



# Fish Passage Center Weekly Report #07 - 23

August 10, 2007

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## Summary of Events:

Precipitation throughout the Columbia Basin has varied between 16% and 100% of average at individual sub-basins over July. Precipitation above The Dalles has been 48% of average over July. Over the entire water year, precipitation has varied between 73% and 109% of average at individual sub-basins.

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

Location	Water Year 2007 July 1-23		Water Year 2007 October 1, 2006 to July 23, 2007	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	0.72	55	22.73	104
SNAKE RIVER Above Ice Harbor	0.18	26	12.23	77
Columbia Above The Dalles	0.44	48	20.02	97
Kootenai	0.85	60	24.51	109
Clark Fork	0.19	22	14.91	99
Flathead	0.40	34	19.16	96
Pend Oreille/Spokane	0.33	33	25.46	90
Central Washington	0.12	45	7.53	91
SNAKE RIVER Plain	0.18	40	7.28	73
Salmon/Boise/Payette	0.13	23	14.17	78
Clearwater	0.17	16	25.81	93
SW Washington Cascades/Cowlitz	1.03	100	65.55	98
Willamette Valley	0.58	94	57.29	101

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

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

Location	May Final		July Final	
	% 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	64000
Libby Res. Inflow, MT (Jan-July)	108	6790	116	7310
Hungry Horse Res. Inflow, MT (Jan-July)	92	2050	88	1950
Lower Granite Res. Inflow (Apr- July)	66	14200	59	12700
Brownlee Res. Inflow (Apr-July)	48	3040	39	2460
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 1284.0 feet (8-9-07) and drafted 0.3 feet last week. Outflows at Grand Coulee ranged between 79.7 and 127.9 Kcfs last week. The summer end of August draft limit at Grand Coulee is 1278 feet.

Dworshak is currently at an elevation of 1556.5 feet (8-9-07) and drafted 7.4 feet last week. Outflows at Dworshak have been approximately 9.9 Kcfs.

The Libby Reservoir is currently at elevation 2448.7 feet (8-9-07) and drafted 2.3 feet last week. Outflows at Libby are currently at 17.3 Kcfs and will remain at this level through August.

Hungry Horse is currently at an elevation of 3549.6 feet (8-9-07) and drafted 2.0 feet last week. Outflows at Hungry Horse are currently at 4.4 Kcfs and will remain at this level through August.

The Brownlee Reservoir was at an elevation of 2056.6 feet on August 9th, 2007, drafting 0.7 feet last week. Outflows at Brownlee Dam have been 8.6 to 12.2 Kcfs over the last week.

The summer Biological Opinion flow objective at McNary Dam is 200 Kcfs this year. Flows at McNary Dam have averaged 174.7 Kcfs over the summer season to date and 149.9 Kcfs last week.

The summer Biological Opinion flow at Lower Granite Dam is 50 Kcfs this year. Flows at Lower Granite Dam have averaged 31.5 Kcfs over the summer season to date and 26.2 Kcfs last week.

**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	45Kcfs/Gas Cap Study

In general, the lower Snake River projects have been meeting the Court Order. The Court Order allows for the operation of one turbine unit at each of the Snake River projects. This minimum operation of one turbine unit and the low flow results in hours where the specified spill targets at each project cannot be achieved.

At Ice Harbor Dam spill was provided to achieve study conditions until July 21, when it was determined that no more radio tagged fish were in the area. The project reverted to operating at 45 Kcfs during daylight hours and gas cap spill during nighttime hours.

Court ordered summer spill at the lower Columbia projects began on July 1, 2007. 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, which the project has met over the past week. Summer spill at John Day Dam is 30% of instantaneous flow, an objective that the project has met over the past week. According to the court order, summer spill at The Dalles Dam is that same as was seen in the spring, 40% of instantaneous flow for 24 hours. The Dalles Dam has met this objective over the past week.

On June 20th the summer spill program was initiated at Bonneville Dam for research purposes, which was to be implemented until July 15. On July 16 the project reverted to the Court's Order of 75 Kcfs during daytime hours and gas cap spill at night. At the beginning of the past week, the gas cap spill level was reduced to 120 Kcfs since TDG at the Camas/Washougal monitor exceeded the 115% TDG on August 1 and 2, but gradually increased over the week.

Total dissolved gas waivers were not exceeded at the federal hydroprojects throughout the past week. Gas bubble trauma (GBT) monitoring continued this week at Little Goose, Lower Monumental, McNary, Rock Island and Bonneville dams. At Little Goose Dam very late passing steelhead juveniles continue to show up with minor signs of GBT fish, in spite of TDG measurements in the forebay that are less than the water quality standard.

**Smolt Monitoring:** Subyearling indices decreased this past week at all SMP sites. Steelhead smolts continue to show up at Lower Snake River dams this year well beyond the end of their active migration season. Particularly at Little Goose Dam these fish are occurring in numbers equal to or greater than subyearling Chinook, which is very unusual. Likely the very low flows have delayed these fish. What few PIT-tagged fish there are suggest that travel times between Lower Granite Dam and Little Goose Dam, for steelhead, at this time of year are very long, taking up to two months.

At Lower Granite Dam, there was a decrease in the average subyearling passage index, with the average this week at 200 per day compared to 400 per day last week. Indices of subyearling Chinook decreased at Little Goose and Lower Monumental dams this past week.

At Rock Island Dam, the subyearling index was down this past week, averaging 135 per day this week compared to 240 per day last week.

In the Lower Columbia, at McNary Dam, numbers of subyearling Chinook were relatively high again this week, with the index averaging 44,000 this week compared to 48,000 last week. The index calculated for passage on July 12, was over 500,000, representing the highest passage date this season for subyearlings at McNary. While at John Day and Bonneville dams, the weekly average subyearling index fell reflecting the decreasing passage of subyearling Chinook through the lower River. The index at John Day Dam averaged 6,500 compared to 13,000 last week. At Bonneville Dam the index averaged 7,400 this week compared to 18,500 per day last week.

#### **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 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. There were no releases of juvenile salmonids scheduled for the Mid-Columbia River Zone this week. Furthermore, there are no 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 into the Lower Columbia River Zone over the past week and are no scheduled releases over the next two weeks.

**Adult Fish Passage:** At Bonneville dam, daily counts for fall Chinook began on August 1st. As of August 9th, 3,063 fall Chinook adults and 687 jacks had passed Bonneville Dam. Daily counts for adult fall Chinook began August 4th at The Dalles Dam. Daily fall Chinook totals ranged from 152 to 237 at The Dalles Dam as of August 9th, with a total count of 1,164. A total of 32,795 summer Chinook have passed McNary Dam. As of August 7th, the 2007 McNary summer Chinook count was about 52.6 percent of the 2006 count and 60.9 percent of the 10-year average. The adult summer Chinook count total at Lower Granite Dam in the Snake River, was 7,504 through August 9th. The 2007 adult summer Chinook count at Rock Island Dam in the upper Columbia River was 26,947 with daily totals ranging from 61 to 102.

As of August 9th, 123,221 steelhead had passed Bonneville Dam which was 1.20 times greater than the 2006 count. The 2007 Bonneville steelhead count was about 85.1 percent of the 10-year average. The daily steelhead counts at The Dalles Dam ranged between 1,115 and 1,873 for the week with the cumulative count of 40,625. About 32.9 percent of the steelhead counted at Bonneville have passed The Dalles Dam. The majority of the 21,716 steelhead counted at McNary Dam have moved up into the Snake River with the cumulative count at Ice Harbor now at 9,533 for the season. The cumulative count at Priest Rapids was at 2,118 for the season.

As of August 9th, 2,574,179 adult Shad were counted at Bonneville Dam this season with daily counts ranging from 85 to 328. Adult sockeye counts at Bonneville were at 24,348 as of August 9th. This year's sockeye count is about 65.7 percent of the 2006 count and 40.0 percent of the 10-year average count. About 24,492 of the adult sockeye have been counted at Priest Rapids Dam. This year's count is about 91.7 percent of the 2006 adult sockeye count at Priest Rapids Dam and 42.1 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 55 sockeye have been counted at Ice Harbor Dam in the Snake River.

The coho salmon run at Bonneville is just beginning with 28 adults and 10 jacks counted to date. Four chum have been observed at Bonneville and 1 pink salmon was counted on 8/3/07.

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

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
07/27/07	132.5	0.2	135.8	0.0	139.7	9.0	143.0	12.7	144.7	28.4	156.8	14.2	154.5	21.4
07/28/07	111.8	0.2	110.8	0.0	108.0	7.6	113.0	11.3	115.5	24.1	130.8	9.5	127.4	23.0
07/29/07	111.3	0.2	110.3	0.0	112.2	7.7	113.1	10.3	113.4	22.7	107.3	9.4	154.6	24.0
07/30/07	142.2	0.2	136.4	0.0	138.6	10.3	133.1	12.6	133.3	28.6	143.7	12.8	140.0	22.3
07/31/07	137.6	0.2	146.6	0.0	155.0	9.3	153.4	11.5	153.9	27.3	147.8	10.4	146.8	22.8
08/01/07	125.0	0.2	123.4	0.0	140.4	8.6	143.2	11.6	144.7	29.4	153.4	10.4	156.4	20.6
08/02/07	114.1	0.2	120.6	0.0	114.3	8.3	106.8	11.4	108.3	26.6	139.0	9.2	141.4	19.2
08/03/07	131.4	0.2	127.9	0.0	130.9	8.5	127.7	10.3	127.8	25.2	115.6	5.4	108.3	21.0
08/04/07	108.4	0.1	109.9	0.0	115.5	8.2	118.8	9.8	122.1	21.9	128.6	1.6	125.1	21.9
08/05/07	79.7	0.1	86.6	0.0	86.7	6.4	82.3	10.0	83.8	21.8	89.8	1.4	87.6	21.4
08/06/07	116.4	0.2	106.2	0.0	107.9	7.2	107.1	11.8	110.0	27.4	112.7	1.5	108.1	21.8
08/07/07	117.5	0.2	122.8	0.0	123.4	8.2	119.7	11.3	119.4	27.2	113.8	1.8	107.1	22.8
08/08/07	127.9	0.1	122.5	0.0	125.9	8.1	122.3	10.5	120.8	24.1	131.7	1.8	133.4	21.6
08/09/07	123.9	0.1	135.2	0.0	140.4	8.9	133.7	10.1	132.7	24.0	133.3	4.2	128.2	23.6

**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
07/27/07	9.8	0.0	9.3	9.8	29.3	17.0	29.4	8.8	29.4	13.6	29.6	19.5
07/28/07	9.8	0.0	10.4	11.2	28.4	15.9	29.5	8.8	28.3	14.7	28.4	18.0
07/29/07	9.9	0.0	10.2	11.9	27.5	14.7	27.8	8.4	25.8	13.6	25.4	15.2
07/30/07	9.9	0.0	8.9	12.0	29.4	16.7	28.1	8.4	29.4	16.9	29.3	19.2
07/31/07	9.9	0.0	9.6	13.4	28.5	15.8	27.1	8.0	25.5	13.3	25.8	15.9
08/01/07	9.9	0.0	9.8	10.4	30.5	17.9	30.8	9.1	28.5	18.9	28.1	18.0
08/02/07	9.9	0.0	9.8	10.4	27.4	14.9	27.9	8.4	29.8	16.6	30.5	20.6
08/03/07	9.9	0.0	8.1	10.2	27.0	14.5	24.7	7.4	24.4	12.2	25.7	15.6
08/04/07	9.9	0.0	10.0	10.4	26.1	13.5	26.0	7.8	25.4	13.1	25.2	15.0
08/05/07	10.0	0.0	9.3	10.6	26.0	13.3	26.3	7.9	25.2	13.0	25.0	14.7
08/06/07	9.9	0.0	10.4	10.1	26.9	14.6	25.4	7.6	24.4	11.9	25.4	15.1
08/07/07	10.0	0.0	9.9	10.9	26.0	13.4	24.8	7.4	24.0	11.8	21.9	12.0
08/08/07	10.0	0.0	10.4	10.3	25.8	13.3	25.0	7.4	23.7	11.4	24.0	13.7
08/09/07	10.0	0.0	---	---	25.9	13.3	27.5	8.1	26.5	14.3	26.2	16.1

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

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
07/27/07	192.0	114.6	179.8	54.1	171.3	68.5	182.2	95.4	5.2	70.1
07/28/07	178.2	79.7	162.5	48.6	153.7	61.2	171.5	94.9	0.0	65.1
07/29/07	150.6	60.4	140.0	42.4	135.3	54.1	151.5	95.3	1.3	43.4
07/30/07	172.1	96.2	174.5	51.9	165.0	65.8	169.6	95.0	0.0	63.0
07/31/07	175.7	105.3	154.1	47.2	150.3	59.8	173.3	96.6	0.0	65.2
08/01/07	189.1	85.3	174.8	52.1	169.6	67.7	176.6	98.4	0.0	66.7
08/02/07	197.1	79.0	187.5	56.2	182.1	73.0	194.7	100.4	7.0	75.9
08/03/07	159.2	87.9	144.1	43.4	137.9	55.1	167.3	95.2	0.0	60.6
08/04/07	143.5	86.2	136.8	41.1	136.6	54.4	135.5	88.7	0.0	35.3
08/05/07	143.5	64.2	136.9	41.2	129.5	52.1	142.4	92.8	0.0	38.1
08/06/07	146.6	58.6	125.1	37.6	123.6	49.7	140.5	93.0	0.0	36.1
08/07/07	142.4	80.7	135.9	40.6	129.7	52.2	137.4	91.0	0.0	34.7
08/08/07	154.7	92.7	145.4	43.6	145.6	57.9	151.0	93.4	0.4	45.7
08/09/07	159.4	70.3	147.4	44.5	144.3	57.8	152.8	97.7	0.0	43.6

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

Site	Date	Species	Number of Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank			
								Rank 1	Rank 2	Rank 3	Rank 4
<b>Little Goose Dam</b>											
	07/31/07	Chinook + Steelhead	64	6	6	9.37%	0.00%	5	1	0	0
	08/07/07	Chinook + Steelhead	54	7	7	12.96%	0.00%	7	0	0	0
<b>Lower Monumental Dam</b>											
	08/05/07	Chinook + Steelhead	8	0	0	0.00%	0.00%	0	0	0	0
<b>McNary Dam</b>											
	08/06/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Bonneville Dam</b>											
	08/04/07	Chinook + Steelhead	38	0	0	0.00%	0.00%	0	0	0	0
	08/06/07	Chinook + Steelhead	88	0	0	0.00%	0.00%	0	0	0	0
	08/08/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
<b>Rock Island Dam</b>											
	07/30/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/02/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/06/07	Chinook + Steelhead	95	0	0	0.00%	0.00%	0	0	0	0



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

**Total Dissolved Gas Saturation Data at Upper Columbia River Sites**

	<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>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>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
7/27	108	108	109	24	111	111	112	24	112	113	113	24	109	110	112	24	110	110	111	24
7/28	108	108	108	24	111	111	112	24	112	112	113	24	109	110	112	24	110	110	111	24
7/29	108	108	108	24	112	112	113	24	112	112	112	23	109	110	112	24	110	110	111	24
7/30	108	108	108	24	111	112	113	24	111	112	112	22	109	110	111	24	109	110	110	24
7/31	108	108	108	24	111	111	112	23	111	111	111	24	109	109	111	23	109	109	109	24
8/1	107	108	108	24	110	111	111	24	111	111	112	24	108	109	110	24	109	109	109	24
8/2	108	108	109	24	110	111	111	24	111	111	112	24	108	109	111	24	109	110	110	24
8/3	108	108	108	24	111	111	112	24	111	111	111	24	108	109	110	24	109	110	110	24
8/4	108	108	108	24	110	111	112	24	110	111	111	24	108	109	110	24	109	109	109	24
8/5	107	108	108	24	110	110	111	24	110	111	111	24	108	110	111	24	109	109	110	24
8/6	107	107	108	24	110	110	110	24	111	111	111	24	109	110	112	24	109	110	110	24
8/7	107	107	107	24	110	110	111	24	110	111	111	24	109	109	112	24	109	110	110	24
8/8	106	106	107	24	110	110	111	24	110	110	110	24	108	109	111	24	108	109	109	24
8/9	106	107	107	24	110	111	113	24	109	109	110	24	108	108	110	24	107	108	108	24

**Total Dissolved Gas Saturation Data at Mid Columbia River Sites**

<u>Date</u>	<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>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>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
7/27	110	110	111	24	110	110	111	24	113	114	114	24	111	111	112	24	112	112	113	24
7/28	110	110	111	24	110	110	111	24	113	114	115	24	111	111	112	24	111	112	112	24
7/29	111	111	112	24	109	110	111	24	113	113	116	24	111	111	111	24	111	112	112	24
7/30	110	110	111	24	109	110	111	24	111	112	113	24	110	111	111	24	111	111	112	24
7/31	109	109	110	24	110	110	111	24	111	111	112	24	110	110	111	24	110	111	111	24
8/1	109	109	110	24	110	110	111	24	111	112	113	24	110	111	111	24	111	111	112	24
8/2	109	110	110	24	110	111	112	24	111	113	113	24	110	111	111	24	111	111	112	24
8/3	109	109	110	24	109	110	110	24	110	111	112	24	110	110	111	24	110	111	111	24
8/4	109	109	110	24	109	110	111	24	111	112	112	24	109	109	110	24	110	110	110	24
8/5	109	110	111	24	110	112	113	24	111	112	113	24	110	110	111	24	110	111	111	24
8/6	109	110	111	24	110	111	111	24	111	112	113	24	110	111	111	24	111	111	112	24
8/7	110	110	111	24	109	110	111	24	111	111	112	24	110	110	111	24	111	111	111	24
8/8	108	109	109	24	109	109	110	24	110	111	111	24	109	109	110	24	110	110	110	24
8/9	107	107	108	24	108	109	110	24	110	111	111	24	108	109	109	24	109	109	110	24

**Total Dissolved Gas Saturation at Mid Columbia River Sites**

<u>Date</u>	<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>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>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
7/27	111	112	112	24	117	117	118	24	108	109	113	24	113	115	117	24	113	114	117	24
7/28	110	111	111	24	116	117	118	24	108	109	111	24	113	115	116	24	112	114	115	24
7/29	110	110	111	24	116	116	119	24	108	108	109	24	112	114	118	18	111	111	113	24
7/30	110	111	111	24	116	116	118	24	107	107	110	24	111	112	114	16	109	111	113	24
7/31	109	109	110	24	116	116	116	24	107	109	111	24	112	114	116	24	110	111	113	24
8/1	109	109	109	24	116	116	116	24	107	110	113	24	113	115	117	24	112	114	116	24
8/2	111	112	113	24	116	117	119	24	105	105	109	10	114	115	116	24	114	115	118	24
8/3	111	111	112	24	116	116	118	24	---	---	---	0	112	114	119	24	110	111	113	24
8/4	110	111	112	24	114	115	118	24	---	---	---	0	110	110	111	24	108	109	111	24
8/5	110	111	112	24	116	117	119	24	---	---	---	0	110	111	111	24	109	110	110	24
8/6	111	112	112	24	117	118	120	24	108	110	111	18	111	111	111	24	110	110	111	24
8/7	111	111	111	24	116	117	119	24	108	108	109	24	109	109	110	24	108	109	110	24
8/8	110	111	111	24	116	116	119	24	---	---	---	0	---	---	---	0	---	---	---	0
8/9	109	110	111	24	114	115	117	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>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#		
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High		Avg	Avg
7/27	115	116	117	24	111	112	113	24	99	100	100	24	---	---	---	0	102	103	105	24
7/28	114	115	116	24	110	111	112	24	99	100	100	24	---	---	---	0	102	103	105	24
7/29	113	114	114	24	110	111	112	24	99	100	100	24	102	103	105	24	101	103	104	24
7/30	112	113	115	24	109	109	110	24	99	100	100	24	102	103	104	24	101	103	104	24
7/31	113	114	115	24	108	109	110	24	99	99	100	24	101	103	104	24	101	103	104	24
8/1	114	115	116	24	109	110	111	24	99	100	100	24	101	103	104	24	102	104	105	24
8/2	115	116	117	24	110	111	112	24	100	101	103	24	102	103	104	24	102	103	105	24
8/3	112	113	113	24	110	111	112	24	100	100	100	24	102	103	104	24	102	103	105	24
8/4	111	112	113	24	108	109	109	24	100	100	100	24	101	103	104	24	101	103	104	24
8/5	111	112	112	24	108	108	109	24	100	100	100	24	101	102	104	24	101	103	104	24
8/6	111	112	112	24	108	109	110	24	100	100	101	24	101	102	103	24	101	102	103	24
8/7	111	112	112	24	106	107	108	24	100	100	101	24	102	103	104	24	101	103	104	24
8/8	---	---	---	0	106	107	108	24	100	100	100	24	101	102	104	24	101	103	104	24
8/9	---	---	---	0	106	107	107	24	100	100	101	24	101	103	104	24	101	103	104	24

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

Date	<u>Clrwtr-Lewiston</u>			<u>Lower Granite</u>			<u>L. Granite Tlwr</u>			<u>Little Goose</u>			<u>L. Goose Tlwr</u>							
	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#		
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High		Avg	Avg
7/27	104	106	108	24	102	102	102	24	112	112	112	24	108	108	109	24	108	108	109	24
7/28	104	106	108	24	102	102	103	24	111	112	112	24	108	108	108	24	108	108	109	24
7/29	104	106	108	24	102	102	102	24	111	111	112	24	107	107	108	24	107	108	108	24
7/30	104	106	107	24	102	102	102	24	111	112	112	24	107	107	107	24	108	108	109	24
7/31	103	106	107	24	102	102	102	24	112	112	112	24	106	106	107	24	107	108	109	24
8/1	103	106	107	24	102	103	103	24	112	112	113	24	106	107	107	24	107	108	108	24
8/2	104	106	107	24	103	103	103	24	111	112	112	24	107	107	107	24	107	108	108	24
8/3	104	106	107	24	102	102	102	24	111	111	112	24	107	107	107	24	107	107	107	24
8/4	103	106	107	24	102	102	103	24	110	111	111	24	106	106	107	24	107	108	108	24
8/5	103	105	107	24	102	103	103	24	111	111	112	24	106	106	106	24	107	108	108	24
8/6	103	105	106	24	103	103	104	24	112	112	112	24	106	107	107	24	107	108	108	24
8/7	103	105	107	24	103	103	103	24	111	111	112	24	107	107	107	24	107	107	107	24
8/8	103	105	107	24	102	102	102	24	110	110	111	24	105	105	106	24	106	107	107	24
8/9	103	105	107	24	101	102	102	24	110	111	111	24	104	105	105	24	107	107	108	24

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

Date	<u>Lower Mon.</u>			<u>L. Mon. Tlwr</u>			<u>Ice Harbor</u>			<u>Ice Harbor Tlwr</u>			<u>McNary-Oregon</u>							
	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#		
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High		Avg	Avg
7/27	106	106	106	24	112	113	114	24	110	110	111	24	111	112	114	24	---	---	---	0
7/28	106	106	106	24	113	114	115	24	110	110	110	24	112	113	115	24	---	---	---	0
7/29	106	106	107	24	113	114	115	24	110	110	111	24	111	111	112	24	---	---	---	0
7/30	106	106	106	24	113	114	114	24	110	110	110	24	112	113	114	24	---	---	---	0
7/31	105	106	106	24	112	113	113	24	109	110	110	24	111	112	112	24	---	---	---	0
8/1	105	105	105	24	116	117	118	24	109	109	109	24	111	112	114	24	---	---	---	0
8/2	105	105	105	24	114	114	116	24	109	109	110	24	113	114	114	24	---	---	---	0
8/3	105	105	105	24	112	113	114	24	109	110	110	24	111	112	112	24	---	---	---	0
8/4	105	106	106	24	112	113	114	24	110	110	111	24	110	111	112	24	---	---	---	0
8/5	106	106	106	24	113	114	114	24	111	111	112	24	111	111	112	24	---	---	---	0
8/6	106	106	106	24	113	113	114	24	112	112	112	24	111	113	114	24	---	---	---	0
8/7	104	105	105	24	112	112	113	24	110	111	111	24	110	111	111	24	---	---	---	0
8/8	104	104	104	24	112	112	113	24	108	108	109	24	110	111	112	24	---	---	---	0
8/9	104	104	105	24	112	113	114	24	107	108	108	24	110	111	112	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	McNary-Wash			McNary Tlwr			John Day			John Day Tlwr			The Dalles			#				
	24 h	12 h		24 h	12 h		24h	12h		24h	12h		24h	12h						
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	AVG	High					
7/27	110	110	111	24	115	117	118	24	105	106	106	24	116	117	119	24	106	106	107	24
7/28	110	110	111	24	117	119	119	24	105	106	106	24	115	117	118	24	106	106	107	24
7/29	109	109	110	24	119	119	119	24	105	105	105	24	114	114	115	24	106	106	106	24
7/30	109	109	110	24	116	117	118	24	104	104	104	24	115	117	119	24	104	104	105	24
7/31	109	109	110	24	115	116	116	24	104	104	104	24	115	118	120	24	106	106	107	24
8/1	108	109	111	24	117	118	118	24	104	105	106	21	116	117	119	21	108	108	109	24
8/2	109	110	111	24	117	118	118	24	105	105	106	24	116	117	118	24	108	108	109	24
8/3	109	109	109	24	116	117	117	24	104	104	104	24	114	115	115	24	106	106	107	24
8/4	108	109	109	24	114	116	117	24	104	104	105	24	114	115	115	24	105	105	105	24
8/5	109	109	110	24	117	118	118	24	105	105	106	24	114	115	116	24	106	106	107	24
8/6	109	109	110	24	117	118	118	24	105	105	106	24	113	114	115	24	106	106	106	24
8/7	107	107	107	24	113	114	116	24	104	104	105	24	113	115	117	24	104	104	105	24
8/8	105	105	106	24	113	114	116	24	103	103	103	24	114	115	116	24	104	104	104	24
8/9	103	104	104	24	115	117	117	24	102	102	102	24	114	115	117	24	104	105	105	24

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	The Dalles Dnst			Bonneville			Warrendale			Camas\Washougal			Cascade Island			#				
	24 h	12 h		24 h	12 h		24h	12h		24h	12h		24h	12h						
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	AVG	High					
7/27	113	113	114	24	105	105	106	24	---	---	---	0	111	114	116	24	116	118	120	24
7/28	113	113	114	24	106	106	106	24	---	---	---	0	110	113	114	24	116	117	120	24
7/29	112	112	113	24	105	106	106	24	---	---	---	0	110	112	113	24	115	117	120	24
7/30	112	113	113	24	104	104	105	24	---	---	---	0	111	114	116	24	116	117	120	24
7/31	113	114	114	24	104	105	105	24	---	---	---	0	111	114	117	24	116	118	121	24
8/1	114	115	116	24	107	108	109	24	---	---	---	0	112	116	118	24	116	118	120	24
8/2	114	115	116	24	109	110	111	24	---	---	---	0	113	115	118	24	116	118	120	24
8/3	113	113	114	24	107	107	108	24	---	---	---	0	111	113	115	24	116	117	120	24
8/4	112	112	113	24	105	105	106	24	---	---	---	0	110	112	114	24	115	117	119	24
8/5	113	113	114	24	104	105	105	24	---	---	---	0	112	113	115	21	116	117	119	24
8/6	113	113	113	24	104	104	104	24	---	---	---	0	112	113	114	21	116	117	120	24
8/7	111	112	112	24	103	103	103	24	---	---	---	0	112	113	114	24	115	117	120	24
8/8	111	112	112	24	103	103	103	24	---	---	---	0	113	114	116	24	116	117	121	24
8/9	111	111	112	24	104	104	104	24	---	---	---	0	112	113	115	24	116	118	121	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>												
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)	
07/27/2007	*	---	---	---	---	0	0	0	0	---	0	---
07/28/2007	*	---	---	---	---	0	0	0	3	0	0	0
07/29/2007	*	---	---	---	---	0	0	0	0	---	0	---
07/30/2007	*	---	---	---	---	0	0	5	0	0	0	0
07/31/2007	*	---	---	---	---	0	0	0	2	---	0	---
08/01/2007	*	---	---	---	---	0	0	0	0	0	0	0
08/02/2007	*	---	---	---	---	0	0	0	0	---	0	---
08/03/2007	*	---	---	---	---	0	0	0	0	0	0	0
08/04/2007	*	---	---	---	---	0	0	0	0	---	0	---
08/05/2007	*	---	---	---	---	0	3	0	0	0	0	0
08/06/2007	*	---	---	---	---	0	0	0	0	---	0	---
08/07/2007		---	---	---	---	0	1	0	0	0	0	0
08/08/2007	*	---	---	---	---	0	0	0	0	---	0	---
08/09/2007	*	---	---	---	---	0	0	0	0	0	0	0
08/10/2007	*	---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b># Days:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>7</b>	<b>14</b>	<b>7</b>
<b>Average:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>YTD</b>		<b>43,491</b>	<b>86,299</b>	<b>15,108</b>	<b>6,553</b>	<b>2,247,460</b>	<b>655,132</b>	<b>355,684</b>	<b>23,766</b>	<b>2,224,840</b>	<b>4,262,556</b>	<b>1,949,995</b>

<b>COMBINED SUBYEARLING CHINOOK</b>												
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)	
07/27/2007	*	---	---	---	---	500	641	73	361	---	39,474	---
07/28/2007	*	---	---	---	---	716	506	103	326	75,471	0	15,333
07/29/2007	*	---	---	---	---	275	376	68	193	---	0	---
07/30/2007	*	---	---	---	---	348	605	53	181	39,269	0	7,252
07/31/2007	*	---	---	---	---	222	850	23	198	---	51,558	---
08/01/2007	*	---	---	---	---	306	429	22	210	29,736	0	32,911
08/02/2007	*	---	---	---	---	261	522	64	228	---	0	---
08/03/2007	*	---	---	---	---	174	265	39	255	83,404	27,842	16,754
08/04/2007	*	---	---	---	---	189	284	50	112	---	0	---
08/05/2007	*	---	---	---	---	230	222	17	138	18,713	0	4,146
08/06/2007	*	---	---	---	---	278	274	47	145	---	0	---
08/07/2007		---	---	---	---	214	351	8	105	65,127	17,525	3,438
08/08/2007	*	---	---	---	---	199	236	20	126	---	0	---
08/09/2007	*	---	---	---	---	179	134	4	65	9,649	0	5,311
08/10/2007	*	---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,091</b>	<b>5,695</b>	<b>591</b>	<b>2,643</b>	<b>321,369</b>	<b>136,399</b>	<b>85,145</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>7</b>
<b>Average:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>292</b>	<b>407</b>	<b>42</b>	<b>189</b>	<b>45,910</b>	<b>9,743</b>	<b>12,164</b>
<b>YTD</b>		<b>0</b>	<b>83</b>	<b>90</b>	<b>255</b>	<b>325,237</b>	<b>435,277</b>	<b>78,002</b>	<b>14,546</b>	<b>4,579,947</b>	<b>2,963,159</b>	<b>4,020,991</b>

## Two-Week Summary of Passage Indices

<b>COMBINED COHO</b>											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
07/27/2007	*	---	---	---	0	9	0	1	---	0	---
07/28/2007	*	---	---	---	0	6	0	0	0	0	0
07/29/2007	*	---	---	---	0	12	0	1	---	0	---
07/30/2007	*	---	---	---	2	19	5	0	0	0	0
07/31/2007	*	---	---	---	0	6	0	2	---	0	---
08/01/2007	*	---	---	---	2	9	5	0	0	0	0
08/02/2007	*	---	---	---	2	11	0	1	---	0	---
08/03/2007	*	---	---	---	0	9	0	0	0	0	0
08/04/2007	*	---	---	---	2	0	8	1	---	0	---
08/05/2007	*	---	---	---	4	9	0	0	0	0	0
08/06/2007	*	---	---	---	0	6	0	0	---	0	---
08/07/2007		---	---	---	0	1	0	0	0	0	0
08/08/2007	*	---	---	---	0	7	0	0	---	0	---
08/09/2007	*	---	---	---	0	9	0	0	0	0	0
08/10/2007	*	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	0	0	0	0	12	113	18	6	0	0	0
<b># Days:</b>	0	0	0	0	14	14	14	14	7	14	7
<b>Average:</b>	0	0	0	0	1	8	1	0	0	0	0
<b>YTD</b>	0	0	0	57	50,705	55,786	18,030	64,419	99,127	347,366	628,424

<b>COMBINED STEELHEAD</b>											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
07/27/2007	*	---	---	---	7	2,056	27	0	---	0	---
07/28/2007	*	---	---	---	5	1,294	33	0	0	0	0
07/29/2007	*	---	---	---	2	556	32	0	---	0	---
07/30/2007	*	---	---	---	7	351	35	0	0	0	0
07/31/2007	*	---	---	---	0	196	23	0	---	0	---
08/01/2007	*	---	---	---	5	258	38	2	0	0	0
08/02/2007	*	---	---	---	5	605	69	0	---	0	---
08/03/2007	*	---	---	---	4	574	48	3	0	820	0
08/04/2007	*	---	---	---	0	522	12	0	---	0	---
08/05/2007	*	---	---	---	6	162	17	0	65	0	16
08/06/2007	*	---	---	---	0	133	43	1	---	0	---
08/07/2007		---	---	---	0	377	12	2	0	0	0
08/08/2007	*	---	---	---	0	288	16	1	---	0	---
08/09/2007	*	---	---	---	2	138	4	1	0	0	0
08/10/2007	*	---	---	---	---	---	---	---	---	---	---
<hr/>											
<b>Total:</b>	0	0	0	0	43	7,510	409	10	65	820	16
<b># Days:</b>	0	0	0	0	14	14	14	14	7	14	7
<b>Average:</b>	0	0	0	0	3	536	29	1	9	59	2
<b>YTD</b>	3,734	46,002	1,940	7,792	1,859,284	1,869,836	740,676	18,545	376,482	961,232	267,125

## Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE											
	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)	
07/27/2007	*	---	---	---	0	0	0	0	---	0	---	
07/28/2007	*	---	---	---	0	0	0	0	0	0	0	
07/29/2007	*	---	---	---	0	0	0	0	---	0	---	
07/30/2007	*	---	---	---	0	0	0	0	0	0	0	
07/31/2007	*	---	---	---	0	0	0	0	---	0	---	
08/01/2007	*	---	---	---	0	0	0	2	0	0	0	
08/02/2007	*	---	---	---	0	0	0	0	---	0	---	
08/03/2007	*	---	---	---	0	0	0	0	0	0	0	
08/04/2007	*	---	---	---	0	0	0	0	---	0	---	
08/05/2007	*	---	---	---	0	0	0	0	0	0	0	
08/06/2007	*	---	---	---	0	0	0	0	---	0	---	
08/07/2007		---	---	---	0	0	0	0	0	0	0	
08/08/2007	*	---	---	---	0	0	0	0	---	0	---	
08/09/2007	*	---	---	---	0	0	0	0	0	0	0	
08/10/2007	*	---	---	---	---	---	---	---	---	---	---	
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b># Days:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>7</b>	<b>14</b>	
<b>Average:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>YTD</b>		<b>27</b>	<b>0</b>	<b>0</b>	<b>413</b>	<b>20,682</b>	<b>17,121</b>	<b>5,735</b>	<b>16,427</b>	<b>513,701</b>	<b>790,330</b>	<b>171,307</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:

8/10/07 10:01 AM

		07/27/07 TO 08/10/07					
		Species					
Site	Data	CH0	CH1	CO	ST	Grand Total	
<b>LGR</b>	Sum of NumberCollected	1,806			6	19	1,831
	Sum of NumberBarged	1,863			6	19	1,888
	Sum of NumberBypassed	1			0	0	1
	Sum of Numbertrucked	0			0	0	0
	Sum of SampleMorts	29			0	0	29
	Sum of FacilityMorts	5			0	0	5
	Sum of ResearchMorts	0			0	0	0
	Sum of TotalProjectMorts	34			0	0	34
<b>LGS</b>	Sum of NumberCollected	3,953		3	77	5,208	9,241
	Sum of NumberBarged	3,531		2	85	5,410	9,028
	Sum of NumberBypassed	721		0	0	0	721
	Sum of Numbertrucked	0		0	0	0	0
	Sum of SampleMorts	23		0	3	9	35
	Sum of FacilityMorts	16		1	0	25	42
	Sum of ResearchMorts	6		0	0	0	6
	Sum of TotalProjectMorts	45		1	3	34	83
<b>LMN</b>	Sum of NumberCollected	271		2	8	181	462
	Sum of NumberBarged	276		2	8	178	464
	Sum of NumberBypassed	3		0	0	13	16
	Sum of Numbertrucked	0		0	0	0	0
	Sum of SampleMorts	1		0	0	1	2
	Sum of FacilityMorts	4		0	0	1	5
	Sum of ResearchMorts	0		0	0	0	0
	Sum of TotalProjectMorts	5		0	0	2	7
<b>MCN</b>	Sum of NumberCollected	161,490				25	161,515
	Sum of NumberBarged	0				0	0
	Sum of NumberBypassed	160,996				25	161,021
	Sum of Numbertrucked	0				0	0
	Sum of SampleMorts	337				0	337
	Sum of FacilityMorts	157				0	157
	Sum of ResearchMorts	0				0	0
	Sum of TotalProjectMorts	494				0	494
Total Sum of NumberCollected		167,520		5	91	5,433	173,049
Total Sum of NumberBarged		5,670		4	99	5,607	11,380
Total Sum of NumberBypassed		161,721		0	0	38	161,759
Total Sum of Numbertrucked		0		0	0	0	0
Total Sum of SampleMorts		390		0	3	10	403
Total Sum of FacilityMorts		182		1	0	26	209
Total Sum of ResearchMorts		6		0	0	0	6
Total Sum of TotalProjectMorts		578		1	3	36	618

**YTD Transportation Summary**

Source: Fish Passage Center

Updated:

8/10/07 10:01 AM

TO: **08/10/07**

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	188,952	1,578,085	38,273	15,920	1,367,773	3,189,003
	Sum of NumberBarged	145,936	1,125,031	36,821	15,540	1,185,544	2,508,872
	Sum of NumberBypassed	40,108	451,109	1,432	356	181,734	674,739
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	248	57	1	2	32	340
	Sum of FacilityMorts	1,350	1,008	19	22	462	2,861
	Sum of ResearchMorts	1,227	880	0	0	0	2,107
	Sum of TotalProjectMorts	2,825	1,945	20	24	494	5,308
<b>LGS</b>	Sum of NumberCollected	302,600	463,095	39,980	12,005	1,320,005	2,137,685
	Sum of NumberBarged	297,544	398,141	39,408	11,553	1,197,287	1,943,933
	Sum of NumberBypassed	4,590	64,720	541	433	121,828	192,112
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	94	31	20	3	54	202
	Sum of FacilityMorts	245	198	5	16	741	1,205
	Sum of ResearchMorts	116	7	0	0	0	123
	Sum of TotalProjectMorts	455	236	25	19	795	1,530
<b>LMN</b>	Sum of NumberCollected	42,354	279,225	13,528	4,155	574,211	913,473
	Sum of NumberBarged	38,066	270,566	13,505	4,130	562,224	888,491
	Sum of NumberBypassed	4,092	8,183	21	2	11,478	23,776
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	82	30	0	0	80	192
	Sum of FacilityMorts	112	393	2	23	444	974
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	194	423	2	23	524	1,166
<b>MCN</b>	Sum of NumberCollected	2,318,174	1,316,837	58,662	304,436	222,752	4,220,861
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	2,315,882	1,315,864	58,647	303,929	222,353	4,216,675
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	884	141	4	58	33	1,120
	Sum of FacilityMorts	1,168	819	11	447	366	2,811
	Sum of ResearchMorts	241	13	0	2	0	256
	Sum of TotalProjectMorts	2,293	973	15	507	399	4,187
Total Sum of NumberCollected		2,852,080	3,637,242	150,443	336,516	3,484,741	10,461,022
Total Sum of NumberBarged		481,546	1,793,738	89,734	31,223	2,945,055	5,341,296
Total Sum of NumberBypassed		2,364,672	1,839,876	60,641	304,720	537,393	5,107,302
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		1,308	259	25	63	199	1,854
Total Sum of FacilityMorts		2,875	2,418	37	508	2,013	7,851
Total Sum of ResearchMorts		1,584	900	0	2	0	2,486
Total Sum of TotalProjectMorts		5,767	3,577	62	573	2,212	12,191



**Cumulative Adult Passage at Mainstem Dams Through: 08/09**

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	08/09	66624	16606	96456	2908	156175	8234	47882	13686	97519	4355	69317	7971	3063	687	3999	516	4319	684
TDA	08/09	52795	15406	61827	2176	108412	6003	40653	11409	81219	3620	59863	5873	1164	520	2226	264	1861	365
JDA	08/09	43379	13663	50313	2093	90974	4767	36191	11717	73814	4150	55712	5893	579	296	1080	189	832	231
MCN	08/07	38852	12252	45887	2475	83968	5029	32795	9436	62295	3361	53793	5437	0	0	0	0	0	0
IHR	08/08	28047	7308	25434	875	56277	3172	7926	2566	8454	530	11528	1857	0	0	0	0	0	0
LMN	08/09	26963	6934	23589	548	53700	2904	11710	1508	9779	512	11137	1504	0	0	0	0	0	0
LGS	08/09	23953	7227	20836	733	51418	2974	7747	2850	7977	573	9579	1779	0	0	0	0	0	0
LGR	08/09	22481	8971	22530	973	51737	3293	7504	3347	6913	645	9614	1953	0	0	0	0	0	0
PRD	08/06	6712	489	8535	81	17371	512	29173	961	55090	429	46946	1845	0	0	0	0	0	0
RIS	08/08	5572	2066	9643	483	14040	762	26947	5681	58824	1790	43279	4240	0	0	0	0	0	0
RRH	08/08	2424	920	5376	274	5343	306	20064	4613	37752	1473	30932	2736	0	0	0	0	0	0
WEL	08/08	2040	752	4159	217	3869	205	11405	2691	20397	940	20857	1022	0	0	0	0	0	0
WFA	08/07	22962	280	36740	187	7150	102	0	0	0	0	0	0	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2007		2006		10-Yr Avg.		10-Yr			10-Yr			Wild
	Adult	Jack	Adult	Jack	Adult	Jack	2007	2006	Avg.	2007	2006	Avg.	2007
BON	28	10	58	8	25	1	24348	37023	60795	123221	102002	144751	40340
TDA	5	-1	7	2	0	0	19101	29987	50770	40625	25994	56592	15110
JDA	2	1	5	5	3	1	24176	35338	55190	28267	24811	40845	10075
MCN	0	0	0	0	0	0	18147	29226	46950	21716	14046	27695	7211
IHR	0	0	0	0	0	0	55	44	30	9533	6621	13499	1653
LMN	0	0	0	0	0	0	43	12	31	11030	7819	11859	2470
LGS	0	0	0	0	0	0	35	21	34	5547	4221	7611	1303
LGR	0	0	0	0	0	0	53	14	36	13250	8668	10727	2982
PRD	0	1	0	0	4	0	24492	26693	58057	2118	1528	3044	0
RIS	0	0	0	0	1	0	24996	34933	53747	1657	1164	2374	783
RRH	0	0	0	0	1	0	20460	25188	37443	1190	811	1584	456
WEL	0	0	0	0	0	0	21303	21416	36458	525	279	757	275
WFA	2	0	0	0	0	0	0	0	0	18453	24516	4263	0

PRD does not post 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: 08/10/07

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