental	17 Kcfs/17 Kcfs
Ice Harbor	30%/30% vs 45 Kcfs/Gas Cap Study

Dworshak Dam outflow was increased and flow exceeded hydraulic capacity this week as the project filled and began passing inflow. Two units continue to be out of service at Lower Granite Dam limiting powerhouse capacity to about 70 Kcfs. Flows continue to exceed hydraulic capacity at this project and spill has either met or exceeded the Court Order. Little

Goose Dam has spilled near 30% of daily flow over the past week, with uncontrolled spill during some hours and less than 30% spill on other hours when spill can be reduced to decrease TDG levels at the Lower Monumental forebay gage. At Lower Monumental Dam summer spill of 17 Kcfs is met whenever possible, but as flows recede spill has been reduced to less than 17 Kcfs based on TDG at the Ice Harbor forebay gage. Spill at Ice Harbor Dam has generally met or exceeded the court ordered levels of 45 Kcfs daytime spill and gas cap nighttime spill alternating with 30% instantaneous spill.

Court ordered spring spill at the lower Columbia projects ended on June 30, 2007. Summer spill was initiated on July 1, 2008. The Court Order calls for the following summer spill levels at the Federal Lower Columbia River Projects:

Project	Day/Night Spill
McNary	60%/60% vs 40%/40%
John Day	30%/30% vs 40%/40% test days
The Dalles	40%/40%
Bonneville	85 Kcfs/Gas Cap

Summer spill at McNary was initiated on June 21, 2008 to facilitate the conduct of a research study comparing spill levels of 40%/40% versus 60%/60%. The project generally met or exceeded the Court ordered spill this past week when the objective was 40%/40%, but the 60%/60% spill was often restricted due to TDG levels at the John Day Dam forebay monitor. At John Day Dam spill has generally met the 30% of daily average flow and missed the 40% of daily average flow on test days due to exceedences of TDG at The Dalles forebay monitor. Spill at The Dalles Dam met, or was less than the Court Order based on the TDG readings at the Bonneville Dam forebay monitor. Spill at Bonneville Dam generally met or exceeded the Court Order. The summer spill levels of 85 Kcfs during daytime hours and gas cap spill at night were initiated on June 21, 2008 to facilitate the conduct of research at this project. Total dissolved gas has exceeded the waiver limits at many sites due to spill in excess of hydraulic capacity and generation needs.

Gas bubble trauma (GBT) monitoring at Lower Granite Dam has concluded for the year. Sampling occurred at all other Snake River monitoring sites, Rock Island Dam in the Mid Columbia, and at McNary and

Bonneville dams in the lower Columbia. No fish were detected with signs of GBT in their non paired fins this past week.

Smolt Monitoring: Spring migrant indices continued to decrease throughout the hydrosystem over the past week, while subyearling Chinook numbers have continued to increase in the Lower Columbia but decrease at Snake River transport sites.

At Snake River SMP sites the daily passage indices for yearling Chinook and steelhead continued to decline. Yearling Chinook indices dropped to below 500 per day this week at Little Goose and Lower Monumental dams, while at Lower Granite Dam the daily indices averaged about 600 fish--about half of last weeks numbers. Steelhead indices dropped to below 1,000 per day this past week. Indices for subyearling Chinook remained relatively high at Lower Granite Dam, with the daily average at 7,000 fish per day over the past week. On July 2 the subyearling index at Granite rose to 11,000.

Debris has been accumulating at Snake River projects. At Little Goose Dam plugged orifices were discovered at unit 4 on July 2. Once the debris plugs were removed the COE recovered 358 juvenile salmonids on the separator, made up almost entirely of subyearling Chinook. The COE is proposing spill operations to pass debris at both Little Goose and Lower Monumental dams next week. In the mean time they are going to flush orifices on shorter intervals to insure debris does not plug them again.

Subyearling migrants predominate in the Columbia River also. At Rock Island Dam indices for yearling Chinook and steelhead dropped quickly over the past week. Subyearling Chinook indices averaged around 230 fish per day this week compared to indices of 240 fish per day last week.

At the lower Columbia River dams indices for all spring migrants were down, while subyearling Chinook indices continued to increase. At McNary the subyearling Chinook index rose to 141,000 on June 26—the highest daily number this year. Indices averaged 100,000 per day in the three complete samples taken in the past week. On June 30 the bypass system lost water and all collected fish were dumped to raceway 5 and then returned to river.

At Bonneville Dam the subyearling Chinook passage indices averaged 52,000 per day over the past week, with the index reaching 71,000 on June 29.

Hatchery Release:

Snake River Zone: The Snake River Zone encompasses the Snake River and its tributaries from its confluence with the Columbia River to Hells Canyon Dam. Beginning July 1, approximately 300,000 spring Chinook parr were scheduled for release into the Selway River. These parr are not expected to out-migrate until spring 2009 and are unmarked. This was the only scheduled release of salmonid juveniles to this zone this week. A volitional release of approximately 56,000 spring Chinook parr from the Lostine Acclimation Facility on the Wallowa River is scheduled to end over the next two weeks. This release began in mid-June. These parr are not anticipated to out-migrate until spring 2009 and are 100% adipose clipped. There are no other releases to this zone scheduled over the next two weeks.

Mid-Columbia Zone: The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam. Two releases of subyearling summer Chinook from Turtle Rock Hatchery into the Mid-Columbia River were scheduled to begin this week. In all, approximately 848,000 subyearlings will be released during these two releases. Also, an experimental release of approximately 12,000 coho juveniles from Cle Elem Lake was scheduled to end this week. This release began on April 28th and fish have slowly out-migrated as the lake has filled throughout the season. There were no other releases of juvenile salmonids scheduled for this zone this week. Furthermore, no releases are scheduled for this zone over the next two weeks.

Lower Columbia Zone: The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. Approximately 2.0 million subyearling fall Chinook from the Little White Salmon NFH into the Little White Salmon River were scheduled for release this week. There were no other scheduled releases of juvenile salmonids to this zone this week and no releases are scheduled over the next two weeks.

Adult Fish Passage: The summer Chinook count began June 1st at Bonneville Dam. Daily passage numbers at Bonneville Dam have ranged between 1,128 and 2,157 adult summer Chinook in the last week. The 2008 summer Chinook count of 59,162 is about 1.89 times greater than the 2007 and 1.25 times greater than the 10 year average. The summer Chinook jack count of 9,212 is about 1.11 times greater than the 2007 count and 1.72 times greater than the 10 year

average to date. The adult summer Chinook count total at The Dalles Dam was 47,665, about 80.5% of the Bonneville passage total to date. A total of 34,376 summer Chinook have passed McNary Dam. The adult summer Chinook count total at Lower Granite Dam in the Snake River was 14,983 as of July 1st. The 2008 adult summer Chinook count at Rock Island Dam in the upper Columbia was 6,232 with daily totals ranging from 517 to 970.

As of July 1st, 17,344 steelhead had passed Bonneville Dam. The 2008 count was 1.57 times greater than the 2007 count of 10,990 and had 391 fewer fish than the 10 year average. The 2008 wild steelhead count at Bonneville Dam was 5,153 fish. The daily steelhead counts at The Dalles Dam ranged between 392 and 578 for the week with a cumulative count of 6,855. About 39.5% of the steelhead counted at Bonneville Dam had passed The Dalles Dam. The majority of the 5,091 steelhead at McNary Dam have moved up into the Snake River with the cumulative count at Ice Harbor now at 4,017 for the season. The cumulative count at Priest Rapids Dam was at 527 for the season as of June 29th.

As of July 1st at Bonneville Dam, the adult Shad count was 1,949,723 which was about 78.6% of the 2007 count of 2,480,456 and only 65.1% the 10 year average count of 2,994,571. The 2008 Bonneville Dam sockeye count of 193,707 increased about 9.9 times compared to the 2007 count and increased approximately 4.17 times compared to the 10 year average. A total of 48,863 adult sockeye have been counted at Priest Rapids Dam so far this season. Two of the major spawning sites for sockeye in the upper Columbia river zone are Lake Wenatchee and Lake Osoyoos (Okanogan basin). To date, only 146 sockeye have been counted at Ice Harbor Dam in the Snake River.

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
06/19/2008	194.4	10.0	192.7	11.8	211.7	31.4	208.8	38.7	209.0	44.1	231.6	101.7	218.7	55.6
06/20/2008	179.0	0.2	181.3	0.0	198.3	24.2	194.8	25.6	195.4	42.5	213.7	77.9	205.2	44.0
06/21/2008	131.9	0.1	137.6	0.0	167.9	16.6	173.5	26.1	177.2	33.6	196.3	57.6	192.9	34.1
06/22/2008	147.9	5.2	144.9	5.9	147.7	14.8	140.2	14.4	147.9	31.8	155.8	23.9	149.9	23.2
06/23/2008	177.8	0.1	168.6	0.0	182.0	21.3	177.4	25.9	180.6	39.0	191.9	55.3	182.7	36.2
06/24/2008	169.6	6.7	173.8	4.2	187.5	21.4	181.9	26.2	188.6	37.7	202.9	65.4	197.8	40.3
06/25/2008	200.7	16.4	196.9	28.3	212.6	41.6	208.8	40.3	209.5	36.8	224.4	98.8	210.6	54.9
06/26/2008	212.1	26.6	211.9	32.8	227.0	58.1	225.4	47.2	230.3	39.5	248.2	130.0	235.6	76.9
06/27/2008	209.9	16.3	209.8	29.4	226.7	55.3	224.5	48.1	231.1	42.9	254.1	136.3	243.1	86.0
06/28/2008	196.6	12.2	192.0	11.0	206.7	36.5	206.6	35.7	213.5	44.7	231.8	102.9	221.8	60.0
06/29/2008	180.7	0.1	173.6	0.0	187.3	24.6	186.5	24.5	195.6	43.1	210.8	77.6	203.1	41.7
06/30/2008	181.0	1.1	188.8	0.0	204.7	37.9	202.8	37.7	209.3	44.5	221.9	94.2	208.7	50.6
07/01/2008	185.9	6.6	184.6	14.7	197.3	34.4	195.2	32.9	203.2	40.1	220.2	92.4	209.4	55.3
07/02/2008	175.8	0.1	170.8	0.0	184.7	25.1	185.6	34.2	196.7	40.2	213.1	79.1	205.5	49.2

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

Date	Dworshak		Brownlee Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
06/19/2008	14.5	4.9	20.7	17.8	133.0	65.6	127.4	44.3	129.2	36.1	134.2	67.6
06/20/2008	11.9	2.2	17.7	21.8	130.9	60.3	124.2	35.4	126.6	19.4	131.4	48.5
06/21/2008	12.0	2.3	16.6	19.7	130.1	59.2	126.6	35.5	127.8	17.4	134.7	58.0
06/22/2008	12.1	2.4	16.3	19.1	133.9	64.4	130.2	42.3	132.3	24.6	138.0	74.6
06/23/2008	13.9	4.3	16.1	19.9	139.5	69.9	132.7	41.7	136.2	24.3	143.3	68.1
06/24/2008	14.8	5.3	15.7	15.4	132.1	63.7	128.8	39.0	131.1	22.2	135.7	59.2
06/25/2008	13.8	4.3	15.3	15.4	120.0	47.1	117.2	30.7	117.2	28.0	122.9	68.4
06/26/2008	9.8	2.2	14.4	13.1	112.5	40.9	107.1	41.6	109.3	35.4	111.9	74.8
06/27/2008	8.5	1.1	13.2	13.6	101.7	34.6	97.9	37.7	97.7	35.7	104.0	70.9
06/28/2008	9.6	1.4	13.0	16.1	100.2	28.8	97.8	29.5	98.6	18.2	103.9	69.6
06/29/2008	11.0	1.5	12.9	18.1	103.5	18.3	101.7	29.5	101.1	17.3	104.2	44.6
06/30/2008	15.1	5.6	12.0	18.1	107.0	21.1	109.3	37.2	103.0	16.1	105.4	32.5
07/01/2008	16.3	6.7	13.1	15.3	104.6	23.5	101.3	29.2	102.7	14.8	105.7	63.6
07/02/2008	16.0	6.5	---	---	102.1	18.3	98.5	28.4	100.4	14.6	105.4	65.7

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		
06/19/2008	359.5	186.7	370.9	125.9	353.7	152.8	374.7	165.9	75.6	121.8
06/20/2008	342.5	167.9	342.9	103.2	330.7	131.8	357.6	141.0	76.6	128.6
06/21/2008	340.2	165.8	318.9	118.3	305.8	122.6	325.6	112.6	76.5	125.1
06/22/2008	327.1	165.2	329.7	138.9	321.2	134.6	332.2	124.3	76.3	120.3
06/23/2008	301.1	166.8	295.4	94.8	282.1	113.0	300.9	87.7	77.6	124.2
06/24/2008	340.3	184.6	329.8	100.2	317.3	127.6	327.2	110.5	78.4	127.0
06/25/2008	345.4	173.2	347.5	120.5	335.8	144.6	358.5	141.3	77.2	128.6
06/26/2008	349.4	174.2	331.7	114.3	318.3	136.3	329.4	115.8	76.9	125.3
06/27/2008	354.4	183.1	357.2	136.2	345.7	143.7	372.5	155.0	77.4	128.7
06/28/2008	338.0	174.9	341.1	133.7	323.9	142.1	346.0	132.8	77.1	124.6
06/29/2008	320.6	155.0	324.6	121.9	321.4	126.4	330.9	118.3	77.2	124.0
06/30/2008	324.1	153.6	320.8	114.2	305.7	116.9	326.8	118.9	75.6	121.1
07/01/2008	321.7	154.0	308.2	101.7	295.2	123.2	305.9	104.1	66.0	124.4
07/02/2008	326.8	150.6	320.7	96.3	308.6	119.6	322.6	118.7	66.9	125.6

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

Site	Date	Species	Number of Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank			
								Rank 1	Rank 2	Rank 3	Rank 4
Little Goose Dam											
	06/24/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	07/01/08	Chinook + Steelhead	25	0	0	0.00%	0.00%	0	0	0	0
Lower Monumental Dam											
	06/23/08	Chinook + Steelhead	100	4	4	4.00%	0.00%	4	0	0	0
	06/30/08	Chinook + Steelhead	28	0	0	0.00%	0.00%	0	0	0	0
McNary Dam											
	06/27/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/29/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	06/24/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	06/28/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/01/08	Chinook + Steelhead	103	0	0	0.00%	0.00%	0	0	0	0
Rock Island Dam											
	06/23/08	Chinook + Steelhead	100	1	0	0.00%	0.00%	0	0	0	0
	06/26/08	Chinook + Steelhead	50	0	0	0.00%	0.00%	0	0	0	0
	06/30/08	Chinook + Steelhead	50	0	0	0.00%	0.00%	0	0	0	0

Hatchery Releases Last Two Weeks

Hatchery Release Summary									
From:		6/19/2008		to		07/02/08			
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Clearwater Hatchery	CH1	SP	2009	300,000	07-01-08	07-15-08	Selway River	Clearwater River M F
Nez Perce Tribe	Lookingglass Hatchery	CH0	SP	2009	56,207	06-15-08	07-15-08	Lostine River	Wallowa River
Nez Perce Tribe Total					356,207				
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2008	4,500,000	06-12-08	06-20-08	Priest Rapids Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	CH0	FA	2008	3,450,000	06-09-08	06-27-08	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH0	SU	2008	242,400	06-13-08	06-20-08	Wells Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife Total					8,192,400				
Yakama Tribe	Klickitat Hatchery	CH0	FA	2008	50,000	06-24-08	06-24-08	Klickitat River	Klickitat River
Yakama Tribe	Klickitat Hatchery	CH0	FA	2008	1,900,000	06-24-08	06-24-08	Klickitat River	Klickitat River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2008	12,000	04-28-08	06-30-08	Cle Elum Lake	Yakima River
Yakama Tribe Total					1,962,000				
Grand Total					10,510,607				

Hatchery Releases Next Two Weeks

Hatchery Release Summary									
From:		7/3/2008		to		7/16/2008			
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Clearwater Hatchery	CH1	SP	2009	300,000	07-01-08	07-15-08	Selway River	Clearwater River M F
Nez Perce Tribe	Lookingglass Hatchery	CH0	SP	2009	56,207	06-15-08	07-15-08	Lostine River	Wallowa River
Nez Perce Tribe Total					356,207				
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH0	FA	2008	2,000,000	07-03-08	07-03-08	Little White Salmon River	Little White Salmon River
U.S. Fish and Wildlife Service Total					2,000,000				
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH0	SU	2008	398,000	07-03-08	07-03-08	Turtle Rock Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH0	SU	2008	450,000	07-03-08	07-03-08	Turtle Rock Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife Total					848,000				
Grand Total					3,204,207				

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	<u>Hungry H. Dnst</u>			<u>Boundary</u>			<u>Grand Coulee</u>			<u>Grand C. Tlwr</u>			<u>Chief Joseph</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>					
	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>				
6/19	104	105	106	24	125	126	127	24	118	118	118	24	115	116	117	24	117	117	118	24
6/20	105	106	106	24	124	125	126	23	118	119	119	24	115	116	117	23	116	117	118	24
6/21	107	107	108	24	125	125	127	22	119	119	119	24	115	116	117	22	116	116	117	24
6/22	106	106	107	24	125	126	127	21	118	119	119	24	116	117	118	21	115	116	116	24
6/23	105	106	106	24	125	126	127	23	119	119	119	23	115	116	117	23	116	116	117	24
6/24	106	106	106	24	125	126	127	21	119	119	119	24	115	116	117	21	116	116	117	24
6/25	105	106	106	24	126	127	128	24	119	119	120	24	116	117	118	24	115	116	117	24
6/26	105	106	106	24	126	126	127	22	119	119	120	24	117	117	118	22	116	116	117	24
6/27	104	105	106	24	126	127	128	24	119	119	120	24	116	117	118	24	116	116	117	24
6/28	104	105	105	24	125	126	128	22	120	120	120	24	117	118	119	22	117	118	118	24
6/29	105	105	106	24	124	125	126	23	120	120	121	24	117	119	119	23	117	118	119	24
6/30	105	106	106	24	123	124	124	21	120	121	121	24	117	118	119	21	117	118	118	24
7/1	106	107	107	24	122	123	124	23	121	121	122	24	118	119	120	23	117	118	118	24
7/2	106	107	107	24	122	123	124	21	120	121	121	24	117	118	119	21	117	118	119	24

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	<u>Chief J. Dnst</u>			<u>Wells</u>			<u>Wells Dwnstrm</u>			<u>Rocky Reach</u>			<u>Rocky R. Tlwr</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>					
	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>				
6/19	116	117	117	24	---	---	---	0	117	118	118	22	117	117	118	24	117	118	120	24
6/20	115	116	116	24	---	---	---	0	118	119	120	24	116	116	116	24	116	117	117	24
6/21	115	116	116	24	---	---	---	0	117	118	118	24	116	116	117	24	117	117	119	24
6/22	115	116	117	24	---	---	---	0	116	116	117	24	116	116	117	24	116	116	117	24
6/23	115	116	116	24	---	---	---	0	117	117	117	23	114	114	114	24	114	115	115	24
6/24	115	115	116	24	---	---	---	0	117	118	119	24	114	114	115	24	115	115	116	24
6/25	114	115	116	24	---	---	---	0	119	121	123	24	115	116	116	24	117	117	118	24
6/26	115	116	116	24	---	---	---	0	121	123	125	24	116	117	118	24	118	119	121	24
6/27	114	115	116	24	---	---	---	0	120	121	124	24	118	120	121	24	120	121	123	24
6/28	115	116	117	24	---	---	---	0	119	120	120	24	120	121	121	24	120	121	122	24
6/29	116	117	117	24	---	---	---	0	120	120	121	24	119	119	120	24	119	119	120	24
6/30	116	117	117	24	---	---	---	0	112	120	121	24	118	118	118	24	119	119	120	24
7/1	115	116	116	24	---	---	---	0	95	95	95	6	118	119	119	24	118	119	119	23
7/2	116	117	117	24	118	118	118	13	118	120	122	14	119	120	122	24	119	120	122	24

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	<u>Rock Island</u>			<u>Rock I. Tlwr</u>			<u>Wanapum</u>			<u>Wanapum Tlwr</u>			<u>Priest Rapids</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>					
	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>				
6/19	117	118	119	24	122	123	124	24	116	117	120	24	121	124	126	24	120	124	126	24
6/20	116	117	117	24	121	122	122	24	116	117	119	24	119	121	124	24	119	120	121	24
6/21	116	117	118	24	121	122	123	24	117	118	120	24	119	120	121	24	120	121	122	24
6/22	115	115	115	24	121	121	121	24	116	116	117	24	117	117	118	24	116	116	118	24
6/23	114	114	115	24	120	121	122	24	114	115	116	24	116	117	119	24	114	115	115	24
6/24	115	115	116	24	119	120	121	24	114	115	116	24	117	118	120	24	115	117	118	24
6/25	116	117	118	24	119	120	121	24	115	116	117	24	122	126	128	24	117	120	125	24
6/26	117	117	118	24	119	120	120	24	113	114	115	24	125	127	128	24	121	123	125	24
6/27	119	119	121	24	121	123	125	24	114	115	116	24	126	128	128	24	123	126	128	24
6/28	120	121	122	24	124	125	126	24	116	118	121	22	122	123	128	24	125	127	128	24
6/29	119	119	120	24	122	124	124	24	119	121	123	24	121	121	125	24	121	123	126	24
6/30	118	119	120	24	121	122	123	24	119	120	121	24	122	124	125	24	121	123	125	24
7/1	118	119	119	24	121	122	122	24	118	118	119	24	122	126	129	24	122	124	127	24
7/2	118	118	119	24	121	121	122	24	118	119	120	24	121	123	127	24	123	126	127	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 and Snake River Sites

Date	Priest R. Dnst			#	Pasco			#	Dworshak			#	Clrwtr-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	
6/19	121	123	124	24	116	117	118	24	108	109	109	24	104	105	106	24	105	106	107	24
6/20	120	121	121	24	116	118	119	24	101	102	103	24	103	104	105	24	106	106	107	24
6/21	120	121	122	24	115	115	116	24	103	103	103	24	103	104	105	24	105	106	106	24
6/22	116	117	118	24	114	115	115	24	103	103	103	24	103	104	105	24	105	106	107	24
6/23	116	117	117	24	112	113	113	24	108	112	114	24	104	106	107	24	105	106	106	24
6/24	117	118	118	24	112	113	114	24	110	111	113	24	104	105	106	24	105	106	107	24
6/25	119	121	124	24	113	114	115	24	107	108	109	24	104	105	106	24	105	106	107	24
6/26	123	124	125	24	115	116	117	24	104	106	109	24	103	104	105	24	105	105	106	24
6/27	124	125	127	24	116	117	118	24	102	104	106	24	103	103	104	24	105	105	106	24
6/28	124	125	126	24	118	119	120	24	104	107	109	24	103	104	104	24	105	106	106	24
6/29	121	122	124	24	118	119	119	24	102	102	102	24	103	104	105	24	105	105	106	24
6/30	121	123	124	24	116	117	118	24	111	113	113	24	105	106	107	24	104	105	106	24
7/1	122	123	124	24	116	117	117	24	113	114	115	24	105	106	107	24	104	104	104	24
7/2	123	124	125	24	117	118	119	24	112	114	115	24	105	106	107	24	104	105	105	24

Total Dissolved Gas Saturation Data at Snake River Sites

Date	Clrwtr-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	
6/19	104	104	105	24	105	105	105	24	122	124	124	24	116	117	120	24	119	121	124	24
6/20	103	104	104	24	106	106	106	24	122	122	122	24	120	120	120	24	118	118	119	24
6/21	103	103	103	24	106	106	106	24	122	122	122	24	120	120	121	24	118	118	118	24
6/22	103	104	104	24	105	105	106	24	123	124	126	24	118	118	119	24	118	119	125	24
6/23	104	105	105	24	105	105	106	24	122	123	123	24	118	118	118	24	118	120	122	24
6/24	104	105	106	24	105	105	106	24	121	122	123	24	118	119	119	24	118	119	119	24
6/25	104	104	105	24	106	106	106	24	118	120	121	24	119	119	120	24	117	119	138	24
6/26	103	104	104	24	106	106	106	24	117	119	124	24	118	119	119	24	121	122	125	24
6/27	103	103	104	24	105	105	105	24	113	118	123	24	117	117	118	24	121	121	125	24
6/28	103	104	105	24	105	105	105	24	113	116	117	24	115	115	116	24	115	115	117	24
6/29	103	104	105	24	105	105	106	24	108	108	108	24	115	116	116	24	115	115	115	24
6/30	103	105	106	24	105	106	106	24	110	111	114	24	114	114	115	24	115	117	117	24
7/1	104	104	105	24	105	105	105	24	110	113	116	24	110	111	112	24	113	114	114	24
7/2	105	106	107	24	105	105	105	24	108	108	109	24	109	109	109	24	118	119	119	24

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	
6/19	121	122	123	24	121	123	124	24	118	119	121	24	120	122	124	24	---	---	---	0
6/20	120	121	123	24	119	120	121	24	120	121	122	24	119	120	121	24	---	---	---	0
6/21	119	120	120	24	119	120	120	24	119	120	120	24	119	120	121	24	---	---	---	0
6/22	117	117	118	24	119	120	124	24	117	117	118	24	120	120	124	24	---	---	---	0
6/23	119	119	120	24	119	120	123	24	117	117	117	24	119	119	120	24	---	---	---	0
6/24	119	119	120	24	119	120	121	24	117	117	118	24	119	120	123	24	---	---	---	0
6/25	119	120	121	24	118	118	121	24	118	118	119	24	120	122	124	24	---	---	---	0
6/26	118	118	119	24	118	120	122	24	118	118	118	24	119	121	124	24	---	---	---	0
6/27	119	120	121	24	118	119	122	24	118	118	118	24	118	119	120	24	---	---	---	0
6/28	121	122	123	24	119	120	120	24	119	119	120	24	118	118	119	24	---	---	---	0
6/29	119	120	122	24	119	119	120	24	119	120	120	24	118	119	119	24	---	---	---	0
6/30	117	117	118	24	118	119	120	24	119	120	120	24	118	118	119	24	---	---	---	0
7/1	116	117	117	24	119	119	120	24	117	117	119	24	118	119	119	24	---	---	---	0
7/2	116	116	118	24	119	119	119	24	116	116	116	24	118	119	120	24	---	---	---	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 River Sites

Date	<u>McNary-Wash</u>				<u>McNary Tlwr</u>				<u>John Day</u>				<u>John Day Tlwr</u>				<u>The Dalles</u>			
	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24h</u>		<u>12h</u>		#	<u>24h</u>		<u>12h</u>		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	AVG	High	hr	
6/19	115	116	116	24	120	120	120	24	112	112	112	24	118	119	120	24	114	115	117	23
6/20	117	119	119	24	119	120	120	24	112	113	113	24	118	119	121	24	113	114	114	24
6/21	117	117	117	24	119	119	122	24	115	116	117	24	118	119	119	24	114	115	116	24
6/22	115	116	117	24	118	119	119	24	116	116	116	24	119	120	124	24	114	115	118	24
6/23	115	115	115	24	118	119	122	24	115	115	116	24	116	117	117	24	114	114	115	24
6/24	114	114	115	24	119	121	122	24	113	114	114	24	117	118	119	24	113	114	114	24
6/25	113	114	115	24	119	119	120	24	112	113	113	24	118	118	119	24	113	114	115	24
6/26	114	114	114	24	119	119	120	24	111	112	112	24	117	118	119	24	111	112	112	24
6/27	114	115	116	24	120	120	120	24	112	113	114	24	119	119	119	24	113	115	116	24
6/28	116	117	118	24	119	119	120	24	113	114	114	24	118	119	119	24	116	117	118	24
6/29	118	119	120	24	118	119	119	24	114	115	116	24	118	119	119	24	115	116	116	24
6/30	119	119	120	24	118	118	119	24	117	118	118	24	118	119	119	24	115	116	117	24
7/1	117	117	118	24	118	119	119	24	117	117	118	24	117	117	117	24	115	115	116	24
7/2	116	117	117	24	118	119	119	24	117	117	118	24	117	118	119	24	116	117	117	24

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>				<u>Bonneville</u>				<u>Warrendale</u>				<u>Camas\Washougal</u>				<u>Cascade Island</u>			
	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24h</u>		<u>12h</u>		#	<u>24h</u>		<u>12h</u>		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	AVG	High	hr	
6/19	119	120	120	24	117	118	119	24	---	---	---	0	119	121	121	24	123	124	125	24
6/20	118	119	119	24	119	119	119	24	---	---	---	0	119	120	121	24	124	125	125	24
6/21	118	119	119	24	117	117	118	24	---	---	---	0	118	119	120	24	120	122	124	24
6/22	118	119	121	24	114	114	115	24	---	---	---	0	116	116	117	21	121	123	123	24
6/23	118	118	119	24	114	115	115	24	---	---	---	0	114	114	114	22	119	120	121	24
6/24	118	118	118	24	114	114	115	24	---	---	---	0	113	114	115	24	121	123	124	24
6/25	118	118	119	24	114	115	115	24	---	---	---	0	116	117	118	24	124	124	124	24
6/26	117	118	118	24	112	113	114	24	---	---	---	0	114	114	115	24	120	122	124	24
6/27	118	119	119	24	114	115	117	24	---	---	---	0	116	118	119	24	124	124	124	24
6/28	120	120	121	24	117	118	120	24	---	---	---	0	117	117	117	24	124	125	125	24
6/29	119	119	119	24	120	120	121	24	---	---	---	0	118	119	120	24	122	124	125	24
6/30	119	119	119	24	117	117	118	24	---	---	---	0	118	118	119	24	121	123	124	24
7/1	119	119	119	24	114	114	115	24	---	---	---	0	115	115	116	24	120	121	122	24
7/2	119	119	120	24	116	116	117	24	---	---	---	0	115	116	117	24	121	122	124	24

Two-Week Summary of Passage Indices

Source: Fish Passage Center

Updated: 7/3/2008 8:07

Two-Week Summary of Passage Indices

* One or more of the sites on this date had an incomplete or biased sample.

See Sampling Comments: <http://www.fpc.org/currentDaily/smpcomments.htm>

For clip information see: <http://www.fpc.org/CurrentDaily/catch.htm>

For sockeye and yearling chinook (Snake only) race information see: <http://www.fpc.org/smoltqueries/currentsmppsubmitdata.asp>

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)
06/19/2008 *	---	---	---	---	2,263	2,742	900	120	---	3,032	1,284
06/20/2008 *	---	---	---	---	1,036	1,941	1,404	146	2,564	899	1,172
06/21/2008 *	---	---	---	---	465	1,341	1,075	2	---	1,525	927
06/22/2008	---	---	---	---	1,032	1,968	907	3	3,333	1,512	777
06/23/2008 *	---	---	---	---	1,277	1,851	471	1	---	950	836
06/24/2008	---	---	---	---	663	1,859	340	0	1,231	470	1,133
06/25/2008 *	---	---	---	---	988	1,153	208	0	---	2,258	742
06/26/2008	---	---	---	---	933	630	153	0	2,239	2,795	1,514
06/27/2008 *	---	---	---	---	468	377	55	2	---	2,047	1,602
06/28/2008	---	---	---	---	346	193	114	2	1,275	244	656
06/29/2008 *	---	---	---	---	1,054	631	301	0	---	837	553
06/30/2008 *	---	---	---	---	647	486	218	2	0	424	523
07/01/2008 *	---	---	---	---	607	422	124	2	---	576	85
07/02/2008 *	---	---	---	---	643	184	126	9	654	503	507
07/03/2008	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	12,422	15,778	6,396	289	11,296	18,072	12,311
# Days:	0	0	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	887	1,127	457	21	1,614	1,291	879
YTD	56,037	78,597	19,672	13,632	3,383,866	2,741,135	1,970,674	22,519	1,348,440	1,689,988	1,288,498

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)
06/19/2008 *	---	---	---	---	13,626	42,783	6,737	36	---	8,798	14,861
06/20/2008 *	---	---	---	---	12,670	45,269	17,092	19	35,977	7,707	31,588
06/21/2008 *	---	---	---	---	8,658	22,123	5,516	176	---	8,709	35,157
06/22/2008	---	---	---	---	8,897	13,054	5,651	341	82,056	8,727	30,615
06/23/2008 *	---	---	---	---	9,074	18,546	6,656	446	---	15,483	22,311
06/24/2008	---	---	---	---	10,100	45,200	5,233	280	123,675	23,909	23,042
06/25/2008 *	---	---	---	---	9,876	38,818	8,206	236	---	56,047	37,334
06/26/2008	---	---	---	---	8,434	23,037	5,646	182	141,162	50,348	50,716
06/27/2008 *	---	---	---	---	5,126	16,149	5,393	213	---	59,030	53,120
06/28/2008	---	---	---	---	5,183	11,497	5,234	134	97,322	33,439	51,261
06/29/2008 *	---	---	---	---	7,161	15,922	4,246	225	---	31,699	71,485
06/30/2008 *	---	---	---	---	5,375	10,589	2,647	205	196	29,734	58,291
07/01/2008 *	---	---	---	---	6,151	13,873	3,421	207	---	48,384	45,229
07/02/2008 *	---	---	---	---	11,518	12,369	3,760	444	63,485	46,108	37,310
07/03/2008	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	121,849	329,229	85,438	3,144	543,873	428,122	562,320
# Days:	0	0	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	8,704	23,516	6,103	225	77,696	30,580	40,166
YTD	0	0	2	119	531,408	842,178	283,807	6,037	707,559	645,523	2,689,862

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)
06/19/2008 *	---	---	---	---	0	0	6	60	---	621	160
06/20/2008 *	---	---	---	---	0	35	7	37	752	205	527
06/21/2008 *	---	---	---	---	0	0	0	57	---	307	709
06/22/2008	---	---	---	---	0	0	0	30	798	309	272
06/23/2008 *	---	---	---	---	0	0	0	24	---	66	366
06/24/2008	---	---	---	---	0	30	0	30	224	185	283
06/25/2008 *	---	---	---	---	0	0	10	34	---	150	233
06/26/2008	---	---	---	---	0	0	0	23	203	208	179
06/27/2008 *	---	---	---	---	0	0	0	25	---	166	355
06/28/2008	---	---	---	---	0	0	0	29	0	114	189
06/29/2008 *	---	---	---	---	0	0	0	31	---	87	174
06/30/2008 *	---	---	---	---	0	0	0	25	0	85	131
07/01/2008 *	---	---	---	---	13	0	0	21	---	175	258
07/02/2008 *	---	---	---	---	0	0	4	20	0	336	410
07/03/2008	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	13	65	27	446	1,977	3,014	4,246
# Days:	0	0	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	1	5	2	32	282	215	303
YTD	0	0	0	326	96,253	166,060	142,685	52,034	164,181	361,958	357,548

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)
06/19/2008 *	---	---	---	---	1,820	2,962	962	93	---	1,103	160
06/20/2008 *	---	---	---	---	1,743	3,883	1,277	67	544	572	117
06/21/2008 *	---	---	---	---	1,629	3,233	818	69	---	516	164
06/22/2008	---	---	---	---	2,634	2,881	518	38	198	206	492
06/23/2008 *	---	---	---	---	1,532	3,930	797	32	---	390	209
06/24/2008	---	---	---	---	1,526	2,620	326	34	226	736	661
06/25/2008 *	---	---	---	---	1,291	2,601	300	24	---	398	530
06/26/2008	---	---	---	---	1,348	1,731	268	45	203	208	622
06/27/2008 *	---	---	---	---	725	1,052	191	38	---	84	267
06/28/2008	---	---	---	---	456	823	114	61	212	228	93
06/29/2008 *	---	---	---	---	694	789	65	49	---	166	11
06/30/2008 *	---	---	---	---	709	740	52	37	0	254	131
07/01/2008 *	---	---	---	---	388	489	35	30	---	175	345
07/02/2008 *	---	---	---	---	457	323	78	20	0	0	48
07/03/2008	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	16,952	28,057	5,801	637	1,383	5,036	3,850
# Days:	0	0	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	1,211	2,004	414	46	198	360	275
YTD	4,565	22,292	5,891	10,708	3,238,210	3,691,264	1,546,023	22,550	505,460	1,132,583	449,439

Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE										
	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
06/19/2008 *	---	---	---	---	0	42	6	122	---	415	128
06/20/2008 *	---	---	---	---	47	35	14	67	627	203	117
06/21/2008 *	---	---	---	---	0	69	23	102	---	360	164
06/22/2008	---	---	---	---	0	35	6	67	534	268	311
06/23/2008 *	---	---	---	---	39	0	0	80	---	195	470
06/24/2008	---	---	---	---	20	0	0	58	671	62	142
06/25/2008 *	---	---	---	---	19	28	0	43	---	199	392
06/26/2008	---	---	---	---	17	0	8	14	0	0	267
06/27/2008 *	---	---	---	---	0	94	0	34	---	0	88
06/28/2008	---	---	---	---	0	36	0	49	0	453	93
06/29/2008 *	---	---	---	---	0	0	4	12	---	0	174
06/30/2008 *	---	---	---	---	0	0	0	41	0	424	0
07/01/2008 *	---	---	---	---	0	0	0	23	---	175	170
07/02/2008 *	---	---	---	---	0	35	0	31	0	0	121
07/03/2008	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	142	374	61	743	1,832	2,754	2,637
# Days:	0	0	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	10	27	4	53	262	197	188
YTD	37	0	0	111	24,634	36,537	45,476	38,749	216,033	331,118	141,340

* See sampling comments

<http://www.fpc.org/currentDaily/smpcomments.htm>

Smolt indices, clipped & unclipped or combined, are presented in the following order: yearling chinook (chinook 1's,) subyearling chinook (chinook 0's), steelhead, coho, and sockeye. Two classes of fish counts are shown in these tables: collection counts, which account for sample rates but are not adjusted for flow; and passage indices, which are collection counts divided by the proportion of water passing through the sampled powerhouse. Passage indices are not population estimates, but are used to adjust collection counts for daily fluctuations in the site's or project's operations. The classes of counts presented in the report are defined below for each site. Most samples occur over a 24-hr period that spans two calendar days. In this report, the date shown corresponds with the sample end date.

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)}

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.

Two Week Transportation Summary

Source: Fish Passage Center

Updated:

7/3/08 8:07 AM

		06/19/08 TO 07/03/08						
		Species						
Site	Data	CH0	CH1	CO	SO	ST	Grand Total	
LGR	Sum of NumberCollected	73,840	7,430	10	75	9,725	91,080	
	Sum of NumberBarged	71,136	7,401	10	75	9,718	88,340	
	Sum of NumberBypassed	0	0	0	0	0	0	
	Sum of Numbertrucked	0	0	0	0	0	0	
	Sum of SampleMorts	46	4	0	0	2	52	
	Sum of FacilityMorts	352	25	0	0	5	382	
	Sum of ResearchMorts	2,306	0	0	0	0	2,306	
	Sum of TotalProjectMorts	2,704	29	0	0	7	2,740	
LGS	Sum of NumberCollected	222,745	10,667	45	255	19,145	252,857	
	Sum of NumberBarged	220,157	10,662	45	254	19,121	250,239	
	Sum of NumberBypassed	2,054	0	0	0	0	2,054	
	Sum of Numbertrucked	0	0	0	0	0	0	
	Sum of SampleMorts	38	3	0	0	0	41	
	Sum of FacilityMorts	496	2	0	1	24	523	
	Sum of ResearchMorts	0	0	0	0	0	0	
	Sum of TotalProjectMorts	534	5	0	1	24	564	
LMN	Sum of NumberCollected	68,164	5,194	21	49	4,642	78,070	
	Sum of NumberBarged	67,959	5,124	21	48	3,910	77,062	
	Sum of NumberBypassed	53	24	0	0	712	789	
	Sum of Numbertrucked	0	0	0	0	0	0	
	Sum of SampleMorts	19	6	0	0	5	30	
	Sum of FacilityMorts	133	40	0	1	15	189	
	Sum of ResearchMorts	0	0	0	0	0	0	
	Sum of TotalProjectMorts	152	46	0	1	20	219	
MCN	Sum of NumberCollected	262,853	5,498	960	868	661	270,840	
	Sum of NumberBarged	0	0	0	0	0	0	
	Sum of NumberBypassed	262,696	5,488	958	866	659	270,667	
	Sum of Numbertrucked	0	0	0	0	0	0	
	Sum of SampleMorts	22	0	0	0	0	22	
	Sum of FacilityMorts	125	10	2	2	2	141	
	Sum of ResearchMorts	10	0	0	0	0	10	
	Sum of TotalProjectMorts	157	10	2	2	2	173	
Total Sum of NumberCollected		627,602	28,789	1,036	1,247	34,173	692,847	
Total Sum of NumberBarged		359,252	23,187	76	377	32,749	415,641	
Total Sum of NumberBypassed		264,803	5,512	958	866	1,371	273,510	
Total Sum of Numbertrucked		0	0	0	0	0	0	
Total Sum of SampleMorts		125	13	0	0	7	145	
Total Sum of FacilityMorts		1,106	77	2	4	46	1,235	
Total Sum of ResearchMorts		2,316	0	0	0	0	2,316	
Total Sum of TotalProjectMorts		3,547	90	2	4	53	3,696	

YTD Transportation Summary

Source: Fish Passage Center

Updated:

7/3/08 8:07 AM

TO: 07/03/08

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	283,408	2,306,055	62,989	11,989	2,070,986	4,735,427
	Sum of NumberBarged	275,937	1,874,449	61,095	11,529	1,692,227	3,915,237
	Sum of NumberBypassed	1,727	425,949	1,848	424	377,925	807,873
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	145	145	2	2	47	341
	Sum of FacilityMorts	1,326	2,723	44	34	787	4,914
	Sum of ResearchMorts	4,273	2,789	0	0	0	7,062
	Sum of TotalProjectMorts	5,744	5,657	46	36	834	12,317
LGS	Sum of NumberCollected	543,360	1,705,334	95,840	21,782	2,307,277	4,673,593
	Sum of NumberBarged	537,127	1,312,560	93,070	21,695	1,588,079	3,552,531
	Sum of NumberBypassed	5,405	389,296	2,765	67	718,741	1,116,274
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	66	40	1	3	12	122
	Sum of FacilityMorts	762	3,438	4	17	445	4,666
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	828	3,478	5	20	457	4,788
LMN	Sum of NumberCollected	209,135	1,215,912	83,192	28,101	957,015	2,493,355
	Sum of NumberBarged	206,930	275,839	9,240	10,125	230,161	732,295
	Sum of NumberBypassed	1,896	940,231	73,949	17,975	726,626	1,760,677
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	27	37	0	0	22	86
	Sum of FacilityMorts	282	796	3	1	206	1,288
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	309	833	3	1	228	1,374
MCN	Sum of NumberCollected	335,575	746,453	76,141	98,978	276,022	1,533,169
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	335,219	745,659	76,091	98,857	275,765	1,531,591
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	50	106	2	18	25	201
	Sum of FacilityMorts	288	624	45	92	210	1,259
	Sum of ResearchMorts	18	58	3	5	20	104
	Sum of TotalProjectMorts	356	788	50	115	255	1,564
Total Sum of NumberCollected		1,371,478	5,973,754	318,162	160,850	5,611,300	13,435,544
Total Sum of NumberBarged		1,019,994	3,462,848	163,405	43,349	3,510,467	8,200,063
Total Sum of NumberBypassed		344,247	2,501,135	154,653	117,323	2,099,057	5,216,415
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		288	328	5	23	106	750
Total Sum of FacilityMorts		2,658	7,581	96	144	1,648	12,127
Total Sum of ResearchMorts		4,291	2,847	3	5	20	7,166
Total Sum of TotalProjectMorts		7,237	10,756	104	172	1,774	20,043

Cumulative Adult Passage at Mainstem Dams Through: 07/01

DAM	EndDate	Spring Chinook						Summer Chinook						Fall Chinook					
		2008		2007		10-Yr Avg.		2008		2007		10-Yr Avg.		2008		2007		10-Yr Avg.	
		Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	07/01	125545	17552	67482	16860	151523	9831	59162	9212	31254	8299	47250	5339	0	0	0	0	0	0
TDA	07/01	95440	15801	53524	15567	106828	7522	47665	9051	25244	6745	38732	3686	0	0	0	0	0	0
JDA	07/01	81771	14925	44005	13864	89148	6122	44915	10001	21361	5546	34261	3160	0	0	0	0	0	0
MCN	07/01	68085	12133	39497	12393	82136	6227	34376	8238	18288	4183	29253	2724	0	0	0	0	0	0
IHR	07/01	53142	7757	28380	7371	54980	3897	19460	4440	5377	1454	9057	1354	0	0	0	0	0	0
LMN	07/01	54512	6885	28397	7102	52688	3599	20529	2312	6489	840	8233	1031	0	0	0	0	0	0
LGS	07/01	50401	7805	23960	7227	50024	3685	15201	3822	4387	1582	6395	1151	0	0	0	0	0	0
LGR	07/01	50146	10946	22905	9085	50643	4197	14983	3294	3798	1477	5894	1114	0	0	0	0	0	0
PRD	06/29	12173	620	6708	489	17360	563	8365	513	8885	397	12917	332	0	0	0	0	0	0
RIS	07/01	12490	1119	5572	2066	13979	962	6232	354	6246	1146	9625	743	0	0	0	0	0	0
RRH	07/01	4065	371	2424	920	5404	397	1822	76	3100	238	4466	240	0	0	0	0	0	0
WEL	06/30	2708	426	2041	752	3980	281	312	2	256	27	603	19	0	0	0	0	0	0
WFA	06/26	10492	220	20942	197	-	-	0	0	0	0	-	-	0	0	0	0	-	-

DAM	Coho						Sockeye			Steelhead			
	2008		2007		10-Yr Avg.		2008	2007	10-Yr Avg.	2008	2007	10-Yr Avg.	Wild 2008
	Adult	Jack	Adult	Jack	Adult	Jack							
BON	0	0	0	0	0	0	193707	19556	46361	17344	10990	16953	5153
TDA	0	0	0	0	0	0	157519	14367	37489	6855	3802	6890	2365
JDA	-1	0	1	0	0	0	160102	16733	38384	10168	4852	8224	3497
MCN	0	0	0	0	0	0	105639	11854	28289	5091	3678	4677	1669
IHR	-1	0	0	0	0	0	146	33	15	4017	3243	3163	1302
LMN	0	0	0	0	0	0	138	15	10	4662	3297	2894	1874
LGS	0	0	0	0	0	0	70	6	8	2865	2668	2690	1076
LGR	0	0	0	0	0	0	57	9	6	7898	10888	7777	2507
PRD	0	0	0	1	0	0	48863	6551	17427	527	92	140	0
RIS	0	0	0	0	0	0	30540	4268	10863	588	84	141	274
RRH	0	0	0	0	1	0	19044	2277	5704	809	218	190	360
WEL	0	0	0	0	0	0	3632	731	1912	312	63	32	199
WFA	0	0	2	0	-	-	0	0	-	16387	15395	-	-

BON and LGR have switched to video counts so the data is delayed.

*PRD is not posting wild steelhead numbers.

These numbers were collected from USACE, Grant PUD, Douglas PUD, Chelan PUD, ODFW and DART.

Wild steelhead numbers are included in the total. Wild Steelhead are defined as unclipped fish.

Historic counts (pre-1996) were obtained from CRITFC and compiled by the FPC.

Historic counts 1997 to present were obtained from the Corps of Engineers.

Page last updated on: 07/03/08

BON counts from January 1, 2008 to March 14, 2008 (our traditional counts begin March 15):

Year	Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
2008	42	0	578	278
2007	22	0	1,677	517