



Fish Passage Center

Weekly Report #08 - 13

May 30, 2008

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 33% and 127% of average at individual sub-basins over May. Precipitation above The Dalles has been 82% of average over May. Over the entire water year, precipitation has generally been near or above average.

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

Location	Water Year 2008 May 1-26		Water Year 2008 October 1, 2007 to May 1-26 2008	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	1.66	89	17.69	100
SNAKE RIVER Above Ice Harbor	1.14	72	13.24	99
Columbia Above The Dalles	1.36	82	17.50	100
Kootenai	1.43	77	16.65	91
Clark Fork	1.25	73	12.29	103
Flathead	2.59	127	15.82	100
Pend Oreille/ Spokane	1.03	47	24.77	101
Central Washington	0.21	33	5.04	70
SNAKE RIVER Plain	1.00	80	6.88	82
Salmon/Boise/ Payette	0.88	58	16.00	101
Clearwater	1.39	55	23.38	98
SW Washington Cascades/ Cowlitz	2.14	67	57.18	92
Willamette Valley	1.53	52	54.45	103

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 133% of average, for Snake River Basins snowpack is 100% of average, and for lower Columbia Basins between McNary and Bonneville Dam average snowpack is 273% of average.

Table 2 displays the May Final and June Early runoff volume forecasts for multiple reservoirs. Water Supply Forecasts increased slightly between the May Final and June Early forecasts in Upper Columbia Basins and held steady or decreased slightly in Snake River Basins. The current forecast (June Early) at The Dalles between January and July is 99100 Kaf (92% of average).

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

Location	May Final		June Early	
	% Average (1971- 2000)	Probable Runoff Volume (Kaf)	% Average (1971- 2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan- July)	91	97300	92	99100
Grand Coulee (Jan-July)	95	59800	97	60700
Libby Res. Inflow, MT (Jan-July)	92	5820	93	5840
Hungry Horse Res. Inflow, MT (Jan-July)	91	2030	98	2190
Lower Granite Res. Inflow (Apr-July)	101	21800	101	21800
Brownlee Res. Inflow (Apr-July)	77	4860	76	4820
Dworshak Res. Inflow (Apr-July)	111	2930	107	2830

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 136.2 Kcfs over the last week and 84.1 Kcfs over the spring season, flows at Priest Rapids have averaged 230.4 Kcfs over the last week and 135.5 Kcfs over the spring season and flows at McNary have averaged 378.3 Kcfs over the last week and 239.9 Kcfs over the spring season.

Grand Coulee Reservoir is at 1259.7 feet (5-29-08) and has refilled 8.6 feet over the last week. Outflows at Grand Coulee have ranged between 183.9 and 212.5 Kcfs over the last week. Inflows last week have ranged between 245.7 Kcfs and 259.7 Kcfs.

The Libby Reservoir is currently at elevation 2421.2 feet (5-29-08) and refilled 7.6 feet last week. Outflows at Libby were 14.8 Kcfs last week. Inflows at Libby have ranged between 36.1 Kcfs to 47.4 Kcfs over the last week.

Hungry Horse is currently at an elevation of 3532.3 ft (5-29-08) and has refilled 7.3 feet last week. Outflows were 2.5-4.9 Kcfs last week; inflows ranged between 15.7 kcf and 20.3 Kcfs last week.

Dworshak is currently at an elevation of 1550.1 feet (5-29-08) and refilled 21.9 feet last week. Outflows at Dworshak ranged between 1.1-1.6 Kcfs over the last week. Dworshak inflows have ranged between 24.4 and 31.4 Kcfs last week.

The Brownlee Reservoir is at an elevation of 2071.3 feet (May 29th, 2008), refilling 8.0 feet last week. Outflows at Brownlee Dam have been 15.7 to 31.7 Kcfs over the last week. Inflows at Brownlee Dam have been 25.9 to 31.9 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 capacity throughout the lower Snake River. Presently, two units are out of service at Lower Granite Dam limiting powerhouse capacity to about 70 Kcfs at lower Granite Dam. Little Goose Dam has spilled between 30% and 40% of daily flow over the past week. Additional spill to clear debris occurred on May 28th at this project. At Lower Monumental Dam spill has been in excess of hydraulic capacity and has ranged from 25 to 44 Kcfs of daily average flow over the week, with higher hourly spill during nighttime hours. Spill at Ice Harbor Dam has 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. However, over the past two days spill has been less than the 40% that was planned for those days. Spill at The Dalles Dam has met the Court Order. Spill at Bonneville Dam has exceeded the Court Order, ranging between a daily average of 178 Kcfs and 217 Kcfs, and is spill in excess of hydraulic capacity.

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. With the exception of Lower Granite Dam, signs of GBT have been observed at all other monitoring sites this past week. At Little Goose Dam 1% of fish were detected with severe signs, while at Lower Monumental Dam 3% of sampled fish were affected with minor signs, at McNary Dam 1% of the sampled fish were affected with minor signs; and, at Bonneville Dam 1% of sampled fish were affected with minor signs. At Rock Island Dam the observation was 7% of the sampled fish with 6% Rank 1 signs and 1% Rank 2 signs.

Smolt Monitoring: Spring migrant indices decreased in the Snake River over the past week, while in the Lower Columbia River sockeye and coho smolt numbers continued to increase. Subyearling Chinook numbers have also begun to increase in the Snake River. The fall chinook smolt migration in the Snake River should reach peak numbers in the two or three weeks..

At Lower Granite Dam the daily passage indices for yearling Chinook and steelhead fell after the freshet in the Snake River. Yearling Chinook indices dropped to about 11,000 per day this week compared to over 80,000 per day last week. Steelhead showed a similar drop with the average daily index falling to 44,000 per day this week compared to over 100,000 per day last week. Coho indices reached a relatively high 12,000 on May 19 and numbers have declined since that date to less than 1,000 fish per day. Sockeye numbers have also declined with the indices averaging less than 1,000 fish per day this week at Lower Granite Dam compared to over 2,000 per day last week.

Spring migrant indices were a mixed bag at Rock Island Dam over the past week. Indices for yearling Chinook averaged 1,000 per day over the past week a little higher than last week, while steelhead indices averaged about 650 per day, about half of the average for last week. Coho indices averaged about 2,000 fish per day this week down from 3,000 per day last week. And sockeye indices were up; averaging 2,600 per day compared to about 2,000 per day last week. Relatively low numbers of subyearling Chinook were captured at the trap this past week.

In the lower River at McNary and John Day dams passage indices for yearling Chinook were down while steelhead indices stayed relatively similar to last week. Coho and sockeye smolt indices were up in the Lower River with the average daily index for coho at McNary up to over 20,000 per day this past week compared to under 7,000 per day last week. Sockeye indices averaged 30,000 per day at McNary Dam this past week compare to nearly 12,000 per day last week.

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. Sample rates have remained at 2% over the past several days and still the SMP crew have collected several hundred smolts per day. The high bypass passage numbers are likely an indication of the numbers of fish in the system at this point.

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 1.4 million subyearling fall Chinook were scheduled for release into this zone this week. Of these, about 36% were scheduled for release from the Big Canyon Creek Acclimation Facility on the Clearwater River. The remaining 64% were scheduled for release from the Pittsburg Landing Acclimation Ponds and Captain Johns Rapids Acclimation Ponds on the Snake River, above Lower Granite Dam. Roughly 60% of the subyearling fall Chinook released this week were unmarked.

About 400,000 subyearling fall Chinook are scheduled for release into this zone, beginning June 1st. About 50% of these subyearlings are scheduled for release above Lower Granite Dam, into Couse Creek, while the other 50% will be released from the Lyons Ferry Hatchery, below Lower Granite Dam. There are no other scheduled releases of juvenile salmonids to this zone over the next two weeks.

Mid-Columbia Zone: The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam. There were no releases of juvenile salmonids to this zone scheduled to begin this week. However, the Yakama Tribal releases of coho to the Yakima River Basin continued this week. These releases are part of the tribal program to re-establish coho runs to this basin and are expected to run through the end of this month.

Approximately 4.5 million subyearling fall Chinook are scheduled for release from Priest Rapids Hatchery, beginning June 11th. Approximately 72% of these subyearlings are unmarked. There are no other scheduled releases of juvenile salmonids to this zone over the next two weeks.

Lower Columbia Zone: The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. Approximately 800,000 subyearling fall Chinook were scheduled for release into the Umatilla River this week. About 50% of these subyearlings were to be released from the Thornhollow Acclimation Facility, while the remaining 50% were to be released directly into the Umatilla River. There were no other scheduled releases of juvenile salmonids to this zone this week.

Approximately 4.0 million subyearling fall Chinook are scheduled for release from Klickitat Hatchery into the Klickitat River, beginning June

11th. Approximately 85% of these subyearlings are unmarked. There are no other scheduled releases of juvenile salmonids to this zone over the next two weeks.

Adult Fish Passage

Daily adult spring Chinook counts at Bonneville ranged from 636 to 1,588. The 2008 count of 122,957 was about 1.88 times larger than the 2007 adult spring Chinook count of 65,332 at Bonneville Dam but is about 82.3% of the ten year average. The 2008 spring Chinook jack count at Bonneville Dam of 17,124 increased about 1.05 times compared to the 2007 count and increased about 1.78 times compared to the ten year average. The 2007 spring Chinook migration arrived later than usual at Bonneville Dam. The 2008 spring Chinook migration arrived earlier than the 2007 migration, but arrived later than the 10 year average migration. The summer Chinook count begins June 1st at Bonneville Dam.

A total of 41,118 spring Chinook adults have been observed at Ice Harbor Dam as of May 29th. The 2008 Ice Harbor count about increased 1.72 times when compared to the 2007 count. However, it was about 85.5% of the 10 year average count. The 2008 spring Chinook jack count of 4,694 was about 78% of the 2007 count, but increased by 1.54 times when compared to the 10 year average. A total of 8,697 spring Chinook adults have been counted at Priest Rapids Dam as of May 28th. The 2008 Priest Rapids Dam adult spring Chinook count increased about 1.67 times compared to the 2007 count. However, it was only 56.3% of the 10 year average count.

The 2008 Bonneville adult steelhead count was 3,594 fish, as of May 29th, which was 272 more fish when compared to the 2007 count of 3,322 fish. The 2008 wild steelhead count at Bonneville Dam was 924 fish. At Willamette Falls Dam, the 2008 count for steelhead was 10,118, as of May 28th. This year's steelhead count has 155 more fish than the 2007 count of 9,963 at Willamette Falls Dam.

The total steelhead count passing at Lower Granite Dam as of May 29th was 7,765. The 2008 count was about 73.4% of the 2007 count of 10,579. The 2008 Lower Granite adult steelhead count increased about 1.04 times when compared to the 10-year average count of 7,410. The 2008 wild steelhead count at Lower Granite Dam as of May 29th was 2,453. At Rock Island Dam, as of May 28th, 240 adult steelhead had been counted. At Rocky Reach Dam 458 adult steelhead

had been counted so far this season. The 2008 Rocky Reach Dam adult steelhead count increased 2.82 times when compared to the 2007 count and increased 3.49 times when compared to the 10 year average.

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
05/16/2008	113.3	0.0	126.7	0.0	139.4	10.0	129.9	0.0	137.9	15.9	120.4	18.1	124.0	18.7
05/17/2008	112.9	0.0	105.9	0.0	141.5	8.8	141.2	0.0	157.6	16.0	163.7	28.0	144.3	22.1
05/18/2008	101.5	0.0	102.3	0.0	131.4	8.4	131.2	0.0	151.6	16.0	160.2	25.4	161.5	22.9
05/19/2008	121.0	0.0	119.0	0.0	152.4	10.0	151.3	0.0	173.2	17.1	184.2	43.5	181.3	21.3
05/20/2008	95.3	0.0	111.3	0.0	152.8	10.5	156.5	0.0	176.1	17.0	185.7	45.8	180.2	20.5
05/21/2008	119.7	0.0	112.9	0.0	149.3	10.5	144.6	0.0	164.5	17.7	170.0	30.3	171.3	21.3
05/22/2008	149.0	0.0	142.7	0.0	166.7	11.0	165.0	0.0	179.7	18.1	185.5	45.6	176.8	21.5
05/23/2008	177.9	0.0	178.7	2.3	193.9	19.8	181.9	6.9	190.1	20.3	201.1	65.7	186.7	46.1
05/24/2008	212.5	3.7	207.4	18.7	242.8	47.2	253.1	61.4	244.9	37.4	271.9	135.5	257.2	97.0
05/25/2008	205.0	0.0	210.0	18.8	240.3	59.1	234.2	41.1	235.5	33.1	252.2	121.9	232.8	98.2
05/26/2008	185.1	0.0	189.4	1.1	220.2	36.5	218.5	47.0	228.8	26.8	251.0	111.9	238.5	93.9
05/27/2008	189.7	0.0	198.2	11.6	228.4	75.5	227.7	57.4	231.9	27.3	254.8	116.3	239.0	75.9
05/28/2008	191.5	0.0	186.7	5.0	218.5	68.6	221.4	33.9	230.8	28.0	252.3	114.3	236.1	72.8
05/29/2008	183.9	1.4	184.6	8.0	213.0	66.1	212.2	24.7	221.2	23.7	238.3	103.0	222.4	61.1

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

Date	Dworshak		Hells Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
05/16/2008	4.7	0.0	21.0	10.3	97.4	27.6	97.3	26.1	96.4	27.2	100.4	44.3
05/17/2008	1.5	0.0	25.6	12.0	121.9	51.2	117.8	35.7	116.7	25.6	120.4	53.3
05/18/2008	1.7	0.0	29.1	12.9	149.5	78.2	144.8	53.6	147.0	32.4	149.3	78.7
05/19/2008	1.7	0.0	32.3	16.2	177.5	105.4	172.5	81.1	182.7	68.6	185.1	112.3
05/20/2008	1.6	0.0	34.3	16.1	197.3	125.8	186.9	96.7	198.8	85.6	198.8	129.9
05/21/2008	1.6	0.0	35.2	20.4	198.9	128.6	186.4	96.0	197.2	85.7	199.0	131.3
05/22/2008	1.6	0.0	35.8	21.7	182.4	112.0	178.1	86.8	189.7	79.2	193.4	126.0
05/23/2008	1.6	0.1	31.9	21.5	154.4	85.0	152.3	62.2	154.9	43.7	163.1	96.2
05/24/2008	1.1	1.0	30.8	22.2	135.4	68.7	133.3	52.8	137.2	42.9	143.9	94.0
05/25/2008	1.1	1.0	28.6	18.3	130.1	59.7	124.8	39.4	124.5	26.7	130.7	78.2
05/26/2008	1.6	0.0	26.9	21.7	127.3	56.4	122.4	36.1	122.7	25.2	127.8	68.3
05/27/2008	1.6	0.0	25.9	19.6	130.6	60.4	124.8	36.7	125.5	25.3	133.3	66.2
05/28/2008	1.4	0.4	27.5	24.6	131.3	61.4	126.2	44.1	127.3	37.9	133.2	77.4
05/29/2008	1.2	0.7	---	---	144.6	74.9	140.3	53.4	142.1	40.7	147.1	95.3

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

Date	McNary		John Day		The Dalles		Bonneville			
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
05/16/2008	268.3	107.4	270.4	81.1	261.3	104.5	298.4	95.5	67.8	123.7
05/17/2008	265.7	106.6	263.8	79.6	260.8	104.3	276.2	105.6	63.2	96.0
05/18/2008	341.3	165.3	349.3	110.6	342.4	128.6	346.0	152.7	68.2	113.6
05/19/2008	385.0	210.2	387.5	133.5	377.1	144.6	402.4	195.5	68.0	127.5
05/20/2008	390.6	219.0	385.9	125.1	382.5	151.7	402.7	202.5	67.3	121.5
05/21/2008	401.1	233.0	414.9	123.6	396.2	161.5	414.7	222.7	66.3	114.3
05/22/2008	393.5	221.3	409.4	137.3	398.2	165.0	418.6	230.9	66.7	109.6
05/23/2008	370.0	197.8	396.0	143.0	388.1	154.2	415.2	217.3	67.0	119.5
05/24/2008	377.3	209.1	388.5	154.6	384.9	164.0	399.2	192.7	67.8	127.3
05/25/2008	375.2	218.7	393.2	139.7	382.7	152.9	397.5	189.8	68.2	128.1
05/26/2008	374.4	213.0	363.4	117.4	355.2	142.3	387.4	178.4	68.0	129.7
05/27/2008	367.4	196.6	365.0	111.0	351.4	139.2	373.5	167.9	67.9	126.3
05/28/2008	390.9	222.0	394.9	137.8	386.6	154.8	401.1	195.2	68.2	126.3
05/29/2008	393.1	220.3	399.1	137.3	389.0	159.3	416.0	211.8	66.9	125.9

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

Site	Date	Species	Number of Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank			
								Rank 1	Rank 2	Rank 3	Rank 4
Lower Granite Dam											
	05/20/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/27/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Little Goose Dam											
	05/20/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/27/08	Chinook + Steelhead	100	1	1	1.00%	1.00%	0	0	1	0
Lower Monumental Dam											
	05/26/08	Chinook + Steelhead	100	3	3	3.00%	0.00%	3	0	0	0
McNary Dam											
	05/22/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	05/28/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	05/20/08	Chinook + Steelhead	108	0	0	0.00%	0.00%	0	0	0	0
	05/24/08	Chinook + Steelhead	107	3	2	1.86%	0.00%	2	0	0	0
	05/27/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
Rock Island Dam											
	05/22/08	Chinook + Steelhead	100	1	0	0.00%	0.00%	0	0	0	0
	05/25/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	05/29/08	Chinook + Steelhead	100	8	7	7.00%	0.00%	6	1	0	0

Hatchery Releases Last Two Weeks

Hatchery Release Summary									
From:	5/16/2008		to		05/29/08				
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2008	400,000	05-26-08	05-27-08	Pittsburg Landing Acclim Pond	Snake River
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2008	500,000	05-26-08	05-26-08	Cpt John Acclim Pond Big Canyon (Clearwater River)	Snake River Clearwater River M F
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2008	500,000	05-28-08	05-29-08		
Nez Perce Tribe Total					1,400,000				
Oregon Dept. of Fish and Wildlife	Umatilla Hatchery	CH0	FA	2008	300,000	05-28-08	05-28-08	Umatilla River	Umatilla River
Oregon Dept. of Fish and Wildlife	Umatilla Hatchery	CH0	FA	2008	800,000	05-20-08	05-21-08	Hells Canyon Dam	Snake River
Oregon Dept. of Fish and Wildlife Total					1,100,000				
Umatilla Tribe	Umatilla Hatchery	CH0	FA	2008	300,000	05-28-08	05-28-08	Thornhollow Acclim Pond	Umatilla River
Umatilla Tribe Total					300,000				
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH0	SU	2008	242,400	05-13-08	05-20-08	Wells Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2008	90,000	04-21-08	05-19-08	Twisp River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2008	110,000	04-21-08	05-19-08	Chewuch River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2008	110,000	04-21-08	05-19-08	Methow River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2008	138,000	04-21-08	05-19-08	Okanogan River	Okanogan River
Washington Dept. of Fish and Wildlife Total					690,400				
Grand Total					3,490,400				

Hatchery Releases Next Two Weeks

Hatchery Release Summary									
From:	5/30/2008		to		6/12/2008				
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH0	FA	2008	200,000	06-01-08	06-01-08	Couse Creek	Snake River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH0	FA	2008	200,000	06-01-08	06-01-08	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2008	4,500,000	06-11-08	06-18-08	Priest Rapids Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife Total					4,900,000				
Yakama Tribe	Klickitat Hatchery	CH0	FA	2008	4,000,000	06-11-08	06-12-08	Klickitat River	Klickitat River
Yakama Tribe Total					4,000,000				
Grand Total					8,900,000				

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	<u>Hungry H. Dnst</u>			<u>Boundary</u>			<u>Grand Coulee</u>			<u>Grand C. Tlwr</u>			<u>Chief Joseph</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
5/16	97	98	98	24	117	118	119	22	108	108	109	24	105	106	107	22	105	105	105	1
5/17	98	98	98	24	118	120	121	22	109	110	111	24	107	108	109	22	107	108	109	22
5/18	98	99	99	24	122	123	123	23	110	111	111	24	108	108	109	23	108	108	109	24
5/19	102	105	107	24	121	123	123	22	109	109	109	24	107	108	108	22	108	108	109	24
5/20	103	105	105	24	125	126	127	21	110	111	111	24	107	108	108	21	108	109	109	24
5/21	101	102	103	24	125	126	127	23	110	110	110	24	107	108	109	23	108	108	109	24
5/22	99	100	102	24	127	128	129	24	110	111	111	24	108	109	109	24	108	108	109	24
5/23	98	98	99	24	127	128	129	23	112	112	112	24	109	109	109	23	108	108	108	24
5/24	98	98	98	24	128	128	130	22	112	112	112	24	111	113	116	22	107	108	108	24
5/25	97	97	98	24	128	128	130	23	112	112	113	24	109	110	110	23	110	112	113	24
5/26	98	99	99	24	128	129	130	23	113	113	114	24	109	111	111	23	109	109	110	24
5/27	99	99	100	24	129	129	131	23	114	114	115	24	110	111	112	23	109	110	111	24
5/28	99	100	100	24	129	130	131	23	115	115	115	24	111	112	112	23	111	112	112	24
5/29	102	102	103	24	128	129	130	24	115	115	116	24	112	113	117	24	111	112	112	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>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
5/16	105	105	105	1	106	107	107	24	108	109	109	24	106	107	108	24	107	107	108	24
5/17	107	107	108	22	107	108	108	24	109	110	110	24	108	109	109	24	108	109	109	24
5/18	108	108	109	24	108	108	108	24	109	109	110	24	108	109	109	24	109	109	109	24
5/19	107	108	109	24	107	107	108	24	109	109	110	24	108	108	109	24	108	108	109	24
5/20	108	109	109	24	107	108	108	21	110	110	110	21	108	108	108	24	108	108	108	24
5/21	108	108	109	24	107	107	108	24	109	110	110	24	107	107	108	24	107	108	108	24
5/22	107	108	108	24	108	108	108	23	110	110	111	23	108	108	109	24	108	109	109	24
5/23	108	108	114	24	107	108	108	24	110	111	112	24	109	109	109	24	109	109	110	24
5/24	111	114	116	24	107	108	108	24	113	115	116	24	109	110	112	24	114	115	116	24
5/25	111	114	115	24	107	108	108	24	116	119	125	24	112	112	113	24	114	115	116	24
5/26	109	109	113	24	110	111	112	24	115	117	128	24	115	116	119	24	117	118	122	24
5/27	110	111	112	24	108	109	109	24	122	125	128	24	114	116	121	24	116	118	122	24
5/28	110	111	111	24	110	110	111	24	120	124	127	24	120	121	123	24	121	122	123	24
5/29	111	112	114	24	110	110	110	24	120	122	126	24	119	120	122	24	119	120	123	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>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
5/16	107	107	108	24	110	112	115	24	108	111	114	24	111	112	113	24	111	111	113	24
5/17	108	108	109	24	110	111	112	24	109	110	111	24	112	113	114	24	112	113	115	24
5/18	108	108	109	24	111	112	113	24	109	110	110	24	112	113	114	24	112	112	113	24
5/19	108	108	109	24	110	111	112	24	109	110	111	24	112	113	113	24	112	112	113	24
5/20	107	108	108	24	110	111	112	24	109	109	109	24	112	112	113	24	111	112	112	24
5/21	107	107	107	24	109	110	111	24	107	107	108	24	110	110	111	24	109	109	110	24
5/22	107	108	108	24	109	110	111	24	107	108	109	24	110	111	112	24	108	109	109	24
5/23	108	108	108	24	111	111	112	24	107	107	108	24	112	114	117	24	110	110	111	24
5/24	113	115	116	24	116	118	121	24	106	107	110	24	123	125	126	24	119	124	126	24
5/25	113	114	115	24	116	118	119	24	108	111	112	24	122	125	126	24	120	123	125	24
5/26	117	118	120	24	118	120	122	24	112	113	115	24	121	124	126	24	124	125	126	24
5/27	115	116	117	24	117	118	119	24	113	115	117	24	122	124	126	24	120	123	124	24
5/28	119	120	121	24	121	122	122	24	114	115	117	24	122	124	126	21	123	125	126	24
5/29	118	119	120	24	120	121	122	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>#</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>		
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
5/16	112	112	113	24	109	110	110	24	97	98	98	24	102	103	104	24	103	104	105	24
5/17	114	115	115	24	110	111	111	24	104	107	108	24	104	105	106	24	104	105	106	24
5/18	114	115	115	24	111	112	112	24	100	101	102	24	104	106	106	24	105	106	107	24
5/19	114	114	114	24	111	111	111	24	100	101	101	24	105	106	107	24	107	108	108	24
5/20	113	114	114	24	109	110	110	24	101	102	102	24	105	105	106	24	108	108	108	24
5/21	111	112	112	24	107	107	108	24	101	101	102	24	104	105	105	24	108	109	109	24
5/22	110	111	112	24	107	108	108	24	101	101	102	17	104	104	104	17	109	109	109	24
5/23	114	115	116	24	107	107	107	24	102	103	103	24	103	103	104	24	107	108	108	24
5/24	121	124	125	24	109	111	112	24	109	113	114	24	103	103	104	24	106	106	107	24
5/25	123	124	124	24	115	117	117	24	113	114	114	24	103	104	104	24	105	106	106	24
5/26	125	125	126	24	116	117	117	24	105	107	113	24	103	104	104	24	105	106	106	24
5/27	122	123	124	24	116	117	117	24	103	104	105	24	103	104	105	24	105	105	106	24
5/28	124	125	125	24	115	116	116	24	105	107	111	24	103	104	105	24	105	105	105	24
5/29	---	---	---	0	115	115	116	24	106	108	112	24	103	103	104	24	105	105	105	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>#</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>		
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
5/16	102	103	104	24	103	103	104	24	113	115	117	24	107	107	109	24	116	117	118	24
5/17	103	104	105	24	105	105	106	24	120	122	122	24	109	110	111	24	115	116	116	24
5/18	104	105	105	24	105	106	106	24	126	128	129	24	111	113	114	24	119	122	123	24
5/19	104	105	106	24	106	106	106	24	130	131	132	24	117	119	121	24	125	127	127	24
5/20	104	104	105	24	106	107	107	24	132	133	135	24	123	124	124	24	127	128	130	24
5/21	103	104	104	24	106	107	107	24	132	133	135	24	122	122	123	24	126	127	128	24
5/22	103	103	104	17	107	108	108	24	131	132	134	24	123	124	125	24	126	127	128	24
5/23	103	103	103	24	108	108	109	24	128	130	131	24	126	126	127	24	123	124	124	24
5/24	102	103	103	24	107	107	107	24	124	125	126	24	125	125	126	24	121	123	125	24
5/25	103	104	105	24	105	106	106	24	121	121	122	24	122	123	123	24	118	119	122	24
5/26	103	103	104	24	106	106	106	24	121	121	121	24	121	122	122	24	117	118	118	24
5/27	103	103	104	24	105	105	106	24	122	122	123	24	119	120	120	24	117	118	118	24
5/28	103	103	103	24	105	105	105	24	122	122	124	24	119	119	119	24	120	123	139	24
5/29	102	103	103	24	105	105	105	24	125	126	128	24	118	118	118	24	120	122	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>#</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>		
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
5/16	112	113	114	24	118	121	121	24	115	115	116	24	117	117	118	24	---	---	---	0
5/17	115	116	117	24	120	121	121	24	116	116	117	24	118	120	120	24	---	---	---	0
5/18	116	117	117	24	120	120	121	24	117	118	118	24	120	121	122	24	---	---	---	0
5/19	121	124	125	24	122	124	125	24	117	118	119	24	125	126	127	24	---	---	---	0
5/20	128	129	129	24	125	127	129	24	121	121	121	24	127	130	135	24	---	---	---	0
5/21	127	128	129	24	125	126	127	24	121	122	122	24	127	129	131	24	---	---	---	0
5/22	129	130	131	24	124	126	127	24	123	124	125	24	127	129	131	24	---	---	---	0
5/23	129	130	131	24	121	122	123	24	124	125	125	24	123	124	126	24	---	---	---	0
5/24	125	126	126	24	118	121	125	24	123	123	124	24	122	123	124	24	---	---	---	0
5/25	123	124	125	24	116	117	120	24	121	122	122	19	120	121	121	24	---	---	---	0
5/26	121	121	122	24	116	116	117	24	120	120	121	18	119	120	121	24	---	---	---	0
5/27	119	119	119	24	115	115	118	24	---	---	---	0	120	120	121	24	---	---	---	0
5/28	119	119	119	24	121	122	123	24	118	118	119	24	121	122	124	24	---	---	---	0
5/29	120	121	122	24	122	123	124	24	118	118	119	24	122	123	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>				
5/16	112	113	114	24	115	115	116	24	109	109	110	24	115	115	115	24	111	112	112	24
5/17	114	115	115	24	115	116	117	24	110	110	111	24	114	115	115	24	112	112	113	24
5/18	114	115	115	24	118	120	121	24	111	112	113	24	117	118	118	24	112	112	113	24
5/19	113	114	115	24	121	122	122	24	113	114	115	24	119	120	122	24	114	115	115	24
5/20	112	113	114	24	121	122	122	24	113	114	114	24	118	118	118	24	113	114	115	24
5/21	109	110	111	24	122	122	123	24	110	110	111	24	118	118	118	24	110	110	110	24
5/22	110	113	116	24	122	122	123	24	109	110	110	24	119	120	121	24	110	111	111	24
5/23	114	115	116	24	121	121	121	24	108	108	108	24	119	120	120	24	110	111	112	24
5/24	110	111	112	24	121	123	123	24	110	111	111	24	120	120	123	24	113	115	119	24
5/25	110	111	113	24	121	122	123	24	113	114	115	24	119	120	120	24	113	114	115	24
5/26	116	118	119	24	121	122	123	24	116	116	117	24	118	119	119	24	114	115	115	24
5/27	117	117	118	24	120	121	122	24	117	117	118	24	118	119	120	24	114	115	116	24
5/28	118	118	118	24	122	122	123	24	119	119	119	24	119	120	121	24	116	116	117	24
5/29	115	116	116	24	121	122	122	24	116	117	118	24	119	119	120	24	113	114	114	24

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>Camas\Washougal</u>			<u>Cascade Island</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>					
	<u>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>				
5/16	116	117	117	24	115	116	117	24	---	---	---	0	114	115	116	24	120	121	121	24
5/17	117	117	118	24	117	117	118	24	---	---	---	0	115	117	118	23	120	120	120	24
5/18	116	116	117	24	116	116	116	24	---	---	---	0	118	119	120	22	123	124	124	24
5/19	117	118	118	24	115	116	116	24	---	---	---	0	119	120	121	24	123	124	125	24
5/20	117	117	118	24	115	116	116	24	---	---	---	0	118	119	119	24	123	124	125	24
5/21	116	116	117	24	112	113	113	24	---	---	---	0	116	117	118	24	124	124	126	24
5/22	116	117	118	24	112	112	112	24	---	---	---	0	119	119	120	24	124	124	125	24
5/23	117	118	118	24	112	113	113	24	---	---	---	0	118	119	120	24	124	124	125	24
5/24	119	120	121	24	115	116	118	24	---	---	---	0	118	119	119	23	123	123	124	24
5/25	118	119	119	24	116	117	118	24	---	---	---	0	118	119	119	22	123	123	123	24
5/26	118	119	119	24	115	115	116	24	---	---	---	0	118	118	119	24	122	123	123	24
5/27	118	119	120	24	115	115	116	24	---	---	---	0	117	118	118	24	122	122	123	24
5/28	119	120	120	24	115	115	116	24	---	---	---	0	118	118	119	24	123	124	125	24
5/29	118	119	120	24	114	114	115	24	---	---	---	0	119	120	120	24	124	125	126	24

Two-Week Summary of Passage Indices

Source: Fish Passage Center

Updated: 5/30/2008 11:35

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)
05/16/2008 *	---	0	324	66	57,536	73,248	14,041	833	---	36,094	63,992
05/17/2008 *	---	---	28	3,163	49,082	70,976	16,233	935	132,623	31,618	76,265
05/18/2008 *	---	---	1	1,381	110,539	93,157	36,920	781	---	35,777	48,905
05/19/2008 *	---	---	---	1,913	198,420	152,930	39,322	740	168,287	91,846	47,707
05/20/2008 *	---	---	---	---	97,055	154,162	125,040	812	---	117,897	47,110
05/21/2008 *	---	---	---	---	36,012	168,150	800,503	704	71,074	77,795	20,288
05/22/2008 *	---	0	---	---	35,911	109,380	224,204	600	---	85,349	12,474
05/23/2008 *	---	0	---	---	19,162	73,814	40,440	959	78,940	62,173	12,707
05/24/2008 *	---	0	---	---	9,218	63,968	26,297	1,017	---	77,209	8,848
05/25/2008 *	---	0	---	---	13,405	31,712	22,899	1,419	83,181	47,438	20,704
05/26/2008 *	---	0	---	---	9,496	31,592	11,435	1,355	---	68,964	22,369
05/27/2008 *	---	4	---	---	11,361	27,244	14,528	1,080	46,463	64,706	26,325
05/28/2008 *	---	8	---	---	8,786	57,307	14,230	343	---	50,939	23,907
05/29/2008 *	---	0	---	---	11,185	24,665	10,006	806	25,943	94,716	13,000
05/30/2008	---	---	---	---	---	---	---	---	---	---	---
Total:	0	12	353	6,523	667,168	1,132,305	1,396,098	12,384	606,511	942,521	444,601
# Days:	0	9	3	4	14	14	14	14	7	14	14
Average:	0	1	118	1,631	47,655	80,879	99,721	885	86,644	67,323	31,757
YTD	56,037	78,589	19,672	13,632	3,497,726	2,517,719	1,854,587	18,729	1,251,647	1,391,983	1,217,409

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)
05/16/2008 *	---	0	0	3	0	0	0	2	---	0	1,196
05/17/2008 *	---	---	0	22	0	0	0	15	845	205	1,214
05/18/2008 *	---	---	0	16	370	0	0	37	---	0	3,023
05/19/2008 *	---	---	---	1	1,314	0	0	81	1,660	0	1,227
05/20/2008 *	---	---	---	---	4,646	1,176	252	179	---	322	3,203
05/21/2008 *	---	---	---	---	13,692	838	795	412	6,505	238	2,415
05/22/2008 *	---	0	---	---	7,294	6,302	544	275	---	220	3,856
05/23/2008 *	---	0	---	---	8,710	3,742	909	256	9,505	800	4,031
05/24/2008 *	---	0	---	---	8,779	5,650	2,431	150	---	2,280	2,794
05/25/2008 *	---	0	---	---	5,284	6,229	1,139	35	9,669	2,976	4,025
05/26/2008 *	---	0	---	---	4,610	3,656	1,263	23	---	2,856	1,697
05/27/2008 *	---	0	---	---	4,115	4,275	1,326	10	29,250	3,432	3,364
05/28/2008 *	---	0	---	---	3,205	8,854	1,636	11	---	8,120	3,102
05/29/2008 *	---	0	---	---	6,770	4,349	792	49	28,925	11,520	2,854
05/30/2008	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	42	68,789	45,071	11,087	1,535	86,359	32,969	38,001
# Days:	0	9	3	4	14	14	14	14	7	14	14
Average:	0	0	0	11	4,914	3,219	792	110	12,337	2,355	2,714
YTD	0	0	2	119	73,927	45,529	11,087	2,042	88,230	33,246	2,035,282

Two-Week Summary of Passage Indices

COMBINED COHO											
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
05/16/2008 *	---	0	0	4	1,839	2,289	0	789	---	11,248	18,899
05/17/2008 *	---	---	0	50	1,259	1,096	423	1,525	845	4,706	16,516
05/18/2008 *	---	---	0	6	5,176	2,307	368	3,620	---	4,626	14,138
05/19/2008 *	---	---	---	2	12,702	5,029	444	4,019	13,588	9,169	22,462
05/20/2008 *	---	---	---	---	4,130	7,446	6,170	4,268	---	12,244	23,037
05/21/2008 *	---	---	---	---	3,423	23,454	84,236	3,452	5,694	11,366	20,672
05/22/2008 *	---	0	---	---	1,683	28,990	30,710	3,170	---	14,417	10,206
05/23/2008 *	---	0	---	---	747	16,083	3,635	1,998	20,290	12,769	12,681
05/24/2008 *	---	0	---	---	1,097	12,355	885	2,346	---	22,994	9,413
05/25/2008 *	---	0	---	---	1,761	5,043	1,518	2,265	23,389	15,423	12,105
05/26/2008 *	---	0	---	---	1,475	3,948	632	2,805	---	15,147	7,396
05/27/2008 *	---	0	---	---	1,163	3,349	1,074	2,087	14,521	14,478	6,435
05/28/2008 *	---	0	---	---	943	7,862	996	872	---	13,885	9,481
05/29/2008 *	---	0	---	---	785	1,985	424	1,038	28,128	27,328	5,708
05/30/2008	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	62	38,183	121,236	131,515	34,254	106,455	189,800	189,149
# Days:	0	9	3	4	14	14	14	14	7	14	14
Average:	0	0	0	16	2,727	8,660	9,394	2,447	15,208	13,557	13,511
YTD	0	0	0	326	104,284	149,286	136,866	35,960	132,861	260,214	320,709

COMBINED STEELHEAD											
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
05/16/2008 *	---	0	250	83	37,832	185,405	12,352	505	---	34,968	17,344
05/17/2008 *	---	---	131	1,264	48,722	164,973	23,035	443	14,406	29,061	12,266
05/18/2008 *	---	---	3	281	108,506	145,339	34,344	1,398	---	25,598	24,719
05/19/2008 *	---	---	---	617	204,552	148,546	31,324	1,790	22,741	32,654	13,594
05/20/2008 *	---	---	---	---	147,132	147,768	87,372	1,812	---	34,177	8,770
05/21/2008 *	---	---	---	---	116,023	212,879	535,080	1,241	23,018	38,505	5,843
05/22/2008 *	---	0	---	---	81,922	149,578	232,900	843	---	50,883	4,687
05/23/2008 *	---	0	---	---	45,789	90,888	49,073	1,041	36,159	59,811	5,909
05/24/2008 *	---	0	---	---	15,584	41,303	31,599	1,010	---	56,669	6,486
05/25/2008 *	---	0	---	---	26,126	22,003	13,917	1,006	30,730	34,164	8,538
05/26/2008 *	---	0	---	---	26,367	26,177	10,801	553	---	30,570	10,518
05/27/2008 *	---	107	---	---	32,742	28,432	11,180	438	7,871	25,508	6,143
05/28/2008 *	---	128	---	---	21,851	71,597	14,941	285	---	15,051	5,033
05/29/2008 *	---	10	---	---	19,427	18,008	9,146	329	7,635	21,378	4,122
05/30/2008	---	---	---	---	---	---	---	---	---	---	---
Total:	0	245	384	2,245	932,575	1,452,896	1,097,064	12,694	142,560	488,997	133,972
# Days:	0	9	3	4	14	14	14	14	7	14	14
Average:	0	27	128	561	66,613	103,778	78,362	907	20,366	34,928	9,569
YTD	4,565	21,922	5,891	10,708	3,248,802	3,405,413	1,433,331	18,220	485,570	986,398	424,346

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)	
05/16/2008	*	---	0	0	4	0	0	0	192	---	716	718
05/17/2008	*	---	---	0	42	1,977	274	0	342	13,178	1,741	729
05/18/2008	*	---	---	0	1	2,773	1,442	0	972	---	1,953	385
05/19/2008	*	---	---	---	14	2,628	1,006	444	1,764	10,074	6,170	1,355
05/20/2008	*	---	---	---	---	5,163	1,568	2,537	3,476	---	12,328	723
05/21/2008	*	---	---	---	---	1,711	2,094	18,012	3,428	12,315	5,469	2,536
05/22/2008	*	---	0	---	---	561	3,361	6,793	4,132	---	8,680	1,906
05/23/2008	*	---	0	---	---	1,742	4,488	3,181	2,833	12,937	10,184	3,534
05/24/2008	*	---	0	---	---	1,975	1,412	1,547	1,605	---	12,876	3,892
05/25/2008	*	---	0	---	---	685	1,780	1,012	4,323	68,960	14,086	6,342
05/26/2008	*	---	0	---	---	369	2,778	884	5,870	---	21,561	4,668
05/27/2008	*	---	0	---	---	447	1,211	1,390	2,327	17,175	26,737	12,285
05/28/2008	*	---	0	---	---	848	1,603	783	797	---	17,192	25,897
05/29/2008	*	---	0	---	---	589	687	863	870	21,051	37,418	11,098
05/30/2008		---	---	---	---	---	---	---	---	---	---	---
Total:		0	0	0	61	21,468	23,704	37,446	32,931	155,690	177,111	76,068
# Days:		0	9	3	4	14	14	14	14	7	14	14
Average:		0	0	0	15	1,533	1,693	2,675	2,352	22,241	12,651	5,433
YTD		37	0	0	111	23,351	24,025	37,798	33,628	179,312	181,233	78,227

* 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:

5/30/08 11:37 AM

		05/16/08	TO	05/30/08			
Site	Data	Species					Grand Total
		CH0	CH1	CO	SO	ST	
LGR	Sum of NumberCollected	30,150	331,450	18,312	10,004	434,083	823,999
	Sum of NumberBarged	29,608	297,832	17,862	9,766	413,919	768,987
	Sum of NumberBypassed	468	32,357	424	230	19,622	53,101
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	5	20	1	2	13	41
	Sum of FacilityMorts	69	1,015	25	6	529	1,644
	Sum of ResearchMorts	0	226	0	0	0	226
	Sum of TotalProjectMorts	74	1,261	26	8	542	1,911
LGS	Sum of NumberCollected	27,552	661,382	66,301	13,850	871,063	1,640,148
	Sum of NumberBarged	27,534	659,564	66,299	13,849	870,350	1,637,596
	Sum of NumberBypassed	8	517	0	0	590	1,115
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	1	13	1	0	3	18
	Sum of FacilityMorts	9	1,288	1	1	120	1,419
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	10	1,301	2	1	123	1,437
LMN	Sum of NumberCollected	7,795	826,742	75,433	22,575	655,079	1,587,624
	Sum of NumberBarged	6,301	125,534	4,783	4,819	119,431	260,868
	Sum of NumberBypassed	1,489	701,046	70,648	17,756	535,563	1,326,502
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	8	0	0	7	15
	Sum of FacilityMorts	5	154	2	0	78	239
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	5	162	2	0	85	254
MCN	Sum of NumberCollected	37,719	291,279	46,553	68,816	64,793	509,160
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	37,681	290,922	46,525	68,769	64,726	508,623
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	6	22	1	3	3	35
	Sum of FacilityMorts	27	312	25	36	59	459
	Sum of ResearchMorts	5	23	2	2	5	37
	Sum of TotalProjectMorts	38	357	28	41	67	531
Total Sum of NumberCollected		103,216	2,110,853	206,599	115,245	2,025,018	4,560,931
Total Sum of NumberBarged		63,443	1,082,930	88,944	28,434	1,403,700	2,667,451
Total Sum of NumberBypassed		39,646	1,024,842	117,597	86,755	620,501	1,889,341
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of SampleMorts		12	63	3	5	26	109
Total Sum of FacilityMorts		110	2,769	53	43	786	3,761
Total Sum of ResearchMorts		5	249	2	2	5	263
Total Sum of TotalProjectMorts		127	3,081	58	50	817	4,133

YTD Transportation Summary

Source: Fish Passage Center

Updated:

5/30/08 11:37 AM

TO: 05/30/08

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	33,693	2,351,933	66,554	11,314	2,067,433	4,530,927
	Sum of NumberBarged	31,885	1,921,862	64,663	10,865	1,695,503	3,724,778
	Sum of NumberBypassed	1,726	424,420	1,848	424	371,142	799,560
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	7	137	2	2	40	188
	Sum of FacilityMorts	75	2,725	41	23	748	3,612
	Sum of ResearchMorts	0	2,789	0	0	0	2,789
	Sum of TotalProjectMorts	82	5,651	43	25	788	6,589
LGS	Sum of NumberCollected	27,835	1,569,418	85,827	14,071	2,131,297	3,828,448
	Sum of NumberBarged	27,534	1,179,266	83,099	14,049	1,413,207	2,717,155
	Sum of NumberBypassed	290	388,600	2,726	21	717,878	1,109,515
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	1	22	1	0	8	32
	Sum of FacilityMorts	10	1,530	1	1	204	1,746
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	11	1,552	2	1	212	1,778
LMN	Sum of NumberCollected	7,795	1,135,038	79,134	22,794	878,247	2,123,008
	Sum of NumberBarged	6,301	195,197	5,183	4,819	154,560	366,060
	Sum of NumberBypassed	1,489	940,165	73,949	17,975	723,540	1,757,118
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	25	0	0	9	34
	Sum of FacilityMorts	5	642	2	0	138	787
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	5	667	2	0	147	821
MCN	Sum of NumberCollected	38,827	703,253	62,324	82,769	267,274	1,154,447
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	38,788	702,704	62,296	82,718	267,060	1,153,566
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	6	70	1	3	18	98
	Sum of FacilityMorts	28	421	25	40	174	688
	Sum of ResearchMorts	5	52	2	2	20	81
	Sum of TotalProjectMorts	39	543	28	45	212	867
Total Sum of NumberCollected		108,150	5,759,642	293,839	130,948	5,344,251	11,636,830
Total Sum of NumberBarged		65,720	3,296,325	152,945	29,733	3,263,270	6,807,993
Total Sum of NumberBypassed		42,293	2,455,889	140,819	101,138	2,079,620	4,819,759
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		14	254	4	5	75	352
Total Sum of FacilityMorts		118	5,318	69	64	1,264	6,833
Total Sum of ResearchMorts		5	2,841	2	2	20	2,870
Total Sum of TotalProjectMorts		137	8,413	75	71	1,359	10,055

Cumulative Adult Passage at Mainstem Dams Through: 05/29

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	05/29	122957	17124	65332	16157	149418	9572	0	0	0	0	0	0	0	0	0	0	0	0
TDA	05/29	91371	14906	49535	14240	102241	6971	0	0	0	0	0	0	0	0	0	0	0	0
JDA	05/29	75933	13602	40217	12624	84041	5562	0	0	0	0	0	0	0	0	0	0	0	0
MCN	05/29	59439	9822	34152	10516	74846	5259	0	0	0	0	0	0	0	0	0	0	0	0
IHR	05/29	41118	4694	23891	6014	48050	3048	0	0	0	0	0	0	0	0	0	0	0	0
LMN	05/29	37934	4214	22878	5723	44373	2713	0	0	0	0	0	0	0	0	0	0	0	0
LGS	05/29	32939	3961	14543	4918	40457	2532	0	0	0	0	0	0	0	0	0	0	0	0
LGR	05/29	29796	5239	13524	5936	39562	2666	0	0	0	0	0	0	0	0	0	0	0	0
PRD	05/28	8697	351	5191	223	15449	375	0	0	0	0	0	0	0	0	0	0	0	0
RIS	05/28	7629	348	4108	1005	11387	547	0	0	0	0	0	0	0	0	0	0	0	0
RRH	05/28	2281	95	1799	402	4283	179	0	0	0	0	0	0	0	0	0	0	0	0
WEL	05/28	893	47	660	199	2179	73	0	0	0	0	0	0	0	0	0	0	0	0
WFA	05/28	5267	62	16066	152	-	-	0	0	0	0	-	-	0	0	0	0	-	-

DAM	Coho						Sockeye			Steelhead			
	2008		2007		10-Yr Avg.		2008		2007	10-Yr Avg.	10-Yr Avg.		Wild
	Adult	Jack	Adult	Jack	Adult	Jack	2008	2007	Avg.	2008	2007	Avg.	2008
BON	0	0	0	0	0	0	14	9	10	3594	3322	3902	924
TDA	0	0	0	0	0	0	2	1	2	1445	1259	1234	540
JDA	-1	0	0	0	0	0	1	5	1	3310	2140	3181	1446
MCN	0	0	0	0	0	0	1	0	0	2478	1925	1751	1095
IHR	0	0	0	0	0	0	0	0	0	3174	2273	1904	1175
LMN	0	0	0	0	0	0	0	0	0	4028	2305	1920	1762
LGS	0	0	0	0	0	0	0	0	0	2658	2301	2178	1040
LGR	0	0	0	0	0	0	0	0	0	7765	10579	7410	2453
PRD	0	0	0	1	0	0	0	0	11	113	46	9	0
RIS	0	0	0	0	0	0	1	0	1	240	49	35	119
RRH	0	0	0	0	0	0	1	0	0	458	162	131	232
WEL	0	0	0	0	0	0	0	0	0	136	41	24	99
WFA	0	0	2	0	-	-	0	0	-	10118	9963	-	-

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: 05/30/08

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