



Fish Passage Center

Weekly Report #13 - 27

September 27, 2013

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Summary of Events

Water Supply

Precipitation throughout the Columbia Basin has been above average over September, ranging between 122% and 216% of average at individual sub-basins. Precipitation above The Dalles has been 162% of average over September. Over the 2013 water year, precipitation has ranged between 70% and 105% of average.

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

Location	Water Year 2013 September 1–25, 2013		Water Year 2013 October 1, 2012 to September 25, 2013	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia above Coulee	2.75	140	37.4	97
SNAKE RIVER above Ice Harbor	1.90	192	17.3	76
Columbia above The Dalles	2.05	162	24.1	86
Kootenai	3.34	163	42.1	105
Clark Fork	1.72	122	21.2	75
Flathead	2.70	151	35.7	97
Pend Oreille Basin	2.16	137	29.2	87
SNAKE BASIN above Hells Canyon	1.79	216	14.0	75
Salmon River Basin	2.11	162	20.6	70
Clearwater	2.67	155	35.4	85
Willamette River above Portland	3.91	203	59.9	92

Grand Coulee Reservoir is currently at an elevation of 1284.3 feet (9-26-13) and has refilled 1.2 feet last week. Outflows at Grand Coulee have ranged between 59.1 and 71.4 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2449.5 feet (9-26-13) and has refilled 0.2 feet last week. Outflows at Libby Dam have been 6.0 Kcfs over the last week. The COE plans to maintain outflows of 6.0 Kcfs through September while maintaining an elevation near 2449 feet by the end of September.

Hungry Horse is currently at an elevation of 3550.7 feet (9-26-13) and has drafted 0.7 feet over the last week. Outflows at Hungry Horse have been 1.9 Kcfs last week. The end of September draft target is 3550 feet at Hungry Horse.

Dworshak is currently at an elevation of 1519.9 feet (9-26-13) and has 0.3 feet last week. Outflows from Dworshak have been reduced from 2.4 Kcfs to 1.6 Kcfs over the last week.

Flows in both the Snake and Columbia Rivers continue to be low, ranging between 16.1–21.7 Kcfs at Lower Granite and 76.3–103.5 Kcfs at McNary over last week.

Smolt Monitoring

Smolt monitoring is ongoing at five SMP dams (BON, MCN, LMN, LGS, and LGR). SMP sampling at MCN and LMN is scheduled to end at the end of this month.

Subyearling Chinook continued to be the dominant species of salmonid at all SMP dams over the past week. Passage of subyearling Chinook increased at Bonneville but decreased at McNary, Lower Granite, Little Goose, and Lower Monumental dams this week. Although subyearling Chinook dominated the collections, many of the SMP sites continued to collect a few spring migrants this week.

High temperature sampling protocols were lifted and daily SMP sampling was resumed on September 20th at BON. Compared to the previous week, passage of subyearling Chinook increased this week. This week's daily average passage index for subyearling Chinook was about 124 per day. Last week's daily average passage index for subyearling Chinook was about 70 per day. No other species of salmonids were collected in this week's samples. In addition, no Pacific lamprey juveniles were collected at BON this week.

Sampling at MCN for the 2013 season is every-other-day. Subyearling Chinook dominated the bypass samples at MCN this week. Subyearling Chinook passage at MCN continued to decrease this week, when compared to previous weeks. This week's daily average passage index for subyearling Chinook was about 85 per day. Last week's daily average passage index was about 315 per day. No spring migrants were collected in this week's samples. Pacific lamprey macrophthalmia continue to be the only species and life-stage of lamprey collected at MCN this season. The daily average collection for Pacific lamprey macrophthalmia for this week was about 5 per day. SMP sampling at MCN is scheduled to end on October 1st.

Subyearling Chinook passage decreased at LGR this week when compared to last week. This week's daily average passage index for subyearling Chinook was about 90 per day. Last week's daily average passage index was about 210 per day. A very small number of yearling Chinook, sockeye, and steelhead were collected at LGR this week. Finally, both Pacific lamprey ammocoetes and macrophthalmia were collected at LGR this week, although in very small numbers. Due to the possible resampling of PIT-tagged research fish that were released into the gatewells, the estimated year-to-date collection and passage index totals for yearling Chinook, steelhead, subyearling Chinook, and Pacific lamprey macrophthalmia are likely inflated. The FPC is aware of this possible bias and is investigating ways to correct these inflated estimates after the season has ended. However, the magnitude of this bias is relatively low and is unlikely to skew estimates of timing for this species.

Subyearling Chinook passage also decreased at LGS this week when compared to last week. This week's daily average passage index for subyearling Chinook at LGS was about 35 per day. Last week's daily average passage index was about 566 per day. The only spring migrants that were collected in this week's samples were steelhead. Finally, only Pacific lamprey macrophthalmia were collected at LGS this week. The daily average collection for Pacific macrophthalmia this week was six per day.

On September 19th, sampling at LMN was switched from full index sampling every-other-day, with primary bypass on the non-sample days, to full index sampling every day with every-other-day transportation. Samples from this week were dominated by subyearling Chinook. The daily average passage index for subyearling Chinook this week was about 40 per day. Among the days when condition sample counts were above twenty, condition monitoring showed Columnaris levels as high as 59% this week. The only other salmonids collected in this week's samples were steelhead. Among lamprey species, only Pacific lamprey macrophthalmia were collected this week, but in very low numbers. SMP sampling at LMN is scheduled to end on October 1st.

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 new releases of juvenile salmonids scheduled for this zone this week. There are two releases of spring Chinook pre-smolts scheduled for this zone over the next two weeks. Both releases are scheduled to begin in early October and are going to tributaries of the Clearwater River. In all, these two releases are expected to total about 225,000 pre-smolts, of which 100% will be unclipped but tagged with coded-wire tags. These pre-smolts are not expected to out-migrate until spring of 2014.

Mid-Columbia Zone: The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam.

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

Adult Fish Passage

Daily adult fall Chinook passage numbers at Bonneville Dam ranged between 9,725 and 18,390 last week. The adult fall Chinook count of 854,940 is about 2.7 times greater than the 2012 count of 321,046 and about 2.4 times greater than the 10-year average count of 353,396. The 2013 Bonneville Dam fall Chinook jack count of 95,216 is about 92.2% of the 2012 count of 103,289, while being 1.8 times greater than the 10-year average count of 51,947. The 2013 McNary Dam adult fall Chinook count of 323,510 is about 2.3 times greater than the 2012 count and 3.1 times larger than the 10-year average. The 2013 McNary Dam jack count of 40,842 is about 1.1 times greater than the 2012 count and 1.8 times greater than the 10-year average count. The 2013 Lower Granite Dam adult fall Chinook count of 44,130 is about 1.6 times greater than the 2012 count and 3.2 times larger than the 10-year average. The 2013 McNary Dam jack count of 14,735 has 500 more fish than the 2012 count and is about 1.7 times greater than the 10-year average count.

Daily steelhead counts at Bonneville Dam ranged from 997 to 1,371. The 2013 Bonneville Dam adult steelhead count of 222,004 has 3,200 more fish than the 2012 count of 218,804, while being about 64.5% of the 10-year average count of 343,965. The 2013 Bonneville Dam adult wild steelhead count of 95,238 is about 1.2 times greater than the 2012 count of 80,496, while being 89.5% of the 10-year average count of 106,427. In the Snake River, this year's Lower Granite steelhead count of 44,775 has 4,079 fewer fish than the 2012 count and is about 53.2% of the 10-year average

count of 84,116. The 2013 Lower Granite Dam adult wild steelhead count of 15,610 has 25 more fish than the 2012 count, while being 69.6% of the 10-year average count of 22,430. At Willamette Falls, the 2013 count for steelhead was 17,712 as of September 25th. This year's steelhead count is about 56.3% of the 2012 count of 31,448 and about 68.2% of the 10-year average count of 25,957.

Daily counts of coho have ranged between 560 and 952 over the last week at Bonneville Dam. The 2013 Bonneville Dam adult coho count of 27,637 is about 71.3% of the 2012 count of 38,782 and about 36.7% of the 10-year average count of 75,219. The 2013 Bonneville Dam coho jack count of 3,901 has 1,672 more fish than the 2012 count of 2,229, while having 161 fewer fish than the 10-year average count of 4,062.

Hatchery Releases Last Two Weeks

Hatchery Release Summary

From: 9/13/2013 to 09/26/13

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
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No Releases Scheudled

Hatchery Releases Next Two Weeks

Hatchery Release Summary

From: 9/27/2013 to 10/10/2013

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2014	75,000	10-04-13	10-18-13	Newsome Creek	S Fk Clearwater River
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2014	150,000	10-03-13	10-17-13	Lolo Creek	Clearwater River M F
Nez Perce Tribe									
Total					225,000				
Grand Total					225,000				

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
09/13/2013	72.8	0.2	73.6	0.0	74.8	0.0	74.5	0.0	78.1	0.0	81.7	1.7	80.4	7.4
09/14/2013	66.3	0.2	66.1	0.0	68.4	0.0	70.5	0.0	74.9	0.0	78.3	1.8	72.9	7.6
09/15/2013	75.1	0.2	77.2	0.0	76.3	1.1	74.3	4.5	78.0	0.0	73.4	6.9	67.8	7.9
09/16/2013	72.0	0.1	72.3	0.0	77.5	0.0	82.4	1.0	86.2	0.0	94.4	3.7	94.8	7.9
09/17/2013	---	---	63.6	0.0	67.2	0.0	65.9	0.0	69.2	0.0	81.0	1.8	81.5	7.5
09/18/2013	69.4	0.2	63.7	0.0	63.6	0.0	65.0	0.0	66.1	0.0	64.1	1.9	58.1	7.1
09/19/2013	68.7	0.2	67.2	0.0	71.3	0.0	72.1	0.0	75.7	0.0	86.2	2.0	84.0	7.9
09/20/2013	59.1	0.2	58.8	0.0	61.4	0.0	61.3	0.0	63.0	0.0	68.9	1.8	67.8	7.7
09/21/2013	70.0	0.2	69.8	0.0	71.2	0.0	72.2	0.0	75.6	0.0	75.4	2.1	70.9	7.8
09/22/2013	54.3	0.2	51.2	0.0	56.1	0.0	58.3	0.0	62.0	0.0	67.8	2.1	64.5	7.9
09/23/2013	69.1	0.1	73.1	0.0	74.3	0.0	71.7	0.0	71.9	0.0	78.6	2.0	77.1	7.9
09/24/2013	63.3	0.2	65.5	0.0	68.4	0.0	72.8	0.0	76.1	0.0	78.5	2.2	75.2	7.9
09/25/2013	62.4	0.2	63.9	0.0	65.2	0.0	67.8	0.0	71.1	0.0	74.6	2.0	72.6	7.7
09/26/2013	71.4	0.1	77.3	0.0	77.5	0.0	76.9	0.0	79.7	0.0	81.0	2.1	77.1	8.0

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

Date	Dworshak		Hells Brownlee Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
09/13/2013	4.8	0.0	---	---	14.7	0.6	19.4	0.6	21.7	0.0	23.0	0.0
09/14/2013	4.8	0.0	---	---	24.5	0.0	17.5	0.0	20.4	0.0	20.6	0.0
09/15/2013	4.8	0.0	---	---	24.8	0.0	17.3	0.0	18.5	0.0	16.4	0.0
09/16/2013	2.7	0.0	---	---	15.1	0.0	19.8	0.0	19.9	0.0	18.9	0.0
09/17/2013	2.4	0.0	---	---	21.6	0.0	14.4	0.0	14.6	0.0	15.7	1.0
09/18/2013	2.4	0.0	---	---	20.5	0.0	15.6	0.0	18.6	0.0	16.5	1.9
09/19/2013	2.4	0.0	---	---	14.9	0.0	23.3	0.0	25.8	0.0	26.6	0.7
09/20/2013	2.4	0.0	---	---	21.7	0.0	20.2	0.0	25.5	0.0	28.9	0.0
09/21/2013	2.2	0.0	---	---	18.2	0.0	12.6	0.0	12.6	0.0	10.8	0.0
09/22/2013	1.6	0.0	---	---	18.3	0.0	12.4	0.0	12.4	0.0	10.6	0.0
09/23/2013	1.6	0.0	---	---	18.6	0.0	15.6	0.0	13.1	0.0	11.0	0.0
09/24/2013	1.6	0.0	---	---	17.7	0.0	16.2	0.0	16.8	0.0	16.2	0.0
09/25/2013	1.6	0.0	---	---	16.1	0.0	15.4	0.0	17.5	0.0	18.4	0.0
09/26/2013	1.6	0.0	---	---	18.1	0.0	16.9	0.0	18.1	0.0	18.3	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
09/13/2013	114.9	0.0	117.9	0.9	117.4	0.0	125.5	1.4	33.3	84.5
09/14/2013	100.3	0.0	102.7	0.0	100.4	0.9	108.5	1.4	23.4	77.4
09/15/2013	79.7	0.0	70.7	0.6	72.6	0.9	90.0	1.4	15.9	66.5
09/16/2013	92.8	0.0	84.9	0.9	83.9	0.9	93.1	1.3	16.0	69.4
09/17/2013	116.3	0.0	116.9	0.8	112.7	0.0	115.0	1.3	28.1	79.3
09/18/2013	85.1	0.0	83.6	0.8	84.0	0.0	97.4	1.2	18.8	71.0
09/19/2013	100.4	0.0	96.3	1.0	98.2	0.0	104.5	1.2	18.8	78.2
09/20/2013	103.5	0.0	107.9	0.8	105.9	0.0	111.9	1.2	24.8	79.6
09/21/2013	79.2	0.0	72.1	0.8	72.4	0.0	84.9	1.3	15.7	61.6
09/22/2013	76.3	0.0	74.4	0.9	73.5	0.0	80.3	1.2	16.4	56.3
09/23/2013	86.9	0.0	92.9	0.9	95.5	0.0	105.8	1.2	24.3	74.0
09/24/2013	93.3	0.0	84.4	0.8	84.4	0.0	95.3	1.3	10.1	77.6
09/25/2013	97.0	0.0	96.9	1.2	96.3	0.0	102.0	1.2	15.7	78.1
09/26/2013	95.4	0.0	97.2	0.9	95.5	0.0	105.6	1.2	16.0	80.9

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	<u>Hungry H. Dnst</u>			<u>Boundary</u>			<u>Grand Coulee</u>			<u>Grand C. Tlwr</u>			<u>Chief Joseph</u>							
	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#					
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High			
9/13	---	---	---	0	---	---	---	0	103.2	103.4	103.6	24	102.6	103.2	103.6	24	105.0	105.4	105.7	24
9/14	---	---	---	0	---	---	---	0	102.9	103.0	103.5	24	102.1	102.4	102.7	24	104.9	105.2	105.4	24
9/15	---	---	---	0	---	---	---	0	103.0	103.3	104.2	24	102.3	102.8	103.3	22	104.6	105.0	105.4	24
9/16	---	---	---	0	---	---	---	0	102.7	103.0	103.2	24	101.5	101.5	101.8	10	103.8	104.1	104.3	24
9/17	---	---	---	0	---	---	---	0	102.7	103.0	103.5	24	101.4	101.7	102.2	24	103.5	103.8	104.1	24
9/18	---	---	---	0	---	---	---	0	102.1	102.4	102.6	24	100.6	100.8	101.1	24	102.8	103.2	103.7	24
9/19	---	---	---	0	---	---	---	0	102.0	102.3	102.6	24	100.5	100.8	101.2	24	101.9	102.2	102.4	24
9/20	---	---	---	0	---	---	---	0	102.1	102.3	102.8	24	101.4	102.0	102.3	24	102.6	103.2	103.4	23
9/21	---	---	---	0	---	---	---	0	102.5	102.7	102.9	24	101.2	101.6	102.1	24	103.0	103.4	103.6	24
9/22	---	---	---	0	---	---	---	0	102.2	102.5	102.9	24	100.8	101.3	101.7	24	102.8	103.1	103.5	24
9/23	---	---	---	0	---	---	---	0	101.2	101.6	102.2	24	100.5	100.9	101.1	24	101.7	101.9	102.3	24
9/24	---	---	---	0	---	---	---	0	102.0	102.3	102.5	24	100.4	100.6	100.8	24	101.4	101.9	102.3	24
9/25	---	---	---	0	---	---	---	0	102.2	102.7	103.2	24	100.5	101.5	104.0	24	101.2	101.6	102.4	24
9/26	---	---	---	0	---	---	---	0	101.3	101.5	101.9	23	99.4	99.5	99.9	23	100.3	100.6	100.8	23

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	<u>Chief J. Dnst</u>			<u>Wells</u>			<u>Wells Dwnstrm</u>			<u>Rocky Reach</u>			<u>Rocky R. Tlwr</u>							
	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#					
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High			
9/13	105.1	105.5	105.9	24	106.1	106.8	107.4	23	105.7	106.7	107.3	23	105.5	105.9	106.3	24	104.2	105.0	105.2	24
9/14	105.4	105.8	106.5	24	105.5	105.9	106.6	21	105.1	105.9	106.8	21	105.6	106.1	106.4	24	104.1	104.8	105.2	24
9/15	105.2	105.5	105.8	24	105.6	105.9	106.3	18	105.6	106.1	106.6	18	105.7	105.8	106.0	24	105.2	106.4	113.1	24
9/16	104.4	104.8	105.3	24	104.5	104.7	104.9	22	105.2	106.0	108.3	22	104.8	105.0	105.3	24	105.1	106.0	109.9	24
9/17	104.2	104.7	105.3	24	103.7	103.9	104.4	22	103.8	104.3	105.2	22	104.4	104.6	104.7	24	103.4	103.7	104.0	24
9/18	103.6	104.2	104.9	24	102.6	103.1	103.5	23	102.8	103.3	104.1	23	103.1	103.4	103.9	24	101.8	102.2	102.7	24
9/19	102.7	103.6	104.7	24	102.0	102.6	103.0	23	102.2	102.9	103.7	23	102.2	102.3	102.7	24	100.9	101.5	101.8	24
9/20	103.8	104.7	105.4	23	103.0	103.4	104.4	19	103.1	103.8	104.8	19	102.7	103.0	103.4	24	101.6	102.1	102.3	24
9/21	103.9	104.4	105.0	24	103.2	103.6	104.3	20	103.5	104.0	104.7	20	103.1	103.1	103.3	24	102.0	102.3	102.5	24
9/22	104.1	104.5	104.9	24	102.2	102.4	102.6	18	102.5	102.7	103.6	18	102.9	103.0	103.0	24	101.3	101.8	102.2	24
9/23	102.5	102.9	103.4	24	101.2	101.4	102.0	17	101.3	101.5	101.9	17	101.6	101.8	102.3	24	100.4	100.7	100.9	24
9/24	102.5	103.0	104.1	24	101.1	101.5	102.0	22	101.4	101.9	102.5	22	101.1	101.3	101.4	24	100.3	100.5	100.7	24
9/25	102.5	103.1	103.9	24	100.8	101.1	101.5	21	101.1	101.5	102.2	21	100.8	101.0	101.1	24	99.8	100.0	100.1	24
9/26	101.8	102.6	103.2	23	100.6	100.9	101.2	22	100.8	101.3	101.9	22	99.9	100.1	100.5	23	99.1	99.2	99.3	23

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	<u>Rock Island</u>			<u>Rock I. Tlwr</u>			<u>Wanapum</u>			<u>Wanapum Tlwr</u>			<u>Priest Rapids</u>							
	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#					
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High			
9/13	104.7	105.0	105.3	24	105.0	105.4	105.5	24	103.8	103.8	104.5	2	104.3	104.3	104.4	2	102.9	102.9	102.9	2
9/14	104.4	105.0	105.1	24	105.1	105.3	105.4	24	104.7	106.2	107.4	24	104.4	104.7	105.1	24	103.2	103.5	103.8	24
9/15	105.1	105.3	105.7	24	105.5	105.7	106.0	24	105.3	105.7	108.2	14	106.3	106.5	119.0	14	103.3	103.4	104.1	14
9/16	105.0	105.8	107.0	24	105.4	106.1	107.7	24	103.0	103.5	104.0	24	105.1	106.7	121.7	24	103.2	103.8	105.9	24
9/17	103.7	103.9	104.4	24	104.0	104.3	104.6	24	102.3	102.7	103.1	24	102.9	103.2	103.7	24	103.6	105.0	107.6	24
9/18	102.3	102.6	103.1	24	102.6	103.0	103.4	24	100.4	100.8	101.4	24	101.3	101.7	102.2	24	99.8	100.1	101.3	24
9/19	101.5	102.3	102.7	24	102.0	102.4	102.7	23	100.5	101.8	102.7	24	101.1	101.5	102.1	24	99.9	100.7	101.5	24
9/20	102.4	102.6	102.9	24	102.7	102.8	103.3	24	100.1	100.1	101.5	9	101.8	101.8	102.1	9	100.8	100.8	101.0	9
9/21	102.6	102.8	103.0	24	102.7	102.9	103.0	24	101.6	101.6	103.0	6	102.8	102.8	103.2	6	101.0	101.0	101.7	6
9/22	101.9	102.2	102.4	24	102.1	102.4	102.6	24	---	---	---	0	---	---	---	0	---	---	---	0
9/23	101.0	101.2	101.5	24	101.1	101.3	101.6	24	99.9	99.9	100.1	5	100.6	100.6	100.7	5	99.3	99.3	99.3	5
9/24	100.7	100.9	101.1	24	100.9	101.0	101.2	24	---	---	---	0	---	---	---	0	---	---	---	0
9/25	100.4	100.6	100.8	24	100.5	100.8	100.9	24	99.5	99.7	100.2	15	100.7	100.9	102.7	15	99.7	99.8	100.0	15
9/26	99.7	100.0	100.4	23	99.9	100.1	100.4	23	---	---	---	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>Clwrtr-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>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
9/13	105.4	105.4	105.4	2	---	---	---	0	100.6	101.1	101.7	24	101.8	103.3	104.7	24	---	---	---	0
9/14	105.2	105.4	105.5	24	---	---	---	0	100.6	101.0	101.5	24	101.7	103.0	104.4	24	---	---	---	0
9/15	105.5	105.5	106.0	14	---	---	---	0	100.9	101.5	102.0	24	102.0	103.4	104.7	24	---	---	---	0
9/16	104.8	104.9	105.1	24	---	---	---	0	100.7	101.3	101.8	24	102.0	103.5	105.0	24	---	---	---	0
9/17	105.8	106.5	108.2	24	---	---	---	0	100.4	101.1	102.0	24	100.9	102.1	103.4	24	---	---	---	0
9/18	102.9	103.4	104.3	24	---	---	---	0	99.8	100.3	100.8	24	100.5	101.6	103.2	24	---	---	---	0
9/19	102.9	103.5	103.7	24	---	---	---	0	99.5	100.1	100.9	24	100.6	102.4	104.0	24	---	---	---	0
9/20	103.7	103.7	103.7	9	---	---	---	0	100.7	101.7	102.5	24	101.3	103.3	105.0	24	---	---	---	0
9/21	103.7	103.6	104.3	6	---	---	---	0	101.4	102.2	104.3	24	101.1	102.5	103.6	24	---	---	---	0
9/22	---	---	---	0	---	---	---	0	104.5	105.0	105.5	24	101.6	102.9	103.8	24	---	---	---	0
9/23	102.5	102.5	102.5	5	---	---	---	0	103.9	104.5	105.4	24	101.9	103.4	104.5	24	---	---	---	0
9/24	---	---	---	0	---	---	---	0	103.9	104.4	105.3	24	101.5	102.5	103.4	24	---	---	---	0
9/25	103.2	103.4	103.6	15	---	---	---	0	104.0	104.5	105.0	24	101.0	101.8	102.4	24	---	---	---	0
9/26	---	---	---	0	---	---	---	0	103.7	104.2	105.3	23	100.9	102.0	103.0	23	---	---	---	0

Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clwrtr-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>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
9/13	---	---	---	0	---	---	---	0	114.8	128.1	136.5	24	---	---	---	0	102.1	103.3	105.4	24
9/14	---	---	---	0	---	---	---	0	115.6	126.2	141.7	24	---	---	---	0	101.9	102.2	102.4	24
9/15	---	---	---	0	---	---	---	0	107.4	111.8	130.6	24	---	---	---	0	102.5	102.9	103.3	24
9/16	---	---	---	0	---	---	---	0	116.3	130.7	139.4	24	---	---	---	0	101.8	102.1	102.7	24
9/17	---	---	---	0	---	---	---	0	102.9	105.8	115.1	24	---	---	---	0	101.1	101.4	101.6	24
9/18	---	---	---	0	---	---	---	0	98.5	98.8	99.2	24	---	---	---	0	99.4	99.9	100.4	24
9/19	---	---	---	0	---	---	---	0	109.6	120.9	139.7	24	---	---	---	0	98.9	99.4	99.8	24
9/20	---	---	---	0	---	---	---	0	102.5	104.1	110.3	24	---	---	---	0	99.4	100.0	100.5	24
9/21	---	---	---	0	---	---	---	0	98.9	99.3	100.0	24	---	---	---	0	97.4	97.7	98.2	24
9/22	---	---	---	0	---	---	---	0	97.0	97.3	97.7	24	---	---	---	0	96.8	97.2	97.7	24
9/23	---	---	---	0	---	---	---	0	95.8	96.0	96.2	24	---	---	---	0	96.7	97.0	97.2	24
9/24	---	---	---	0	---	---	---	0	95.7	96.0	96.8	24	---	---	---	0	96.8	97.1	97.6	24
9/25	---	---	---	0	---	---	---	0	95.6	95.8	95.9	24	---	---	---	0	96.6	97.0	97.4	24
9/26	---	---	---	0	---	---	---	0	95.3	95.6	96.0	23	---	---	---	0	95.8	96.2	96.8	23

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

Date	<u>Lower Mon.</u>			#	<u>L. Mon. Tlwr</u>			#	<u>Ice Harbor</u>			#	<u>Ice Harbor Tlwr</u>			#	<u>McNary-Oregon</u>			#
	<u>24 h</u>	<u>12 h</u>			<u>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	High	
9/13	---	---	---	0	102.7	103.5	104.0	24	103.2	103.5	103.9	24	103.8	104.5	105.2	24	---	---	---	0
9/14	---	---	---	0	103.0	103.5	104.2	24	103.0	103.2	103.5	24	103.3	104.0	104.8	24	---	---	---	0
9/15	---	---	---	0	101.6	102.3	103.6	24	102.5	102.6	103.1	24	102.9	103.8	104.7	24	---	---	---	0
9/16	---	---	---	0	99.6	99.9	100.8	24	101.0	101.3	101.9	24	101.6	102.3	103.5	24	---	---	---	0
9/17	---	---	---	0	100.1	100.7	101.1	24	102.5	103.0	103.1	24	102.0	102.8	103.1	24	---	---	---	0
9/18	---	---	---	0	98.8	99.1	99.6	24	101.2	101.7	102.5	24	102.2	102.6	103.0	24	---	---	---	0
9/19	---	---	---	0	99.8	100.7	101.5	24	100.7	100.8	101.0	24	101.3	101.6	102.2	24	---	---	---	0
9/20	---	---	---	0	100.7	101.3	101.8	24	101.0	101.1	101.3	24	100.5	101.0	101.3	24	---	---	---	0
9/21	---	---	---	0	99.7	100.4	102.3	24	100.0	100.2	100.5	24	100.0	100.6	101.1	24	---	---	---	0
9/22	---	---	---	0	98.9	99.3	99.9	24	99.1	99.3	99.8	24	99.7	100.0	100.3	24	---	---	---	0
9/23	---	---	---	0	98.1	98.5	99.2	24	98.3	98.4	98.8	24	98.6	98.9	99.1	24	---	---	---	0
9/24	---	---	---	0	98.2	98.5	99.0	24	98.4	98.5	98.6	24	98.9	99.3	99.9	24	---	---	---	0
9/25	---	---	---	0	98.0	98.3	99.0	24	98.3	98.3	98.3	8	98.5	99.0	99.3	24	---	---	---	0
9/26	---	---	---	0	97.2	97.5	97.7	23	---	---	---	0	97.7	98.0	98.5	23	---	---	---	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	High		24 h	12 h	High		24h	12h	High		24h	12h	High		24h	12h	High	AVG	High
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg			
9/13	104.5	104.9	105.4	24	103.8	104.1	104.2	24	102.8	103.0	103.2	24	102.2	102.5	102.7	24	103.2	103.6	103.9	24	
9/14	104.1	104.4	105.1	24	103.9	104.3	104.6	24	102.4	103.2	104.7	24	102.0	102.6	102.9	24	102.1	102.3	102.7	24	
9/15	104.9	105.5	106.3	24	104.0	104.6	105.5	24	102.6	103.0	103.2	24	102.3	102.6	103.2	24	101.7	101.9	102.0	24	
9/16	102.3	102.8	103.4	24	101.7	102.1	102.6	24	101.0	101.2	101.3	24	100.2	100.7	100.9	24	100.7	100.9	101.3	24	
9/17	101.4	101.6	101.8	24	100.8	101.0	101.1	24	100.8	100.8	100.9	12	100.6	101.1	101.3	24	100.1	100.3	100.4	24	
9/18	99.9	100.1	100.7	24	99.4	99.6	99.8	24	---	---	---	0	99.2	99.5	99.6	24	99.0	99.0	99.2	8	
9/19	99.6	99.9	100.2	24	99.5	99.9	100.2	24	---	---	---	0	100.1	101.3	103.3	24	---	---	---	0	
9/20	100.3	100.5	100.8	24	100.0	100.4	100.7	24	---	---	---	0	130.5	141.2	141.6	24	---	---	---	0	
9/21	100.0	100.1	100.3	24	99.7	100.0	100.3	24	---	---	---	0	140.2	140.4	140.8	24	---	---	---	0	
9/22	99.8	99.9	100.0	24	99.6	99.8	100.0	24	---	---	---	0	140.8	141.3	141.8	24	---	---	---	0	
9/23	99.3	99.4	99.6	24	99.1	99.2	99.4	24	---	---	---	0	140.7	141.3	142.1	24	---	---	---	0	
9/24	99.6	99.7	99.8	24	99.3	99.4	99.6	24	---	---	---	0	139.4	140.2	141.2	24	---	---	---	0	
9/25	99.4	99.4	99.6	11	99.0	99.2	99.5	24	---	---	---	0	139.8	140.5	141.0	24	---	---	---	0	
9/26	---	---	---	0	98.1	98.2	98.5	23	---	---	---	0	118.5	136.7	141.1	23	---	---	---	0	

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	The Dalles Dnst			#	Bonneville			#	Warrendale			#	Camas\Washougal			#	Cascade Island					
	24 h	12 h	High		24 h	12 h	High		24h	12h	High		24h	12h	High		24h	12h	High	24h	12h	High
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg				
9/13	104.5	104.8	105.2	24	103.2	103.5	103.8	24	103.2	103.5	103.6	24	102.9	103.5	103.8	24	---	---	---	0		
9/14	103.5	103.9	104.3	24	102.3	102.5	102.7	24	102.6	102.9	103.4	24	102.8	103.3	103.6	24	---	---	---	0		
9/15	103.5	104.1	104.8	24	101.8	102.2	102.5	24	101.8	102.1	102.3	24	101.7	102.4	103.4	24	---	---	---	0		
9/16	102.6	103.1	103.6	24	100.3	100.5	100.7	24	100.7	100.9	101.3	24	100.4	100.6	100.9	24	---	---	---	0		
9/17	101.4	101.8	102.1	24	99.7	99.9	100.1	24	100.2	100.4	100.7	24	100.4	100.5	100.8	24	---	---	---	0		
9/18	100.6	100.9	101.1	24	98.5	98.5	98.8	13	99.5	99.8	100.4	24	99.4	99.9	100.3	24	---	---	---	0		
9/19	100.9	101.2	101.7	24	---	---	---	0	99.9	100.7	101.3	24	99.4	99.4	99.7	9	---	---	---	0		
9/20	101.2	101.5	101.9	24	---	---	---	0	100.6	101.0	101.3	24	---	---	---	0	---	---	---	0		
9/21	101.5	101.7	101.9	24	---	---	---	0	100.6	100.9	101.3	24	---	---	---	0	---	---	---	0		
9/22	101.1	101.4	102.1	24	---	---	---	0	100.3	100.6	100.9	24	---	---	---	0	---	---	---	0		
9/23	99.9	100.3	100.9	24	---	---	---	0	99.3	99.6	99.7	24	---	---	---	0	---	---	---	0		
9/24	100.1	100.5	100.8	24	---	---	---	0	99.2	99.5	99.9	24	---	---	---	0	---	---	---	0		
9/25	99.7	100.1	100.7	24	---	---	---	0	99.9	100.7	101.3	24	---	---	---	0	---	---	---	0		
9/26	99.6	99.8	102.4	23	---	---	---	0	100.9	101.3	102.1	23	---	---	---	0	---	---	---	0		

Two-Week Summary of Passage Indices

Source: Fish Passage Center

Updated: 9/27/2013 7:48

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/currentsmptsubmitdata.asp>

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)
09/13/2013	*	---	---	---	---	0	0	0	---	---	0
09/14/2013	*	---	---	---	---	0	0	---	---	0	0
09/15/2013	*	---	---	---	---	0	0	1	---	---	---
09/16/2013	*	---	---	---	---	0	0	---	---	0	0
09/17/2013	*	---	---	---	---	0	0	0	---	---	---
09/18/2013	*	---	---	---	---	0	0	---	---	0	0
09/19/2013	*	---	---	---	---	0	0	0	---	---	---
09/20/2013	*	---	---	---	---	0	0	0	---	0	0
09/21/2013	*	---	---	---	---	1	0	0	---	---	0
09/22/2013	*	---	---	---	---	0	0	0	---	0	0
09/23/2013	*	---	---	---	---	0	0	0	---	---	0
09/24/2013	*	---	---	---	---	1	0	0	---	0	0
09/25/2013	*	---	---	---	---	1	0	0	---	---	0
09/26/2013	*	---	---	---	---	---	0	---	---	0	0
09/27/2013	*	---	---	---	---	---	---	---	---	---	---
<hr/>											
Total:	0	0	0	0	3	0	1	0	0	0	0
# Days:	0	0	0	0	13	14	10	0	0	7	1
Average:	0	0	0	0	0	0	0	0	0	0	0
YTD	50,632	55,648	26,301	2,797	2,607,106	1,498,294	614,256	28,315	2,123,325	2,056,882	1,881,678

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)
09/13/2013	*	---	---	---	352	885	106	---	---	12	---
09/14/2013	*	---	---	---	187	652	---	---	216	---	86
09/15/2013	*	---	---	---	120	414	49	---	---	---	---
09/16/2013	*	---	---	---	134	535	---	---	272	---	25
09/17/2013	*	---	---	---	228	791	28	---	---	---	---
09/18/2013	*	---	---	---	257	317	---	---	456	---	97
09/19/2013	*	---	---	---	202	366	57	---	---	---	---
09/20/2013	*	---	---	---	182	114	57	---	180	---	192
09/21/2013	*	---	---	---	108	60	75	---	---	---	78
09/22/2013	*	---	---	---	106	22	26	---	32	---	26
09/23/2013	*	---	---	---	55	19	45	---	---	---	157
09/24/2013	*	---	---	---	45	13	19	---	72	---	229
09/25/2013	*	---	---	---	47	16	25	---	---	---	114
09/26/2013	*	---	---	---	---	4	---	---	56	---	73
09/27/2013	*	---	---	---	---	---	---	---	---	---	---
<hr/>											
Total:	0	0	0	0	2,023	4,208	487	0	1,284	12	1,077
# Days:	0	0	0	0	13	14	10	0	7	1	10
Average:	0	0	0	0	156	301	49	0	183	12	108
YTD	2	61	195	2,668	724,605	641,374	273,170	18,794	3,697,258	2,427,009	4,862,914

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)
09/13/2013 *	---	---	---	---	0	0	0	---	---	0	---
09/14/2013 *	---	---	---	---	0	0	---	---	0	---	0
09/15/2013 *	---	---	---	---	0	0	0	---	---	---	---
09/16/2013 *	---	---	---	---	0	0	---	---	0	---	0
09/17/2013 *	---	---	---	---	0	0	0	---	---	---	---
09/18/2013 *	---	---	---	---	0	0	---	---	0	---	0
09/19/2013 *	---	---	---	---	0	0	0	---	---	---	---
09/20/2013	---	---	---	---	0	0	0	---	0	---	0
09/21/2013 *	---	---	---	---	0	0	0	---	---	---	0
09/22/2013	---	---	---	---	0	0	0	---	0	---	0
09/23/2013 *	---	---	---	---	0	0	0	---	---	---	0
09/24/2013	---	---	---	---	0	0	0	---	0	---	0
09/25/2013 *	---	---	---	---	0	0	0	---	---	---	0
09/26/2013	---	---	---	---	---	0	---	---	0	---	0
09/27/2013	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	0	0	0	0	0	0	0
# Days:	0	0	0	0	13	14	10	0	7	1	10
Average:	0	0	0	0	0	0	0	0	0	0	0
YTD	0	0	0	107	61,826	54,078	10,584	49,973	85,380	188,509	770,840

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)
09/13/2013 *	---	---	---	---	0	1	2	---	---	0	---
09/14/2013 *	---	---	---	---	0	0	---	---	0	---	0
09/15/2013 *	---	---	---	---	1	0	3	---	---	---	---
09/16/2013 *	---	---	---	---	1	3	---	---	0	---	0
09/17/2013 *	---	---	---	---	1	2	0	---	---	---	---
09/18/2013 *	---	---	---	---	1	0	---	---	0	---	0
09/19/2013 *	---	---	---	---	0	2	1	---	---	---	---
09/20/2013	---	---	---	---	2	0	3	---	0	---	0
09/21/2013 *	---	---	---	---	0	1	1	---	---	---	0
09/22/2013	---	---	---	---	1	0	0	---	0	---	0
09/23/2013 *	---	---	---	---	0	1	1	---	---	---	0
09/24/2013	---	---	---	---	1	0	1	---	0	---	0
09/25/2013 *	---	---	---	---	0	0	0	---	---	---	0
09/26/2013	---	---	---	---	---	0	---	---	0	---	0
09/27/2013	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	8	10	12	0	0	0	0
# Days:	0	0	0	0	13	14	10	0	7	1	10
Average:	0	0	0	0	1	1	1	0	0	0	0
YTD	3,789	40,840	3,547	9,925	2,037,034	1,713,547	610,918	14,984	471,593	732,388	470,306

Two-Week Summary of Passage Indices

COMBINED SOCKEYE											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
09/13/2013 *	---	---	---	---	0	1	0	---	---	0	---
09/14/2013 *	---	---	---	---	0	0	---	---	4	---	0
09/15/2013 *	---	---	---	---	0	0	0	---	---	---	---
09/16/2013 *	---	---	---	---	0	0	---	---	0	---	0
09/17/2013 *	---	---	---	---	0	1	0	---	---	---	---
09/18/2013 *	---	---	---	---	0	0	---	---	4	---	0
09/19/2013 *	---	---	---	---	0	0	0	---	---	---	---
09/20/2013	---	---	---	---	0	0	0	---	0	---	0
09/21/2013 *	---	---	---	---	0	0	0	---	---	---	0
09/22/2013	---	---	---	---	0	0	0	---	0	---	0
09/23/2013 *	---	---	---	---	0	0	0	---	---	---	0
09/24/2013	---	---	---	---	2	0	0	---	0	---	0
09/25/2013 *	---	---	---	---	0	0	0	---	---	---	0
09/26/2013	---	---	---	---	---	0	---	---	0	---	0
09/27/2013	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	2	2	0	0	8	0	0
# Days:	0	0	0	0	13	14	10	0	7	1	10
Average:	0	0	0	0	0	0	0	0	1	0	0
YTD	1	0	0	326	54,707	33,021	11,379	25,107	633,854	414,310	396,143

COMBINED LAMPREY JUVENILES											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR ^T (Coll)	LGS (Coll)	LMN (Coll)	RIS (Coll)	MCN (Coll)	JDA (Coll)	BO2 (Coll)
09/13/2013 *	---	---	---	---	0	11	1	---	---	0	---
09/14/2013 *	---	---	---	---	0	0	---	---	28	---	0
09/15/2013 *	---	---	---	---	0	5	1	---	---	---	---
09/16/2013 *	---	---	---	---	2	1	---	---	36	---	0
09/17/2013 *	---	---	---	---	0	5	1	---	---	---	---
09/18/2013 *	---	---	---	---	3	3	---	---	8	---	5
09/19/2013 *	---	---	---	---	0	3	1	---	---	---	---
09/20/2013	---	---	---	---	2	6	0	---	4	---	0
09/21/2013 *	---	---	---	---	0	5	2	---	---	---	0
09/22/2013	---	---	---	---	0	6	0	---	8	---	0
09/23/2013 *	---	---	---	---	0	9	1	---	---	---	0
09/24/2013	---	---	---	---	3	9	0	---	4	---	0
09/25/2013 *	---	---	---	---	1	8	1	---	---	---	0
09/26/2013	---	---	---	---	---	0	---	---	4	---	0
09/27/2013	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	11	71	8	0	92	0	5
# Days:	0	0	0	0	13	14	10	0	7	1	10
Average:	0	0	0	0	1	5	1	0	13	0	1
YTD	0	8	0	0	4,994	55,407	63,726	185	86,554	173,701	6,184

Two-Week Summary of Passage Indices

* 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, sockeye, and lamprey juveniles. Two classes of fish counts are shown in these tables:
Two classes of fish counts are shown in these tables:

Collection counts (Coll), which account for sample rates but are not adjusted for flow;

Passage indices (INDEX), 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.

Combined lamprey juvenile collection counts are provided for all sites. Combined lamprey juveniles is a combination of pacific lamprey ammocoetes, brook lamprey ammocoetes, unknown lamprey ammocoetes, pacific lamprey macrophthalmia, and unidentified lamprey species.

†† Passage index for yearling Chinook, steelhead, and subyearling Chinook at LGR may be inflated in 2013 due to possible resampling of PIT-tagged research fish

† Caution should be used with interpreting lamprey juvenile collection counts at LGR because of the possibility that lamprey may escape the sample tank before being sampled

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.

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.

Fall (post SMP season) trapping at the Imnaha River Fish Trap (IMN) is funded by the Lower Snake River Compensation Program (LSRCP)

WTB and LEW data collected for the FPC by Idaho Dept. of Fish and Game.

Two Week Transportation Summary

Source: Fish Passage Center

Updated:

9/27/13 7:45 AM

		09/13/13 TO 09/27/13				
		Species				
Site	Data	CH0	CH1	ST	SO	Grand Total
LGR	Sum of NumberCollected	1,965	3	8	2	1,978
	Sum of NumberBarged	0	0	0	0	0
	Sum of NumberBypassed	0	0	6	0	6
	Sum of Numbertrucked	2,307	4	3	1	2,315
	Sum of SampleMorts	42	0	0	1	43
	Sum of FacilityMorts	0	0	0	0	0
	Sum of ResearchMorts	0	0	0	0	0
	Sum of TotalProjectMorts	42	0	0	1	43
LGS	Sum of NumberCollected	4,163		10	2	4,175
	Sum of NumberBarged	0		0	0	0
	Sum of NumberBypassed	47		0	0	47
	Sum of Numbertrucked	4,006		10	1	4,017
	Sum of SampleMorts	88		0	1	89
	Sum of FacilityMorts	18		0	0	18
	Sum of ResearchMorts	0		0	0	0
	Sum of TotalProjectMorts	106		0	1	107
LMN	Sum of NumberCollected	487	1	12		500
	Sum of NumberBarged	0	0	0		0
	Sum of NumberBypassed	0	0	0		0
	Sum of Numbertrucked	473	1	12		486
	Sum of SampleMorts	14	0	0		14
	Sum of FacilityMorts	0	0	0		0
	Sum of ResearchMorts	0	0	0		0
	Sum of TotalProjectMorts	14	0	0		14
MCN	Sum of NumberCollected	1,284			8	1,292
	Sum of NumberBarged	0			0	0
	Sum of NumberBypassed	1,275			8	1,283
	Sum of Numbertrucked	0			0	0
	Sum of SampleMorts	6			0	6
	Sum of FacilityMorts	3			0	3
	Sum of ResearchMorts	0			0	0
	Sum of TotalProjectMorts	9			0	9
Total Sum of NumberCollected		7,899	4	30	12	7,945
Total Sum of NumberBarged		0	0	0	0	0
Total Sum of NumberBypassed		1,322	0	6	8	1,336
Total Sum of Numbertrucked		6,786	5	25	2	6,818
Total Sum of SampleMorts		150	0	0	2	152
Total Sum of FacilityMorts		21	0	0	0	21
Total Sum of ResearchMorts		0	0	0	0	0
Total Sum of TotalProjectMorts		171	0	0	2	173

YTD Transportation Summary

Source: Fish Passage Center

Updated:

9/27/13 7:45 AM

TO: 09/27/13

Site	Data	Species						Grand Total
		CH0	CH1	CO	SO	ST	LU	
LGR	Sum of NumberCollected	469,088	1,865,144	48,077	42,660	1,444,870		3,869,839
	Sum of NumberBarged	437,793	1,554,582	47,807	42,574	1,087,929		3,170,685
	Sum of NumberBypassed	13,697	308,258	210	52	356,581		678,798
	Sum of NumberTrucked	16,544	14	1	12	13		16,584
	Sum of SampleMorts	665	174	2	7	40		888
	Sum of FacilityMorts	351	2,066	57	15	259		2,748
	Sum of ResearchMorts	38	52	0	0	47		137
	Sum of TotalProjectMorts	1,054	2,292	59	22	346		3,773
LGS	Sum of NumberCollected	448,455	1,026,511	36,886	22,629	1,174,704		2,709,185
	Sum of NumberBarged	426,163	979,239	36,685	22,607	1,108,345		2,573,039
	Sum of NumberBypassed	322	46,698	200	2	66,202		113,424
	Sum of NumberTrucked	21,183	0	1	12	22		21,218
	Sum of SampleMorts	334	14	0	4	11		363
	Sum of FacilityMorts	449	560	0	4	124		1,137
	Sum of ResearchMorts	0	0	0	0	0		0
	Sum of TotalProjectMorts	783	574	0	8	135		1,500
LMN	Sum of NumberCollected	169,677	470,899	8,000	8,064	459,589	1	1,116,230
	Sum of NumberBarged	151,939	469,284	7,999	8,058	458,179	0	1,095,459
	Sum of NumberBypassed	13,438	1,079	0	2	1,144	147	15,810
	Sum of NumberTrucked	2,980	2	0	0	13	0	2,995
	Sum of SampleMorts	439	16	0	0	18	0	473
	Sum of FacilityMorts	362	518	1	4	235	0	1,120
	Sum of ResearchMorts	0	0	0	0	0	0	0
	Sum of TotalProjectMorts	801	534	1	4	253	0	1,593
MCN	Sum of NumberCollected	1,779,191	1,098,880	43,803	314,637	255,352		3,491,863
	Sum of NumberBarged	0	0	0	0	0		0
	Sum of NumberBypassed	1,778,621	1,098,057	43,799	314,387	255,297		3,490,161
	Sum of NumberTrucked	0	0	0	0	0		0
	Sum of SampleMorts	389	62	1	34	8		494
	Sum of FacilityMorts	181	761	3	216	47		1,208
	Sum of ResearchMorts	0	0	0	0	0		0
	Sum of TotalProjectMorts	570	823	4	250	55		1,702
Total Sum of NumberCollected		2,866,411	4,461,434	136,766	387,990	3,334,515	1	11,187,117
Total Sum of NumberBarged		1,015,895	3,003,105	92,491	73,239	2,654,453	0	6,839,183
Total Sum of NumberBypassed		1,806,078	1,454,092	44,209	314,443	679,224	147	4,298,193
Total Sum of NumberTrucked		40,707	16	2	24	48	0	40,797
Total Sum of SampleMorts		1,827	266	3	45	77	0	2,218
Total Sum of FacilityMorts		1,343	3,905	61	239	665	0	6,213
Total Sum of ResearchMorts		38	52	0	0	47	0	137
Total Sum of TotalProjectMorts		3,208	4,223	64	284	789	0	8,568

Cumulative Adult Passage at Mainstem Dams Through: 09/27

Dam	End Date	Spring Chinook						Summer Chinook						Fall Chinook					
		2013		2012		10-Yr Avg.		2013		2012		10-Yr Avg.		2013		2012		10-Yr Avg.	
		Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	09/26	83345	33820	158089	7592	141713	20323	93097	26186	81663	12235	87543	17586	9E+05	95216	321046	103289	353396	51947
TDA	09/26	69202	32311	117087	7175	107368	16911	85639	20750	69222	10392	74538	13909	5E+05	72990	196839	83750	187370	41053
JDA	09/26	56991	28957	107655	6755	92410	15875	74764	19636	60814	10415	67514	14608	3E+05	72306	142806	70673	136962	35180
MCN	09/26	52176	22279	102763	4787	83990	13854	75741	14808	64428	5104	63310	10848	3E+05	40842	140231	36294	103267	22451
IHR	09/26	38017	18611	71957	2905	58986	8558	11912	6321	14182	1481	17476	4251	51450	14881	34213	17823	20196	10655
LMN	09/26	36470	19053	68608	2891	58025	7379	11765	7703	15150	1611	18803	4213	46818	18769	28837	18273	17533	9732
LGS	09/26	35072	19443	68247	3449	53406	8429	10120	7632	14748	1613	17544	4904	45904	16345	28074	14352	15834	7341
LGR	09/26	35031	19940	66366	3525	53382	9851	8423	7572	13163	1717	16010	5560	44130	14735	27138	14235	13798	8561
PRD	09/23	13725	1298	19495	1015	15225	1406	71083	3174	50667	1994	53926	2612	98496	11269	22865	5177	20252	3658
WAN	09/23	13715	1661	19804	973	15699	2278	69983	2189	50588	1515	47124	1979	31819	4552	8267	2863	9957	3470
RIS	09/16	13345	3100	19881	800	14248	2237	68380	3985	52184	3343	51396	5464	7907	8427	4107	2733	4798	1632
RRH	09/16	6841	2101	6641	459	5306	853	59680	4044	45528	2775	39283	4310	5736	4908	3192	1470	3450	1138
WEL	09/14	7133	2980	5311	700	4618	880	49270	4225	38588	3271	28793	2802	2023	352	1662	448	1749	698
WFA	09/25	27897	1664	35899	1314	46153	1141	0	0	0	0	0	0	884	211	1430	385	874	175

Dam	End Date	Coho						Sockeye			Steelhead					Lamprey			
		2013		2012		10-Yr Avg.		2013	2012	10-Yr Avg.	2013	2012	10-Yr Avg.	Wild 2013	Wild 2012	10-Yr Avg.	2013	2012	10-Yr Avg.
		Adult	Jack	Adult	Jack	Adult	Jack												
BON	09/26	27637	3901	38782	2229	75219	4062	185505	515673	177593	222004	218804	343965	95238	80496	106427	23790	29094	33849
TDA	09/26	9952	1203	27682	2538	24812	2584	161896	410099	146266	153019	175558	244420	65300	62658	75157	8708	6158	8372
JDA	09/26	5845	705	25895	3270	20846	2948	155383	394163	149056	105148	128760	218090	43182	49047	66015	6483	4517	7282
MCN	09/26	3054	600	13210	907	10678	1169	134198	364147	125774	89231	113118	168310	34693	39137	48635	1549	935	3252
IHR	09/26	262	94	1958	243	1122	137	895	453	425	65020	67090	118429	18117	17653	28892	317	461	403
LMN	09/26	219	55	1201	200	861	98	1014	486	530	57769	59473	109967	19337	17135	28217	111	131	110
LGS	09/26	253	106	1177	169	767	99	991	453	508	44899	51439	92970	15094	16297	23333	33	77	106
LGR	09/26	54	13	523	71	512	93	751	469	613	44775	48854	84116	15610	15585	22430	19	47	32
PRD	09/23	565	97	6275	1144	1819	283	163078	408258	154770	11647	14573	16706	0	0	0	5639	3601	3384
WAN	09/23	290	75	3238	751	1254	190	155695	450198	196435	9118	12864	17074	0	0	0	3894	2466	2168
RIS	09/16	4	1	1038	27	465	86	159183	410612	152394	6700	11210	12884	3849	4949	6060	1927	789	1293
RRH	09/16	0	0	134	7	43	11	131649	363297	129825	4890	8943	9451	2692	3865	4110	1496	559	583
WEL	09/14	0	0	32	0	2	0	129937	326074	123596	3326	5690	5759	1737	2606	2487	17	3	37
WFA	09/25	3831	1436	2192	2676	3325	958	0	0	0	17712	31448	25957	0	0	0	0	0	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.