

# Fish Passage Center Weekly Report #06 - 21

July 28, 2006

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### **Summary of Events:**

Water Supply: Precipitation throughout the Columbia Basin has varied between 77% and 186% of average at individual sub-basins over July. Precipitation above The Dalles over July has been 118% of average. Over the entire water year, precipitation has been average or above average at all list locations.

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

Location	Water Yea July 1-		Water Year 2006 October 1, 2005 to July 24, 2006				
	Observed	%	Observed	%			
G 1 1: 41	(inches)	Average	(inches)	Average			
Columbia Above Coulee	2.71	113	22.49	110			
Snake River Above Ice Harbor	1.36	93	18.57	123			
Columbia Above The Dalles	2.12	118	22.14	112			
Kootenai	2.68	109	23.82	113			
Clark Fork	2.11	109	16.84	119			
Flathead	3.57	135	22.52	120			
Pend Oreille/Spokane	3.37	154	31.65	116			
Central Washington	1.19	186	10.95	138			
Snake River Plain	0.97	101	11.81	123			
Salmon/Boise/ Payette	1.56	106	23.50	133			
Clearwater	2.67	107	29.49	110			
SW Washington Cascades/Cowlitz	2.27	77	65.99	101			
Willamette Valley	2.16	96	61.17	109			

Table 2 displays the May Final, June Final, and July Final runoff volume forecasts for multiple reservoirs. The July Final forecast at The Dalles between January and July is 114000 Kaf (106% of average). The forecast at Libby has increased 12% between the June final and July Final forecast.

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

1					T 1				
	N	<b>1</b> ay	Ju	ine	Ju	ıly			
	F	inal	Fi	nal	Fi	nal			
	%	Probable	%	Probable	%	Probable			
	Average	Runoff	Average	Runoff	Average	Runoff			
	(1971-	Volume	(1971-	Volume	(1971-	Volume			
Location	2000)	(Kaf)	2000)	(Kaf)	2000)	(Kaf)			
The Dalles (Jan-July)	103	110000	103	111000	106	114000			
Grand									
Coulee	98	61900	101	63300	106	66900			
(Jan-July)									
Libby Res.									
Inflow, MT	98	6160	101	6360	113	7120			
(Jan-July)									
Hungry									
Horse Res.	101	2250	106	2360	109	2430			
Inflow, MT									
(Jan-July)									
Lower Granite Res.									
Inflow	126	27100	124	26700	116	25100			
(Apr- July)									
Brownlee									
Res. Inflow	143	9020	141	8910	138	8710			
(Apr-July)	143	7020	1-11	0710	130	0710			
Dworshak									
Res. Inflow	101	2670	106	2800	105	2770			
(Apr-July)	-								

Grand Coulee Reservoir is at 1285.2 feet (7-27-06) and has drafted 2.4 feet over the last week. Inflow has ranged from 108.6 to 125.1 Kcfs, while outflow has ranged between 106.3 and 145.6 Kcfs.

The Libby Reservoir is currently at elevation 2454.1 feet (7-27-06) and drafted 1.5 feet last week. Outflows are currently 14.1 Kcfs.

Hungry Horse is currently at an elevation of 3552.8 feet (7-27-06) and has drafted approximately 1.7 feet in the last week. Hungry Horse outflows have ranged between 3.2 and 5.4 Kcfs. Inflows ranged between 1.1 and 2.4 Kcfs over the same period.

Dworshak is currently at an elevation of 1573 feet (7-27-06) and drafted approximately 8.1 feet last week. Outflows at Dworshak were decreased from approximately 14 Kcfs to 12 Kcfs on July 24, 2006. At the July 26 TMT, it was agreed to further drop outflows to full powerhouse capacity (approximately 9.5 Kcfs) late today.

The Brownlee Reservoir was at an elevation of 2060.5 feet on July 27th, 2006. Outflows at Hells Canyon have ranged between 13.1 and 17.7 Kcfs over the last week.

According to the June Final Water Supply Forecast, the flow objective this summer is 54.5 Kcfs at Lower Granite (began 6-21-06) and 200 Kcfs at McNary (began 7-1-06). From June 21 to July 27 flows have averaged 46.8 Kcfs at Lower Granite, over the last week flows have averaged 37.6 Kcfs at Lower Granite. Between July 1 and July 27, flows at McNary have averaged 192.4 Kcfs, over the last week flows have averaged 177.3 Kcfs.

**Spill:** Spill at Dworshak Dam has averaged 25% of average daily flow over the past week. Spill operations for fish passage are being implemented in accordance with the December 29, 2005 District Court Order and Opinion. Summer spill began on June 21 at the Snake River projects. Spill at Lower Granite, Little Goose, Lower Monumental, and Ice Harbor dams averaged 45%, 31%, 42%, and 70%, of average daily flow over the past week, respectively. Spill at Lower Granite Dam is supposed to be 18 Kcfs according to the Court's Order. However, over the past week spill has ranged from a low of 16.5 to a high of 17.3 Kcfs, which according to the COE was due to an error in the teletype sent to the project and will be remedied. At Little Goose Dam spill has met the Court's Order. At Lower Monumental Dam spill was decreased from 17 Kcfs to 13.5 Kcfs on July 25th because total dissolved gas at the forebay monitor at Ice Harbor Dam averaged 115.1%. The COE did not increase spill again over the next four days because they believed that an increase in spill might cause them to again exceed the 115% at the Ice Harbor forebay. The COE has reconsidered and expects to increase spill today to the Court Order since the Ice Harbor forebay gas level was only 112.6% on July 27. Spill at Ice Harbor Dam is not occurring as specified in the Court's Order, but this is due to the low flows. Spill is occurring as the water in excess of the amount used to operate one turbine unit at the project. Summer spill was initiated on July 1 at the Lower Columbia River projects.

Spill at McNary, John Day, The Dalles, and Bonneville dams was 49%, 30%, 39%, and 48% of average daily flow, respectively. McNary and John Day dams met the Court's order last week, while The Dalles Dam was close at 39%. Spill at Bonneville Dam was below the Court's Order. Daytime spill levels at Bonneville Dam did not achieve the 75 Kcfs, since the COE instructs the project to spill as close to 75 Kcfs as they can, without exceeding 75 Kcfs. The opening of the spill gates to the next level might cause the project to spill a small increment above the 75 Kcfs dependent on the head on the project. Nighttime spill at this project was restricted to 75 Kcfs (from 120

Kcfs) on July 24 due to TDG exceedances at Camas/Washougal where the high 12 hour average TDG was 117.7%. TDG decreased quickly (117% down to 111%-107%) at Camas/Washougal due to decreased temperatures and increased wind activity. After request the COE agreed to increase nighttime spill again beginning the night of July 27th.

Total dissolved gas levels have met the TDG waiver requirements over the past week at all sites, except Camas/Washougal. Only one sampled fish showed minor signs of GBT, and that was at Rock Island Dam.

**Smolt Monitoring**: Subyearling Chinook salmon predominate the run at all sites as they have for the past several weeks. Small numbers of spring migrants continue to be detected in the system. Subyearling indices decreased at all sites over the past week.

At Lower Granite Dam, subyearling Chinook indices averaged roughly 600 per day over the past week compared to 1,000 per day the previous week, while at Little Goose and Lower Monumental Dam the subyearling index averaged 600 and 300 (respectively) per day this week.

At Rock Island Dam indices for subyearlings averaged 200 per day this week compared to 400 per day last week. At McNary Dam, subyearling indices were down, averaging 16,000 this week compared to 40,000 per day over the previous week. At John Day Dam, where sampling is limited to every other day due to high temperatures, subyearling indices averaged 13,000 per day this week compared to 35,000 per day last week. At Bonneville Dam subvearling indices also decreased with this weeks' average index at 8,800 per day, compared to 18,000 fish per day last week. Bonneville sampling has also been reduced due to high temperatures. In fact, with the recent heat wave, temperatures exceeded 72 degrees F, at which point sampling ceased, for one day, as per the 2006 Fish Passage Plan. With temperatures below 72 again, sampling has commenced. However, when temperatures are at or above 70, sampling crews will work up fish more frequently to reduce holding time at the site.

Adult Fish Passage: At Bonneville dam, daily counts of summer Chinook averaged 549 fish for the week ending July 27. The season total is now 95,931 fish, about 123% and 161% of the respective 2005 and 10-year average counts. The adult summer Chinook count at The Dalles Dam through July 27 was 78,575 fish, about 82% of the Bonneville passage total to date. About 58,513 of the summer Chinook have passed McNary Dam (as of July 27) with the majority moving upstream into the Mid-Columbia River. Daily counts at Rock Island Dam ranged between 491 and 964 during the week.

At Bonneville Dam, steelhead counts again increased throughout the week with the average daily count of 2,367 per day. Through July 27, the steelhead run at Bonneville Dam was 50,362, 65% and 63% of the respective 2005 and 10-year average counts. The daily counts at The Dalles Dam ranged between 344 and 758 for the week with the cumulative steelhead count through July 27 at 17,559. About 35% of the steelhead counted at Bonneville Dam have passed The Dalles Dam. The majority of the 10,956 steelhead counted at McNary Dam have moved up into the Snake River with the cumulative count at Ice Harbor Dam now at 5,413 for the season. The cumulative count at Priest Rapids Dam is 821 for the season.

Adult sockeye salmon passage at Bonneville Dam averaged 57 fish per day through the week with the count at Bonneville through July 27 at 36,831, about 51% and 62% of the respective 2005 and 10-year average counts. About 26,376 of the adult sockeye have been counted at Priest Rapids Dam. One of the major spawning sites for the sockeye is Lake Wenatchee with the other site at Lake Osoyoos (Okanogan basin). To date, 43 sockeye have been counted into the Snake River.

**Hatchery Releases**: No hatchery releases are scheduled for the next two weeks.

Daily Average Flow and Spill (in kcfs) at Mid-Columbia Project	s) at Mid-Columbia Projects	ily Average Flow and Spill (in ko
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	Grand Chief				<b></b> (	-	cky	Ro	ck			Pri	iest	
	Co	ulee	Jose	ph	We	ells	Re	ach	Isla	nd	Wana	apum	Ra	pids
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
07/14/06	146.9	0.2	140.1	0.0	144.7	8.5	141.5	11.2	142.3	25.3	150.0	21.2	144.0	26.8
07/15/06	129.9	0.2	139.7	0.0	151.8	22.3	148.6	9.6	151.3	23.0	161.8	28.1	155.1	32.2
07/16/06	98.6	0.2	99.1	0.0	103.6	7.3	113.7	8.5	119.7	19.2	138.3	9.3	138.4	22.6
07/17/06	123.9	0.2	128.6	0.0	131.0	8.3	125.5	12.0	125.2	28.7	126.1	1.6	121.8	21.3
07/18/06	131.0	0.2	130.5	0.0	133.6	10.0	131.3	13.3	131.2	30.1	134.4	1.9	127.3	23.3
07/19/06	130.9	0.2	127.5	0.0	139.7	9.9	142.4	12.3	144.4	27.9	152.8	11.6	149.5	22.3
07/20/06	132.1	0.2	129.0	0.0	127.6	8.5	123.3	12.3	125.0	27.4	140.3	5.1	136.9	23.2
07/21/06	121.2	0.2	128.9	0.0	133.4	8.0	129.9	11.9	129.0	26.7	126.1	2.7	121.3	21.2
07/22/06	125.3	0.2	122.1	0.0	127.6	8.3	128.1	9.5	131.7	21.6	137.2	6.9	131.3	22.5
07/23/06	106.3	0.2	106.2	0.0	106.4	7.9	100.3	6.7	104.7	15.9	120.2	4.0	120.7	24.1
07/24/06	137.1	0.2	132.3	0.0	136.7	8.8	137.3	10.6	136.4	25.0	131.6	3.2	125.7	20.7
07/25/06	115.2	0.2	122.6	0.0	127.8	9.2	132.5	11.7	136.7	25.6	146.3	17.5	139.5	24.8
07/26/06	110.5	0.2	111.9	0.0	115.8	7.5	114.4	11.2	115.1	24.8	131.0	2.7	131.9	20.2
07/27/06	145.6	0.2	139.0	0.0	139.7	8.4	135.3	11.7	135.1	26.0	133.7	4.4	134.1	21.9

Daily Average	Flow and	Snill (in	kcfc\ at	Snako	Racin	Drojecte
Daliv Average	Flow and	Spill (in	KCIS) at	Snake	Basin	Projects

				Hells	Lo	wer	Li	ttle	Lov	ver	l l	ce
	Dwo	rshak	Brownlee	Canyon	Gra	nite	Go	ose	Monum	ental	Ha	rbor
Date	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
07/14/06	11.2	1.6	13.6	18.0	40.7	17.9	40.0	12.3	40.3	16.1	40.7	29.6
07/15/06	11.2	1.6	13.2	15.1	42.5	18.2	42.2	13.1	40.9	14.8	42.4	30.6
07/16/06	11.2	1.6	13.5	16.5	39.0	18.3	36.9	11.5	36.9	16.6	37.9	27.6
07/17/06	11.2	1.6	12.4	17.0	38.6	18.1	39.0	12.1	39.0	16.8	38.9	28.6
07/18/06	11.2	1.5	12.9	18.2	42.4	18.1	41.8	12.7	40.6	16.6	42.1	18.3
07/19/06	12.2	2.5	11.9	13.9	39.0	17.9	37.9	11.7	38.2	16.8	38.0	15.7
07/20/06	13.8	4.2	12.8	17.8	37.6	17.9	35.0	10.8	36.2	16.8	34.6	21.9
07/21/06	14.0	4.3	11.8	17.2	42.6	17.3	44.3	13.2	43.8	16.8	48.0	36.2
07/22/06	13.9	4.2	11.9	15.7	38.2	16.4	38.3	12.0	37.9	16.6	39.5	28.5
07/23/06	13.6	3.9	12.3	17.7	39.8	16.4	38.8	12.0	38.6	16.8	39.1	27.9
07/24/06	13.5	3.8	11.7	17.6	39.2	16.5	40.2	11.7	39.5	16.5	41.4	30.0
07/25/06	12.0	2.2	11.7	14.0	37.3	16.5	34.1	10.7	33.6	15.5	33.2	22.3
07/26/06	12.0	2.2	10.9	13.1	33.5	16.5	31.2	9.9	31.3	13.5	31.4	20.1
07/27/06	12.0	2.2			32.8	17.0	33.5	10.5	33.9	13.5	35.9	24.8

	-	verage Narv	Flow and		kcfs) a		er Colu		rojects onneville	
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
07/14/06	178.1	99.2	173.5	52.3	172.5	67.7	194.1	92.1	3.9	86.5
07/15/06	193.8	114.5	157.7	47.0	151.5	60.5	176.6	91.1	0.0	74.0
07/16/06	187.6	81.9	184.2	54.9	173.8	69.4	171.6	88.8	0.0	71.2
07/17/06	208.7	82.4	199.7	59.2	191.3	75.2	195.2	89.1	35.2	59.4
07/18/06	179.2	72.5	168.3	50.6	165.4	66.2	178.2	92.1	2.9	71.6
07/19/06	172.3	68.2	160.2	47.5	157.9	62.4	166.1	90.1	0.1	64.5
07/20/06	193.6	107.9	180.4	53.3	176.3	69.4	183.6	92.3	1.9	77.9
07/21/06	184.7	109.5	173.8	51.8	176.3	69.5	194.5	89.7	9.0	84.3
07/22/06	176.6	78.8	148.3	44.0	142.8	56.0	158.8	86.6	0.0	60.7
07/23/06	162.1	64.0	154.8	46.1	149.3	59.1	160.4	86.3	0.0	62.7
07/24/06	186.0	80.6	176.8	52.2	176.0	69.4	180.4	82.8	12.3	73.7
07/25/06	176.6	69.5	157.9	46.7	151.6	59.1	161.3	74.4	2.5	73.0
07/26/06	195.2	111.2	190.5	57.6	185.9	73.6	193.9	75.1	11.1	96.2
07/27/06	159.8	95.7	152.4	45.6	151.3	59.7	162.7	80.0	0.0	71.2

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

										sh with f Highest l	
			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
Littl	e Goose	Dam									
	07/18/06	Chinook + Steelhead	49	1	1	2.04%	0.00%	1	0	0	0
Low	er Monu	mental Dam									
	07/24/06	Chinook + Steelhead	24	0	0	0.00%	0.00%	0	0	0	0
McN	lary Dam										
	07/20/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/24/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bon	neville D	am									
	07/18/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/21/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/26/06	Chinook + Steelhead	85	0	0	0.00%	0.00%	0	0	0	0
Roc	k Island	Dam									
	07/20/06	Chinook + Steelhead	100	2	2	2.00%	0.00%	2	0	0	0
	07/24/06	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	07/27/06	Chinook + Steelhead	99	0	0	0.00%	0.00%	0	0	0	0

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

	<u>Hung</u>	ry H. I	<u>Dnst</u>		Boundary				Grand	d Coul	<u>ee</u>		Grand	d C. T	<u>wr</u>		<b>Chief</b>	Chief Joseph			
	<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>Date</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>													
7/14	107	107	107	24	116	116	117	14	119	120	120	24	117	117	118	14	115	116	116	24	
7/15	107	107	107	24	116	117	118	24	119	119	119	24	116	117	120	24	116	116	116	24	
7/16	106	107	107	24	116	116	117	24	118	118	119	24	116	117	119	24	116	116	116	24	
7/17	107	107	108	24	116	117	118	24	118	119	119	24	115	116	120	24	116	116	117	24	
7/18	107	107	107	24	116	116	117	24	118	118	118	24	115	116	119	24	116	116	117	24	
7/19	107	107	108	24	115	115	116	24	117	118	118	24	115	116	118	24	115	115	116	24	
7/20	107	107	107	24	115	115	116	24	115	116	117	24	114	115	118	24	114	115	115	24	
7/21	107	107	107	24	113	114	115	24	114	114	115	24	114	115	117	24	114	115	115	24	
7/22	107	108	108	24	112	113	114	16	114	115	116	24	114	115	120	16	115	115	115	24	
7/23	108	108	109	24	113	114	115	24	113	114	114	24	115	117	121	24	115	116	116	24	
7/24	108	109	109	24	114	114	115	24	113	114	115	24	114	116	119	24	115	115	116	24	
7/25				0				0				0				0				0	
7/26	108	108	109	24	116	116	117	24	113	113	114	24	113	114	117	24	114	115	115	24	
7/27	108	108	109	24	116	117	118	24	113	114	114	24	113	114	116	24	114	114	115	24	

Total Dissolved 6	as Saturation D	ata at Mid Col	umbia River Sites

	Chief J. Dnst Wells					Wells Dwnstrm				<u>strm</u>		Rock	y Read	<u>ch</u>	Rocky R. Tlwr					
	<u>24 h</u>	<u>12 h</u>		#	<u>24 h</u>	12 h		#	<u>24 h</u>	<u>12 h</u>		#	<u>24 h</u>	<u>12 h</u>		<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>	<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>
7/14	115	115	116	24	114	114	114	22	114	115	115	22	112	113	113	24	113	113	113	24
7/15	115	116	116	24	114	114	114	24	116	118	121	24	113	113	113	24	113	113	114	24
7/16	115	116	117	24	114	115	115	24	115	115	116	24	113	114	115	24	113	114	115	24
7/17	116	116	116	24	114	115	115	24	115	116	117	24	115	116	116	24	115	116	116	24
7/18	116	116	117	24	114	114	115	24	115	116	116	24	113	113	113	24	113	113	114	24
7/19	115	116	116	24	115	115	116	24	116	117	118	24	114	114	115	24	114	115	115	24
7/20	115	115	115	24	114	114	115	23	115	116	116	23	114	115	115	24	114	114	114	24
7/21	115	115	115	24	114	115	116	24	115	116	117	24	115	115	116	24	115	116	116	24
7/22	115	115	116	23	115	115	116	24	116	116	117	24	115	116	116	24	115	115	116	24
7/23	115	116	117	24	115	116	117	24	116	117	118	24	116	116	117	24	116	116	116	24
7/24	115	115	116	24	115	116	116	24	116	117	117	24	116	116	116	23	116	116	116	24
7/25				0				0				0				0				0
7/26	114	115	116	24	113	114	115	24	115	116	116	24	114	114	115	24	114	115	115	24
7/27	114	114	115	24	114	114	115	24	115	115	116	24	114	114	115	24	114	115	115	24

**Total Dissolved Gas Saturation at Mid Columbia River Sites** 

	Rock	Island	<u>d</u>		Rock	<u>I. Tlw</u>	<u>r</u>		<u>Wana</u>	<u>pum</u>			<u>Wana</u>	pum <sup>-</sup>	<u> Flwr</u>		<u>Pries</u>	t Rapi	<u>ds</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>
Date	<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>
7/1	4 113	113	113	24	116	117	117	24	111	112	113	23	113	114	114	23	112	112	113	23
7/1	5 112	113	113	24	116	117	117	24	111	112	113	23	113	114	118	23	112	113	114	23
7/1	6 112	113	113	24	113	116	116	24	111	113	114	23	113	114	116	23	112	113	115	23
7/1	7 113	114	116	24	112	119	120	24	111	112	112	23	112	113	113	23	111	111	112	23
7/1	8 113	113	114	24	118	119	119	24				0				0				0
7/1	9 113	113	114	24	118	119	119	24	110	112	113	23	112	113	114	23	109	110	111	23
7/2	0 114	114	115	24	118	119	120	24				0				0				0
7/2	1 115	116	116	24	119	120	122	24				0				0				0
7/2	2 115	116	116	24	118	119	119	24				0				0				0
7/2	3 115	116	117	24	118	119	119	24				0				0				0
7/2	4 115	116	117	24	119	119	120	24				0				0				0
7/2	5			0				0				0				0				0
7/2	6 114	115	115	24	118	119	120	24				0				0				0
7/2	7 114	115	116	24	118	119	120	24				0				0				0

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

Total Dissolved Ga	s Saturation Data at	Lower Columbia :	and Snake River Sites

	Pries <sup>1</sup>	t R. Dı	<u>nst</u>		Pasco	<u>0</u>			<b>Dwor</b>	<u>shak</u>			<b>Clrwt</b>	r-Pecl	<u>&lt;</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>	<u>12 h</u>		<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>
7/14	114	115	116	23	110	110	111	24	103	103	103	24	105	106	107	24	102	104	105	24
7/15	114	115	116	23	110	110	111	24	103	103	103	24	104	106	107	24	102	103	104	24
7/16	114	114	115	23	110	111	111	24	102	103	103	24	104	106	107	24	102	103	104	24
7/17	113	113	114	23	109	110	111	24	102	103	103	24	104	106	107	24	102	103	104	24
7/18 -				0	108	109	110	24	102	103	103	24	104	105	106	24	102	103	104	24
7/19	112	113	113	23	109	109	110	24	105	107	108	24	105	107	108	24	102	103	104	24
7/20 -				0	109	110	110	24	108	109	109	24	108	109	110	24	101	103	104	24
7/21 -				0	110	111	112	24	108	109	109	24	108	110	111	24	102	103	104	24
7/22 -				0	112	112	113	24	108	109	109	24	109	110	111	24	102	103	104	24
7/23 -				0	112	113	113	24	108	108	109	24	109	110	111	24	101	102	103	24
7/24 -				0	112	113	113	24	108	109	109	24	109	110	111	24	101	102	103	24
7/25 -				0				0				0				0				0
7/26 -				0	110	110	111	24	104	104	104	24	105	107	108	24	100	101	102	24
7/27 -				0	109	110	110	24	104	104	104	24	106	107	108	24	101	103	106	24

#### **Total Dissolved Gas Saturation Data at Snake River Sites**

	<b>Clrwt</b>	r-Lew	<u>iston</u>		Lowe	r Grar	<u>nite</u>		L. Gra	anite T	<u>lwr</u>		Little	Goos	<u>e</u>		L. Go	ose T	lwr	
	<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>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<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>	<u>hr</u>
7/14	105	107	109	24	101	101	102	24	112	113	116	24	106	106	107	24	112	113	114	24
7/15	105	107	109	24	101	101	101	24	113	114	114	24	106	107	107	24	112	114	115	24
7/16	105	107	109	24	101	101	102	24	114	115	115	24	107	107	107	16	111	112	113	16
7/17	105	107	109	24	101	102	102	24	112	113	115	24	107	107	108	24	112	113	113	24
7/18	104	107	108	24	102	102	103	24	111	112	113	24	108	108	109	24	112	114	114	24
7/19	104	107	108	24	102	102	103	24	111	112	112	24	107	107	108	24	112	113	114	24
7/20	106	108	110	24	102	102	103	24	111	112	112	24	107	107	107	23	112	113	115	23
7/21	106	109	110	24	102	102	102	24	112	113	114	24	107	107	108	24	113	115	115	24
7/22	107	109	111	24	102	102	102	24	115	115	116	24	107	108	108	24	113	114	114	24
7/23	107	109	111	24	102	103	104	24	115	115	115	24	108	109	109	24	113	114	114	24
7/24	107	109	111	24	104	104	104	24	115	115	116	24	110	110	111	24	113	114	115	24
7/25				0				0				0				0				0
7/26	105	107	109	24	104	105	106	24	115	115	115	24	111	111	111	24	112	113	114	24
7/27	105	108	109	24	105	105	107	24	115	115	116	24	111	111	112	24	113	113	114	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 Ha	<u>arbor</u>			Ice H	arbor	<u>Tlwr</u>		<u>McNa</u>	ary-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>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>
Date	<u>Avg</u>	Avg	<u>High</u>	<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>	Avg	Avg	High	<u>hr</u>
7/14	108	108	109	24	116	117	118	24	109	109	110	24	112	114	116	24				0
7/15	108	108	109	24	116	117	118	24	109	109	110	24	113	115	116	24				0
7/16	108	109	109	24	116	117	118	24	110	110	111	24	113	114	115	24				0
7/17	109	109	109	24	116	117	117	24	110	110	111	24	113	114	114	24				0
7/18	108	109	110	24	116	117	118	24	110	110	110	24	112	113	114	24				0
7/19	109	109	110	24	116	117	118	24	110	111	111	24	111	112	113	24				0
7/20	109	109	109	24	117	119	120	24	110	110	110	24	112	113	116	24				0
7/21	109	109	110	24	117	118	119	24	111	111	112	24	114	115	116	24				0
7/22	110	110	111	24	117	117	118	24	112	113	114	24	113	114	115	24				0
7/23	111	111	112	24	117	118	119	24	114	114	115	24	113	114	115	24				0
7/24	111	112	112	24	117	118	119	24	115	115	116	24	114	115	116	24				0
7/25				0				0				0				0				0
7/26	111	111	111	24	114	115	115	23	114	114	115	24	112	114	115	24				0
7/27	110	111	111	24	114	115	115	24	113	114	114	24	113	114	115	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** 

	<u>McNa</u>	ry-Wa	<u>ish</u>		<u>McNa</u>	ry Tlv	<u>/r</u>		<u>John</u>	Day			<u>John</u>	Day T	lwr		The [	<u>Dalles</u>		
	<u>24 h</u>	<u>12 h</u>		#	<u>24 h</u>	12 h		#	<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>
7/14	107	107	107	24	116	117	117	24	105	105	105	24	115	117	118	24	108	108	109	24
7/15	107	108	108	24	117	119	123	24	104	105	105	24	114	115	118	24	107	107	108	24
7/16	109	110	110	24	116	116	117	24	104	105	105	24	116	117	119	24	106	107	107	24
7/17	110	110	111	24	115	116	117	24	104	105	105	24	116	118	119	24	106	107	107	24
7/18	109	109	110	24	115	116	116	24	104	104	104	24	115	116	118	24	106	106	106	24
7/19	109	109	110	24	114	116	116	24	104	105	105	24	115	116	118	24	106	106	107	24
7/20	108	109	109	24	116	118	119	24	105	106	107	24	116	117	119	24	107	107	108	24
7/21	109	110	112	24	116	117	117	24	107	107	109	24	115	116	118	24	109	109	109	24
7/22	110	110	112	24	115	116	116	24	108	108	108	24	114	115	115	24	109	110	110	24
7/23	112	112	113	24	114	115	117	24	108	108	109	24	115	116	116	24	109	109	110	24
7/24	113	113	114	24	115	115	117	14	108	109	110	24	116	117	119	24	108	108	109	24
7/25				0				0				0				0				0
7/26	112	112	113	24	116	118	118	24	108	109	110	24	117	118	119	24	107	108	109	24
7/27	110	111	111	24	117	117	118	24	109	110	110	24	115	116	118	24	109	109	109	24

	The D	<u> Dalles</u>	<b>Dnst</b>		<b>Bonn</b>	<u>eville</u>			Warr	<u>endale</u>	<u> </u>		Cama	ıs\Wa	<u>shougal</u>	<u> </u>	Casc	ade Is	land	
	<u>24 h</u>	<u>12 h</u>		#	<u>24 h</u>	12 h		#	<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>
7/14	114	114	116	24	108	109	109	24				0	112	114	116	24	116	117	120	17
7/15	113	113	113	24	107	108	108	24				0	111	113	115	24	118	118	121	17
7/16	113	113	114	24	107	107	108	24				0	111	113	115	24	118	118	118	17
7/17	113	113	113	24	106	106	106	24				0	110	112	113	24	117	117	120	11
7/18	112	113	113	24	105	106	106	24				0	110	112	115	24	116	117	119	17
7/19	113	113	113	24	106	107	107	24				0	111	114	116	24	118	118	119	17
7/20	113	113	114	24	107	108	108	24				0	113	116	118	24	118	118	121	17
7/21	114	114	115	24	109	110	111	24				0	113	115	117	24	116	116	118	17
7/22	114	114	114	24	112	113	113	24				0	113	114	116	24	118	118	118	17
7/23	114	114	115	24	113	113	113	24				0	116	118	119	24	118	118	118	17
7/24	114	114	114	24	111	111	112	24				0	115	116	118	24	118	118	118	17
7/25				0				0				0				0	118	118	118	14
7/26	113	114	114	24	105	106	106	24				0	110	111	111	24	117	117	118	17
7/27	114	114	115	24	105	105	105	24				0	108	109	110	24	117	117	118	17

## **Two-Week Summary of Passage Indices**

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

See Sampling Comments: <a href="http://www.fpc.org/currentDaily/smpcomments.htm">http://www.fpc.org/currentDaily/smpcomments.htm</a>

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

					COMB	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)
07/14/2006						0	3	0	0	17	0	0
07/15/2006						0	3	13	0	0	0	0
07/16/2006						0	3	3	0	25	143	0
07/17/2006	*					0	3	11	0	17	0	0
07/18/2006						7	0	0	0	0	0	0
07/19/2006						0	3	0	0	0	143	0
07/20/2006						0	3	0	0	69	0	0
07/21/2006						0	3	0	0	0	0	0
07/22/2006						0	9	0	0	51	0	0
07/23/2006						4	6	0	0	17	0	0
07/24/2006	*					0	0	22	0	0	0	0
07/25/2006						0	0	7	2	35	0	0
07/26/2006	*					0	1	7	0	17	0	
07/27/2006						0	0	0	0	0	0	0
07/28/2006												
Total:		0	0	0	0	11	37	63	2	248	286	0
# Days:		0	0	0	0	14	14	14	14	14	14	13
Average:		0	0	0	0	1	3	5	0	18	20	0
YTD		30,897	25,910	13,056	18,995	3,692,699	4,182,423	1,439,231	37,266	1,560,794	2,250,569	2,256,332

					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)
07/14/2006						1,331	1,207	337	401	76,623	22,982	18,449
07/15/2006						747	723	669	664	56,225	47,907	47,416
07/16/2006						1,009	1,221	486	679	40,691	32,879	13,182
07/17/2006	*					917	929	1,126	460	28,313	53,659	15,671
07/18/2006						884	756	369	272	43,526	41,676	12,028
07/19/2006						969	1,034	249	290	21,169	18,790	14,407
07/20/2006						1,039	729	567	303	15,695	26,845	11,043
07/21/2006						907	664	421	215	18,980	29,990	6,603
07/22/2006						613	863	297	319	15,207	17,440	7,924
07/23/2006						586	928	375	244	10,044	8,431	6,767
07/24/2006	*					420	402	277	284	14,210	0	11,473
07/25/2006						411	589	630	192	15,780	12,492	9,606
07/26/2006	*					395	407	166	133	18,687	0	
07/27/2006						646	441	230	304	20,722	19,262	10,365
07/28/2006												
Total:	П	0	0	0	0	10,874	10,893	6,199	4,760	395,872	332,353	184,934
# Days:	H	0	0	0	0	14	14	14	14	14	14	13
Average:	H	0	0	0	0	777	778		340	28,277	23,740	14,226
YTD		3	30	15	291	741,926	1,123,883		29,094	3,782,398	2,735,357	3,784,372

## Two-Week Summary of Passage Indices

	П		-									
	Ш					COMBINI	ED COHO					
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	П	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)						
07/14/2006	П					0	0	0	3	0	0	27
07/15/2006	П					0	0	0	9	0	0	219
07/16/2006	П					0	0	0	9	0	0	0
07/17/2006	*					0	0	0	5	0	0	0
07/18/2006						0	0	0	3	0	0	0
07/19/2006						0	0	0	0	0	0	0
07/20/2006						0	3	0	3	0	0	0
07/21/2006						0	0	0	0	0	0	0
07/22/2006						0	0	0	0	0	0	0
07/23/2006						0	0	0	1	0	0	0
07/24/2006	*					0	0	0	3	0	0	0
07/25/2006						0	0	0	0	0	0	0
07/26/2006	*					0	1	0	1	0	0	
07/27/2006						0	0	0	3	0	0	0
07/28/2006												
Total:	П	0	0	0	0	0	4	0	40	0	0	246
# Days:		0	0	0	0	14	14	14	14	14	14	13
Average:		0	0	0	0	0	0	0	3	0	0	19
YTD		0	0	0	49	86,142	133,012	33,976	61,252	102,165	316,645	657,541

	П	1	I			OMDINED	OTEEL LIE					
	Ш						STEELHEA					
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	Ш	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
07/14/2006						0	3	7	0	0	0	0
07/15/2006						7	0	6	4	0	0	2
07/16/2006						0	0	10	5	25	0	0
07/17/2006	*					0	6	11	3	0	0	0
07/18/2006						7	9	0	3	0	0	0
07/19/2006						0	10	7	2	0	0	0
07/20/2006						7	0	4	0	0	0	0
07/21/2006						4	14	6	0	51	0	0
07/22/2006						0	12	0	2	0	0	0
07/23/2006						0	15	14	1	0	0	0
07/24/2006	*					0	0	0	1	17	0	0
07/25/2006						0	3	0	0	0	0	0
07/26/2006	*					0	0	0	0	17	0	
07/27/2006						0	1	0	0	0	0	0
07/28/2006												
Total:		0	0	0	0	25	73	65	21	110	0	2
# Days:	П	0	0	0	0	14	14	14	14	14	14	13
Average:	П	0	0	0	0	2	5	5	2	8	0	0
YTD		1,970	19,014	9,317	3,068	4,483,415	4,376,035	1,265,442	26,919	446,234	1,682,235	271,624

### Two-Week Summary of Passage Indices

	П	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)						
07/14/2006						7	3	0	9	240	0	0
07/15/2006						7	3	0	9	26	410	2
07/16/2006						0	3	0	6	25	286	0
07/17/2006	*					0	0	0	8	34	190	0
07/18/2006	П					7	0	0	5	211	0	0
07/19/2006						7	0	0	6	43	0	17
07/20/2006	П					0	0	4	6	0	95	0
07/21/2006						4	3	0	8	51	96	0
07/22/2006						3	3	0	9	101	143	0
07/23/2006						0	0	0	4	51	0	0
07/24/2006	*					0	3	0	4	34	0	24
07/25/2006	П					0	1	0	5	35	0	0
07/26/2006	*					0	0	0	1	17	0	
07/27/2006						0	0	0	9	52	143	0
07/28/2006												
Total:		0	0	0	0	35	19	4	89	920	1,363	43
# Days:		0	0	0	0	14	14	14	14	14	14	13
Average:		0	0	0	0	3	1	0	6	66	97	3
YTD		13	0	0	679	51,861	92,633	40,235	34,498	496,196	529,016	407,623

<sup>\*</sup> 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

 ${\sf LGR\ (Index) = Lower\ Granite\ Dam\ Bypass\ Collection\ System: Passage\ Index\ Counts}$ 

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

JDA (Index) = John Day Dam Bypass Collection System: Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

JDA and BO2 data collected for the FPC by Pacific States Marine Fisheries Commission.

RIS data collected for the FPC by Chelan Co. PUD/Washington Dept. of Fish and Wildlife.

LGR, LMN, and MCN data collected for the FPC by Washington Dept. of Fish and Wildlife.

LGS and GRN data collected for the FPC by Oregon Dept. of Fish and Wildlife.

IMN data collected for the FPC by the Nez Perce Tribe.

### **Two Week Transportation Summary**

Source: Fish Passage Center Updated: 7/28/06 8:55 AM

07/14/06 TO 07/28/06 **Species** Site Data CH0 CH1 CO SO ST **Grand Total** LGR Sum of NumberCollected 5,982 6,022 6,457 Sum of NumberBarged 6,423 Sum of NumberBypassed Sum of Numbertrucked Sum of SampleMorts Sum of FacilityMorts Sum of ResearchMorts Sum of TotalProjectMorts LGS Sum of NumberCollected 7,481 7,572 7,775 Sum of NumberBarged 7,676 Sum of NumberBypassed Sum of Numbertrucked Sum of SampleMorts Sum of FacilityMorts Sum of ResearchMorts Sum of TotalProjectMorts LMN 3,620 Sum of NumberCollected 3,544 Sum of NumberBarged 3,504 3,576 Sum of NumberBypassed Sum of Numbertrucked Sum of SampleMorts Sum of FacilityMorts Sum of ResearchMorts Sum of TotalProjectMorts MCN Sum of NumberCollected 202,740 202,070 199,618 200,281 Sum of NumberBarged Sum of NumberBypassed Sum of Numbertrucked Sum of SampleMorts Sum of FacilityMorts 1,785 1,790 Sum of ResearchMorts Sum of TotalProjectMorts 1,899 1,906 Total Sum of NumberCollected 219,954 219,077 Total Sum of NumberBarged 217,221 218,089 Total Sum of NumberBypassed Total Sum of Numbertrucked Total Sum of SampleMorts Total Sum of FacilityMorts 1,932 1,945 Total Sum of ResearchMorts Total Sum of TotalProjectMorts 2,157 2,176

## **YTD Transportation Summary**

Source: Fish Passage Center

Updated: 7/28/06 8:55 AM

Source.	Fish Passage Center	TO:	07/28/06			Updated:	17	728/06 8:55 AM
		Species						
Site	Data	CH0	CH1	СО		SO	ST	Grand Total
LGR	Sum of NumberCollected	476,333	2,407,709		51,160	32,615	2,820,591	5,788,408
	Sum of NumberBarged	457,066	1,964,112		46,802	25,789	2,467,171	4,960,940
	Sum of NumberBypassed	17,386	437,073		4,214	6,237	352,045	816,955
	Sum of NumberTrucked	0	0		0	0	0	0
	Sum of SampleMorts	254	203		2	30	99	588
	Sum of FacilityMorts	1,269	6,010		140	558	1,219	9,196
	Sum of ResearchMorts	41	311		2	1	57	412
	Sum of TotalProjectMorts	1,564	6,524		144	589	1,375	10,196
LGS	Sum of NumberCollected	764,360	3,131,209		88,076	63,223	3,228,546	7,275,414
	Sum of NumberBarged	753,314	2,746,887		86,458	53,001	2,634,367	6,274,027
	Sum of NumberBypassed	4,264	376,348		1,524	8,895	591,417	982,448
	Sum of NumberTrucked	0	0		0	0	0	0
	Sum of SampleMorts	154	136		0	23	20	333
	Sum of FacilityMorts	2,989	5,761		94	1,304	739	10,887
	Sum of ResearchMorts	23	22		0	0	1	46
	Sum of TotalProjectMorts	3,166	5,919		94	1,327	760	11,266
LMN	Sum of NumberCollected	248,589	1,096,131		23,183	27,781	935,548	2,331,232
	Sum of NumberBarged	241,686	1,060,695		23,024	27,011	883,883	2,236,299
	Sum of NumberBypassed	6,260	34,451		159	576	51,011	92,457
	Sum of NumberTrucked	0	0		0	0	0	0
	Sum of SampleMorts	143	47		0	9	34	233
	Sum of FacilityMorts	379	938		0	185	620	2,122
	Sum of ResearchMorts	1	0		0	0	0	1
	Sum of TotalProjectMorts	523	985		0	194	654	2,356
MCN	Sum of NumberCollected	1,963,481	830,072		47,855	252,722	232,033	3,326,163
	Sum of NumberBarged	891,022			100	667		,
	Sum of NumberBypassed	1,065,665			47,736	251,660	·	2,425,731
	Sum of NumberTrucked	0	0		0	0		
	Sum of SampleMorts Sum of FacilityMorts	312 6,287	117 761		15	28 350		
	Sum of ResearchMorts	196			3	17		
	Sum of TotalProjectMorts	6,795			19	395		
	m of NumberCollected	3,452,763	7,465,121	2	10,274	376,341	7,216,718	
	m of NumberBarged	2,343,088	5,771,990		56,384	106,468		
	m of NumberBypassed	1,093,575	1,676,728		53,633	267,368		
	m of NumberTrucked m of SampleMorts	0 863	0 503		3	0 90		
	m of FacilityMorts	10,924	13,470		249	2,397		
	m of ResearchMorts	261	375		5	<u>2,597</u> 18		
	m of TotalProjectMorts	12,048			257	2,505		

### Cumulative Adult Passage at Mainstem Dams Through: 07/27

		Spring Chinook							S	Summer (	Chinoo	k		Fall Chinook					
		200	06	20	05	10-Y	r Avg.	200	06	200	)5	10-Y	r Avg.	20	06	20	05	10-Yr	Avg.
DAM	EndDate	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	07/27	96,456	2,908	74,038	4,288	151,682	8,418	95,931	4,153	77,831	4,368	59,559	7,409	0	0	0	0	0	0
TDA	07/27	61,827	2,176	60,964	3,210	104,618	6,110	78,575	3,348	67,890	3,306	50,887	5,216	0	0	0	0	0	0
JDA	07/26	50,313	2,093	56,027	2,715	87,807	4,857	71,067	3,606	61,104	5,030	46,791	5,026	0	0	0	0	0	0
MCN	07/26	45,355	2,475	51,855	3,201	80,814	5,125	58,513	2,921	60,025	2,729	45,313	4,602	0	0	0	0	0	0
IHR	07/26	25,465	843	28,039	1,267	54,334	3,256	8,394	519	8,586	944	10,843	1,862	0	0	0	0	0	0
LMN	07/26	23,596	551	25,933	1,002	51,936	3,032	9,445	451	8,054	751	10,271	1,497	0	0	0	0	0	0
LGS	07/26	20,839	745	23,995	923	49,856	3,088	7,634	548	6,736	893	8,901	1,767	0	0	0	0	0	0
LGR	07/26	22,963	984	26,028	1,258	49,902	3,362	7,439	636	6,550	998	8,995	1,923	0	0	0	0	0	0
PRD	07/26	8,535	81	14,148	515	16,757	523	50,868	286	55,448	1,750	37,518	1,479	0	0	0	0	0	0
RIS	07/26	9,245	473	11,908	504	13,259	737	51,938	1,262	45,896	2,055	32,607	3,185	0	0	0	0	0	0
RRH	07/26	5,376	274	4,568	417	4,860	283	32,660	1,031	33,351	1,573	22,215	1,911	0	0	0	0	0	0
WEL	07/22	4,043	214	4,897	99	3,488	193	15,359	597	19,627	310	12,744	485	0	0	0	0	0	0
WFA	07/26	34,545	165	35,367	1,179	3,479	87	0	0	0	0	0	0	0	0	0	0	0	0

			Col	10			S	ockeye		Steelhead				
	20	06	2005		10-Yr Avg.				10-Yr			10-Yr	Wild	
DAM	Adult	Jack	Adult	Jack	Adult	Jack	2006	2005	Avg.	2006	2005	Avg.	2006	
BON	0	-1	0	0	2	0	36,831	72,702	59,903	50,362	76,994	80561	20,244	
TDA	1	0	1	0	0	0	29,850	65,032	50,088	17,559	33,716	37146	7,785	
JDA	0	0	0	0	1	0	35,103	69,071	53,830	19,256	23,398	26992	6,694	
MCN	0	0	0	0	0	0	28,951	62,856	46,445	10,956	17,081	17350	3,414	
IHR	0	0	0	0	0	0	43	18	27	5,413	6,412	8797	1,429	
LMN	0	0	0	0	0	0	13	18	29	6,040	6,429	7524	1,604	
LGS	0	0	0	0	0	0	15	13	33	3,593	3,637	5043	1,120	
LGR	0	0	0	0	0	0	14	18	34	8,381	7,170	8608	2,483	
PRD	2	0	0	1	2	0	26,376	72,528	57,016	821	1,402	1567	0	
RIS	0	0	2	0	1	0	34,057	67,660	51,005	529	1,125	1052	332	
RRH	0	0	0	0	1	0	24,178	51,397	34,993	409	888	736	257	
WEL	0	0	0	0	0	0	17,280	44,743	30,467	130	213	227	65	
WFA	0	0	0	0	0	0	0	0	0	28,139	19,011	1802	0	

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

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

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

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

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

Page last updated on: 07/28/06

BON counts from January 1, 2006 to March 14, 2006 (our traditional counts begin March 15):

Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
1	0	2,516	238

Run Year counts (June 1, 2005 to May 31, 2006) for Lower Granite:

Steelhead	
741	

<sup>\*</sup>PRD is not posting wild steelhead numbers.