Fish Passage Center

Weekly Report #14 - 27

September 26, 2014

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Starting September 12, the weekly reports will be published every other week; the next report will be October 10.

Summary of Events

Water Supply

Precipitation throughout the Columbia Basin has varied between 14% and 110% of average at individual sub-basins over the first twenty five days of September, with the greatest precipitation occurring in the upper Columbia Basins. Precipitation above The Dalles has been 62% of average over September. Over the 2014 water year, precipitation has ranged between 77% and 95% of average.

Table 1. Summary of September precipitation and cumulative October through September 25, 2014, precipitation with respect to average (1971–2000), at select locations within the Columbia and Snake River Basins.

Location	Water Year 2014 September 1-25, 2014		Water Year 2014 October 1, 2013 to September 25, 2014	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia above Coulee	1.8	92	35.4	92
Snake River above Ice Harbor	0.27	27	18.2	80
Columbia above The Dalles	0.79	62	23.4	83
Kootenai	2.26	110	37.7	94
Clark Fork	0.19	14	22.0	78
Flathead	0.83	47	34.8	94
Pend Oreille River Basin above Waneta Dam	0.55	35	28.8	86
Salmon River Basin	0.37	29	22.6	77
Upper Snake Tributaries	0.50	47	26.1	95
Clearwater	0.27	16	35.8	86
Willamette River above Portland	1.54	80	53.6	83

Grand Coulee Reservoir is at 1282 feet (9-25-14) and has refilled 1.4 feet over the past two weeks. Outflows at Grand Coulee have ranged between 52 and 75.7 Kcfs over the last week. On August 31st, 2014, Grand Coulee was at an elevation of 1279.6 feet, reaching the end of August draft target of 1279.7 feet.

The Libby Reservoir is currently at elevation 2447.8 feet (9-25-14) and has drafted 2.2 feet over the previous two weeks. Daily average outflows at Libby Dam have been 9.0 Kcfs.

Hungry Horse is currently at an elevation of 3550.8 feet (9-25-14) and has drafted 2.3 feet over the previous two weeks. Outflows at Hungry Horse have been 2.6 to 2.7 Kcfs.

Dworshak is currently at an elevation of 1519.8 feet (9-25-14) and drafted 9.9 feet over the previous two weeks. The temporary TDG waiver expired on September 15th and outflow was reduced to 6.7 Kcfs to reduce spill to below the 110% water quality standard. Outflow was further reduced to 4.8 Kcfs on the 20th and then to a minimum of 2 Kcfs by the 25th of September, when the project reached the 1520 foot draft limit.

The Brownlee Reservoir was at an elevation of 2055.4 feet on September 25, 2014 and was holding steady over the past two weeks. Inflows to Brownlee Dam ranged between 9.2 and 9.9 Kcfs last week.

Smolt Monitoring: Smolt monitoring is ongoing at five SMP dams (BON, MCN, LMN, LGS, and LGR). Sampling at John Day ended after the September 15th sample. SMP sampling for 2014 is scheduled to end at MCN and LMN at the end of this month.

While subyearling Chinook continued to dominate the collections at all active SMP sites this week, passage of subyearling Chinook was low and generally decreased, when compared to the previous week. The daily average passage index for subyearling Chinook at Bonneville Dam (BON) this week was about 110 per day, whereas that for last week was about 160 per day. At McNary Dam (MCN), this week's daily average passage index for subyearling Chinook was only about 65 per day. Last week's daily average passage index for subyearling Chinook at MCN was about 61 per day. This week's daily average passage index for subyearling Chinook at Lower Granite Dam (LGR) was about 40 per day, which is a decrease from last week's daily average passage index of about 65 per day. Compared to last week, passage of subyearling Chinook decreased at Little Goose (LGS). The daily average passage index for subyearling Chinook at LGS was about 25 per day, whereas that for last week was about 35 per day. Due to increased mortalities in subyearling Chinook and high levels of *Columnaris* earlier this month, sampling at Lower Monumental Dam (LMN) was modified to every-other-day sampling, beginning after the September 13th sample. Since this time, all fish have been bypassed back to the river on non-sample days. Over the past week, the daily average passage index for subyearling Chinook at LMN has been about 20 per day. This is a decrease from the previous week of about 80 fish per day.

No pacific lamprey ammocoetes or macropthalmia were encountered at BON this week. At MCN, pacific lamprey macropthalmia were encountered in only one of this week's samples. A total of three pacific lamprey macropthalmia were sampled this week at LGR, one in each of the September 20th, 22nd, and 25th samples. No pacific lamprey ammocoetes were encountered in this week's samples at LGS but pacific lamprey macropthalmia were encountered in all seven of this week's samples. The daily average collection for pacific macropthalmia at LGS this week was 5 per day. Finally, pacific lamprey macropthalmia were encountered in three of this week's four samples at LMN.

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 scheduled for this zone this week. Approximately 225,000 spring Chinook pre-smolts are scheduled for release into tributaries of the Clearwater River, beginning in early October. These pre-smolts are 100% coded-wire-tagged and are not expected to out-migrate until spring 2015.

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 scheduled for this zone this week and no releases are 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 releases scheduled for this zone this week . There are no other releases scheduled for this zone over the next two weeks.

Adult Passage: Daily adult fall Chinook passage numbers at Bonneville Dam ranged between 11,119 and 21,444 last week. The adult fall Chinook count of 765,103 is about 90.1% of the 2013 count of 844,083, while being about 2 times greater than the 10-year average count of 377,026. The 2014 Bonneville Dam fall Chinook jack count of 107,091 is about 1.1 times greater than the 2013 count of 93,263 and 1.9 times greater than the 10-year average count of 56,337. The 2014 McNary Dam adult fall Chinook count of 300,098 has 3,837 more fish than the 2013 count and is 2.7 times greater than the 10-year average. The 2014 McNary Dam jack count of 42,506 is about 1.1 times greater than the 2013 count and 1.9 times greater than the 10-year average count. The 2014 Lower Granite Dam adult fall Chinook count of 41,525 has 751 fewer fish than the 2013 count, while being 2.5 times greater than the 10-year average. The 2014 Lower Granite Dam jack count of 9,563 is about 67.7% of the 2013 count, while having 303 more fish than the the 10-year average count.

Daily steelhead counts at Bonneville Dam ranged from 2,311 to 4,152. The 2014 Bonneville Dam adult steelhead count of 302,978 is about 1.4 times greater than the 2013 count of 220,661, while being about 91.8% of the 10-year average count of 329,918. The 2014 Bonneville Dam adult wild steelhead count

of 123,369 is about 1.3 times greater than the 2013 count of 94,876 and about 1.2 times greater than the 10-year average count of 104,776. In the Snake River, this year's Lower Granite steelhead count of 60,016 is 1.4 times greater than the 2013 count, while being 77.2% of the 10-year average count. The 2014 Lower Granite Dam adult wild steelhead count of 22,654 is about 1.5 times greater than the 2013 count and has 1,439 more fish than the 10-year average count. At Willamette Falls, the 2014 count for steelhead was 27,283 as of September 19th. This year's steelhead count is about 1.5 times greater than the 2013 count of 17,818 and has 2,080 more fish than the 10-year average count.

Daily counts of coho have ranged between 3,458 and 5,060 over the last week at Bonneville Dam. The 2014 Bonneville Dam adult coho count of 164,136 is about 6.1 times greater than the 2013 count of 26,869 and about 2.4 times greater than the 10-year average count of 67,699. The 2014 Bonneville Dam coho jack count of 8,772 is about 2.3 times greater than the 2013 count of 3,787 and 2.2 times greater than the 10-year average count of 3,963.

Wanapum Dam Update

At Wanapum Dam a significant crack (65-feet long by 2-inches wide) was discovered in a spillway monolith (#4) on February 27, 2014. This discovery has led to an emergency drawdown of the Wanapum pool to an elevation range of 541–545 feet, which is over 20 feet below its typical forebay elevation. Preliminary results of an investigation by Grant PUD and its consultants has determined that the primary contributing factor to a fracture developing within the dam's spillway was a mathematical error during the pre-construction design of Wanapum Dam.

The drawdown of Wanapum pool had caused the adult fishways at Wanapum Dam to not be operational. The adult fishways exits had been approximately 10 feet above the forebay water level. Grant County has designed adult fishway retrofits that involve the use of weir boxes and chutes to deliver adult fish into the forebay of Wanapum Dam. On April 15, 2014, the weir and chute retrofit was operational at the left bank fishway. A weir and chute has also been installed at the right bank fishway at Wanapum and was operational on April 26, 2014. Grant County PUD installed a spiral flume on the left bank fishway that reduces the elevation of the chute outflow from approximately 10 feet down to several feet. At the time of installing the spiral flume at the left bank fishway exit, Grant County also installed a ramp structure leading up to the weir and barriers to prevent jumping outside the structure. Grant PUD has also completed the installation of the spiral flume at the right bank fishway.

Visual observations of the exit retrofits have been promising. During Wanapum Dam site visits on May 7, May 21, June 4, June 18, July 2, July 23, and August 20, 2014, many fish have been seen passing the left bank fishway weir and chute. As of September 22, 2014, a total of 608,142 sockeye and 163,804 adult Chinook had passed Priest Rapids Dam. As of September 24, 2014, 581,097 sockeye and 115,319 adult Chinook had passed Rock Island Dam.

Over the last several weeks, Grant PUD has had problems with aquatic vegetation clogging the upper ladder supply pumps (four per ladder), especially on the left bank fishway. As long as this issue continues, Grant PUD plans to clean the pumps at least 3 days per week and more often if needed. During pump cleaning, attraction water to the lower fishway will remain on and two of the four upper ladder pumps will be cleaned at a time, always leaving two pumps to supply water to the upper fishway and the weir chute. A mortality of approximately 9-12 fall Chinook occurred on September 18-19, when in spite of cleaning pumps, a clog occurred and ladder flows began dropping off and eventually flow to the ladder was lost. Ladder flow was restored the afternoon of the 19th.

The drawdown of Wanapum pool has also had a significant impact on the adult fishways at Rock Island Dam, operated by Chelan PUD. With the lower than normal tailrace levels, Chelan PUD has constructed extensions or denils at several ladder entrances. Chelan County PUD currently has all three denils in place, two at the right bank fishway and one on the left bank fishway. Over the last several weeks as flows and project tailwater elevations have decreased, Chelan PUD has begun to operate the denils at both the left and right bank fishways.

Hatchery Releases Last Two Weeks

Hatchery Release Summary
From: 9/12/2014 to 09/25/14

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Dworshak NFH	CH0	SP	2015	300,000	09-16-14	09-18-14	Selway River	Clearwater River M F
Nez Perce Tribe Total					**300,000**				
Grand Total					**300,000**				

Hatchery Releases Next Two Weeks

Hatchery Release Summary
From: 9/26/2014 to 10/9/2014

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2014	75,000	10-01-14	10-15-14	Newsome Creek	S Fk Clearwater River
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2015	150,000	10-01-14	10-15-14	Lolo Creek	Clearwater River M F
Nez Perce Tribe Total					**225,000**				
Grand Total					**225,000**				

CH = Chinook, ST = Steelhead, CO = Coho, SO = Sockeye, CT = Cutthroat Trout, CM = Chum

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

	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
09/12/2014	55.4	0.1	60.3	0.0	56.8	0.0	54.8	0.0	53.2	42.6	63.6	4.1	76.8	2.4
09/13/2014	52.0	0.1	47.8	0.0	49.7	0.0	47.1	0.0	45.0	43.5	59.3	3.9	62.8	2.0
09/14/2014	54.9	0.1	54.8	0.0	53.8	0.0	48.0	0.0	48.3	46.8	47.2	3.8	48.3	1.8
09/15/2014	75.7	0.1	76.6	0.0	75.7	0.0	75.0	0.0	75.8	18.8	78.3	4.0	70.8	2.1
09/16/2014	69.1	0.1	68.0	0.0	67.4	0.0	68.5	0.0	73.2	14.7	77.1	3.9	79.1	2.2
09/17/2014	57.9	0.1	56.7	0.0	64.9	0.0	64.1	0.0	65.2	21.9	72.0	3.8	77.2	2.2
09/18/2014	54.7	0.1	51.7	0.0	49.2	0.0	47.1	0.0	46.5	45.0	52.9	3.6	59.0	1.7
09/19/2014	69.2	0.1	70.3	0.0	60.3	0.0	60.5	0.0	63.7	23.6	59.8	3.9	45.9	2.8
09/20/2014	66.1	0.1	66.4	0.0	69.1	0.0	67.8	0.0	68.5	20.8	70.3	4.0	70.8	3.9
09/21/2014	59.8	0.1	63.7	0.0	63.0	0.0	62.4	0.0	63.6	24.6	67.9	4.1	69.7	2.9
09/22/2014	56.4	0.1	57.3	0.0	61.6	0.0	64.6	0.0	67.1	21.2	72.6	4.0	77.9	2.6
09/23/2014	66.5	0.1	64.5	0.0	67.8	0.0	67.6	0.0	68.2	20.9	72.6	3.7	77.6	2.2
09/24/2014	65.6	0.1	63.2	0.0	65.6	0.0	60.6	0.0	64.4	28.2	68.5	3.7	71.1	1.9
09/25/2014	70.4	0.1	73.6	0.0	72.1	0.0	66.3	0.0	66.6	20.3	71.4	3.7	73.3	1.8

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

	Dworshak		Brownlee	Hells Canyon	Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
Date	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
09/12/2014	8.5	3.8	---	9.2	22.9	0.0	26.4	0.0	26.8	0.0	28.1	0.0
09/13/2014	8.5	3.8	---	8.8	22.6	0.0	25.0	0.0	25.5	0.0	26.9	0.0
09/14/2014	8.3	3.6	---	8.7	23.8	0.0	26.6	0.0	26.6	0.0	25.8	0.0
09/15/2014	6.7	2.0	---	8.8	22.6	0.0	19.5	0.0	22.5	0.0	22.8	0.0
09/16/2014	6.7	2.0	---	9.5	21.1	0.0	16.9	0.0	16.9	0.0	15.7	0.0
09/17/2014	6.7	2.0	---	8.8	21.6	0.0	16.9	0.0	17.5	0.0	17.6	0.0
09/18/2014	6.7	2.0	---	8.3	21.2	0.0	20.4	0.0	21.0	0.0	22.1	0.0
09/19/2014	6.7	2.0	---	9.4	21.5	0.0	20.2	0.0	22.4	0.0	21.4	0.0
09/20/2014	4.8	0.0	---	9.7	21.2	0.0	16.8	0.0	17.4	0.0	19.4	0.0
09/21/2014	4.8	0.0	---	9.6	18.8	0.0	13.1	0.0	12.4	0.0	10.7	0.0
09/22/2014	3.9	0.0	---	9.5	20.2	0.0	19.1	0.0	17.6	0.0	16.4	0.0
09/23/2014	2.4	0.0	---	8.1	18.4	0.0	21.1	0.0	23.9	0.0	27.3	0.0
09/24/2014	2.4	0.0	---	9.4	13.9	6.6	21.7	0.0	25.2	0.0	28.4	0.0
09/25/2014	2.0	0.0	---	10.1	15.3	0.0	12.5	0.0	12.1	0.0	10.3	0.0

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

	McNary		John Day		The Dalles		Bonneville			
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
09/12/2014	100.7	0.0	95.1	1.0	93.8	7.3	91.8	1.7	51.0	31.7
09/13/2014	93.8	0.0	92.2	1.0	93.4	7.6	104.3	1.5	62.8	32.6
09/14/2014	81.9	0.0	81.0	1.0	81.5	7.9	88.5	1.3	48.8	31.0
09/15/2014	85.5	0.0	86.9	1.0	86.7	7.7	93.1	1.3	53.5	30.9
09/16/2014	90.0	0.0	84.0	1.0	84.6	0.0	90.3	1.3	50.0	31.6
09/17/2014	95.5	0.0	94.4	0.9	93.7	0.0	100.8	1.3	60.6	31.5
09/18/2014	96.2	0.0	89.3	1.0	85.0	0.0	91.5	1.3	51.7	31.1
09/19/2014	78.2	0.0	85.8	1.2	85.0	0.0	91.6	1.3	57.7	25.2
09/20/2014	71.6	0.0	74.2	1.0	74.1	0.0	85.4	1.2	58.2	18.6
09/21/2014	83.1	0.0	78.6	1.1	79.7	0.0	84.2	1.2	55.5	20.1
09/22/2014	84.8	0.0	80.8	0.9	80.4	0.0	85.3	1.2	55.8	20.8
09/23/2014	104.4	0.0	102.1	0.9	102.0	0.0	109.2	1.2	66.5	34.0
09/24/2014	117.0	0.0	114.9	0.9	115.1	0.0	122.8	1.4	67.1	46.9
09/25/2014	96.8	0.0	92.4	1.2	91.9	0.0	97.7	1.2	63.4	25.7

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

	Hungry H. Dnst				Boundary				Grand Coulee				Grand C. Tlwr				Chief Joseph			
Date	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr
9/12	101.7	101.9	102.2	24	---	---	---	0	100.3	100.4	100.5	24	102.6	102.9	103.1	24	102.7	103.2	103.4	24
9/13	101.8	102.5	102.6	24	---	---	---	0	100.5	100.8	101.1	24	102.1	102.4	102.6	24	103.3	104.0	104.4	24
9/14	101.9	102.3	102.5	24	---	---	---	0	100.6	100.8	101.0	24	102.0	102.3	102.5	24	103.4	103.8	104.1	24
9/15	102.1	102.6	102.8	24	---	---	---	0	100.6	100.9	101.1	24	102.5	102.9	103.0	24	103.4	104.0	104.7	24
9/16	102.4	102.9	103.1	24	---	---	---	0	101.2	101.8	102.5	24	102.7	103.0	103.2	24	103.9	104.2	104.6	24
9/17	102.8	103.3	103.5	24	---	---	---	0	102.3	103.0	103.2	24	103.1	103.5	103.7	24	103.9	104.3	104.5	24
9/18	103.2	103.4	104.0	24	---	---	---	0	102.3	102.4	102.6	24	103.8	104.0	104.3	24	103.7	103.9	104.1	24
9/19	102.7	103.0	103.5	24	---	---	---	0	100.7	100.9	101.2	24	102.4	102.8	103.1	24	102.8	103.1	103.2	24
9/20	101.9	102.3	102.5	24	---	---	---	0	100.1	100.3	100.5	24	100.8	101.1	101.5	24	102.2	102.6	103.2	24
9/21	102.4	103.0	103.4	24	---	---	---	0	100.3	100.6	100.7	24	101.1	101.7	102.1	24	103.0	103.8	104.1	24
9/22	102.9	103.3	103.7	24	---	---	---	0	101.2	101.8	102.1	24	101.6	101.8	102.1	24	103.6	103.9	104.4	24
9/23	103.0	103.3	103.5	24	---	---	---	0	102.6	103.5	104.1	24	101.3	101.7	103.3	24	103.2	103.3	104.0	24
9/24	103.2	103.4	103.8	24	---	---	---	0	102.2	102.5	102.9	24	101.0	101.3	101.6	24	102.1	102.4	102.9	24
9/25	103.3	103.8	104.0	23	---	---	---	0	101.7	101.8	102.1	23	101.0	101.4	101.5	23	101.4	101.6	101.7	23

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

	Chief J. Dnst				Wells				Wells Dwnstrm				Rocky Reach				Rocky R. Tlwr			
Date	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr
9/12	104.6	105.5	106.2	24	102.9	103.7	104.5	22	102.9	103.9	104.6	22	103.1	103.3	103.5	24	102.1	102.6	103.2	24
9/13	105.1	105.5	106.1	24	104.3	105.3	106.7	21	104.0	105.0	106.1	21	103.3	103.7	104.2	24	101.7	102.1	102.4	24
9/14	103.8	104.7	105.9	24	105.0	105.9	107.0	22	104.9	105.8	106.5	22	103.8	104.2	104.5	24	101.8	102.1	102.3	24
9/15	103.6	103.9	104.5	24	105.1	105.6	106.4	20	105.2	105.8	106.5	20	103.9	104.2	104.3	24	102.8	103.7	104.1	24
9/16	104.4	104.7	105.4	24	105.0	105.4	106.0	21	105.0	105.5	106.0	21	104.4	104.9	105.2	24	103.7	104.1	104.8	24
9/17	105.4	105.9	106.5	24	105.0	105.3	106.2	18	104.8	105.2	106.2	18	105.3	105.7	105.9	24	104.7	105.1	105.5	24
9/18	104.9	105.5	106.2	24	105.1	105.3	105.6	19	104.7	105.0	105.6	19	105.7	105.9	105.9	24	104.1	104.8	105.3	24
9/19	103.3	103.7	105.0	24	103.9	104.2	104.9	18	103.7	104.0	104.8	18	104.6	104.8	105.0	24	103.0	103.2	103.4	24
9/20	102.7	103.6	104.5	24	103.4	103.8	104.5	18	103.3	103.8	104.6	18	103.7	103.9	104.3	24	102.6	102.8	103.1	24
9/21	103.8	104.5	104.8	24	104.0	104.6	105.5	20	103.8	104.6	105.3	20	103.6	104.0	104.2	24	102.6	102.9	103.1	24
9/22	104.2	104.8	105.3	24	103.8	104.0	104.4	20	103.5	103.9	104.6	20	103.9	104.0	104.1	24	103.1	103.5	103.8	24
9/23	104.0	104.7	106.0	24	103.4	103.5	103.8	19	102.9	103.2	103.7	19	103.9	103.9	103.9	24	103.4	103.6	103.7	24
9/24	103.4	104.2	105.1	24	103.0	103.1	103.4	15	102.8	102.9	103.3	15	103.5	103.7	103.9	24	103.0	103.3	103.7	24
9/25	102.2	102.6	103.1	23	102.1	102.3	102.4	18	102.1	102.3	102.4	18	102.6	102.8	103.0	23	102.2	102.3	102.6	23

Total Dissolved Gas Saturation at Mid Columbia River Sites

	Rock Island				Rock I. Tlwr				Wanapum				Wanapum Tlwr				Priest Rapids			
Date	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr
9/12	102.6	102.9	103.2	24	110.6	113.1	116.3	23	104.1	105.5	107.0	24	105.8	106.7	107.1	24	102.9	103.3	104.0	24
9/13	103.0	103.3	103.8	24	112.7	113.1	113.8	24	104.4	105.9	108.4	24	105.8	106.5	107.1	24	103.1	103.9	104.5	24
9/14	102.7	103.2	103.6	24	111.7	112.0	112.2	24	104.2	105.0	105.5	24	105.7	106.1	106.9	24	103.2	103.6	104.0	24
9/15	102.9	103.4	103.9	24	106.9	110.2	114.2	24	105.7	107.2	108.2	24	106.9	108.0	109.0	24	103.7	104.9	106.1	24
9/16	103.6	103.9	104.6	24	107.4	111.2	115.7	24	108.4	109.5	109.9	24	109.6	110.2	110.4	24	105.1	106.5	107.8	24
9/17	104.5	104.9	105.3	24	107.8	110.9	114.3	24	107.8	108.7	109.4	24	108.6	109.6	110.1	24	108.0	109.2	110.3	24
9/18	104.9	105.2	105.4	23	111.2	111.6	111.8	24	103.1	104.0	104.6	24	105.8	106.2	106.5	24	106.6	107.5	108.8	24
9/19	103.4	103.7	103.9	24	107.7	111.7	117.0	24	100.8	101.6	102.4	24	103.0	103.4	104.0	24	102.1	102.6	103.2	24
9/20	103.1	103.2	103.3	24	107.3	111.3	115.0	24	102.9	105.4	107.2	24	103.9	104.7	105.8	24	101.6	102.0	102.3	24
9/21	103.0	103.2	103.4	24	107.5	111.6	116.1	24	106.4	108.3	109.6	24	107.3	108.3	108.7	24	102.5	103.4	103.8	24
9/22	102.9	103.1	103.1	24	107.1	110.8	114.9	23	105.6	106.5	107.5	24	106.6	107.2	107.5	24	105.4	106.6	107.4	24
9/23	103.2	103.3	103.5	24	107.3	111.4	114.5	24	104.3	105.2	105.9	24	105.5	106.1	106.7	24	105.7	106.2	107.1	24
9/24	102.6	103.1	103.4	24	107.8	111.5	116.5	24	103.5	104.2	104.7	24	104.7	105.1	105.4	24	103.4	104.1	105.0	24
9/25	101.5	101.6	101.7	23	106.3	110.2	112.4	22	---	---	---	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

	Priest R. Dnst				Pasco				Dworshak				Clrwtr-Peck				Anatone			
Date	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr
9/12	104.1	104.6	105.0	24	---	---	---	0	114.1	114.4	115.2	24	110.3	111.5	112.6	24	100.5	102.0	103.4	24
9/13	104.0	104.7	105.0	24	---	---	---	0	114.2	114.5	114.7	24	110.4	111.5	112.4	24	100.3	101.4	102.7	24
9/14	104.4	105.0	105.5	24	---	---	---	0	113.7	114.4	115.1	24	110.1	111.2	112.7	24	100.1	101.3	102.7	24
9/15	104.7	105.6	105.9	24	---	---	---	0	107.9	108.5	109.5	24	106.2	107.6	108.5	24	100.2	101.6	102.8	24
9/16	105.5	106.5	106.8	24	---	---	---	0	108.0	108.4	108.9	24	106.0	107.3	108.5	24	100.5	101.9	103.1	24
9/17	107.6	108.6	109.0	24	---	---	---	0	108.1	108.5	109.0	24	106.1	107.2	108.4	24	100.9	102.1	103.1	24
9/18	107.1	107.7	108.5	24	---	---	---	0	108.1	108.4	108.9	24	106.1	107.1	108.3	24	100.4	101.1	102.1	23
9/19	103.6	104.1	104.7	24	---	---	---	0	107.3	107.7	108.3	24	105.7	106.8	108.1	24	100.5	101.7	103.0	22
9/20	103.0	103.2	103.5	24	---	---	---	0	101.2	102.0	106.4	24	102.2	103.6	104.3	24	100.9	102.1	103.5	23
9/21	103.5	104.2	104.4	24	---	---	---	0	101.1	101.7	102.3	24	101.7	103.2	104.5	24	101.2	102.5	103.6	24
9/22	105.1	106.1	106.4	24	---	---	---	0	101.8	102.7	104.2	24	101.3	102.5	103.8	24	100.4	101.0	102.0	24
9/23	105.7	106.0	106.3	24	---	---	---	0	101.4	102.0	102.8	24	101.5	102.7	103.8	24	100.6	101.6	102.7	24
9/24	104.2	104.7	105.8	24	---	---	---	0	102.0	102.8	104.0	24	101.6	103.1	104.3	24	100.4	101.3	102.7	24
9/25	---	---	---	0	---	---	---	0	104.3	106.5	108.2	23	101.9	103.5	104.7	23	100.0	101.1	102.3	23

Total Dissolved Gas Saturation Data at Snake River Sites

	Clrwtr-Lewiston				Lower Granite				L. Granite Tlwr				Little Goose				L. Goose Tlwr			
Date	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr
9/12	104.5	106.4	108.0	24	101.3	101.9	102.6	24	101.0	101.5	102.2	24	102.1	102.5	103.0	24	100.9	101.3	101.8	24
9/13	104.4	106.3	107.9	24	101.2	101.5	102.2	24	100.8	101.2	101.6	24	101.6	102.0	102.3	24	100.0	100.6	101.1	24
9/14	104.3	106.1	107.6	24	100.8	101.0	101.4	24	100.3	100.6	101.0	24	99.2	100.1	100.8	24	98.8	99.4	99.6	24
9/15	103.8	105.3	106.9	24	100.4	100.8	101.1	24	100.3	101.0	101.4	24	98.5	98.7	98.8	24	99.1	99.5	100.0	24
9/16	103.1	104.7	106.0	24	100.8	101.0	101.3	24	100.5	100.9	101.2	24	98.3	98.4	98.5	24	98.8	99.2	99.8	24
9/17	103.0	104.3	105.3	24	101.7	102.4	103.1	24	101.1	101.6	101.9	24	98.6	99.3	99.7	24	99.3	100.1	100.8	24
9/18	102.9	104.1	105.2	24	102.1	102.4	102.9	24	100.7	101.0	101.2	24	98.7	98.9	99.0	24	99.4	99.7	100.0	24
9/19	102.9	104.3	105.5	24	101.0	101.3	101.5	24	99.7	99.8	100.0	24	98.1	98.3	98.5	24	98.3	98.6	98.8	24
9/20	103.0	104.8	106.5	24	100.7	100.9	101.2	24	100.1	100.8	101.1	24	100.8	102.7	104.7	24	99.3	100.4	100.9	24
9/21	102.0	103.8	105.2	24	100.5	100.9	101.3	24	100.6	101.3	101.7	24	101.8	102.7	103.5	24	100.2	100.6	101.0	24
9/22	101.2	102.1	103.0	24	102.2	103.3	104.2	24	101.0	101.8	104.5	24	99.2	99.5	100.0	24	98.7	99.1	99.7	24
9/23	101.9	103.4	104.9	24	103.2	103.5	103.8	24	101.2	101.8	102.3	24	99.2	99.8	100.9	24	98.7	99.5	100.2	24
9/24	101.5	103.1	104.6	24	102.9	103.1	103.5	24	105.2	109.1	110.4	24	99.5	100.7	101.4	24	98.9	99.4	99.8	24
9/25	101.1	102.8	104.2	23	101.1	101.2	101.7	13	99.6	99.8	100.1	23	97.6	97.6	97.9	9	98.5	99.1	99.6	23

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

	Lower Mon.				L. Mon. Tlwr				Ice Harbor				Ice Harbor Tlwr				McNary-Oregon			
Date	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr
9/12	101.3	101.4	101.5	24	104.4	108.6	118.5	24	101.5	101.8	102.2	24	100.5	101.0	101.8	24	---	---	---	0
9/13	100.9	101.1	101.3	24	100.3	100.9	101.5	24	100.4	100.7	100.9	24	100.0	100.8	101.7	24	---	---	---	0
9/14	99.7	99.8	100.1	24	99.7	100.2	101.0	24	99.6	99.8	100.3	24	99.5	100.2	101.0	24	---	---	---	0
9/15	100.1	100.7	101.2	24	100.6	101.7	102.5	24	99.5	99.7	100.2	24	99.6	100.4	100.9	24	---	---	---	0
9/16	101.0	101.0	101.1	9	100.4	102.0	103.0	24	99.8	99.9	100.1	24	100.1	101.2	103.0	24	---	---	---	0
9/17	---	---	---	0	102.0	102.6	103.2	24	100.4	100.8	101.1	24	100.9	102.2	103.3	24	---	---	---	0
9/18	---	---	---	0	100.4	101.0	101.7	24	100.0	100.2	100.4	24	100.4	101.0	101.4	24	---	---	---	0
9/19	---	---	---	0	98.9	99.6	101.9	24	99.3	99.5	99.6	24	99.6	100.4	100.8	24	---	---	---	0
9/20	---	---	---	0	98.1	98.5	98.9	24	99.2	99.5	99.7	24	99.9	100.7	101.3	24	---	---	---	0
9/21	---	---	---	0	98.3	98.7	99.4	24	99.2	99.6	100.1	24	100.9	102.1	102.7	24	---	---	---	0
9/22	---	---	---	0	98.0	98.5	99.7	24	98.9	98.9	99.2	10	101.1	102.2	103.9	24	---	---	---	0
9/23	---	---	---	0	98.4	98.8	99.4	24	---	---	---	0	101.7	102.1	102.6	24	---	---	---	0
9/24	---	---	---	0	98.9	99.3	100.3	24	---	---	---	0	100.6	101.0	101.7	24	---	---	---	0
9/25	---	---	---	0	99.0	99.5	101.4	23	---	---	---	0	101.0	101.7	102.2	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

	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		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr
9/12	101.2	101.5	102.0	24	100.9	101.3	101.6	24	100.1	101.0	101.6	24	97.9	98.8	99.6	24	100.0	100.3	100.5	24
9/13	100.5	100.9	101.2	24	100.6	100.8	101.0	24	100.2	100.8	101.6	24	97.7	98.3	98.8	24	100.4	100.8	101.2	24
9/14	100.0	100.4	100.7	24	100.1	100.4	100.7	24	99.4	100.1	101.1	24	97.9	99.1	99.9	24	100.3	100.6	100.8	24
9/15	98.9	98.9	99.1	9	100.1	100.5	100.8	24	98.8	98.8	99.6	11	99.2	100.9	102.1	24	100.5	100.7	100.9	24
9/16	---	---	---	0	100.6	101.0	101.3	24	---	---	---	0	98.5	99.1	99.6	24	100.5	100.5	100.7	8
9/17	---	---	---	0	101.9	102.5	102.8	24	---	---	---	0	97.5	98.1	99.7	24	---	---	---	0
9/18	---	---	---	0	101.8	102.4	102.9	24	---	---	---	0	96.3	97.3	98.0	23	---	---	---	0
9/19	---	---	---	0	100.5	100.9	101.3	24	---	---	---	0	95.7	97.1	97.9	24	---	---	---	0
9/20	---	---	---	0	101.0	101.8	102.7	24	---	---	---	0	96.4	97.6	98.9	24	---	---	---	0
9/21	---	---	---	0	102.0	102.5	102.7	24	---	---	---	0	98.6	101.5	102.1	24	---	---	---	0
9/22	---	---	---	0	101.8	102.1	102.4	24	---	---	---	0	101.0	101.3	101.7	24	---	---	---	0
9/23	---	---	---	0	101.9	102.2	102.5	24	---	---	---	0	100.9	101.2	101.6	24	---	---	---	0
9/24	---	---	---	0	101.6	102.1	102.6	24	---	---	---	0	100.5	100.8	101.1	24	---	---	---	0
9/25	---	---	---	0	101.1	101.3	101.5	23	---	---	---	0	99.9	100.1	100.3	23	---	---	---	0

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

	The Dalles Dnst				Bonneville				Warrendale				Camas\Washougal				Cascade Island			
	24 h	12 h		#	24 h	12 h		#	24h	12h		#	24h	12h		#	24h	12h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
9/12	103.2	104.8	105.8	24	99.9	100.2	100.4	24	102.1	102.9	103.7	24	100.6	101.2	101.6	24	109.0	110.8	112.7	24
9/13	103.1	104.5	104.9	24	100.6	101.0	101.5	24	102.7	103.7	104.4	24	101.3	101.9	102.4	24	107.7	109.2	113.6	24
9/14	104.0	105.9	106.6	24	101.2	101.4	101.8	24	103.7	104.6	105.3	24	101.7	102.4	102.9	24	109.8	112.2	116.0	24
9/15	103.9	105.6	106.2	24	101.5	101.8	102.1	24	103.7	104.6	105.6	24	102.2	102.9	103.4	24	110.5	113.4	115.7	24
9/16	102.3	102.7	103.2	24	101.5	101.8	101.9	24	104.4	105.0	105.8	24	103.3	104.4	104.7	24	109.6	111.9	113.7	24
9/17	102.3	102.6	102.7	24	102.7	103.1	103.3	24	105.1	106.0	106.8	24	104.7	105.1	105.3	24	111.4	111.4	114.7	12
9/18	101.7	102.2	102.7	24	101.7	102.3	102.7	24	104.9	105.4	105.6	24	104.3	104.3	104.9	11	---	---	---	0
9/19	101.1	101.3	101.5	24	100.5	100.8	100.9	24	104.2	104.8	105.2	24	---	---	---	0	---	---	---	0
9/20	101.8	102.5	103.4	24	100.4	100.8	101.2	24	103.7	104.2	104.9	24	---	---	---	0	---	---	---	0
9/21	102.9	103.6	104.1	24	100.5	100.9	101.1	24	103.9	104.8	105.4	24	---	---	---	0	---	---	---	0
9/22	102.3	102.8	103.3	24	99.9	100.7	100.8	24	103.6	103.9	104.1	24	---	---	---	0	---	---	---	0
9/23	102.2	102.6	102.9	24	100.5	101.0	101.1	24	104.1	104.4	104.6	24	---	---	---	0	---	---	---	0
9/24	101.2	101.6	101.9	24	100.4	100.4	100.8	13	103.2	103.3	103.4	24	---	---	---	0	---	---	---	0
9/25	101.2	101.5	101.6	23	---	---	---	0	103.9	104.5	105.3	23	---	---	---	0	---	---	---	0

Two-Week Summary of Passage Indices

Source: Fish Passage Center Updated: 9/26/2014 8:46

Two-Week Summary of Passage Indices

* One or more of the sites on this date had an incomplete or biased sample.
See Sampling Comments: http://www.fpc.org/currentDaily/smpcomments.htm
For clip information see: http://www.fpc.org/CurrentDaily/catch.htm
For sockeye and yearling chinook (Snake only) race information see: http://www.fpc.org/smoltqueries/currentsmpsubmitdata.asp

				COMBINED YEARLING CHINOOK								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
09/12/2014	*	---	---	---	---	0	0	0	---	0	0	0
09/13/2014	*	---	---	---	---	0	0	0	---	---	0	0
09/14/2014	*	---	---	---	---	0	0	---	---	0	0	0
09/15/2014	*	---	---	---	---	0	0	1	---	---	0	0
09/16/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/17/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/18/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/19/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/20/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/21/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/22/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/23/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/24/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/25/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/26/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**8**	**0**	**7**	**4**	**14**
Average:		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
YTD		**65,404**	**63,591**	**25,420**	**10,159**	**4,807,475**	**2,838,738**	**1,969,634**	**26,427**	**2,022,048**	**2,320,483**	**2,151,268**

				COMBINED SUBYEARLING CHINOOK								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
09/12/2014	*	---	---	---	---	116	26	118	---	68	4	130
09/13/2014	*	---	---	---	---	124	75	117	---	---	50	160
09/14/2014	*	---	---	---	---	70	53	---	---	56	30	274
09/15/2014	*	---	---	---	---	32	33	73	---	---	30	142
09/16/2014	*	---	---	---	---	38	19	---	---	36	---	136
09/17/2014	*	---	---	---	---	41	15	19	---	---	---	119
09/18/2014	*	---	---	---	---	26	25	---	---	84	---	157
09/19/2014	*	---	---	---	---	25	21	22	---	---	---	47
09/20/2014	*	---	---	---	---	12	23	---	---	64	---	153
09/21/2014	*	---	---	---	---	16	15	29	---	---	---	35
09/22/2014	*	---	---	---	---	33	14	---	---	56	---	30
09/23/2014	*	---	---	---	---	65	20	6	---	---	---	32
09/24/2014	*	---	---	---	---	51	40	---	---	76	---	122
09/25/2014	*	---	---	---	---	83	37	24	---	---	---	371
09/26/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**732**	**416**	**408**	**0**	**440**	**114**	**1,908**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**8**	**0**	**7**	**4**	**14**
Average:		**0**	**0**	**0**	**0**	**52**	**30**	**51**	**0**	**63**	**29**	**136**
YTD		**0**	**27**	**4**	**332**	**948,724**	**1,048,103**	**381,204**	**38,664**	**4,914,606**	**2,591,942**	**4,234,262**

Two-Week Summary of Passage Indices

				COMBINED COHO								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
09/12/2014	*	---	---	---	---	0	0	0	---	0	0	0
09/13/2014	*	---	---	---	---	0	0	0	---	---	0	0
09/14/2014	*	---	---	---	---	0	0	---	---	0	0	0
09/15/2014	*	---	---	---	---	0	0	0	---	---	0	0
09/16/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/17/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/18/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/19/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/20/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/21/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/22/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/23/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/24/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/25/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/26/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**8**	**0**	**7**	**4**	**14**
Average:		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
YTD		**0**	**0**	**0**	**267**	**74,170**	**59,431**	**27,316**	**66,433**	**147,455**	**225,188**	**776,651**

				COMBINED STEELHEAD								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
09/12/2014	*	---	---	---	---	0	0	0	---	0	0	0
09/13/2014	*	---	---	---	---	0	0	1	---	---	0	0
09/14/2014	*	---	---	---	---	0	0	---	---	0	0	0
09/15/2014	*	---	---	---	---	0	0	0	---	---	0	0
09/16/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/17/2014	*	---	---	---	---	1	0	0	---	---	---	0
09/18/2014	*	---	---	---	---	0	1	---	---	0	---	0
09/19/2014	*	---	---	---	---	0	1	2	---	---	---	0
09/20/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/21/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/22/2014	*	---	---	---	---	2	0	---	---	0	---	0
09/23/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/24/2014	*	---	---	---	---	1	0	---	---	0	---	0
09/25/2014	*	---	---	---	---	2	1	0	---	---	---	0
09/26/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**6**	**3**	**3**	**0**	**0**	**0**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**8**	**0**	**7**	**4**	**14**
Average:		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
YTD		**2,080**	**43,465**	**4,243**	**12,842**	**3,376,198**	**1,975,623**	**1,183,218**	**27,522**	**586,885**	**1,032,890**	**459,444**

Two-Week Summary of Passage Indices

				COMBINED SOCKEYE								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
09/12/2014	*	---	---	---	---	0	2	1	---	0	0	0
09/13/2014	*	---	---	---	---	1	1	0	---	---	0	0
09/14/2014	*	---	---	---	---	1	1	---	---	0	0	0
09/15/2014	*	---	---	---	---	0	0	0	---	---	0	0
09/16/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/17/2014	*	---	---	---	---	2	0	0	---	---	---	0
09/18/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/19/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/20/2014	*	---	---	---	---	0	2	---	---	4	---	0
09/21/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/22/2014	*	---	---	---	---	0	1	---	---	0	---	0
09/23/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/24/2014	*	---	---	---	---	0	1	---	---	0	---	0
09/25/2014	*	---	---	---	---	2	1	0	---	---	---	0
09/26/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**6**	**9**	**1**	**0**	**4**	**0**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**8**	**0**	**7**	**4**	**14**
Average:		**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**
YTD		**0**	**0**	**2**	**0**	**182,064**	**88,458**	**69,805**	**37,962**	**1,495,582**	**577,701**	**590,103**

				COMBINED LAMPREY JUVENILES								
		WTB	IMN	GRN	LEW	LGR†	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(Samp)	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)
09/12/2014	*	---	---	---	---	0	11	0	---	12	0	0
09/13/2014	*	---	---	---	---	1	8	2	---	---	0	0
09/14/2014	*	---	---	---	---	2	6	---	---	4	0	4
09/15/2014	*	---	---	---	---	0	2	9	---	---	0	0
09/16/2014	*	---	---	---	---	3	2	---	---	8	---	0
09/17/2014	*	---	---	---	---	0	2	0	---	---	---	0
09/18/2014	*	---	---	---	---	1	5	---	---	8	---	0
09/19/2014	*	---	---	---	---	0	6	2	---	---	---	0
09/20/2014	*	---	---	---	---	1	4	---	---	0	---	0
09/21/2014	*	---	---	---	---	0	5	1	---	---	---	0
09/22/2014	*	---	---	---	---	1	9	---	---	0	---	0
09/23/2014	*	---	---	---	---	0	4	3	---	---	---	0
09/24/2014	*	---	---	---	---	0	3	---	---	4	---	0
09/25/2014	*	---	---	---	---	1	2	0	---	---	---	0
09/26/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**10**	**69**	**17**	**0**	**36**	**0**	**4**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**8**	**0**	**7**	**4**	**14**
Average:		**0**	**0**	**0**	**0**	**1**	**5**	**2**	**0**	**5**	**0**	**0**
YTD		**1**	**3**	**0**	**0**	**185**	**21,080**	**29,505**	**220**	**60,701**	**98,903**	**19,339**

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:
Sample counts (Samp) are provided for juvenile lamprey at LGR. See note below for details †.
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 macropthalmia, and unidentified lamprey species.
† In 2013 it was confirmed that juvenile lamprey can escape the sample tank at LGR which would lead to unreliable estimates of collection. Therefore, only sample counts are provided in this report.

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: 9/26/14 8:49 AM

09/12/14 TO 09/26/14

		Species				
Site	Data	**CH0**	**CH1**	ST	SO	**Grand Total**
LGR	Sum of NumberCollected	695		5	5	705
	Sum of NumberBarged	0		0	0	0
	Sum of NumberBypassed	0		5	0	5
	Sum of Numbertrucked	679		0	5	684
	Sum of SampleMorts	16		0	0	16
	Sum of FacilityMorts	0		0	0	0
	Sum of ResearchMorts	0		0	0	0
	Sum of TotalProjectMorts	16		0	0	16
LGS	Sum of NumberCollected	416		3	9	428
	Sum of NumberBarged	0		0	0	0
	Sum of NumberBypassed	0		0	0	0
	Sum of Numbertrucked	398		3	8	409
	Sum of SampleMorts	13		0	1	14
	Sum of FacilityMorts	5		0	0	5
	Sum of ResearchMorts	0		0	0	0
	Sum of TotalProjectMorts	18		0	1	19
LMN	Sum of NumberCollected	408	1	3	1	413
	Sum of NumberBarged	0	0	0	0	0
	Sum of NumberBypassed	0	0	0	0	0
	Sum of Numbertrucked	386	1	3	1	391
	Sum of SampleMorts	22	0	0	0	22
	Sum of FacilityMorts	0	0	0	0	0
	Sum of ResearchMorts	0	0	0	0	0
	Sum of TotalProjectMorts	22	0	0	0	22
Total Sum of NumberCollected		1,519	1	11	15	1,546
Total Sum of NumberBarged		0	0	0	0	0
Total Sum of NumberBypassed		0	0	5	0	5
Total Sum of Numbertrucked		1,463	1	6	14	1,484
Total Sum of SampleMorts		51	0	0	1	52
Total Sum of FacilityMorts		5	0	0	0	5
Total Sum of ResearchMorts		0	0	0	0	0
Total Sum of TotalProjectMorts		56	0	0	1	57

YTD Transportation Summary

Source: Fish Passage Center Updated: 9/26/14 8:49 AM

TO: 09/26/14

		Species					
Site	Data	**CH0**	**CH1**	CO	SO	ST	**Grand Total**
LGR	Sum of NumberCollected	645,703	3,442,339	52,723	130,979	2,404,249	6,675,993
	Sum of NumberBarged	622,537	1,939,440	48,991	70,855	1,326,856	4,008,679
	Sum of NumberBypassed	11,727	1,501,375	3,722	59,638	1,077,105	2,653,567
	Sum of NumberTrucked	9,386	1	1	24	0	9,412
	Sum of SampleMorts	496	139	1	47	60	743
	Sum of FacilityMorts	1,547	1,305	8	415	121	3,396
	Sum of ResearchMorts	10	79	0	0	107	196
	Sum of TotalProjectMorts	2,053	1,523	9	462	288	4,335
LGS	Sum of NumberCollected	739,533	1,951,719	41,832	61,252	1,369,633	4,163,969
	Sum of NumberBarged	731,173	1,768,377	40,932	54,864	1,149,468	3,744,814
	Sum of NumberBypassed	324	182,657	890	6,110	220,103	410,084
	Sum of NumberTrucked	6,409	0	0	16	9	6,434
	Sum of SampleMorts	239	34	1	25	16	315
	Sum of FacilityMorts	1,388	651	9	237	167	2,452
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	1,627	685	10	262	183	2,767
LMN	Sum of NumberCollected	258,393	1,326,227	19,905	48,376	792,154	2,445,055
	Sum of NumberBarged	253,846	1,138,579	17,505	45,110	686,179	2,141,219
	Sum of NumberBypassed	616	177,066	0	2,568	89,957	270,207
	Sum of NumberTrucked	1,754	5	0	2	12	1,773
	Sum of SampleMorts	236	25	0	1	17	279
	Sum of FacilityMorts	541	964	0	301	193	1,999
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	777	989	0	302	210	2,278
Total Sum of NumberCollected		1,643,629	6,720,285	114,460	240,607	4,566,036	13,285,017
Total Sum of NumberBarged		1,607,556	4,846,396	107,428	170,829	3,162,503	9,894,712
Total Sum of NumberBypassed		12,667	1,861,098	4,612	68,316	1,387,165	3,333,858
Total Sum of NumberTrucked		17,549	6	1	42	21	17,619
Total Sum of SampleMorts		971	198	2	73	93	1,337
Total Sum of FacilityMorts		3,476	2,920	17	953	481	7,847
Total Sum of ResearchMorts		10	79	0	0	107	196
Total Sum of TotalProjectMorts		4,457	3,197	19	1,026	681	9,380

Cumulative Adult Passage at Mainstem Dams Through: 09/25

		Spring Chinook						Summer Chinook						Fall Chinook					
		2014		2013		10-Yr Avg.		2014		2013		10-Yr Avg.		2014		2013		10-Yr Avg.	
DAM	ENDDA	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	09/25	188083	26094	83345	33820	130283	22257	109734	25342	93097	26186	85511	18881	765103	107091	844083	93263	377026	56337
TDA	09/25	143142	21080	69202	32311	99813	18973	96134	19525	85639	20750	73080	14947	442198	66966	493296	71913	206017	44377
JDA	09/25	123224	19103	56991	28957	87036	17743	86033	17655	75248	19714	65621	15576	352206	52278	335349	70332	148853	38601
MCN	09/24	107147	16033	52176	22279	79413	14950	87974	17022	75741	14808	61586	11232	300098	42506	296261	37274	112470	22693
IHR	09/25	79298	12428	38017	18611	54814	9602	17433	4474	11912	6321	16717	4436	52347	11876	50708	14579	23272	11219
LMN	09/25	79942	14020	36470	19053	54458	8539	16064	8136	11765	7703	18241	4639	42708	14859	46092	18390	20747	10840
LGS	09/25	77966	13649	35072	19443	49920	9660	17058	7477	10120	7632	17208	5330	41143	9989	44559	15683	18897	8356
LGR	09/25	79167	13732	35031	19940	49728	11001	14668	7106	8423	7572	15316	5918	41525	9563	42276	14133	16844	9260
PRD	09/22	23742	2649	13725	1298	14700	1468	78434	4889	71083	3174	52746	2498	61628	6347	96858	11206	26118	4392
WAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	09/24	23247	2934	13345	3100	13890	2468	77982	6494	68386	3986	50079	5174	14090	4397	16223	9485	6669	2780
RRH	09/24	12376	2377	6841	2101	5576	1020	58569	5017	59685	4044	38940	4099	10449	3297	12214	5569	4791	1853
WEL	09/23	15376	2544	7133	2980	4880	1164	49255	5989	49451	4264	29289	3038	3725	1492	4261	660	2303	967
WFA	09/19	30071	1598	27897	1664	40347	1124	0	0	0	0	0	0	961	354	1126	303	683	141

		Coho						Sockeye			Steelhead						Lamprey		
		2014		2013		10-Yr Avg.				10-Yr			10-Yr	Wild	Wild	10-Yr			10-Yr
DAM	ENDDA	Adult	Jack	Adult	Jack	Adult	Jack	2014	2013	Avg.	2014	2013	Avg.	2014	2013	Avg.	2014	2013	Avg.
BON	09/25	164136	8772	26869	3787	67699	3963	614180	185505	192204	302978	220661	329918	123369	94876	104776	31837	23783	24577
TDA	09/25	111632	8963	9623	1164	22637	2454	586188	161896	159036	210245	150977	233107	84892	64677	73547	11530	8706	6373
JDA	09/25	77149	6248	5095	650	18717	2612	557531	155494	161068	152441	101876	200420	58536	42246	62454	8340	6534	5873
MCN	09/24	53728	10803	2335	471	9045	1023	546008	134198	135990	140269	84113	151359	52259	33245	44916	1680	1540	2110
IHR	09/25	8952	465	248	94	1044	137	2392	895	505	91695	63595	108449	27569	17802	26621	712	315	281
LMN	09/25	4969	1391	213	54	800	97	2804	1014	632	82087	56556	100045	28419	19012	26727	217	111	77
LGS	09/25	3988	1041	245	99	709	104	2811	991	607	65390	43397	83799	22827	14698	21248	121	31	45
LGR	09/25	1905	68	48	13	448	82	2775	750	681	60016	43087	77722	22654	15172	21215	79	19	11
PRD	09/22	9838	572	561	97	1665	267	608142	163078	167425	15041	11565	16187	0	0	0	7000	5615	3518
WAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	09/24	4983	15	43	2	1553	212	581097	159201	164839	10697	8520	14673	5021	4699	6707	2351	2053	1159
RRH	09/24	1132	9	2	0	232	26	492850	131655	139953	6803	6339	11032	3186	3409	4598	3668	1587	556
WEL	09/23	199	5	0	0	48	0	490773	129982	133695	4446	4684	7468	2277	2366	3123	7	20	3
WFA	09/19	717	849	3915	1612	1866	591	0	0	0	27283	17818	25203	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.

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