



# Fish Passage Center Weekly Report #07 - 18

July 6, 2007

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## Summary of Events:

**Water Supply:** Precipitation throughout the Columbia Basin has varied between 57% and 123% of average at individual sub-basins over June. Precipitation above The Dalles has been 100 % of average over June. Over the entire water year, precipitation has varied between 75% and 116% of average at individual sub-basins.

**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 2007 June 1-25		Water Year 2007 October 1, 2006 to June 25, 2007	
	Observed (inches)	% Average	Observed (inches)	% Average
	Columbia Above Coulee	2.15	108	21.98
SNAKE RIVER ABOVE ICE HARBOR	0.95	78	12.04	81
Columbia Above The Dalles	1.50	100	19.54	101
Kootenai	2.51	123	23.85	116
Clark Fork	1.63	101	14.74	106
Flathead	1.74	79	18.68	102
Pend Oreille/Spokane	1.63	89	25.04	93
Central Washington	0.39	73	7.23	92
SNAKE RIVER PLAIN	0.64	79	7.04	75
Salmon/Boise/Payette	0.85	69	14.01	81
Clearwater	1.72	83	25.46	97
SW Washington Cascades/Cowlitz	1.41	57	63.74	98
Willamette Valley	1.15	61	56.36	102

Table 2 displays the May Final and July Early runoff volume forecasts for multiple reservoirs. Water Supply Forecasts at Libby Dam have increased 9% between the May final and July Early forecasts. Water Supply Forecasts at Lower Granite Dam and Brownlee Dam decreased by 7-8% between the May final and July Early forecasts. The current forecast at The Dalles between January and July is 95500 Kaf (89% of average).

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

Location	May Final		July Early	
	% Average (1971- 2000)	Probable Runoff Volume (Kaf)	% Average (1971- 2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	92	99100	89	95500
Grand Coulee (Jan-July)	104	65300	102	64400
Libby Res. Inflow, MT (Jan-July)	108	6790	117	7370
Hungry Horse Res. Inflow, MT (Jan-July)	92	2050	88	1960
Lower Granite Res. Inflow (Apr- July)	66	14200	59	12800
Brownlee Res. Inflow (Apr-July)	48	3040	40	2550
Dworshak Res. Inflow (Apr-July), RFC Forecast	78	2060	70	1850
Dworshak Res. Inflow (Apr-July), COE Forecast	70 (May Final)	1868 (May Final)		

Grand Coulee Reservoir is at 1287 feet (7-5-07) and refilled 2.4 feet last week. Outflows at Grand Coulee ranged between 99.4 and 131.7 Kcfs last week.

Dworshak is currently at an elevation of 1596.25 feet (7-3-07) and drafted 3.4 feet last week. Outflows at Dworshak were increased to 7.5 Kcfs on Monday July 2nd, then to full powerhouse (9.5 Kcfs) on Tuesday, and to 12 Kcfs on Thursday in an effort to moderate temperatures at Lower Granite Dam.

The Libby Reservoir is currently at elevation 2451.5 feet (7-5-07) and refilled 3.1 feet last week. Outflows at Libby were increased to 17.3 Kcfs and is expected to remain at that level for the remainder of July and August.

Hungry Horse is currently at an elevation of 3558.9 feet (7-5-07) and drafted one foot last week. Outflows at Hungry Horse are currently about 4.5 Kcfs.

The Brownlee Reservoir was at an elevation of 2070.7 feet on July 5th, 2007, drafting 2.8 feet last week. Outflows at Brownlee Dam have been 8.5 to 17.8 Kcfs over the last week.

The Spring 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 85 Kcfs at Lower Granite, 237 Kcfs at McNary, and 135 Kcfs at Priest Rapids. The McNary Dam flow averaged 239 Kcfs over the season. The Priest Rapids Dam flow over the past week averaged 129.7 Kcfs and 168 Kcfs over the season. The Spring Biological Opinion flow period ended on June 30th at both McNary and Priest Rapids Dams. The summer Biological Opinion flow objective begins on July 1 and is 200 Kcfs at McNary Dam. Since July 1 flow at McNary has averaged 164.9 Kcfs.

The spring Biological Opinion flow period at Lower Granite Dam ended on June 20th, 2007. Flows at Lower Granite Dam averaged 61.2 Kcfs over the spring season, well below the 85 Kcfs flow target. The summer Biological Opinion flow at Lower Granite Dam is determined by the June

Final Water Supply Forecast and is 50 Kcfs this year. Flows at Lower Granite dam were 33.5 Kcfs over the last week and 34.6 Kcfs over the summer flow period.

**Spill:** In accordance with the Court Order, summer spill was initiated at the Snake River Projects at 0001 hours on June 21, 2007. The Court Order calls for the following spill levels at the Federal Snake River Projects:

Project	Day/Night Spill
Lower Granite	18Kcfs/18Kcfs
Little Goose	30%/30%
Lower Monumental	17Kcfs/17Kcfs
Ice Harbor	30%/30% vs 45Kcfs/Gas Cap Study

Spill at Lower Granite Dam over the past week met the summer spill level of 18 Kcfs as per the Court Order. Little Goose Dam has met the Court Order over the past week, which remains at the same 30% of instantaneous flow as was required during the spring spill period.

According to the Court Order, summer spill at Lower Monumental Dam of 17 Kcfs spill for 24 hours daily began on June 21st and the project has met that objective.

Ice Harbor spill is being provided to achieve the study conditions specified in the Court's Order.

Court ordered spring spill at the lower Columbia projects began on April 10, 2007 and ended on June 30th. The Court Order calls for the following spill levels at the Federal Lower Columbia River Projects:

Project	Day/Night Spill
McNary	40%/40% vs 60%/60%
John Day	30%/30%
The Dalles	40%/40%
Bonneville	85Kcfs/gas cap until July 15 75Kcfs/gas cap July 16-Aug31

Spill at McNary Dam is alternating 60% of instantaneous flow and 40% of instantaneous flow in 2 day blocks and the project has met that objective. Both John Day and The Dalles dams have met the Court's Order over the past week.

On June 20th the summer spill program was initiated at Bonneville Dam for research purposes. Spill is 85-87 Kcfs during daytime hours and gas cap spill at night, which will be implemented until July 15. After July 15 the project will revert to the Court's Order of 75 Kcfs during daytime hours and gas cap spill at night. The gas cap spill has been lowered to about 90 Kcfs over the past week due to TDG exceeding 115% at the Camas/Washougal monitor.

Total dissolved gas waivers were not exceeded at the federal hydroprojects throughout the past week, except for 7/2 7/3 at the Camas/Washougal Station. Gas bubble trauma (GBT) monitoring continued this week at Little Goose, Lower Monumental, McNary and Bonneville dams. A few fish (2.9%) were observed with minor signs of GBT at Little Goose Dam and one fish at Lower Monumental Dam.

**Smolt Monitoring:** Subyearling Chinook now predominate at the Snake River SMP sites as well as at the Columbia River sites. Subyearling indices were relatively steady again this past week at Snake River sites, while at all Columbia River SMP sites, indices were up substantially, especially at John Day and Bonneville dams.

At Lower Granite Dam, there was a slight decrease in the average subyearling passage index, with the average this week at 4,200 per day compared to 5,000 per day last week. Indices of subyearling Chinook increased at Little Goose and Lower Monumental dams this past week. Based on seasonal estimates of detection probability, the estimated total population index (as opposed to the passage index) for subyearling Chinook passing the Snake projects was just over 1 million, based on an estimated seasonal detection probability of 16%. Using the historic detection probability data to develop a multiple regression relationship between detection and flow and spill variables, the seasonal detection probability was estimated near 12%. The resulting seasonal population index would be near 1.8 million based on the second approach. It's likely that the actual population was somewhere between these two estimates.

At Rock Island Dam, the numbers of all spring migrants have continued to decrease, while the subyearling index was up this past week, averaging 180 per day this week compared to 114 per day last week.

In the Lower Columbia, at McNary Dam, numbers of subyearling Chinook high again this week, with the index averaging 232,000 this week compared to 255,000 last week. While at John Day and Bonneville dams, the weekly average subyearling index rose to reflect the increased passage seen at McNary Dam last week. The index at John Day Dam averaged 102,000 compared to 29,000 last week. At Bonneville Dam the index averaged 50,000 this week compared to 22,000 per day last week.

**Adult Fish Passage:** Daily passage numbers at Bonneville Dam have ranged between 707 and 1,097 adult summer Chinook in the last week. The 2007 summer Chinook count of 35,767 is about 69.8 percent of the 10-year average count and 45.7 percent of the 2006 count. The summer Chinook jack count of 9,822 at Bonneville Dam is presently 3.56 times greater than observed in 2006, and 1.91 times greater than the 10-year average count to date. The adult summer Chinook count total at The Dalles Dam was 28,698 through July 5th, about 80.2 percent of the Bonneville passage total to date. A total of 20,765 summer Chinook have passed McNary Dam. The adult summer Chinook count total at Lower Granite Dam in the Snake River, was 4,903 through of July 5th. The 2007 adult summer Chinook count at Rock Island Dam in the upper Columbia River was 7,834 with daily totals ranging from 400 to 841.

As of July 5th, 13,732 steelhead had passed Bonneville Dam which was 104 more than the 2006 count. The 2007 Bonneville steelhead count was about 63.3 percent of the 10-year average. The daily steelhead counts at The Dalles Dam ranged between 196 and 453 for the week with the cumulative count of 5,283. About 38.4 percent of the steelhead counted at Bonneville have passed The Dalles Dam. The majority of the 4,286 steelhead counted at McNary Dam have moved up into the Snake River with the cumulative

count at Ice Harbor now at 3,304 for the season. The cumulative count at Priest Rapids was at 117 for the season.

As of July 5th, 2,523,233 adult Shad were counted at Bonneville Dam this season with daily counts ranging from 10,071 to 22,459. Adult sockeye counts increased at Bonneville with the count through July 5th at 21,452. This year's sockeye count is about 65.8 percent of the 2006 count and 40.6 percent of the 10-year average count. About 10,714 of the adult sockeye have been counted at Priest Rapids Dam. This year's count is about 1.27 times the 2006 adult sockeye count at Priest Rapids Dam, but only 42.2 percent of the 10-year average. Two of the major spawning sites for sockeye are Lake Wenatchee and Lake Ososyoos (Okanogan basin). To date, only 35 sockeye have been counted at Ice Harbor Dam in the Snake River.

#### **Hatchery Release:**

**Snake River Zone:** The Snake River Zone encompasses the Snake River and its tributaries from its confluence with the Columbia River to Hells Canyon Dam. Approximately 304,000 spring Chinook parr were scheduled for release into the Selway River this week. These parr are not expected to out-migrate until 2008. There were no other releases scheduled for the Snake River Zone this week nor are there any releases scheduled for this zone over the next two weeks.

**Mid-Columbia Zone:** The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam. Beginning July 2nd, approximately 860,000 subyearling summer Chinook were scheduled for release into the Mid-Columbia River from Turtle Rock Hatchery. There were no other releases scheduled for the Mid-Columbia River Zone this week. Furthermore, there are no other releases scheduled for this zone over the next two weeks.

**Lower Columbia Zone:** The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. There were no scheduled releases of juvenile

salmonids into the Lower Columbia River Zone over the past week and are no scheduled releases over 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
06/22/07	123.6	0.1	125.9	0.0	147.8	9.2	153.7	13.1	160.5	29.4	171.1	28.1	172.4	23.5
06/23/07	106.0	0.1	103.1	0.0	120.4	7.9	123.8	12.1	133.2	27.0	153.7	11.0	154.8	20.4
06/24/07	81.8	0.1	83.2	0.0	103.5	7.9	102.2	10.5	105.7	23.3	133.4	8.1	134.4	20.1
06/25/07	130.5	0.2	132.0	0.0	140.4	10.0	135.1	14.2	139.1	32.8	137.4	7.4	133.7	19.4
06/26/07	147.8	0.1	148.3	0.0	143.3	16.3	133.6	11.5	138.0	28.2	138.8	8.4	136.8	15.2
06/27/07	135.7	0.2	134.1	0.0	147.0	8.4	149.7	12.2	157.2	27.8	145.6	17.4	147.7	20.6
06/28/07	141.1	0.2	135.7	0.0	147.1	8.7	139.9	11.2	142.8	27.9	145.7	9.6	135.7	20.9
06/29/07	130.9	0.2	132.2	0.0	146.6	9.3	145.7	12.7	150.5	28.9	156.4	24.4	160.2	22.1
06/30/07	108.1	0.1	112.3	0.0	118.4	8.1	115.8	9.9	123.2	23.1	142.9	9.3	134.9	22.2
07/01/07	99.4	0.2	100.5	0.0	112.8	7.9	112.7	8.4	116.7	19.1	108.1	9.5	104.5	23.7
07/02/07	100.5	0.2	98.7	0.0	119.9	8.1	123.1	13.0	130.5	28.3	137.9	9.7	136.7	21.3
07/03/07	127.3	0.1	118.4	0.0	115.7	8.2	106.8	13.3	109.4	30.0	110.5	9.0	111.8	21.4
07/04/07	114.7	0.2	118.1	0.0	121.9	8.2	122.6	11.4	127.8	25.7	123.8	10.2	115.4	23.9
07/05/07	131.7	0.1	138.3	0.0	146.8	16.0	141.9	17.5	146.6	27.8	149.8	22.7	144.2	26.1

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

Date	Dworshak		Brownlee Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
06/22/07	4.3	0.0	8.5	13.1	41.5	18.2	43.4	13.0	44.8	17.1	45.2	35.0
06/23/07	4.3	0.0	8.5	13.3	39.9	18.0	39.0	11.9	37.9	16.6	37.5	17.3
06/24/07	4.3	0.0	8.7	9.4	35.3	18.2	35.4	10.7	33.9	17.1	34.1	15.2
06/25/07	4.1	0.0	8.7	10.1	33.6	18.1	34.2	10.6	34.4	16.3	33.0	15.2
06/26/07	3.6	0.0	8.7	10.1	31.4	17.7	31.8	9.7	28.8	15.9	30.6	15.3
06/27/07	3.8	0.0	10.7	12.6	30.8	18.3	30.7	9.3	29.7	16.7	30.1	20.1
06/28/07	4.3	0.0	10.5	16.5	33.0	18.1	32.9	9.9	32.9	17.1	31.6	21.8
06/29/07	4.3	0.0	10.5	16.8	36.0	18.3	37.0	11.0	35.8	16.6	36.8	17.7
06/30/07	4.3	0.0	10.3	15.0	36.7	18.2	33.1	10.0	33.6	17.1	32.8	15.2
07/01/07	4.3	0.0	10.0	11.9	33.3	18.0	35.3	10.7	33.7	16.9	33.3	23.0
07/02/07	6.1	0.0	9.2	12.1	31.2	18.0	29.2	8.7	29.6	17.1	30.1	20.2
07/03/07	8.8	0.0	8.9	10.8	31.5	18.0	36.2	10.8	33.5	17.0	33.7	23.7
07/04/07	9.5	0.0	9.0	8.9	32.7	17.9	34.9	10.5	31.5	17.1	30.1	20.0
07/05/07	10.5	1.0	---	---	33.0	17.9	32.5	9.6	32.6	16.7	32.9	16.2

**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		
06/22/07	200.2	109.6	192.2	44.6	194.1	77.3	210.2	91.7	4.9	102.1
06/23/07	215.4	125.9	196.5	48.5	191.5	76.5	209.6	91.3	5.2	101.7
06/24/07	183.3	82.7	161.2	41.6	162.0	65.4	184.5	78.8	8.2	85.9
06/25/07	185.2	73.8	192.7	48.2	187.3	74.7	166.8	92.3	0.0	63.1
06/26/07	196.9	106.5	189.4	48.4	187.6	75.0	191.3	94.2	3.8	81.8
06/27/07	172.9	103.6	165.3	43.9	163.7	65.7	176.6	93.3	0.0	71.9
06/28/07	186.0	83.5	163.9	42.9	160.9	64.5	170.0	93.5	0.0	65.0
06/29/07	183.8	72.7	169.9	40.0	163.0	65.3	172.5	91.4	0.0	69.5
06/30/07	185.7	104.1	182.0	42.7	176.3	71.3	205.8	89.4	0.0	105.0
07/01/07	156.1	93.8	143.8	43.8	143.1	57.5	161.9	89.2	0.0	61.2
07/02/07	168.8	101.1	135.7	41.2	131.1	52.4	131.8	89.0	0.0	31.3
07/03/07	171.9	103.0	168.9	50.4	171.2	68.4	172.6	88.4	0.0	72.6
07/04/07	155.1	69.6	148.9	44.3	144.3	57.8	149.8	86.7	0.0	51.6
07/05/07	172.5	69.1	162.3	48.7	161.9	65.2	168.1	86.8	0.0	69.7

## 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>											
	06/26/07	Chinook + Steelhead	102	4	3	2.94%	0.00%	2	1	0	0
	07/03/07	Chinook + Steelhead	104	3	3	2.88%	0.00%	3	0	0	0
<b>Lower Monumental Dam</b>											
	07/01/07	Chinook + Steelhead	25	1	1	4.00%	0.00%	1	0	0	0
<b>Bonneville Dam</b>											
	06/26/07	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	06/30/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/03/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Rock Island Dam</b>											
	07/01/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/05/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0

### HATCHERY RELEASE LAST TWO WEEKS

Hatchery Release Summary									
From:	6/22/2007		to		07/05/07				
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Clearwater Hatchery	CH0	SP	2008	304,000	07-01-07	07-01-07	Selway River	Clearwater River M F
<b>Nez Perce Tribe Total</b>					<b>304,000</b>				
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH0	FA	2007	2,061,924	06-28-07	06-28-07	Little White Salmon River	Little White Salmon River
<b>U.S. Fish and Wildlife Service Total</b>					<b>2,061,924</b>				
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH0	SU	2007	410,000	07-02-07	07-06-07	Turtle Rock Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH0	SU	2007	450,000	07-02-07	07-06-07	Turtle Rock Hatchery	Mid-Columbia River
<b>Washington Dept. of Fish and Wildlife Total</b>					<b>860,000</b>				
Yakama Tribe	Klickitat Hatchery	CH0	FA	2007	2,159,500	06-25-07	06-29-07	Klickitat Hatchery	Klickitat River
<b>Yakama Tribe Total</b>					<b>2,159,500</b>				
<b>Grand Total</b>					<b>5,385,424</b>				

### HATCHERY RELEASE NEXT TWO WEEKS

Hatchery Release Summary									
From:	7/6/2007		to		7/19/2007				
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH0	SU	2007	410,000	07-02-07	07-06-07	Turtle Rock Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH0	SU	2007	450,000	07-02-07	07-06-07	Turtle Rock Hatchery	Mid-Columbia River
<b>Washington Dept. of Fish and Wildlife Total</b>					<b>860,000</b>				
<b>Grand Total</b>					<b>860,000</b>				

## 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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>					
	<u>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>				
6/22	105	106	106	24	117	120	121	24	112	113	113	24	110	111	111	24	111	111	111	24
6/23	106	106	106	24	117	119	120	24	113	113	113	24	110	110	111	24	111	111	111	24
6/24	106	106	106	24	119	121	122	24	112	113	113	24	110	111	112	24	110	111	112	24
6/25	105	105	105	24	116	117	118	24	112	112	113	24	109	110	111	24	110	110	110	24
6/26	104	105	105	24	116	117	120	24	112	112	113	24	110	110	111	24	110	111	112	24
6/27	105	106	106	24	115	116	117	24	113	113	114	24	110	111	112	24	111	111	111	24
6/28	106	106	107	24	115	116	117	24	113	114	114	24	111	112	113	24	111	111	112	24
6/29	106	106	107	24	114	115	115	24	113	113	113	24	110	110	111	24	110	111	111	24
6/30	105	106	106	24	112	113	115	24	112	113	113	24	110	111	112	24	110	111	111	24
7/1	106	106	107	24	112	113	116	24	113	113	113	24	111	111	112	24	110	111	112	24
7/2	106	106	107	24	114	115	115	24	113	113	113	24	110	111	112	24	111	112	112	24
7/3	106	106	106	20	114	115	115	24	112	112	113	24	111	111	114	24	111	111	112	24
7/4	---	---	---	0	115	115	116	24	112	113	113	24	110	111	111	24	111	112	112	24
7/5	---	---	---	0	115	116	117	24	112	113	113	24	110	111	112	24	112	112	113	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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>					
	<u>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>				
6/22	110	111	111	24	109	110	110	24	111	112	113	24	111	111	112	24	112	112	113	24
6/23	111	111	113	24	109	109	110	24	110	111	111	24	110	110	111	24	111	111	112	24
6/24	111	111	112	24	108	109	110	24	110	111	112	24	109	109	110	24	110	110	110	24
6/25	110	110	111	24	108	108	108	24	109	110	110	24	108	108	109	24	109	109	109	24
6/26	110	110	111	24	109	110	110	24	112	114	118	24	108	109	109	24	109	110	110	24
6/27	110	111	112	24	111	111	111	24	113	113	115	24	110	111	112	24	111	112	112	24
6/28	111	111	112	24	111	111	111	23	112	113	113	23	112	113	113	24	113	113	114	24
6/29	110	111	112	24	109	110	111	24	111	112	112	24	111	111	112	24	112	112	112	24
6/30	109	110	110	24	109	110	111	24	110	111	112	24	111	111	111	24	112	112	112	24
7/1	110	111	112	24	110	111	113	24	111	112	113	24	111	111	111	24	112	112	112	24
7/2	111	112	112	24	110	111	111	24	112	112	113	24	111	111	111	24	111	111	112	24
7/3	111	111	112	24	110	111	112	24	112	113	113	24	110	110	111	24	111	111	112	24
7/4	111	111	112	24	112	112	113	24	113	114	115	24	111	111	112	24	111	112	112	24
7/5	112	112	113	24	112	113	114	24	115	117	119	24	112	113	114	24	113	114	116	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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>					
	<u>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>				
6/22	112	112	113	24	116	117	117	24	110	111	112	24	114	116	118	24	114	116	117	24
6/23	111	111	112	24	115	116	117	24	109	110	111	24	113	114	116	24	112	114	114	24
6/24	110	111	111	24	115	116	116	24	108	108	110	24	112	113	115	24	111	112	113	24
6/25	109	110	110	24	114	115	116	24	108	109	110	24	111	112	114	24	110	111	112	24
6/26	109	110	111	24	113	114	115	24	109	111	112	24	112	113	115	24	111	113	114	24
6/27	110	111	111	24	115	116	116	24	111	112	113	24	114	115	116	24	112	113	116	24
6/28	112	114	115	24	117	117	118	24	111	111	112	24	114	115	117	24	113	114	116	24
6/29	112	112	113	24	116	116	117	24	109	110	111	24	115	117	118	24	112	113	116	24
6/30	112	113	113	24	116	116	116	24	108	110	111	24	113	114	116	24	112	113	114	24
7/1	112	112	113	24	116	116	116	24	---	---	---	0	---	---	---	0	---	---	---	0
7/2	112	112	112	24	116	117	117	24	---	---	---	0	---	---	---	0	---	---	---	0
7/3	112	112	112	24	116	117	117	24	---	---	---	0	---	---	---	0	---	---	---	0
7/4	111	112	113	24	117	118	120	24	---	---	---	0	---	---	---	0	---	---	---	0
7/5	112	113	114	24	117	118	119	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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>#</u>			
6/22	116	117	118	24	111	112	113	24	100	100	101	24	102	103	104	24	103	104	105	24
6/23	114	115	116	24	110	111	112	24	100	100	101	24	102	103	104	24	102	104	105	24
6/24	113	114	115	24	109	110	110	24	100	100	101	24	102	103	104	24	102	103	104	24
6/25	112	113	114	24	107	108	109	24	99	99	100	24	101	102	103	24	102	103	104	24
6/26	113	113	114	24	109	110	111	24	99	100	100	20	101	103	104	24	103	104	105	24
6/27	114	115	116	24	110	110	111	24	100	100	101	24	101	103	104	24	103	104	105	24
6/28	115	116	116	24	110	111	112	24	100	101	101	24	101	103	103	24	103	104	105	24
6/29	114	115	117	24	109	109	110	24	100	101	101	24	101	102	103	24	102	103	104	24
6/30	114	115	116	24	109	110	111	24	99	100	100	24	100	102	103	24	102	104	105	24
7/1	---	---	---	0	110	111	111	24	100	101	101	24	100	101	103	24	103	104	105	24
7/2	---	---	---	0	109	110	111	24	100	100	102	24	100	103	104	24	102	103	105	24
7/3	---	---	---	0	110	111	112	24	99	99	100	24	102	103	104	24	102	104	106	24
7/4	---	---	---	0	111	111	112	24	99	99	99	24	102	103	104	24	103	104	106	24
7/5	---	---	---	0	111	113	113	24	101	103	105	24	103	105	107	24	103	105	106	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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>#</u>			
6/22	103	105	106	24	102	102	103	24	114	115	115	24	110	111	112	24	109	110	110	24
6/23	102	104	106	24	103	103	104	24	112	113	115	24	111	111	112	24	108	109	110	24
6/24	102	103	105	24	103	104	105	24	114	115	116	24	111	111	111	24	108	109	109	24
6/25	102	104	105	24	102	102	103	24	113	114	115	24	109	109	110	24	108	108	109	24
6/26	103	105	106	24	102	102	103	24	114	115	116	24	108	109	110	24	107	108	108	24
6/27	103	105	106	24	101	101	102	24	116	116	116	24	109	110	110	24	108	108	109	24
6/28	103	106	107	24	100	100	101	24	113	114	116	24	108	109	109	24	108	108	108	24
6/29	102	104	106	24	100	100	100	24	114	115	116	24	107	107	108	24	108	108	108	24
6/30	103	105	107	24	101	102	102	24	112	113	115	24	108	109	109	24	107	108	109	24
7/1	103	106	107	24	102	102	102	24	112	112	113	24	110	110	110	24	107	108	108	24
7/2	103	105	106	24	101	101	102	24	114	115	116	24	109	109	110	24	107	107	108	24
7/3	103	105	107	24	100	100	101	24	113	114	115	24	109	110	111	24	108	110	114	24
7/4	104	106	107	24	101	102	102	24	112	112	113	24	111	111	112	24	108	109	109	24
7/5	104	106	108	24	102	103	104	24	112	112	112	24	110	110	111	23	109	109	110	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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>#</u>			
6/22	108	108	109	24	112	112	113	24	115	116	116	24	113	114	114	24	---	---	---	0
6/23	109	109	110	24	114	114	116	24	116	116	117	24	113	113	114	24	---	---	---	0
6/24	108	109	109	24	114	114	114	24	114	115	116	24	111	112	112	24	---	---	---	0
6/25	106	107	108	24	113	114	116	24	111	112	113	24	111	111	112	24	---	---	---	0
6/26	107	107	108	24	115	117	117	24	110	111	111	24	111	111	112	24	---	---	---	0
6/27	108	108	109	24	114	114	115	24	111	111	111	24	112	114	115	24	---	---	---	0
6/28	107	108	108	24	114	114	115	24	111	111	111	24	113	114	114	24	---	---	---	0
6/29	107	107	108	24	113	113	114	24	111	111	112	24	111	113	114	24	---	---	---	0
6/30	107	107	107	24	113	114	114	24	112	112	113	24	111	111	112	24	---	---	---	0
7/1	107	107	107	24	113	113	114	24	112	112	112	24	113	114	115	24	---	---	---	0
7/2	105	105	106	24	113	113	114	24	110	111	112	24	113	114	114	24	---	---	---	0
7/3	105	106	107	24	113	114	114	24	110	110	111	24	113	114	114	24	---	---	---	0
7/4	107	107	107	24	114	114	115	24	111	111	111	24	113	114	114	24	---	---	---	0
7/5	107	108	108	24	113	114	115	24	111	111	112	24	112	112	113	24	---	---	---	0

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>McNary-Wash</u>			<u>McNary Tlwr</u>			<u>John Day</u>			<u>John Day Tlwr</u>			<u>The Dalles</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>AVG</u>	<u>High</u>	<u>#</u>	
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr
6/22	111	111	112	24	117	117	118	24	106	107	107	24	111	116	118	24	109	111	112	24
6/23	110	110	111	24	116	116	117	24	108	108	109	24	112	117	118	24	109	111	114	24
6/24	110	110	111	24	117	118	119	24	107	108	108	24	112	117	119	24	109	110	112	24
6/25	108	108	109	24	117	118	118	24	106	107	107	24	111	117	118	24	109	112	114	24
6/26	110	111	112	24	116	117	118	24	108	109	110	24	112	117	118	24	110	113	116	24
6/27	109	110	111	24	114	115	116	24	107	107	108	24	112	117	118	24	109	112	115	24
6/28	111	112	112	24	115	116	118	24	106	107	107	24	112	117	118	24	110	112	114	24
6/29	110	111	111	24	116	118	118	24	106	106	107	24	111	115	118	24	109	110	112	24
6/30	109	109	110	24	116	117	118	24	106	107	108	24	112	117	118	24	109	111	115	24
7/1	110	110	111	24	113	114	114	24	108	109	109	24	114	114	115	24	109	111	114	24
7/2	109	109	109	24	115	116	117	24	108	108	108	24	114	114	115	24	109	110	112	24
7/3	109	110	110	24	114	115	116	24	108	108	109	24	115	115	115	24	108	109	110	24
7/4	109	110	110	24	116	118	119	24	108	109	110	24	114	115	115	24	110	111	111	24
7/5	111	112	114	24	117	118	119	24	109	109	110	24	114	116	118	24	110	111	111	24

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>Camas\Washougal</u>			<u>Cascade Island</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>AVG</u>	<u>High</u>	<u>#</u>	
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr
6/22	114	115	116	24	109	110	111	24	---	---	---	0	112	113	115	24	116	116	118	24
6/23	114	114	116	24	110	110	111	24	---	---	---	0	112	114	116	24	116	117	118	24
6/24	113	114	116	24	109	110	111	24	---	---	---	0	111	113	114	24	115	116	117	24
6/25	114	114	116	24	109	111	112	24	---	---	---	0	112	116	117	24	115	116	117	24
6/26	115	116	118	24	110	112	113	24	---	---	---	0	113	114	115	24	116	117	118	24
6/27	115	116	118	24	112	113	113	24	---	---	---	0	113	116	117	24	116	116	117	24
6/28	115	115	116	24	111	111	112	24	---	---	---	0	115	116	117	24	115	116	117	24
6/29	114	114	115	24	110	110	111	24	---	---	---	0	113	114	116	24	115	116	117	24
6/30	114	114	116	24	110	111	111	24	---	---	---	0	113	115	116	24	116	116	117	24
7/1	114	115	116	24	111	112	112	24	---	---	---	0	113	115	116	24	115	116	117	24
7/2	113	113	114	24	110	110	111	24	---	---	---	0	114	116	117	24	115	116	117	24
7/3	113	114	114	24	110	110	110	24	---	---	---	0	116	117	118	24	115	116	117	24
7/4	114	114	115	24	111	111	112	24	---	---	---	0	113	115	116	24	115	115	116	24
7/5	114	115	115	24	110	110	111	24	---	---	---	0	114	115	116	24	115	115	116	24

# 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)
06/22/2007	---	---	---	---	0	86	8	1	2,509	813	568
06/23/2007	*	---	---	---	27	14	4	0	---	604	623
06/24/2007	---	---	---	---	9	14	0	0	0	660	435
06/25/2007	*	---	---	---	21	12	4	0	---	544	469
06/26/2007	---	---	---	---	0	0	2	3	429	411	245
06/27/2007	*	---	---	---	0	16	0	3	---	406	141
06/28/2007	*	---	---	---	0	14	0	2	507	450	170
06/29/2007	*	---	---	---	9	0	0	0	---	331	83
06/30/2007	---	---	---	---	16	1	4	2	0	133	105
07/01/2007	*	---	---	---	0	0	0	11	---	179	133
07/02/2007	---	---	---	---	0	0	0	1	0	206	0
07/03/2007	*	---	---	---	0	4	0	0	---	0	0
07/04/2007	---	---	---	---	0	11	0	0	128	204	88
07/05/2007	*	---	---	---	0	11	0	0	---	0	202
07/06/2007	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>82</b>	<b>183</b>	<b>22</b>	<b>23</b>	<b>3,573</b>	<b>4,941</b>	<b>3,262</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>7</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>13</b>	<b>2</b>	<b>2</b>	<b>510</b>	<b>353</b>	<b>233</b>
<b>YTD</b>	<b>43,491</b>	<b>86,948</b>	<b>15,108</b>	<b>6,553</b>	<b>2,247,438</b>	<b>655,073</b>	<b>355,419</b>	<b>23,741</b>	<b>2,224,167</b>	<b>4,261,327</b>	<b>1,949,318</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)
06/22/2007	---	---	---	---	3,427	7,306	630	119	159,179	10,740	15,778
06/23/2007	*	---	---	---	4,709	9,294	469	178	---	20,118	17,008
06/24/2007	---	---	---	---	6,494	5,776	325	158	259,217	19,039	17,407
06/25/2007	*	---	---	---	7,422	12,630	402	54	---	14,701	22,862
06/26/2007	---	---	---	---	5,969	10,971	542	85	235,112	49,403	19,338
06/27/2007	*	---	---	---	5,060	12,218	1,799	107	---	56,736	26,768
06/28/2007	*	---	---	---	1,997	2,664	314	97	366,889	33,499	34,938
06/29/2007	*	---	---	---	3,695	6,033	1,090	73	---	48,663	53,452
06/30/2007	---	---	---	---	4,537	8,903	875	80	214,337	109,825	28,084
07/01/2007	*	---	---	---	3,074	27,724	595	49	---	193,317	70,093
07/02/2007	---	---	---	---	6,717	5,949	1,484	83	246,586	87,177	53,702
07/03/2007	*	---	---	---	2,626	3,048	260	86	---	54,413	19,225
07/04/2007	---	---	---	---	2,408	5,907	847	333	235,356	117,173	90,646
07/05/2007	*	---	---	---	6,535	8,761	1,763	566	---	104,242	38,678
07/06/2007	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64,670</b>	<b>127,184</b>	<b>11,395</b>	<b>2,068</b>	<b>1,716,676</b>	<b>919,046</b>	<b>507,979</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>7</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,619</b>	<b>9,085</b>	<b>814</b>	<b>148</b>	<b>245,239</b>	<b>65,646</b>	<b>36,284</b>
<b>YTD</b>	<b>0</b>	<b>82</b>	<b>90</b>	<b>255</b>	<b>287,417</b>	<b>388,960</b>	<b>66,922</b>	<b>5,417</b>	<b>2,038,298</b>	<b>1,169,033</b>	<b>2,909,493</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)
06/22/2007	---	---	---	---	10	0	2	26	329	271	1,153
06/23/2007	*	---	---	---	0	43	0	32	---	200	350
06/24/2007	---	---	---	---	0	43	0	12	122	133	237
06/25/2007	*	---	---	---	0	46	0	10	---	155	156
06/26/2007	---	---	---	---	0	15	0	13	0	118	71
06/27/2007	*	---	---	---	0	15	0	5	---	361	147
06/28/2007	*	---	---	---	0	29	0	10	0	91	121
06/29/2007	*	---	---	---	0	0	0	5	---	132	252
06/30/2007	---	---	---	---	0	0	0	9	0	0	0
07/01/2007	*	---	---	---	0	14	0	10	---	0	86
07/02/2007	---	---	---	---	0	0	0	6	132	0	98
07/03/2007	*	---	---	---	0	0	0	5	---	0	0
07/04/2007	---	---	---	---	0	11	0	6	0	204	86
07/05/2007	*	---	---	---	0	0	5	4	---	0	0
07/06/2007	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>216</b>	<b>7</b>	<b>153</b>	<b>583</b>	<b>1,665</b>	<b>2,757</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>7</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>15</b>	<b>1</b>	<b>11</b>	<b>83</b>	<b>119</b>	<b>197</b>
<b>YTD</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>50,668</b>	<b>54,985</b>	<b>17,922</b>	<b>64,355</b>	<b>98,955</b>	<b>345,725</b>	<b>628,038</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)
06/22/2007	---	---	---	---	87	2,234	87	9	594	418	1,027
06/23/2007	*	---	---	---	73	999	60	8	---	302	1,051
06/24/2007	---	---	---	---	84	649	52	3	488	284	715
06/25/2007	*	---	---	---	41	706	53	17	---	351	400
06/26/2007	---	---	---	---	56	251	30	8	257	91	387
06/27/2007	*	---	---	---	72	337	65	8	---	361	374
06/28/2007	*	---	---	---	38	450	40	3	0	91	194
06/29/2007	*	---	---	---	9	675	63	0	---	331	586
06/30/2007	---	---	---	---	33	560	28	2	490	666	105
07/01/2007	*	---	---	---	25	708	22	3	---	304	227
07/02/2007	---	---	---	---	72	720	44	3	132	0	0
07/03/2007	*	---	---	---	48	266	15	0	---	0	8
07/04/2007	---	---	---	---	29	207	12	0	0	347	231
07/05/2007	*	---	---	---	45	921	127	3	---	204	0
07/06/2007	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>712</b>	<b>9,683</b>	<b>698</b>	<b>67</b>	<b>1,961</b>	<b>3,750</b>	<b>5,305</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>7</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>51</b>	<b>692</b>	<b>50</b>	<b>5</b>	<b>280</b>	<b>268</b>	<b>379</b>
<b>YTD</b>	<b>3,734</b>	<b>45,908</b>	<b>1,940</b>	<b>7,792</b>	<b>1,858,921</b>	<b>1,847,386</b>	<b>739,005</b>	<b>18,510</b>	<b>375,137</b>	<b>957,697</b>	<b>265,100</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)
06/22/2007	---	---	---	---	0	14	2	0	395	375	170
06/23/2007	*	---	---	---	0	29	2	2	---	300	39
06/24/2007		---	---	---	0	14	0	0	0	288	169
06/25/2007	*	---	---	---	0	0	4	0	---	389	156
06/26/2007		---	---	---	0	15	0	0	0	213	53
06/27/2007	*	---	---	---	0	0	0	0	---	226	22
06/28/2007	*	---	---	---	0	0	0	0	0	180	49
06/29/2007	*	---	---	---	0	0	0	0	---	132	83
06/30/2007		---	---	---	0	0	0	0	98	133	105
07/01/2007	*	---	---	---	0	0	0	1	---	0	0
07/02/2007		---	---	---	0	0	0	0	0	413	0
07/03/2007	*	---	---	---	0	0	0	0	---	0	0
07/04/2007		---	---	---	0	0	0	0	0	0	43
07/05/2007	*	---	---	---	0	0	0	3	---	0	0
07/06/2007		---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>8</b>	<b>6</b>	<b>493</b>	<b>2,649</b>	<b>889</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>7</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>5</b>	<b>1</b>	<b>0</b>	<b>70</b>	<b>189</b>	<b>64</b>
<b>YTD</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>413</b>	<b>20,682</b>	<b>17,100</b>	<b>5,735</b>	<b>16,422</b>	<b>513,444</b>	<b>789,510</b>	<b>170,938</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:

7/6/07 9:12 AM

		06/22/07 TO 07/06/07					
		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	30,424	42	5		336	30,807
	Sum of NumberBarged	12,911	41	5		300	13,257
	Sum of NumberBypassed	15,055	0	0		0	15,055
	Sum of Numbertrucked	1,584	0	0		32	1,616
	Sum of SampleMorts	77	1	0		0	78
	Sum of FacilityMorts	354	0	0		4	358
	Sum of ResearchMorts	443	0	0		0	443
	Sum of TotalProjectMorts	874	1	0		4	879
<b>LGS</b>	Sum of NumberCollected	88,159	129	150	50	6,735	95,223
	Sum of NumberBarged	86,026	122	149	50	6,666	93,013
	Sum of NumberBypassed	1,946	0	0	0	0	1,946
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	19	0	1	0	5	25
	Sum of FacilityMorts	61	7	0	0	64	132
	Sum of ResearchMorts	107	0	0	0	0	107
	Sum of TotalProjectMorts	187	7	1	0	69	264
<b>LMN</b>	Sum of NumberCollected	5,435	12	3	4	345	5,799
	Sum of NumberBarged	3,812	12	3	4	128	3,959
	Sum of NumberBypassed	1,605	0	0	0	210	1,815
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	14	0	0	0	6	20
	Sum of FacilityMorts	4	0	0	0	1	5
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	18	0	0	0	7	25
<b>MCN</b>	Sum of NumberCollected	791,042	1,962	292	287	1,032	794,615
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	790,883	1,962	292	286	1,030	794,453
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	64	0	0	1	1	66
	Sum of FacilityMorts	48	0	0	0	1	49
	Sum of ResearchMorts	47	0	0	0	0	47
	Sum of TotalProjectMorts	159	0	0	1	2	162
Total Sum of NumberCollected		915,060	2,145	450	341	8,448	926,444
Total Sum of NumberBarged		102,749	175	157	54	7,094	110,229
Total Sum of NumberBypassed		809,489	1,962	292	286	1,240	813,269
Total Sum of Numbertrucked		1,584	0	0	0	32	1,616
Total Sum of SampleMorts		174	1	1	1	12	189
Total Sum of FacilityMorts		467	7	0	0	70	544
Total Sum of ResearchMorts		597	0	0	0	0	597
Total Sum of TotalProjectMorts		1,238	8	1	1	82	1,330

### YTD Transportation Summary

Source: Fish Passage Center

Updated:

7/6/07 9:12 AM

TO: 07/06/07

Site	Data	Species					Grand Total
		CH0	CH1	CO	SO	ST	
<b>LGR</b>	Sum of NumberCollected	171,025	1,578,074	38,255	15,920	1,367,601	3,170,875
	Sum of NumberBarged	132,478	1,125,020	36,804	15,540	1,185,344	2,495,186
	Sum of NumberBypassed	35,026	451,109	1,432	356	181,734	669,657
	Sum of NumberTrucked	1,584	0	0	0	32	1,616
	Sum of SampleMorts	148	57	1	2	31	239
	Sum of FacilityMorts	842	1,008	18	22	460	2,350
	Sum of ResearchMorts	947	880	0	0	0	1,827
	Sum of TotalProjectMorts	1,937	1,945	19	24	491	4,416
<b>LGS</b>	Sum of NumberCollected	270,404	463,054	39,424	11,991	1,304,437	2,089,310
	Sum of NumberBarged	266,297	398,101	38,876	11,544	1,181,912	1,896,730
	Sum of NumberBypassed	3,834	64,720	541	433	121,828	191,356
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	28	31	4	2	25	90
	Sum of FacilityMorts	135	197	3	12	672	1,019
	Sum of ResearchMorts	110	7	0	0	0	117
	Sum of TotalProjectMorts	273	235	7	14	697	1,226
<b>LMN</b>	Sum of NumberCollected	36,862	279,107	13,476	4,155	573,427	907,027
	Sum of NumberBarged	32,692	270,548	13,453	4,130	561,476	882,299
	Sum of NumberBypassed	4,080	8,083	21	2	11,458	23,644
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	44	30	0	0	73	147
	Sum of FacilityMorts	46	393	2	23	437	901
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	90	423	2	23	510	1,048
<b>MCN</b>	Sum of NumberCollected	981,431	1,316,537	58,562	304,286	222,072	2,882,888
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	981,196	1,315,564	58,547	303,779	221,673	2,880,759
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	86	141	4	58	33	322
	Sum of FacilityMorts	99	819	11	447	366	1,742
	Sum of ResearchMorts	51	13	0	2	0	66
	Sum of TotalProjectMorts	236	973	15	507	399	2,130
Total Sum of NumberCollected		1,459,722	3,636,772	149,717	336,352	3,467,537	9,050,100
Total Sum of NumberBarged		431,467	1,793,669	89,133	31,214	2,928,732	5,274,215
Total Sum of NumberBypassed		1,024,136	1,839,476	60,541	304,570	536,693	3,765,416
Total Sum of NumberTrucked		1,584	0	0	0	32	1,616
Total Sum of SampleMorts		306	259	9	62	162	798
Total Sum of FacilityMorts		1,122	2,417	34	504	1,935	6,012
Total Sum of ResearchMorts		1,108	900	0	2	0	2,010
Total Sum of TotalProjectMorts		2,536	3,576	43	568	2,097	8,820

**Cumulative Adult Passage at Mainstem Dams Through: 07/05**

DAM	EndDate	Spring Chinook						Summer Chinook						Fall Chinook					
		2007		2006		10-Yr Avg.		2007		2006		10-Yr Avg.		2007		2006		10-Yr Avg.	
		Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	07/05	66624	16606	96456	2908	156175	8234	35767	9822	78192	2753	51174	5134	0	0	0	0	0	0
TDA	07/05	52795	15406	61827	2176	108412	6003	28698	7646	63245	2241	42490	3510	0	0	0	0	0	0
JDA	07/05	43379	13663	50313	2093	90974	4767	24508	6490	54862	1992	38473	3196	0	0	0	0	0	0
MCN	07/04	38852	12252	45887	2475	83968	5029	20765	4925	43611	1783	32962	2704	0	0	0	0	0	0
IHR	07/02	28047	7308	25434	875	56277	3172	5825	1602	6634	303	9444	1266	0	0	0	0	0	0
LMN	07/04	26963	6934	23589	548	53700	2904	7510	1022	7252	246	8966	1084	0	0	0	0	0	0
LGS	07/02	23953	7227	20836	733	51418	2974	4627	1673	4173	261	6931	1061	0	0	0	0	0	0
LGR	07/05	22481	8971	22530	973	51737	3293	4903	1967	3790	294	7390	1239	0	0	0	0	0	0
PRD	07/02	6708	489	8535	81	17371	512	11989	457	20747	83	15971	427	0	0	0	0	0	0
RIS	07/04	5572	2066	9643	483	14040	762	7834	1387	21497	319	12999	1012	0	0	0	0	0	0
RRH	07/04	2424	920	5376	274	5343	306	4415	425	9940	183	6605	358	0	0	0	0	0	0
WEL	07/03	2040	752	4159	217	3869	205	629	49	1711	67	1998	70	0	0	0	0	0	0
WFA	06/24	20856	210	32929	177	6531	101	0	0	0	0	0	0	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2007		2006		10-Yr Avg.		10-Yr Avg.			10-Yr Avg.			Wild
	Adult	Jack	Adult	Jack	Adult	Jack	2007	2006	Avg.	2007	2006	Avg.	2007
BON	0	0	0	0	0	0	21452	32592	52820	13732	13628	21678	3440
TDA	0	0	0	0	0	0	16379	25562	43025	5283	5123	9265	1465
JDA	1	0	0	0	0	0	19795	27743	44709	6196	6969	10115	1687
MCN	0	0	0	0	0	0	14017	21428	33297	4286	4213	5438	851
IHR	0	0	0	0	0	0	35	15	14	3304	3335	3132	681
LMN	0	0	0	0	0	0	18	6	15	3562	3702	3061	955
LGS	0	0	0	0	0	0	6	5	11	2698	2851	2655	793
LGR	0	0	0	0	0	0	17	1	15	11003	7723	7275	2449
PRD	0	1	0	0	0	0	10714	8429	25376	117	162	201	0
RIS	0	0	0	0	1	0	6863	7538	18849	101	107	184	44
RRH	0	0	0	0	1	0	4294	3647	10762	226	177	194	107
WEL	0	0	0	0	0	0	1398	893	5180	67	45	38	45
WFA	2	0	0	0	0	0	0	0	0	14992	20863	3525	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: 07/06/07

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

Year	Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
2007	22	0	1,677	517
2006	2	0	2,523	239

Run Year counts (June 1, 2006 to May 31, 2007) for Lower Granite:

Steelhead
397