



Fish Passage Center

Weekly Report #08 - 16

June 20, 2008

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 99% and 202% of average at individual sub-basins over the beginning of June. Precipitation above The Dalles has been 139% of average over June. Over the entire water year, precipitation has generally been near or above average.

Table 1. Summary of June 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 1-16		Water Year 2008 October 1, 2007 to June 1-16 2008	
	Observed (inches)	% Average	Observed (inches)	% Average
	Columbia Above Coulee	1.74	136	19.65
Snake River Above Ice Harbor	0.99	127	14.87	103
Columbia Above The Dalles	1.33	139	19.29	102
Kootenai	1.45	111	18.15	91
Clark Fork	1.75	170	14.57	109
Flathead	2.40	170	18.44	105
Pend Oreille/Spokane	1.74	149	26.85	102
Central Washington	0.37	107	5.63	73
Snake River Plain	0.51	99	7.59	84
Salmon/Boise/Payette	0.90	115	17.34	102
Clearwater	2.69	202	27.13	106
SW Washington Cascades/Cowlitz	2.77	176	60.34	92
Willamette Valley	1.68	140	56.88	104

Table 2 displays the May Final and June final runoff volume forecasts for multiple reservoirs. Water Supply Forecasts were generally similar between the May Final and June Final forecasts with Hungry Horse showing the biggest change by increasing 8% from the May Final to June Final forecast. The current forecast at The Dalles between January and July is 98200 Kaf (92% of average).

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

Location	May Final		June Final	
	% Average (1971- 2000)	Probable Runoff Volume (Kaf)	% Average (1971- 2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	91	97300	92	98200
Grand Coulee (Jan-July)	95	59800	95	59800
Libby Res. Inflow, MT (Jan-July)	92	5820	93	5840
Hungry Horse Res. Inflow, MT (Jan-July)	91	2030	99	2200
Lower Granite Res. Inflow (Apr- July)	101	21800	102	21900
Brownlee Res. Inflow (Apr-July)	77	4860	76	4780
Dworshak Res. Inflow (Apr-July)	111	2930	109	2880

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. Flows at Lower Granite Dam have averaged 124.8 Kcfs over the last week and 97.98 Kcfs over the spring season, flows at Priest Rapids have averaged 212.1 Kcfs over the last week and 161.9 Kcfs over the spring season and flows at McNary have averaged 350.1 Kcfs over the last week and 279.4 Kcfs over the spring season.

Grand Coulee Reservoir is at 1284.2 feet (6-19-08) and has refilled 5.7 feet over the last week. Outflows at Grand Coulee have ranged between 155.1 and 198.4 Kcfs over the last week. Inflows last week have ranged between 215.7 Kcfs and 235.8 Kcfs.

The Libby Reservoir is currently at elevation 2433.25 feet (6-19-08) and refilled 1.55 feet last week. Outflows at Libby have increased in accordance with SOR 2008 FWS1, which has asked for specific sturgeon and bull trout flow augmentation operations, currently outflows are at 26.2 Kcfs. Inflows at Libby have ranged between 28.7 Kcfs to 33.3 Kcfs over the last week.

Hungry Horse is currently at an elevation of 3548.2 ft (6-19-08) and has refilled 4 feet last week. Outflows were 6.9-9.0 Kcfs last week; inflows ranged between 10.0 Kcfs and 17.7 Kcfs last week.

Dworshak is currently at an elevation of 1587.8 feet (6-19-08) and refilled 7.2 feet last week. Outflows at Dworshak have been at full powerhouse capacity with slightly more than 5 Kcfs of spill. Total Outflow (powerhouse and spill) at Dworshak Dam has been approximately 15 Kcfs. The increase in outflow at Dworshak is due to a flood control operation based on remaining snow-covered area in the Dworshak Basin. Dworshak inflows have ranged between 21.4 and 23.7 Kcfs last week.

The Brownlee Reservoir is at an elevation of 2076.55 feet (June 19th, 2008), filling 1.15 feet last week. Outflows at Brownlee Dam have been 15.1 to 21.1 Kcfs over the last week. Inflows at Brownlee Dam have been 19.0 to 21.7 Kcfs over the last week.

Spill: In accordance with the Court Order, spill was initiated at the Snake River Projects at 0001 hours on April 3, 2007. The Court Order calls for the following spill levels at the Federal Snake River Projects:

Project	Day/Night Spill
Lower Granite	20Kcfs/20Kcfs
Little Goose	30%/30%
Lower Monumental	Gas Cap/Gas Cap
Ice Harbor	30%/30% vs 45Kcfs/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 has exceeded hydraulic capacity. In addition, Dworshak was added to the spill priority list in order to manage excess spill system-wide. Two units are presently out of service at Lower Granite Dam limiting powerhouse capacity to about 70 Kcfs at Lower Granite Dam. One of the two units came back into service on 6/12, but was back out of service on 6/16. Flows continue to exceed hydraulic capacity at this project. Little Goose Dam has spilled between 30% and 43% of daily flow over the past week. At Lower Monumental Dam spill has been in excess of hydraulic capacity or generation capacity and has ranged from 21 to 43 Kcfs of daily average flow over the week, with higher hourly spill during nighttime hours. 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 at times 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	40%/40%
John Day	0/60%; 30%/30% vs 40%/40% test
The Dalles	40%/40%
Bonneville	100 Kcfs/100 Kcfs

Spill at McNary exceeded the Court ordered spill this past week. 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 exceeded the Court Order, ranging between a daily average of 123 Kcfs and 188 Kcfs, and is spill in excess of hydraulic and generation capacity. 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 occurred at all the Snake River monitoring sites, Rock Island Dam in the Mid Columbia, and at McNary and Bonneville dams in the lower Columbia. At Lower Granite, McNary and Bonneville dams, signs of GBT have not been observed, while at Little Goose 1% of fish sampled had minor signs, at Lower Monumental 8% of fish sampled had minor signs and at Rock Island 2.6 % of fish sampled were detected with minor signs of GBT.

Smolt Monitoring: Spring migrant indices continued to decrease in the Snake River 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 remained near 2,000 per day this week at Lower Granite Dam just slightly below last week's numbers. Steelhead indices dropped more precipitously with the average daily indices falling below 3,000 per day compared to over 5,000 per day last week.

Spring migrants continue to predominate in the Columbia River. At Rock Island Dam indices for yearling Chinook and steelhead averaged about 80 per day over the past week a little lower than the previous week. Subyearling Chinook indices averaged around 50 fish per day this week compared to indices that approached 900 fish per day two weeks ago.

In the lower River indices for all spring migrants were down, while subyearling Chinook indices continued to increase. At McNary the subyearling Chinook index rose to 14,000 on June 18.

At Bonneville Dam the traveling screens have been reinstalled at most units in Powerhouse 2 over the past several days. Some of the increase in subyearling Chinook passage indices may have been due to increased guidance efficiency as the number of screened units increased throughout the week.

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. Two releases of spring Chinook parr were scheduled to begin this week. The first was a release of approximately 40,000 parr into Meadow Creek, a tributary of the Selway River. The second was a release of about 56,000 parr from the Lostine Acclimation Facility on the Wallowa River. Although they are being released this year, these parr are not expected to out-migrate until spring of 2009. There were no other scheduled releases of salmonid juveniles for this week.

In addition to the parr being released this week, approximately 300,000 spring Chinook parr are scheduled for release into the Selway River, beginning early July. These juveniles are expected to out-migrate in spring 2009 and are 100% unmarked. Over the next two weeks, there are no other releases to this zone.

Mid-Columbia Zone: The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam. Today was the last day of the volitional release of approximately 4.5 million subyearling fall Chinook from Priest Rapids Hatchery to the Mid-Columbia River. In addition, Ringold Hatchery continued its volitional release of about 3.45 million subyearling fall Chinook to the Mid-Columbia River. This release is scheduled to continue through June 27th. Finally, a release of about 242,400 subyearling summer Chinook from Wells Hatchery ended this week. There were no other releases of juvenile salmonids to this zone over the past week.

Approximately 848,000 subyearling summer Chinook are scheduled for release from Turtle Rock Hatchery into the Mid-Columbia River over the next two weeks. Also, an experimental release of approximately 12,000 coho juveniles from Cle Elem Lake is scheduled to end over the next two weeks. This release began on April 28th and fish have slowly out-migrated as the lake 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. The release of subyearling fall Chinook from Klickitat Hatchery has been split between two time periods, June 16th and June 24th. Approximately 1.5 million subyearlings were released to the Klickitat River on June 16th. Of these, about 85% are unmarked. About 1.95 million subyearling fall Chinook are anticipated for the June 24th release. As with the June 16th release, 85% of these subyearlings are unmarked.

Finally, due to the cooler temperatures this spring, the release of subyearling fall Chinook from Little White Salmon NFH has been postponed to early July. It is expected that the fish will reach their 90 fish per pound goal by this time. In all, approximately 2.0 million subyearling fall Chinook are anticipated for this release. 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 1,721 and 2,683 adult summer Chinook in the last week. The 2008 summer Chinook count of 35,586 is about 2.04 times greater than the 2007 and 1.30 times greater than the 10 year average. The summer Chinook jack count of 6,507 is about 1.44 times greater than the 2007 count and 2.26 times greater than the 10 year average to date.

As of June 17th, the last date for spring Chinook at Lower Granite, the 2008 adult spring Chinook counts were 50,146. The 2008 spring Chinook count at Lower Granite was 2.18 times greater than the 2007 count and had 497 fewer fish than the 10 year average. The 2008 spring Chinook jack count of 10,946 was 1.20 times greater than the 2007 count and 2.60 times greater than the 10 year average.

The 2008 Bonneville adult steelhead count was 8,545 fish, as of June 19th, which was 1.43 times greater than the 2007 count of 5,955 fish and had 128 fewer fish than the 10 year average. The 2008 wild steelhead count at Bonneville Dam was 1,957 fish. At Willamette Falls Dam, the 2008 count for steelhead was 15,004, as of June 16th. This year's steelhead count increased 1.10 times when compared to the 2007 count of 13,592 at Willamette Falls Dam. The 2008 adult sockeye count at Bonneville Dam was 66,468 so far this season. The 2008 sockeye count increased about 10.11 times compared to the 2007 count and increased approximately 4.43 times compared to the 10 year average. As of June 19th at Bonneville Dam, the adult Shad count was 809,503 which was only 31.4% of the 2007 count of 2,575,277 and only 26.1% the 10 year average count of 3,093,245.

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
06/06/2008	182.8	8.9	183.4	19.5	210.9	42.2	207.2	27.4	211.9	22.7	227.5	98.1	220.3	59.2
06/07/2008	181.9	5.0	182.9	17.9	205.1	39.9	206.4	31.2	209.5	21.6	226.2	94.8	216.1	60.2
06/08/2008	180.4	0.1	171.3	0.0	183.0	15.7	180.7	18.2	189.6	34.3	208.3	70.1	205.8	43.8
06/09/2008	206.3	2.6	201.7	13.7	224.4	60.6	221.4	43.3	218.7	38.1	228.3	93.1	218.2	62.9
06/10/2008	205.6	8.6	217.4	37.7	238.3	81.9	242.1	49.9	241.2	44.8	269.8	145.4	255.4	91.8
06/11/2008	209.4	29.8	221.8	36.7	241.8	85.6	250.2	59.2	234.0	39.4	261.8	140.3	250.0	88.5
06/12/2008	205.9	28.9	198.0	15.3	219.7	66.9	220.7	35.7	219.6	45.3	245.0	113.0	230.9	67.8
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

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
06/06/2008	7.0	0.5	26.6	28.6	140.1	69.5	133.6	42.4	136.4	28.0	143.9	82.3
06/07/2008	7.1	0.2	27.0	27.7	138.7	68.1	132.1	40.8	136.4	34.8	141.9	76.6
06/08/2008	7.1	0.0	25.5	27.5	125.1	55.4	119.9	36.0	123.7	34.2	130.2	63.1
06/09/2008	9.1	0.8	23.7	27.4	121.6	52.2	117.4	35.1	117.5	30.8	124.6	66.1
06/10/2008	14.2	4.5	24.2	25.8	120.8	51.1	116.2	40.3	119.0	40.2	123.1	77.2
06/11/2008	15.0	5.3	22.8	23.6	122.4	60.0	116.4	49.6	119.2	51.7	124.6	92.2
06/12/2008	15.1	5.4	22.2	26.5	124.2	55.9	119.4	48.0	120.8	46.8	125.4	77.5
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	---	---	133.0	65.6	127.4	44.3	129.2	36.1	134.2	67.6

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		
06/06/2008	388.3	213.7	395.9	135.0	389.8	153.2	414.5	198.2	77.5	127.4
06/07/2008	365.7	191.0	370.8	117.1	359.4	145.8	389.0	173.5	78.5	125.6
06/08/2008	359.8	184.8	381.5	114.4	364.7	144.3	376.7	161.6	77.0	126.7
06/09/2008	329.6	154.2	320.2	97.9	313.0	126.4	346.9	129.2	75.3	131.1
06/10/2008	362.7	200.7	346.0	126.8	335.1	150.4	342.4	125.5	75.0	130.5
06/11/2008	384.1	223.9	385.2	165.1	370.3	168.0	393.9	173.4	76.7	132.4
06/12/2008	383.8	224.6	401.7	164.7	393.0	165.0	403.0	204.0	74.4	113.2
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

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
Lower Granite Dam											
	06/10/08	Chinook + Steelhead	36	0	0	0.00%	0.00%	0	0	0	0
Little Goose Dam											
	06/10/08	Chinook + Steelhead	100	3	3	3.00%	0.00%	3	0	0	0
	06/17/08	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
McNary Dam											
	06/13/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/15/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	06/14/08	Chinook + Steelhead	103	0	0	0.00%	0.00%	0	0	0	0
	06/14/08	Chinook + Steelhead	100	1	1	1.00%	1.00%	1	0	0	0
Rock Island Dam											
	06/12/08	Chinook + Steelhead	100	1	0	0.00%	0.00%	0	0	0	0
	06/16/08	Chinook + Steelhead	39	1	1	2.56%	0.00%	1	0	0	0

Hatchery Releases Last Two Weeks

From:		6/6/2008	to		06/19/08				
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	1,500,000	06-16-08	06-16-08	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					1,512,000				
Grand Total					10,500,607				

Hatchery Releases Next Two Weeks

Hatchery Release Summary									
From:		6/20/2008	to		7/3/2008				
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	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	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	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					9,040,400				
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					13,358,607				

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>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>	
6/6	103	103	104	24	129	130	131	23	119	119	120	24	116	117	119	23	116	116	118	23
6/7	104	104	105	24	129	129	130	21	118	119	119	24	115	116	117	21	115	116	116	24
6/8	103	103	104	24	129	129	130	23	119	119	119	24	115	116	117	23	115	116	116	24
6/9	104	105	105	24	129	129	130	23	120	121	122	24	117	118	119	23	116	116	117	24
6/10	105	105	106	24	128	129	130	23	120	121	121	24	117	118	119	23	115	116	116	24
6/11	104	104	104	9	128	128	129	23	119	120	120	24	117	118	119	23	116	116	117	24
6/12	102	102	103	11	128	128	129	23	119	119	119	24	118	119	121	23	116	117	117	24
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

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>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>	
6/6	114	114	116	24	117	119	121	24	120	122	123	24	116	117	118	24	117	117	120	24
6/7	115	116	116	24	113	113	114	24	118	120	123	24	116	117	117	24	117	118	119	24
6/8	114	115	116	24	112	113	113	24	115	115	117	24	115	117	118	24	115	117	119	24
6/9	115	115	116	24	114	115	115	24	121	123	125	24	115	116	118	24	116	117	118	24
6/10	116	117	119	24	113	114	114	24	125	126	127	24	117	118	120	24	119	120	121	24
6/11	118	119	119	24	114	114	115	24	126	128	131	24	121	122	122	24	122	123	123	24
6/12	116	116	116	24	114	115	115	24	123	124	125	24	123	123	125	24	123	124	125	24
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

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>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>	
6/6	117	119	121	24	118	120	122	24	118	118	119	24	122	124	126	24	121	123	124	24
6/7	116	116	117	24	118	118	119	24	115	116	118	24	121	125	126	24	118	120	121	24
6/8	115	116	117	24	118	119	120	24	112	113	114	24	116	117	125	24	118	121	123	24
6/9	117	117	118	24	119	120	120	24	115	116	116	24	119	121	127	24	115	116	119	24
6/10	117	118	119	24	121	122	122	24	114	114	114	16	127	127	128	16	121	123	126	16
6/11	120	121	122	24	124	125	126	24	113	114	114	20	126	127	128	19	121	122	124	19
6/12	121	123	124	24	124	125	126	24	115	116	118	24	122	123	127	22	122	124	126	24
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	---	---	---	0	---	---	---	0	---	---	---	0
6/19	117	118	119	24	122	123	124	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	
6/6	121	122	122	24	112	113	114	24	102	104	109	24	102	103	103	24	104	105	105	24
6/7	119	120	121	24	112	113	113	24	100	102	108	24	102	102	103	24	104	104	104	24
6/8	119	120	121	24	113	115	115	24	99	99	100	24	102	103	104	24	104	105	106	24
6/9	118	119	120	24	113	115	115	24	101	103	105	24	102	103	104	24	104	105	105	24
6/10	121	121	123	16	109	111	113	24	107	108	110	24	102	103	103	24	103	103	104	24
6/11	122	123	124	17	114	115	115	24	109	109	109	24	103	103	103	24	103	104	104	24
6/12	122	124	125	24	115	116	117	24	109	109	110	24	103	104	104	24	104	105	106	24
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	---	---	---	0	114	115	116	24	109	109	109	24	104	105	106	24	105	106	106	24
6/19	---	---	---	0	116	117	118	24	108	109	109	24	104	105	106	24	105	106	107	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	
6/6	102	102	102	24	104	105	105	24	123	124	124	24	119	119	120	24	118	119	119	24
6/7	101	102	102	24	104	104	105	24	123	123	124	24	115	116	117	24	117	118	119	24
6/8	102	103	104	24	103	104	104	24	121	121	122	24	114	115	116	24	116	116	117	24
6/9	102	102	103	24	104	105	105	24	120	121	122	24	116	116	117	24	116	117	117	24
6/10	101	102	102	24	104	105	105	24	119	119	123	24	114	114	115	24	117	118	124	24
6/11	102	102	102	24	103	103	104	24	121	123	125	24	111	112	112	24	118	121	125	24
6/12	103	104	104	24	103	103	104	24	120	122	125	24	111	112	113	24	118	121	124	24
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

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	
6/6	120	122	123	24	120	121	122	24	117	118	119	24	120	121	121	24	---	---	---	0
6/7	116	116	117	24	118	118	118	24	114	115	115	24	119	120	121	24	---	---	---	0
6/8	116	117	117	24	117	117	118	24	114	115	115	24	118	119	119	24	---	---	---	0
6/9	117	117	117	24	118	119	120	24	116	117	117	24	118	119	119	24	---	---	---	0
6/10	114	114	115	24	118	120	123	24	113	114	115	24	119	120	124	24	---	---	---	0
6/11	113	114	114	24	120	122	123	24	112	113	113	24	122	124	124	24	---	---	---	0
6/12	117	117	118	24	120	121	123	24	114	114	115	24	119	120	122	24	---	---	---	0
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

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>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>				
6/6	113	114	114	24	121	121	121	24	110	110	111	24	119	119	119	24	111	111	112	24
6/7	110	110	111	24	120	120	120	24	110	110	110	24	117	118	118	24	110	111	111	24
6/8	110	111	112	24	119	120	121	24	109	109	109	24	117	119	119	24	110	111	112	24
6/9	113	113	114	24	119	119	119	24	109	109	109	24	116	117	118	24	111	111	111	24
6/10	110	111	112	24	---	---	---	0	107	108	108	24	117	119	122	24	108	109	110	24
6/11	108	109	110	24	121	121	121	24	106	106	106	24	121	122	125	24	110	112	116	24
6/12	112	113	114	24	122	123	124	24	105	105	106	24	121	122	125	24	112	114	117	24
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

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>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>				
6/6	117	117	117	24	113	113	114	24	---	---	---	0	116	117	118	24	123	124	124	24
6/7	116	117	118	24	112	113	113	24	---	---	---	0	115	116	116	24	122	122	122	24
6/8	116	117	117	24	112	112	113	24	---	---	---	0	116	116	117	24	122	123	124	24
6/9	116	117	118	24	113	114	114	24	---	---	---	0	115	117	117	24	123	124	124	24
6/10	116	117	118	24	110	111	111	24	---	---	---	0	110	111	112	24	123	124	124	24
6/11	117	118	119	24	110	111	111	24	---	---	---	0	113	115	115	24	122	122	123	24
6/12	118	119	121	24	112	113	114	23	---	---	---	0	117	119	120	24	124	124	125	24
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

Two-Week Summary of Passage Indices

Source: Fish Passage Center

Updated: 6/20/2008 9:16

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)
06/06/2008 *	---	1	---	---	4,248	8,881	5,290	212	8,035	12,662	1,305
06/07/2008 *	---	1	---	---	2,437	6,710	3,731	135	---	8,654	859
06/08/2008 *	---	1	---	---	2,482	5,837	3,038	144	9,157	8,543	1,574
06/09/2008 *	---	---	---	---	2,539	3,449	1,330	199	---	7,159	1,916
06/10/2008 *	---	2	---	---	2,035	5,049	1,610	158	10,886	7,822	1,602
06/11/2008 *	---	1	---	---	2,493	6,081	2,308	173	---	5,520	1,494
06/12/2008 *	---	2	---	---	2,089	3,533	1,525	174	6,855	5,058	964
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	---	---	---	---	---	---	---	---	---	---	---
Total:	0	8	0	0	34,131	55,391	24,973	1,763	46,450	75,723	18,268
# Days:	0	9	0	0	14	14	14	14	7	14	14
Average:	0	1	0	0	2,438	3,957	1,784	126	6,636	5,409	1,305
YTD	56,037	78,597	19,672	13,632	3,572,394	2,728,099	1,965,178	22,350	1,346,301	1,674,948	1,277,471

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)
06/06/2008 *	---	0	---	---	15,335	33,703	19,984	48	4,381	7,061	3,852
06/07/2008 *	---	0	---	---	8,357	27,032	13,990	29	---	5,325	2,992
06/08/2008 *	---	0	---	---	10,024	34,751	15,150	29	5,840	3,961	3,535
06/09/2008 *	---	---	---	---	7,351	25,599	15,266	29	---	6,682	3,945
06/10/2008 *	---	0	---	---	12,166	21,811	12,533	32	7,941	5,215	2,635
06/11/2008 *	---	0	---	---	24,983	38,826	14,413	39	---	5,613	3,575
06/12/2008 *	---	0	---	---	15,820	37,592	10,941	94	12,000	6,657	3,857
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	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	193,698	391,275	160,675	637	63,112	102,136	76,410
# Days:	0	9	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	13,836	27,948	11,477	46	9,016	7,295	5,458
YTD	0	0	2	119	424,611	555,732	205,106	2,929	169,526	226,199	2,142,403

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)	
06/06/2008	*	---	0	---	---	104	384	367	928	5,867	6,455	1,019
06/07/2008	*	---	0	---	---	199	507	67	599	---	5,376	827
06/08/2008	*	---	0	---	---	143	73	69	661	3,986	4,582	876
06/09/2008	*	---	---	---	---	45	428	28	670	---	3,436	1,715
06/10/2008	*	---	0	---	---	43	292	21	399	3,106	3,159	1,059
06/11/2008	*	---	0	---	---	0	88	0	286	---	1,892	928
06/12/2008	*	---	0	---	---	50	0	53	226	2,258	1,714	452
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		---	---	---	---	---	---	---	---	---	---	---
Total:		0	0	0	0	682	1,937	752	4,621	18,408	34,185	12,487
# Days:		0	9	0	0	14	14	14	14	7	14	14
Average:		0	0	0	0	49	138	54	330	2,630	2,442	892
YTD		0	0	0	326	108,979	165,995	142,664	51,648	166,190	359,565	353,462

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)	
06/06/2008	*	---	79	---	---	8,185	13,067	7,494	191	2,277	6,271	923
06/07/2008	*	---	77	---	---	5,074	9,784	5,196	141	---	4,966	796
06/08/2008	*	---	52	---	---	6,826	10,664	2,582	133	1,560	5,060	566
06/09/2008	*	---	---	---	---	3,876	6,560	3,056	207	---	3,532	629
06/10/2008	*	---	66	---	---	4,632	4,099	2,645	138	1,466	2,557	904
06/11/2008	*	---	29	---	---	3,398	4,095	1,708	136	---	2,360	379
06/12/2008	*	---	13	---	---	3,582	5,279	1,844	109	1,284	1,803	331
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		---	---	---	---	---	---	---	---	---	---	---
Total:		0	363	0	0	52,505	76,356	30,919	1,676	9,030	34,913	7,772
# Days:		0	9	0	0	14	14	14	14	7	14	14
Average:		0	40	0	0	3,750	5,454	2,209	120	1,290	2,494	555
YTD		4,565	22,292	5,891	10,708	3,428,170	3,666,169	1,541,184	22,006	505,637	1,128,650	445,749

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)	
06/06/2008	*	---	0	---	---	104	1,146	917	89	3,926	6,995	1,592
06/07/2008	*	---	0	---	---	50	725	333	81	---	4,812	1,369
06/08/2008	*	---	0	---	---	191	290	511	47	6,420	4,201	1,282
06/09/2008	*	---	---	---	---	45	428	168	56	---	4,056	1,630
06/10/2008	*	---	0	---	---	43	363	106	57	5,284	4,412	1,343
06/11/2008	*	---	0	---	---	49	176	75	85	---	2,902	816
06/12/2008	*	---	0	---	---	50	0	0	77	3,061	1,627	964
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	*	---	---	---	---	---	---	---	---	---	---	---
Total:		0	0	0	0	642	3,547	2,239	1,200	21,316	34,581	11,602
# Days:		0	9	0	0	14	14	14	14	7	14	14
Average:		0	0	0	0	46	253	160	86	3,045	2,470	829
YTD		37	0	0	111	27,135	36,205	45,421	38,128	220,621	328,779	138,831

* 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:

6/20/08 9:18 AM

		Species					
		06/06/08 TO 06/20/08					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	112,000	19,735	375	350	29,476	161,936
	Sum of NumberBarged	111,985	19,239	474	397	28,759	160,854
	Sum of NumberBypassed	1	392	0	0	2,404	2,797
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	66	0	0	0	5	71
	Sum of FacilityMorts	469	20	1	3	27	520
	Sum of ResearchMorts	1,967	0	0	0	0	1,967
	Sum of TotalProjectMorts	2,502	20	1	3	32	2,558
LGS	Sum of NumberCollected	250,090	36,014	1,317	2,370	50,327	340,118
	Sum of NumberBarged	241,151	39,961	1,565	2,893	56,568	342,138
	Sum of NumberBypassed	3,165	51	0	0	87	3,303
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	28	1	0	2	2	33
	Sum of FacilityMorts	206	508	2	0	21	737
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	234	509	2	2	23	770
LMN	Sum of NumberCollected	115,754	18,134	581	1,702	22,702	158,873
	Sum of NumberBarged	121,662	25,935	876	1,698	27,209	177,380
	Sum of NumberBypassed	354	26	0	0	1,436	1,816
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	9	3	0	0	6	18
	Sum of FacilityMorts	124	31	1	0	24	180
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	133	34	1	0	30	198
MCN	Sum of NumberCollected	28,961	21,518	8,419	9,878	4,138	72,914
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	28,802	21,365	8,399	9,824	4,112	72,502
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	22	32	1	14	6	75
	Sum of FacilityMorts	137	121	19	40	20	337
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	159	153	20	54	26	412
Total Sum of NumberCollected		506,805	95,401	10,692	14,300	106,643	733,841
Total Sum of NumberBarged		474,798	85,135	2,915	4,988	112,536	680,372
Total Sum of NumberBypassed		32,322	21,834	8,399	9,824	8,039	80,418
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of SampleMorts		125	36	1	16	19	197
Total Sum of FacilityMorts		936	680	23	43	92	1,774
Total Sum of ResearchMorts		1,967	0	0	0	0	1,967
Total Sum of TotalProjectMorts		3,028	716	24	59	111	3,938

YTD Transportation Summary

Source: Fish Passage Center

Updated:

6/20/08 9:18 AM

TO: 06/20/08

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	217,093	2,390,375	68,779	13,114	2,155,586	4,844,947
	Sum of NumberBarged	205,395	1,957,532	66,885	12,653	1,775,881	4,018,346
	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	100	146	2	2	47	297
	Sum of FacilityMorts	985	2,809	44	35	808	4,681
	Sum of ResearchMorts	1,967	2,789	0	0	0	4,756
	Sum of TotalProjectMorts	3,052	5,744	46	37	855	9,734
LGS	Sum of NumberCollected	345,894	1,696,287	95,795	21,552	2,289,882	4,449,410
	Sum of NumberBarged	316,970	1,301,898	93,025	21,441	1,568,958	3,302,292
	Sum of NumberBypassed	3,566	389,296	2,765	67	718,741	1,114,435
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	32	37	1	3	12	85
	Sum of FacilityMorts	286	3,436	4	16	423	4,165
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	318	3,473	5	19	435	4,250
LMN	Sum of NumberCollected	145,759	1,211,358	83,175	28,056	953,057	2,421,405
	Sum of NumberBarged	138,971	270,715	9,219	10,077	226,251	655,233
	Sum of NumberBypassed	1,843	940,207	73,949	17,975	726,071	1,760,045
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	9	32	0	0	19	60
	Sum of FacilityMorts	153	762	3	0	192	1,110
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	162	794	3	0	211	1,170
MCN	Sum of NumberCollected	75,522	745,345	77,092	101,188	276,109	1,275,256
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	75,289	744,526	77,032	101,047	275,851	1,273,745
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	32	112	3	22	25	194
	Sum of FacilityMorts	193	643	54	108	211	1,209
	Sum of ResearchMorts	8	58	3	5	20	94
	Sum of TotalProjectMorts	233	813	60	135	256	1,497
Total Sum of NumberCollected		784,268	6,043,365	324,841	163,910	5,674,634	12,991,018
Total Sum of NumberBarged		661,336	3,530,145	169,129	44,171	3,571,090	7,975,871
Total Sum of NumberBypassed		82,425	2,499,978	155,594	119,513	2,098,588	4,956,098
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		173	327	6	27	103	636
Total Sum of FacilityMorts		1,617	7,650	105	159	1,634	11,165
Total Sum of ResearchMorts		1,975	2,847	3	5	20	4,850
Total Sum of TotalProjectMorts		3,765	10,824	114	191	1,757	16,651

Cumulative Adult Passage at Mainstem Dams Through: 06/19

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	06/19	125545	17552	67482	16860	151523	9831	35586	6507	17360	4507	27240	2870	0	0	0	0	0	0
TDA	06/19	95440	15801	53524	15567	106828	7522	23492	5238	13334	3594	19998	1908	0	0	0	0	0	0
JDA	06/19	81771	14925	44005	13864	89148	6122	20607	4416	10023	2361	15432	1340	0	0	0	0	0	0
MCN	06/18	68085	12133	39497	12393	82136	6227	12220	3043	6638	1416	10493	983	0	0	0	0	0	0
IHR	06/19	53142	7757	28380	7371	54980	3897	8630	1730	2230	457	4661	532	0	0	0	0	0	0
LMN	06/19	54512	6885	28397	7102	52688	3599	6830	1012	1909	295	3522	307	0	0	0	0	0	0
LGS	06/19	50401	7805	23960	7227	50024	3685	3667	777	1333	318	2107	257	0	0	0	0	0	0
LGR	06/19	50146	10946	22905	9085	50643	4197	1586	464	365	90	1035	136	0	0	0	0	0	0
PRD	06/18	12173	620	6708	489	17360	563	1208	76	1390	78	1717	59	0	0	0	0	0	0
RIS	06/18	12490	1119	5572	2066	13979	962	223	15	213	57	215	18	0	0	0	0	0	0
RRH	06/18	4029	369	2378	914	5279	392	0	0	0	0	0	0	0	0	0	0	0	0
WEL	06/18	2316	393	1223	673	2896	231	0	0	0	0	0	0	0	0	0	0	0	0
WFA	06/16	8690	166	19249	183	-	-	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	66468	6572	14978	8545	5955	8673	1957
TDA	0	0	0	0	0	0	37751	3815	9269	2651	2002	2774	843
JDA	-1	0	1	0	0	0	25695	3892	7088	4787	3071	4566	1797
MCN	0	0	0	0	0	0	3253	1613	2891	2868	2480	2500	1151
IHR	-1	0	0	0	0	0	1	0	0	3335	2581	2158	1192
LMN	0	0	0	0	0	0	0	2	0	4122	2587	2120	1783
LGS	0	0	0	0	0	0	0	0	0	2702	2410	2290	1040
LGR	0	0	0	0	0	0	0	0	0	7799	10642	7500	2474
PRD	0	0	0	1	0	0	539	352	723	236	58	34	0
RIS	0	0	0	0	0	0	81	64	129	363	58	55	169
RRH	0	0	0	0	0	0	31	29	72	630	188	141	294
WEL	0	0	0	0	0	0	6	7	9	224	53	24	143
WFA	0	0	2	0	-	-	0	0	-	15004	13592	-	-

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: 06/20/08

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