



## Fish Passage Center

# Weekly Report #09 - 31

October 30, 2009

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

### Summary of Events:

**This is the final weekly report for the 2009 season.**

**Water Supply:** Precipitation throughout the Columbia Basin varied between 79% and 112% of average at individual sub-basins over Water Year 2009. Precipitation above The Dalles was 97% of average over Water Year 2009. Water Year 2010 began on October 1, 2009; over the first twenty six days of October, precipitation has ranged between 96% and 197% of average.

**Table 1. Summary of Water Year 2009 and 2010 precipitation with respect to average (1971-2000), at select locations within the Columbia and Snake River Basins.**

Location	Water Year 2009 October 1, 2008 to September 30, 2009		Water Year 2010 October 1-26, 2009	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	22.59	88	2.49	161
Snake River Above Ice Harbor	19.64	109	1.60	159
Columbia Above The Dalles	22.70	97	2.33	167
Kootenai	22.25	85	2.90	187
Clark Fork	18.08	101	1.31	133
Flathead	20.49	87	1.99	141
Pend Oreille/ Spokane	28.81	92	3.12	174
Central Washington	7.27	79	0.89	173
Snake River Plain	13.05	112	1.28	177
Salmon/Boise/ Payette	19.09	95	2.05	197
Clearwater	32.29	104	1.75	96
SW Washington Cascades/Cowlitz	62.74	88	5.56	120
Willamette Valley	49.98	83	4.00	111

Grand Coulee was at 1287.7 feet on October 29, 2009, holding steady last week. Outflows at Grand Coulee have ranged between 49.4 and 81.2 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2440.6 feet (10-29-09) and held steady last week. Outflows at Libby are currently 4.5 Kcfs.

Hungry Horse is currently at an elevation of 3544.7 (10-29-09) and has drafted 0.7 feet last week. Outflows at Hungry Horse have been approximately 1.9-2.4 Kcfs last week.

Dworshak is currently at an elevation of 1516.1 feet (10-29-09) and has held steady last week. Outflows at Dworshak have been 1.6-1.7 Kcfs.

The Brownlee Reservoir was at an elevation of 2045.2 feet on October 29, 2009 refilling 3.8 feet last week. Outflows at Hells Canyon Dam have been 8.8-8.9 Kcfs beginning on October 15<sup>th</sup>, 2009 for Fall Chinook spawning.

### **Smolt Monitoring:**

October 31st is the last scheduled day of sampling at all three SMP sites. Sampling continued at Lower Granite, Little Goose and Bonneville dams over the past two week. Subyearling Chinook smolts increased in numbers at all three sites in the past week. Unclipped subyearlings continue to predominate at all the sites at this time suggesting that many of the late season out-migrant fish may be of wild origin. It should be noted however, that a portion of hatchery origin fish were unmarked as well. Small numbers of coho, sockeye and steelhead have been collected at the sites over the past few weeks as well.

At Lower Granite Dam subyearling Chinook predominated with sockeye smolt numbers second in prevalence but at very low numbers. The sockeye passing the project are likely kokanee that leave Dworshak Reservoir occasionally; Salmon River sockeye typically pass during May. Average daily passage index for subyearling Chinook was at 300 per day this week compared to 250 per day last week. A peak passage of over 480 per day occurred on October

16. Almost all PIT-tag detects (1400 of just over 1450) since October 15 were of surrogate releases from Big Canyon Creek in the Clearwater River during late June to early July. Fall Chinook jack fall-backs continue to be detected at the bypass at Lower Granite Dam that were originally released at Lyons Ferry Hatchery in 2008 (27 detected in the bypass). Those fish migrated past the hatchery and are likely heading back down river after passing above Lower Granite Dam. Six wild fall Chinook smolts PIT-tagged in the Clearwater River have been detected at Lower Granite since October 15.

In the lower Columbia River, at Bonneville Dam, subyearling Chinook weekly average passage index rose this week with the passage index averaging nearly 140 this week compared to 75 fish daily average index last week. There were four PIT-tagged fall Chinook detected in the bypass this week from a large release at Little White National Fish Hatchery on June 18.

#### **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 of juvenile salmonids scheduled for this week. Furthermore, no releases of juvenile salmonids are scheduled to begin 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 scheduled releases of juvenile salmonids to this zone this week. There are no releases of juvenile salmonids to 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. No releases of juvenile salmonids were scheduled for this zone over the past week. Furthermore, there are no releases scheduled for this zone over the next two weeks.

#### **Adult Passage:**

Daily counts of adult fall Chinook ranged from 79 to 166. The 2009 adult fall Chinook count of 282855 was about 90% of the 2008 count and about 76.9% of the 10 year average. The fall Chinook jack count of 114635 was about 2.92 times greater than the 2008 count and about 2.75 times greater than the 10 year average. The adult fall Chinook count total at The Dalles Dam of 176658 is about 62.4% of the Bonneville passage to date. The 2009 Lower Granite Dam adult fall Chinook count of 14995 is about 91.3% of the 2008

count and about 1.52 times greater than the 10 year average count. The 2009 Lower Granite fall Chinook jack count of 40817 is about 4.08 times greater than the 2008 count and about 6.03 times greater than the 10 year average.

Daily steelhead counts at Bonneville Dam for the past week ranged between 143 and 254. The Bonneville Dam 2009 steelhead count of 601812 is about 1.69 times greater than the 2008 count and 1.68 times greater than the 10 year average. The 2009 wild steelhead count at Bonneville Dam was 171314 as of October 29th. The majority of the 408569 at McNary Dam have moved up into the Snake River with the cumulative count at Ice Harbor now at 325379 for the season. This year's Lower Granite total steelhead count of 304125 is about 1.84 times greater than the 2008 count of 165038 and 2.01 times greater than the 10 year average of 151278. The 2009 wild steelhead count as of October 29th was 71230 at Lower Granite Dam.

The summer steelhead run is delineated according to dates of passage past Bonneville Dam and is made up of two components. A-run steelhead pass Bonneville Dam from the first of June through August 25th and B-run steelhead pass Bonneville from August 26th through October. The 2009 B-run steelhead began on August 26<sup>th</sup> at Bonneville Dam and was 157826 as of October 29th. The 2009 B-run steelhead count is about 1.19 times greater than the 2008 count of 132085 and is about 1.24 times greater than the 10 year average count of 127064.

The 2009 adult coho count at Bonneville Dam is 219629 adults and 9480 jacks. The Bonneville 2009 adult coho count is about 1.64 times greater than the 2008 count of 134120 and is about 1.98 times greater than the 10 year average count of 110820. The 2009 coho jack count of 9480 is about 90.9% of the 2008 count of 10433 and is about 1.37 times greater than the 10 year average count of 6924 at Bonneville Dam.

**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
10/16/2009	58.9	0.0	61.5	0.0	63.5	0.0	60.9	0.0	60.2	0.0	65.2	1.4	56.7	0.8
10/17/2009	38.4	0.0	37.6	0.0	42.2	0.0	44.1	0.0	43.5	0.0	56.6	1.5	51.7	0.6
10/18/2009	42.1	0.0	44.0	0.0	40.9	0.0	41.2	0.0	42.6	0.0	48.5	1.4	45.7	0.5
10/19/2009	63.5	0.0	62.9	0.0	65.1	0.0	64.7	0.0	65.0	0.0	59.1	1.5	60.6	0.4
10/20/2009	62.9	0.0	58.4	0.0	66.8	0.0	71.5	0.0	71.3	0.0	75.9	1.7	62.1	0.5
10/21/2009	56.0	0.0	55.2	0.0	55.3	0.0	53.9	0.0	54.4	0.0	67.5	1.6	68.8	0.5
10/22/2009	59.6	0.0	66.1	0.0	64.4	0.0	63.2	0.0	62.5	0.0	57.1	1.5	51.9	0.5
10/23/2009	58.2	0.0	58.5	0.0	60.3	0.0	61.7	0.0	63.9	0.0	65.5	2.4	58.7	0.9
10/24/2009	49.7	0.0	50.4	0.0	52.4	0.0	58.4	0.0	58.9	0.0	72.0	1.9	67.5	0.8
10/25/2009	49.4	0.0	46.5	0.0	53.3	0.0	51.5	0.0	52.4	0.0	63.1	1.6	61.5	0.8
10/26/2009	59.4	0.0	65.6	0.0	60.9	0.0	58.9	0.0	58.7	0.0	57.8	1.5	56.3	0.5
10/27/2009	57.9	0.0	56.6	0.0	61.2	0.0	70.7	0.0	73.5	0.0	82.1	1.8	73.5	0.8
10/28/2009	67.4	0.0	69.6	0.0	71.5	0.0	61.2	0.0	61.1	0.0	72.9	1.4	73.5	0.7
10/29/2009	81.2	0.0	77.3	0.0	77.9	0.0	77.7	0.0	79.7	0.0	70.5	1.7	64.0	0.9

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

Date	Dworshak		Hells Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
10/16/2009	1.6	0.0	13.4	8.8	24.6	0.0	24.1	0.0	23.9	0.0	24.5	0.0
10/17/2009	1.6	0.0	13.6	8.8	15.0	0.0	14.3	0.0	14.2	0.0	14.0	0.0
10/18/2009	1.6	0.0	12.9	8.9	13.5	0.0	13.0	0.0	13.3	0.0	12.2	0.0
10/19/2009	1.6	0.0	13.8	8.9	22.3	0.0	21.2	0.0	22.9	0.0	24.4	0.0
10/20/2009	1.6	0.0	13.5	8.9	21.4	0.0	20.7	0.0	21.4	0.0	20.5	0.0
10/21/2009	1.6	0.0	14.1	8.9	21.9	0.0	20.1	0.0	20.2	0.0	18.6	0.0
10/22/2009	1.6	0.0	13.1	8.9	21.3	0.0	20.3	0.0	20.5	0.0	20.1	0.0
10/23/2009	1.6	0.0	13.3	8.9	21.2	0.0	21.2	0.0	22.4	0.0	23.9	0.0
10/24/2009	1.6	0.0	12.0	8.9	12.5	0.0	13.1	0.0	12.8	0.0	13.6	0.0
10/25/2009	1.6	0.0	12.4	8.8	17.1	0.0	16.8	0.0	17.2	0.0	16.2	0.0
10/26/2009	1.6	0.0	12.2	8.9	17.6	0.0	15.4	0.0	15.8	0.0	16.0	0.0
10/27/2009	1.6	0.0	12.4	8.8	20.8	0.0	19.1	0.0	19.4	0.0	16.8	0.0
10/28/2009	1.6	0.0	12.9	8.8	20.8	0.0	21.2	0.0	22.6	0.0	25.7	0.0
10/29/2009	1.7	0.0	---	---	22.8	0.0	21.2	0.0	21.1	0.0	18.8	0.0

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

Date	McNary		John Day		The Dalles		Bonneville			
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
10/16/2009	79.9	0.0	75.9	0.7	77.4	0.0	88.6	1.3	2.4	77.5
10/17/2009	81.8	0.0	81.3	0.7	83.8	0.0	90.3	1.4	6.8	74.7
10/18/2009	61.7	0.0	65.1	0.7	67.9	0.0	77.4	1.3	0.0	68.7
10/19/2009	81.6	0.0	77.8	0.7	81.3	0.0	87.5	1.3	6.8	72.1
10/20/2009	85.6	0.0	83.5	0.7	85.0	0.0	92.3	1.3	7.4	76.5
10/21/2009	96.5	0.0	97.1	0.7	98.0	0.0	104.9	1.4	15.4	81.0
10/22/2009	90.1	0.0	93.3	0.7	95.3	0.0	101.1	1.3	13.6	79.1
10/23/2009	70.2	0.0	65.3	0.7	67.6	0.0	74.4	1.3	4.5	61.5
10/24/2009	73.5	0.0	66.2	0.7	67.5	0.0	75.7	1.4	8.3	59.0
10/25/2009	94.1	0.0	101.9	0.7	105.5	0.0	114.0	1.3	21.3	84.3
10/26/2009	86.2	0.0	81.6	0.7	82.8	0.0	92.6	1.3	7.8	76.4
10/27/2009	93.0	0.0	86.3	0.7	87.2	0.0	93.9	1.1	8.7	76.9
10/28/2009	109.3	0.0	110.5	0.7	112.6	0.0	119.0	1.3	29.2	81.4
10/29/2009	94.6	0.0	99.9	0.7	102.1	0.0	113.3	1.2	21.9	83.0

Two-Week Summary of Passage Indices

COMBINED YEARLING CHINOOK											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
10/16/2009	---	---	---	---	1	0	---	---	---	---	13
10/17/2009	---	---	---	---	0	0	---	---	---	---	0
10/18/2009	---	---	---	---	0	0	---	---	---	---	0
10/19/2009	---	---	---	---	0	0	---	---	---	---	0
10/20/2009	---	---	---	---	0	0	---	---	---	---	0
10/21/2009	---	---	---	---	1	0	---	---	---	---	0
10/22/2009	---	---	---	---	1	0	---	---	---	---	0
10/23/2009	---	---	---	---	0	0	---	---	---	---	0
10/24/2009	---	---	---	---	2	0	---	---	---	---	0
10/25/2009	---	---	---	---	0	0	---	---	---	---	0
10/26/2009	---	---	---	---	0	0	---	---	---	---	0
10/27/2009	---	---	---	---	0	1	---	---	---	---	0
10/28/2009	---	---	---	---	0	0	---	---	---	---	0
10/29/2009	---	---	---	---	2	0	---	---	---	---	0
10/30/2009	---	---	---	---	---	---	---	---	---	---	---
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>YTD</b>	<b>37,667</b>	<b>44,693</b>	<b>20,207</b>	<b>29,713</b>	<b>3,081,425</b>	<b>2,433,093</b>	<b>449,043</b>	<b>9,225</b>	<b>2,251,664</b>	<b>1,032,260</b>	<b>1,717,115</b>

COMBINED SUBYEARLING CHINOOK											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
10/16/2009	---	---	---	---	480	32	---	---	---	---	144
10/17/2009	---	---	---	---	350	63	---	---	---	---	41
10/18/2009	---	---	---	---	263	33	---	---	---	---	89
10/19/2009	---	---	---	---	161	11	---	---	---	---	51
10/20/2009	---	---	---	---	122	20	---	---	---	---	67
10/21/2009	---	---	---	---	110	17	---	---	---	---	67
10/22/2009	---	---	---	---	227	64	---	---	---	---	61
10/23/2009	---	---	---	---	320	87	---	---	---	---	116
10/24/2009	---	---	---	---	298	30	---	---	---	---	115
10/25/2009	---	---	---	---	219	32	---	---	---	---	80
10/26/2009	---	---	---	---	244	19	---	---	---	---	53
10/27/2009	---	---	---	---	310	49	---	---	---	---	207
10/28/2009	---	---	---	---	375	70	---	---	---	---	206
10/29/2009	---	---	---	---	363	25	---	---	---	---	180
10/30/2009	---	---	---	---	---	---	---	---	---	---	---
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,842</b>	<b>552</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,477</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>274</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>106</b>
<b>YTD</b>	<b>0</b>	<b>18</b>	<b>15</b>	<b>545</b>	<b>1,004,318</b>	<b>1,182,134</b>	<b>433,572</b>	<b>8,189</b>	<b>3,657,510</b>	<b>1,507,261</b>	<b>4,311,427</b>

Two-Week Summary of Passage Indices

COMBINED COHO											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
10/16/2009	---	---	---	---	0	2	---	---	---	---	0
10/17/2009	---	---	---	---	0	5	---	---	---	---	0
10/18/2009	---	---	---	---	0	0	---	---	---	---	0
10/19/2009	---	---	---	---	0	1	---	---	---	---	0
10/20/2009	---	---	---	---	1	0	---	---	---	---	0
10/21/2009	---	---	---	---	2	0	---	---	---	---	0
10/22/2009	---	---	---	---	0	1	---	---	---	---	0
10/23/2009	---	---	---	---	0	1	---	---	---	---	23
10/24/2009	---	---	---	---	0	0	---	---	---	---	0
10/25/2009	---	---	---	---	0	0	---	---	---	---	0
10/26/2009	---	---	---	---	0	0	---	---	---	---	0
10/27/2009	---	---	---	---	0	0	---	---	---	---	0
10/28/2009	---	---	---	---	0	0	---	---	---	---	24
10/29/2009	---	---	---	---	0	0	---	---	---	---	14
10/30/2009	---	---	---	---	---	---	---	---	---	---	---
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>61</b>
<b># Days:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>
<b>YTD</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>332</b>	<b>92,360</b>	<b>81,347</b>	<b>19,011</b>	<b>37,588</b>	<b>127,125</b>	<b>240,419</b>	<b>503,331</b>

COMBINED STEELHEAD											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
10/16/2009	---	---	---	---	0	0	---	---	---	---	0
10/17/2009	---	---	---	---	0	0	---	---	---	---	0
10/18/2009	---	---	---	---	0	0	---	---	---	---	0
10/19/2009	---	---	---	---	0	0	---	---	---	---	0
10/20/2009	---	---	---	---	0	0	---	---	---	---	0
10/21/2009	---	---	---	---	1	0	---	---	---	---	0
10/22/2009	---	---	---	---	0	0	---	---	---	---	0
10/23/2009	---	---	---	---	0	0	---	---	---	---	0
10/24/2009	---	---	---	---	1	0	---	---	---	---	0
10/25/2009	---	---	---	---	0	0	---	---	---	---	0
10/26/2009	---	---	---	---	0	0	---	---	---	---	0
10/27/2009	---	---	---	---	0	0	---	---	---	---	0
10/28/2009	---	---	---	---	1	0	---	---	---	---	0
10/29/2009	---	---	---	---	2	0	---	---	---	---	0
10/30/2009	---	---	---	---	---	---	---	---	---	---	---
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</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>0</b>	<b>0</b>	<b>0</b>	<b>0</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>0</b>
<b>YTD</b>	<b>1,833</b>	<b>24,360</b>	<b>9,611</b>	<b>8,297</b>	<b>4,510,921</b>	<b>3,563,517</b>	<b>727,835</b>	<b>17,612</b>	<b>803,737</b>	<b>940,639</b>	<b>677,051</b>

## Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE										
	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
10/16/2009	---	---	---	---	3	0	---	---	---	---	0
10/17/2009	---	---	---	---	0	0	---	---	---	---	0
10/18/2009	---	---	---	---	1	0	---	---	---	---	0
10/19/2009	---	---	---	---	0	0	---	---	---	---	0
10/20/2009	---	---	---	---	0	0	---	---	---	---	0
10/21/2009	---	---	---	---	0	0	---	---	---	---	0
10/22/2009	---	---	---	---	0	2	---	---	---	---	0
10/23/2009	---	---	---	---	1	3	---	---	---	---	0
10/24/2009	---	---	---	---	1	0	---	---	---	---	0
10/25/2009	---	---	---	---	1	0	---	---	---	---	0
10/26/2009	---	---	---	---	0	0	---	---	---	---	0
10/27/2009	---	---	---	---	2	0	---	---	---	---	0
10/28/2009	---	---	---	---	5	0	---	---	---	---	0
10/29/2009	---	---	---	---	4	0	---	---	---	---	0
10/30/2009	---	---	---	---	---	---	---	---	---	---	---
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>5</b>	<b>0</b>	<b>0</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>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>YTD</b>	<b>170</b>	<b>0</b>	<b>0</b>	<b>177</b>	<b>46,534</b>	<b>46,379</b>	<b>21,692</b>	<b>4,926</b>	<b>190,857</b>	<b>111,959</b>	<b>74,969</b>

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

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

### Definitions for Smolt Index Counts

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

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

## Two Week Transportation Summary

Source: Fish Passage Center

Updated:

10/30/09 10:27 AM

		10/16/09	TO	10/30/09			
		Species					
Site	Data	CH0	CH1	CO	ST	SO	Grand Total
<b>LGR</b>	Sum of NumberCollected	3,842	7	3	5	18	3,875
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	1,897	0	0	0	0	1,897
	Sum of Numbertrucked	1,931	7	3	5	18	1,964
	Sum of SampleMorts	11	0	0	0	0	11
	Sum of FacilityMorts	0	0	0	0	0	0
	Sum of ResearchMorts	3	0	0	0	0	3
	Sum of TotalProjectMorts	14	0	0	0	0	14
<b>LGS</b>	Sum of NumberCollected	552	1	10		5	568
	Sum of NumberBarged	0	0	0		0	0
	Sum of NumberBypassed	0	0	0		0	0
	Sum of Numbertrucked	549	1	10		5	565
	Sum of SampleMorts	1	0	0		0	1
	Sum of FacilityMorts	1	0	0		0	1
	Sum of ResearchMorts	0	0	0		0	0
	Sum of TotalProjectMorts	2	0	0		0	2
Total Sum of NumberCollected		4,394	8	13	5	23	4,443
Total Sum of NumberBarged		0	0	0	0	0	0
Total Sum of NumberBypassed		1,897	0	0	0	0	1,897
Total Sum of Numbertrucked		2,480	8	13	5	23	2,529
Total Sum of SampleMorts		12	0	0	0	0	12
Total Sum of FacilityMorts		1	0	0	0	0	1
Total Sum of ResearchMorts		3	0	0	0	0	3
Total Sum of TotalProjectMorts		16	0	0	0	0	16

### YTD Transportation Summary

Source: Fish Passage Center

Updated: 10/30/09 10:28 AM

TO: 10/30/09

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	710,004	2,352,649	65,932	33,483	3,430,204	6,592,272
	Sum of NumberBarged	680,280	1,500,926	63,607	26,169	1,841,961	4,112,943
	Sum of NumberBypassed	19,673	847,954	1,951	7,068	1,587,774	2,464,420
	Sum of NumberTrucked	5,535	12	232	31	8	5,818
	Sum of SampleMorts	325	118	10	23	33	509
	Sum of FacilityMorts	4,058	2,734	132	192	409	7,525
	Sum of ResearchMorts	35	1,035	0	0	19	1,089
	Sum of TotalProjectMorts	4,418	3,887	142	215	461	9,123
<b>LGS</b>	Sum of NumberCollected	852,313	1,720,262	59,543	33,669	2,517,676	5,183,463
	Sum of NumberBarged	833,735	966,562	56,372	27,768	1,057,254	2,941,691
	Sum of NumberBypassed	9,301	752,024	2,825	5,826	1,460,071	2,230,047
	Sum of NumberTrucked	2,752	1	299	18	7	3,077
	Sum of SampleMorts	453	49	40	10	21	573
	Sum of FacilityMorts	6,059	1,622	7	47	323	8,058
	Sum of ResearchMorts	12	4	0	0	0	16
	Sum of TotalProjectMorts	6,524	1,675	47	57	344	8,647
<b>LMN</b>	Sum of NumberCollected	325,681	321,118	14,019	16,048	518,664	1,195,530
	Sum of NumberBarged	318,442	312,082	13,950	15,870	506,287	1,166,631
	Sum of NumberBypassed	5,826	8,790	9	114	12,089	26,828
	Sum of NumberTrucked	681	7	49	0	3	740
	Sum of SampleMorts	147	15	2	3	10	177
	Sum of FacilityMorts	583	237	8	7	258	1,093
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	730	252	10	10	268	1,270
<b>MCN</b>	Sum of NumberCollected	1,836,921	1,303,737	69,886	106,375	467,741	3,784,660
	Sum of NumberBarged	414,822	196	448	425	74	415,965
	Sum of NumberBypassed	1,353,698	1,301,926	69,356	105,852	467,487	3,298,319
	Sum of NumberTrucked	32,815	0	15	34	4	32,868
	Sum of SampleMorts	808	149	1	2	14	974
	Sum of FacilityMorts	34,259	1,441	65	60	158	35,983
	Sum of ResearchMorts	518	25	0	1	3	547
	Sum of TotalProjectMorts	35,585	1,615	66	63	175	37,504
Total Sum of NumberCollected		3,724,919	5,697,766	209,380	189,575	6,934,285	16,755,925
Total Sum of NumberBarged		2,247,279	2,779,766	134,377	70,232	3,405,576	8,637,230
Total Sum of NumberBypassed		1,388,498	2,910,694	74,141	118,860	3,527,421	8,019,614
Total Sum of NumberTrucked		41,783	20	595	83	22	42,503
Total Sum of SampleMorts		1,733	331	53	38	78	2,233
Total Sum of FacilityMorts		44,959	6,034	212	306	1,148	52,659
Total Sum of ResearchMorts		565	1,064	0	1	22	1,652
Total Sum of TotalProjectMorts		47,257	7,429	265	345	1,248	56,544



Cumulative Adult Passage at Mainstem Dams Through: 10/29

DAM	EndDate	Spring Chinook						Summer Chinook						Fall Chinook					
		2009		2008		10-Yr Avg.		2009		2008		10-Yr Avg.		2009		2008		10-Yr Avg.	
		Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	10/29	114525	66631	125543	17554	160243	11507	81936	37416	78271	11621	76947	10024	282855	114635	314340	39221	367497	41664
TDA	10/29	93908	53646	95438	15801	113852	9048	79916	27878	65073	12206	66821	7950	176658	93536	170767	38268	196344	32953
JDA	10/29	76806	49733	81772	14925	95147	7579	65989	33147	63649	13680	61980	8146	144889	81166	136578	32160	145149	28933
MCN	10/29	70413	43328	68080	12133	86998	7409	57137	21182	54735	11239	59015	7256	104702	61941	101766	19909	112644	21916
IHR	10/29	55435	28223	53142	7757	59050	4663	23856	9400	23693	4964	13243	2568	24821	38600	21903	11533	14351	8357
LMN	10/29	66931	20009	54512	6885	57079	4270	23353	11733	27343	2890	13719	1912	22176	39206	20897	10442	13352	7323
LGS	10/29	52642	24331	50396	7805	54016	4453	20340	11207	21748	4811	11241	2521	23049	31877	18122	6018	11177	5295
LGR	10/29	49667	31064	50146	10946	54673	5280	14482	16367	22612	5072	11171	2757	14995	40817	16420	9997	9891	6765
PRD	10/27	13469	2910	12178	620	18164	621	49417	2117	39174	3442	53065	2394	38393	5217	32331	14200	30043	4661
RIS	10/27	12634	6003	12490	1119	14914	1069	44295	7727	38171	3096	50031	5515	11482	3559	8037	3633	10164	2427
RRH	10/27	6090	1086	4065	371	5734	430	34961	5231	29675	2127	37679	3897	7802	2495	7032	3614	6619	2096
WEL	10/28	6307	1867	2708	426	4250	321	25724	3800	21060	1375	27632	2013	3811	2076	3790	2457	3906	1282
WFA	10/24	25067	2670	14151	521	-	-	-	-	-	-	-	-	952	184	2454	1091	-	-

DAM	Coho						Sockeye			Steelhead			
	2009		2008		10-Yr Avg.		2009	2008	10-Yr Avg.	2009	2008	10-Yr Avg.	Wild 2009
	Adult	Jack	Adult	Jack	Adult	Jack							
BON	219629	9480	134120	10433	110820	6924	177823	213607	78590	601812	355435	357348	171314
TDA	68195	8492	37944	4694	32060	2713	155591	177984	66379	514243	277429	275246	143144
JDA	64199	6816	39893	4912	28702	3385	157402	193409	72416	579128	276563	270509	162276
MCN	33587	3940	18610	3037	14628	1429	121672	146924	58760	408569	220635	215056	108819
IHR	4839	473	2880	114	1412	57	867	539	90	325379	171988	160877	75758
LMN	4447	1013	4092	369	1473	98	1162	722	103	313672	185363	159071	75809
LGS	4501	682	3425	362	1235	70	1061	594	96	301749	167521	146454	61021
LGR	4239	260	3405	1273	1477	216	1219	909	126	304125	165038	151278	71230
PRD	10410	398	5197	417	3653	397	153466	196835	74878	39893	16559	15391	0
RIS	17690	1980	6202	1596	5302	182	162830	193738	71011	37433	16147	14659	11941
RRH	4439	305	2502	741	1198	60	133106	161343	52426	29123	13224	11358	9345
WEL	2135	28	682	5	362	0	134937	165334	52892	24997	9206	8459	8721
WFA	21894	1936	3605	2827	-	-	-	-	-	17606	18976	-	-

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 uncipped 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: 10/30/09

BON counts from January 1, 2009 to March 14, 2009 (historical counts begin March 15):

Year	Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
2009	19	-1	321	109
2008	42	0	561	270