

Fish Passage Center

Weekly Report #08 - 15

June 13, 2008

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 143% and 254% of average at individual sub-basins over the beginning of June. Precipitation above The Dalles has been 172% 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.

	Water Ye June		Water Year 2008 October 1, 2007 to June 1-9 2008				
	Observed	%	Observed	%			
Location	(inches)	Average	(inches)	Average			
Columbia Above Coulee	1.23	171	19.14	102			
Snake River Above Ice Harbor	0.64	145	14.52	103			
Columbia Above The Dalles	0.92	172	18.88	102			
Kootenai	1.15	156	17.85	93			
Clark Fork	1.13	196	13.96	109			
Flathead	1.40	177	17.45	103			
Pend Oreille/ Spokane	1.17	178	26.28	102			
Central Washington	0.29	152	5.56	74			
Snake River Plain	0.41	143	7.59	85			
Salmon/Boise/ Payette	0.65	148	17.09	103			
Clearwater	1.52	204	25.97	104			
SW Washington Cascades/Cowlitz	2.25	254	59.83	94			
Willamette Valley	1.50	223	56.7	104			

Snowpack within the Columbia Basin is average or above for this time of year. Snowpack in the Columbia River for basins above the Snake River

confluence is 204% of average, for Snake River Basins snowpack is 152% of average, and for lower Columbia Basins between McNary and Bonneville Dam average snowpack is 2081% of average (according to the Natural Resource Conservation Service).

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 (June Final) 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.

	May	Final	June	Final
Location	% 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 127.6 Kcfs over the last week and 95.3 Kcfs over the spring season, flows at Priest Rapids have averaged 228.1 Kcfs over the last week and 156.3 Kcfs over the spring season and flows at McNary have averaged 367.7 Kcfs over the last week and 271.5 Kcfs over the spring season.

Grand Coulee Reservoir is at 1278.5 feet (6-12-08) and has refilled 5.7 feet over the last week. Outflows at Grand Coulee have ranged between 180.4 and 209.4 Kcfs over the last week. Inflows last week have ranged between 227.5 Kcfs and 255.6 Kcfs.

The Libby Reservoir is currently at elevation 2431.7 feet (6-12-08) and refilled 1.5 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 26.3 Kcfs. Inflows at Libby have ranged between 26.5 Kcfs to 38.9 Kcfs over the last week.

Hungry Horse is currently at an elevation of 3544.2 ft (6-12-08) and has refilled 1.9 feet last week. Outflows were 6.7-8.9 Kcfs last week; inflows ranged between 4.0 Kcfs and 15.3 Kcfs last week.

Dworshak is currently at an elevation of 1581.6 feet (6-12-08) and refilled 8.0 feet last week. Outflows at Dworshak have recently been increased to 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 20.8 and 24.1 Kcfs last week.

The Brownlee Reservoir is at an elevation of 2075.4 feet (June 12th, 2008), drafting 0.5 feet last week. Outflows at Brownlee Dam have been 23.2 to 26.7 Kcfs over the last week. Inflows at Brownlee Dam have been 22.2 to 27.0 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 were out of service at Lower Granite Dam limiting powerhouse capacity to about 70 Kcfs until Thursday, when one additional unit came back into service. Flows continue to exceed hydraulic capacity at this project. Little Goose Dam has spilled between 30% and 41% 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 28 to 52 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.

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 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 125 Kcfs and 204 Kcfs, and is spill in excess of hydraulic and generation capacity. Total dissolved gas has exceeded the waiver limits at most 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 and McNary dams, signs of GBT have not been observed, while at Little Goose 3% of fish sampled had minor signs; at Lower Monumental 12% of fish sampled had signs with 1% of those being Rank 2; at Rock Island 2% were detected with minor signs; and at Bonneville about 1% of fish 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. The fall chinook smolt migration in the Snake River should reach peak numbers in the next week or two.

At Snake River SMP sites the daily passage indices for yearling Chinook and steelhead continued to decline. Yearling Chinook indices dropped to about 2,000 per day this week over all three dams, compared to 10,000 to 20,000 per day for subyearling Chinook. Steelhead showed a similar drop to yearling Chinook with the average daily indices falling below 4,000 per day at all three Snake River collector projects. Sockeye and coho indices have dropped to less than 100 fish per day at all three Snake River dams.

Spring migrants continue to predominate in the Columbia River. At Rock Island Dam indices for yearling Chinook averaged under 200 per day over the past week a little lower than the previous week. Steelhead indices averaged just over 100 per day, about half of the average for the previous week. Coho indices averaged about 500 fish per day this week down from 1,000 per day last week. Sockeye indices were also down; with daily indices below 100 fish per day this week compared to indices that approached 900 fish per day at the start of last week.

In the lower River indices for all spring migrants

were down, while subyearling Chinook indices were beginning to increase rapidly. At McNary the subyearling Chinook index rose to 12,000 on June 12, not as high a number as two weeks back but likely the beginning of the peak passage at that site.

At Bonneville Dam the traveling screens have been pulled at Powerhouse 2 due to high debris loads and concomitantly high descaling in smolts so that indices are lower due to decreased turbine guidance. None the less sample numbers have remained surprisingly high with the screens removed.

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. Approximately 700,000 subyearling fall Chinook were scheduled for release into this zone this week. Of these, approximately 71.4% were scheduled for release into the Middle Fork of the Clearwater River from the Nez Perce Tribal Hatchery. The remaining 28.6% were scheduled for released from acclimation facilities on the Selway River and South Fork of the Clearwater River. In all, about 50% of these subyearlings are unmarked. All three of these releases are expected to run trough the weekend, ending on or around Sunday, June 15th.

Two releases of spring Chinook parr are scheduled for this zone, beginning next week. The first is a release of approximately 40,000 parr into Meadow Creek, a tributary of the Selway River. The second is 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 are no other scheduled releases of salmonid juveniles to this zone scheduled for 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 release of approximately 3.45 million subyearling fall Chinook from Ringold Hatchery to the Mid-Columbia River began this week. In addition, a release of about 4.5 million subyearling fall Chinook from Priest Rapids Hatchery to the Mid-Columbia River began this week. These releases are volitional and are expected to run for the next couple of weeks. Approximately 81.5% of these subyearling fall Chinook are unmarked. Wells Hatchery was scheduled to begin their release of subyearling summer Chinook to the Mid-Columbia River this week. In all, approximately 242,400

subyearling summer Chinook juveniles were planned for this release, 100% of which were marked. This release is expected to run through June 20th.

Lower Columbia Zone: The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. Approximately 4.05 million subyearling fall Chinook were scheduled for release into this zone this week. These subyearlings were scheduled to be released from Klickitat Hatchery into the Klickitat River. About 84% of these Klickitat Hatchery subyearlings are unmarked. Finally, Little White Salmon NFH is scheduled to release approximately 2.0 million subyearling fall Chinook into the Little White Salmon River, beginning June 19th. 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 1,671 and 2,334 adult summer Chinook in the last week. The 2008 summer Chinook count of 19,911 is about 1.93 times greater than the 2007 and 1.23 times greater than the 10 year average. The summer Chinook jack count of 3,518 is about 1.42 times greater than the 2007 count and 2.13 times greater than the 10 year average to date.

As of June 11th at Willamette Falls Dam, the adult spring Chinook count of 7,201 was only 39.3% of the 2007 count of 18,297. Spring Chinook are counted at Ice Harbor Dam through June 11th. A total of 53,142 spring Chinook adults have been observed at Ice Harbor Dam as of June 11th. The 2008 Ice Harbor count about increased 1.89 times when compared to the 2007 count. Additionally, it is about 96.7% of the 10 year average count. The 2008 spring Chinook jack count of 7,757 had 449 more fish than the 2007 count and increased 2 times when compared to the 10 year average. A total of 11,598 spring Chinook adults have been counted at Priest Rapids Dam as of June 11th. The 2008 Priest Rapids Dam adult spring Chinook count increased about 1.76 times compared to the 2007 count. However, it was only about 68% of the 10 year average count.

The 2008 Bonneville adult steelhead count was 5,767 fish, as of June 12th, which was 1.20 times greater than the 2007 count of 4,775 fish. The 2008 wild steelhead count at Bonneville Dam was 1,296 fish. At Willamette Falls Dam, the 2008 count for steelhead was 13,598, as of June 11th. This year's steelhead count

has 959 more fish than the 2007 count of 12,639 at Willamette Falls Dam. The 2008 adult sockeye count at Bonneville Dam was 7,747 so far this season. The 2008 sockeye count increased about 4.53 times compared to the 2007 count and increased approximately 2.53 times compared to the 10 year average. As of June 12th at Bonneville Dam, the adult Shad count was 282,774 which was only 18.3% of the 2007 count of 1,540,561 and only 16.6% the 10 year average count of 1,699,134.

The total steelhead count passing at Lower Granite Dam as of June 12th was 7,797. The 2008 count was about 73.5% of the 2007 count of 10,602. The 2008 Lower Granite adult steelhead count increased about 1.04 times when compared to the 10-year average count of 7,447. The 2008 wild steelhead count at Lower Granite Dam as of June 12th was 2,475. At Rock Island Dam, as of June 11th, 320 adult steelhead had been counted. At Rocky Reach Dam 572 adult steelhead had been counted so far this season. The 2008 Rocky Reach Dam adult steelhead count increased 3.23 times when compared to the 2007 count and increased 4.23 times when compared to the 10 year average.

Daily Average Flow and Spill (in kcfs) at Mid-Columbia Projects														
	Gr	and	Chi	ef			Ro	cky	Ro	ck			Pr	iest
	Co	ulee	Jose	ph	We	ells	Re	ach	Isla	nd	Wana	apum	Ra	pids
Date	Flow	Spill												
05/30/2008	191.0	3.4	194.8	18.6	224.9	59.0	223.2	38.1	228.6	23.7	250.6	120.9	238.9	81.9
05/31/2008	178.8	0.3	179.6	0.0	209.2	52.9	207.2	24.1	216.8	22.3	235.5	99.7	227.2	65.6
06/01/2008	160.5	12.1	162.8	16.0	191.6	46.0	194.4	16.7	206.3	21.7	223.0	87.1	215.4	61.0
06/02/2008	193.1	10.1	188.2	35.0	213.4	54.2	204.0	24.5	205.7	26.5	220.7	83.7	209.0	51.2
06/03/2008	215.0	14.4	214.9	33.0	242.0	90.6	240.3	50.9	239.7	32.9	266.8	131.1	258.9	96.9
06/04/2008	207.3	27.4	208.8	29.9	241.4	89.6	240.3	52.7	240.8	35.2	268.7	137.3	258.4	102.4
06/05/2008	188.4	8.7	191.5	24.3	214.7	40.4	210.5	31.6	214.7	24.4	230.0	97.1	223.8	68.5
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

	Daily Average Flow and Spill (in kcfs) at Snake Basin Projects											
				Hells	Lov	wer	Li	ttle	Low	/er	I	ce
	Dwo	rshak	Brownlee	ownlee Canyon		Granite		ose	Monumental		Harbor	
Date	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
05/30/2008	1.3	0.3	28.3	28.4	151.7	80.3	146.3	65.4	150.2	47.1	156.6	94.6
05/31/2008	1.4	0.1	28.2	27.3	152.9	82.3	149.0	58.0	154.2	39.1	159.9	91.5
06/01/2008	1.1	1.0	28.1	26.0	154.3	83.4	150.0	59.2	152.9	57.1	160.5	98.8
06/02/2008	8.0	0.2	27.8	24.4	158.9	87.6	155.0	65.4	160.8	47.4	165.6	97.3
06/03/2008	8.7	0.9	27.2	25.3	160.7	89.0	155.0	66.6	158.9	58.2	162.8	99.3
06/04/2008	8.8	1.3	28.0	25.2	152.2	81.9	148.9	66.6	156.1	62.8	162.1	99.6
06/05/2008	8.7	0.6	28.1	27.8	149.4	78.9	143.0	52.0	147.2	32.2	153.6	88.6
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	8.0	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			124.2	55.9	119.4	48.0	120.8	46.8	125.4	77.5

	Daily Average Flow and Spill (in kcfs) at Lower Columbia Projects										
	McI	Nary	John [Day	The D	alles		В	onneville		
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2	
05/30/2008	398.2	224.4	413.9	129.9	396.7	169.4	410.8	202.9	67.5	129.0	
05/31/2008	395.9	224.1	412.9	124.3	402.1	159.3	413.8	197.9	75.7	129.6	
06/01/2008	392.1	220.2	394.2	126.6	389.3	158.3	417.5	200.0	77.0	129.1	
06/02/2008	391.3	219.0	400.0	135.0	397.7	158.3	417.7	207.5	76.0	122.9	
06/03/2008	400.1	230.7	417.8	150.9	398.9	176.4	417.5	202.7	74.7	128.7	
06/04/2008	424.0	250.3	417.1	178.6	399.9	169.9	416.8	199.6	75.2	130.6	
06/05/2008	403.9	228.6	410.8	135.0	404.4	154.5	417.7	201.2	76.4	128.7	
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	

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

										sh with F	
									_	Highest I	
			Number of	Number w	Number w	% Fin	% Severe	Rank	-	Rank	Rank
Site	Date	Species	Fish	GBT signs	Fin Signs	GBT	Fin GBT	1	2	3	4
Low	er Granit	te Dam									
	06/03/08	Chinook + Steelhead	84	1	0	0.00%	0.00%	0	0	0	0
	06/10/08	Chinook + Steelhead	36	0	0	0.00%	0.00%	0	0	0	0
Littl	e Goose	Dam									
	06/03/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	06/10/08	Chinook + Steelhead	100	3	3	3.00%	0.00%	3	0	0	0
Low	er Monu	mental Dam									
	06/09/08	Chinook + Steelhead	100	12	12	12.00%	0.00%	11	1	0	0
McN	lary Dam										
	06/05/08	Chinook + Steelhead	99	0	0	0.00%	0.00%	0	0	0	0
	06/06/08	Chinook + Steelhead	1	0	0	0.00%	0.00%	0	0	0	0
Bon	neville D	am									
	06/03/08	Chinook + Steelhead	73	1	1	1.36%	0.00%	1	0	0	0
	06/07/08	Chinook + Steelhead	83	1	1	1.20%	0.00%	1	0	0	0
Roc	k Island	Dam									
	06/05/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	06/09/08	Chinook + Steelhead	99	2	2	2.02%	0.00%	2	0	0	0
	06/12/08	Chinook + Steelhead	100	1	0	0.00%	0.00%	0	0	0	0

Hatchery Releases Last Two Weeks

	Hatch							
	From:	5/30/200	8	to	06/12/08			
Agency	Hatchery	Species		•				RelRiver
Nez Perce Tribe Nez Perce Tribe	Nez Perce Tribal Hatchery Nez Perce Tribal Hatchery	CH0 CH0	FA FA	2008 2008	,		Cedar Flats Acclim. Lukes Gulch Acclim.	Selway River S Fk Clearwater River
Nez Perce Tribe	Nez Perce Tribai Halchery	СПО	ΓA	2006	100,000 06-11-	10 00-15-00	Nez Perce Tribal	3 FK Clearwater River
Nez Perce Tribe Nez Perce Tribe Total	Nez Perce Tribal Hatchery	CH0	FA	2008	500,000 06-10-1 700,000	8 06-15-08	Hatchery	Clearwater River M F
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH0	FA	2008	200,733 06-02-	8 06-02-08	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2008	4,500,000 06-11-	8 06-18-08	Priest Rapids Hatchery Ringold Springs	Mid-Columbia River
Washington Dept. of Fish and Wildlife Washington Dept. of Fish and	Ringold Springs Hatchery	CH0	FA	2008	3,450,000 06-09-	8 06-27-08	Hatchery	Mid-Columbia River
Wildlife Total Yakama Tribe Yakama Tribe Total Grand Total	Klickitat Hatchery	CH0	FA	2008	8,150,733 4,000,000 06-11- 4,000,000 12,850,733	8 06-12-08	Klickitat River	Klickitat River

Hatchery Releases Next Two Weeks

Hatchery Release Summary										
	From:	6/13/2008		to	6/26/2008					
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 Tribe Total	Nez Perce Tribal Hatchery	CH0	SP	2009	40,000 796,207		06-15-08	Meadow Creek - SELW	Selway River	
								Little White Salmon	Little White Salmon	
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH0	FA	2008	2,000,000	06-19-08	06-19-08	River	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	06-11-08	06-18-08	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 Washington Dept. of Fish and	Wells Hatchery	CH0	SU	2008	242,400	06-13-08	06-20-08	Wells Hatchery	Mid-Columbia River	
Wildlife Total					8,192,400)				
Yakama Tribe	Klickitat Hatchery	CH0	FA	2008	50,000	06-13-08	06-13-08	Klickitat River	Klickitat River	
Yakama Tribe Total					50,000)				
Grand Total					11,038,607	,				

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

	Hung	ry H. [<u>Onst</u>		Boun	dary			Grand	d Coul	<u>ee</u>		Grane	d C. T	wr		Chief	Jose	<u>oh</u>	
	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>
	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<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>
5/30	101	102	102	24	128	129	130	24	115	116	117	24	114	116	121	24	111	112	112	24
5/31	101	101	102	24	128	129	130	22	116	116	116	24	112	113	113	22	115	119	120	24
6/1	101	101	102	24	128	129	130	23	116	117	117	24	115	118	124	23	113	114	117	24
6/2	103	104	104	24	128	129	129	23	116	117	117	24	118	121	124	23	115	118	124	24
6/3	104	105	106	24	129	130	130	23	118	118	119	24	117	119	124	23	119	120	123	24
6/4	104	105	105	24	129	130	132	21	119	119	119	24	121	124	134	21	117	119	119	24
6/5	104	104	105	24	129	129	130	21	119	119	119	24	116	117	118	21	121	126	129	24
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

Total Dissolved	Gas Saturation	Data at Mid C	Columbia River	Sites
i ulai Dissuiveu	Gas Salulation	Data at iviiu C	Jululliula Kivel	ones

	Chief	J. Dn	<u>st</u>		Wells				Wells	Dwns	<u>strm</u>		Rock	y Rea	<u>ch</u>		Rock	y R. T	<u>lwr</u>	
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	<u>12 h</u>		#	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		#
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>
5/30	112	113	114	24	110	112	114	24	118	120	123	24	118	119	120	24	119	120	121	24
5/31	115	118	119	24	111	112	113	24	118	120	127	24	116	118	119	24	117	118	120	24
6/1	113	115	116	24	115	116	117	24	119	121	125	24	117	117	118	24	117	118	119	24
6/2	116	117	119	24	111	112	113	24	119	124	133	24	117	118	118	24	118	119	119	24
6/3	116	117	117	24	115	117	119	23	127	130	135	23	118	121	125	24	120	122	126	24
6/4	116	116	117	24	116	116	117	24	128	132	136	24	125	126	130	24	125	126	130	24
6/5	116	118	120	24	114	115	117	24	118	119	120	24	126	128	130	24	125	127	130	24
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

	Rock	Island	<u>t</u>		Rock	I. Tlw	<u>r</u>		Wana	pum			Wana	pum '	<u>Tlwr</u>		Pries	t Rapi	<u>ds</u>	
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		#	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
5/30	118	118	119	24	119	120	121	24	115	116	117	24	124	125	128	24	120	122	124	24
5/31	116	117	117	24	118	118	119	24	115	117	119	24	121	123	127	24	122	125	126	24
6/1	116	117	118	24	118	119	120	24	115	115	115	24	118	120	123	24	118	120	121	24
6/2	116	117	118	24	119	120	121	24	114	115	116	24	119	123	127	24	116	117	118	24
6/3	118	118	120	24	120	121	123	24	114	115	115	24	125	127	128	24	124	126	127	24
6/4	122	122	123	24	124	125	125	24	114	114	115	24	125	127	128	24	122	123	125	24
6/5	125	127	127	24	125	125	125	24	115	116	116	24	122	125	127	24	122	125	126	24
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				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

	Pries	t R. Dı	<u>ıst</u>		Pasco	<u> </u>			<u>Dwor</u>	<u>shak</u>			<u>Clrwt</u>	r-Pecl	<u> </u>		Anato	<u>one</u>		
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		#
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>
5/30	121	123	124	24	113	114	115	24	110	112	113	24	103	104	104	24	105	106	106	24
5/31	123	124	124	24	115	116	117	24	106	107	108	24	104	105	106	24	105	106	107	24
6/1	120	121	122	24	115	116	116	24	110	113	115	24	130	135	136	24	105	105	106	24
6/2	118	119	120	24	112	113	114	24	101	104	113	24	139	140	140	24	105	106	106	24
6/3	124	125	125	24	112	114	115	24	103	108	115	24	121	138	139	24	105	105	106	24
6/4	123	123	124	24	116	116	117	24	104	109	114	24	103	103	104	24	105	105	105	24
6/5	123	123	123	24	115	116	116	24	102	104	110	24	103	103	104	24	105	106	106	24
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	105	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				0	115	116	117	24	109	109	110	24	103	104	104	24	104	105	106	24

Total Dissolved	Cac Sa	turation	Data :	at Snako	Pivor Sitos
Total Dissolved	Gas Sa	aturation	Data a	ai Snake	River Sites

	Clrwt	r-Lew	<u>iston</u>		Lowe	r Grar	<u>nite</u>		L. Gra	anite 1	<u>lwr</u>		Little	Goos	<u>e</u>		L. Go	ose T	<u>lwr</u>	
	<u>24 h</u>	12 h		#	<u>24 h</u>	12 h		#	<u>24 h</u>	12 h		#	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		#
<u>Date</u>	<u>Avg</u>	Avg	High	<u>hr</u>	Avg	Avg	High	<u>hr</u>	Avg	Avg	<u>High</u>	<u>hr</u>	Avg	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	hr
5/30	103	103	103	24	104	104	104	24	128	128	128	24	117	118	118	24	123	124	125	24
5/31	103	104	105	24	105	106	106	24	128	128	130	24	120	121	121	24	122	122	124	24
6/1	103	103	103	24	106	106	106	24	127	127	128	24	121	121	122	24	122	122	122	24
6/2	103	103	103	24	105	106	106	24	127	128	131	24	120	121	121	24	123	123	124	24
6/3	102	103	104	24	106	106	106	24	127	127	128	24	120	121	122	24	123	124	125	24
6/4	102	102	103	24	105	105	106	24	124	126	127	24	120	121	122	24	123	125	125	24
6/5	102	103	104	24	105	105	105	24	124	125	127	24	119	120	120	24	121	123	143	24
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

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

	Lowe	r Mon	<u>.</u>		L. Mo	n. Tlw	<u>/r</u>		Ice H	<u>arbor</u>			Ice H	arbor	<u>Tlwr</u>		<u>McNa</u>	ry-Or	<u>egon</u>	
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>
5/30	120	120	121	24	120	122	124	24	117	118	118	24	122	123	124	24				0
5/31	124	125	127	24	119	119	122	24	119	119	119	24	122	122	122	24				0
6/1	123	123	124	24	121	124	126	24	120	120	120	24	123	123	124	24				0
6/2	122	122	123	24	121	121	124	24	119	119	120	24	122	123	124	24				0
6/3	124	125	126	24	121	123	125	24	119	120	121	24	123	124	125	24				0
6/4	123	124	126	24	122	125	125	24	120	120	121	24	123	124	124	24				0
6/5	123	124	125	24	120	121	122	24	120	120	121	24	121	122	122	24				0
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

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

	McNa	ry-Wa	ash_		McNa	ry Tlv	<u>/r</u>		<u>John</u>	Day			<u>John</u>	Day T	<u>lwr</u>		The [<u>Dalles</u>		
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24h</u>	<u>12h</u>		#	<u>24h</u>	<u>12h</u>		<u>#</u>	<u>24h</u>	<u>12h</u>		<u>#</u>
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<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>
5/30	114	115	115	24	122	122	123	24	114	114	114	24	119	119	120	24	113	114	115	24
5/31	114	115	115	24	123	123	123	24	114	114	114	24	119	119	120	24	113	114	114	24
6/1	116	116	116	24	122	122	122	24	113	114	114	24	119	119	119	24	112	113	113	24
6/2	114	114	115	24	122	122	122	24	114	114	114	24	119	119	119	24	113	114	114	24
6/3	113	113	114	24	122	122	123	24	113	114	114	24	120	121	125	24	114	115	118	24
6/4	112	112	113	24	123	123	123	24	110	110	111	24	122	124	126	24	113	115	117	24
6/5	114	115	115	24	122	123	123	24	110	110	111	24	119	120	120	24	112	113	114	24
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

Total Dissolved	Gas Saturation	Data at Lower	Columbia	Divor Sites
Total Dissolved	Gas Saturation	i Data at Lower	Columbia	River Sites

	The D	alles	<u>Dnst</u>		Bonn	<u>eville</u>			Warre	endale	<u>)</u>		Cama	ıs\Wa	shouga	<u> </u>	Casc	ade Is	land	
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24h</u>	<u>12h</u>		#	<u>24h</u>	<u>12h</u>		#	<u>24h</u>	<u>12h</u>		<u>#</u>
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<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>
5/30	119	119	121	24	114	115	118	24				0	119	119	120	24	124	124	125	24
5/31	118	118	119	24	116	117	118	24				0	120	121	122	24	124	124	125	24
6/1	117	118	118	24	114	114	115	24				0	118	118	118	24	123	123	124	24
6/2	117	118	119	24	114	114	115	24				0	119	120	121	24	124	125	128	24
6/3	120	122	125	24	117	119	122	24				0	119	120	122	24	124	124	125	24
6/4	118	119	121	24	115	116	120	24				0	119	120	121	24	124	124	124	24
6/5	117	118	119	24	115	116	117	24				0	118	119	119	24	124	124	125	24
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

Two-Week Summary of Passage Indices

Source: Fish Passage Center Updated: 6/13/2008 11:37

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/currentsmpsubmitdata.asp

					СОМВ	INED YEA	RLING CHI	NOOK				
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
05/30/2008	*		0			8,740	27,348	18,619	437		71,801	10,604
05/31/2008	*		0			7,427	22,373	10,575	352	23,362	49,788	15,548
06/01/2008	*		0			7,364	29,923	11,562	292		26,226	5,959
06/02/2008	*		0			3,932	23,159	9,596	233	12,851	22,624	2,911
06/03/2008	*		0			5,871	23,781	12,768	169		14,539	2,609
06/04/2008	*		0			4,248	17,849	11,137	214	11,991	12,128	2,414
06/05/2008	*					2,952	10,556	11,361	161		10,136	1,749
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		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	*											
Total:	П	0	8	0	0	58,857	188,448	104,450	3,053	83,137	262,660	51,508
# Days:	H	0	12	0	0	14	13	14	14	7	14	14
Average:	Ħ	0	1	0	0	4,204	14,496	7,461	218	11,877	18,761	3,679
YTD	_	56,037	78,597	19,672	13,632	3,556,586	2,706,167	1,959,037	21,782	1,334,784	1,654,643	1,268,917

					COMBIN	ED SUBYE	ARLING C	HINOOK				
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
05/30/2008	*		0			8,532	2,765	545	39		24,737	3,805
05/31/2008	*		0			13,347	4,431	414	56	6,908	20,488	4,963
06/01/2008	*		0			13,754	5,121	623	41		13,738	5,077
06/02/2008	*		0			33,090	6,845	298	28	5,342	10,199	4,076
06/03/2008	*		0			32,514	24,148	2,016	36		7,807	4,388
06/04/2008	*		0			34,975	42,282	14,478	32	5,934	6,933	4,268
06/05/2008	*					20,773	33,336	14,970	18		6,915	4,134
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		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	*											
Total:	П	0	0	0	0	251,021	299,416	135,621	550	48,346	131,331	55,102
# Days:		0	12	0	0	14	13	14	14	7	14	14
Average:		0	0	0	0	17,930	23,032	9,687	39	6,907	9,381	3,936
YTD		0	0	2	119	324,949	344,945	•	2,592	136,576	164,577	2,090,384

Two-Week Summary of Passage Indices

					COMBINED COHO							
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)						
05/30/2008	*		0			728	3,265	1,420	1,469		17,137	6,071
05/31/2008	*		0			753	2,385	1,042	2,143	6,364	15,161	4,909
06/01/2008	*		0			975	1,730	527	1,431		11,031	2,865
06/02/2008	*		0			437	2,920	353	2,237	3,848	7,719	1,746
06/03/2008	*		0			790	2,343	960	1,353		4,977	2,109
06/04/2008	*		0			111	1,702	343	1,270	4,709	4,544	1,273
06/05/2008	*					219	427	401	1,164		4,597	1,293
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		0	286		1,892	928
06/12/2008	*		0			50	0	53	226	2,258	1,714	452
06/13/2008	*											
Total:		0	0	0	0	4,597	16,456	5,651	14,836	30,138	91,780	27,142
# Days:	Ħ	0	12	0	0	14	13	14	14	7	14	14
Average:	Ħ	0	0	0	0	328	1,266	404	1,060	4,305	6,556	1,939
YTD		0	0	0	326	108,881	165,742	142,517	50,796	162,999	351,994	347,851

					CC							
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
05/30/2008	*		7			30,174	25,516	15,822	278		25,803	2,590
05/31/2008	*		0			23,143	27,243	10,138	374	3,543	20,490	3,775
06/01/2008	*		0			25,558	34,662	10,653	429		17,901	1,542
06/02/2008	*		0			14,962	37,970	8,766	302	4,026	13,116	2,114
06/03/2008	*		0			16,934	27,756	12,416	216		10,343	1,279
06/04/2008	*		0			9,305	17,403	10,451	245	3,468	11,357	991
06/05/2008	*					6,779	13,850	8,688	266		8,329	1,340
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		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	*											
Total:		0	323	0	0	162,428	233,853	101,459	3,165	17,624	133,888	18,159
# Days:		0	12	0	0	14	13	14	14	7	14	14
Average:		0	27	0	0	11,602	17,989	7,247	226	2,518	9,563	1,297
YTD		4,565	22,245	5,891	10,708	3,411,238	3,639,266	1,534,790	21,385	503,194	1,120,286	442,505

Two-Week Summary of Passage Indices

					COMBINED SOCKEYE							
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)						
05/30/2008	*		0			728	1,760	1,492	856		41,027	11,980
05/31/2008	*		0			646	598	454	852	8,874	27,866	16,549
06/01/2008	*		0			541	2,145	575	456		16,235	9,425
06/02/2008	*		0			218	1,924	651	520	6,551	10,046	4,867
06/03/2008	*		0			677	1,083	1,184	306		6,441	2,386
06/04/2008	*		0			223	183	1,028	196	4,568	5,928	2,014
06/05/2008	*					109	940	0	114		5,422	1,781
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		75	85		2,902	816
06/12/2008	*		0			50	0	0	77	3,061	1,627	964
06/13/2008	*											
Total:	П	0	0	0	0	3,674	11,585	7,494	3.792	38,684	141,970	57,998
# Days:	Ħ	0	12	0	0	14	13	14	14	7	14	14
Average:		0	0	0	0	262	891	535	271	5,526	10,141	4,143
YTD		37	0	0	111	27,025	35,610	45,292	37,420	217,996	323,203	136,225

^{*} 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: 6/13/08 11:37 AM

05/30/08 TO 06/13/08 **Species** Site Data CH0 CH1 CO SO ST **Grand Total** LGR Sum of NumberCollected 120,225 28,217 2.150 1,725 77,153 229,470 Sum of NumberBarged 118,487 26,600 2,147 1,713 70,800 219,747 Sum of NumberBypassed 1,529 0 0 6,292 7,822 Sum of Numbertrucked 0 0 0 0 0 0 Sum of SampleMorts 63 9 0 0 6 78 55 79 3 Sum of FacilityMorts 715 12 864 Sum of ResearchMorts 959 0 0 0 0 959 Sum of TotalProjectMorts 1,737 88 3 12 61 1,901 LGS Sum of NumberCollected 186,831 113,213 9,803 7.111 141,315 458,273 Sum of NumberBarged 206,868 114,065 9,811 7,147 142,560 480,451 Sum of NumberBypassed 1,575 696 39 863 3,219 46 Sum of Numbertrucked 0 0 0 0 0 0 3 13 0 3 33 Sum of SampleMorts 14 214 Sum of FacilityMorts 172 1,874 3 15 2,278 0 0 Sum of ResearchMorts 0 0 0 Sum of TotalProjectMorts 185 1,888 3 18 217 2,311 LMN Sum of NumberCollected 3,925 5,170 70,122 245,661 94,602 71,842 Sum of NumberBarged 71,686 3,924 5,170 94,161 68,219 243,160 Sum of NumberBypassed 354 38 0 0 1,848 2,240 Sum of Numbertrucked 0 0 0 0 0 0 Sum of SampleMorts 4 6 0 0 7 17 1 0 48 Sum of FacilityMorts 83 112 244 Sum of ResearchMorts 0 0 0 0 0 0 55 1 0 Sum of TotalProjectMorts 87 118 261 MCN Sum of NumberCollected 21,270 36,652 13,267 17,195 7,684 96,068 Sum of NumberBarged 0 0 0 0 21,102 36,410 13,236 17,114 Sum of NumberBypassed 7,650 95,512 Sum of Numbertrucked 0 0 0 0 0 Sum of SampleMorts 19 32 2 14 71 4 Sum of FacilityMorts 146 204 28 64 30 472 Sum of ResearchMorts 3 6 1 3 0 13 Sum of TotalProjectMorts 34 556 168 242 31 81 Total Sum of NumberCollected 422,928 249,924 29,145 31,201 296,274 1,029,472 Total Sum of NumberBarged 419,516 212,351 15,882 14,030 281,579 943,358 Total Sum of NumberBypassed 23,032 38,673 13,275 17,160 16,653 108,793 Total Sum of Numbertrucked 0 0 0 0 0 0 Total Sum of SampleMorts 99 61 2 17 20 199 Total Sum of FacilityMorts 1,116 2,269 91 347 3,858 35 Total Sum of ResearchMorts 962 6 1 3 0 972 Total Sum of TotalProjectMorts 2,177 2,336 38 111 367 5,029

YTD Transportation Summary

Source: Fish Passage Center Updated: 6/13/08 11:37 AM

TO: 06/13/08

		Species	06/13/08				
Site	Data	CH0	CH1	СО	SO	ST	Grand Total
LGR	Sum of NumberCollected	153,918	2,380,150	68,704	13,039	2,144,586	4,760,397
	Sum of NumberBarged	150,372	1,948,462	66,810	12,578	1,766,303	3,944,525
	Sum of NumberBypassed	1,727	425,949	1,848	424	377,434	807,382
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	70	146	2	2	46	266
	Sum of FacilityMorts	790	2,804	44	35	803	4,476
	Sum of ResearchMorts	959	2,789	0	0	0	3,748
	Sum of TotalProjectMorts	1,819	5,739	46	37	849	8,490
LGS	Sum of NumberCollected	214,666	1,682,631	95,630	21,182	2,272,612	4,286,721
	Sum of NumberBarged	234,402	1,293,331	92,910	21,196	1,555,767	3,197,606
	Sum of NumberBypassed	1,865	389,296	2,765	67	718,741	1,112,734
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	14	36	1	3	11	65
	Sum of FacilityMorts	182	3,404	4	16	418	4,024
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	196	3,440	5	19	429	4,089
LMN	Sum of NumberCollected	102,397	1,206,880	83,059	27,964	948,369	2,368,669
	Sum of NumberBarged	100,462	266,883	9,107	9,989	222,779	609,220
	Sum of NumberBypassed	1,843	940,203	73,949	17,975	725,388	1,759,358
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	4	31	0	0	16	51
	Sum of FacilityMorts	88	754	3	0	186	1,031
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	92	785	3	0	202	1,082
MCN	Sum of NumberCollected	60,097	739,905	75,591	99,964	274,958	1,250,515
	Sum of NumberBarged	0	0	0	_	0	0
	Sum of NumberBypassed	59,890	739,114	75,532		274,710	1,249,078
	Sum of NumberTrucked Sum of SampleMorts	0 25	0 102	0	_	22	169
	Sum of FacilityMorts	174	625	53		204	
	Sum of ResearchMorts	8	58	3		20	· ·
	Sum of TotalProjectMorts	207	785	59		246	
	m of NumberCollected	531,078	6,009,566	322,984		5,640,525	
	m of NumberBarged	485,236 65,325	3,508,676	168,827		3,544,849	
	m of NumberBypassed m of NumberTrucked	05,325	2,494,562 0	154,094 0		2,096,273 0	
	m of SampleMorts	113	315	6		95	
Total Su	m of FacilityMorts	1,234	7,587	104	155	1,611	10,691
	m of ResearchMorts	967	2,847	3		20	
Total Su	m of TotalProjectMorts	2,314	10,749	113	182	1,726	15,084

Cumulative Adult Passage at Mainstem Dams Through: 06/12

			Spring Chinook						S	ummer	Chinool	k			Fall Chinook				
		2008	3	20	07	10-Yr	Avg.	200	8	200)7	10-Y	r Avg.	20	800	20	07	10-Yr	Avg.
DAM	EndDate	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	06/12	125545	17552	67482	16860	151523	9831	19911	3518	10303	2477	16153	1647	0	0	0	0	0	0
TDA	06/12	95440	15801	53524	15567	106828	7522	10827	2314	6689	1590	10001	960	0	0	0	0	0	0
JDA	06/12	81771	14925	44005	13864	89148	6122	7806	1545	4014	813	6457	540	0	0	0	0	0	0
MCN	06/12	68085	12133	39497	12393	82136	6227	4663	1153	1683	402	3539	356	0	0	0	0	0	0
IHR	06/11	53142	7757	28047	7308	54947	3891	0	0	0	0	0	0	0	0	0	0	0	0
LMN	06/12	53570	6742	27801	6947	51996	3531	0	0	0	0	0	0	0	0	0	0	0	0
LGS	06/12	47307	7345	22963	6983	48383	3481	0	0	0	0	0	0	0	0	0	0	0	0
LGR	06/12	45348	9844	20778	8477	47744	3815	0	0	0	0	0	0	0	0	0	0	0	0
PRD	06/11	11598	598	6581	475	17045	551	0	0	0	0	0	0	0	0	0	0	0	0
RIS	06/11	10810	955	5056	1846	13105	869	0	0	0	0	0	0	0	0	0	0	0	0
RRH	06/11	3664	323	2176	858	4956	357	0	0	0	0	0	0	0	0	0	0	0	0
WEL	06/11	2141	352	1131	601	2721	194	0	0	0	0	0	0	0	0	0	0	0	0
WFA	06/11	7201	127	18297	173	-		0	0	0	0	-	-	0	0	0	0	-	-

			Coh	0			S	ockeye		Steelhead				
	20	80	200	7	10-Yr	Avg.			10-Yr			10-Yr	Wild	
DAM	Adult	Jack	Adult	Jack	Adult	Jack	2008	2007	Avg.	2008	2007	Avg.	2008	
BON	0	0	0	0	0	0	7747	1707	3061	5767	4775	6278	1296	
TDA	0	0	0	0	0	0	2936	868	1723	1803	1572	1892	617	
JDA	-1	0	1	0	0	0	1164	628	1194	3830	2544	3760	1572	
MCN	0	0	0	0	0	0	262	298	539	2673	2179	2109	1116	
IHR	0	0	0	0	0	0	0	0	0	3216	2407	1986	1178	
LMN	0	0	0	0	0	0	0	0	0	4058	2442	1993	1770	
LGS	0	0	0	0	0	0	0	0	0	2674	2354	2217	1045	
LGR	0	0	0	0	0	0	0	0	0	7797	10602	7447	2475	
PRD	0	0	0	1	0	0	3	34	61	171	55	17	0	
RIS	0	0	0	0	0	0	3	3	4	320	53	45	154	
RRH	0	0	0	0	0	0	4	1	2	572	177	135	271	
WEL	0	0	0	0	0	0	2	0	0	187	49	24	122	
WFA	0	0	2	0	-	-	0	0	-	13598	12639	-	-	

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: 06/13/08

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