



Fish Passage Center Weekly Report #06 - 16

June 23, 2006

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 109% and 259% of average at individual sub-basins over the first portion of June. Precipitation above The Dalles over the first portion of June has been 180% 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 1-19		Water Year 2006 October 1, 2005 to June 19	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	2.90	191	22.68	115
SNAKE RIVER Above Ice Harbor	1.29	139	18.50	127
Columbia Above The Dalles	2.04	180	22.06	116
Kootenai	3.08	198	24.22	120
Clark Fork	2.49	203	17.22	128
Flathead	3.92	234	22.87	128
Pend Oreille/Spokane	3.60	259	31.88	121
Central Washington	0.92	226	10.67	138
SNAKE RIVER Plain	0.95	156	11.80	128
Salmon/Boise/ Payette	1.46	157	23.40	137
Clearwater	2.44	155	29.26	113
SW Washington Cascades/Cowlitz	2.04	109	65.77	102
Willamette Valley	1.93	136	60.95	102

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

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

Location	May Final		June Final		June Mid Month	
	% 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	66900
Libby Res. Inflow, MT (Jan-July)	98	6160	101	6360	111	7020
Hungry Horse Res. Inflow, MT (Jan-July)	101	2250	106	2360	114	2540
Lower Granite Res. Inflow (Apr-July)	126	27100	124	26700	116	25100
Brownlee Res. Inflow (Apr-July)	143	9020	141	8910	138	8710
Dworshak Res. Inflow (Apr-July)	101	2670	106	2800	104	2740

Snowpack within the Columbia Basin continues to diminish.

Grand Coulee Reservoir is at 1285.2 feet (6-22-06) and has refilled about 3 feet over the last week. Inflow has ranged from 199 to 214 Kcfs, while outflow has ranged 168.5 to 200.4 Kcfs.

The Libby Reservoir is currently at elevation 2456.9 feet (6-22-06) and refilled about 1 foot last week. Outflows over the last week been approximately 42-55 Kcfs with 24 Kcfs of spill. Inflow has decreased over the last week from 60 to 25 Kcfs.

Hungry Horse is currently at an elevation of 3558.4 feet (6-22-06) and has remained fairly steady; outflows at Hungry Horse have been approximately 9-10 Kcfs over the last week. Inflows ranged between 8.3 and 24.7 Kcfs over the same period.

Dworshak is currently at an elevation of 1597.7 feet (6-22-06) and refilled about 4 feet last week; outflows at Dworshak have decreased from 5.2 to 1.7 Kcfs over the last week. Inflows ranged between 7.2 and 11.2 Kcfs over the same period.

The Brownlee Reservoir was at an elevation of 2076.1 feet on June 22th, 2006. Outflows at Hells Canyon have ranged between 17.4 and 30.5 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 Water Supply Forecast (April Final), the flow objectives this spring will be 100 Kcfs at Lower Granite, 260 Kcfs at McNary, and 135 Kcfs at Priest Rapids. Flows at Lower Granite have averaged 124.3 Kcfs over the season and 80.5 Kcfs last week; flows at McNary have averaged 332 Kcfs over the season and 314.3 Kcfs last week; and flows at Priest Rapids have averaged 191.8 Kcfs over the season and 222.6 Kcfs last week.

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. Spring spill ended on June 20 and summer spill began on June 21. Spill at Lower Granite, Little Goose, Lower Monumental and Ice Harbor dams averaged 27%, 29%, 25% and 47% of average daily flow over the past week, respectively. Spill at Lower Granite Dam met the Court Order and was decreased to 18 Kcfs on June 22, which is the summer spill volume. At Little Goose Dam, the COE did not meet the Court Order earlier in the week, but achieved the objective over the past four days. Spill at Lower Monumental did not achieve the Court Order due to tailrace TDG, but has been meeting the summer spill amount of 17 Kcfs the past few days. Spill at Ice Harbor Dam is exceeding the Court Order.

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 begun to recede. Spill at McNary, John Day, The Dalles and Bonneville dams was 49%, 38%, 40% and 35% 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 35% and 43% of daily average. Spill at The Dalles Dam did achieve the Court's Order over the past week. Spill at Bonneville Dam has met the Court Order over the past week.

Total dissolved gas levels met the TDG waiver limits over the past week. A few sampled fish are showing signs of GBT at some projects, but are much reduced from the last few weeks levels and action criteria are not being exceeded. 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 Rock Island and Lower Columbia River sites.

At Lower Granite Dam, subyearling chinook indices averaged roughly 7,700 per day over the past week compared to 9,000 per day the previous week, while at Little Goose and Lower Monumental Dam the subyearling index averaged 6,000 and 4,000 (respectively) per day this week.

At Rock Island Dam indices for subyearlings averaged 360 per day this week compared to 240 per day last week. At McNary Dam, subyearling indices were up, averaging 54,000 this week compared to 38,000 per day over the previous week. On June 22 the index at McNary reached 120,000 likely reflecting the 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 were flat, averaging 24,000 per day over the past two weeks. At Bonneville Dam subyearling indices were up, with the index averaging 45,000 fish per day this week compared to 16,000 last 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 is releasing roughly 7 million subyearlings; those releases began on June 16 and are scheduled to be completed by June 25. In the Lower Columbia, Little White Salmon NFH is scheduled to release 1.8 million subyearling chinook on June 25.

Adult Fish Passage: At Bonneville, traditional counting of adult summer Chinook began on June 1st. The weekly count averaged 2,260 fish/day through the week ending June 22nd, with the total at 45,525 through June 22nd. This total is about 122% and 163% above 2005 and the 10-year average, respectively. The adult summer Chinook count total at The Dalles Dam was 33,734 through June 22nd.

At Bonneville, the average daily steelhead count for the week was 209 per day. Adult sockeye salmon have increased to a total of 11,774 fish at Bonneville through June 22nd, about 52% and 48% of 2005 and the 10-year average, respectively.

Approximately 3.0 million adult Shad have been counted at Bonneville Dam this season with daily counts between 41,956 and 190,368 for the week.

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
06/09/06	179.1	4.4	179.6	11.6	207.4	52.7	207.3	35.6	211.5	46.2	242.4	122.8	221.7	72.5
06/10/06	169.9	15.1	163.9	18.7	186.4	58.4	190.5	50.0	195.6	42.1	223.7	104.8	211.6	95.0
06/11/06	185.1	19.3	187.4	26.6	214.3	81.0	216.1	66.3	216.4	39.9	250.4	134.8	236.1	91.4
06/12/06	181.9	17.1	189.7	21.1	219.5	81.1	221.4	56.7	223.8	45.5	264.7	147.1	246.9	98.8
06/13/06	188.9	24.1	185.8	18.2	210.1	66.4	210.2	48.6	215.9	44.0	247.8	135.3	231.4	88.9
06/14/06	185.3	17.1	186.4	22.2	213.6	72.3	217.2	40.4	223.8	43.5	262.5	144.2	248.1	96.8
06/15/06	189.9	17.1	188.1	22.2	216.3	75.3	215.8	39.8	217.4	39.9	253.4	134.4	234.9	83.5
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

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

Date	Dworshak		Brownlee Canyon		Hells Granite		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
06/09/06	9.6	0.0	27.8	31.7	127.4	50.0	124.4	45.6	126.3	37.7	128.3	72.2	128.3	72.2
06/10/06	9.6	0.0	29.4	31.6	125.7	59.1	124.6	62.2	125.2	45.8	131.7	85.5	131.7	85.5
06/11/06	9.3	0.0	31.0	31.7	118.4	68.3	114.5	74.3	119.4	76.4	119.9	98.7	119.9	98.7
06/12/06	5.3	0.0	31.0	32.5	106.2	37.6	105.4	34.7	105.4	33.6	108.8	59.8	108.8	59.8
06/13/06	5.3	0.0	31.1	32.5	101.9	29.5	100.7	22.8	101.2	19.1	103.4	50.1	103.4	50.1
06/14/06	5.3	0.0	29.7	32.5	100.8	42.9	98.1	41.4	99.3	29.2	99.9	69.2	99.9	69.2
06/15/06	5.3	0.0	30.6	32.5	112.8	36.2	112.3	34.5	114.6	37.2	115.7	70.4	115.7	70.4
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	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	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	91.4	27.9
06/19/06	3.9	0.0	23.2	31.5	79.7	20.3	78.6	23.9	78.1	22.6	79.9	23.9	79.9	23.9
06/20/06	1.6	0.0	20.6	---	69.4	20.3	68.3	21.0	66.6	23.5	68.8	41.6	68.8	41.6
06/21/06	1.7	0.0	20.4	---	67.5	20.2	66.5	20.2	67.2	17.1	70.2	48.4	70.2	48.4
06/22/06	1.7	0.0	---	---	64.5	20.0	63.0	20.5	65.7	17.3	64.2	44.9	64.2	44.9

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		
06/09/06	364.1	194.9	370.5	159.5	360.8	145.0	372.6	149.0	83.3	128.8
06/10/06	357.4	197.9	363.6	154.2	362.2	149.1	372.5	148.6	81.8	130.6
06/11/06	347.7	214.9	336.8	174.4	334.8	198.6	360.0	143.9	81.2	123.4
06/12/06	348.1	188.2	349.9	137.7	345.3	147.6	345.7	136.7	73.2	124.4
06/13/06	352.6	178.1	337.5	130.1	329.8	121.9	351.9	136.1	75.9	128.3
06/14/06	349.3	182.6	346.7	149.7	337.5	122.9	350.5	139.2	74.1	125.7
06/15/06	373.8	204.1	365.5	144.2	358.4	157.2	369.5	149.0	79.1	129.9
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

HATCHERY RELEASE LAST TWO WEEKS

Hatchery Release Summary									
From:	6/9/2006		to	06/22/06					
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
National Marine Fisheries Service	Lyons Ferry Hatchery	CHO	FA	2006	100,000	06-19-06	07-09-06	Big Canyon (Clearwater River)	Clearwater River M F
National Marine Fisheries Service Total					100,000				
Nez Perce Tribe	Nez Perce Tribal Hatchery	CHO	FA	2006	25,000	06-13-06	06-13-06	Clearwater River	Snake River
Nez Perce Tribe	Nez Perce Tribal Hatchery	CHO	FA	2006	25,000	06-13-06	06-13-06	Clearwater River	Snake River
Nez Perce Tribe	Nez Perce Tribal Hatchery	CHO	FA	2006	500,000	06-08-06	06-15-06	Nez Perce Tribal Hatchery	Clearwater River M F
Nez Perce Tribe Total					550,000				
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CHO	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	CHO	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	CHO	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	CHO	FA	2006	1,699,000	06-16-06	06-17-06	Priest Rapids Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife Total					5,596,000				
Grand Total					6,246,000				

HATCHERY RELEASE NEXT TWO WEEKS

Hatchery Release Summary									
From:	6/23/2006		to	7/6/2006					
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
National Marine Fisheries Service	Lyons Ferry Hatchery	CHO	FA	2006	100,000	06-19-06	07-09-06	Big Canyon (Clearwater River)	Clearwater River M F
National Marine Fisheries Service Total					100,000				
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
U.S. Fish and Wildlife Service Total					1,800,000				
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CHO	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	CHO	FA	2006	1,299,000	06-24-06	06-25-06	Priest Rapids Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife Total					2,598,000				
Grand Total					4,498,000				

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

Site	Date	Species	Number of Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank			
								Rank 1	Rank 2	Rank 3	Rank 4
Lower Granite Dam											
	06/13/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/20/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Little Goose Dam											
	06/13/06	Chinook + Steelhead	100	6	6	6.00%	0.00%	6	0	0	0
	06/20/06	Chinook + Steelhead	100	3	3	3.00%	0.00%	3	0	0	0
Lower Monumental Dam											
	06/19/06	Chinook + Steelhead	22	0	0	0.00%	0.00%	0	0	0	0
McNary Dam											
	06/15/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/19/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	06/13/06	Chinook + Steelhead	100	7	7	7.00%	0.00%	4	3	0	0
	06/16/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/20/06	Chinook + Steelhead	100	2	2	2.00%	0.00%	2	0	0	0
Rock Island Dam											
	06/15/06	Chinook + Steelhead	86	6	6	6.97%	0.00%	6	0	0	0
	06/22/06	Chinook + Steelhead	99	2	2	2.02%	0.00%	2	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>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#					
	Avg	Avg		High	hr		Avg	Avg		High	hr		Avg	Avg		High	hr	Avg	Avg	High
6/9	106	107	107	24	127	128	128	24	120	120	120	24	114	116	117	24	116	116	116	24
6/10	106	106	106	24	127	128	129	24	120	120	121	24	115	117	118	24	116	116	116	24
6/11	106	106	107	24	128	128	129	24	121	121	121	24	118	118	119	24	116	116	117	24
6/12	106	107	107	24	128	128	129	24	121	121	122	24	118	118	118	24	117	117	118	24
6/13	107	108	108	24	127	128	128	24	121	121	122	24	118	119	120	24	117	117	117	14
6/14	107	107	107	24	127	128	128	24	122	122	123	24	118	118	119	24	117	117	117	24
6/15	106	107	107	24	128	128	128	24	122	122	123	24	118	118	119	24	117	118	118	24
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

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	<u>Chief J. Dnst</u>			<u>Wells</u>			<u>Wells Dwnstrm</u>			<u>Rocky Reach</u>			<u>Rocky R. Tlwr</u>							
	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#					
	Avg	Avg		High	hr		Avg	Avg		High	hr		Avg	Avg		High	hr	Avg	Avg	High
6/9	118	122	129	24	114	115	116	24	120	123	127	24	119	119	121	24	120	121	123	24
6/10	122	124	127	24	113	114	115	24	121	127	130	24	118	120	124	24	119	122	124	24
6/11	125	128	131	24	115	116	118	24	125	126	128	24	121	124	126	24	122	125	126	24
6/12	122	122	124	24	115	116	116	24	125	127	132	24	124	125	125	24	124	125	126	24
6/13	120	121	124	13	115	115	115	24	122	125	129	24	123	124	125	24	123	125	125	24
6/14	124	125	125	24	115	116	116	23	124	125	131	23	122	122	123	23	122	123	124	23
6/15	124	125	125	24	115	116	117	24	124	126	128	24	121	121	123	24	122	122	124	24
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

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	<u>Rock Island</u>			<u>Rock I. Tlwr</u>			<u>Wanapum</u>			<u>Wanapum Tlwr</u>			<u>Priest Rapids</u>							
	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#					
	Avg	Avg		High	hr		Avg	Avg		High	hr		Avg	Avg		High	hr	Avg	Avg	High
6/9	119	119	120	24	122	123	124	24	118	120	122	23	126	129	131	23	124	125	127	23
6/10	118	119	119	24	122	123	124	24	120	120	122	23	125	128	130	23	125	126	128	23
6/11	121	122	122	24	124	125	126	24	121	123	125	23	128	129	130	23	127	129	131	23
6/12	123	123	123	24	125	126	127	24	121	122	123	23	129	131	132	23	127	129	131	23
6/13	121	122	123	24	124	125	126	24	121	121	122	14	128	131	133	23	126	129	131	23
6/14	121	122	122	23	124	125	125	23	118	119	121	23	129	131	133	23	127	129	130	23
6/15	120	120	121	24	123	123	124	24	116	116	117	23	127	129	133	23	125	126	129	23
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

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

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

Date	<u>Priest R. Dnst</u>			#	<u>Pasco</u>			#	<u>Dworshak</u>			#	<u>Clrwtr-Peck</u>			#	<u>Anatone</u>			#
	<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
6/9	122	123	124	23	115	116	117	24	102	103	103	24	102	102	103	24	105	105	106	24
6/10	123	124	124	23	116	117	118	24	102	103	103	24	102	102	102	24	105	106	106	24
6/11	125	126	127	23	117	117	118	24	103	103	103	24	102	103	103	24	105	106	106	24
6/12	125	126	127	23	117	118	118	24	103	104	104	24	102	103	103	24	105	105	106	24
6/13	125	126	127	23	117	117	117	24	103	103	103	24	101	101	101	24	104	105	105	24
6/14	125	126	127	23	116	116	117	24	102	103	103	24	101	101	101	24	104	105	105	24
6/15	124	125	126	23	116	117	117	24	102	103	103	24	101	101	102	24	105	105	105	24
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

Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clrwtr-Lewiston</u>			#	<u>Lower Granite</u>			#	<u>L. Granite Tlwr</u>			#	<u>Little Goose</u>			#	<u>L. Goose Tlwr</u>			#
	<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
6/9	102	103	103	24	104	104	104	24	119	120	122	24	102	105	111	24	118	120	124	24
6/10	102	103	104	24	104	104	104	24	122	124	124	24	103	104	105	24	122	125	125	24
6/11	102	103	104	24	105	105	105	24	123	125	126	24	105	105	109	24	124	126	128	24
6/12	102	103	104	24	105	105	105	24	116	120	124	24	109	109	110	23	119	122	125	23
6/13	101	101	102	24	104	104	104	24	113	116	121	24	114	117	120	22	118	118	119	22
6/14	101	101	102	24	103	103	104	24	116	119	122	24	115	118	119	24	118	121	125	24
6/15	101	101	102	24	103	103	103	24	116	118	123	24	109	110	111	24	115	118	125	24
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

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	
6/9	115	115	116	24	119	120	123	24	115	115	116	24	120	121	123	24	---	---	---	0
6/10	118	120	121	24	120	122	129	24	116	116	116	24	120	121	123	24	---	---	---	0
6/11	120	121	124	24	122	122	123	24	117	118	119	24	121	123	126	24	---	---	---	0
6/12	127	128	129	24	122	123	124	24	120	121	121	24	119	119	123	24	---	---	---	0
6/13	122	124	126	24	121	121	122	24	120	120	120	24	118	118	119	24	---	---	---	0
6/14	117	117	119	24	119	120	123	24	119	120	120	24	117	119	119	24	---	---	---	0
6/15	116	117	117	24	120	121	122	24	114	115	116	24	118	119	120	24	---	---	---	0
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

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>Avg</u>	<u>Avg</u>	<u>High</u>		<u>hr</u>	<u>Avg</u>	<u>Avg</u>		<u>High</u>	<u>hr</u>	<u>Avg</u>		<u>Avg</u>	<u>High</u>	<u>hr</u>		<u>Avg</u>	<u>AVG</u>	<u>High</u>	<u>hr</u>
6/9	113	114	114	24	121	121	122	24	111	111	111	24	121	122	122	24	113	113	114	24
6/10	115	116	116	24	121	122	123	24	111	111	111	24	120	121	121	24	114	116	116	24
6/11	116	117	118	24	122	123	123	24	111	112	113	24	120	122	123	24	118	121	124	24
6/12	118	118	119	24	121	121	122	24	115	115	115	24	119	120	121	24	115	116	117	24
6/13	117	117	117	24	120	120	120	24	115	115	116	24	119	119	120	24	113	114	114	24
6/14	115	115	116	24	120	121	122	24	115	116	116	24	119	119	120	24	114	114	114	24
6/15	112	112	113	24	121	121	122	24	112	113	114	24	119	119	120	24	113	114	114	24
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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>CamasWashougal</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>Avg</u>	<u>Avg</u>	<u>High</u>		<u>hr</u>	<u>Avg</u>	<u>Avg</u>		<u>High</u>	<u>hr</u>	<u>Avg</u>		<u>Avg</u>	<u>High</u>	<u>hr</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
6/9	117	118	118	24	112	113	114	24	116	116	117	19	114	115	115	24	122	122	122	17
6/10	118	119	120	24	114	115	116	24	117	118	118	23	115	116	116	24	124	125	125	17
6/11	122	122	123	24	117	118	119	24	119	119	120	23	117	118	118	24	123	125	125	17
6/12	119	120	122	24	121	121	121	24	120	121	121	23	118	118	119	24	123	123	124	17
6/13	117	118	118	24	116	117	119	24	118	119	120	23	118	118	118	24	123	124	124	17
6/14	117	117	118	24	113	113	114	24	116	116	117	23	115	115	115	24	123	123	124	17
6/15	118	119	119	24	113	113	114	24	116	116	117	23	114	115	115	24	123	123	124	17
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

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>

COMBINED YEARLING CHINOOK											
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
06/09/2006	*	---	---	---	1,203	2,465	916	411	---	1,064	1,183
06/10/2006		---	1	---	1,120	4,952	845	419	1,356	1,189	921
06/11/2006	*	---	2	---	903	5,748	985	491	---	573	1,406
06/12/2006		---	1	---	862	1,186	350	313	856	813	920
06/13/2006	*	---	5	---	419	608	99	144	---	458	508
06/14/2006		---	6	---	538	2,014	315	349	513	910	958
06/15/2006	*	---	3	---	785	3,001	1,646	4	---	766	352
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	*	---	---	---	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		---	---	---	---	---	---	---	---	---	---
<hr/>											
Total:	0	36	0	0	12,959	24,450	7,149	2,145	3,415	7,549	7,756
# Days:	0	10	0	0	14	14	14	14	7	14	14
Average:	0	4	0	0	926	1,746	511	153	488	539	554
YTD	30,807	25,173	13,056	19,187	3,692,245	4,176,376	1,438,915	37,259	1,559,171	2,249,190	2,255,045

COMBINED SUBYEARLING CHINOOK											
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
06/09/2006	*	---	---	---	10,452	44,405	22,131	193	---	14,482	19,349
06/10/2006		---	0	---	13,207	53,449	20,859	139	30,897	17,967	13,844
06/11/2006	*	---	0	---	14,732	42,030	22,798	159	---	20,996	12,172
06/12/2006		---	0	---	8,350	18,053	6,778	138	36,760	21,543	16,708
06/13/2006	*	---	0	---	5,217	4,238	4,496	115	---	25,087	18,618
06/14/2006		---	0	---	5,027	9,033	9,944	432	48,130	28,778	13,843
06/15/2006	*	---	0	---	7,051	17,208	6,525	531	---	36,468	15,321
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	*	---	---	---	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		---	---	---	---	---	---	---	---	---	---
<hr/>											
Total:	0	0	0	0	118,161	234,701	123,749	4,276	332,457	330,346	426,145
# Days:	0	10	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	8,440	16,764	8,839	305	47,494	23,596	30,439
YTD	3	35	15	287	548,174	767,889	304,558	10,265	715,033	540,178	2,255,351

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)
06/09/2006 *	---	---	---	---	415	945	262	515	---	1,496	977
06/10/2006	---	0	---	---	329	491	221	350	829	1,922	803
06/11/2006 *	---	0	---	---	328	292	219	205	---	1,942	1,406
06/12/2006	---	0	---	---	45	79	50	192	722	2,168	719
06/13/2006 *	---	0	---	---	167	155	174	146	---	1,680	694
06/14/2006	---	0	---	---	258	254	86	194	723	2,977	465
06/15/2006 *	---	0	---	---	192	180	60	68	---	1,341	487
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 *	---	---	---	---	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	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
Total:	0	0	0	0	3,395	3,847	1,281	1,987	2,588	19,566	7,590
# Days:	0	10	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	243	275	92	142	370	1,398	542
YTD	0	0	0	46	86,024	132,303	33,855	60,938	101,448	314,897	655,559

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)
06/09/2006 *	---	---	---	---	3,152	5,054	2,052	201	---	3,656	777
06/10/2006	---	6	---	---	2,767	4,461	1,767	171	510	3,065	402
06/11/2006 *	---	3	---	---	4,596	6,543	2,080	154	---	3,443	641
06/12/2006	---	11	---	---	1,407	1,982	642	160	206	2,258	259
06/13/2006 *	---	8	---	---	1,283	1,934	720	164	---	1,235	160
06/14/2006	---	14	---	---	719	2,332	659	185	600	1,819	438
06/15/2006 *	---	5	---	---	1,715	1,246	808	105	---	2,331	217
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 *	---	---	---	---	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	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
Total:	0	92	0	0	20,348	26,639	9,429	1,432	1,706	24,823	4,161
# Days:	0	10	0	0	14	14	14	14	7	14	14
Average:	0	9	0	0	1,453	1,903	674	102	244	1,773	297
YTD	1,964	19,986	9,317	3,066	4,482,178	4,372,862	1,264,998	26,688	445,917	1,680,993	270,494

Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE										
	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
06/09/2006 *	---	---	---	---	166	330	174	12	---	330	940
06/10/2006	---	0	---	---	263	302	184	20	1,455	615	1,042
06/11/2006 *	---	0	---	---	164	215	109	19	---	772	644
06/12/2006	---	0	---	---	91	316	50	51	774	723	316
06/13/2006 *	---	0	---	---	112	69	25	42	---	776	321
06/14/2006	---	0	---	---	81	100	143	187	383	786	821
06/15/2006 *	---	0	---	---	128	213	90	68	---	457	271
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 *	---	---	---	---	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	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
Total:	0	0	0	0	1,442	1,946	1,036	854	3,247	5,801	5,568
# Days:	0	10	0	0	14	14	14	14	7	14	14
Average:	0	0	0	0	103	139	74	61	464	414	398
YTD	13	0	0	678	51,771	91,495	40,171	34,023	493,845	526,298	406,494

* See sampling comments <http://www.fpc.org/currentDaily/smpcomments.htm>

Smolt indices, clipped & unclipped or combined, are presented in the following order: yearling chinook (chinook 1's), subyearling chinook (chinook 0's), steelhead, coho, and sockeye. Two classes of fish counts are shown in these tables: collection counts, which account for sample rates but are not adjusted for flow; and passage indices, which are collection counts divided by the proportion of water passing through the sampled powerhouse. Passage indices are not population estimates, but are used to adjust collection counts for daily fluctuations in the site's or project's operations. The classes of counts presented in the report are defined below for each site. Most samples occur over a 24-hr period that spans two calendar days. In this report, the date shown corresponds with the sample end date.

Definitions for Smolt Index Counts

- WTB (Collection) = Salmon River Trap at Whitebird : Collection Counts
- IMN (Collection) = Imnaha River Trap : Collection Counts
- GRN (Collection) = Grande Ronde River Trap : Collection Counts
- LEW (Collection) = Snake River Trap at Lewiston : Collection Counts
- LGR (Index) = Lower Granite Dam Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
- LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
- LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
- RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}
- MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
- JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
- BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

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

Two Week Transportation Summary

Source: Fish Passage Center

Updated:

6/23/06 9:27 AM

06/09/06 TO 06/23/06

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	76,309	8,758	2,300	920	12,418	100,705
	Sum of NumberBarged	74,765	8,752	2,300	876	11,382	98,075
	Sum of NumberBypassed	1,286	0	0	0	1,012	2,298
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	59	2	0	6	4	71
	Sum of FacilityMorts	180	4	0	38	20	242
	Sum of ResearchMorts	19	0	0	0	0	19
	Sum of TotalProjectMorts	258	6	0	44	24	332
LGS	Sum of NumberCollected	156,501	16,327	2,720	1,288	16,876	193,712
	Sum of NumberBarged	154,792	16,315	2,717	1,269	16,912	192,005
	Sum of NumberBypassed	65	0	0	1	1	67
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	54	10	0	2	1	67
	Sum of FacilityMorts	936	2	3	16	32	989
	Sum of ResearchMorts	6	0	0	0	0	6
	Sum of TotalProjectMorts	996	12	3	18	33	1,062
LMN	Sum of NumberCollected	81,540	4,793	850	719	5,950	93,852
	Sum of NumberBarged	80,944	4,765	850	712	5,907	93,178
	Sum of NumberBypassed	495	7	0	0	29	531
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	17	1	0	1	2	21
	Sum of FacilityMorts	84	20	0	6	12	122
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	101	21	0	7	14	143
MCN	Sum of NumberCollected	148,430	1,559	1,181	1,472	800	153,442
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	148,248	1,550	1,179	1,466	797	153,240
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	47	1	1	2	0	51
	Sum of FacilityMorts	77	7	1	3	3	91
	Sum of ResearchMorts	58	1	0	1	0	60
	Sum of TotalProjectMorts	182	9	2	6	3	202
Total Sum of NumberCollected		462,780	31,437	7,051	4,399	36,044	541,711
Total Sum of NumberBarged		310,501	29,832	5,867	2,857	34,201	383,258
Total Sum of NumberBypassed		150,094	1,557	1,179	1,467	1,839	156,136
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of SampleMorts		177	14	1	11	7	210
Total Sum of FacilityMorts		1,277	33	4	63	67	1,444
Total Sum of ResearchMorts		83	1	0	1	0	85
Total Sum of TotalProjectMorts		1,537	48	5	75	74	1,739

YTD Transportation Summary

Source: Fish Passage Center

Updated:

6/23/06 9:27 AM

TO: 06/23/06

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	353,323	2,407,400	51,080	32,560	2,819,771	5,664,134
	Sum of NumberBarged	335,780	1,963,812	46,722	25,737	2,466,374	4,838,425
	Sum of NumberBypassed	16,657	437,073	4,214	6,237	352,045	816,226
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	102	201	2	30	94	429
	Sum of FacilityMorts	765	6,003	140	555	1,201	8,664
	Sum of ResearchMorts	19	311	2	1	57	390
	Sum of TotalProjectMorts	886	6,515	144	586	1,352	9,483
LGS	Sum of NumberCollected	531,534	3,128,056	87,694	62,516	3,226,800	7,036,600
	Sum of NumberBarged	524,225	2,743,860	86,077	52,363	2,632,765	6,039,290
	Sum of NumberBypassed	4,160	376,363	1,524	8,895	591,413	982,355
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	70	134	0	23	14	241
	Sum of FacilityMorts	2,425	5,758	93	1,235	771	10,282
	Sum of ResearchMorts	6	13	0	0	1	20
	Sum of TotalProjectMorts	2,501	5,905	93	1,258	786	10,543
LMN	Sum of NumberCollected	214,603	1,095,922	23,098	27,738	935,247	2,296,608
	Sum of NumberBarged	213,835	1,114,748	23,536	28,265	919,019	2,299,403
	Sum of NumberBypassed	714	34,396	159	576	50,955	86,800
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	24	47	0	7	33	111
	Sum of FacilityMorts	178	936	0	184	613	1,911
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	202	983	0	191	646	2,022
MCN	Sum of NumberCollected	325,391	829,203	47,470	251,474	231,878	1,685,416
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	324,751	828,286	47,451	251,082	231,719	1,683,289
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	131	116	1	28	13	289
	Sum of FacilityMorts	406	760	15	348	140	1,669
	Sum of ResearchMorts	103	41	3	16	6	169
	Sum of TotalProjectMorts	640	917	19	392	159	2,127
Total Sum of NumberCollected		1,424,851	7,460,581	209,342	374,288	7,213,696	16,682,758
Total Sum of NumberBarged		1,073,840	5,822,420	156,335	106,365	6,018,158	13,177,118
Total Sum of NumberBypassed		346,282	1,676,118	53,348	266,790	1,226,132	3,568,670
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		327	498	3	88	154	1,070
Total Sum of FacilityMorts		3,774	13,457	248	2,322	2,725	22,526
Total Sum of ResearchMorts		128	365	5	17	64	579
Total Sum of TotalProjectMorts		4,229	14,320	256	2,427	2,943	24,175

Cumulative Adult Passage at Mainstem Dams Through: 06/25

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	06/25	96,456	2,908	74,038	4,288	151,682	8,418	54,593	1,755	42,390	2,041	31,967	3,432	0	0	0	0	0	0
TDA	06/25	61,827	2,176	60,964	3,210	104,618	6,110	41,433	1,332	34,369	1,431	24,858	2,239	0	0	0	0	0	0
JDA	06/25	50,313	2,093	56,027	2,715	87,807	4,857	31,040	954	29,605	1,443	21,259	1,816	0	0	0	0	0	0
MCN	06/25	45,355	2,475	51,855	3,201	80,814	5,125	21,846	960	25,153	949	17,713	1,583	0	0	0	0	0	0
IHR	06/22	25,465	843	28,039	1,267	54,334	3,256	4,131	161	4,522	318	5,877	663	0	0	0	0	0	0
LMN	06/25	23,596	551	25,933	1,002	51,936	3,032	4,795	156	4,098	279	5,919	637	0	0	0	0	0	0
LGS	06/25	20,839	745	23,995	923	49,856	3,088	2,874	135	1,873	176	4,520	617	0	0	0	0	0	0
LGR	06/25	22,963	984	26,028	1,258	49,902	3,362	2,544	160	1,724	161	3,918	529	0	0	0	0	0	0
PRD	06/24	8,534	81	14,148	515	16,757	523	5,828	17	11,500	203	5,318	152	0	0	0	0	0	0
RIS	06/24	9,245	473	11,908	504	13,259	737	1,888	52	5,347	96	2,179	142	0	0	0	0	0	0
RRH	06/24	5,376	274	4,568	417	4,860	283	791	16	1,889	28	707	24	0	0	0	0	0	0
WEL	06/23	2,994	185	2,711	88	2,796	169	0	0	0	0	0	0	0	0	0	0	0	0
WFA	06/17	29,044	155	31,241	1,080	3,080	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	17,831	30,688	32,905	7,643	9,299	12,588	1,974
TDA	0	0	0	0	0	0	12,566	23,320	24,884	2,498	4,208	4,457	727
JDA	0	0	0	0	0	0	9,963	22,543	23,157	3,766	3,628	5,969	1,323
MCN	0	0	0	0	0	0	7,025	15,617	14,514	2,945	2,951	3,211	906
IHR	0	0	0	0	0	0	2	3	0	2,816	1,907	1,961	942
LMN	0	0	0	0	0	0	2	3	0	2,876	1,543	2,004	1,053
LGS	0	0	0	0	0	0	1	0	0	2,744	1,311	2,144	909
LGR	0	0	0	0	0	0	1	8	0	7,701	5,189	6,410	2,341
PRD	5	0	0	0	0	0	1,127	4,363	4,237	102	80	63	0
RIS	0	0	2	0	0	0	203	1,016	1,213	67	135	73	41
RRH	0	0	0	0	0	0	84	358	546	156	388	123	136
WEL	0	0	0	0	0	0	24	44	121	39	68	23	28
WFA	0	0	0	0	0	0	0	0	0	23,957	13,933	13,100	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: 06/26/06

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
67