



# Fish Passage Center Weekly Report #06 - 20

July 21, 2006

1827 NE 44th Ave., Suite 240  
Portland, OR 97213  
phone: 503/230-4099  
fax: 503/230-7559

## Summary of Events:

**Water Supply:** Precipitation throughout the Columbia Basin has varied between 18% and 125% of average at individual sub-basins over July. Precipitation above The Dalles over July has been 83% of average. Over the entire water year, precipitation has been average or above average at all list locations.

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

Location	Water Year 2006 July 1-17		Water Year 2006 October 1, 2005 to July 17	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	1.01	103	23.5	109
SNAKE RIVER ABOVE ICE HARBOR	0.3	59	18.87	121
Columbia Above The Dalles	0.56	83	22.71	111
Kootenai	1.3	125	25.12	114
Clark Fork	0.66	101	17.5	118
Flathead	0.54	62	23.06	117
Pend Oreille/Spokane	0.76	102	32.42	116
Central Washington	0.07	35	11.02	135
SNAKE RIVER PLAIN	0.31	94	12.12	122
Salmon/Boise/Payette	0.26	59	23.76	131
Clearwater	0.34	42	29.83	108
SW Washington Cascades/Cowlitz	0.35	46	66.34	100
Willamette Valley	0.08	18	61.25	109

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

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

Location	May Final		June Final		July Final	
	% 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	113	7120
Hungry Horse Res. Inflow, MT (Jan-July)	101	2250	106	2360	109	2430
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	105	2770

Grand Coulee Reservoir is at 1287.9 feet (7-20-06) and has held steady over the last week. Inflow has ranged from 128.4 to 142.1 Kcfs, while outflow has ranged between 98.6 and 146.9 Kcfs.

The Libby Reservoir is currently at elevation 2455.9 feet (7-20-06) and drafted 1.3 feet last week. Outflows are currently 17 Kcfs.

Hungry Horse is currently at an elevation of 3554.9 feet (7-20-06) and has drafted approximately 1.6 feet in the last week. Hungry Horse outflows are approximately 5.4 Kcfs. Inflows ranged between 1.2 and 2.4 Kcfs over the same period.

Dworshak is currently at an elevation of 1582.6 feet (7-20-06) and drafted approximately 6.8 feet last week. Outflows at Dworshak were increased to approximately 14 Kcfs on July 20, 2006 for temperature regulation at Lower Granite Dam.

The Brownlee Reservoir was at an elevation of 2064.6 feet on July 20th, 2006. Outflows at Hells Canyon have ranged between 13.9 and 18.2 Kcfs over the last week.

According to the June Final Water Supply Forecast, the flow objective this summer is 54.5 Kcfs at Lower Granite (began 6-21-06) and 200 Kcfs at McNary (began 7-1-06). From June 21 to July 20 flows have averaged 48.9 Kcfs at Lower Granite, over the last week flows have averaged 40 Kcfs at Lower Granite. Between July 1 and July 20, flows at McNary have averaged 197.7 Kcfs, over the last week flows have averaged 187.6 Kcfs.

**Spill:** Spill at Dworshak Dam has averaged 17% of average daily flow over the past week. Spill operation 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 45%, 31%, 42%, and 63%, of average daily flow over the past week, respectively. All Snake River sites were near the Court ordered summer spill.

Spring spill for fish passage began on April 10 and continued through June 30 at Lower Columbia River projects. Summer spill was initiated on

July 1. Spill at McNary, John Day, The Dalles, and Bonneville dams was 48%, 30%, 40%, and 50% of average daily flow, respectively. McNary, John Day, and the Dalles dams met the Court's orders on most all days last week. Spill at Bonneville Dam was below the Court's order for day time spills for all days this last week, and near the Court's order for night time spill.

Total dissolved gas levels have met the TDG waiver requirements over the past week. Sampled fish are showing signs of GBT at some projects. However, all fish affected have been showing minor (Rank 1) signs of GBT at the projects sampled.

**Smolt Monitoring:** Subyearling Chinook salmon predominate in the run at all sites as they have for the past several weeks. Small numbers of spring migrants continue to be detected in the system. Subyearling indices decreased at all sites over the past week, while sockeye indices moved up a bit as late season fish continue to be detected especially in the Lower Columbia, from McNary to Bonneville dams.

At Lower Granite Dam, subyearling chinook indices averaged roughly 1,000 per day over the past week compared to 3,000 per day the previous week, while at Little Goose and Lower Monumental Dam the subyearling index averaged 900 and 500 (respectively) per day this week.

At Rock Island Dam indices for subyearlings averaged 400 per day this week compared to 1,000 per day last week. At McNary Dam, subyearling indices were down, averaging 40,000 this week compared to 180,000 per day over the previous week. At John Day Dam subyearling indices averaged 35,000 per day this week compared to 94,000 per day last week. At Bonneville Dam subyearling indices also decreased with this weeks' average index at 19,000 per day, compared to 43,000 fish per day last week.

**Adult Fish Passage:** At Bonneville dam, daily counts of summer Chinook averaged 629 fish for the week ending July 20. The season total is now 92,088 fish, about 125% and 164% of the respective 2005 and 10-year average counts. The adult summer Chinook count at The Dalles Dam through July 20 was 75,445 fish, about 82% of the Bonneville passage total to date. About 56,212 of the summer Chinook have passed McNary Dam (as of July 20) with the majority moving upstream into the Mid-Columbia River. Daily counts at Rock Island Dam ranged between 884 and 1,460 during the week.

At Bonneville Dam, steelhead counts again increased throughout the week with the average daily count of 1,573 per day. Through July 20, the steelhead run at Bonneville Dam was 33,794, 72% and 62% of the respective 2005 and 10-year average counts. The daily counts at The Dalles Dam ranged between 323 and 840 for the week with the cumulative steelhead count through July 20 at 13,734. About 41% of the steelhead counted at Bonneville Dam have passed The Dalles Dam. The majority of the 8,838 steelhead counted at McNary Dam have moved up into the Snake River with the cumulative count at Ice Harbor Dam now at 4,759 for the season. The cumulative count at Priest Rapids Dam is 401 for the season.

Adult sockeye salmon passage at Bonneville Dam averaged 112 fish per day through the week with the count at Bonneville through July 20 at 36,432, about 51% and 62% of the respective 2005 and 10-year average counts. About 25,047 of the adult sockeye have been counted at Priest Rapids Dam. One of the major spawning sites for the sockeye is Lake Wenatchee with the other site at Lake Osoyoos (Okanogan basin). To date, 41 sockeye have been counted into the Snake River.

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

**Daily Average Flow and Spill (in kcfs) at Mid-Columbia 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
07/07/06	145.3	0.2	144.5	0.0	148.0	10.0	149.3	13.3	155.7	30.9	169.4	30.6	162.2	25.5
07/08/06	135.4	0.2	138.8	0.0	150.2	9.4	155.1	12.6	157.4	29.0	168.0	28.9	160.4	22.5
07/09/06	119.6	0.2	115.3	0.0	117.9	8.9	116.1	9.5	121.9	21.9	132.4	8.5	133.6	21.7
07/10/06	143.6	0.2	149.5	0.0	158.8	10.0	155.8	13.8	159.7	31.0	170.5	26.8	161.2	22.9
07/11/06	136.6	0.2	130.5	0.0	138.8	10.0	138.7	13.0	141.6	30.0	149.6	8.6	144.6	20.2
07/12/06	117.6	0.1	121.3	0.0	129.5	10.0	128.7	11.7	132.1	27.9	137.9	1.9	137.9	22.5
07/13/06	133.4	0.2	131.4	0.0	132.9	8.5	131.7	11.6	132.1	25.1	140.2	13.3	129.5	23.2
07/14/06	146.9	0.2	140.1	0.0	144.7	8.5	141.5	11.2	142.3	25.3	150.0	21.2	144.0	26.8
07/15/06	129.9	0.2	139.7	0.0	151.8	22.3	148.6	9.6	151.3	23.0	161.8	28.1	155.1	32.2
07/16/06	98.6	0.2	99.1	0.0	103.6	7.3	113.7	8.5	119.7	19.2	138.3	9.3	138.4	22.6
07/17/06	123.9	0.2	128.6	0.0	131.0	8.3	125.5	12.0	125.2	28.7	126.1	1.6	121.8	21.3
07/18/06	131.0	0.2	130.5	0.0	133.6	10.0	131.3	13.3	131.2	30.1	134.4	1.9	127.3	23.3
07/19/06	130.9	0.2	127.5	0.0	139.7	9.9	142.4	12.3	144.4	27.9	152.8	11.6	149.5	22.3
07/20/06	132.1	0.2	129.0	0.0	127.6	8.5	123.3	12.3	125.0	27.4	140.3	5.1	136.9	23.2

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

Date	Dworshak		Hells Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
07/07/06	10.0	0.6	15.6	17.9	46.9	18.0	47.5	15.3	47.7	16.9	48.8	36.2
07/08/06	11.3	1.8	13.0	15.8	48.9	17.8	46.7	13.7	45.2	16.6	45.7	19.0
07/09/06	11.3	1.7	15.0	17.6	46.3	18.1	45.9	14.2	48.0	17.0	48.3	15.5
07/10/06	11.2	1.7	14.4	20.5	46.1	17.9	47.8	14.8	46.3	16.8	47.9	33.4
07/11/06	11.2	1.7	14.4	21.3	48.5	18.2	46.0	14.2	46.4	16.9	46.6	32.5
07/12/06	11.2	1.7	14.4	20.4	47.4	18.1	47.0	14.7	46.7	16.7	48.6	17.8
07/13/06	11.2	1.6	13.4	15.4	45.0	18.2	44.7	13.5	45.0	16.0	45.7	17.3
07/14/06	11.2	1.6	13.6	18.0	40.7	17.9	40.0	12.3	40.3	16.1	40.7	29.6
07/15/06	11.2	1.6	13.2	15.1	42.5	18.2	42.2	13.1	40.9	14.8	42.4	30.6
07/16/06	11.2	1.6	13.5	16.5	39.0	18.3	36.9	11.5	36.9	16.6	37.9	27.6
07/17/06	11.2	1.6	12.4	17.0	38.6	18.1	39.0	12.1	39.0	16.8	38.9	28.6
07/18/06	11.2	1.5	12.9	18.2	42.4	18.1	41.8	12.7	40.6	16.6	42.1	18.3
07/19/06	12.2	2.5	11.9	13.9	39.0	17.9	37.9	11.7	38.2	16.8	38.0	15.7
07/20/06	13.8	4.2	---	---	37.6	17.9	35.0	10.8	36.2	16.8	34.6	21.9

**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		
07/07/06	207.7	84.6	215.8	67.4	207.2	85.7	214.8	90.0	16.1	97.2
07/08/06	224.6	123.7	209.9	63.2	207.3	80.6	220.9	88.6	13.8	107.0
07/09/06	208.0	122.1	207.6	62.0	202.7	79.5	219.5	89.2	9.9	108.9
07/10/06	231.1	137.7	212.2	63.4	202.0	80.6	203.7	90.3	8.4	93.4
07/11/06	230.6	136.7	225.2	66.6	219.7	86.9	233.5	92.2	22.6	107.2
07/12/06	198.1	87.3	180.3	54.3	173.6	68.8	191.4	92.3	0.9	86.6
07/13/06	182.8	71.7	186.0	55.8	178.1	69.1	191.9	91.8	2.0	86.5
07/14/06	178.1	99.2	173.5	52.3	172.5	67.7	194.1	92.1	3.9	86.5
07/15/06	193.8	114.5	157.7	47.0	151.5	60.5	176.6	91.1	0.0	74.0
07/16/06	187.6	81.9	184.2	54.9	173.8	69.4	171.6	88.8	0.0	71.2
07/17/06	208.7	82.4	199.7	59.2	191.3	75.2	195.2	89.1	35.2	59.4
07/18/06	179.2	72.5	168.3	50.6	165.4	66.2	178.2	92.1	2.9	71.6
07/19/06	172.3	68.2	160.2	47.5	157.9	62.4	166.1	90.1	0.1	64.5
07/20/06	193.6	107.9	180.4	53.3	176.3	69.4	183.6	92.3	1.9	77.9

**HATCHERY RELEASE LAST TWO WEEKS**

**Hatchery Release Summary**

**From:** 7/7/2006 **to** 07/20/06

<b>Agency</b>	<b>Hatchery</b>	<b>Species</b>	<b>Race</b>	<b>MigYr</b>	<b>NumRel</b>	<b>RelStart</b>	<b>RelEnd</b>	<b>RelSite</b>	<b>RelRiver</b>
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** 100,000  
**Total**

**HATCHERY RELEASE NEXT TWO WEEKS**

**Hatchery Release Summary**

**From:** 7/21/2006 **to** 8/3/2006

**There are no Hatchery Releases scheduled for the next two weeks!**

## 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>Little Goose Dam</b>											
	07/18/06	Chinook + Steelhead	49	1	1	2.04%	0.00%	1	0	0	0
<b>Lower Monumental Dam</b>											
	07/17/06	Chinook + Steelhead	98	1	1	1.02%	0.00%	1	0	0	0
<b>McNary Dam</b>											
	07/13/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/17/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/20/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Bonneville Dam</b>											
	07/11/06	Chinook + Steelhead	100	2	2	2.00%	0.00%	2	0	0	0
	07/14/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/18/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Rock Island Dam</b>											
	07/13/06	Chinook + Steelhead	89	2	2	2.24%	0.00%	2	0	0	0
	07/17/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/20/06	Chinook + Steelhead	100	2	2	2.00%	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>	#	<u>24 h</u>	<u>12 h</u>	#		
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High		Avg	Avg
7/7	106	107	107	24	114	116	117	24	118	119	119	21	114	115	116	24	115	115	115	24
7/8	106	107	107	24	115	116	117	24	119	120	120	24	113	115	117	24	115	116	116	24
7/9	107	108	108	24	116	117	118	24	121	121	121	14	114	116	117	24	117	117	118	24
7/10	108	108	108	24	116	116	117	24	122	122	122	23	116	117	119	24	117	117	118	24
7/11	107	108	108	24	115	116	116	24	121	121	122	21	116	117	118	24	116	117	117	16
7/12	107	108	108	24	114	115	115	24	121	121	122	23	115	116	119	24	116	116	117	12
7/13	107	107	108	24	116	116	117	24	120	120	120	24	116	118	118	24	115	115	116	24
7/14	107	107	107	24	116	116	117	14	119	120	120	24	117	117	118	14	115	116	116	24
7/15	107	107	107	24	116	117	118	24	119	119	119	24	116	117	120	24	116	116	116	24
7/16	106	107	107	24	116	116	117	24	118	118	119	24	116	117	119	24	116	116	116	24
7/17	107	107	108	24	116	117	118	24	118	119	119	24	115	116	120	24	116	116	117	24
7/18	107	107	107	24	116	116	117	24	118	118	118	24	115	116	119	24	116	116	117	24
7/19	107	107	108	24	115	115	116	24	117	118	118	24	115	116	118	24	115	115	116	24
7/20	107	107	107	24	115	115	116	24	115	116	117	24	114	115	118	24	114	115	115	24

### 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>	#	<u>24 h</u>	<u>12 h</u>	#		
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High		Avg	Avg
7/7	114	114	115	24	113	113	114	24	114	115	115	24	113	113	114	24	114	114	114	24
7/8	114	115	116	24	114	114	114	24	115	115	116	24	113	114	115	24	113	114	115	24
7/9	116	116	117	24	115	116	116	24	116	117	117	24	115	116	116	24	115	116	116	24
7/10	116	117	117	24	115	116	116	24	116	117	117	24	115	115	116	24	115	115	116	24
7/11	116	117	117	24	115	116	116	23	116	116	117	23	115	115	115	24	114	115	115	24
7/12	116	117	118	24	114	115	115	24	115	116	116	24	114	114	115	24	114	114	115	24
7/13	115	115	116	24	113	113	114	24	114	114	114	24	113	113	113	24	113	113	114	24
7/14	115	115	116	24	114	114	114	22	114	115	115	22	112	113	113	24	113	113	113	24
7/15	115	116	116	24	114	114	114	24	116	118	121	24	113	113	113	24	113	113	114	24
7/16	115	116	117	24	114	115	115	24	115	115	116	24	113	114	115	24	113	114	115	24
7/17	116	116	116	24	114	115	115	24	115	116	117	24	115	116	116	24	115	116	116	24
7/18	116	116	117	24	114	114	115	24	115	116	116	24	113	113	113	24	113	113	114	24
7/19	115	116	116	24	115	115	116	24	116	117	118	24	114	114	115	24	114	115	115	24
7/20	115	115	115	24	114	114	115	23	115	116	116	23	114	115	115	24	114	114	114	24

### 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>	#	<u>24 h</u>	<u>12 h</u>	#		
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High		Avg	Avg
7/7	113	113	114	24	117	118	118	24	110	110	113	23	112	113	115	23	110	111	112	23
7/8	113	114	114	24	117	118	119	24	112	115	117	23	114	115	117	23	113	114	115	23
7/9	114	115	115	24	115	117	118	24	113	114	117	23	116	117	119	23	115	117	119	23
7/10	115	115	115	24	118	119	119	24	112	113	113	23	115	116	117	23	114	115	115	23
7/11	114	114	115	24	118	118	119	24	111	113	114	23	114	114	115	23	113	113	115	21
7/12	113	114	114	24	115	117	118	24	112	112	113	23	113	113	114	23	111	111	112	23
7/13	113	113	114	24	113	117	118	24	---	---	---	0	---	---	---	0	---	---	---	0
7/14	113	113	113	24	116	117	117	24	111	112	113	23	113	114	114	23	112	112	113	23
7/15	112	113	113	24	116	117	117	24	111	112	113	23	113	114	118	23	112	113	114	23
7/16	112	113	113	24	113	116	116	24	111	113	114	23	113	114	116	23	112	113	115	23
7/17	113	114	116	24	112	119	120	24	111	112	112	23	112	113	113	23	111	111	112	23
7/18	113	113	114	24	118	119	119	24	---	---	---	0	---	---	---	0	---	---	---	0
7/19	113	113	114	24	118	119	119	24	110	112	113	23	112	113	114	23	109	110	111	23
7/20	114	114	115	24	118	119	120	24	---	---	---	0	---	---	---	0	---	---	---	0

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

### Total Dissolved 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>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
7/7	111	112	113	23	107	108	108	24	99	101	104	24	102	103	104	24	102	103	104	24
7/8	114	115	116	23	108	110	110	24	103	103	104	24	104	105	106	24	103	104	105	24
7/9	117	117	118	23	111	112	113	24	103	104	104	24	104	106	107	24	103	104	105	24
7/10	116	116	117	23	111	112	112	24	104	104	104	24	105	106	107	24	103	103	104	24
7/11	114	115	116	23	111	111	112	24	103	104	104	24	105	106	107	24	102	104	105	24
7/12	113	114	114	23	108	108	109	24	103	103	104	24	104	105	106	24	102	102	103	24
7/13	---	---	---	0	108	109	110	24	103	103	103	24	104	106	107	24	102	103	104	24
7/14	114	115	116	23	110	110	111	24	103	103	103	24	105	106	107	24	102	104	105	24
7/15	114	115	116	23	110	110	111	24	103	103	103	24	104	106	107	24	102	103	104	24
7/16	114	114	115	23	110	111	111	24	102	103	103	24	104	106	107	24	102	103	104	24
7/17	113	113	114	23	109	110	111	24	102	103	103	24	104	106	107	24	102	103	104	24
7/18	---	---	---	0	108	109	110	24	102	103	103	24	104	105	106	24	102	103	104	24
7/19	112	113	113	23	109	109	110	24	105	107	108	24	105	107	108	24	102	103	104	24
7/20	---	---	---	0	109	110	110	24	108	109	109	24	108	109	110	24	101	103	104	24

### 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>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
7/7	103	106	107	24	101	101	101	24	111	113	115	24	108	109	109	24	113	114	114	24
7/8	104	107	109	24	100	100	101	24	110	110	112	24	108	108	109	24	113	114	115	24
7/9	105	107	109	24	101	101	102	24	113	114	115	24	108	108	109	24	115	115	116	24
7/10	105	107	109	24	102	103	103	24	111	113	115	24	109	109	110	24	114	114	115	24
7/11	105	108	109	24	103	104	105	24	113	114	115	24	109	110	110	24	114	115	116	24
7/12	104	106	107	24	103	103	104	24	111	113	115	24	107	108	109	24	113	114	114	24
7/13	105	107	109	24	102	102	103	24	113	114	115	24	106	107	107	24	112	113	114	24
7/14	105	107	109	24	101	101	102	24	112	113	116	24	106	106	107	24	112	113	114	24
7/15	105	107	109	24	101	101	101	24	113	114	114	24	106	107	107	24	112	114	115	24
7/16	105	107	109	24	101	101	102	24	114	115	115	24	107	107	107	16	111	112	113	16
7/17	105	107	109	24	101	102	102	24	112	113	115	24	107	107	108	24	112	113	113	24
7/18	104	107	108	24	102	102	103	24	111	112	113	24	108	108	109	24	112	114	114	24
7/19	104	107	108	24	102	102	103	24	111	112	112	24	107	107	108	24	112	113	114	24
7/20	106	108	110	24	102	102	103	24	111	112	112	24	107	107	107	23	112	113	115	23

### 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>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>		<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
7/7	110	110	111	24	117	118	119	24	110	110	111	24	114	115	116	24	---	---	---	0
7/8	110	110	111	24	117	118	118	24	110	110	110	24	113	114	116	24	---	---	---	0
7/9	111	111	113	24	118	118	118	24	111	111	112	24	111	112	112	24	---	---	---	0
7/10	112	112	113	24	117	118	119	24	112	112	113	24	113	115	115	24	---	---	---	0
7/11	112	112	112	24	118	119	119	24	113	113	113	24	114	115	116	24	---	---	---	0
7/12	111	111	112	24	117	118	119	24	111	112	113	24	112	113	114	24	---	---	---	0
7/13	108	109	109	24	116	117	118	24	109	109	110	24	111	113	114	24	---	---	---	0
7/14	108	108	109	24	116	117	118	24	109	109	110	24	112	114	116	24	---	---	---	0
7/15	108	108	109	24	116	117	118	24	109	109	110	24	113	115	116	24	---	---	---	0
7/16	108	109	109	24	116	117	118	24	110	110	111	24	113	114	115	24	---	---	---	0
7/17	109	109	109	24	116	117	117	24	110	110	111	24	113	114	114	24	---	---	---	0
7/18	108	109	110	24	116	117	118	24	110	110	110	24	112	113	114	24	---	---	---	0
7/19	109	109	110	24	116	117	118	24	110	111	111	24	111	112	113	24	---	---	---	0
7/20	109	109	109	24	117	119	120	24	110	110	110	24	112	113	116	24	---	---	---	0



## 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>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>	<u>High</u>	
7/7	107	107	108	24	115	116	117	24	106	107	107	24	117	119	119	24	106	108	109	24
7/8	107	107	109	24	116	118	118	24	106	107	107	24	117	119	120	24	109	109	110	24
7/9	109	110	111	24	117	118	118	24	107	107	108	24	117	118	120	24	109	110	110	24
7/10	111	111	111	24	118	118	119	24	105	106	106	24	117	119	119	24	107	107	109	24
7/11	110	110	110	24	118	118	119	24	105	105	106	24	117	119	120	24	106	107	107	24
7/12	108	109	109	24	116	116	117	22	105	105	106	24	115	116	117	24	106	106	107	24
7/13	107	107	107	24	114	115	116	24	105	106	106	24	116	117	119	24	106	107	108	23
7/14	107	107	107	24	116	117	117	24	105	105	105	24	115	117	118	24	108	108	109	24
7/15	107	108	108	24	117	119	123	24	104	105	105	24	114	115	118	24	107	107	108	24
7/16	109	110	110	24	116	116	117	24	104	105	105	24	116	117	119	24	106	107	107	24
7/17	110	110	111	24	115	116	117	24	104	105	105	24	116	118	119	24	106	107	107	24
7/18	109	109	110	24	115	116	116	24	104	104	104	24	115	116	118	24	106	106	106	24
7/19	109	109	110	24	114	116	116	24	104	105	105	24	115	116	118	24	106	106	107	24
7/20	108	109	109	24	116	118	119	24	105	106	107	24	116	117	119	24	107	107	108	24

### 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>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>	<u>High</u>	
7/7	114	114	115	24	105	106	106	24	113	115	117	23	109	112	114	24	116	116	119	17
7/8	115	116	116	24	109	111	112	24	114	115	117	23	110	112	114	23	117	117	119	17
7/9	115	116	116	24	112	112	113	24	116	116	118	23	112	114	116	24	117	117	118	17
7/10	114	114	114	24	109	110	111	24	114	116	118	23	111	112	114	24	116	116	120	17
7/11	114	114	114	24	108	108	108	24	114	116	118	23	111	112	115	24	117	117	120	17
7/12	113	113	114	24	107	107	107	24	114	116	119	23	109	111	113	24	116	116	120	17
7/13	113	114	114	23	107	108	109	24	116	117	119	15	111	114	116	24	116	116	119	17
7/14	114	114	116	24	108	109	109	24	---	---	---	0	112	114	116	24	116	117	120	17
7/15	113	113	113	24	107	108	108	24	---	---	---	0	111	113	115	24	118	118	121	17
7/16	113	113	114	24	107	107	108	24	---	---	---	0	111	113	115	24	118	118	118	17
7/17	113	113	113	24	106	106	106	24	---	---	---	0	110	112	113	24	117	117	120	11
7/18	112	113	113	24	105	106	106	24	---	---	---	0	110	112	115	24	116	117	119	17
7/19	113	113	113	24	106	107	107	24	---	---	---	0	111	114	116	24	118	118	119	17
7/20	113	113	114	24	107	108	108	24	---	---	---	0	113	116	118	24	118	118	121	17

## 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/smolqueries/currentsmppsubmitdata.asp>

<b>COMBINED YEARLING CHINOOK</b>											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
07/07/2006	---	---	---	---	0	30	13	1	0	0	0
07/08/2006	---	---	---	---	0	72	12	0	172	0	0
07/09/2006 *	---	---	---	---	0	29	3	0	0	58	0
07/10/2006	---	---	---	---	9	0	20	0	0	204	0
07/11/2006	---	---	---	---	0	23	0	0	76	0	0
07/12/2006	---	---	---	---	0	15	0	0	76	1	0
07/13/2006 *	---	---	---	---	0	6	0	0	17	0	0
07/14/2006	---	---	---	---	0	3	0	0	17	0	0
07/15/2006	---	---	---	---	0	3	13	0	0	0	0
07/16/2006	---	---	---	---	0	3	3	0	25	143	0
07/17/2006 *	---	---	---	---	0	3	11	0	17	0	0
07/18/2006	---	---	---	---	7	0	0	0	0	0	0
07/19/2006	---	---	---	---	0	3	0	0	0	143	0
07/20/2006	---	---	---	---	0	3	0	0	69	0	0
07/21/2006	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>193</b>	<b>75</b>	<b>1</b>	<b>469</b>	<b>549</b>	<b>0</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>14</b>	<b>5</b>	<b>0</b>	<b>34</b>	<b>39</b>	<b>0</b>
<b>YTD</b>	<b>30,897</b>	<b>25,174</b>	<b>13,056</b>	<b>19,187</b>	<b>3,692,695</b>	<b>4,182,404</b>	<b>1,439,195</b>	<b>37,264</b>	<b>1,560,674</b>	<b>2,250,569</b>	<b>2,256,332</b>

<b>COMBINED SUBYEARLING CHINOOK</b>											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
07/07/2006	---	---	---	---	4,406	8,429	1,920	1,359	472,197	86,919	58,563
07/08/2006	---	---	---	---	5,395	5,906	2,852	1,197	346,021	87,259	52,871
07/09/2006 *	---	---	---	---	3,624	5,526	3,415	1,693	110,586	116,913	47,348
07/10/2006	---	---	---	---	2,956	4,514	2,170	1,247	91,398	143,967	37,370
07/11/2006	---	---	---	---	2,023	4,205	918	1,088	76,018	96,340	48,017
07/12/2006	---	---	---	---	2,013	2,432	405	379	93,259	68,895	30,763
07/13/2006 *	---	---	---	---	1,353	1,409	487	213	121,155	55,962	28,727
07/14/2006	---	---	---	---	1,331	1,207	337	401	76,452	22,982	18,449
07/15/2006	---	---	---	---	747	723	669	664	56,225	47,907	47,416
07/16/2006	---	---	---	---	1,009	1,221	486	679	40,691	32,879	13,182
07/17/2006 *	---	---	---	---	917	929	1,126	460	28,313	53,659	15,671
07/18/2006	---	---	---	---	884	756	369	272	43,526	41,676	12,028
07/19/2006	---	---	---	---	969	1,034	249	290	21,169	18,790	14,407
07/20/2006	---	---	---	---	1,039	729	567	303	15,695	26,845	11,043
07/21/2006	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28,666</b>	<b>39,020</b>	<b>15,970</b>	<b>10,245</b>	<b>1,592,705</b>	<b>900,993</b>	<b>435,855</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,048</b>	<b>2,787</b>	<b>1,141</b>	<b>732</b>	<b>113,765</b>	<b>64,357</b>	<b>31,133</b>
<b>YTD</b>	<b>3</b>	<b>35</b>	<b>15</b>	<b>287</b>	<b>737,948</b>	<b>1,119,589</b>	<b>354,079</b>	<b>27,403</b>	<b>3,668,765</b>	<b>2,647,742</b>	<b>3,731,634</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)
07/07/2006	---	---	---	---	0	0	3	7	0	0	0
07/08/2006	---	---	---	---	0	0	0	10	172	0	0
07/09/2006 *	---	---	---	---	0	0	0	9	0	0	0
07/10/2006	---	---	---	---	0	0	0	13	0	3	0
07/11/2006	---	---	---	---	0	0	0	9	0	0	0
07/12/2006	---	---	---	---	0	0	0	11	0	0	0
07/13/2006 *	---	---	---	---	0	0	0	12	0	0	0
07/14/2006	---	---	---	---	0	0	0	3	0	0	27
07/15/2006	---	---	---	---	0	0	0	9	0	0	219
07/16/2006	---	---	---	---	0	0	0	9	0	0	0
07/17/2006 *	---	---	---	---	0	0	0	5	0	0	0
07/18/2006	---	---	---	---	0	0	0	3	0	0	0
07/19/2006	---	---	---	---	0	0	0	0	0	0	0
07/20/2006	---	---	---	---	0	3	0	3	0	0	0
07/21/2006	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>103</b>	<b>172</b>	<b>3</b>	<b>246</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>12</b>	<b>0</b>	<b>18</b>
<b>YTD</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>46</b>	<b>86,142</b>	<b>133,011</b>	<b>33,976</b>	<b>61,244</b>	<b>102,165</b>	<b>316,645</b>	<b>657,541</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)
07/07/2006	---	---	---	---	0	90	6	1	0	0	0
07/08/2006	---	---	---	---	0	29	12	5	0	0	0
07/09/2006 *	---	---	---	---	16	46	24	9	0	58	0
07/10/2006	---	---	---	---	26	23	7	4	0	3	209
07/11/2006	---	---	---	---	33	12	24	2	0	0	0
07/12/2006	---	---	---	---	0	7	0	0	0	0	0
07/13/2006 *	---	---	---	---	0	0	0	4	17	0	0
07/14/2006	---	---	---	---	0	3	7	0	0	0	0
07/15/2006	---	---	---	---	7	0	6	4	0	0	2
07/16/2006	---	---	---	---	0	0	10	5	25	0	0
07/17/2006 *	---	---	---	---	0	6	11	3	0	0	0
07/18/2006	---	---	---	---	7	9	0	3	0	0	0
07/19/2006	---	---	---	---	0	10	7	2	0	0	0
07/20/2006	---	---	---	---	7	0	4	0	0	0	0
07/21/2006	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>96</b>	<b>235</b>	<b>118</b>	<b>42</b>	<b>42</b>	<b>61</b>	<b>211</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>17</b>	<b>8</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>15</b>
<b>YTD</b>	<b>1,970</b>	<b>19,998</b>	<b>9,317</b>	<b>3,066</b>	<b>4,483,411</b>	<b>4,375,990</b>	<b>1,265,422</b>	<b>26,915</b>	<b>446,149</b>	<b>1,682,235</b>	<b>271,624</b>

## 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)
07/07/2006	---	---	---	---	0	0	0	29	0	0	0
07/08/2006	---	---	---	---	0	14	0	19	172	0	135
07/09/2006 *	---	---	---	---	0	0	0	30	98	58	0
07/10/2006	---	---	---	---	0	12	7	18	0	26	220
07/11/2006	---	---	---	---	0	0	6	14	0	179	0
07/12/2006	---	---	---	---	8	0	0	5	101	4	0
07/13/2006 *	---	---	---	---	0	12	0	0	0	0	0
07/14/2006	---	---	---	---	7	3	0	9	240	0	0
07/15/2006	---	---	---	---	7	3	0	9	26	410	2
07/16/2006	---	---	---	---	0	3	0	6	25	286	0
07/17/2006 *	---	---	---	---	0	0	0	8	34	190	0
07/18/2006	---	---	---	---	7	0	0	5	211	0	0
07/19/2006	---	---	---	---	7	0	0	6	43	0	17
07/20/2006	---	---	---	---	0	0	4	6	0	95	0
07/21/2006	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>47</b>	<b>17</b>	<b>164</b>	<b>950</b>	<b>1,248</b>	<b>374</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>12</b>	<b>68</b>	<b>89</b>	<b>27</b>
<b>YTD</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>678</b>	<b>51,854</b>	<b>92,623</b>	<b>40,235</b>	<b>34,458</b>	<b>495,855</b>	<b>528,634</b>	<b>407,599</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  
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
- LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts  
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
- LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts  
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
- RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts  
Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}
- MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts  
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
- JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts  
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
- BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts  
Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

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

## Two Week Transportation Summary

Source: Fish Passage Center

Updated:

7/21/06 9:21 AM

		07/07/06 TO 07/21/06						
		Species						
Site	Data	CH0	CH1	CO	SO	ST	Grand Total	
<b>LGR</b>	Sum of NumberCollected	17,193	9			21	57	17,280
	Sum of NumberBarged	16,964	9			21	47	17,041
	Sum of NumberBypassed	0	0			0	0	0
	Sum of Numbertrucked	0	0			0	0	0
	Sum of SampleMorts	54	0			0	1	55
	Sum of FacilityMorts	175	0			0	9	184
	Sum of ResearchMorts	0	0			0	0	0
	Sum of TotalProjectMorts	229	0			0	10	239
<b>LGS</b>	Sum of NumberCollected	26,745	132	2		32	160	27,071
	Sum of NumberBarged	25,729	131	2		30	153	26,045
	Sum of NumberBypassed	9	0	0		0	0	9
	Sum of Numbertrucked	0	0	0		0	0	0
	Sum of SampleMorts	48	0	0		0	1	49
	Sum of FacilityMorts	161	1	0		2	6	170
	Sum of ResearchMorts	3	0	0		0	0	3
	Sum of TotalProjectMorts	212	1	0		2	7	222
<b>LMN</b>	Sum of NumberCollected	9,939	46	2		10	74	10,071
	Sum of NumberBarged	8,680	44	2		8	72	8,806
	Sum of NumberBypassed	1,096	0	0		0	0	1,096
	Sum of Numbertrucked	0	0	0		0	0	0
	Sum of SampleMorts	63	0	0		2	1	66
	Sum of FacilityMorts	100	2	0		0	1	103
	Sum of ResearchMorts	0	0	0		0	0	0
	Sum of TotalProjectMorts	163	2	0		2	2	169
<b>MCN</b>	Sum of NumberCollected	842,661	240	100		510	20	843,531
	Sum of NumberBarged	827,458	199	100		508	20	828,285
	Sum of NumberBypassed	945	0	0		0	0	945
	Sum of Numbertrucked	0	0	0		0	0	0
	Sum of SampleMorts	92	0	0		0	0	92
	Sum of FacilityMorts	4,942	0	0		1	0	4,943
	Sum of ResearchMorts	54	1	0		1	0	56
	Sum of TotalProjectMorts	5,088	1	0		2	0	5,091
Total Sum of NumberCollected		896,538	427	104		573	311	897,953
Total Sum of NumberBarged		878,831	383	104		567	292	880,177
Total Sum of NumberBypassed		2,050	0	0		0	0	2,050
Total Sum of Numbertrucked		0	0	0		0	0	0
Total Sum of SampleMorts		257	0	0		2	3	262
Total Sum of FacilityMorts		5,378	3	0		3	16	5,400
Total Sum of ResearchMorts		57	1	0		1	0	59
Total Sum of TotalProjectMorts		5,692	4	0		6	19	5,721

### YTD Transportation Summary

Source: Fish Passage Center

Updated:

7/21/06 9:21 AM

TO: 07/21/06

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	474,147	2,407,707	51,160	32,611	2,820,589	5,786,214
	Sum of NumberBarged	455,223	1,964,111	46,802	25,786	2,467,169	4,959,091
	Sum of NumberBypassed	17,386	437,073	4,214	6,237	352,045	816,955
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	245	203	2	30	99	579
	Sum of FacilityMorts	1,252	6,009	140	557	1,219	9,177
	Sum of ResearchMorts	41	311	2	1	57	412
	Sum of TotalProjectMorts	1,538	6,523	144	588	1,375	10,168
<b>LGS</b>	Sum of NumberCollected	761,405	3,131,196	88,075	63,216	3,228,515	7,272,407
	Sum of NumberBarged	750,657	2,746,874	86,457	52,994	2,634,338	6,271,320
	Sum of NumberBypassed	4,261	376,348	1,524	8,895	591,417	982,445
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	146	136	0	23	19	324
	Sum of FacilityMorts	2,985	5,761	94	1,304	739	10,883
	Sum of ResearchMorts	23	22	0	0	1	46
	Sum of TotalProjectMorts	3,154	5,919	94	1,327	759	11,253
<b>LMN</b>	Sum of NumberCollected	247,225	1,096,111	23,183	27,781	935,536	2,329,836
	Sum of NumberBarged	240,546	1,060,675	23,024	27,011	883,873	2,235,129
	Sum of NumberBypassed	6,236	34,451	159	576	51,011	92,433
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	127	47	0	9	34	217
	Sum of FacilityMorts	315	938	0	185	618	2,056
	Sum of ResearchMorts	1	0	0	0	0	1
	Sum of TotalProjectMorts	443	985	0	194	652	2,274
<b>MCN</b>	Sum of NumberCollected	1,908,081	830,012	47,855	252,562	231,993	3,270,503
	Sum of NumberBarged	827,458	199	100	508	20	828,285
	Sum of NumberBypassed	1,065,480	828,856	47,736	251,660	231,814	2,425,546
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	250	116	1	28	13	408
	Sum of FacilityMorts	5,528	759	15	349	140	6,791
	Sum of ResearchMorts	196	42	3	17	6	264
	Sum of TotalProjectMorts	5,974	917	19	394	159	7,463
Total Sum of NumberCollected		3,390,858	7,465,026	210,273	376,170	7,216,633	18,658,960
Total Sum of NumberBarged		2,273,884	5,771,859	156,383	106,299	5,985,400	14,293,825
Total Sum of NumberBypassed		1,093,363	1,676,728	53,633	267,368	1,226,287	4,317,379
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		768	502	3	90	165	1,528
Total Sum of FacilityMorts		10,080	13,467	249	2,395	2,716	28,907
Total Sum of ResearchMorts		261	375	5	18	64	723
Total Sum of TotalProjectMorts		11,109	14,344	257	2,503	2,945	31,158

**Cumulative Adult Passage at Mainstem Dams Through: 07/20**

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	07/20	96,456	2,908	74,038	4,288	151,682	8,418	92,088	3,755	73,813	4,113	56,316	6,816	0	0	0	0	0	0
TDA	07/20	61,827	2,176	60,964	3,210	104,618	6,110	75,445	3,009	64,092	3,023	47,982	4,719	0	0	0	0	0	0
JDA	07/20	50,313	2,093	56,027	2,715	87,807	4,857	67,826	3,061	57,968	4,511	44,345	4,544	0	0	0	0	0	0
MCN	07/19	45,355	2,475	51,855	3,201	80,814	5,125	56,212	2,654	56,270	2,398	42,035	4,107	0	0	0	0	0	0
IHR	07/19	25,465	843	28,039	1,267	54,334	3,256	8,216	488	8,374	904	10,671	1,819	0	0	0	0	0	0
LMN	07/19	23,596	551	25,933	1,002	51,936	3,032	9,044	396	7,841	699	10,081	1,449	0	0	0	0	0	0
LGS	07/19	20,839	745	23,995	923	49,856	3,088	6,988	493	6,531	815	8,686	1,700	0	0	0	0	0	0
LGR	07/19	22,963	984	26,028	1,258	49,902	3,362	6,878	573	6,316	919	8,772	1,818	0	0	0	0	0	0
PRD	07/17	8,535	81	14,148	515	16,757	523	45,857	141	48,156	1,573	31,155	1,179	0	0	0	0	0	0
RIS	07/18	9,245	473	11,908	504	13,259	737	46,162	969	40,076	1,705	26,640	2,442	0	0	0	0	0	0
RRH	07/18	5,376	274	4,568	417	4,860	283	27,365	732	27,507	1,256	16,927	1,352	0	0	0	0	0	0
WEL	07/14	4,043	214	4,897	99	3,488	193	11,723	359	13,697	189	8,162	292	0	0	0	0	0	0
WFA	07/18	34,445	165	35,278	1,178	3,473	87	0	0	0	0	0	0	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2006		2005		10-Yr Avg.		10-Yr			10-Yr			Wild
	Adult	Jack	Adult	Jack	Adult	Jack	2006	2005	Avg.	2006	2005	Avg.	2006
BON	-1	0	0	0	1	0	36,432	71,781	59,263	33,794	46,791	54678	13,507
TDA	1	0	1	0	0	0	29,519	63,925	49,477	13,734	22,980	26263	6,022
JDA	0	0	0	0	1	0	34,503	67,420	53,025	16,006	17,728	20788	5,521
MCN	0	0	0	0	0	0	28,529	60,565	45,332	8,838	12,013	12527	2,660
IHR	0	0	0	0	0	0	41	17	26	4,759	5,624	6628	1,276
LMN	0	0	0	0	0	0	13	18	29	5,379	5,434	5878	1,471
LGS	0	0	0	0	0	0	14	8	33	3,385	3,087	4176	1,069
LGR	0	0	0	0	0	0	13	16	33	8,191	6,713	7950	2,441
PRD	1	0	0	1	1	0	25,047	67,184	52,874	401	608	791	0
RIS	0	0	2	0	1	0	30,337	60,250	45,699	280	622	608	197
RRH	0	0	0	0	1	0	20,542	43,340	30,153	258	622	452	194
WEL	0	0	0	0	0	0	11,095	28,181	21,899	87	139	106	43
WFA	0	0	0	0	0	0	0	0	0	27,872	18,833	1788	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: 07/21/06

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
551