



# Fish Passage Center Weekly Report #07 - 16

June 22, 2007

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## Summary of Events:

**Water Supply:** Precipitation throughout the Columbia Basin has varied between 58% and 159% of average at individual sub-basins over June. Precipitation above The Dalles has been 127 % of average over June. Over the entire water year, precipitation has varied between 76% and 118% of average at individual sub-basins (Table 1).

**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 1-18		Water Year 2007 October 1, 2006 to June 1-18, 2007	
	Observed (inches)	% Average	Observed (inches)	% Average
	Columbia Above Coulee	1.96	136	21.78
SNAKE RIVER ABOVE ICE HARBOR	0.91	104	12.01	83
Columbia Above The Dalles	1.37	127	19.41	102
Kootenai	2.34	159	23.68	118
Clark Fork	1.49	129	14.6	109
Flathead	1.52	96	18.46	104
Pend Oreille/Spokane	1.50	114	24.91	94
Central Washington	0.39	101	7.23	94
SNAKE RIVER PLAIN	0.63	109	7.04	76
Salmon/Boise/Payette	0.82	93	13.99	82
Clearwater	1.59	107	25.33	98
SW Washington Cascades/Cowlitz	1.03	58	63.26	98
Willamette Valley	1.09	80	26.29	102

Table 2 displays the May Final and June Mid-month runoff volume forecasts for multiple reservoirs. Water Supply Forecasts at Libby Dam have increased 12% between the May final and June mid-month forecasts. Water Supply Forecasts at Lower Granite Dam and Brownlee Dam decreased by 7% between the May final and June mid-month forecasts. The current forecast at The Dalles between January and July is 96400 Kaf (90% of average).

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

Location	May Final		June Mid-Month	
	% Average (1971- 2000)	Probable Runoff Volume (Kaf)	% Average (1971- 2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	92	99100	90	96400
Grand Coulee (Jan-July)	104	65300	103	65000
Libby Res. Inflow, MT (Jan-July)	108	6790	120	7540
Hungry Horse Res. Inflow, MT (Jan-July)	92	2050	89	1980
Lower Granite Res. Inflow (Apr- July)	66	14200	59	12700
Brownlee Res. Inflow (Apr-July)	48	3040	41	2570
Dworshak Res. Inflow (Apr-July), RFC Forecast	78	2060	70	1860
Dworshak Res. Inflow (Apr-July), COE Forecast	70 (May Final)	1868 (May Final)		

Grand Coulee Reservoir is at 1281.7 feet (6-21-07) and drafted 0.7 feet last week. Outflows at Grand Coulee ranged between 102.8 and 164.2 Kcfs last week.

Dworshak is currently at an elevation of 1599.9 feet (6-21-07) and refilled 0.3 feet last week. Outflows at Dworshak are 5.0 Kcfs, inflows are 4.2 Kcfs.

The Libby Reservoir is currently at elevation 2442.7 feet (6-21-07) and refilled 5.4 feet last week. Outflows at Libby are currently at 15 Kcfs and will remain at that level for several weeks until a flat flow is agreed upon at TMT for the remainder of July and August. Determining the flat flow out of Libby for the summer has been difficult as the Water Supply Forecast has increased 12% between the May final and June mid-month forecasts.

Hungry Horse is currently at an elevation of 3559.7 feet (6-21-07) and refilled 0.7 feet last week. Outflows at Hungry Horse are currently 4.3 Kcfs.

The Brownlee Reservoir was at an elevation of 2075.9 feet on June 21, 2007, holding steady last week. Outflows at Brownlee Dam have been 8.2 to 14.4 Kcfs over the last week.

The Spring Biological Opinion flow period began on April 3 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 over the past week averaged 214.8 Kcfs and 245.3 Kcfs over the season. The Priest Rapids Dam flow over the past week averaged 165.3 Kcfs and 171.4 Kcfs over the season. The Spring Biological Opinion flow period will end on June 30 at both McNary and Priest Rapids Dams.

**Spill:** The spring spill season ended at midnight on April 20, 2007 at the Snake River projects. In accordance with the Court Order, summer spill was initiated at the Snake River Projects at 0001 hours on April 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 was near 20 Kcfs daily through June 20 and then decreased to 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 21. Prior to this time spill at this project was provided at about 22.6 Kcfs during daytime and 23.6 Kcfs during nighttime hours. It may have been possible to increase spill at this time since the spill caps were not exceeded. At times since June 21 spill was less than 17 Kcfs since flow was too low to operate one turbine unit and provide the full amount of spill. 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. The Court Order calls for the following spill levels at the Federal Lower Columbia River Projects:

Project	Day/Night Spill
McNary	40%/40%
John Day	0/60%
The Dalles	40%/40%
Bonneville	85Kcfs/gas cap until July 15 75Kcfs/gas cap July 16-Aug31

Spill at McNary Dam is meeting the Court's Order. Spill at John Day Dam has been between 59.2% and 59.9% over the past week, close to the Court's Order. Spill at The Dalles met the Court's Order over the past week.

On June 20 the summer spill program was initiated at Bonneville Dam for research purposes. Daily average spill at Bonneville Dam ranged from 98.2 Kcfs to 98.4 Kcfs over the first part of the past week until the evening of June 20, when the project changed to the summer operation. Spill is 85 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.

Total dissolved gas waivers were not exceeded at the federal hydroprojects throughout the past week, except for the Camas/Washougal Station on 6/20 and 6/21. Gas bubble trauma (GBT) monitoring continued this week at Lower Granite, Little Goose, Rock Island, McNary and Bonneville dams. A higher than normal incidence of GBT in steelhead continued to be observed at Little Goose Dam over the past week, while the subyearling Chinook sampled did not show the same incidence. (Too few fish were available to sample at Lower Monumental Dam). Given that the total dissolved gas readings at Little Goose Dam forebay are less than the 110% total dissolved gas standard, the late migrating steelhead samples are likely exhibiting gas bubbles as a result of longer than normal transit times at the current low flows (less than 40 Kcfs).

**Smolt Monitoring:** Subyearling Chinook now predominate at the Snake River SMP sites as well as at the Columbia River sites. Subyearling indices decreased at all Snake River sites over the past week, while at all Columbia River SMP sites, indices were up.

At Lower Granite Dam, there was a decrease in the average subyearling passage index, with the average this week at 4,200 per day compared to 9,000 per day last week. Indices of subyearling Chinook decreased at Little Goose and Lower Monumental dams as well 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 970,000 at Lower Granite, 700,000 at Little Goose and just over 500,000 at Lower Monumental.

At Rock Island Dam, the numbers of all spring migrants have continued to decrease, while the subyearling index was up slightly this past week, averaging 72 per day this week compared to 64 per day last week.

In the Lower Columbia, at McNary Dam, numbers of subyearling Chinook were up again this week, with the index averaging 48,000 this week compared to 29,000 last week. While at John Day Dam, the weekly average subyearling index rose to 12,000 compared to 11,000 last week. At Bonneville Dam indices subyearling chinook continued to increase slowly over the past week. The index averaged 15,000 this week compared to 11,000 per day last week.

**Adult Fish Passage:** The summer Chinook count began June 1 at Bonneville Dam. Daily passage numbers at Bonneville Dam have ranged between 900 and 1,414 adult summer Chinook in the last week. The 2007 summer Chinook count of 20,834 is about 69.5 percent of the 10-year average count and 47.8 percent of the 2006 count. The summer Chinook jack count of 5,474 at Bonneville Dam is presently 3.9 times greater than observed in 2006, and 1.9 times greater than the 10-year average count to date. The adult summer Chinook count total at The Dalles Dam was 15,688 through June 21.

As of June 21st, 6,427 steelhead had passed Bonneville Dam which was 133 fewer than the 2006 count. The 2007 Bonneville steelhead count was about 64.8 percent of the 10-year average. As of June 21, 2, a total of 126,173 adult Shad were counted at Bonneville Dam this season with daily counts ranging from 22,120 to 121,519. Adult sockeye counts increased at Bonneville with the count through June 21 at 9,179 salmon. This year's sockeye count is about 86.8 percent of the 2006 count and 42.8 percent of the 10-year average count.

As of June 17, the last date for spring Chinook count at Lower Granite, the 2007 adult spring Chinook counts were 22,481. The 2007 spring Chinook count at Lower Granite had 49 fewer salmon than the 2006 count, but was only 43.4 percent of the 10-year average. The 2007 spring Chinook jack count of 8,971 was 9.21 times greater than the 2006 count and 2.72 times larger than the 10-year average count at Lower Granite Dam. The adult summer Chinook count total at Lower Granite was 1,323 through June 21.

### **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. There were no scheduled releases of juvenile salmonids into this zone this week.

A release of approximately 304,000 spring Chinook parr into the Selway River is scheduled to occur on July 1. However, these parr are not expected to out-migrate until 2008. There are no other 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. This week marked the end of two volitional releases of subyearling fall Chinook into the Mid-Columbia River. These releases were from Priest Rapids Hatchery and Ringold Hatchery and are expected to total about 10.15 million subyearlings. There were no other scheduled releases of juvenile salmonids in this zone this week.

A release of approximately 860,000 subyearling summer Chinook into the Mid-Columbia River is scheduled to occur on July 2nd from Turtle Rock Hatchery. 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 this week.

Beginning on or around June 25, approximately 2.16 million subyearling fall Chinook will be released from Klickitat Hatchery into the Klickitat River. Also scheduled for release over the next two weeks are approximately 2.0 million subyearling fall Chinook from Little White Salmon NFH on June 28. There are no other scheduled releases of juvenile salmonids over the next two weeks in this zone.

**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
06/08/07	171.5	0.3	171.3	0.0	191.4	29.2	189.0	27.9	194.0	40.1	208.3	60.9	203.5	32.7
06/09/07	149.0	0.3	156.5	0.0	175.4	14.6	176.3	16.5	182.6	36.8	199.6	57.5	194.5	23.0
06/10/07	144.8	0.3	141.6	0.0	161.5	10.8	163.7	14.2	168.0	32.4	179.7	36.8	180.7	15.4
06/11/07	154.9	0.3	158.2	0.0	175.7	12.2	173.9	16.7	179.5	37.5	192.5	51.2	184.5	17.2
06/12/07	148.9	0.3	145.8	0.0	169.1	10.0	173.2	15.1	179.3	35.3	193.4	50.8	189.4	15.2
06/13/07	142.0	0.3	145.6	0.0	160.0	10.0	158.9	14.5	164.1	34.2	171.1	27.9	176.0	11.0
06/14/07	153.6	0.3	149.5	0.0	163.7	10.0	162.8	15.6	168.3	34.7	177.9	34.3	175.5	15.5
06/15/07	164.2	0.2	172.6	0.0	183.1	23.6	173.3	23.7	174.8	33.1	184.5	45.3	174.1	23.0
06/16/07	143.4	0.1	142.1	0.0	158.8	11.4	163.9	17.4	170.6	30.4	183.6	40.5	186.6	24.6
06/17/07	102.8	0.1	107.5	0.0	131.0	9.6	135.6	11.1	142.9	25.5	157.9	12.2	165.9	19.1
06/18/07	134.8	0.1	140.1	0.0	143.3	10.0	131.2	14.5	135.9	33.7	158.1	18.5	153.6	18.5
06/19/07	152.2	0.1	147.1	0.0	164.3	10.0	162.7	14.6	166.4	32.9	151.6	11.8	144.6	19.4
06/20/07	149.6	0.1	151.0	0.0	164.0	10.3	159.8	13.8	164.2	30.0	172.4	28.9	162.7	22.4
06/21/07	150.4	0.1	150.9	0.0	165.2	12.1	161.3	14.4	164.9	32.0	175.0	33.1	169.3	25.8

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

Date	Dworshak		Brownlee Canyon		Hells Granite		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
06/08/07	5.0	0.0	10.2	10.5	52.8	20.0	52.6	15.8	51.4	23.2	52.1	16.2		
06/09/07	5.3	0.0	10.5	13.0	53.6	19.8	52.9	16.0	51.2	22.6	51.1	16.0		
06/10/07	5.3	0.0	12.3	9.6	52.4	19.8	52.7	15.7	51.7	23.2	51.8	16.4		
06/11/07	5.3	0.0	12.8	14.6	54.7	19.7	52.3	15.7	51.1	22.2	51.7	36.4		
06/12/07	5.6	0.0	13.5	16.2	62.7	19.9	63.3	18.9	63.8	23.2	66.0	51.7		
06/13/07	4.3	0.0	12.0	11.5	57.6	19.8	56.8	16.9	55.3	22.5	56.6	24.2		
06/14/07	4.3	0.0	12.0	11.5	55.1	19.9	53.9	16.3	52.3	24.0	53.6	17.4		
06/15/07	4.3	0.0	12.0	11.6	47.5	19.8	48.1	14.5	47.7	22.6	47.8	33.8		
06/16/07	4.3	0.0	11.0	11.2	46.0	19.9	44.4	13.3	42.5	22.9	44.0	33.5		
06/17/07	4.3	0.0	10.0	8.4	45.7	19.9	46.1	13.8	45.2	22.0	47.0	36.0		
06/18/07	4.3	0.0	9.9	7.9	40.7	19.8	40.7	12.2	39.4	23.1	40.7	30.4		
06/19/07	4.7	0.0	10.2	11.5	37.5	19.9	38.1	11.3	35.0	22.3	37.1	17.3		
06/20/07	4.3	0.0	9.6	9.4	42.9	19.9	43.3	13.0	43.1	23.0	42.7	15.6		
06/21/07	5.0	0.0	---	---	37.4	18.1	34.4	10.3	33.4	16.5	32.6	22.0		

**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		
06/08/07	260.3	106.7	257.1	67.0	252.5	100.4	249.3	98.8	35.4	103.6
06/09/07	277.4	110.5	275.2	70.5	277.0	106.9	282.6	99.3	60.1	111.8
06/10/07	244.9	98.1	229.7	59.5	222.3	89.8	254.1	98.5	40.2	103.9
06/11/07	249.0	99.3	245.2	58.4	252.1	99.7	268.5	98.2	43.7	115.1
06/12/07	245.6	98.8	233.4	56.6	230.1	92.0	237.5	98.0	23.5	104.5
06/13/07	267.6	106.8	243.3	64.1	239.0	95.7	236.9	98.7	21.5	104.9
06/14/07	234.7	94.2	238.1	66.4	235.4	94.2	247.2	99.6	27.4	108.7
06/15/07	233.8	93.8	224.2	53.1	230.7	92.2	237.2	99.2	19.5	107.0
06/16/07	247.2	99.0	214.2	49.8	201.4	80.8	214.7	98.4	6.9	97.9
06/17/07	196.5	78.9	180.0	51.8	177.7	71.2	194.4	98.3	0.0	84.5
06/18/07	221.9	88.8	222.3	57.1	223.2	89.2	221.2	98.2	12.7	98.8
06/19/07	222.4	89.0	219.5	55.9	219.1	87.0	229.4	98.2	15.2	104.5
06/20/07	206.6	82.8	188.6	48.9	185.8	74.6	201.3	102.8	4.3	82.7
06/21/07	201.0	80.5	177.7	45.5	169.1	67.1	194.8	92.3	0.0	91.0

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

Site	Date	Species	Number of Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank			
								Rank 1	Rank 2	Rank 3	Rank 4
<b>Lower Granite Dam</b>											
	06/12/07	Chinook + Steelhead	18	0	0	0.00%	0.00%	0	0	0	0
<b>Little Goose Dam</b>											
	06/12/07	Chinook + Steelhead	150	16	15	10.00%	0.00%	13	2	0	0
	06/19/07	Chinook + Steelhead	78	36	36	46.15%	0.00%	25	11	0	0
<b>McNary Dam</b>											
	06/15/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/17/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/21/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Bonneville Dam</b>											
	06/12/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/16/07	Chinook + Steelhead	58	0	0	0.00%	0.00%	0	0	0	0
<b>Rock Island Dam</b>											
	06/12/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/14/07	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0

## HATCHERY RELEASE LAST TWO WEEKS

### Hatchery Release Summary

From: **6/8/2007** to **06/21/07**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	FA	2007	25,000	06-11-07	06-11-07	Selway River Nez Perce Tribal	Clearwater River M F
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	FA	2007	500,000	06-15-07	06-15-07	Hatchery	Clearwater River M F
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2008	40,000	06-15-07	06-15-07	Meadow Creek - SELW	Selway River
<b>Nez Perce Tribe Total</b>					<b>565,000</b>				
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2007	6,700,000	06-13-07	06-21-07	Priest Rapids Hatchery Ringold Springs	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	CH0	FA	2007	3,450,000	06-14-07	06-22-07	Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH0	SU	2007	192,013	06-13-07	06-13-07	Wells Hatchery	Mid-Columbia River
<b>Washington Dept. of Fish and Wildlife Total</b>					<b>10,342,013</b>				
Yakama Tribe	Klickitat Hatchery	CH0	FA	2007	2,198,000	06-11-07	06-15-07	Klickitat Hatchery	Klickitat River
<b>Yakama Tribe Total</b>					<b>2,198,000</b>				
<b>Grand Total</b>					<b>13,105,013</b>				

## HATCHERY RELEASE NEXT TWO WEEKS

### Hatchery Release Summary

From:	6/22/2007		to	7/5/2007						
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	2,000,000	06-28-07	06-28-07	Little White Salmon River	Little White Salmon River	
<b>U.S. Fish and Wildlife Service Total</b>					<b>2,000,000</b>					
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	CH0	FA	2007	3,450,000	06-14-07	06-22-07	Ringold Springs Hatchery	Mid-Columbia River	
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>4,310,000</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>8,773,500</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>			
6/8	98	99	99	24	119	119	120	24	114	115	115	24	111	112	112	24	111	111	112	24
6/9	99	99	100	24	121	123	123	24	113	114	115	24	112	112	112	24	112	112	112	24
6/10	99	99	99	24	122	123	123	24	114	116	116	24	112	112	113	24	112	112	113	24
6/11	99	99	99	24	121	122	122	22	115	115	115	24	111	112	113	22	111	111	112	24
6/12	99	100	101	24	121	121	121	24	114	114	114	24	111	111	112	24	110	111	111	24
6/13	102	103	104	24	119	120	121	24	114	114	114	24	111	112	113	24	111	111	111	24
6/14	104	105	105	24	118	119	120	24	114	114	114	24	111	112	113	24	111	111	111	24
6/15	105	105	106	24	117	119	119	24	114	114	114	24	111	112	112	24	111	111	112	24
6/16	105	106	106	24	117	119	119	24	114	114	114	24	111	112	112	24	111	112	112	24
6/17	105	105	106	24	115	116	117	24	113	114	114	24	110	111	111	24	111	111	112	24
6/18	104	104	105	24	116	117	118	24	113	113	114	24	110	111	112	23	111	111	112	24
6/19	104	105	105	24	116	118	120	24	113	113	114	24	110	111	112	24	111	112	112	24
6/20	105	106	106	24	117	120	121	24	113	113	113	24	111	111	112	24	112	112	112	24
6/21	105	106	106	24	116	119	122	24	113	113	113	24	110	111	112	24	111	111	112	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>			
6/8	110	111	111	24	110	110	111	24	114	115	119	24	110	110	111	24	111	112	114	24
6/9	111	111	112	24	110	110	111	24	113	115	125	24	112	113	113	24	113	113	114	24
6/10	111	112	112	24	110	110	110	24	112	112	113	24	113	114	115	24	113	114	116	24
6/11	110	110	111	24	109	109	110	24	111	112	113	24	109	110	110	24	110	111	111	24
6/12	110	110	111	24	109	109	109	24	111	111	112	24	109	109	109	24	110	110	110	24
6/13	111	111	112	24	109	110	110	24	111	111	112	24	110	110	110	24	110	111	111	24
6/14	110	111	111	24	109	110	110	24	111	111	112	24	109	109	109	24	110	110	110	24
6/15	110	111	111	24	110	110	111	24	114	115	117	24	109	110	110	24	111	111	113	24
6/16	111	111	111	24	109	110	110	24	112	112	115	24	111	112	113	24	112	113	115	24
6/17	111	111	112	24	110	110	111	24	111	112	112	24	111	112	113	24	112	113	114	24
6/18	110	111	111	24	109	110	110	24	110	111	112	24	109	109	110	24	110	110	111	24
6/19	111	111	112	24	110	111	111	24	112	113	113	24	110	110	110	24	110	111	111	24
6/20	111	111	112	24	111	111	112	24	113	114	114	24	110	111	112	24	111	112	112	24
6/21	111	111	112	24	110	111	111	24	113	113	114	24	111	112	112	24	112	112	113	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>			
6/8	112	113	114	24	116	117	118	24	108	109	110	24	116	119	122	24	115	116	117	24
6/9	113	113	114	24	117	118	119	24	109	110	110	24	116	119	121	24	117	118	118	24
6/10	113	114	115	24	117	118	119	24	109	110	112	24	116	118	120	24	115	117	118	24
6/11	111	111	112	24	116	117	118	24	108	109	110	24	116	117	118	24	113	114	116	24
6/12	110	111	111	24	115	116	117	24	108	109	110	24	116	118	119	24	114	115	116	24
6/13	110	111	111	24	115	117	117	24	109	109	110	24	114	116	118	24	115	116	117	24
6/14	110	111	112	24	116	117	118	24	109	111	111	24	113	115	117	24	112	114	115	24
6/15	110	111	112	24	115	116	117	24	110	111	112	24	116	118	120	24	114	114	116	24
6/16	112	113	114	24	116	117	117	24	109	110	111	24	114	115	119	24	115	116	117	24
6/17	112	112	113	24	116	117	117	24	107	107	109	24	110	111	112	24	110	110	111	24
6/18	110	111	111	24	115	116	119	24	107	107	108	24	111	112	114	24	109	111	112	24
6/19	111	112	112	24	115	116	117	24	111	113	115	24	114	115	116	24	112	114	115	24
6/20	111	112	113	24	116	117	118	24	111	112	114	24	116	118	121	22	114	116	117	24
6/21	112	112	113	24	117	117	118	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>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High					
	Avg	Avg		hr	Avg		Avg	hr		Avg	Avg		hr	Avg			Avg	hr	Avg	Avg
6/8	116	117	117	24	107	109	110	24	100	101	104	24	102	103	104	24	104	105	106	24
6/9	117	118	119	24	110	110	111	24	100	101	101	24	101	102	103	24	103	104	105	24
6/10	116	117	118	24	109	110	110	24	100	100	100	24	101	101	101	24	103	103	103	24
6/11	114	115	117	24	109	109	110	24	100	101	101	24	101	102	103	24	103	104	105	24
6/12	114	115	116	24	109	110	111	24	103	105	107	24	102	104	104	24	103	104	105	24
6/13	115	116	117	24	109	110	110	24	99	100	100	24	101	101	102	24	103	104	104	24
6/14	113	114	115	24	110	111	112	24	100	100	101	24	101	102	103	24	103	104	105	24
6/15	115	116	118	24	110	111	112	24	100	100	101	24	102	103	103	24	103	104	105	24
6/16	116	118	118	24	110	111	112	24	100	101	101	24	102	102	103	24	103	104	104	24
6/17	112	112	113	24	109	109	110	24	100	100	100	24	100	101	101	24	102	103	104	24
6/18	111	113	114	24	108	109	110	24	100	101	101	24	101	103	104	24	103	104	105	24
6/19	113	115	116	24	109	111	112	24	101	102	105	24	102	103	105	24	103	104	105	24
6/20	116	117	118	24	111	112	113	24	100	101	102	24	102	103	104	24	103	104	105	24
6/21	---	---	---	0	111	112	113	24	100	101	104	24	102	103	106	24	103	104	105	24

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

Date	<u>Clrwtr-Lewiston</u>			<u>Lower Granite</u>			<u>L. Granite Tlwr</u>			<u>Little Goose</u>			<u>L. Goose Tlwr</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High					
	Avg	Avg		hr	Avg		Avg	hr		Avg	Avg		hr	Avg			Avg	hr	Avg	Avg
6/8	103	104	106	24	100	100	101	24	111	112	114	24	108	108	109	24	110	111	114	24
6/9	102	103	104	24	100	100	100	24	110	110	111	24	109	110	112	24	108	109	109	24
6/10	101	101	102	24	101	101	101	24	113	114	115	24	110	111	111	24	109	109	110	24
6/11	101	103	104	24	102	102	103	24	113	114	114	24	110	110	110	24	109	109	110	24
6/12	102	104	105	24	102	102	102	24	111	112	114	24	109	109	110	24	110	111	112	24
6/13	101	102	103	24	102	102	102	24	110	111	112	24	108	109	109	24	110	110	110	24
6/14	102	104	105	24	102	102	102	24	113	114	115	24	109	109	109	24	110	111	112	24
6/15	102	104	105	24	104	104	105	24	114	115	115	24	109	110	110	24	110	110	111	24
6/16	102	103	103	24	103	103	103	24	113	114	116	24	109	110	110	24	109	109	110	24
6/17	100	101	102	24	102	103	103	24	112	113	113	24	109	109	109	24	109	109	110	24
6/18	102	104	106	24	103	103	103	24	115	115	116	24	109	109	110	24	109	109	109	24
6/19	103	105	106	24	103	103	103	24	115	116	116	24	109	110	110	24	109	109	110	24
6/20	103	105	106	24	102	102	102	24	113	114	115	24	110	110	110	24	109	110	111	24
6/21	103	105	106	24	101	101	102	24	111	112	112	24	109	109	110	24	108	109	109	24

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

Date	<u>Lower Mon.</u>			<u>L. Mon. Tlwr</u>			<u>Ice Harbor</u>			<u>Ice Harbor Tlwr</u>			<u>McNary-Oregon</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High					
	Avg	Avg		hr	Avg		Avg	hr		Avg	Avg		hr	Avg			Avg	hr	Avg	Avg
6/8	109	109	109	24	118	119	119	24	111	111	111	24	112	112	114	24	---	---	---	0
6/9	110	110	111	24	116	118	119	24	112	113	114	24	112	112	112	24	---	---	---	0
6/10	111	111	112	24	116	118	119	24	114	115	115	24	112	113	115	24	---	---	---	0
6/11	110	110	111	24	116	118	118	24	113	114	114	24	114	115	116	24	---	---	---	0
6/12	108	108	109	24	116	118	118	24	112	112	113	24	115	116	116	24	---	---	---	0
6/13	108	109	109	24	116	119	120	24	112	112	113	24	113	114	116	24	---	---	---	0
6/14	109	109	110	24	118	120	121	24	112	113	114	24	113	115	116	24	---	---	---	0
6/15	110	110	110	24	117	119	121	24	114	114	115	24	113	114	115	24	---	---	---	0
6/16	109	109	110	24	115	116	118	24	114	114	114	24	113	114	115	24	---	---	---	0
6/17	109	109	110	24	114	115	118	24	114	114	114	24	114	115	115	24	---	---	---	0
6/18	109	109	109	24	116	117	119	24	113	114	114	24	114	115	116	24	---	---	---	0
6/19	108	108	109	24	116	117	118	24	113	113	113	23	112	113	114	24	---	---	---	0
6/20	108	109	111	24	116	117	119	24	113	113	115	24	112	113	115	24	---	---	---	0
6/21	108	109	109	24	114	115	118	24	113	113	114	24	112	114	114	24	---	---	---	0

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>McNary-Wash</u>				<u>McNary Tlwr</u>				<u>John Day</u>				<u>John Day Tlwr</u>				<u>The Dalles</u>			
	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24h</u>		<u>12h</u>		#	<u>24h</u>		<u>12h</u>		#
	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	
6/8	108	108	109	24	115	115	116	24	105	105	106	13	111	117	119	24	109	112	116	24
6/9	108	109	109	24	115	115	116	24	105	105	105	1	111	118	120	24	109	112	115	24
6/10	109	110	110	24	115	115	116	24	---	---	---	0	111	117	119	24	108	111	113	24
6/11	108	109	109	24	115	115	115	24	105	105	105	1	111	117	118	24	107	110	113	24
6/12	108	108	109	24	117	118	119	24	106	106	107	12	111	116	118	24	108	112	115	24
6/13	109	110	110	24	115	115	116	24	106	106	106	24	111	116	118	24	109	111	113	24
6/14	110	110	113	24	115	116	117	24	106	106	107	24	111	117	119	24	109	112	114	24
6/15	111	111	112	24	115	115	118	24	107	107	108	24	111	117	118	24	109	112	114	24
6/16	112	112	112	24	114	115	115	24	108	108	109	24	111	116	117	24	108	110	111	24
6/17	109	109	110	24	116	118	118	24	107	108	108	24	111	115	116	24	107	109	110	24
6/18	108	109	110	24	114	115	115	24	106	107	107	24	111	116	118	24	108	110	111	24
6/19	110	111	112	24	115	116	118	23	107	108	109	24	112	116	117	24	109	113	116	24
6/20	111	112	114	24	116	117	118	24	108	108	109	24	112	116	118	24	110	113	115	24
6/21	111	111	112	24	115	117	119	24	106	107	107	24	112	117	118	24	109	111	112	24

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>				<u>Bonneville</u>				<u>Warrendale</u>				<u>CamasWashougal</u>				<u>Cascade Island</u>			
	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24h</u>		<u>12h</u>		#	<u>24h</u>		<u>12h</u>		#
	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>		<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	
6/8	115	117	118	24	109	109	110	24	---	---	---	0	111	112	113	24	118	118	119	24
6/9	115	117	118	24	111	112	113	24	---	---	---	0	111	112	112	24	118	119	119	24
6/10	114	115	116	24	111	112	114	24	---	---	---	0	111	112	113	24	118	118	119	24
6/11	114	115	117	24	109	111	112	24	---	---	---	0	111	112	113	24	118	118	119	24
6/12	114	116	118	24	110	110	111	24	---	---	---	0	111	113	114	24	118	118	118	24
6/13	114	116	117	24	111	112	112	24	---	---	---	0	111	112	113	24	117	118	118	24
6/14	115	117	118	24	110	110	111	24	---	---	---	0	112	114	114	24	117	118	118	24
6/15	115	117	118	24	111	111	112	24	---	---	---	0	112	113	114	24	117	118	118	24
6/16	113	115	116	24	111	112	113	24	---	---	---	0	111	112	113	24	117	117	118	24
6/17	112	113	114	24	108	109	109	24	---	---	---	0	111	112	113	24	116	117	117	24
6/18	113	114	115	24	107	108	109	24	---	---	---	0	112	113	113	24	117	117	118	24
6/19	114	116	118	24	110	111	112	24	---	---	---	0	112	114	115	24	117	118	118	24
6/20	115	116	117	24	112	113	113	24	---	---	---	0	114	115	116	24	117	117	118	24
6/21	115	115	117	24	110	112	112	24	---	---	---	0	114	116	117	24	115	116	117	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/currentsmppsubmitdata.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)	
06/08/2007	*	---	72	---	---	183	506	40	295	12,953	8,262	3,385
06/09/2007	*	---	39	---	---	128	92	29	467	---	8,637	2,176
06/10/2007	*	---	45	---	---	96	184	99	671	6,995	8,619	2,429
06/11/2007	*	---	29	---	---	0	287	63	669	---	7,786	2,535
06/12/2007		---	11	---	---	124	215	48	588	5,428	5,079	2,426
06/13/2007	*	---	19	---	---	133	210	0	282	---	5,148	2,269
06/14/2007		---	20	---	---	94	170	34	137	5,309	4,381	1,175
06/15/2007	*	---	19	---	---	193	82	0	9	---	3,296	1,385
06/16/2007		---	18	---	---	34	40	8	2	3,248	2,023	1,607
06/17/2007	*	---	16	---	---	55	215	12	7	---	2,900	740
06/18/2007		---	32	---	---	45	287	4	7	2,396	2,190	1,050
06/19/2007	*	---	19	---	---	59	122	3	2	---	975	978
06/20/2007	*	---	17	---	---	32	89	0	5	1,314	1,102	575
06/21/2007	*	---	---	---	---	9	72	2	3	---	1,096	462
06/22/2007		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>		<b>0</b>	<b>356</b>	<b>0</b>	<b>0</b>	<b>1,185</b>	<b>2,571</b>	<b>342</b>	<b>3,144</b>	<b>37,643</b>	<b>61,494</b>	<b>23,192</b>
<b># Days:</b>		<b>0</b>	<b>13</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>27</b>	<b>0</b>	<b>0</b>	<b>85</b>	<b>184</b>	<b>24</b>	<b>225</b>	<b>5,378</b>	<b>4,392</b>	<b>1,657</b>
<b>YTD</b>		<b>43,491</b>	<b>86,924</b>	<b>15,108</b>	<b>6,553</b>	<b>2,247,273</b>	<b>654,890</b>	<b>355,397</b>	<b>23,663</b>	<b>2,220,594</b>	<b>4,256,386</b>	<b>1,946,056</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)	
06/08/2007	*	---	2	---	---	20,874	20,030	3,273	109	15,139	10,675	9,189
06/09/2007	*	---	1	---	---	14,987	21,857	4,771	158	---	6,898	11,901
06/10/2007	*	---	3	---	---	7,505	56,248	8,909	39	20,281	10,456	13,675
06/11/2007	*	---	0	---	---	6,041	29,241	9,746	37	---	11,760	10,811
06/12/2007		---	1	---	---	5,714	13,566	5,171	48	30,608	13,508	13,389
06/13/2007	*	---	3	---	---	4,011	8,383	4,093	22	---	11,338	11,173
06/14/2007		---	1	---	---	4,653	7,072	2,330	34	51,809	10,678	9,717
06/15/2007	*	---	4	---	---	4,253	9,428	764	23	---	11,573	11,489
06/16/2007		---	2	---	---	3,636	4,670	652	32	55,637	11,270	14,331
06/17/2007	*	---	1	---	---	4,465	8,976	460	53	---	18,942	13,353
06/18/2007		---	0	---	---	5,232	12,424	294	48	38,027	12,855	12,971
06/19/2007	*	---	0	---	---	3,923	4,450	207	57	---	10,985	16,835
06/20/2007	*	---	1	---	---	4,377	3,821	470	187	50,928	9,410	16,664
06/21/2007	*	---	---	---	---	3,905	6,163	1,001	104	---	7,019	17,723
06/22/2007		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>		<b>0</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>93,576</b>	<b>206,329</b>	<b>42,141</b>	<b>951</b>	<b>262,429</b>	<b>157,367</b>	<b>183,221</b>
<b># Days:</b>		<b>0</b>	<b>13</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>1</b>	<b>0</b>	<b>0</b>	<b>6,684</b>	<b>14,738</b>	<b>3,010</b>	<b>68</b>	<b>37,490</b>	<b>11,241</b>	<b>13,087</b>
<b>YTD</b>		<b>0</b>	<b>81</b>	<b>90</b>	<b>255</b>	<b>222,746</b>	<b>261,776</b>	<b>55,527</b>	<b>3,299</b>	<b>321,622</b>	<b>249,987</b>	<b>2,401,514</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)
06/08/2007	*	---	0	---	---	153	546	53	868	7,429	1,484	2,354
06/09/2007	*	---	0	---	---	64	916	22	887	---	2,276	2,176
06/10/2007	*	---	0	---	---	32	72	91	559	2,104	2,713	3,068
06/11/2007	*	---	0	---	---	32	144	161	558	---	2,739	3,178
06/12/2007		---	0	---	---	62	179	57	386	1,684	1,780	4,419
06/13/2007	*	---	0	---	---	29	72	19	239	---	1,841	2,565
06/14/2007		---	0	---	---	62	143	0	125	1,769	1,553	2,174
06/15/2007	*	---	0	---	---	97	62	4	60	---	1,302	2,176
06/16/2007		---	0	---	---	26	164	0	59	1,354	889	2,171
06/17/2007	*	---	0	---	---	64	158	2	91	---	1,305	1,737
06/18/2007		---	0	---	---	72	14	0	57	932	1,379	1,553
06/19/2007	*	---	0	---	---	30	36	0	43	---	399	1,102
06/20/2007	*	---	0	---	---	0	57	0	52	466	636	783
06/21/2007	*	---	---	---	---	0	115	0	23	---	558	380
06/22/2007		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>723</b>	<b>2,678</b>	<b>409</b>	<b>4,007</b>	<b>15,738</b>	<b>20,854</b>	<b>29,836</b>
<b># Days:</b>		<b>0</b>	<b>13</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>52</b>	<b>191</b>	<b>29</b>	<b>286</b>	<b>2,248</b>	<b>1,490</b>	<b>2,131</b>
<b>YTD</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>50,636</b>	<b>54,769</b>	<b>17,915</b>	<b>63,703</b>	<b>98,372</b>	<b>344,060</b>	<b>625,281</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)
06/08/2007	*	---	59	---	---	2,502	4,791	285	303	2,550	2,041	934
06/09/2007	*	---	39	---	---	2,041	8,957	722	226	---	2,304	545
06/10/2007	*	---	93	---	---	1,379	6,297	1,376	18	1,432	2,100	726
06/11/2007	*	---	280	---	---	1,348	5,174	467	17	---	1,450	705
06/12/2007		---	94	---	---	1,378	4,389	306	37	1,694	1,571	998
06/13/2007	*	---	34	---	---	808	3,749	914	27	---	1,113	536
06/14/2007		---	22	---	---	1,218	3,414	468	19	2,445	1,789	1,206
06/15/2007	*	---	31	---	---	660	1,759	105	14	---	1,380	347
06/16/2007		---	24	---	---	256	2,285	123	14	1,523	1,010	1,259
06/17/2007	*	---	17	---	---	446	1,624	93	15	---	1,749	1,267
06/18/2007		---	24	---	---	281	1,076	39	13	1,108	1,504	1,142
06/19/2007	*	---	12	---	---	237	1,157	56	8	---	1,042	1,030
06/20/2007	*	---	10	---	---	193	1,422	69	14	594	680	477
06/21/2007	*	---	---	---	---	214	1,628	58	9	---	492	635
06/22/2007		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>		<b>0</b>	<b>739</b>	<b>0</b>	<b>0</b>	<b>12,961</b>	<b>47,722</b>	<b>5,081</b>	<b>734</b>	<b>11,346</b>	<b>20,225</b>	<b>11,807</b>
<b># Days:</b>		<b>0</b>	<b>13</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>57</b>	<b>0</b>	<b>0</b>	<b>926</b>	<b>3,409</b>	<b>363</b>	<b>52</b>	<b>1,621</b>	<b>1,445</b>	<b>843</b>
<b>YTD</b>		<b>3,734</b>	<b>45,870</b>	<b>1,940</b>	<b>7,792</b>	<b>1,857,908</b>	<b>1,837,703</b>	<b>738,307</b>	<b>18,370</b>	<b>373,176</b>	<b>953,947</b>	<b>259,795</b>

## Two-Week Summary of Passage Indices

COMBINED SOCKEYE												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
06/08/2007	*	---	0	---	---	0	72	13	15	8,271	14,018	1,708
06/09/2007	*	---	0	---	---	0	0	29	14	---	12,821	1,054
06/10/2007	*	---	0	---	---	32	0	8	8	5,556	10,939	1,820
06/11/2007	*	---	0	---	---	32	0	46	7	---	9,934	1,635
06/12/2007		---	0	---	---	46	172	10	13	2,694	7,696	1,961
06/13/2007	*	---	0	---	---	15	0	0	3	---	6,334	490
06/14/2007		---	0	---	---	0	0	0	9	2,190	3,798	1,236
06/15/2007	*	---	0	---	---	32	0	0	2	---	2,683	820
06/16/2007		---	0	---	---	0	0	6	3	1,946	1,421	347
06/17/2007	*	---	0	---	---	0	29	4	0	---	1,460	277
06/18/2007		---	0	---	---	9	57	2	0	1,271	1,095	365
06/19/2007	*	---	0	---	---	0	36	0	0	---	768	484
06/20/2007	*	---	0	---	---	11	29	5	3	382	645	222
06/21/2007	*	---	---	---	---	0	14	0	0	---	581	361
06/22/2007		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>177</b>	<b>409</b>	<b>123</b>	<b>77</b>	<b>22,310</b>	<b>74,193</b>	<b>12,780</b>
<b># Days:</b>		<b>0</b>	<b>13</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>13</b>	<b>29</b>	<b>9</b>	<b>6</b>	<b>3,187</b>	<b>5,300</b>	<b>913</b>
<b>YTD</b>		<b>27</b>	<b>0</b>	<b>0</b>	<b>413</b>	<b>20,672</b>	<b>17,028</b>	<b>5,727</b>	<b>16,399</b>	<b>512,951</b>	<b>786,861</b>	<b>170,049</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:

6/22/07 9:28 AM

		06/08/07 TO 06/22/07						
		Species						
Site	Data	CH0	CH1	CO	SO	ST	Grand Total	
<b>LGR</b>	Sum of NumberCollected	57,120	735	445	110	8,113	66,523	
	Sum of NumberBarged	41,806	735	442	110	7,133	50,226	
	Sum of NumberBypassed	14,584	0	0	0	946	15,530	
	Sum of Numbertrucked	0	0	0	0	0	0	
	Sum of SampleMorts	21	0	0	0	2	23	
	Sum of FacilityMorts	325	0	3	0	32	360	
	Sum of ResearchMorts	384	0	0	0	0	384	
	Sum of TotalProjectMorts	730	0	3	0	34	767	
<b>LGS</b>	Sum of NumberCollected	143,646	1,791	1,862	285	33,222	180,806	
	Sum of NumberBarged	142,117	1,777	1,861	285	33,155	179,195	
	Sum of NumberBypassed	1,473	0	0	0	0	1,473	
	Sum of Numbertrucked	0	0	0	0	0	0	
	Sum of SampleMorts	8	0	0	0	4	12	
	Sum of FacilityMorts	45	14	1	0	63	123	
	Sum of ResearchMorts	3	0	0	0	0	3	
	Sum of TotalProjectMorts	56	14	1	0	67	138	
<b>LMN</b>	Sum of NumberCollected	23,127	187	227	66	2,786	26,393	
	Sum of NumberBarged	20,640	181	227	66	1,982	23,096	
	Sum of NumberBypassed	2,446	3	0	0	797	3,246	
	Sum of Numbertrucked	0	0	0	0	0	0	
	Sum of SampleMorts	25	0	0	0	3	28	
	Sum of FacilityMorts	16	3	0	0	4	23	
	Sum of ResearchMorts	0	0	0	0	0	0	
	Sum of TotalProjectMorts	41	3	0	0	7	51	
<b>MCN</b>	Sum of NumberCollected	155,295	22,313	9,326	13,226	6,723	206,883	
	Sum of NumberBarged	0	0	0	0	0	0	
	Sum of NumberBypassed	155,266	22,288	9,326	13,218	6,710	206,808	
	Sum of Numbertrucked	0	0	0	0	0	0	
	Sum of SampleMorts	16	5	0	3	2	26	
	Sum of FacilityMorts	9	20	0	5	11	45	
	Sum of ResearchMorts	4	0	0	0	0	4	
	Sum of TotalProjectMorts	29	25	0	8	13	75	
<b>Total Sum of NumberCollected</b>		<b>379,188</b>	<b>25,026</b>	<b>11,860</b>	<b>13,687</b>	<b>50,844</b>	<b>480,605</b>	
<b>Total Sum of NumberBarged</b>		<b>204,563</b>	<b>2,693</b>	<b>2,530</b>	<b>461</b>	<b>42,270</b>	<b>252,517</b>	
<b>Total Sum of NumberBypassed</b>		<b>173,769</b>	<b>22,291</b>	<b>9,326</b>	<b>13,218</b>	<b>8,453</b>	<b>227,057</b>	
<b>Total Sum of Numbertrucked</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>Total Sum of SampleMorts</b>		<b>70</b>	<b>5</b>	<b>0</b>	<b>3</b>	<b>11</b>	<b>89</b>	
<b>Total Sum of FacilityMorts</b>		<b>395</b>	<b>37</b>	<b>4</b>	<b>5</b>	<b>110</b>	<b>551</b>	
<b>Total Sum of ResearchMorts</b>		<b>391</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>391</b>	
<b>Total Sum of TotalProjectMorts</b>		<b>856</b>	<b>42</b>	<b>4</b>	<b>8</b>	<b>121</b>	<b>1,031</b>	

### YTD Transportation Summary

Source: Fish Passage Center

Updated:

6/22/07 9:28 AM

TO: 06/22/07

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	140,601	1,578,032	38,250	15,920	1,367,265	3,140,068
	Sum of NumberBarged	119,567	1,124,979	36,799	15,540	1,185,044	2,481,929
	Sum of NumberBypassed	19,971	451,109	1,432	356	181,734	654,602
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	71	56	1	2	31	161
	Sum of FacilityMorts	488	1,008	18	22	456	1,992
	Sum of ResearchMorts	504	880	0	0	0	1,384
	Sum of TotalProjectMorts	1,063	1,944	19	24	487	3,537
<b>LGS</b>	Sum of NumberCollected	182,245	462,925	39,274	11,941	1,297,702	1,994,087
	Sum of NumberBarged	180,271	397,979	38,727	11,494	1,175,246	1,803,717
	Sum of NumberBypassed	1,888	64,720	541	433	121,828	189,410
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	9	31	3	2	20	65
	Sum of FacilityMorts	74	190	3	12	608	887
	Sum of ResearchMorts	3	7	0	0	0	10
	Sum of TotalProjectMorts	86	228	6	14	628	962
<b>LMN</b>	Sum of NumberCollected	31,427	279,095	13,473	4,151	573,082	901,228
	Sum of NumberBarged	28,880	270,536	13,450	4,126	561,348	878,340
	Sum of NumberBypassed	2,475	8,083	21	2	11,248	21,829
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	30	30	0	0	67	127
	Sum of FacilityMorts	42	393	2	23	436	896
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	72	423	2	23	503	1,023
<b>MCN</b>	Sum of NumberCollected	190,389	1,314,575	58,270	303,999	221,040	2,088,273
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	190,313	1,313,602	58,255	303,493	220,643	2,086,306
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	22	141	4	57	32	256
	Sum of FacilityMorts	51	819	11	447	365	1,693
	Sum of ResearchMorts	4	13	0	2	0	19
	Sum of TotalProjectMorts	77	973	15	506	397	1,968
Total Sum of NumberCollected		544,662	3,634,627	149,267	336,011	3,459,089	8,123,656
Total Sum of NumberBarged		328,718	1,793,494	88,976	31,160	2,921,638	5,163,986
Total Sum of NumberBypassed		214,647	1,837,514	60,249	304,284	535,453	2,952,147
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		132	258	8	61	150	609
Total Sum of FacilityMorts		655	2,410	34	504	1,865	5,468
Total Sum of ResearchMorts		511	900	0	2	0	1,413
Total Sum of TotalProjectMorts		1,298	3,568	42	567	2,015	7,490



**Cumulative Adult Passage at Mainstem Dams Through: 06/21**

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	06/21	66624	16606	96456	2908	156175	8234	20834	5474	43568	1396	29972	2807	0	0	0	0	0	0
TDA	06/21	52795	15406	61827	2176	108412	6003	15688	4271	32192	1048	22308	1808	0	0	0	0	0	0
JDA	06/21	43379	13663	50313	2093	90974	4767	12254	3051	21474	694	17764	1313	0	0	0	0	0	0
MCN	06/19	38852	12252	45887	2475	83968	5029	7955	1757	11879	563	11529	937	0	0	0	0	0	0
IHR	06/21	28047	7308	25434	875	56277	3172	3289	691	3792	148	5621	581	0	0	0	0	0	0
LMN	06/20	26963	6934	23589	548	53700	2904	2764	458	3154	91	4034	329	0	0	0	0	0	0
LGS	06/21	23953	7227	20836	733	51418	2974	1724	492	2138	99	3159	337	0	0	0	0	0	0
LGR	06/21	22481	8971	22530	973	51737	3293	1323	393	1242	84	2258	254	0	0	0	0	0	0
PRD	06/19	6623	479	8535	81	17371	512	1839	123	1559	6	2036	62	0	0	0	0	0	0
RIS	06/20	5572	2066	9643	483	14040	762	675	156	531	22	706	39	0	0	0	0	0	0
RRH	06/20	2424	920	5376	274	5343	306	40	4	59	5	93	4	0	0	0	0	0	0
WEL	06/20	1267	695	3115	192	2914	171	0	0	0	0	0	0	0	0	0	0	0	0
WFA	06/18	19881	200	30371	168	6139	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	9179	10569	21436	6427	6560	9915	1242
TDA	0	0	0	0	0	0	5605	7090	14100	2178	2067	3209	550
JDA	1	0	0	0	0	0	5571	5497	11001	3306	3349	5000	964
MCN	0	0	0	0	0	0	2167	2278	3475	2548	2622	2542	623
IHR	0	0	0	0	0	0	1	1	0	2688	2829	2104	641
LMN	0	0	0	0	0	0	2	1	0	2609	2966	2012	867
LGS	0	0	0	0	0	0	0	0	0	2420	2751	2215	772
LGR	0	0	0	0	0	0	0	0	0	10670	7643	6827	2414
PRD	0	1	0	0	0	0	464	192	964	57	81	40	0
RIS	0	0	0	0	0	0	121	60	275	61	65	58	27
RRH	0	0	0	0	0	0	58	37	135	191	154	124	86
WEL	0	0	0	0	0	0	21	8	30	55	40	23	36
WFA	2	0	0	0	0	0	0	0	0	13945	19490	3284	0

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

\*PRD is not posting wild steelhead numbers.

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

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

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

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

Page last updated on: 06/22/07

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
90