



# Fish Passage Center Weekly Report #06 - 17

June 30, 2006

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## Summary of Events:

**Water Supply:** Precipitation throughout the Columbia Basin has varied between 80% and 190% of average at individual sub-basins over the first portion of June. Precipitation above The Dalles over the first portion of June has been 132% of average. Over the entire water year, precipitation has been average or above average at all list locations.

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

Location	Water Year 2006 June 1-26		Water Year 2006 October 1, 2005 to June 26	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	2.93	141	22.72	112
Snake River Above Ice Harbor	1.30	103	18.51	124
Columbia Above The Dalles	2.05	132	22.07	113
Kootenai	3.11	146	24.25	117
Clark Fork	2.49	149	17.23	123
Flathead	3.95	172	22.90	124
Pend Oreille/Spokane	3.60	190	31.89	118
Central Washington	0.92	165	10.67	136
Snake River Plain	0.95	114	11.8	125
Salmon/Boise/Payette	1.47	115	23.41	134
Clearwater	2.45	113	29.27	111
SW Washington Cascades/Cowlitz	2.04	80	65.77	101
Willamette Valley	1.93	99	60.95	110

Table 2 displays the May Final, June Final, and July Early runoff volume forecasts for multiple reservoirs. The July Early forecast at The Dalles between January and July is 114000 Kaf (106% of average). The forecast at Libby has increased 11% between the June final and July Early forecast.

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

Location	May Final		June Final		July Early	
	% Average (1971- 2000)	Probable Runoff Volume (Kaf)	% Average (1971- 2000)	Probable Runoff Volume (Kaf)	% Average (1971- 2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	103	110000	103	111000	106	114000
Grand Coulee (Jan-July)	98	61900	101	63300	106	66500
Libby Res. Inflow, MT (Jan-July)	98	6160	101	6360	112	7080
Hungry Horse Res. Inflow, MT (Jan-July)	101	2250	106	2360	114	2540
Lower Granite Res. Inflow (Apr-July)	126	27100	124	26700	116	25000
Brownlee Res. Inflow (Apr-July)	143	9020	141	8910	137	8680
Dworshak Res. Inflow (Apr-July)	101	2670	106	2800	105	2770

Snowpack within the Columbia Basin continues to diminish.

Grand Coulee Reservoir is at 1286.9 feet (6-29-06) and has refilled about 1.2 feet over the last week. Inflow has ranged from 155.6 to 196.5 Kcfs, while outflow has ranged 135.1 to 168 Kcfs.

The Libby Reservoir is currently at elevation 2456.6 feet (6-29-06) and held steady last week. Outflows over the last week have ranged between 24 Kcfs to 36.8 Kcfs. Libby has been forced to spill water from June 8th through June 27th due to excessive inflow; however, Libby has not been forced to spill over the last two days.

Hungry Horse is currently at an elevation of 3558.1 feet (6-29-06) and has remained fairly steady; outflows at Hungry Horse have been reduced from approximately 8.7 Kcfs to 4.2 Kcfs. Inflows ranged between 6.9 and 4.3 Kcfs over the same period.

Dworshak is currently at an elevation of 1599.0 feet (6-29-06) and held steady last week. Outflows at Dworshak were increased to 7.2 Kcfs on June 28th for temperature regulation at Lower Granite Dam and were further increased to 10 Kcfs late on June 29th.

The Brownlee Reservoir was at an elevation of 2071.9 feet on June 29th, 2006. Outflows at Hells Canyon have ranged between 15.2 and 23.7 Kcfs over the last week.

The Biological Opinion flow period began on April 3rd in the lower Snake River (Lower Granite) and 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 were 100 Kcfs at Lower Granite, 260 Kcfs at McNary, and 135 Kcfs at Priest Rapids. Flows at Lower Granite have averaged 125.8 Kcfs over spring season; flows at McNary have averaged 326.5 Kcfs over the spring season and 267.2 Kcfs last week; and flows at Priest Rapids have averaged 191.6 Kcfs over the season and 189.8 Kcfs 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). From June 21 to June 29 flows have averaged 59.1 Kcfs at Lower Granite.

**Spill:** No spill occurred at Dworshak Dam over the past week. Spill operations for fish passage at the Lower Snake River projects began on April 3, 2006 in accordance with the December 29, 2005 District Court Order and Opinion. Summer spill began on June 21. Spill at Lower Granite, Little Goose, Lower Monumental and Ice Harbor dams averaged 32%, 32%, 28% and 49% of average daily flow over the past week, respectively. Spill at Lower Granite Dam met the Court Order for summer spill over the past week. At Little Goose Dam, the COE met the Court Order for summer spill early in the week, but fell below the objective over the past three days due to forebay TDG at Lower Monumental. Spill at Lower Monumental did not achieve the Court Order due to forebay TDG at Ice Harbor Dam. Spill at Ice Harbor Dam is exceeding the Court Order for summer spill.

Spill for fish passage began on April 10 and will continue until June 30 at Lower Columbia River projects. Flows in the lower Columbia over the past week have continued to recede. Spill at McNary, John Day, The Dalles and Bonneville dams was 46%, 32%, 39% and 31% of average daily flow, respectively. McNary Dam has been exceeding the requirements of the Court's Order. John Day Dam is being operated with a limited hydraulic capacity and spill is being provided at a more flat spill over 24 hours that has varied between 23% and 38% of daily average. Spill at The Dalles Dam achieved the Court Order in the early part of the week but fell below the objective for the last four days due to adjustments made in spill because of high forebay TDG at Bonneville Dam. Spill at Bonneville Dam achieved the Court Order in the early part of the week but has fallen below the objective over the past five days due to adjustments made in spill due to TDG levels at Camas/Washougal.

Extreme temperatures have resulted in total dissolved gas levels that have exceeded the TDG waiver limits at some locations over the past week. Sampled fish are showing signs of GBT at some projects, but fin signs did not exceed 3% at any project. All fish affected have been showing minor (Rank 1) signs of GBT at the projects sampled.

**Smolt Monitoring:** The numbers of spring migrants generally decreased in the collection at all SMP sites over the past week, while subyearling Chinook indices increased at all SMP sites this past week, except Lower Monumental Dam.

At Lower Granite Dam, subyearling Chinook indices averaged roughly 9,600 per day over the past week compared to 7,700 per day the previous week, while at Little Goose and Lower Monumental Dam the subyearling index averaged 10,000 and 1,500 (respectively) per day this week.

At Rock Island Dam indices for subyearlings averaged 730 per day this week compared to 350 per day last week. At McNary Dam, subyearling indices were up, averaging 110,00 this week compared to 54,000 per day over the previous week. On June 28 the index at McNary reached 200,000 likely reflecting the continued passage of subyearlings released from Priest Rapids Hatchery over the past few weeks. PIT-tag detections at McNary Dam confirm that these fish are indeed passing the project in good numbers. At John Day Dam subyearling indices doubled, averaging 50,000 per day this week compared to 24,000 per day last week. At Bonneville Dam subyearling indices also doubled the previous week with this weeks' average index at 80,000 per day, compared to 41,000 fish per day last week.

**Adult Fish Passage:** At Bonneville, traditional counting of adult summer Chinook began on June 1st. The weekly count averaged 3,142 fish/day through the week ending June 29th, with the total at 67,524 through June 29th. This total is about 137% and 180% above 2005 and the 10-year average, respectively. The adult summer Chinook count total at The Dalles Dam was 52,451 through June 29th.

At Bonneville, the average daily steelhead count for the week was 443 per day. Adult sockeye salmon have increased to a total of 26,237 fish at Bonneville through June 29th, about 59% and 61% of 2005 and the 10-year average, respectively.

Approximately 3.7 million adult Shad have been counted at Bonneville Dam this season with daily counts between 47,677 and 158,027 for the week.

**Hatchery Releases:** Hatchery releases of subyearling Chinook are winding down throughout the system. A late release of 100,000 subyearlings from Lyons Ferry Hatchery are scheduled for release from Big Canyon Creek on the Clearwater River. The release is volitional and scheduled for completion July 9. Priest Rapids Hatchery, in the mid-Columbia released roughly 7 million subyearlings; those releases began on June 16 and were scheduled to be completed by June 25. In the Lower Columbia, Little White Salmon NFH was scheduled to release 1.8 million subyearling Chinook on June 25.

**Daily Average Flow and Spill (in kcfs) at Mid-Columbia Projects**

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
06/16/06	201.5	9.9	198.4	18.3	224.0	87.1	226.5	53.3	228.9	40.1	265.6	150.2	248.1	101.3
06/17/06	185.4	0.1	181.5	0.0	205.1	69.8	205.8	35.4	210.9	40.3	245.4	129.2	230.4	84.2
06/18/06	157.5	0.1	161.9	0.0	182.9	37.7	185.0	25.4	189.7	39.9	214.3	87.1	204.3	56.9
06/19/06	182.3	0.1	178.9	0.0	198.0	50.2	198.7	28.9	200.0	40.0	227.9	108.4	220.6	69.7
06/20/06	168.5	0.1	176.7	0.0	199.2	50.0	197.9	27.1	201.2	41.9	231.9	107.5	214.9	60.8
06/21/06	183.2	12.2	178.6	9.3	194.7	41.3	186.1	24.7	185.6	38.1	207.1	81.2	192.4	43.3
06/22/06	200.4	12.3	205.9	8.8	226.2	88.7	224.4	49.3	223.6	41.1	264.9	147.1	247.5	93.5
06/23/06	168.0	0.2	166.6	0.0	180.5	21.9	182.4	24.3	185.2	44.3	214.9	80.3	208.3	48.5
06/24/06	163.2	0.2	171.7	0.0	188.2	38.0	182.6	17.6	181.0	33.9	204.5	74.5	183.7	37.7
06/25/06	166.7	0.2	157.5	0.0	173.6	20.3	176.7	17.9	179.9	33.5	206.9	69.7	201.7	45.1
06/26/06	161.9	0.2	161.2	0.0	176.5	11.2	175.7	15.7	180.8	36.3	204.5	63.7	189.9	38.2
06/27/06	166.2	0.2	168.8	0.0	175.6	18.9	172.2	16.7	177.5	34.6	194.2	59.0	183.0	40.3
06/28/06	156.3	0.1	161.7	0.0	173.5	16.5	173.9	16.9	182.1	35.1	199.7	70.2	189.1	46.5
06/29/06	135.1	0.2	134.4	0.0	152.0	10.1	155.9	16.4	164.8	35.3	175.8	37.0	172.7	39.1

**Daily Average Spill 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
06/16/06	5.2	0.0	30.0	32.5	100.2	25.9	98.6	31.2	101.1	17.6	102.2	43.2
06/17/06	4.4	0.0	28.0	29.4	94.1	20.2	93.2	20.3	91.9	16.8	92.3	27.1
06/18/06	4.1	0.0	25.7	31.6	87.8	20.2	89.6	23.4	91.1	18.8	91.4	27.9
06/19/06	3.9	0.0	23.2	24.7	79.7	20.3	78.6	23.9	78.1	22.6	79.9	23.9
06/20/06	1.6	0.0	20.6	20.6	69.4	20.3	68.3	21.0	66.6	23.5	68.8	41.6
06/21/06	1.7	0.0	20.4	22.7	67.5	20.2	66.5	20.2	67.2	17.1	70.2	48.4
06/22/06	1.7	0.0	18.7	22.6	64.5	20.0	63.0	20.5	65.7	17.3	64.2	44.9
06/23/06	1.7	0.0	16.8	23.7	60.3	18.2	60.3	18.1	59.4	16.9	64.6	44.9
06/24/06	1.7	0.0	15.6	22.5	61.0	18.2	60.7	18.2	59.8	16.7	58.8	21.3
06/25/06	2.2	0.0	15.2	20.0	55.8	18.0	57.4	17.3	57.0	17.0	58.4	17.7
06/26/06	5.3	0.0	15.8	22.5	58.0	18.1	57.1	26.7	59.1	16.7	60.3	44.3
06/27/06	5.8	0.0	14.8	18.7	57.5	18.0	56.1	16.2	55.7	16.0	58.4	37.8
06/28/06	4.1	0.0	14.1	19.5	52.4	18.1	52.8	15.6	51.5	14.9	52.9	17.8
06/29/06	7.5	0.0	---	---	55.3	18.0	55.3	15.7	55.8	14.9	56.2	18.8

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

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
06/16/06	351.1	177.3	345.7	127.5	336.5	138.9	359.6	136.1	83.8	128.3
06/17/06	344.4	165.2	332.0	114.8	328.3	127.3	349.0	125.0	82.9	129.5
06/18/06	330.7	155.2	326.9	116.3	322.4	128.4	326.8	109.5	80.4	125.3
06/19/06	301.2	126.2	294.0	104.4	290.2	115.4	313.6	96.9	72.9	132.3
06/20/06	322.9	162.9	320.8	136.7	319.3	128.6	316.8	101.2	70.1	134.0
06/21/06	278.6	162.2	272.0	103.0	266.3	105.5	288.8	101.8	53.6	121.9
06/22/06	271.3	127.3	259.0	108.2	247.3	102.9	269.2	101.5	37.2	119.0
06/23/06	303.7	128.1	294.3	105.6	286.6	115.2	295.8	101.5	57.3	125.5
06/24/06	279.4	148.6	277.7	104.5	267.6	107.1	290.7	101.6	57.8	119.7
06/25/06	247.6	136.4	213.7	62.3	208.0	83.1	230.8	89.2	16.0	114.1
06/26/06	263.5	116.1	254.7	85.0	254.0	94.6	258.2	74.8	50.2	121.7
06/27/06	258.4	103.4	259.9	97.7	245.7	90.7	260.0	66.8	60.8	120.8
06/28/06	249.0	105.8	221.8	52.8	213.5	81.9	233.1	63.8	43.6	114.2
06/29/06	268.8	115.0	257.7	59.9	255.1	93.5	267.8	68.1	0.0	0.0

**HATCHERY RELEASE LAST TWO WEEKS**

**Hatchery Release Summary**

**From: 6/16/2006 to 06/29/06**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
National Marine Fisheries Service	Lyons Ferry Hatchery	CH0	FA	2006	100,000	06-19-06	07-09-06	Big Canyon (Clearwater River)	Clearwater River M F
<b>National Marine Fisheries Service Total</b>					<b>100,000</b>				
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH1	FA	2006	1,800,000	06-23-06	06-23-06	Little White Salmon Hatchery	Little White Salmon River
<b>U.S. Fish and Wildlife Service Total</b>					<b>1,800,000</b>				
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2006	1,299,000	06-18-06	06-19-06	Priest Rapids Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2006	1,299,000	06-20-06	06-21-06	Priest Rapids Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2006	1,299,000	06-22-06	06-23-06	Priest Rapids Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2006	1,299,000	06-24-06	06-25-06	Priest Rapids Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2006	1,699,000	06-16-06	06-17-06	Priest Rapids Hatchery	Mid-Columbia River
<b>Washington Dept. of Fish and Wildlife Total</b>					<b>6,895,000</b>				
<b>Grand Total</b>					<b>8,795,000</b>				

**HATCHERY RELEASE NEXT TWO WEEKS**

**Hatchery Release Summary**

**From: 6/30/2006 to 7/13/2006**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
National Marine Fisheries Service	Lyons Ferry Hatchery	CH0	FA	2006	100,000	06-19-06	07-09-06	Big Canyon (Clearwater River)	Clearwater River M F
<b>National Marine Fisheries Service Total</b>					<b>100,000</b>				
<b>Grand Total</b>					<b>100,000</b>				

## 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
<b>Lower Granite Dam</b>											
	06/27/06	Chinook + Steelhead	100	2	2	2.00%	0.00%	2	0	0	0
<b>Little Goose Dam</b>											
	06/20/06	Chinook + Steelhead	100	3	3	3.00%	0.00%	3	0	0	0
	06/27/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Lower Monumental Dam</b>											
	06/26/06	Chinook + Steelhead	60	0	0	0.00%	0.00%	0	0	0	0
<b>McNary Dam</b>											
	06/23/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/25/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Bonneville Dam</b>											
	06/20/06	Chinook + Steelhead	100	2	2	2.00%	0.00%	2	0	0	0
	06/23/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/27/06	Chinook + Steelhead	100	2	2	2.00%	0.00%	2	0	0	0
<b>Rock Island Dam</b>											
	06/22/06	Chinook + Steelhead	99	2	2	2.02%	0.00%	2	0	0	0
	06/26/06	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	06/29/06	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	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 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>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
6/16	105	106	106	24	127	127	128	24	122	122	122	12	118	119	120	24	117	117	117	24
6/17	105	105	106	24	126	127	127	24	120	121	121	24	118	119	119	24	116	117	117	24
6/18	106	106	107	24	127	127	128	24	119	120	120	24	118	118	119	24	117	118	118	24
6/19	106	106	106	24	128	128	129	24	119	119	120	13	118	119	119	24	117	118	118	24
6/20	105	105	106	24	128	128	129	24	119	119	119	8	116	117	117	24	116	117	117	24
6/21	105	105	105	24	128	128	129	24	118	118	118	1	116	117	118	24	116	116	116	24
6/22	105	105	105	24	127	127	127	24	118	118	118	9	116	117	117	24	116	116	117	24
6/23	104	104	105	24	126	126	127	24	117	118	118	24	114	115	115	24	115	116	116	24
6/24	105	105	105	24	124	125	125	24	117	117	118	24	113	114	115	24	115	115	116	24
6/25	105	106	107	24	124	124	126	23	117	117	118	23	114	115	117	23	116	116	116	24
6/26	106	107	107	24	123	124	126	24	118	118	119	24	114	116	116	24	116	117	117	24
6/27	107	107	107	23	122	123	125	24	119	119	119	24	115	116	117	24	117	117	117	24
6/28	107	107	107	24	120	121	123	24	119	119	119	24	116	118	118	24	116	117	117	24
6/29	106	106	107	24	119	119	120	24	118	118	118	1	116	117	117	24	116	116	116	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>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
6/16	122	124	124	24	115	116	117	24	126	127	128	24	121	123	124	24	122	124	125	24
6/17	115	115	116	23	114	114	115	24	122	124	127	24	122	123	123	24	123	123	124	24
6/18	116	117	117	24	114	114	115	24	118	121	123	24	121	122	122	24	121	122	122	24
6/19	116	116	117	24	115	115	115	24	120	122	125	24	117	118	120	24	118	119	121	24
6/20	115	116	116	24	114	115	115	24	120	123	125	24	117	118	120	24	118	118	120	24
6/21	118	120	121	24	114	114	115	24	118	122	127	24	120	121	122	24	120	121	122	24
6/22	116	118	121	24	115	115	115	24	125	127	130	24	117	119	123	23	119	120	123	23
6/23	114	115	116	24	114	114	115	24	117	118	124	24	123	125	125	24	123	125	126	24
6/24	114	114	115	24	114	114	114	24	119	121	124	24	117	119	121	24	118	119	121	24
6/25	115	115	116	24	114	114	115	24	117	119	124	24	117	117	118	24	118	118	120	23
6/26	115	116	116	24	115	115	116	24	116	117	118	24	117	117	117	24	117	117	117	24
6/27	116	117	118	24	116	116	116	23	118	119	123	23	117	117	118	24	117	118	118	24
6/28	116	116	117	24	115	115	116	24	117	118	124	24	116	116	116	24	116	116	117	24
6/29	116	116	117	24	114	114	115	24	115	115	118	24	116	117	118	24	116	117	119	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>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
6/16	120	121	121	24	123	123	124	24	115	116	119	23	129	130	132	23	126	127	129	23
6/17	121	122	122	24	124	124	125	24	115	116	118	23	127	128	129	23	125	126	127	23
6/18	120	121	121	24	123	123	124	24	116	118	121	23	124	128	129	23	124	126	127	23
6/19	117	118	119	24	121	122	122	24	115	116	117	23	126	129	130	23	120	123	124	23
6/20	116	117	118	24	121	122	122	24	113	114	116	23	125	128	129	23	124	126	127	23
6/21	118	120	122	24	122	123	124	24	113	114	116	23	121	125	130	23	118	120	125	23
6/22	117	118	119	23	121	122	123	23	114	115	118	23	129	130	132	23	125	128	129	23
6/23	122	123	124	24	124	125	126	24	---	---	---	0	---	---	---	0	---	---	---	0
6/24	118	119	120	24	121	122	123	24	118	121	123	23	122	125	127	23	119	121	124	23
6/25	116	117	117	23	119	120	120	23	120	123	124	23	124	125	129	20	124	125	127	23
6/26	117	117	117	24	120	120	120	24	120	122	125	23	120	121	123	20	122	123	127	23
6/27	117	117	118	24	120	121	122	24	---	---	---	0	---	---	---	0	---	---	---	0
6/28	115	116	116	24	119	120	121	24	---	---	---	0	---	---	---	0	---	---	---	0
6/29	115	116	117	24	119	119	120	24	---	---	---	0	---	---	---	0	---	---	---	0

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

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

Date	<u>Priest R. Dnst</u>			#	<u>Pasco</u>			#	<u>Dworshak</u>			#	<u>Clwrtr-Peck</u>			#	<u>Anatone</u>			#
	<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
6/16	125	126	126	23	115	116	116	24	103	103	108	24	102	103	103	24	105	106	106	24
6/17	124	125	125	23	116	117	118	24	105	108	109	24	102	103	104	24	105	105	106	24
6/18	123	123	124	23	117	118	118	24	102	103	103	24	102	103	104	24	104	105	106	24
6/19	121	122	124	23	115	116	116	24	102	102	103	24	102	102	103	24	104	104	105	24
6/20	122	124	126	23	114	115	116	24	103	105	106	24	101	103	104	24	104	104	105	24
6/21	118	120	122	23	116	117	118	24	105	106	107	24	102	103	104	24	103	104	105	24
6/22	125	127	127	23	113	115	116	24	105	106	107	24	102	103	104	24	103	104	105	24
6/23	---	---	---	0	118	119	119	24	105	106	107	24	102	103	105	24	103	104	105	24
6/24	118	119	122	23	115	116	117	24	105	106	107	24	102	104	105	24	103	104	105	24
6/25	122	123	124	23	114	115	117	24	102	103	104	24	102	103	104	24	103	104	105	24
6/26	120	121	123	23	117	118	118	24	103	103	103	24	103	104	105	24	104	105	105	24
6/27	---	---	---	0	115	116	117	24	103	104	106	24	103	105	105	24	104	104	105	24
6/28	---	---	---	0	114	114	115	24	102	103	107	24	102	104	106	24	103	104	105	24
6/29	---	---	---	0	112	113	114	24	99	99	99	23	101	101	103	23	102	102	103	24

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

Date	<u>Clwrtr-Lewiston</u>			#	<u>Lower Granite</u>			#	<u>L. Granite Tlwr</u>			#	<u>Little Goose</u>			#	<u>L. Goose Tlwr</u>			#
	<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
6/16	102	103	104	24	103	103	103	24	112	114	117	24	109	109	110	24	115	118	123	24
6/17	102	104	105	24	103	103	103	24	111	111	112	24	109	109	110	24	112	113	113	24
6/18	102	104	105	24	104	104	104	24	111	112	112	24	109	109	110	24	113	114	114	24
6/19	102	103	104	24	104	104	104	24	111	111	113	24	108	108	108	24	113	114	114	24
6/20	102	104	105	24	103	103	104	24	110	110	111	24	107	108	108	24	114	114	114	24
6/21	102	104	105	24	103	103	103	24	111	111	112	24	108	108	109	24	114	114	114	24
6/22	102	104	105	24	103	103	104	24	110	111	116	24	109	109	110	24	115	116	117	24
6/23	102	104	106	24	103	103	104	24	111	112	113	24	110	110	111	24	114	115	116	24
6/24	102	104	106	24	103	103	104	24	112	113	113	24	112	112	114	24	115	115	116	24
6/25	103	105	106	24	103	103	104	24	110	112	113	24	113	113	114	24	115	115	116	24
6/26	103	105	106	24	104	104	105	24	112	113	113	24	113	115	116	24	117	118	124	24
6/27	103	105	106	24	104	105	105	24	111	112	115	24	116	116	118	24	115	116	117	24
6/28	103	105	107	24	104	104	106	24	112	113	116	24	113	113	114	24	115	115	115	24
6/29	101	101	102	23	104	105	106	24	111	113	116	24	112	113	113	24	114	114	115	24

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

Date	<u>Lower Mon.</u>			#	<u>L. Mon. Tlwr</u>			#	<u>Ice Harbor</u>			#	<u>Ice Harbor Tlwr</u>			#	<u>McNary-Oregon</u>			#
	<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
6/16	115	116	117	24	118	119	120	24	114	115	115	24	117	118	120	24	---	---	---	0
6/17	111	111	112	24	117	118	119	24	112	113	113	24	115	116	116	24	---	---	---	0
6/18	111	112	112	24	118	118	119	24	112	112	113	24	116	116	116	24	---	---	---	0
6/19	111	112	112	24	119	120	121	24	113	113	113	24	115	115	116	24	---	---	---	0
6/20	111	111	112	24	120	120	121	24	112	112	113	24	115	115	116	24	---	---	---	0
6/21	111	111	111	24	118	118	118	23	113	113	114	24	115	116	116	24	---	---	---	0
6/22	112	112	112	24	118	118	118	24	114	115	115	24	115	116	117	24	---	---	---	0
6/23	112	113	113	24	118	118	119	24	114	114	115	24	115	116	116	24	---	---	---	0
6/24	113	113	114	24	118	119	119	24	114	114	114	24	114	115	115	24	---	---	---	0
6/25	114	114	114	24	118	119	119	24	114	114	114	24	113	115	116	24	---	---	---	0
6/26	115	115	116	24	118	119	120	24	115	116	116	24	114	116	117	24	---	---	---	0
6/27	116	116	116	24	118	119	120	24	117	117	117	24	114	116	117	24	---	---	---	0
6/28	115	115	116	24	116	117	118	24	116	116	116	24	114	116	117	24	---	---	---	0
6/29	115	115	116	24	117	117	118	24	115	116	116	24	113	115	116	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>24 h</u>	<u>12 h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>AVG</u>	<u>High</u>	#	
	<u>Avg</u>	<u>Avg</u>		<u>High</u>	<u>Avg</u>		<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>		<u>High</u>	<u>Avg</u>		<u>Avg</u>	<u>High</u>	<u>Avg</u>		<u>AVG</u>
6/16	113	114	114	24	120	121	121	24	110	110	111	24	119	119	119	24	112	113	113	24
6/17	112	113	113	24	120	120	120	24	107	107	108	24	119	119	120	24	110	111	112	24
6/18	114	115	116	24	120	120	120	24	108	109	109	24	119	119	120	24	110	111	112	24
6/19	115	115	116	24	118	119	120	24	108	108	109	24	118	118	119	24	109	109	110	24
6/20	113	114	114	24	119	120	120	24	108	109	110	24	119	119	119	24	110	112	113	24
6/21	112	113	113	24	119	119	119	24	109	110	110	24	118	118	119	24	111	112	113	24
6/22	113	114	115	24	118	118	119	24	109	109	110	24	119	120	120	24	110	112	114	24
6/23	114	114	114	24	118	118	120	24	110	111	112	24	119	119	120	24	112	113	115	24
6/24	115	117	118	24	118	119	119	24	112	112	113	24	118	119	119	24	114	115	117	24
6/25	118	118	119	24	118	120	120	24	113	114	115	24	116	119	119	24	114	115	117	24
6/26	117	117	118	24	118	118	119	24	115	115	116	23	117	119	120	23	115	117	119	24
6/27	117	118	119	24	117	118	118	24	116	116	117	24	119	120	120	24	115	116	117	24
6/28	117	117	118	24	117	118	118	24	115	115	115	24	117	120	121	24	112	113	114	24
6/29	114	115	117	24	117	117	117	24	115	115	115	24	123	129	135	24	112	113	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>24 h</u>	<u>12 h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#		
	<u>Avg</u>	<u>Avg</u>		<u>High</u>	<u>Avg</u>		<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>		<u>High</u>	<u>Avg</u>		<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>
6/16	117	118	118	24	115	115	115	24	117	117	118	23	115	115	116	24	120	120	120	17
6/17	115	116	116	24	113	113	114	24	115	116	116	23	114	115	115	24	120	120	120	17
6/18	116	116	117	24	112	112	113	24	114	114	115	23	113	113	114	24	119	119	121	17
6/19	115	115	115	24	110	110	111	24	112	113	113	23	111	111	112	24	120	120	120	17
6/20	116	117	117	24	109	110	110	24	112	112	113	23	110	111	112	24	120	120	121	17
6/21	117	117	117	24	110	111	111	24	113	114	115	23	111	112	113	24	119	119	120	17
6/22	116	117	118	24	111	111	111	24	115	115	115	23	111	113	113	24	119	119	120	17
6/23	117	118	119	24	111	112	113	24	114	114	115	23	112	113	114	24	120	121	121	17
6/24	118	119	120	24	115	116	117	24	116	116	117	23	113	115	116	24	120	120	121	17
6/25	118	119	120	24	116	116	117	24	117	118	118	23	115	116	117	24	118	118	119	17
6/26	119	120	120	24	117	117	117	24	117	117	118	23	115	117	118	24	118	118	119	17
6/27	118	119	119	24	117	118	119	24	116	117	117	24	115	116	116	24	117	118	118	17
6/28	117	117	117	24	112	112	114	24	113	114	114	23	112	113	114	24	116	116	117	17
6/29	117	117	118	24	111	111	112	24	112	113	114	23	111	111	112	24	118	118	119	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: <http://www.fpc.org/currentDaily/smpcomments.htm>

For clip information see: <http://www.fpc.org/CurrentDaily/catch.htm>

For sockeye and yearling chinook (Snake only) race information see: <http://www.fpc.org/smoltqueries/currentsmpsubmitdata.asp>

<b>COMBINED YEARLING CHINOOK</b>											
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
06/16/2006 *	---	4	---	---	863	0	930	4	462	606	339
06/17/2006 *	---	4	---	---	1,084	983	363	6	---	525	324
06/18/2006 *	---	5	---	---	2,214	1,226	315	2	138	238	459
06/19/2006 *	---	5	---	---	2,030	1,345	171	0	---	52	62
06/20/2006 *	---	1	---	---	570	305	135	0	90	158	19
06/21/2006 *	---	---	---	---	157	384	48	2	---	58	230
06/22/2006	---	---	---	---	211	233	31	0	0	139	75
06/23/2006 *	---	---	---	---	125	212	20	0	---	82	370
06/24/2006 *	---	---	---	---	57	64	32	0	213	0	158
06/25/2006 *	---	---	---	---	88	93	29	0	---	0	151
06/26/2006 *	---	---	---	---	30	130	19	2	0	87	196
06/27/2006 *	---	---	---	---	14	333	11	0	0	0	0
06/28/2006 *	---	---	---	---	27	583	6	0	509	447	412
06/29/2006 *	---	---	---	---	76	63	11	0	---	42	0
06/30/2006	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>7,546</b>	<b>5,954</b>	<b>2,121</b>	<b>16</b>	<b>1,412</b>	<b>2,434</b>	<b>2,795</b>
<b># Days:</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>8</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>539</b>	<b>425</b>	<b>152</b>	<b>1</b>	<b>177</b>	<b>174</b>	<b>200</b>
<b>YTD</b>	<b>30,807</b>	<b>25,174</b>	<b>13,056</b>	<b>19,187</b>	<b>3,692,662</b>	<b>4,177,854</b>	<b>1,439,043</b>	<b>37,261</b>	<b>1,559,893</b>	<b>2,249,848</b>	<b>2,256,332</b>

<b>COMBINED SUBYEARLING CHINOOK</b>											
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
06/16/2006 *	---	0	---	---	5,418	0	9,823	362	23,345	27,319	50,808
06/17/2006 *	---	0	---	---	6,656	10,197	7,271	320	---	20,237	39,694
06/18/2006 *	---	0	---	---	10,198	11,525	6,282	193	37,452	19,472	63,000
06/19/2006 *	---	0	---	---	8,095	9,545	3,138	174	---	19,037	38,255
06/20/2006 *	---	0	---	---	7,547	4,717	1,904	282	34,313	23,558	39,209
06/21/2006 *	---	---	---	---	9,323	4,552	965	561	---	26,114	40,191
06/22/2006	---	---	---	---	6,888	5,749	835	677	121,560	29,288	45,133
06/23/2006 *	---	---	---	---	5,561	6,409	1,016	957	---	34,412	51,173
06/24/2006 *	---	---	---	---	6,296	9,832	833	834	137,866	80,166	89,441
06/25/2006 *	---	---	---	---	11,178	10,774	2,705	626	---	49,298	120,317
06/26/2006 *	---	---	---	---	13,417	10,416	2,255	862	94,228	66,426	86,584
06/27/2006 *	---	---	---	---	11,719	13,023	1,840	732	0	71,896	87,178
06/28/2006 *	---	---	---	---	11,859	13,721	1,204	432	203,743	88,334	80,667
06/29/2006 *	---	---	---	---	11,411	27,236	1,023	296	---	102,703	63,834
06/30/2006	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>125,566</b>	<b>137,696</b>	<b>41,094</b>	<b>7,308</b>	<b>652,507</b>	<b>658,260</b>	<b>895,484</b>
<b># Days:</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>8</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,969</b>	<b>9,835</b>	<b>2,935</b>	<b>522</b>	<b>81,563</b>	<b>47,019</b>	<b>63,963</b>
<b>YTD</b>	<b>3</b>	<b>35</b>	<b>15</b>	<b>287</b>	<b>619,615</b>	<b>859,300</b>	<b>315,434</b>	<b>15,004</b>	<b>1,150,874</b>	<b>1,033,413</b>	<b>2,834,545</b>

## 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)
06/16/2006	*	---	0	---	283	0	55	53	44	1,211	283
06/17/2006	*	---	0	---	618	227	36	59	---	1,577	202
06/18/2006	*	---	0	---	409	511	19	48	214	1,400	328
06/19/2006	*	---	0	---	185	314	41	19	---	683	187
06/20/2006	*	---	0	---	122	189	30	54	56	699	358
06/21/2006	*	---	---	---	14	115	8	49	---	219	306
06/22/2006		---	---	---	30	95	20	35	0	251	375
06/23/2006	*	---	---	---	42	85	19	40	---	165	149
06/24/2006	*	---	---	---	14	43	15	33	107	157	313
06/25/2006	*	---	---	---	0	57	23	8	---	52	151
06/26/2006	*	---	---	---	0	107	30	22	112	180	196
06/27/2006	*	---	---	---	29	79	16	18	0	0	211
06/28/2006	*	---	---	---	0	64	6	19	212	0	206
06/29/2006	*	---	---	---	15	0	0	12	---	42	198
06/30/2006		---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>1,761</b>	<b>1,886</b>	<b>318</b>	<b>469</b>	<b>745</b>	<b>6,636</b>	<b>3,463</b>
<b># Days:</b>		<b>0</b>	<b>5</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>8</b>	<b>14</b>	<b>14</b>
<b>Average:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>126</b>	<b>135</b>	<b>23</b>	<b>34</b>	<b>93</b>	<b>474</b>	<b>247</b>
<b>YTD</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>46</b>	<b>86,124</b>	<b>132,738</b>	<b>33,964</b>	<b>61,090</b>	<b>101,879</b>	<b>315,493</b>

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)
06/16/2006	*	---	10	---	863	0	274	38	159	1,652	368
06/17/2006	*	---	12	---	1,198	466	181	59	---	1,328	94
06/18/2006	*	---	17	---	908	792	74	75	195	1,520	328
06/19/2006	*	---	6	---	791	656	125	15	---	1,368	373
06/20/2006	*	---	12	---	421	493	30	47	36	655	28
06/21/2006	*	---	---	---	347	368	10	42	---	409	76
06/22/2006		---	---	---	181	312	7	16	0	84	0
06/23/2006	*	---	---	---	139	259	20	40	---	659	73
06/24/2006	*	---	---	---	85	314	14	17	36	79	78
06/25/2006	*	---	---	---	205	294	17	21	---	52	151
06/26/2006	*	---	---	---	75	168	49	24	112	106	0
06/27/2006	*	---	---	---	159	184	54	18	0	0	0
06/28/2006	*	---	---	---	149	161	11	12	42	223	206
06/29/2006	*	---	---	---	91	46	11	11	---	42	0
06/30/2006		---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>		<b>0</b>	<b>57</b>	<b>0</b>	<b>5,612</b>	<b>4,513</b>	<b>877</b>	<b>435</b>	<b>580</b>	<b>8,177</b>	<b>1,775</b>
<b># Days:</b>		<b>0</b>	<b>5</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>8</b>	<b>14</b>	<b>14</b>
<b>Average:</b>		<b>0</b>	<b>11</b>	<b>0</b>	<b>401</b>	<b>322</b>	<b>63</b>	<b>31</b>	<b>73</b>	<b>584</b>	<b>127</b>
<b>YTD</b>		<b>1,964</b>	<b>19,998</b>	<b>9,317</b>	<b>3,066</b>	<b>4,483,081</b>	<b>4,374,288</b>	<b>1,265,174</b>	<b>26,831</b>	<b>446,107</b>	<b>1,682,154</b>

## Two-Week Summary of Passage Indices

COMBINED SOCKEYE												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
06/16/2006	*	---	0	---	---	127	0	73	72	154	441	481
06/17/2006	*	---	0	---	---	139	113	91	70	---	197	202
06/18/2006	*	---	0	---	---	90	115	56	168	136	494	459
06/19/2006	*	---	0	---	---	53	102	14	9	---	52	62
06/20/2006	*	---	0	---	---	14	0	0	29	90	158	9
06/21/2006	*	---	---	---	---	14	29	13	71	---	0	0
06/22/2006		---	---	---	---	0	42	14	36	255	0	0
06/23/2006	*	---	---	---	---	0	58	4	36	---	0	73
06/24/2006	*	---	---	---	---	0	50	7	61	142	0	78
06/25/2006	*	---	---	---	---	15	7	4	11	---	52	0
06/26/2006	*	---	---	---	---	15	8	6	22	225	145	196
06/27/2006	*	---	---	---	---	0	9	0	12	0	0	0
06/28/2006	*	---	---	---	---	0	7	11	17	297	0	206
06/29/2006	*	---	---	---	---	0	91	0	14	---	42	0
06/30/2006		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>467</b>	<b>631</b>	<b>293</b>	<b>628</b>	<b>1,299</b>	<b>1,581</b>	<b>1,766</b>
<b># Days:</b>		<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>8</b>	<b>14</b>	<b>14</b>
<b>Average:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>45</b>	<b>21</b>	<b>45</b>	<b>162</b>	<b>113</b>	<b>126</b>
<b>YTD</b>		<b>13</b>	<b>0</b>	<b>0</b>	<b>678</b>	<b>51,801</b>	<b>91,725</b>	<b>40,203</b>	<b>34,196</b>	<b>494,509</b>	<b>526,537</b>	<b>407,047</b>

\* 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  
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts  
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts  
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts  
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse 2 Flow} / (\text{Powerhouse 1 \& 2 Flow} + \text{Spill}) \}$
- MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts  
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts  
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts  
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse 2 Flow} / (\text{Powerhouse 1 \& 2 Flow} + \text{Spill}) \}$

JDA and BO2 data collected for the FPC by Pacific States Marine Fisheries Commission.  
 RIS data collected for the FPC by Chelan Co. PUD/Washington Dept. of Fish and Wildlife.  
 LGR, LMN, and MCN data collected for the FPC by Washington Dept. of Fish and Wildlife.  
 LGS and GRN data collected for the FPC by Oregon Dept. of Fish and Wildlife.  
 IMN data collected for the FPC by the Nez Perce Tribe.

## Two Week Transportation Summary

Source: Fish Passage Center

Updated:

6/30/06 8:03 AM

		06/16/06 TO 06/30/06					
		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	88,608	5,698	1,340	350	4,164	100,160
	Sum of NumberBarged	83,824	6,129	1,450	410	4,833	96,646
	Sum of NumberBypassed	1,336	0	0	0	205	1,541
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	64	3	0	3	4	74
	Sum of FacilityMorts	162	4	0	12	14	192
	Sum of ResearchMorts	19	0	0	0	0	19
	Sum of TotalProjectMorts	245	7	0	15	18	285
<b>LGS</b>	Sum of NumberCollected	108,592	5,350	1,467	550	3,668	119,627
	Sum of NumberBarged	97,868	7,129	1,576	604	4,446	111,623
	Sum of NumberBypassed	109	0	0	1	1	111
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	33	5	0	2	5	45
	Sum of FacilityMorts	102	2	1	7	11	123
	Sum of ResearchMorts	10	0	0	0	0	10
	Sum of TotalProjectMorts	145	7	1	9	16	178
<b>LMN</b>	Sum of NumberCollected	31,733	1,683	237	232	685	34,570
	Sum of NumberBarged	32,733	2,761	277	290	1,207	37,268
	Sum of NumberBypassed	2,738	7	0	0	7	2,752
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	23	0	0	1	0	24
	Sum of FacilityMorts	25	3	0	1	3	32
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	48	3	0	2	3	56
<b>MCN</b>	Sum of NumberCollected	336,285	752	396	645	287	338,365
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	336,121	750	395	642	286	338,194
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	32	0	0	2	0	34
	Sum of FacilityMorts	63	2	1	0	1	67
	Sum of ResearchMorts	69	0	0	1	0	70
	Sum of TotalProjectMorts	164	2	1	3	1	171
<b>Total Sum of NumberCollected</b>		<b>565,218</b>	<b>13,483</b>	<b>3,440</b>	<b>1,777</b>	<b>8,804</b>	<b>592,722</b>
<b>Total Sum of NumberBarged</b>		<b>214,425</b>	<b>16,019</b>	<b>3,303</b>	<b>1,304</b>	<b>10,486</b>	<b>245,537</b>
<b>Total Sum of NumberBypassed</b>		<b>340,304</b>	<b>757</b>	<b>395</b>	<b>643</b>	<b>499</b>	<b>342,598</b>
<b>Total Sum of Numbertrucked</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Sum of SampleMorts</b>		<b>152</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>9</b>	<b>177</b>
<b>Total Sum of FacilityMorts</b>		<b>352</b>	<b>11</b>	<b>2</b>	<b>20</b>	<b>29</b>	<b>414</b>
<b>Total Sum of ResearchMorts</b>		<b>98</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>99</b>
<b>Total Sum of TotalProjectMorts</b>		<b>602</b>	<b>19</b>	<b>2</b>	<b>29</b>	<b>38</b>	<b>690</b>

### YTD Transportation Summary

Source: Fish Passage Center

Updated:

6/30/06 8:03 AM

TO: 06/30/06

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	402,054	2,407,688	51,150	32,580	2,820,392	5,713,864
	Sum of NumberBarged	376,355	1,964,047	46,782	25,755	2,466,932	4,879,871
	Sum of NumberBypassed	17,206	437,073	4,214	6,237	352,045	816,775
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	130	202	2	30	96	460
	Sum of FacilityMorts	846	6,005	140	557	1,204	8,752
	Sum of ResearchMorts	27	311	2	1	57	398
	Sum of TotalProjectMorts	1,003	6,518	144	588	1,357	9,610
<b>LGS</b>	Sum of NumberCollected	593,372	3,129,044	87,983	62,675	3,227,766	7,100,840
	Sum of NumberBarged	565,953	2,744,801	86,365	52,457	2,633,695	6,083,271
	Sum of NumberBypassed	4,228	376,363	1,524	8,895	591,413	982,423
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	84	136	0	23	18	261
	Sum of FacilityMorts	2,453	5,759	94	1,236	771	10,313
	Sum of ResearchMorts	12	13	0	0	1	26
	Sum of TotalProjectMorts	2,549	5,908	94	1,259	790	10,600
<b>LMN</b>	Sum of NumberCollected	222,299	1,096,013	23,175	27,761	935,373	2,304,621
	Sum of NumberBarged	218,538	1,060,575	23,016	26,993	883,706	2,212,828
	Sum of NumberBypassed	2,957	34,397	159	576	50,960	89,049
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	40	47	0	7	33	127
	Sum of FacilityMorts	196	936	0	185	616	1,933
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	236	983	0	192	649	2,060
<b>MCN</b>	Sum of NumberCollected	565,033	829,623	47,705	251,829	231,973	1,926,163
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	564,335	828,706	47,686	251,437	231,814	1,923,978
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	140	116	1	28	13	298
	Sum of FacilityMorts	433	760	15	348	140	1,696
	Sum of ResearchMorts	125	41	3	16	6	191
	Sum of TotalProjectMorts	698	917	19	392	159	2,185
Total Sum of NumberCollected		1,782,758	7,462,368	210,013	374,845	7,215,504	17,045,488
Total Sum of NumberBarged		1,160,846	5,769,423	156,163	105,205	5,984,333	13,175,970
Total Sum of NumberBypassed		588,726	1,676,539	53,583	267,145	1,226,232	3,812,225
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		394	501	3	88	160	1,146
Total Sum of FacilityMorts		3,928	13,460	249	2,326	2,731	22,694
Total Sum of ResearchMorts		164	365	5	17	64	615
Total Sum of TotalProjectMorts		4,486	14,326	257	2,431	2,955	24,455

**Cumulative Adult Passage at Mainstem Dams Through: 06/29**

DAM	EndDate	Spring Chinook						Summer Chinook						Fall Chinook					
		2006		2005		10-Yr Avg.		2006		2005		10-Yr Avg.		2006		2005		10-Yr Avg.	
		Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	06/29	96,456	2,908	74,038	4,288	151,682	8,418	67,524	2,199	49,346	2,547	37,445	4,121	0	0	0	0	0	0
TDA	06/29	61,827	2,176	60,964	3,210	104,618	6,110	52,451	1,773	41,375	1,751	29,997	2,695	0	0	0	0	0	0
JDA	06/29	50,313	2,093	56,027	2,715	87,807	4,857	43,395	1,401	36,049	1,945	26,397	2,253	0	0	0	0	0	0
MCN	06/28	45,355	2,475	51,855	3,201	80,814	5,125	29,084	1,234	31,438	1,198	21,489	1,917	0	0	0	0	0	0
IHR	06/28	25,465	843	28,039	1,267	54,334	3,256	5,634	231	6,274	526	7,969	1,082	0	0	0	0	0	0
LMN	06/28	23,596	551	25,933	1,002	51,936	3,032	5,684	190	4,853	340	6,911	816	0	0	0	0	0	0
LGS	06/28	20,839	745	23,995	923	49,856	3,088	3,353	177	2,037	219	5,420	820	0	0	0	0	0	0
LGR	06/28	22,963	984	26,028	1,258	49,902	3,362	2,967	184	1,872	207	5,072	770	0	0	0	0	0	0
PRD	06/27	8,535	81	14,148	515	16,757	523	10,565	27	18,957	400	8,808	233	0	0	0	0	0	0
RIS	06/28	9,245	473	11,908	504	13,259	737	6,754	146	10,611	368	4,969	363	0	0	0	0	0	0
RRH	06/28	5,376	274	4,568	417	4,860	283	3,563	49	4,655	73	2,031	94	0	0	0	0	0	0
WEL	06/27	3,435	195	4,505	95	3,246	189	0	0	0	0	0	0	0	0	0	0	0	0
WFA	06/24	31,895	158	32,877	1,099	3,241	86	0	0	0	0	0	0	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2006		2005		10-Yr Avg.		2006	2005	10-Yr Avg.	10-Yr			Wild 2006
	Adult	Jack	Adult	Jack	Adult	Jack				2006	2005	Avg.	
BON	0	0	0	0	0	0	26,237	44,776	42,701	9,844	11,496	15533	2,724
TDA	0	0	0	0	0	0	19,153	35,089	33,410	3,144	5,283	5916	930
JDA	0	0	0	0	0	0	19,061	32,433	33,181	4,735	4,505	7317	1,459
MCN	0	0	0	0	0	0	10,573	22,510	21,354	3,182	3,542	3763	956
IHR	0	0	0	0	0	0	13	5	6	3,035	2,482	2437	987
LMN	0	0	0	0	0	0	4	3	3	3,017	1,748	2185	1,073
LGS	0	0	0	0	0	0	1	2	1	2,780	1,368	2249	915
LGR	0	0	0	0	0	0	1	8	1	7,711	5,249	6480	2,342
PRD	3	0	0	0	0	0	3,169	10,159	10,942	113	123	100	0
RIS	0	0	2	0	0	0	1,352	3,554	4,262	73	171	100	42
RRH	0	0	0	0	1	0	606	1,725	2,139	161	402	139	137
WEL	0	0	0	0	0	0	63	367	589	61	75	25	29
WFA	0	0	0	0	0	0	0	0	0	25,612	15,203	1433	0

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

\*PRD is not posting wild steelhead numbers.

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

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

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

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

Page last updated on: 06/30/06

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
77