



Fish Passage Center

Weekly Report #08 - 17

June 27, 2008

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 65% and 147% of average at individual sub-basins since the beginning 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	24.45	104
SW Washington Cascades/Cowlitz	2.53	67	67.57	93
Willamette Valley	2.28	65	55.19	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 flow period began on April 3rd in the lower Snake River (Lower Granite) and began on April 10th in the mid (Priest Rapids) and lower (McNary) Columbia River. According to the April Final Water Supply Forecast, the flow objectives this spring

are 100 Kcfs at Lower Granite, 260 Kcfs at McNary, and 135 Kcfs at Priest Rapids. Generally, flows have been high over the last week.

The spring Biological Opinion flow period at Lower Granite Dam ended on June 20th, 2008. Flows at Lower Granite Dam averaged 98.4 Kcfs over the spring season, slightly below the 100 Kcfs flow target. 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 128.1 Kcfs between June 21st, 2008 and June 26th, 2008.

Flows at Priest Rapids have averaged 196.4 Kcfs over the last week and 164.9 Kcfs over the spring season and flows at McNary have averaged 335.1 Kcfs over the last week and 284.4 Kcfs over the spring season.

Grand Coulee Reservoir is at 1285.8 feet (6-26-08) and has refilled 1.6 feet over the last week. Outflows at Grand Coulee have ranged between 131.9 and 212.1 Kcfs over the last week. Inflows last week have ranged between 183.9 Kcfs and 199.2 Kcfs.

The Libby Reservoir is currently at elevation 2437.37 feet (6-26-08) and refilled 4.1 feet last week. Outflows at Libby have decreased after the completion of the sturgeon flow augmentation operations; currently outflows are at 20.2 Kcfs. Inflows at Libby have ranged between 28.1 Kcfs to 40.5 Kcfs over the last week.

Hungry Horse is currently at an elevation of 3555.37 ft (6-26-08) and has refilled 7.4 feet last week. Outflows were 5.1–7.7 Kcfs last week; inflows ranged between 14.9 Kcfs and 21.2 Kcfs last week.

Dworshak is currently at an elevation of 1595.6 feet (6-26-08) and refilled 7.8 feet last week. Outflows at Dworshak were at full powerhouse capacity with slightly more than 5 Kcfs of spill, but decreased to less than full powerhouse at week’s end. Dworshak inflows have ranged between 19.8 and 26.6 Kcfs last week.

The Brownlee Reservoir is at an elevation of 2076.09 feet (June 26th, 2008), and has been holding steady. Outflows at Brownlee Dam have been 12.8 to 20.6 Kcfs over the last week. Inflows at Brownlee Dam have been 14.4 to 17.7 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

High runoff continues to result in flows in excess of hydraulic and generation capacity throughout the lower Snake River. Dworshak Dam outflow was increased for flood control and flow exceeded hydraulic capacity early in the week, but was gradually decreased over the week to less than hydraulic capacity. Two units are presently out of service at Lower Granite Dam limiting powerhouse capacity to about 70 Kcfs at Lower Granite Dam. Flows continue to exceed hydraulic capacity at this project and spill has 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 Lower Monumental Dam summer spill of 17 Kcfs is met whenever possible, but during some periods excess spill occurs due to over generation capacity and excess hydraulic capacity conditions. Spill at Ice Harbor Dam has generally exceeded the court ordered levels of 45 Kcfs daytime spill and gas cap nighttime spill alternating with 30% instantaneous spill, and is spill in excess of hydraulic capacity and excess generation. However, when possible spill has been reduced to address total dissolved gas.

Court ordered spill at the lower Columbia projects began on April 10, 2007. The Court Order calls for the following spill levels at the Federal Lower Columbia River Projects:

Project	Day/Night Spill
McNary	60%/60% vs 40%/40%*
John Day	0/60%; 30%/30% vs 40%/40% test
The Dalles	40%/40%
Bonneville	85 Kcfs/Gas Cap*

*Summer Spill initiated 6/21/08

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 McNary Dam tailrace monitor. At John Day Dam spill has ranged between 30% of daily average flow and about 40% of daily average flow. Spill at The Dalles Dam met, or exceeded the Court Order. Spill at Bonneville Dam has 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. At McNary and Rock Island dams signs of GBT in the non paired fins have not been observed, while at Little Goose 1% of fish sampled had minor signs, at Lower Monumental 4% of fish sampled had minor signs and at Bonneville Dam 1% of fish sampled were detected with minor signs of GBT in the non paired fins.

Smolt Monitoring: Spring migrant indices continued to decrease throughout the hydrosystem over the past week, while subyearling Chinook numbers have continued to increase.

At Snake River SMP sites the daily passage indices for yearling Chinook and steelhead continued to decline. Yearling Chinook indices dropped to below 1,000 per day this week at Lower Granite Dam about half of last weeks' numbers. Steelhead indices dropped to about 1,500 per day this past week. compared to over 2,000 per day last week.

Subyearling migrants predominate in the Columbia River also. At Rock Island Dam indices for yearling Chinook and steelhead averaged less than 90 per day over the past week a little lower than the previous week. Subyearling Chinook indices averaged around 240 fish per day this week compared to indices that approached 900 fish per day three weeks ago.

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.

At Bonneville Dam the subyearling Chinook passage indices averaged nearly 33,000 per day over the past week, with the index reaching nearly 51,000 on June 26.

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. There were no releases of juvenile salmonids scheduled for the Snake River Zone this week.

However, beginning early July, approximately 300,000 spring Chinook parr will be released into the Selway River. Since this is a parr release, these juveniles are not expected to out-migrate until spring 2009. All 300,000 juveniles from this release are unmarked. This is the only release of salmonid juveniles to this zone scheduled to take place 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. A volitional release of approximately 3.45 million subyearling fall Chinook from Ringold Hatchery to the Mid-Columbia River was scheduled to end this week. Approximately 94% of these juveniles are unmarked. There were no other releases of juvenile salmonids to this zone over the past week.

Beginning in early July, approximately 848,000 subyearling summer Chinook will be released from Turtle Rock Hatchery into the Mid-Columbia River. Also, an experimental release of approximately 12,000 coho juveniles from Cle Elem Lake is scheduled to end on or around June 30. This release began on April 28th and fish have slowly out-migrated as the lake has filled throughout the season. There are no other releases of juveniles salmonids 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 1.95 million subyearling fall Chinook were scheduled for release into the Klickitat River this week. These juveniles were reared at the Klickitat Hatchery and are mostly unmarked (about 85%). Finally, approximately 2.0 million subyearling fall Chinook are scheduled for release from the Little White Salmon NFH into the Little White Salmon on or around July 3. There are no other scheduled releases of juvenile salmonids to this zone 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 1,868 and 2,987 adult summer Chinook in the last week. The 2008 summer Chinook count of 52,320 is about 2.02 times greater than the 2007 and 1.33 times greater than the 10 year average. The summer Chinook jack count of 8,339 is about 1.18 times greater than the 2007 count and 1.91 times greater than the 10 year average to date. The adult summer Chinook count total at The Dalles Dam was 40,021, about 76.5% of the Bonneville passage total to date. A total of 25,774 summer Chinook have passed McNary Dam. The adult summer Chinook count total at Lower Granite Dam in the Snake River was 9,887 as of June 26th. The 2008 adult summer Chinook count at Rock Island Dam in the upper Columbia was 2,132 with daily totals ranging from 184 to 424.

As of June 26th, 12,663 steelhead had passed Bonneville Dam. The 2008 count was 1.60 times greater than the 2007 count of 7,896 and had 117 fewer fish than the 10 year average. The 2008 wild steelhead count at Bonneville Dam was 3,248 fish. The daily steelhead counts at The Dalles Dam ranged between 206 and 402 for the week with a cumulative count of 4,490. About 35.4% of the steelhead counted at Bonneville Dam had passed The Dalles Dam. The majority of the 3,979 steelhead at McNary Dam have moved up into the Snake River with the cumulative count at Ice Harbor now at 3,465 for the season. The cumulative count at Priest Rapids Dam was at 325 for the season as of June 25th.

As of June 26th at Bonneville Dam, the adult Shad count was 1,653,567 which was about 69.7% of the 2007 count of 2,371,868 and only 57.7% the 10 year average count of 2,864,528. The 2008 Bonneville Dam sockeye count of 157,486 increased about 10.2 times compared to the 2007 count and increased approximately 4.38 times compared to the 10 year average. A total of 12,936 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 20 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
06/13/2008	181.7	11.0	188.9	13.9	209.6	50.2	212.7	33.3	212.5	46.4	236.4	103.1	228.0	68.3
06/14/2008	155.1	0.2	157.2	0.0	179.8	15.0	178.3	18.4	183.0	41.0	195.4	53.9	190.1	33.6
06/15/2008	175.6	9.0	171.5	8.7	183.8	22.2	175.9	26.1	178.4	40.3	187.8	49.4	178.9	27.3
06/16/2008	194.4	18.5	193.4	19.2	217.8	40.2	213.1	30.3	216.0	43.7	234.1	105.1	224.0	68.4
06/17/2008	198.4	27.7	195.2	32.3	214.1	45.2	210.8	28.5	213.5	43.0	231.3	100.3	221.2	73.1
06/18/2008	191.6	19.8	193.6	22.6	213.1	41.2	210.8	31.2	213.2	43.7	233.2	105.9	223.5	60.6
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

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

Date	Dworshak		Hells Brownlee Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
06/13/2008	15.1	5.5	21.7	23.7	125.2	43.6	120.0	45.5	122.6	39.6	129.1	66.3
06/14/2008	15.0	5.3	20.3	21.1	118.0	29.4	113.2	34.2	115.1	22.4	120.5	38.4
06/15/2008	15.0	5.3	20.9	18.6	116.5	27.5	112.3	33.7	110.9	21.7	116.5	52.3
06/16/2008	15.0	5.3	21.0	23.7	118.1	37.9	116.0	34.4	115.1	20.7	119.9	61.5
06/17/2008	14.8	5.1	20.1	22.9	130.7	60.0	124.7	40.0	124.1	28.4	128.8	68.6
06/18/2008	14.8	5.1	19.0	16.7	131.9	67.8	129.7	55.8	133.7	43.4	137.5	75.3
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	---	---	112.5	40.9	107.1	41.6	109.3	35.4	111.9	74.8

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

Date	McNary		John Day		The Dalles		Bonneville			
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
06/13/2008	367.2	209.9	364.1	128.4	353.1	155.0	387.1	188.4	75.5	111.7
06/14/2008	325.0	162.2	348.9	105.1	338.2	135.0	366.6	168.4	75.7	111.1
06/15/2008	321.6	158.2	317.6	117.4	302.3	121.5	316.3	119.3	74.4	111.2
06/16/2008	335.7	168.7	319.5	121.0	312.8	125.0	318.3	123.5	78.0	105.4
06/17/2008	358.7	183.7	351.3	137.2	332.6	148.3	355.7	156.7	76.5	111.0
06/18/2008	382.8	208.8	384.9	156.7	373.0	161.6	386.4	187.6	75.8	111.6
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

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											
	06/17/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	06/24/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
Lower Monumental Dam											
	06/16/08	Chinook + Steelhead	36	3	3	8.33%	0.00%	3	0	0	0
	06/23/08	Chinook + Steelhead	100	4	4	4.00%	0.00%	4	0	0	0
McNary Dam											
	06/19/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	06/21/08	Chinook + Steelhead	108	0	0	0.00%	0.00%	0	0	0	0
	06/24/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
Rock Island Dam											
	06/16/08	Chinook + Steelhead	39	1	1	2.56%	0.00%	1	0	0	0
	06/20/08	Chinook + Steelhead	50	0	0	0.00%	0.00%	0	0	0	0
	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

Hatchery Releases Last Two Weeks

Hatchery Release Summary									
From:	6/13/2008		to		06/26/08				
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Lookingglass Hatchery	CH0	SP	2009	56,207	06-15-08	07-15-08	Lostine River	Wallowa River
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	FA	2008	100,000	06-11-08	06-15-08	Cedar Flats Acclim.	Selway River
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	FA	2008	100,000	06-11-08	06-15-08	Lukes Gulch Acclim. Nez Perce Tribal	S Fk Clearwater River
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	FA	2008	500,000	06-10-08	06-15-08	Hatchery	Clearwater River M F
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2009	40,000	06-15-08	06-15-08	Meadow Creek - SELW	Selway River
Nez Perce Tribe Total					796,207				
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2008	4,500,000	06-12-08	06-20-08	Priest Rapids Hatchery Ringold Springs	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	CH0	FA	2008	3,450,000	06-09-08	06-27-08	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	1,500,000	06-16-08	06-16-08	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					3,462,000				
Grand Total					12,450,607				

Hatchery Releases Next Two Weeks

Hatchery Release Summary									
From:	6/27/2008		to		7/10/2008				
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	Ringold Springs Hatchery	CH0	FA	2008	3,450,000	06-09-08	06-27-08	Hatchery Ringold Springs	Mid-Columbia River
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					4,298,000				
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2008	12,000	04-28-08	06-30-08	Cle Elum Lake	Yakima River
Yakama Tribe Total					12,000				
Grand Total					6,666,207				

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

	<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>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	<u>Avg</u>	<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>	
6/13	103	104	104	24	127	128	128	22	119	120	120	24	117	118	120	22	118	119	120	24
6/14	102	103	104	24	126	126	127	23	119	119	120	24	115	116	117	23	117	118	119	24
6/15	103	104	105	24	126	127	128	24	119	119	119	24	116	117	117	24	117	117	117	24
6/16	104	105	105	24	127	127	128	23	119	119	120	24	116	117	117	23	117	117	117	24
6/17	105	106	106	24	127	127	128	21	119	119	120	24	117	117	118	21	116	116	117	24
6/18	105	106	106	24	127	128	130	23	118	119	119	24	116	117	119	23	116	117	117	24
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

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>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	<u>Avg</u>	<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>	
6/13	117	118	119	24	115	115	115	24	122	126	129	24	121	122	123	24	121	122	123	24
6/14	116	117	118	24	115	115	115	24	117	117	118	24	120	122	122	24	120	122	122	24
6/15	115	116	116	24	116	116	117	24	118	119	124	24	116	116	116	24	116	116	117	24
6/16	114	114	115	24	115	115	116	23	120	122	127	23	116	117	120	24	117	118	120	24
6/17	116	117	118	24	114	114	115	24	119	120	121	22	117	119	120	24	118	119	121	24
6/18	115	116	118	24	113	113	114	16	118	119	123	24	115	116	116	23	116	117	118	23
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

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>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	<u>Avg</u>	<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>	
6/13	121	121	122	24	123	124	124	24	117	118	119	24	122	125	127	24	120	122	126	24
6/14	120	121	122	24	122	123	124	24	117	118	119	24	118	118	119	24	117	119	122	24
6/15	115	116	117	24	119	120	120	24	119	119	120	24	119	119	123	24	117	118	119	24
6/16	116	117	118	24	120	121	122	24	118	119	120	24	122	125	127	24	120	124	127	24
6/17	117	118	119	24	121	121	122	24	115	115	117	24	121	124	126	24	117	119	120	24
6/18	116	116	117	23	121	122	123	23	114	115	116	24	122	126	127	24	122	124	126	24
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	---	---	---	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	<u>Priest R. Dnst</u>				<u>Pasco</u>				<u>Dworshak</u>				<u>Clrwtr-Peck</u>				<u>Anatone</u>			
	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr	
6/13	122	123	124	24	117	118	119	24	109	110	110	24	104	105	105	24	104	105	106	24
6/14	118	119	121	24	115	116	117	24	109	109	110	24	---	---	---	0	104	105	105	24
6/15	117	118	119	24	114	115	115	24	109	109	109	24	104	105	105	24	104	105	106	24
6/16	122	124	126	24	114	115	116	24	109	109	110	24	104	105	105	24	104	105	106	24
6/17	120	121	123	24	115	116	117	24	109	109	109	24	104	105	105	24	105	105	106	24
6/18	122	124	124	24	114	115	116	24	109	109	109	24	104	105	106	24	105	106	106	24
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	---	---	---	0	115	116	117	24	104	106	109	24	103	104	105	24	105	105	106	24

Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clrwtr-Lewiston</u>				<u>Lower Granite</u>				<u>L. Granite Tlwr</u>				<u>Little Goose</u>				<u>L. Goose Tlwr</u>			
	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr	
6/13	104	105	105	24	104	105	106	24	117	120	126	24	114	115	117	24	118	120	124	24
6/14	103	104	105	24	105	105	105	24	113	114	114	24	116	117	117	24	116	117	117	24
6/15	103	104	105	24	105	105	106	24	113	113	113	24	114	115	117	24	115	115	116	24
6/16	104	104	105	24	105	105	105	24	116	119	121	24	112	112	113	24	115	116	116	24
6/17	103	104	105	24	105	105	105	24	121	123	124	24	110	111	112	23	116	118	124	24
6/18	103	104	105	24	104	104	105	24	122	123	124	24	112	113	114	24	120	122	124	24
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

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

Date	<u>Lower Mon.</u>				<u>L. Mon. Tlwr</u>				<u>Ice Harbor</u>				<u>Ice Harbor Tlwr</u>				<u>McNary-Oregon</u>			
	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr	
6/13	118	119	120	24	121	122	123	24	117	118	118	24	120	122	124	24	---	---	---	0
6/14	118	119	121	24	120	121	122	24	119	119	119	24	117	118	118	24	---	---	---	0
6/15	117	118	118	24	120	120	121	24	118	119	119	24	118	119	120	24	---	---	---	0
6/16	117	118	118	24	119	120	121	24	118	119	119	24	118	119	119	24	---	---	---	0
6/17	115	115	116	24	118	119	124	24	117	118	118	24	119	121	123	24	---	---	---	0
6/18	115	115	119	24	120	123	125	24	115	116	117	24	120	121	123	24	---	---	---	0
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

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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>AVG</u>	<u>High</u>	<u>#</u>	
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr
6/13	115	116	117	24	121	122	122	24	107	108	109	24	119	120	124	24	111	113	117	24
6/14	117	118	118	24	120	120	120	24	110	111	112	24	117	118	119	24	111	112	113	24
6/15	116	117	118	24	119	119	119	24	114	116	116	24	118	119	119	24	112	114	115	24
6/16	116	116	117	24	119	119	120	24	116	117	117	24	118	119	120	24	115	115	116	24
6/17	113	114	115	24	119	119	119	24	114	115	116	24	119	119	123	24	113	113	115	24
6/18	113	115	116	24	121	122	124	24	112	113	113	24	120	121	123	24	115	116	119	24
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

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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>	
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/13	118	119	120	24	115	115	116	24	---	---	---	0	120	120	120	24	123	123	123	24
6/14	116	117	118	24	113	114	116	24	---	---	---	0	117	118	118	24	123	123	124	24
6/15	117	118	119	24	112	112	112	24	---	---	---	0	116	117	118	21	121	123	124	24
6/16	118	119	119	24	113	113	114	24	---	---	---	0	113	114	115	22	122	123	124	24
6/17	118	119	120	24	112	113	114	23	---	---	---	0	115	116	116	24	123	124	124	24
6/18	119	120	122	24	114	115	116	24	---	---	---	0	118	120	121	24	123	125	126	24
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

Two-Week Summary of Passage Indices

Source: Fish Passage Center

Updated: 6/27/2008 8:28

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)
06/13/2008 *	---	0	---	---	1,599	2,888	1,549	149	---	3,381	1,051
06/14/2008 *	---	0	---	---	2,452	1,828	1,265	102	3,453	3,863	1,108
06/15/2008 *	---	0	---	---	2,370	1,672	585	77	---	2,604	1,540
06/16/2008 *	---	---	---	---	2,977	1,860	514	28	4,437	3,191	1,192
06/17/2008 *	---	---	---	---	2,088	1,783	604	39	---	1,565	1,159
06/18/2008 *	---	---	---	---	2,059	3,078	724	53	3,627	2,669	1,220
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	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	22,202	26,594	10,699	720	20,884	30,714	15,655
# Days:	0	3	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	1,586	1,900	764	51	2,983	2,194	1,118
YTD	56,037	78,597	19,672	13,632	3,578,788	2,738,842	1,969,736	22,502	1,355,668	1,685,357	1,284,572

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)
06/13/2008 *	---	0	---	---	10,762	36,650	13,008	61	---	6,383	4,798
06/14/2008 *	---	0	---	---	11,203	15,861	15,154	33	9,645	8,044	4,602
06/15/2008 *	---	0	---	---	14,055	14,356	6,923	50	---	8,240	5,629
06/16/2008 *	---	---	---	---	17,076	17,328	7,254	72	8,858	9,071	5,089
06/17/2008 *	---	---	---	---	16,216	14,830	4,541	48	---	9,671	7,270
06/18/2008 *	---	---	---	---	16,724	30,153	4,781	37	14,447	11,415	9,770
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	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	167,371	378,008	112,398	2,017	415,820	232,552	282,782
# Days:	0	3	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	11,955	27,001	8,028	144	59,403	16,611	20,199
YTD	0	0	2	119	492,320	761,779	259,106	4,609	552,396	397,129	2,373,166

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)
06/13/2008 *	---	0	---	---	0	0	9	275	---	1,435	528
06/14/2008 *	---	0	---	---	0	36	63	215	1,081	1,873	776
06/15/2008 *	---	0	---	---	0	72	12	129	---	1,208	1,395
06/16/2008 *	---	---	---	---	98	29	50	60	1,119	1,246	1,064
06/17/2008 *	---	---	---	---	0	28	7	78	---	743	1,196
06/18/2008 *	---	---	---	---	0	0	0	35	991	445	492
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	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	98	230	164	1,087	5,168	9,001	8,180
# Days:	0	3	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	7	16	12	78	738	643	584
YTD	0	0	0	326	108,979	166,060	142,681	51,883	168,167	360,995	356,031

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)
06/13/2008 *	---	13	---	---	2,636	4,261	1,728	123	---	1,830	370
06/14/2008 *	---	18	---	---	3,133	3,651	1,252	108	1,000	1,685	465
06/15/2008 *	---	16	---	---	2,938	3,064	486	98	---	965	545
06/16/2008 *	---	---	---	---	2,453	3,066	648	56	1,005	1,153	469
06/17/2008 *	---	---	---	---	1,843	2,866	791	67	---	1,105	638
06/18/2008 *	---	---	---	---	2,109	2,938	527	76	438	523	597
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	---	---	---	---	---	---	---	---	---	---	---
Total:	0	47	0	0	28,635	43,687	10,698	930	3,614	11,390	6,039
# Days:	0	3	0	0	14	14	14	14	7	14	14
Average:	0	16	0	0	2,045	3,121	764	66	516	814	431
YTD	4,565	22,292	5,891	10,708	3,439,873	3,687,048	1,545,488	22,315	506,808	1,131,676	448,544

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)
06/13/2008	---	0	---	---	43	122	47	167	---	940	431
06/14/2008	*	0	---	---	34	107	13	92	1,174	1,498	398
06/15/2008	*	0	---	---	33	0	37	153	---	776	609
06/16/2008	*	---	---	---	0	36	0	34	800	1,112	325
06/17/2008	*	---	---	---	0	35	7	98	---	331	558
06/18/2008	*	---	---	---	0	77	19	42	651	504	157
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	*	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	252	586	180	1,139	4,457	6,863	4,469
# Days:	0	3	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	18	42	13	81	637	490	319
YTD	37	0	0	111	27,277	36,372	45,472	38,559	222,453	330,066	140,694

* 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:

6/27/08 8:26 AM

		06/13/08	TO	06/27/08			
		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	99,110	13,625	75	150	17,230	130,190
	Sum of NumberBarged	96,602	13,616	75	150	16,728	127,171
	Sum of NumberBypassed	0	0	0	0	491	491
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	57	2	0	0	3	62
	Sum of FacilityMorts	390	7	0	0	8	405
	Sum of ResearchMorts	2,061	0	0	0	0	2,061
	Sum of TotalProjectMorts	2,508	9	0	0	11	2,528
LGS	Sum of NumberCollected	251,765	17,678	160	390	29,465	299,458
	Sum of NumberBarged	248,308	17,661	160	389	29,441	295,959
	Sum of NumberBypassed	2,941	0	0	0	0	2,941
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	34	4	0	0	1	39
	Sum of FacilityMorts	482	13	0	1	23	519
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	516	17	0	1	24	558
LMN	Sum of NumberCollected	87,181	8,262	130	134	8,237	103,944
	Sum of NumberBarged	86,974	8,196	130	133	7,081	102,514
	Sum of NumberBypassed	37	19	0	0	1,132	1,188
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	19	5	0	0	5	29
	Sum of FacilityMorts	151	42	0	1	19	213
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	170	47	0	1	24	242
MCN	Sum of NumberCollected	198,410	9,988	2,461	2,092	1,712	214,663
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	198,249	9,950	2,458	2,081	1,700	214,438
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	25	10	0	5	3	43
	Sum of FacilityMorts	126	28	3	6	9	172
	Sum of ResearchMorts	10	0	0	0	0	10
	Sum of TotalProjectMorts	161	38	3	11	12	225
Total Sum of NumberCollected		636,466	49,553	2,826	2,766	56,644	748,255
Total Sum of NumberBarged		431,884	39,473	365	672	53,250	525,644
Total Sum of NumberBypassed		201,227	9,969	2,458	2,081	3,323	219,058
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of SampleMorts		135	21	0	5	12	173
Total Sum of FacilityMorts		1,149	90	3	8	59	1,309
Total Sum of ResearchMorts		2,071	0	0	0	0	2,071
Total Sum of TotalProjectMorts		3,355	111	3	13	71	3,553

YTD Transportation Summary

Source: Fish Passage Center

Updated:

6/27/08 8:26 AM

TO: 06/27/08

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	253,028	2,393,775	68,779	13,189	2,161,816	4,890,587
	Sum of NumberBarged	246,974	1,962,078	66,885	12,728	1,783,031	4,071,696
	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	127	148	2	2	49	328
	Sum of FacilityMorts	1,180	2,811	44	35	811	4,881
	Sum of ResearchMorts	3,020	2,789	0	0	0	5,809
	Sum of TotalProjectMorts	4,327	5,748	46	37	860	11,018
LGS	Sum of NumberCollected	488,492	1,703,764	95,840	21,672	2,304,404	4,614,172
	Sum of NumberBarged	482,710	1,310,992	93,070	21,585	1,585,208	3,493,565
	Sum of NumberBypassed	5,032	389,296	2,765	67	718,741	1,115,901
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	52	40	1	3	12	108
	Sum of FacilityMorts	698	3,436	4	17	443	4,598
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	750	3,476	5	20	455	4,706
LMN	Sum of NumberCollected	189,578	1,215,142	83,189	28,098	956,606	2,472,613
	Sum of NumberBarged	187,436	275,079	9,237	10,122	229,860	711,734
	Sum of NumberBypassed	1,880	940,222	73,949	17,975	726,520	1,760,546
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	23	36	0	0	21	80
	Sum of FacilityMorts	239	796	3	1	205	1,244
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	262	832	3	1	226	1,324
MCN	Sum of NumberCollected	258,507	749,893	78,052	102,056	276,670	1,465,178
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	258,139	749,064	77,990	101,913	276,410	1,463,516
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	50	112	3	22	25	212
	Sum of FacilityMorts	300	653	56	110	213	1,332
	Sum of ResearchMorts	18	58	3	5	20	104
	Sum of TotalProjectMorts	368	823	62	137	258	1,648
Total Sum of NumberCollected		1,189,605	6,062,574	325,860	165,015	5,699,496	13,442,550
Total Sum of NumberBarged		917,120	3,548,149	169,192	44,435	3,598,099	8,276,995
Total Sum of NumberBypassed		266,778	2,504,531	156,552	120,379	2,099,596	5,147,836
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		252	336	6	27	107	728
Total Sum of FacilityMorts		2,417	7,696	107	163	1,672	12,055
Total Sum of ResearchMorts		3,038	2,847	3	5	20	5,913
Total Sum of TotalProjectMorts		5,707	10,879	116	195	1,799	18,696

Cumulative Adult Passage at Mainstem Dams Through: 06/26

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	06/26	125545	17552	67482	16860	151523	9831	52320	8339	25924	7064	39333	4356	0	0	0	0	0	0
TDA	06/26	95440	15801	53524	15567	106828	7522	40021	7842	21088	5526	30965	2956	0	0	0	0	0	0
JDA	06/26	81771	14925	44005	13864	89148	6122	35921	8106	17940	4131	26263	2384	0	0	0	0	0	0
MCN	06/26	68085	12133	39497	12393	82136	6227	25774	6711	14037	3065	21483	2040	0	0	0	0	0	0
IHR	06/24	53142	7757	28380	7371	54980	3897	15332	3467	3655	896	6836	864	0	0	0	0	0	0
LMN	06/26	54512	6885	28397	7102	52688	3599	16371	1885	4719	728	6541	740	0	0	0	0	0	0
LGS	06/26	50401	7805	23960	7227	50024	3685	11438	2654	3264	1099	4844	768	0	0	0	0	0	0
LGR	06/26	50146	10946	22905	9085	50643	4197	9887	2277	2577	967	4188	697	0	0	0	0	0	0
PRD	06/25	12173	620	6708	489	17360	563	3986	348	5024	338	7478	214	0	0	0	0	0	0
RIS	06/25	12490	1119	5572	2066	13979	962	2132	145	2526	473	3264	228	0	0	0	0	0	0
RRH	06/25	4065	371	2424	920	5404	397	291	19	809	55	1136	44	0	0	0	0	0	0
WEL	06/25	2533	412	1527	720	3341	262	0	0	0	0	0	0	0	0	0	0	0	0
WFA	06/23	10126	210	20533	193	-	-	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	2008	2007	Avg.	2008	2007	Avg.	2008	
BON	0	0	0	0	0	0	157486	15427	35932	12663	7896	12780	3248	
TDA	0	0	0	0	0	0	119015	10772	27499	4490	2746	4774	1431	
JDA	-1	0	1	0	0	0	108179	12519	26882	7220	3876	6314	2519	
MCN	0	0	0	0	0	0	61720	7354	17756	3979	3114	3576	1416	
IHR	-1	0	0	0	0	0	20	5	3	3465	2809	2412	1222	
LMN	0	0	0	0	0	0	12	6	0	4330	2920	2424	1809	
LGS	0	0	0	0	0	0	9	0	0	2766	2546	2451	1052	
LGR	0	0	0	0	0	0	3	2	0	7822	10753	7617	2483	
PRD	0	0	0	1	0	0	12936	2544	6276	325	73	81	0	
RIS	0	0	0	0	0	0	2391	708	1774	436	66	85	204	
RRH	0	0	0	0	0	0	1057	351	847	703	198	156	321	
WEL	0	0	0	0	0	0	391	123	288	267	56	26	169	
WFA	0	0	2	0	-	-	0	0	-	16072	14786	-	-	

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: 06/27/08

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