Fish Passage Center

Weekly Report #14 - 28

October 10, 2014

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This is the final weekly report of 2014. The FPC will resume our weekly reporting in March of 2015.

Summary of Events

Water Supply

Precipitation throughout the Columbia Basin has varied between 0% and 19% of average at individual sub-basins over first nine days of Water Year 2015 (October 1–9, 2014). Precipitation above The Dalles has been 8% of average over the beginning of Water Year 2015. Over the 2014 Water Year, precipitation ranged between 78% and 102% of average.

Table 1. Summary of Water Year 2014 precipitation and new Water Year 2015 precipitation with respect to average (1971–2000), at select locations within the Columbia and Snake River Basins.

	Water Year 2014 October 1, 2013 to September 30, 2014		Water Year 2015 October 1, 2014 to October 9, 2014	
Location	Observed (inches)	% Average	Observed (inches)	% Average
Columbia above Coulee	35.8	92	0.1	17
Snake River above Ice Harbor	19.2	84	0.0	1
Columbia above The Dalles	24.0	84	0.0	8
Kootenai	38.1	94	0.2	19
Clark Fork	22.4	78	0.0	2
Flathead	35.3	95	0.1	14
Pend Oreille River Basin above Waneta Dam	29.1	86	0.0	6
Salmon River Basin	23.8	80	0.0	0
Upper Snake Tributaries	28.3	102	0.0	5
Clearwater	36.5	87	0.0	1
Willamette River above Portland	53.9	83	0.0	0

Grand Coulee Reservoir is at 1285.2 feet (10-9-14) and has refilled 0.8 feet over the last week. Outflows at Grand Coulee have ranged between 59.0 and 74.3 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2447.7 feet (10-9-14) and has refilled 0.2 feet over the previous week. Daily average outflows at Libby Dam have been 4.0 Kcfs over the last week.

Hungry Horse is currently at an elevation of 3548.7 feet (10-9-14) and has drafted 0.7 feet over the previous week. Outflows at Hungry Horse have been 1.9–2.1 Kcfs over the last week.

Dworshak is currently at an elevation of 1518.5 feet (10-9-14) and has drafted 0.7 feet over the previous week. Outflows at Dworshak have been 1.7 Kcfs over the last week.

The Brownlee Reservoir was at an elevation of 2059.7 feet on October 9, 2014, and has refilled 2.3 feet last week. Inflows to Brownlee Dam have ranged between 11.2 and 12.3 Kcfs last week.

Smolt Monitoring

Smolt monitoring is ongoing at three SMP dams (BON, LGS, and LGR). Sampling at these three sites will continue through the end of this month. Sampling at McNary and Lower Monumental dams ended after the September 30th and October 1st samples, respectively.

The daily average passage index for subyearling Chinook at Bonneville Dam (BON) this week was about 85 per day. This daily average was similar to last week but slightly below the daily average from 2 weeks ago. This week's daily average passage index for subyearling Chinook at Lower Granite Dam (LGR)

was about 210 per day, which is a large increase from recent weeks. Last week's daily average passage index for subyearling Chinook at LGR was about 30 per day. Subyearling Chinook passage at Little Goose Dam (LGS) was extremely low this week, with a daily average passage index of only 7 fish per day.

Pacific lamprey macropthalmia were encountered at BON on one day this week, October 3rd, with an estimated collection of ten. A total of four pacific lamprey macropthalmia were sampled this week at LGR, one on October 5th, two on October 6th, and one on October 9th. Pacific lamprey macropthalmia were encountered in six of this week's samples at LGS. The maximum collection for pacific lamprey macropthalmia at LGS this week was three, on October 4th. No pacific lamprey ammocoetes were encountered at BON, LGR, or LGS this week.

Hatchery Release

Snake River Zone: The Snake River Zone encompasses the Snake River and its tributaries from its confluence with the Columbia River to Hells Canyon Dam. There were no new releases scheduled for this zone this week. Approximately 225,000 spring Chinook pre-smolts were scheduled for release into tributaries of the Clearwater River. These pre-smolt releases were expected to occur sometime in early to mid-October. All pre-smolts were planned to be 100% coded-wire tagged and are not expected to out-migrate until spring 2015. No other releases are scheduled for this zone over the next 2 weeks.

Mid-Columbia Zone: The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam. There were no releases scheduled for this zone this week and no releases are scheduled for this zone over the next 2 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 2 weeks.

Adult Passage

Daily adult fall Chinook passage numbers at Bonneville Dam ranged between 2,041 and 4,257 last week. The adult fall Chinook count of 836,672 is about 91% of the 2013 count of 917,514, while being about 2 times greater than the 10-year average count of 410,360. The 2014 Bonneville Dam fall Chinook jack count of 130,417 is about 1.2 times greater than the 2013 count of 105,957 and 2.0 times greater than the 10-year average count of 64,941. The 2014 McNary Dam adult fall Chinook count of 387,529 has 28,433 fewer fish than the 2013 count but is 2.6 times greater than the 10-year average. The 2014 McNary Dam jack count of 68,416 is about 1.4 times greater than the 2013 count and 2.2 times greater than the 10-year average count. The 2014 Lower Granite Dam adult fall Chinook count of 56,722 has 3,952 more fish than the 2013 count, while being 2.6 times greater than the 10-year average. The 2014 Lower Granite Dam jack count of 16,879 is about 85% of the 2013 count, while having 3,239 more fish than the the 10-year average count.

Daily steelhead counts at Bonneville Dam ranged from 361 to 863. The 2014 Bonneville Dam adult steelhead count of 317,734 is about 1.4 times greater than the 2013 count of 230,145, while being about 93% of the 10-year average count of 343,281. The 2014 Bonneville Dam adult wild steelhead count of 127,367 is about 1.3 times greater than the 2013 count of 97,768 and about 1.2 times greater than the 10-year average count of 107,871. In the Snake River, this year's Lower Granite steelhead count of 119,179 is 1.6 times greater than the 2013 count, while being 94% of the 10-year average count. The 2014 Lower Granite Dam adult wild steelhead count of 39,126 is about 1.7 times greater than the 2013 count and has 7,105 more fish than the 10-year average count. At Willamette Falls, the 2014 count for steelhead was 27,434 as of September 29th. This year's steelhead count is about 1.5 times greater than the 2013 count of 17,887 and has 2,144 more fish than the 10-year average count.

Daily counts of coho have ranged between 2,708 and 3,317 over the last week at Bonneville Dam. The 2014 Bonneville Dam adult coho count of 209,824 is about 4.8 times greater than the 2013 count of 43,846 and about 2.4 times greater than the 10-year average

count of 89,403. The 2014 Bonneville Dam coho jack count of 12,307 is about 2.2 times greater than the 2013 count of 5,612 and 2.3 times greater than the 10-year average count of 5,476.

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. 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. Grant County PUD installed spiral flumes on the left and right bank fishway chutes that reduce the elevation of the chute outflow from more than 10 feet down to several feet. Over 2014, the fishway exit retrofits have performed well. As of October 9, 2014, a total of 608,142 sockeye and 203,963 adult Chinook had passed Priest Rapids Dam. As of October 9, 2014, 581,111 sockeye and 123,430 adult Chinook had passed Rock Island Dam.

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.

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.

The drawdown of the Wanapum reservoir coupled with very low September river flows have created a difficult situation for adult fish passage at Rock Island Dam. Under the current tailrace elevations, and at river flows roughly less than 75 Kcfs, Chelan PUD cannot operate their powerhouses. Under spill only conditions throughout an entire day, adult passage at Rock Island Dam has generally been poor. All in all, despite the low flows that Chelan PUD has been receiving along with the drawdown of the Wanapum pool and associated Rock Island tailrace, fishway attendants/biologists at Chelan PUD have been working very hard at creating favorable fish passage conditions at Rock Island Dam. This has involved large daily changes in river conditions from all spill to powerhouse operations, each of which influences fishways in various ways. Chelan PUD has worked hard to provide a pulse of water daily in which the powerhouse can be operated which has provided the best possible conditions for migrating adult salmonids. Over most days of the week, Chelan PUD has been able to operate the powerhouse beginning at 8:00–9:00 AM. However over some weekend days, the powerhouse has not begun to operate until later in the afternoon (3:00–4:00 PM).

Hatchery Releases Last 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**				

Hatchery Releases Next Two Weeks

Hatchery Release Summary
From: 10/10/2014 to 10/23/2014

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
09/26/2014	73.1	0.1	69.3	0.0	65.6	0.0	67.4	0.0	68.6	16.3	68.7	3.8	65.9	2.2
09/27/2014	56.1	0.1	63.6	0.0	65.3	0.0	67.5	0.0	69.3	19.9	71.0	3.9	72.3	2.4
09/28/2014	57.9	0.1	62.0	0.0	60.0	0.0	61.9	0.0	65.6	27.9	66.5	3.9	63.9	2.3
09/29/2014	52.4	0.1	52.9	0.0	59.0	0.0	59.5	0.0	60.3	25.9	70.0	3.9	72.7	1.2
09/30/2014	53.6	0.1	54.9	0.0	55.3	0.0	50.5	0.0	49.9	48.4	50.7	3.7	50.4	1.4
10/01/2014	64.4	0.0	63.5	0.0	57.6	0.0	60.8	0.0	64.4	30.0	59.2	3.8	53.7	1.9
10/02/2014	77.8	0.0	75.0	0.0	73.2	0.0	68.3	0.0	72.1	18.2	74.2	4.0	73.8	2.6
10/03/2014	71.3	0.0	68.8	0.0	69.1	0.0	71.5	0.0	74.1	15.3	78.1	3.8	82.2	2.5
10/04/2014	65.4	0.0	67.2	0.0	64.2	0.0	58.8	0.0	60.4	32.2	60.5	3.9	57.8	2.4
10/05/2014	59.0	0.0	64.5	0.0	67.1	0.0	69.1	0.0	71.3	36.1	72.4	4.0	71.5	2.8
10/06/2014	70.8	0.0	61.8	0.0	70.7	0.0	73.4	0.0	75.3	16.7	79.7	3.9	86.6	2.0
10/07/2014	70.5	0.0	69.2	0.0	75.0	0.0	73.9	0.0	77.4	15.6	85.4	3.8	89.2	2.0
10/08/2014	69.5	0.0	69.7	0.0	69.8	0.0	71.0	0.0	73.8	12.4	74.0	3.8	72.6	1.5
10/09/2014	74.3	0.0	69.2	0.0	70.5	0.0	71.2	0.0	73.7	14.2	74.4	3.8	80.2	2.0

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
09/26/2014	1.7	0.0	---	10.8	15.3	0.0	13.3	0.0	12.2	0.0	10.5	0.0
09/27/2014	1.7	0.0	---	10.7	16.6	0.0	15.6	0.0	15.0	0.0	14.3	0.0
09/28/2014	1.7	0.0	---	11.0	19.8	0.0	15.7	0.0	15.5	0.0	15.7	0.0
09/29/2014	1.7	0.0	---	9.8	15.9	0.0	14.1	0.0	13.9	0.0	12.8	0.0
09/30/2014	1.7	0.0	---	9.3	17.2	0.0	14.0	0.0	13.7	0.0	14.9	0.0
10/01/2014	1.7	0.0	---	9.3	18.4	0.0	16.7	0.0	16.0	0.0	16.3	0.0
10/02/2014	1.7	0.0	---	9.3	19.3	0.0	16.0	0.0	15.8	0.0	14.7	0.0
10/03/2014	1.7	0.0	---	9.3	19.3	0.0	18.6	0.0	19.0	0.0	19.1	0.0
10/04/2014	1.7	0.0	---	9.3	19.1	0.0	18.1	0.0	17.0	0.0	15.6	0.0
10/05/2014	1.7	0.0	---	9.3	18.0	0.0	17.5	0.0	17.3	0.0	17.8	0.0
10/06/2014	1.7	0.0	---	9.4	20.7	0.0	20.3	0.0	21.7	0.0	23.7	0.0
10/07/2014	1.7	0.0	---	9.7	17.7	0.0	17.3	0.0	17.2	0.0	16.3	0.0
10/08/2014	1.7	0.0	---	9.9	18.1	0.0	17.4	0.0	17.8	0.0	17.9	0.0
10/09/2014	1.7	0.0	---	11.0	18.6	0.0	18.6	0.0	18.3	0.0	19.2	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
09/26/2014	76.0	0.0	76.5	0.9	78.3	0.0	88.1	1.2	60.9	18.6
09/27/2014	83.6	0.0	87.3	1.0	88.3	0.0	95.1	1.2	65.9	20.5
09/28/2014	87.8	0.0	81.9	0.9	81.7	0.0	89.5	1.2	43.8	37.1
09/29/2014	78.8	0.0	68.6	0.9	69.9	0.0	85.0	1.2	17.3	59.0
09/30/2014	77.6	0.0	72.6	1.0	72.4	0.0	77.4	1.2	8.5	60.3
10/01/2014	72.8	0.0	71.9	1.0	74.4	0.0	79.6	1.2	4.9	66.1
10/02/2014	87.5	0.0	86.9	1.1	86.9	0.0	93.9	1.2	3.5	81.7
10/03/2014	98.4	0.0	100.9	0.9	99.8	0.0	102.2	1.2	7.6	86.0
10/04/2014	85.0	0.0	73.5	0.9	76.1	0.0	82.7	1.2	1.7	72.3
10/05/2014	80.9	0.0	80.3	0.9	79.6	0.0	82.5	1.2	0.0	73.9
10/06/2014	105.7	0.0	96.2	0.9	100.0	0.0	114.9	1.2	34.9	71.4
10/07/2014	111.5	0.0	101.2	0.8	98.6	0.0	104.4	1.1	24.7	71.2
10/08/2014	103.0	0.0	104.9	0.9	102.8	0.0	105.7	1.1	27.3	69.9
10/09/2014	94.6	0.0	100.2	0.9	102.9	0.0	108.2	1.1	23.4	76.3

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
9/26	103.0	103.2	103.5	24	---	---	---	0	101.1	101.2	101.5	24	100.7	101.0	101.2	24	101.3	101.7	101.9	24
9/27	102.5	102.8	103.1	24	---	---	---	0	100.9	101.0	101.1	24	100.3	100.9	101.1	24	100.8	101.0	101.4	24
9/28	101.9	102.1	102.5	24	---	---	---	0	101.2	101.4	101.5	24	101.0	101.4	101.6	24	101.0	101.3	101.7	24
9/29	102.4	103.0	103.2	24	---	---	---	0	101.8	101.9	102.1	24	101.7	102.2	102.6	24	101.5	101.8	102.1	24
9/30	102.7	103.0	103.1	24	---	---	---	0	101.4	101.6	101.9	24	101.4	101.6	102.1	24	100.9	101.3	101.6	24
10/1	102.0	102.2	102.3	24	---	---	---	0	101.0	101.1	101.2	24	100.2	100.6	100.8	24	100.1	100.4	100.5	24
10/2	102.0	102.4	102.9	24	---	---	---	0	100.4	100.6	101.0	24	99.3	99.5	100.0	24	99.9	100.1	100.3	24
10/3	101.3	101.6	102.0	24	---	---	---	0	100.1	100.3	100.5	24	99.0	99.3	99.5	24	99.9	100.2	100.4	24
10/4	101.2	101.5	101.8	24	---	---	---	0	100.7	100.8	101.0	24	99.5	99.8	100.1	24	100.2	100.4	100.6	24
10/5	101.4	101.7	101.9	24	---	---	---	0	100.8	101.0	101.1	24	99.5	99.8	100.0	24	100.3	100.6	100.9	24
10/6	101.8	102.0	102.2	24	---	---	---	0	101.1	101.2	101.4	24	100.1	100.5	100.8	24	100.5	100.9	101.0	24
10/7	102.1	102.5	102.7	24	---	---	---	0	101.1	101.2	101.4	24	100.1	100.5	100.8	24	100.7	101.0	101.4	24
10/8	101.9	102.1	102.3	24	---	---	---	0	100.9	101.1	101.2	24	99.6	99.8	100.0	24	100.6	100.8	100.9	24
10/9	101.5	101.8	102.2	23	---	---	---	0	100.6	100.7	100.8	23	99.2	99.4	99.6	23	100.4	100.6	100.9	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
9/26	102.5	102.9	103.9	24	100.8	101.0	101.4	19	100.8	101.2	101.6	19	101.6	101.8	102.2	24	101.2	101.3	101.9	24
9/27	102.3	103.2	104.8	24	100.4	100.8	101.5	19	100.2	100.7	101.5	19	101.1	101.3	101.5	24	100.6	100.8	100.9	24
9/28	102.5	103.2	103.7	24	101.6	102.1	102.7	21	101.1	101.9	102.7	20	101.4	101.7	101.9	24	100.8	101.1	101.5	24
9/29	103.1	104.0	105.6	24	102.3	102.6	103.3	18	102.1	102.6	103.3	18	101.9	102.0	102.2	24	101.5	101.7	101.9	24
9/30	102.9	103.5	104.8	24	101.5	101.8	102.0	19	101.5	101.8	102.3	19	101.0	101.3	101.5	24	100.7	101.0	101.5	24
10/1	101.6	102.2	102.7	24	100.5	100.8	101.4	22	100.6	101.1	101.8	22	100.5	100.7	100.8	24	100.2	100.5	100.7	24
10/2	101.5	102.2	102.7	24	99.8	100.0	100.5	22	99.9	100.2	101.1	22	99.8	100.0	100.5	24	99.8	100.1	100.7	24
10/3	101.1	101.7	102.5	24	99.8	100.2	100.4	18	99.9	100.3	100.5	18	99.5	99.7	99.9	24	99.7	99.9	100.1	24
10/4	101.1	101.5	102.3	24	100.3	100.4	100.7	20	100.3	100.6	101.1	20	99.8	99.9	100.0	24	99.9	100.2	100.4	24
10/5	101.3	101.9	102.8	24	100.7	101.0	102.2	18	100.7	101.1	102.3	18	100.2	100.4	100.5	24	100.2	100.4	100.8	24
10/6	100.5	100.9	101.2	24	101.5	101.8	102.3	19	101.6	102.1	103.0	19	100.6	100.9	100.9	24	100.9	101.2	101.4	24
10/7	100.3	100.8	101.3	24	101.7	102.0	102.5	18	101.9	102.3	102.9	19	101.4	102.1	102.7	22	101.3	101.8	102.3	22
10/8	100.3	100.6	101.0	24	100.9	101.2	101.6	20	101.2	101.5	102.0	20	102.0	102.1	102.4	24	101.7	101.8	102.3	24
10/9	100.1	100.6	101.2	23	100.2	100.3	100.8	16	100.4	100.5	101.6	16	101.3	101.7	101.9	20	101.1	101.5	101.6	20

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
9/26	101.0	101.2	101.5	24	105.0	109.0	113.5	24	102.6	104.3	105.8	24	103.4	104.4	105.2	24	102.3	103.1	104.1	24
9/27	100.8	101.0	101.3	24	105.6	110.1	113.0	24	102.4	104.0	104.9	24	103.7	104.5	105.2	24	102.3	103.5	104.4	24
9/28	101.1	101.3	101.6	24	106.8	111.4	113.2	24	102.8	103.7	104.9	24	103.5	104.4	104.8	24	103.3	104.1	104.7	24
9/29	101.4	101.5	101.6	24	107.1	111.9	114.4	24	102.2	103.2	103.8	24	103.3	104.0	104.9	24	103.0	103.9	104.4	24
9/30	100.7	101.1	101.3	24	111.8	112.7	113.5	24	100.4	100.8	101.3	24	101.1	101.3	102.4	24	100.9	101.4	102.1	24
10/1	99.8	100.1	100.5	24	106.5	112.0	114.3	24	100.5	100.9	101.8	24	101.1	101.4	101.7	24	99.1	99.7	100.5	24
10/2	99.7	99.8	100.0	24	104.5	109.3	114.6	24	101.7	103.2	104.6	24	101.5	102.2	103.5	24	99.3	100.0	100.7	24
10/3	99.5	99.7	100.1	24	103.4	107.0	114.6	23	104.5	105.7	106.9	24	105.1	106.0	106.4	24	101.0	102.2	102.6	24
10/4	99.8	100.0	100.1	24	107.1	111.3	115.1	24	103.7	104.4	105.6	24	104.0	104.5	105.0	24	104.3	105.3	106.5	24
10/5	99.7	100.3	100.9	24	108.7	113.1	116.4	24	103.4	104.8	105.7	24	102.9	103.9	104.5	24	104.7	105.5	106.5	24
10/6	100.8	101.0	101.5	24	104.4	108.0	115.4	24	103.4	104.3	105.0	24	103.7	105.2	105.9	24	103.6	104.5	105.8	24
10/7	100.9	101.7	102.2	24	104.7	107.7	114.4	22	105.7	107.4	110.1	24	105.5	106.8	107.6	24	103.5	104.9	106.2	24
10/8	101.4	101.6	102.0	24	102.0	103.3	110.1	24	103.6	104.2	104.7	24	103.9	104.5	104.9	24	103.9	104.8	106.4	24
10/9	101.0	101.2	101.3	23	102.9	105.1	116.3	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

	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
9/26	102.6	103.1	103.3	24	---	---	---	0	105.7	106.4	107.3	24	102.6	102.6	103.0	3	98.6	98.6	99.0	7
9/27	102.7	103.2	103.4	24	---	---	---	0	105.6	106.3	107.2	24	---	---	---	0	---	---	---	0
9/28	103.7	104.2	104.4	24	---	---	---	0	105.9	106.7	108.2	24	---	---	---	0	---	---	---	0
9/29	103.9	104.2	104.4	24	---	---	---	0	105.8	106.2	106.8	24	---	---	---	0	---	---	---	0
9/30	101.9	102.4	103.2	24	---	---	---	0	105.6	106.3	106.9	24	---	---	---	0	---	---	---	0
10/1	100.6	101.1	101.5	24	---	---	---	0	105.2	105.9	106.9	24	---	---	---	0	---	---	---	0
10/2	100.1	100.3	100.4	24	---	---	---	0	104.7	105.5	106.7	24	---	---	---	0	---	---	---	0
10/3	101.0	101.8	102.0	24	---	---	---	0	104.6	105.5	106.7	24	---	---	---	0	---	---	---	0
10/4	103.8	105.0	105.2	24	---	---	---	0	105.0	105.8	107.0	24	---	---	---	0	---	---	---	0
10/5	105.0	105.2	105.3	24	---	---	---	0	106.6	107.6	108.8	24	---	---	---	0	---	---	---	0
10/6	104.4	104.7	105.0	24	---	---	---	0	106.4	107.0	108.1	24	---	---	---	0	---	---	---	0
10/7	104.1	104.8	105.4	24	---	---	---	0	105.9	106.6	108.1	24	---	---	---	0	---	---	---	0
10/8	104.2	105.0	105.5	24	---	---	---	0	105.8	106.6	107.7	24	---	---	---	0	---	---	---	0
10/9	---	---	---	0	---	---	---	0	106.7	107.4	108.7	23	---	---	---	0	---	---	---	0

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
9/26	99.4	99.4	100.4	10	---	---	---	0	98.7	98.9	99.4	24	---	---	---	0	98.4	98.6	98.9	24
9/27	---	---	---	0	---	---	---	0	99.3	99.7	99.9	24	---	---	---	0	98.5	98.9	99.4	24
9/28	---	---	---	0	---	---	---	0	100.1	100.5	101.1	24	---	---	---	0	99.3	99.8	100.1	24
9/29	---	---	---	0	---	---	---	0	100.2	100.6	100.9	24	---	---	---	0	99.3	99.5	99.9	24
9/30	---	---	---	0	---	---	---	0	100.0	100.5	101.4	24	---	---	---	0	97.9	98.3	98.5	24
10/1	---	---	---	0	---	---	---	0	99.1	99.4	100.3	24	---	---	---	0	97.8	98.3	98.6	24
10/2	---	---	---	0	---	---	---	0	98.0	98.3	98.7	24	---	---	---	0	97.9	98.1	98.5	24
10/3	---	---	---	0	---	---	---	0	97.5	97.9	98.1	24	---	---	---	0	97.7	98.2	98.7	24
10/4	---	---	---	0	---	---	---	0	97.9	98.2	98.5	24	---	---	---	0	98.4	98.8	99.3	24
10/5	---	---	---	0	---	---	---	0	97.7	98.0	98.4	24	---	---	---	0	98.0	98.3	98.6	24
10/6	---	---	---	0	---	---	---	0	96.8	97.0	97.2	24	---	---	---	0	97.7	98.0	98.5	24
10/7	---	---	---	0	---	---	---	0	96.7	97.0	97.6	24	---	---	---	0	97.7	98.1	98.6	24
10/8	---	---	---	0	---	---	---	0	95.6	95.9	96.1	24	---	---	---	0	97.5	97.7	98.0	24
10/9	---	---	---	0	---	---	---	0	96.1	96.7	97.1	23	---	---	---	0	98.4	99.3	99.9	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
9/26	---	---	---	0	98.0	98.4	99.6	24	---	---	---	0	100.6	101.2	102.1	24	---	---	---	0
9/27	---	---	---	0	98.4	98.9	99.6	24	---	---	---	0	99.8	100.7	102.0	24	---	---	---	0
9/28	---	---	---	0	98.7	99.3	99.9	24	---	---	---	0	98.9	99.6	100.7	24	---	---	---	0
9/29	---	---	---	0	98.1	98.6	99.3	24	---	---	---	0	99.4	100.1	101.1	24	---	---	---	0
9/30	---	---	---	0	97.8	98.3	99.3	24	---	---	---	0	98.3	98.9	99.7	24	---	---	---	0
10/1	---	---	---	0	97.6	98.1	99.3	24	---	---	---	0	98.3	99.0	100.2	24	---	---	---	0
10/2	---	---	---	0	97.3	97.7	97.9	24	---	---	---	0	98.4	99.2	100.1	24	---	---	---	0
10/3	---	---	---	0	97.7	98.1	98.4	24	---	---	---	0	98.0	98.5	99.0	24	---	---	---	0
10/4	---	---	---	0	97.3	97.8	98.7	24	---	---	---	0	98.5	99.3	100.7	24	---	---	---	0
10/5	---	---	---	0	97.1	97.6	99.7	24	---	---	---	0	98.8	99.5	100.3	24	---	---	---	0
10/6	---	---	---	0	97.6	98.3	98.6	24	---	---	---	0	99.1	99.7	100.5	24	---	---	---	0
10/7	---	---	---	0	97.9	98.6	99.3	24	---	---	---	0	99.4	100.4	101.1	24	---	---	---	0
10/8	---	---	---	0	98.4	98.9	101.0	24	---	---	---	0	99.2	99.9	100.5	24	---	---	---	0
10/9	---	---	---	0	98.2	98.8	99.7	23	---	---	---	0	99.8	100.7	101.7	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			
Date	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24h Avg	12h Avg	High	# hr	24h Avg	12h Avg	High	# hr	24h Avg	12h AVG	High	# hr
9/26	---	---	---	0	100.3	100.6	100.9	24	---	---	---	0	98.4	98.7	99.1	24	---	---	---	0
9/27	---	---	---	0	100.1	100.4	100.6	24	---	---	---	0	98.2	98.6	99.2	24	---	---	---	0
9/28	---	---	---	0	100.4	100.8	101.1	24	---	---	---	0	98.4	99.1	99.6	24	---	---	---	0
9/29	---	---	---	0	100.5	100.8	101.1	24	---	---	---	0	98.9	99.5	99.9	24	---	---	---	0
9/30	---	---	---	0	99.2	99.5	99.7	24	---	---	---	0	99.3	99.9	100.3	24	---	---	---	0
10/1	---	---	---	0	98.8	99.2	99.9	24	---	---	---	0	98.5	99.1	99.5	24	---	---	---	0
10/2	---	---	---	0	98.4	98.6	98.8	24	---	---	---	0	98.1	98.3	98.8	24	---	---	---	0
10/3	---	---	---	0	98.5	98.9	99.2	24	---	---	---	0	97.8	98.1	98.3	24	---	---	---	0
10/4	---	---	---	0	98.6	98.9	99.3	24	---	---	---	0	98.2	99.1	99.7	24	---	---	---	0
10/5	---	---	---	0	98.8	99.2	99.4	24	---	---	---	0	98.9	99.4	99.7	24	---	---	---	0
10/6	---	---	---	0	99.6	100.2	100.4	24	---	---	---	0	98.2	98.4	98.7	24	---	---	---	0
10/7	---	---	---	0	100.4	100.8	101.2	24	---	---	---	0	97.6	98.0	98.4	24	---	---	---	0
10/8	---	---	---	0	100.8	101.0	101.4	24	---	---	---	0	97.7	98.2	98.8	24	---	---	---	0
10/9	---	---	---	0	100.9	101.4	101.9	23	---	---	---	0	97.4	98.2	98.7	23	---	---	---	0

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

	The Dalles Dnst				Bonneville				Warrendale				Camas\Washougal				Cascade Island			
Date	24 h Avg	12 h Avg	High	# hr	24 h Avg	12 h Avg	High	# hr	24h Avg	12h Avg	High	# hr	24h Avg	12h Avg	High	# hr	24h Avg	12h Avg	High	# hr
9/26	100.8	101.0	101.2	24	---	---	---	0	103.4	103.8	104.1	24	---	---	---	0	---	---	---	0
9/27	101.4	101.8	102.1	24	---	---	---	0	102.9	103.0	103.3	24	---	---	---	0	---	---	---	0
9/28	101.8	102.5	102.9	24	---	---	---	0	103.1	103.7	104.1	24	---	---	---	0	---	---	---	0
9/29	101.9	102.2	102.6	24	---	---	---	0	102.9	103.1	103.4	24	---	---	---	0	---	---	---	0
9/30	101.2	101.4	101.6	24	---	---	---	0	102.4	102.7	103.1	24	---	---	---	0	---	---	---	0
10/1	100.8	101.1	101.4	24	---	---	---	0	102.5	103.0	103.5	24	---	---	---	0	---	---	---	0
10/2	100.6	100.8	100.9	24	---	---	---	0	101.5	102.1	102.7	24	---	---	---	0	---	---	---	0
10/3	100.4	100.8	101.0	24	---	---	---	0	101.6	102.0	102.3	24	---	---	---	0	---	---	---	0
10/4	101.1	101.7	101.8	24	---	---	---	0	102.5	102.9	103.5	24	---	---	---	0	---	---	---	0
10/5	101.6	101.9	102.1	24	---	---	---	0	103.5	104.3	104.9	24	---	---	---	0	---	---	---	0
10/6	101.9	102.2	102.4	24	---	---	---	0	104.9	105.7	107.1	24	---	---	---	0	---	---	---	0
10/7	101.9	102.2	102.4	24	---	---	---	0	104.3	104.8	105.5	24	---	---	---	0	---	---	---	0
10/8	101.4	101.6	101.7	24	---	---	---	0	104.3	104.6	104.7	24	---	---	---	0	---	---	---	0
10/9	101.2	101.6	102.0	23	---	---	---	0	104.1	104.8	105.7	23	---	---	---	0	---	---	---	0

Two-Week Summary of Passage Indices

Source: Fish Passage Center Updated: 10/10/2014 7:15

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)
09/26/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/27/2014	*	---	---	---	---	0	1	0	---	---	---	0
09/28/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/29/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/30/2014	*	---	---	---	---	0	0	---	---	0	---	0
10/01/2014		---	---	---	---	0	1	0	---	---	---	0
10/02/2014		---	---	---	---	0	0	---	---	---	---	0
10/03/2014	*	---	---	---	---	0	0	---	---	---	---	0
10/04/2014	*	---	---	---	---	0	0	---	---	---	---	0
10/05/2014		---	---	---	---	0	1	---	---	---	---	0
10/06/2014		---	---	---	---	0	0	---	---	---	---	0
10/07/2014		---	---	---	---	0	0	---	---	---	---	0
10/08/2014		---	---	---	---	0	1	---	---	---	---	0
10/09/2014		---	---	---	---	0	0	---	---	---	---	0
10/10/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**3**	**0**	**3**	**0**	**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**	**2,838,742**	**1,969,634**	**26,427**	**2,022,048**	**2,329,081**	**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)
09/26/2014	*	---	---	---	---	39	23	---	---	108	---	102
09/27/2014	*	---	---	---	---	35	8	2	---	---	---	22
09/28/2014	*	---	---	---	---	13	7	---	---	68	---	31
09/29/2014	*	---	---	---	---	24	6	5	---	---	---	92
09/30/2014	*	---	---	---	---	14	8	---	---	48	---	77
10/01/2014		---	---	---	---	59	3	6	---	---	---	139
10/02/2014		---	---	---	---	35	1	---	---	---	---	95
10/03/2014	*	---	---	---	---	18	9	---	---	---	---	163
10/04/2014	*	---	---	---	---	66	5	---	---	---	---	147
10/05/2014		---	---	---	---	111	8	---	---	---	---	44
10/06/2014		---	---	---	---	181	5	---	---	---	---	32
10/07/2014		---	---	---	---	289	5	---	---	---	---	79
10/08/2014		---	---	---	---	419	11	---	---	---	---	55
10/09/2014		---	---	---	---	380	8	---	---	---	---	71
10/10/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**1,683**	**107**	**13**	**0**	**224**	**0**	**1,149**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**3**	**0**	**3**	**0**	**14**
Average:		**0**	**0**	**0**	**0**	**120**	**8**	**4**	**0**	**75**	**0**	**82**
YTD		**0**	**27**	**4**	**332**	**950,407**	**1,048,211**	**381,217**	**38,664**	**4,914,830**	**2,591,935**	**4,235,411**

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)
09/26/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/27/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/28/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/29/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/30/2014	*	---	---	---	---	0	0	---	---	0	---	0
10/01/2014		---	---	---	---	0	0	0	---	---	---	0
10/02/2014		---	---	---	---	0	0	---	---	---	---	0
10/03/2014	*	---	---	---	---	0	0	---	---	---	---	0
10/04/2014	*	---	---	---	---	1	0	---	---	---	---	0
10/05/2014		---	---	---	---	0	0	---	---	---	---	0
10/06/2014		---	---	---	---	0	0	---	---	---	---	0
10/07/2014		---	---	---	---	0	0	---	---	---	---	0
10/08/2014		---	---	---	---	0	0	---	---	---	---	0
10/09/2014		---	---	---	---	0	0	---	---	---	---	0
10/10/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**3**	**0**	**3**	**0**	**14**
Average:		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
YTD		**0**	**0**	**0**	**267**	**74,171**	**59,431**	**27,316**	**66,433**	**147,455**	**225,431**	**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)
09/26/2014	*	---	---	---	---	2	0	---	---	0	---	0
09/27/2014	*	---	---	---	---	1	0	0	---	---	---	0
09/28/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/29/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/30/2014	*	---	---	---	---	0	0	---	---	0	---	0
10/01/2014		---	---	---	---	0	0	1	---	---	---	0
10/02/2014		---	---	---	---	1	0	---	---	---	---	0
10/03/2014	*	---	---	---	---	1	0	---	---	---	---	0
10/04/2014	*	---	---	---	---	2	0	---	---	---	---	0
10/05/2014		---	---	---	---	0	0	---	---	---	---	0
10/06/2014		---	---	---	---	0	0	---	---	---	---	0
10/07/2014		---	---	---	---	0	0	---	---	---	---	0
10/08/2014		---	---	---	---	0	0	---	---	---	---	0
10/09/2014		---	---	---	---	0	0	---	---	---	---	0
10/10/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**7**	**0**	**1**	**0**	**0**	**0**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**3**	**0**	**3**	**0**	**14**
Average:		**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**
YTD		**2,080**	**43,465**	**4,243**	**12,842**	**3,376,205**	**1,975,623**	**1,183,219**	**27,522**	**586,885**	**1,037,142**	**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)
09/26/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/27/2014	*	---	---	---	---	1	1	0	---	---	---	0
09/28/2014	*	---	---	---	---	0	0	---	---	0	---	0
09/29/2014	*	---	---	---	---	0	0	0	---	---	---	0
09/30/2014	*	---	---	---	---	0	0	---	---	0	---	0
10/01/2014		---	---	---	---	0	2	0	---	---	---	0
10/02/2014		---	---	---	---	0	0	---	---	---	---	0
10/03/2014	*	---	---	---	---	0	3	---	---	---	---	0
10/04/2014	*	---	---	---	---	0	0	---	---	---	---	0
10/05/2014		---	---	---	---	1	0	---	---	---	---	0
10/06/2014		---	---	---	---	0	1	---	---	---	---	0
10/07/2014		---	---	---	---	2	0	---	---	---	---	0
10/08/2014		---	---	---	---	3	1	---	---	---	---	0
10/09/2014		---	---	---	---	0	1	---	---	---	---	0
10/10/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**7**	**9**	**0**	**0**	**0**	**0**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**3**	**0**	**3**	**0**	**14**
Average:		**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**
YTD		**0**	**0**	**2**	**0**	**182,071**	**88,467**	**69,805**	**37,962**	**1,495,582**	**578,093**	**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)
09/26/2014	*	---	---	---	---	1	1	---	---	12	---	0
09/27/2014	*	---	---	---	---	0	3	2	---	---	---	0
09/28/2014	*	---	---	---	---	0	3	---	---	0	---	0
09/29/2014	*	---	---	---	---	0	6	1	---	---	---	0
09/30/2014	*	---	---	---	---	2	1	---	---	0	---	0
10/01/2014		---	---	---	---	0	1	1	---	---	---	10
10/02/2014		---	---	---	---	0	3	---	---	---	---	0
10/03/2014	*	---	---	---	---	0	1	---	---	---	---	10
10/04/2014	*	---	---	---	---	0	3	---	---	---	---	0
10/05/2014		---	---	---	---	1	0	---	---	---	---	0
10/06/2014		---	---	---	---	2	1	---	---	---	---	0
10/07/2014		---	---	---	---	0	2	---	---	---	---	0
10/08/2014		---	---	---	---	0	2	---	---	---	---	0
10/09/2014		---	---	---	---	1	1	---	---	---	---	0
10/10/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**7**	**28**	**4**	**0**	**12**	**0**	**20**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**3**	**0**	**3**	**0**	**14**
Average:		**0**	**0**	**0**	**0**	**1**	**2**	**1**	**0**	**4**	**0**	**1**
YTD		**1**	**3**	**0**	**0**	**192**	**21,108**	**29,509**	**220**	**60,713**	**98,903**	**19,359**

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: 10/10/14 7:12 AM

09/26/14 TO 10/10/14

		Species					
Site	Data	**CH0**	**CH1**	CO	ST	SO	**Grand Total**
LGR	Sum of NumberCollected	1,683		1	7	7	1,698
	Sum of NumberBarged	0		0	0	0	0
	Sum of NumberBypassed	0		0	7	0	7
	Sum of Numbertrucked	1,659		1	0	7	1,667
	Sum of SampleMorts	24		0	0	0	24
	Sum of FacilityMorts	0		0	0	0	0
	Sum of ResearchMorts	0		0	0	0	0
	Sum of TotalProjectMorts	24		0	0	0	24
LGS	Sum of NumberCollected	107	4			9	120
	Sum of NumberBarged	0	0			0	0
	Sum of NumberBypassed	0	0			0	0
	Sum of Numbertrucked	98	4			9	111
	Sum of SampleMorts	7	0			0	7
	Sum of FacilityMorts	2	0			0	2
	Sum of ResearchMorts	0	0			0	0
	Sum of TotalProjectMorts	9	0			0	9
LMN	Sum of NumberCollected	13			1		14
	Sum of NumberBarged	0			0		0
	Sum of NumberBypassed	0			0		0
	Sum of Numbertrucked	13			1		14
	Sum of SampleMorts	0			0		0
	Sum of FacilityMorts	0			0		0
	Sum of ResearchMorts	0			0		0
	Sum of TotalProjectMorts	0			0		0
Total Sum of NumberCollected		1,803	4	1	8	16	1,832
Total Sum of NumberBarged		0	0	0	0	0	0
Total Sum of NumberBypassed		0	0	0	7	0	7
Total Sum of Numbertrucked		1,770	4	1	1	16	1,792
Total Sum of SampleMorts		31	0	0	0	0	31
Total Sum of FacilityMorts		2	0	0	0	0	2
Total Sum of ResearchMorts		0	0	0	0	0	0
Total Sum of TotalProjectMorts		33	0	0	0	0	33

YTD Transportation Summary

Source: Fish Passage Center Updated: 10/10/14 7:12 AM

TO: 10/10/14

		Species					
Site	Data	**CH0**	**CH1**	CO	SO	ST	**Grand Total**
LGR	Sum of NumberCollected	647,386	3,442,339	52,724	130,986	2,404,256	6,677,691
	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	1,077,112	2,653,574
	Sum of NumberTrucked	11,045	1	2	31	0	11,079
	Sum of SampleMorts	520	139	1	47	60	767
	Sum of FacilityMorts	1,547	1,305	8	415	121	3,396
	Sum of ResearchMorts	10	79	0	0	107	196
	Sum of TotalProjectMorts	2,077	1,523	9	462	288	4,359
LGS	Sum of NumberCollected	739,641	1,951,723	41,832	61,261	1,369,633	4,164,090
	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	6,507	4	0	25	9	6,545
	Sum of SampleMorts	246	34	1	25	16	322
	Sum of FacilityMorts	1,391	651	9	237	167	2,455
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	1,637	685	10	262	183	2,777
LMN	Sum of NumberCollected	258,406	1,326,227	19,905	48,376	792,155	2,445,069
	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	1,767	5	0	2	13	1,787
	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		1,645,433	6,720,289	114,461	240,623	4,566,044	13,286,850
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	1,387,172	3,333,865
Total Sum of NumberTrucked		19,319	10	2	58	22	19,411
Total Sum of SampleMorts		1,002	198	2	73	93	1,368
Total Sum of FacilityMorts		3,479	2,920	17	953	481	7,850
Total Sum of ResearchMorts		10	79	0	0	107	196
Total Sum of TotalProjectMorts		4,491	3,197	19	1,026	681	9,414

Cumulative Adult Passage at Mainstem Dams Through: 10/09

		Spring Chinook						Summer Chinook						Fall Chinook					
	END	2014		2013		10-Yr Avg.		2014		2013		10-Yr Avg.		2014		2013		10-Yr Avg.	
DAM	DATE	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	10/09	188083	26094	83345	33820	130283	22257	109734	25342	93097	26186	85511	18881	836672	130417	917514	105957	410360	64941
TDA	10/09	143142	21080	69202	32311	99813	18973	96134	19525	85639	20750	73080	14947	513940	87458	565592	82243	236709	53380
JDA	10/09	123224	19103	56991	28957	87036	17743	86033	17655	75248	19714	65621	15576	421144	74841	407467	83669	178668	48102
MCN	10/09	107147	16033	52176	22279	79413	14950	87974	17022	75741	14808	61586	11232	387529	68416	415962	49811	152004	31314
IHR	10/09	79298	12428	38017	18611	54814	9602	17433	4474	11912	6321	16717	4436	60013	17031	56472	18210	27107	14759
LMN	10/09	79942	14020	36470	19053	54458	8539	16064	8136	11765	7703	18241	4639	49931	22209	51959	21902	25087	14535
LGS	10/09	77966	13649	35072	19443	49920	9660	17058	7477	10120	7632	17208	5330	50519	15187	52857	19983	23644	11659
LGR	10/09	79167	13732	35031	19940	49728	11001	14668	7106	8423	7572	15316	5918	56722	16879	52770	19880	21596	13640
PRD	10/08	23742	2649	13725	1298	14700	1468	78434	4889	71083	3174	52746	2498	101787	10330	186134	15455	44084	5990
WAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	10/08	23247	2934	13345	3100	13890	2468	77982	6494	68386	3986	50079	5174	22201	6181	24345	10754	9192	3390
RRH	10/08	12376	2377	6841	2101	5576	1020	58569	5017	59685	4044	38940	4099	15932	4779	18427	6589	6382	2318
WEL	10/08	15376	2544	7133	2980	4880	1164	49255	5989	49451	4264	29289	3038	6059	2138	6396	1034	2952	1306
WFA	09/29	30071	1598	27897	1664	40347	1124	0	0	0	0	0	0	1158	418	1493	396	1138	265

		Coho						Sockeye			Steelhead						Lamprey		
	END	2014		2013		10-Yr Avg.				10-Yr			10-Yr	Wild	Wild	10-Yr			10-Yr
DAM	DATE	Adult	Jack	Adult	Jack	Adult	Jack	2014	2013	Avg.	2014	2013	Avg.	2014	2013	Avg.	2014	2013	Avg.
BON	10/09	209824	12307	43846	5612	89403	5476	614179	185505	192204	317734	230145	343281	127367	97768	107871	31924	23961	24668
TDA	10/09	137409	10381	22432	2381	31355	3000	586187	161896	159036	241117	185168	265185	94773	78379	82383	11646	8730	6409
JDA	10/09	98429	7377	14886	1255	28103	3426	557531	155498	161068	184396	144832	242774	69476	61234	74592	8531	6640	5942
MCN	10/09	88397	13105	10744	1551	15587	1643	546012	134200	135990	187456	135377	203640	66452	52446	58320	1746	1565	2159
IHR	10/09	13561	628	1578	268	1887	197	2392	895	505	132935	99202	151860	38730	27082	36583	715	323	283
LMN	10/09	13687	2486	1320	243	1728	192	2805	1014	632	130103	91045	146804	42132	28653	37443	219	108	77
LGS	10/09	14382	2845	883	240	1566	186	2810	993	607	118711	75849	131177	37030	23265	31291	119	32	45
LGR	10/09	12856	318	626	137	1429	229	2783	757	681	119179	75738	126531	39126	23615	32021	82	19	11
PRD	10/08	29814	1842	2120	304	3888	474	608142	163078	167425	18693	13780	18436	0	0	0	7396	5862	3798
WAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	10/08	32000	132	577	55	4979	437	581111	159203	164839	13871	10230	16653	6569	5460	7542	2411	2139	1224
RRH	10/08	9166	58	88	3	1013	105	492880	131658	139953	9663	7903	12874	4518	4043	5272	3778	1621	597
WEL	10/08	5282	54	56	0	408	0	490794	129988	133697	6763	6002	9435	3332	2904	3868	7	21	7
WFA	09/29	2328	1419	12549	2976	5495	1577	0	0	0	27434	17887	25290	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.

Page last updated on: 10/10/14