



Fish Passage Center

Weekly Report #13 - 28

October 11, 2013

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The Fish Passage Center is Moving

On the weekend of October 26–27, the Fish Passage Center will be moving to:

847 NE 19th Avenue, #250
 Portland, Oregon 97232

Our new phone number will be 503/833-3900.

During that weekend our internet site will be down. When our web site is activated on Monday, October 28, we will be able to offer quicker access to our site as we are upgrading to fiber optic cable.

This is the final Weekly Report of 2013.

Summary of Events

Water Supply

Precipitation throughout the Columbia Basin has been below average over the beginning of Water Year (WY) 2014, ranging between 20% and 83% of average at individual sub-basins. Precipitation above The Dalles has been 49% of average over WY 2014. Over WY 2013, precipitation ranged between 77% and 109% of average.

Table 1. Summary of Water Year 2013 precipitation and early Water Year 2014 precipitation with respect to average (1971–2000), at select locations within the Columbia and Snake River Basins.

Location	Water Year 2013 October 1, 2012 to September 30, 2013		Water Year 2014 October 1, 2013 to October 9, 2013	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia above Coulee	39.1	100	0.4	49
Snake River above Ice Harbor	18.3	80	0.2	41
Columbia above The Dalles	25.5	90	0.3	49
Kootenai	43.9	109	0.4	50
Clark Fork	22.1	78	0.1	20
Flathead	36.7	98	0.3	40
Pend Oreille Basin	30.4	90	0.2	32
Snake Basin above Hells Canyon	14.7	78	0.1	36
Salmon River Basin	22.7	77	0.3	62
Clearwater	36.9	88	0.4	44
Willamette River above Portland	66.0	101	1.2	83

Grand Coulee Reservoir is currently at an elevation of 1285.8 feet (10-10-13) and has refilled 0.7 feet last week. Outflows at Grand Coulee have ranged between 46.4 and 70.8 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2451.2 feet (10-10-13) and has refilled 0.8 feet last week. Outflows at Libby Dam have been 4.0 Kcfs over the last week.

Hungry Horse is currently at an elevation of 3549.7 feet (10-10-13) and has drafted 0.4 feet over the last week. Outflows at Hungry Horse have been 1.1–1.9 Kcfs last week.

Dworshak is currently at an elevation of 1520.7 feet (10-10-13) and has drafted 0.2 feet last week. Outflows from Dworshak have been 1.6 Kcfs over the last week.

Albeni Falls is currently at an elevation of 2058.5 feet (10-10-13) and has drafted 1.3 feet last week. Outflows have ranged between 24 and 26 Kcfs over the last week. The target elevation by November 10, 2013, is 2051 feet.

Smolt Monitoring

Smolt monitoring is ongoing at three SMP dams (BON, LGS, and LGR). SMP sampling at MCN and LMN ended with the September 30th and October 1st samples, respectively. Sampling at BON will end with the October 12th sample while sampling at LGR and LGS will continue through the end of this month.

Compared to the previous week, passage of subyearling Chinook decreased this week. This week's daily average passage index for subyearling Chinook was about 90 per day. Last week's daily average passage index for subyearling Chinook was about 400 per day. No spring migrants were collected in this week's samples. Finally, only pacific lamprey macrophthalmia were collected this week, but only on one day (Oct. 5th). In all, the estimated collection for October 5th was 50 pacific lamprey macrophthalmia. In preparation for repairs to the prototype adult pacific lamprey passage structure on the Bonneville Washington shore ladder, project biologists at BON began removing the screens in the second powerhouse on October 9th. In addition, powerhouse priority was switched to the first powerhouse on the Oregon side. All screens are expected to be removed by the end of the day today, October 11th, and will likely remain out for the remainder of the 2013 SMP season. Therefore, sampling for the 2013 SMP season at BON will end with the October 12th sample.

Over the last two weeks, passage of subyearling Chinook at LGR has increased, when compared to previous weeks. This week's daily average passage index for subyearling Chinook was about 235 per

day. This increase in subyearling Chinook passage coincides with increases in flows in the Snake River that began on September 30th. A very small number of yearling Chinook, sockeye/kokanee, and steelhead were collected at LGR this week. Finally, only pacific lamprey macrophthalmia were collected at LGR this week, although in very small numbers. Due to the possible resampling of PIT-tagged research fish that were released into the gatewells, the estimated year-to-date collection and passage index totals for yearling Chinook, steelhead, subyearling Chinook, and Pacific lamprey macrophthalmia are likely inflated. The FPC is aware of this possible bias and is investigating ways to correct these inflated estimates after the season has ended. However, the magnitude of this bias is relatively low and is unlikely to skew estimates of timing for this species.

Subyearling Chinook passage has also increased at LGS over the past two weeks. This week's daily average passage index for subyearling Chinook at LGS was about 360 per day. As with LGR passage, this increase in subyearling Chinook passage at LGS coincides with increased flows in the Snake River that began on September 30th. A very small number of coho, sockeye/kokanee, and steelhead were also collected at LGS this week. Finally, only pacific lamprey macrophthalmia were collected at LGS this week. The daily average collection for pacific macrophthalmia this week was eight per day.

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 two releases of juvenile salmonids scheduled over the last two weeks. Both releases were of spring Chinook pre-smolts to tributaries of the Clearwater River that were scheduled to begin in early October. In all, these two releases were expected to total about 225,000 pre-smolts, of which 100% were to be unclipped but tagged with coded-wire tags. These pre-smolts are not expected to out-migrate until spring of 2014.

Mid-Columbia Zone: The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam. No new releases of juvenile salmonids were scheduled to begin in this zone over the last two weeks. There are also no releases of juvenile salmonids in this zone over the next two weeks.

Lower Columbia Zone: The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. No new releases of juvenile salmonids were scheduled for this zone over the last two weeks. Furthermore, there are no new releases to this zone scheduled over the next two weeks.

Adult Fish Passage

Daily adult fall Chinook passage numbers at Bonneville Dam ranged between 2,102 and 4,907 last week. The adult fall Chinook count of 922,421 is about 2.7 times greater than the 2012 count of 343,711 and about 2.4 times greater than the 10-year average count of 379,188. The 2013 Bonneville Dam fall Chinook jack count of 106,627 is about 89% of the 2012 count of 119,800, while being 1.8 times greater than the 10-year average count of 59,135. The 2013 McNary Dam adult fall Chinook count of 418,067 is about 2.5 times greater than the 2012 count and 3.3 times larger than the 10-year average. The 2013 McNary Dam jack count of 50,122 has 1,711 more fish than the 2012 count and is 1.7 times greater than the 10-year average count. The 2013 Lower Granite Dam adult fall Chinook count of 53,010 is about 1.6 times greater than the 2012 count and 3 times larger than the 10-year average. The 2013 Lower Granite jack count of 20,072 has 149 fewer fish than the 2012 count, while being about 1.6 times greater than the 10-year average count.

Daily steelhead counts at Bonneville Dam ranged from 331 to 494. The 2013 Bonneville Dam adult steelhead count of 230,476 has 1,222 more fish than the 2012 count of 229,254, while being about 64.7% of the 10-year average count of 356,260. The 2013 Bonneville Dam adult wild steelhead count of 97,864

is about 1.2 times greater than the 2012 count of 83,376, while being 89.6% of the 10-year average count of 109,207. In the Snake River, this year's Lower Granite steelhead count of 78,326 has 1,624 fewer fish than the 2012 count and is about 57.7% of the 10-year average count of 135,784. The 2013 Lower Granite Dam adult wild steelhead count of 24,359 has 1,280 more fish than the 2012 count, while being 72% of the 10-year average count of 33,823. At Willamette Falls, the 2013 count for steelhead was 17,797 as of October 9th. This year's steelhead count is about 56.3% of the 2012 count of 31,579 and about 68.3% of the 10-year average count of 26,036.

Daily counts of coho have ranged between 807 and 1,312 over the last week at Bonneville Dam. The 2013 Bonneville Dam adult coho count of 44,802 has 219 fewer fish than the 2012 count of 45,021 and about 46.1% of the 10-year average count of 97,203. The 2013 Bonneville Dam coho jack count of 5,710 has 2,329 more fish than the 2012 count of 3,381, while having 140 fewer fish than the 10-year average count of 5,570. The 2013 McNary Dam adult coho count of 10,849 is about 70.5% of the 2012 count and 67% of the 10-year average. The 2013 McNary Dam coho jack count of 1,579 is about 1.2 times greater than in 2012, while having 76 fewer fish than the 10-year average count. The 2013 Lower Granite Dam adult coho count of 764 is about 42.5% of the 2012 count and 52% of the 10-year average. The 2013 Lower Granite coho jack count of 166 has 14 more fish than the 2012 count, while having 60 fewer fish than the 10-year average count.

Hatchery Releases Last Two Weeks

Hatchery Release Summary									
From:		9/27/2013 to 10/10/13							
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2014	75,000	10-04-13	10-18-13	Newsome Creek	S Fk Clearwater River
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2014	150,000	10-03-13	10-17-13	Lolo Creek	Clearwater River M F
Nez Perce Tribe									
Total					225,000				
Grand Total					225,000				

Hatchery Releases Next Two Weeks

Hatchery Release Summary									
From:		10/11/2013 to 10/24/2013							
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2014	75,000	10-04-13	10-18-13	Newsome Creek	S Fk Clearwater River
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2014	150,000	10-03-13	10-17-13	Lolo Creek	Clearwater River M F
Nez Perce Tribe									
Total					225,000				
Grand Total					225,000				

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

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

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
09/27/2013	72.9	0.2	71.5	0.0	74.6	0.0	74.7	0.0	77.8	0.0	82.8	2.1	81.2	8.0
09/28/2013	47.4	0.2	46.8	0.0	53.1	0.0	57.0	0.0	60.3	0.0	69.8	2.1	69.6	7.9
09/29/2013	48.2	0.0	48.6	0.0	49.0	0.0	48.5	0.0	53.2	0.0	52.3	2.0	48.3	7.5
09/30/2013	66.5	0.1	68.3	0.0	69.2	0.0	70.9	0.0	76.2	0.0	75.5	2.1	72.7	7.9
10/01/2013	46.5	0.0	43.9	0.0	55.8	0.0	60.8	0.0	67.6	0.0	80.1	2.0	81.3	7.9
10/02/2013	72.6	0.0	76.1	0.0	72.8	0.0	72.1	0.0	76.8	0.0	75.5	1.8	71.6	7.5
10/03/2013	57.9	0.0	59.6	0.0	63.1	0.0	65.2	0.0	71.2	0.0	77.3	2.0	77.5	7.9
10/04/2013	62.3	0.0	60.7	0.0	63.6	0.0	65.4	0.0	70.9	0.0	73.5	2.2	66.9	7.8
10/05/2013	47.1	0.0	47.6	0.0	55.7	0.0	55.8	0.0	58.5	0.0	70.4	2.1	70.4	8.0
10/06/2013	55.1	0.0	55.6	0.0	56.0	0.0	56.4	0.0	61.0	0.0	56.1	2.1	52.7	7.5
10/07/2013	51.1	0.0	47.4	0.0	52.0	0.0	55.1	0.0	60.4	0.0	64.0	2.2	62.7	5.8
10/08/2013	65.6	0.0	64.8	0.0	66.2	0.0	66.1	0.0	70.5	0.0	70.6	2.2	65.6	8.0
10/09/2013	70.8	0.0	73.1	0.0	77.6	0.0	81.9	5.8	86.3	0.0	91.1	2.0	88.2	8.2
10/10/2013	46.4	0.0	46.8	0.0	54.2	0.0	59.5	0.0	63.8	0.0	77.4	2.1	91.7	6.7

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

Date	Dworshak		Hells Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
09/27/2013	1.6	0.0	---	---	19.7	0.0	18.6	0.0	21.1	0.0	21.1	0.0
09/28/2013	1.6	0.0	---	---	21.6	0.0	23.6	0.0	23.8	0.0	23.2	0.0
09/29/2013	1.6	0.0	---	---	20.9	0.0	17.0	0.0	19.0	0.0	19.6	0.0
09/30/2013	1.6	0.0	---	---	24.8	0.0	21.2	0.0	22.9	0.0	24.5	0.0
10/01/2013	1.6	0.0	---	---	31.4	0.0	29.2	0.0	29.6	0.0	30.6	0.0
10/02/2013	1.6	0.0	---	---	36.2	0.0	33.8	0.0	35.9	0.0	36.2	0.0
10/03/2013	1.6	0.0	---	---	30.0	0.0	27.7	0.0	29.5	0.0	29.0	0.0
10/04/2013	1.6	0.0	---	---	30.6	0.0	28.4	0.0	28.3	0.0	25.1	0.0
10/05/2013	1.6	0.0	---	---	29.8	0.0	29.4	0.0	31.2	0.0	31.3	0.0
10/06/2013	1.6	0.0	---	---	25.2	0.0	20.9	0.0	21.5	0.0	19.1	0.0
10/07/2013	1.6	0.0	---	---	26.6	0.0	26.1	0.0	27.0	0.0	27.9	0.0
10/08/2013	1.6	0.0	---	---	27.8	0.0	26.1	0.0	26.7	0.0	26.0	0.0
10/09/2013	1.6	0.0	---	---	26.7	0.0	25.1	0.0	26.4	0.0	26.1	0.0
10/10/2013	1.6	0.0	---	---	---	---	26.2	0.0	27.9	0.0	27.3	0.0

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

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
09/27/2013	97.6	0.0	93.1	0.9	94.3	0.0	97.5	1.1	9.4	79.6
09/28/2013	98.7	0.0	97.9	0.8	95.5	0.0	103.3	1.2	15.8	78.8
09/29/2013	84.5	0.0	83.1	0.7	85.7	0.0	106.4	1.3	16.4	81.4
09/30/2013	87.4	0.0	83.8	0.8	83.4	0.0	103.0	1.2	11.9	82.4
10/01/2013	111.8	0.0	111.6	0.6	111.0	0.0	127.1	1.2	30.4	88.0
10/02/2013	116.9	0.0	122.3	0.9	123.4	0.0	131.6	1.2	37.2	85.8
10/03/2013	103.4	0.0	103.2	0.8	102.3	0.0	114.1	1.2	20.7	84.8
10/04/2013	104.8	0.0	100.7	0.8	100.6	0.0	116.8	1.2	24.6	83.6
10/05/2013	98.2	0.0	80.6	0.8	81.0	0.0	92.3	1.1	0.4	83.4
10/06/2013	88.6	0.0	76.1	0.8	77.1	0.0	89.8	1.1	0.0	81.3
10/07/2013	83.0	0.0	76.6	0.8	76.7	0.0	88.6	0.8	0.0	80.3
10/08/2013	89.4	0.0	94.7	0.9	93.5	0.0	93.6	0.7	6.4	79.1
10/09/2013	105.9	0.0	95.2	0.9	95.2	0.0	102.3	1.1	56.6	37.1
10/10/2013	114.0	0.0	100.5	0.8	97.9	0.0	105.9	1.3	80.6	16.6

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	Hungry H. Dnst			#	Boundary			#	Grand Coulee			#	Grand C. Tlwr			#	Chief Joseph			#
	24 h	12 h	High		24 h	12 h	High		24 h	12 h	High		24 h	12 h	High		24 h	12 h	High	
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg		
9/27	---	---	---	0	---	---	---	0	101.1	101.3	101.4	24	99.0	99.2	99.3	24	100.4	100.6	100.9	24
9/28	---	---	---	0	---	---	---	0	101.7	102.0	102.2	24	100.7	101.9	102.6	24	101.1	101.6	101.8	24
9/29	---	---	---	0	---	---	---	0	101.5	101.7	102.1	24	101.3	101.7	101.9	24	101.0	101.3	101.5	24
9/30	---	---	---	0	---	---	---	0	101.1	101.5	102.1	24	100.3	100.8	101.7	24	100.4	100.7	101.3	24
10/1	---	---	---	0	---	---	---	0	100.2	100.4	100.6	24	98.7	98.8	99.3	24	99.1	99.2	99.5	13
10/2	---	---	---	0	---	---	---	0	99.4	99.5	99.6	24	98.1	98.3	98.5	24	---	---	---	0
10/3	---	---	---	0	---	---	---	0	98.5	98.8	99.3	24	97.4	97.5	97.8	24	---	---	---	0
10/4	---	---	---	0	---	---	---	0	97.7	97.8	98.0	24	96.6	96.9	97.0	24	---	---	---	0
10/5	---	---	---	0	---	---	---	0	98.0	98.2	98.4	24	97.0	97.2	97.3	24	---	---	---	0
10/6	---	---	---	0	---	---	---	0	98.7	99.0	99.2	24	97.6	98.1	98.4	24	---	---	---	0
10/7	---	---	---	0	---	---	---	0	98.9	99.5	99.7	24	98.9	99.5	100.0	24	---	---	---	0
10/8	---	---	---	0	---	---	---	0	96.7	97.3	97.8	24	98.3	98.5	98.9	24	---	---	---	0
10/9	---	---	---	0	---	---	---	0	98.7	99.0	99.2	24	97.5	97.7	98.0	24	---	---	---	0
10/10	---	---	---	0	---	---	---	0	99.2	99.3	99.4	21	97.6	97.8	98.0	21	---	---	---	0

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	Chief J. Dnst			#	Wells			#	Wells Dwnstrm			#	Rocky Reach			#	Rocky R. Tlwr			#
	24 h	12 h	High		24 h	12 h	High		24 h	12 h	High		24 h	12 h	High		24 h	12 h	High	
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg		
9/27	101.5	102.2	103.3	24	100.4	100.4	100.5	23	100.6	100.9	101.4	22	100.0	100.2	100.3	24	99.3	99.6	99.7	24
9/28	102.2	103.0	103.6	24	101.1	101.6	102.4	21	101.3	101.9	102.6	21	101.0	101.4	101.7	24	100.1	100.5	100.8	24
9/29	102.5	103.0	103.6	24	101.0	101.0	101.4	11	101.0	101.0	101.6	11	101.2	101.4	101.7	24	100.0	100.4	100.8	24
9/30	102.6	102.6	103.2	3	99.3	99.3	100.8	12	99.7	99.7	100.8	12	100.1	100.6	101.5	24	99.3	99.6	100.1	24
10/1	---	---	---	0	98.1	98.3	98.6	22	98.5	98.7	99.1	22	98.7	98.9	99.2	24	97.8	98.1	98.2	24
10/2	---	---	---	0	97.9	98.2	98.4	23	98.2	98.5	98.8	23	98.0	98.1	98.3	24	97.3	97.3	97.4	24
10/3	---	---	---	0	97.8	98.2	98.7	24	98.1	98.5	98.8	24	97.3	97.5	97.9	24	96.8	96.9	97.2	16
10/4	---	---	---	0	97.6	97.9	98.1	22	98.0	98.4	98.7	22	96.8	97.0	97.2	24	---	---	---	0
10/5	---	---	---	0	98.5	99.1	99.5	23	98.6	99.2	99.5	23	97.7	98.1	98.3	24	---	---	---	0
10/6	---	---	---	0	99.6	100.1	100.7	22	99.9	100.6	100.9	22	99.0	99.7	100.0	24	---	---	---	0
10/7	---	---	---	0	100.3	100.5	100.8	21	100.6	100.7	101.0	20	100.0	100.1	100.3	24	---	---	---	0
10/8	---	---	---	0	99.9	100.1	100.3	23	100.2	100.4	100.9	23	99.7	99.8	100.0	24	99.1	99.2	99.5	13
10/9	---	---	---	0	99.1	99.3	99.6	21	99.6	99.9	100.1	21	99.3	99.6	99.9	24	98.9	99.2	99.5	24
10/10	---	---	---	0	99.3	99.6	99.9	21	99.7	99.9	100.3	21	99.5	99.6	99.7	23	99.4	99.5	99.5	23

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	Rock Island			#	Rock I. Tlwr			#	Wanapum			#	Wanapum Tlwr			#	Priest Rapids			#
	24 h	12 h	High		24 h	12 h	High		24 h	12 h	High		24 h	12 h	High		24 h	12 h	High	
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg		
9/27	99.5	99.7	100.0	24	99.7	99.8	100.0	24	98.5	98.8	99.1	24	99.4	99.6	99.8	24	98.9	99.2	99.4	24
9/28	100.4	100.7	101.1	24	100.7	101.0	101.4	24	99.4	99.8	100.4	24	100.7	101.0	101.6	24	99.8	100.2	100.6	24
9/29	100.3	100.4	100.5	24	100.6	100.8	101.0	24	98.9	99.4	100.0	24	100.7	101.2	102.0	24	99.2	99.6	100.1	24
9/30	99.5	99.9	100.3	24	99.6	100.1	100.4	24	98.5	98.7	99.0	24	100.0	100.7	102.3	24	98.3	98.5	99.3	24
10/1	98.4	98.7	99.1	24	98.7	99.0	99.2	24	97.5	97.7	97.9	24	98.5	98.8	99.6	24	98.2	98.5	98.7	24
10/2	98.0	98.1	98.1	24	98.2	98.4	98.5	24	96.9	97.2	97.6	24	98.0	98.4	99.3	24	97.8	98.0	98.3	24
10/3	97.3	97.6	98.1	24	97.6	97.8	98.1	24	96.6	96.9	97.2	24	97.5	97.9	98.7	24	97.4	97.6	97.9	24
10/4	97.1	97.1	97.4	24	97.2	97.3	97.5	24	96.1	96.6	96.9	24	97.4	97.8	98.6	24	97.1	97.5	97.7	24
10/5	97.5	97.7	97.7	24	97.8	98.1	98.3	24	96.7	97.4	97.7	24	97.6	98.0	98.8	24	97.9	98.5	98.8	24
10/6	98.6	99.0	99.2	24	98.9	99.4	99.7	24	98.0	99.1	100.0	24	99.1	99.5	100.4	24	98.6	99.2	99.4	24
10/7	99.5	99.8	100.1	24	99.8	100.1	100.5	24	98.3	98.4	98.5	24	99.8	99.9	100.3	24	99.2	99.4	99.8	24
10/8	99.3	99.5	99.9	24	99.5	99.8	100.0	24	97.8	97.9	98.2	24	99.7	99.9	100.1	24	99.1	99.1	99.2	24
10/9	99.3	99.9	103.1	24	99.2	99.7	101.5	24	98.0	98.6	99.0	24	99.0	99.3	100.1	24	99.2	99.6	99.9	24
10/10	101.0	102.8	104.6	23	101.3	102.8	103.9	23	---	---	---	0	---	---	---	0	---	---	---	0

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

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

Date	Priest R. Dnst				Pasco				Dworshak				Clrwtr-Peck				Anatone			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
9/27	102.3	102.6	103.0	24	---	---	---	0	103.4	104.0	104.7	24	100.7	101.8	102.7	24	---	---	---	0
9/28	103.2	103.6	104.2	24	---	---	---	0	104.0	104.6	104.9	24	101.3	102.2	102.6	24	---	---	---	0
9/29	102.4	102.9	103.2	24	---	---	---	0	104.2	104.4	104.9	24	100.9	101.5	101.8	24	---	---	---	0
9/30	102.0	102.5	103.0	24	---	---	---	0	104.0	104.6	105.1	24	100.9	101.7	102.4	24	---	---	---	0
10/1	101.7	102.1	102.6	24	---	---	---	0	103.3	103.9	104.6	24	100.2	100.7	101.3	24	---	---	---	0
10/2	101.5	101.8	102.4	24	---	---	---	0	103.4	104.3	105.1	24	100.7	101.9	102.8	24	---	---	---	0
10/3	100.9	101.3	101.6	24	---	---	---	0	102.7	103.4	104.3	24	99.8	100.5	101.1	24	---	---	---	0
10/4	100.8	101.3	101.7	24	---	---	---	0	102.1	102.8	103.8	24	100.0	101.3	102.5	24	---	---	---	0
10/5	101.4	101.9	102.5	24	---	---	---	0	102.1	102.9	104.1	24	100.4	101.9	103.1	24	---	---	---	0
10/6	102.0	102.6	103.0	24	---	---	---	0	103.0	104.0	105.2	24	101.0	102.5	104.0	24	---	---	---	0
10/7	101.8	102.4	102.5	24	---	---	---	0	103.5	104.3	105.2	24	101.1	102.2	103.4	24	---	---	---	0
10/8	102.3	102.7	102.9	24	---	---	---	0	103.3	103.9	104.6	24	100.7	101.5	102.1	24	---	---	---	0
10/9	102.3	102.6	103.0	24	---	---	---	0	103.3	103.9	104.7	24	100.9	102.0	103.3	24	---	---	---	0
10/10	---	---	---	0	---	---	---	0	103.4	104.0	105.0	23	100.9	101.9	102.9	23	---	---	---	0

Total Dissolved Gas Saturation Data at Snake River Sites

Date	Clrwtr-Lewiston				Lower Granite				L. Granite Tlwr				Little Goose				L. Goose Tlwr			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
9/27	---	---	---	0	---	---	---	0	94.7	94.9	95.3	24	---	---	---	0	95.2	95.6	95.9	24
9/28	---	---	---	0	---	---	---	0	95.8	96.2	96.7	24	---	---	---	0	96.3	97.0	97.2	24
9/29	---	---	---	0	---	---	---	0	95.7	96.0	96.1	24	---	---	---	0	95.8	96.4	96.8	24
9/30	---	---	---	0	---	---	---	0	95.2	95.6	96.2	24	---	---	---	0	95.5	95.8	96.4	24
10/1	---	---	---	0	---	---	---	0	94.6	94.8	95.0	24	---	---	---	0	94.8	95.4	95.6	24
10/2	---	---	---	0	---	---	---	0	94.8	95.3	95.5	24	---	---	---	0	94.2	94.7	95.0	24
10/3	---	---	---	0	---	---	---	0	94.8	94.9	95.2	24	---	---	---	0	93.5	94.0	94.4	24
10/4	---	---	---	0	---	---	---	0	94.5	94.6	94.8	24	---	---	---	0	92.6	92.9	93.1	24
10/5	---	---	---	0	---	---	---	0	95.0	95.3	95.5	24	---	---	---	0	93.0	93.4	94.4	24
10/6	---	---	---	0	---	---	---	0	96.2	96.8	97.0	24	---	---	---	0	93.4	94.1	94.9	24
10/7	---	---	---	0	---	---	---	0	97.3	97.6	97.9	24	---	---	---	0	93.9	94.4	94.8	24
10/8	---	---	---	0	---	---	---	0	98.0	98.3	99.2	24	---	---	---	0	93.9	94.4	94.7	24
10/9	---	---	---	0	---	---	---	0	97.9	98.3	99.0	24	---	---	---	0	93.4	93.9	95.3	24
10/10	---	---	---	0	---	---	---	0	98.4	98.5	98.6	23	---	---	---	0	93.8	94.5	94.9	23

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

Date	Lower Mon.				L. Mon. Tlwr				Ice Harbor				Ice Harbor Tlwr				McNary-Oregon			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
9/27	---	---	---	0	96.9	97.1	97.9	24	---	---	---	0	97.4	97.7	97.9	24	---	---	---	0
9/28	---	---	---	0	97.9	98.4	99.0	24	---	---	---	0	98.2	98.7	98.9	24	---	---	---	0
9/29	---	---	---	0	97.5	97.9	99.1	24	---	---	---	0	98.1	98.5	98.8	24	---	---	---	0
9/30	---	---	---	0	97.0	97.5	98.0	24	---	---	---	0	97.7	97.9	98.2	24	---	---	---	0
10/1	---	---	---	0	96.3	96.7	97.5	24	---	---	---	0	96.8	97.1	97.3	24	---	---	---	0
10/2	---	---	---	0	96.1	96.4	97.0	24	---	---	---	0	96.6	97.0	97.3	24	---	---	---	0
10/3	---	---	---	0	95.3	95.6	96.0	24	---	---	---	0	96.1	96.4	96.8	24	---	---	---	0
10/4	---	---	---	0	94.8	95.1	95.6	24	---	---	---	0	95.8	96.3	96.8	24	---	---	---	0
10/5	---	---	---	0	95.2	95.6	96.2	24	---	---	---	0	96.3	96.9	97.1	24	---	---	---	0
10/6	---	---	---	0	96.1	96.6	99.6	24	---	---	---	0	97.5	98.5	99.2	24	---	---	---	0
10/7	---	---	---	0	96.3	96.8	97.3	24	---	---	---	0	97.5	97.9	98.2	24	---	---	---	0
10/8	---	---	---	0	96.3	96.6	97.5	24	---	---	---	0	97.3	97.7	98.0	24	---	---	---	0
10/9	---	---	---	0	96.0	96.3	96.5	24	---	---	---	0	96.9	97.2	97.5	24	---	---	---	0
10/10	---	---	---	0	96.3	96.5	97.2	23	---	---	---	0	97.3	97.6	97.9	23	---	---	---	0

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>McNary-Wash</u>			<u>McNary Tlwr</u>			<u>John Day</u>			<u>John Day Tlwr</u>			<u>The Dalles</u>							
	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#					
	Avg	Avg		High	hr		Avg	Avg		High	hr		Avg	Avg		High	hr	Avg	AVG	High
9/27	---	---	---	0	97.7	97.9	98.2	24	---	---	---	0	97.6	98.0	98.4	24	---	---	---	0
9/28	---	---	---	0	98.7	99.2	99.6	24	---	---	---	0	98.6	99.2	99.7	24	---	---	---	0
9/29	---	---	---	0	98.9	99.2	99.6	24	---	---	---	0	98.4	99.0	99.6	24	---	---	---	0
9/30	---	---	---	0	98.6	98.8	99.4	24	---	---	---	0	97.2	97.5	98.7	24	---	---	---	0
10/1	---	---	---	0	97.7	97.9	98.0	24	---	---	---	0	96.2	96.5	96.7	24	---	---	---	0
10/2	---	---	---	0	97.5	97.7	97.8	24	---	---	---	0	96.1	96.6	96.8	24	---	---	---	0
10/3	---	---	---	0	96.7	96.9	97.1	24	---	---	---	0	95.8	96.1	96.5	24	---	---	---	0
10/4	---	---	---	0	96.3	96.5	96.7	24	---	---	---	0	95.9	96.8	97.3	24	---	---	---	0
10/5	---	---	---	0	97.0	97.5	97.6	24	---	---	---	0	96.4	96.7	96.9	24	---	---	---	0
10/6	---	---	---	0	98.4	98.8	99.0	24	---	---	---	0	96.2	97.2	97.8	24	---	---	---	0
10/7	---	---	---	0	99.0	99.2	99.4	24	---	---	---	0	97.6	98.8	99.6	24	---	---	---	0
10/8	---	---	---	0	98.8	98.9	99.1	24	---	---	---	0	98.6	99.0	99.6	24	---	---	---	0
10/9	---	---	---	0	98.8	99.2	99.3	24	---	---	---	0	97.4	97.7	98.4	24	---	---	---	0
10/10	---	---	---	0	99.4	99.5	99.6	23	---	---	---	0	97.2	97.5	97.6	23	---	---	---	0

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>Camas\Washougal</u>			<u>Cascade Island</u>							
	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#					
	Avg	Avg		High	hr		Avg	Avg		High	hr		Avg	Avg		High	hr	Avg	AVG	High
9/27	99.8	100.1	100.3	24	---	---	---	0	100.6	101.0	101.3	24	---	---	---	0	---	---	---	0
9/28	100.7	101.0	101.1	24	---	---	---	0	102.2	102.5	102.8	24	---	---	---	0	---	---	---	0
9/29	100.5	100.7	101.2	24	---	---	---	0	102.4	102.9	103.5	24	---	---	---	0	---	---	---	0
9/30	99.8	100.1	100.4	24	---	---	---	0	101.3	101.7	102.0	24	---	---	---	0	---	---	---	0
10/1	98.6	98.8	98.9	24	---	---	---	0	101.3	101.7	102.1	24	---	---	---	0	---	---	---	0
10/2	98.6	98.8	99.1	24	---	---	---	0	100.8	101.1	101.6	24	---	---	---	0	---	---	---	0
10/3	98.4	98.7	99.0	24	---	---	---	0	100.5	100.8	101.0	24	---	---	---	0	---	---	---	0
10/4	98.4	98.8	99.1	24	---	---	---	0	100.7	101.1	101.6	24	---	---	---	0	---	---	---	0
10/5	99.3	99.8	100.0	24	---	---	---	0	100.9	101.3	101.8	24	---	---	---	0	---	---	---	0
10/6	100.4	100.9	101.1	24	---	---	---	0	101.3	101.9	102.4	24	---	---	---	0	---	---	---	0
10/7	101.0	101.1	101.2	24	---	---	---	0	101.2	101.4	101.7	24	---	---	---	0	---	---	---	0
10/8	100.7	100.9	101.1	24	---	---	---	0	101.4	101.8	102.5	24	---	---	---	0	---	---	---	0
10/9	100.1	100.4	100.7	24	---	---	---	0	101.6	102.3	102.8	24	---	---	---	0	---	---	---	0
10/10	100.4	100.5	100.7	23	---	---	---	0	101.9	102.0	102.1	23	---	---	---	0	---	---	---	0

Two-Week Summary of Passage Indices

Source: Fish Passage Center

Updated: 10/11/2013 7:38

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/smolqueries/currentsmppsubmitdata.asp>

COMBINED YEARLING CHINOOK											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR ^{††} (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
09/27/2013 *	---	---	---	---	0	0	0	---	---	---	0
09/28/2013	---	---	---	---	0	0	0	---	0	---	0
09/29/2013 *	---	---	---	---	1	0	0	---	---	---	0
09/30/2013	---	---	---	---	1	0	0	---	0	---	0
10/01/2013 *	---	---	---	---	1	0	0	---	---	---	0
10/02/2013	---	---	---	---	1	0	---	---	---	---	0
10/03/2013	---	---	---	---	0	0	---	---	---	---	0
10/04/2013	---	---	---	---	0	0	---	---	---	---	0
10/05/2013	---	---	---	---	0	0	---	---	---	---	0
10/06/2013	---	---	---	---	1	0	---	---	---	---	0
10/07/2013	---	---	---	---	0	0	---	---	---	---	0
10/08/2013	---	---	---	---	3	0	---	---	---	---	0
10/09/2013	---	---	---	---	6	0	---	---	---	---	0
10/10/2013 *	---	---	---	---	---	0	---	---	---	---	0
10/11/2013	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	14	0	0	0	0	0	0
# Days:	0	0	0	0	13	14	5	0	2	0	14
Average:	0	0	0	0	1	0	0	0	0	0	0
YTD	50,632	55,648	26,301	2,797	2,607,120	1,498,294	614,256	28,315	2,123,325	2,057,119	1,881,678

COMBINED SUBYEARLING CHINOOK											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR ^{††} (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
09/27/2013 *	---	---	---	---	14	5	12	---	---	---	73
09/28/2013	---	---	---	---	31	11	41	---	84	---	71
09/29/2013 *	---	---	---	---	54	14	31	---	---	---	49
09/30/2013	---	---	---	---	285	21	48	---	48	---	97
10/01/2013 *	---	---	---	---	491	65	287	---	---	---	236
10/02/2013	---	---	---	---	364	121	---	---	---	---	1,088
10/03/2013	---	---	---	---	449	237	---	---	---	---	1,163
10/04/2013	---	---	---	---	235	262	---	---	---	---	252
10/05/2013	---	---	---	---	189	381	---	---	---	---	123
10/06/2013	---	---	---	---	123	400	---	---	---	---	0
10/07/2013	---	---	---	---	251	487	---	---	---	---	80
10/08/2013	---	---	---	---	197	283	---	---	---	---	14
10/09/2013	---	---	---	---	417	331	---	---	---	---	22
10/10/2013 *	---	---	---	---	---	366	---	---	---	---	128
10/11/2013	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	3,100	2,984	419	0	132	0	3,396
# Days:	0	0	0	0	13	14	5	0	2	0	14
Average:	0	0	0	0	238	213	84	0	66	0	243
YTD	2	61	195	2,668	727,728	644,358	273,599	18,794	3,697,390	2,553,975	4,866,310

Two-Week Summary of Passage Indices

COMBINED COHO											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
09/27/2013 *	---	---	---	---	0	0	0	---	---	---	0
09/28/2013	---	---	---	---	1	0	0	---	0	---	0
09/29/2013 *	---	---	---	---	0	0	0	---	---	---	0
09/30/2013	---	---	---	---	0	0	0	---	0	---	0
10/01/2013 *	---	---	---	---	0	0	0	---	---	---	24
10/02/2013	---	---	---	---	0	0	---	---	---	---	33
10/03/2013	---	---	---	---	0	0	---	---	---	---	49
10/04/2013	---	---	---	---	0	0	---	---	---	---	0
10/05/2013	---	---	---	---	0	1	---	---	---	---	0
10/06/2013	---	---	---	---	0	0	---	---	---	---	0
10/07/2013	---	---	---	---	0	0	---	---	---	---	0
10/08/2013	---	---	---	---	0	0	---	---	---	---	0
10/09/2013	---	---	---	---	0	0	---	---	---	---	0
10/10/2013 *	---	---	---	---	---	0	---	---	---	---	0
10/11/2013	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	1	1	0	0	0	0	106
# Days:	0	0	0	0	13	14	5	0	2	0	14
Average:	0	0	0	0	0	0	0	0	0	0	8
YTD	0	0	0	107	61,827	54,079	10,584	49,973	85,380	188,509	770,946

COMBINED STEELHEAD											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR ^{††} (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
09/27/2013 *	---	---	---	---	0	0	0	---	---	---	0
09/28/2013	---	---	---	---	0	1	1	---	0	---	0
09/29/2013 *	---	---	---	---	0	0	1	---	---	---	0
09/30/2013	---	---	---	---	0	0	0	---	0	---	0
10/01/2013 *	---	---	---	---	0	1	2	---	---	---	0
10/02/2013	---	---	---	---	0	0	---	---	---	---	0
10/03/2013	---	---	---	---	0	0	---	---	---	---	0
10/04/2013	---	---	---	---	0	1	---	---	---	---	0
10/05/2013	---	---	---	---	1	0	---	---	---	---	0
10/06/2013	---	---	---	---	1	0	---	---	---	---	0
10/07/2013	---	---	---	---	1	0	---	---	---	---	0
10/08/2013	---	---	---	---	0	0	---	---	---	---	0
10/09/2013	---	---	---	---	0	0	---	---	---	---	0
10/10/2013 *	---	---	---	---	---	0	---	---	---	---	0
10/11/2013	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	3	3	4	0	0	0	0
# Days:	0	0	0	0	13	14	5	0	2	0	14
Average:	0	0	0	0	0	0	1	0	0	0	0
YTD	3,789	40,840	3,547	9,925	2,037,038	1,713,550	610,922	14,984	471,593	732,388	470,306

Two-Week Summary of Passage Indices

COMBINED SOCKEYE											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
09/27/2013 *	---	---	---	---	2	0	0	---	---	---	0
09/28/2013	---	---	---	---	3	0	0	---	0	---	0
09/29/2013 *	---	---	---	---	3	0	0	---	---	---	0
09/30/2013	---	---	---	---	14	0	0	---	0	---	0
10/01/2013 *	---	---	---	---	4	0	0	---	---	---	0
10/02/2013	---	---	---	---	5	0	---	---	---	---	0
10/03/2013	---	---	---	---	3	1	---	---	---	---	0
10/04/2013	---	---	---	---	5	1	---	---	---	---	0
10/05/2013	---	---	---	---	1	1	---	---	---	---	0
10/06/2013	---	---	---	---	2	0	---	---	---	---	0
10/07/2013	---	---	---	---	0	0	---	---	---	---	0
10/08/2013	---	---	---	---	9	0	---	---	---	---	0
10/09/2013	---	---	---	---	6	0	---	---	---	---	0
10/10/2013 *	---	---	---	---	---	0	---	---	---	---	0
10/11/2013	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	57	3	0	0	0	0	0
# Days:	0	0	0	0	13	14	5	0	2	0	14
Average:	0	0	0	0	4	0	0	0	0	0	0
YTD	1	0	0	326	54,766	33,024	11,379	25,107	633,854	414,785	396,143

COMBINED LAMPREY JUVENILES											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR [†] (Coll)	LGS (Coll)	LMN (Coll)	RIS (Coll)	MCN (Coll)	JDA (Coll)	BO2 (Coll)
09/27/2013 *	---	---	---	---	0	2	0	---	---	---	0
09/28/2013	---	---	---	---	0	9	0	---	0	---	0
09/29/2013 *	---	---	---	---	0	8	1	---	---	---	0
09/30/2013	---	---	---	---	1	11	0	---	0	---	0
10/01/2013 *	---	---	---	---	0	6	3	---	---	---	0
10/02/2013	---	---	---	---	2	10	---	---	---	---	0
10/03/2013	---	---	---	---	0	3	---	---	---	---	0
10/04/2013	---	---	---	---	1	3	---	---	---	---	0
10/05/2013	---	---	---	---	0	5	---	---	---	---	50
10/06/2013	---	---	---	---	1	14	---	---	---	---	0
10/07/2013	---	---	---	---	0	8	---	---	---	---	0
10/08/2013	---	---	---	---	0	6	---	---	---	---	0
10/09/2013	---	---	---	---	0	4	---	---	---	---	0
10/10/2013 *	---	---	---	---	---	15	---	---	---	---	0
10/11/2013	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	5	104	4	0	0	0	50
# Days:	0	0	0	0	13	14	5	0	2	0	14
Average:	0	0	0	0	0	7	1	0	0	0	4
YTD	0	8	0	0	5,001	55,511	63,730	185	86,554	176,113	6,234

Two-Week Summary of Passage Indices

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

Smolt indices, clipped & unclipped or combined, are presented in the following order: yearling chinook (chinook 1's), subyearling chinook (chinook 0's), steelhead, coho, sockeye, and lamprey juveniles. Two classes of fish counts are shown in these tables:

Two classes of fish counts are shown in these tables:

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

Passage indices (INDEX), which are collection counts divided by the proportion of water passing through the sampled powerhouse.

Passage indices are not population estimates, but are used to adjust collection counts for daily fluctuations in the site's or project's operations.

The classes of counts presented in the report are defined below for each site. Most samples occur over a 24-hr period

that spans two calendar days. In this report, the date shown corresponds with the sample end date.

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

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

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

Definitions for Smolt Index Counts

WTB (Collection) = Salmon River Trap at Whitebird : Collection Counts

IMN (Collection) = Imnaha River Trap : Collection Counts

GRN (Collection) = Grande Ronde River Trap : Collection Counts

LEW (Collection) = Snake River Trap at Lewiston : Collection Counts

LGR (Index) = Lower Granite Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

JDA and BO2 data collected for the FPC by Pacific States Marine Fisheries Commission.

RIS data collected for the FPC by Chelan Co. PUD.

LGR, LMN, and MCN data collected for the FPC by Washington Dept. of Fish and Wildlife.

LGS and GRN data collected for the FPC by Oregon Dept. of Fish and Wildlife.

IMN data collected for the FPC by the Nez Perce Tribe.

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

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

Two Week Transportation Summary

Source: Fish Passage Center

Updated:

10/11/13 7:30 AM

09/27/13 TO 10/11/13

		Species						
Site	Data	CH0	CH1	CO	ST	SO	Grand Total	
LGR	Sum of NumberCollected	3,100		14		3	57	3,174
	Sum of NumberBarged	0		0		0	0	0
	Sum of NumberBypassed	0		0		3	1	4
	Sum of Numbertrucked	3,091		14		0	52	3,157
	Sum of SampleMorts	32		0		0	6	38
	Sum of FacilityMorts	0		0		0	0	0
	Sum of ResearchMorts	0		0		0	0	0
	Sum of TotalProjectMorts	32		0		0	6	38
LGS	Sum of NumberCollected	2,984			1	3	3	2,991
	Sum of NumberBarged	0			0	0	0	0
	Sum of NumberBypassed	9			0	0	0	9
	Sum of Numbertrucked	2,574			1	3	3	2,581
	Sum of SampleMorts	29			0	0	0	29
	Sum of FacilityMorts	13			0	0	0	13
	Sum of ResearchMorts	0			0	0	0	0
	Sum of TotalProjectMorts	42			0	0	0	42
LMN	Sum of NumberCollected	419				4		423
	Sum of NumberBarged	0				0		0
	Sum of NumberBypassed	0				0		0
	Sum of Numbertrucked	413				4		417
	Sum of SampleMorts	12				0		12
	Sum of FacilityMorts	0				0		0
	Sum of ResearchMorts	0				0		0
	Sum of TotalProjectMorts	12				0		12
MCN	Sum of NumberCollected	132						132
	Sum of NumberBarged	0						0
	Sum of NumberBypassed	131						131
	Sum of Numbertrucked	0						0
	Sum of SampleMorts	0						0
	Sum of FacilityMorts	1						1
	Sum of ResearchMorts	0						0
	Sum of TotalProjectMorts	1						1
Total Sum of NumberCollected		6,635		14	1	10	60	6,720
Total Sum of NumberBarged		0		0	0	0	0	0
Total Sum of NumberBypassed		140		0	0	3	1	144
Total Sum of Numbertrucked		6,078		14	1	7	55	6,155
Total Sum of SampleMorts		73		0	0	0	6	79
Total Sum of FacilityMorts		14		0	0	0	0	14
Total Sum of ResearchMorts		0		0	0	0	0	0
Total Sum of TotalProjectMorts		87		0	0	0	6	93

YTD Transportation Summary

Source: Fish Passage Center

Updated: 10/11/13 7:30 AM

TO: 10/11/13

Site	Data	Species						Grand Total
		CH0	CH1	CO	SO	ST	LU	
LGR	Sum of NumberCollected	472,211	1,865,158	48,078	42,719	1,444,874		3,873,040
	Sum of NumberBarged	437,793	1,554,582	47,807	42,574	1,087,929		3,170,685
	Sum of NumberBypassed	13,697	308,258	210	53	356,585		678,803
	Sum of NumberTrucked	19,635	28	1	64	13		19,741
	Sum of SampleMorts	697	174	3	13	40		927
	Sum of FacilityMorts	351	2,066	57	15	259		2,748
	Sum of ResearchMorts	38	52	0	0	47		137
	Sum of TotalProjectMorts	1,086	2,292	60	28	346		3,812
LGS	Sum of NumberCollected	451,439	1,026,511	36,887	22,632	1,174,707		2,712,176
	Sum of NumberBarged	426,163	979,239	36,685	22,607	1,108,345		2,573,039
	Sum of NumberBypassed	331	46,698	200	2	66,202		113,433
	Sum of NumberTrucked	23,757	0	2	15	25		23,799
	Sum of SampleMorts	363	14	0	4	11		392
	Sum of FacilityMorts	462	560	0	4	124		1,150
	Sum of ResearchMorts	0	0	0	0	0		0
	Sum of TotalProjectMorts	825	574	0	8	135		1,542
LMN	Sum of NumberCollected	170,106	470,899	8,000	8,064	459,593	1	1,116,663
	Sum of NumberBarged	151,939	469,284	7,999	8,058	458,179	0	1,095,459
	Sum of NumberBypassed	13,438	1,079	0	2	1,144	151	15,814
	Sum of NumberTrucked	3,393	2	0	0	17	0	3,412
	Sum of SampleMorts	455	16	0	0	18	0	489
	Sum of FacilityMorts	362	518	1	4	235	0	1,120
	Sum of ResearchMorts	0	0	0	0	0	0	0
	Sum of TotalProjectMorts	817	534	1	4	253	0	1,609
MCN	Sum of NumberCollected	1,779,323	1,098,880	43,803	314,637	255,352		3,491,995
	Sum of NumberBarged	0	0	0	0	0		0
	Sum of NumberBypassed	1,778,752	1,098,057	43,799	314,387	255,297		3,490,292
	Sum of NumberTrucked	0	0	0	0	0		0
	Sum of SampleMorts	389	62	1	34	8		494
	Sum of FacilityMorts	182	761	3	216	47		1,209
	Sum of ResearchMorts	0	0	0	0	0		0
	Sum of TotalProjectMorts	571	823	4	250	55		1,703
Total Sum of NumberCollected		2,873,079	4,461,448	136,768	388,052	3,334,526	1	11,193,874
Total Sum of NumberBarged		1,015,895	3,003,105	92,491	73,239	2,654,453	0	6,839,183
Total Sum of NumberBypassed		1,806,218	1,454,092	44,209	314,444	679,228	151	4,298,342
Total Sum of NumberTrucked		46,785	30	3	79	55	0	46,952
Total Sum of SampleMorts		1,904	266	4	51	77	0	2,302
Total Sum of FacilityMorts		1,357	3,905	61	239	665	0	6,227
Total Sum of ResearchMorts		38	52	0	0	47	0	137
Total Sum of TotalProjectMorts		3,299	4,223	65	290	789	0	8,666

Cumulative Adult Passage at Mainstem Dams Through: 10/11

Dam	End Date	Spring Chinook						Summer Chinook						Fall Chinook					
		2013		2012		10-Yr Avg.		2013		2012		10-Yr Avg.		2013		2012		10-Yr Avg.	
		Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	10/10	83345	33820	158089	7592	141713	20323	93097	26186	81663	12235	87543	17586	922421	106627	343711	119800	379188	59135
TDA	10/10	69202	32311	117087	7175	107368	16911	85639	20750	69222	10392	74538	13909	569340	82794	218874	102972	211177	49104
JDA	10/10	56991	28957	107655	6755	92410	15875	74764	19636	60814	10415	67514	14608	409073	84040	161208	86705	159338	43132
MCN	10/10	52176	22279	102763	4787	83990	13854	75741	14808	64428	5104	63310	10848	418067	50122	164850	48411	128219	29254
IHR	10/10	38017	18611	71957	2905	58986	8558	11912	6321	14182	1481	17476	4251	56597	18296	37668	20826	23545	13950
LMN	10/10	36470	19053	68608	2891	58025	7379	11765	7703	15150	1611	18803	4213	52067	22038	32665	22004	21232	13210
LGS	10/10	35072	19443	68247	3449	53406	8429	10120	7632	14748	1613	17544	4904	53045	20109	33223	18016	19772	10298
LGR	10/10	35031	19940	66366	3525	53382	9851	8423	7572	13163	1717	16010	5560	53010	20072	32932	20221	17482	12504
PRD	10/07	13725	1298	19495	1015	15225	1406	71083	3174	50667	1994	53926	2612	181159	15292	41641	8164	29267	4872
WAN	10/07	13715	1661	19804	973	15699	2278	69983	2189	50588	1515	47124	1979	61680	6189	15874	4173	15398	4297
RIS	09/28	13345	3100	19881	800	14248	2237	68380	3985	52184	3343	51396	5464	20149	9928	6187	3741	6841	2270
RRH	09/28	6841	2101	6641	459	5306	853	59680	4044	45528	2775	39283	4310	14773	5882	4233	2294	4636	1603
WEL	10/09	7133	2980	5311	700	4618	880	49451	4264	38588	3271	28793	2802	6537	1047	2653	982	2816	1291
WFA	10/09	27897	1664	35899	1314	46153	1141	0	0	0	0	0	0	978	237	1753	426	1187	259

Dam	End Date	Coho						Sockeye			Steelhead					Lamprey			
		2013		2012		10-Yr Avg.		2013	2012	10-Yr Avg.	2013	2012	10-Yr Avg.	Wild 2013	Wild 2012	10-Yr Avg.	2013	2012	10-Yr Avg.
		Adult	Jack	Adult	Jack	Adult	Jack												
BON	10/10	44802	5710	45021	3381	97203	5570	185505	515673	177593	230476	229254	356260	97864	83376	109207	23961	29204	33955
TDA	10/10	22566	2386	29322	2724	32450	3026	161896	410099	146266	185781	190171	273126	78606	66762	82636	8730	6230	8432
JDA	10/10	15012	1267	27906	3456	29524	3679	155387	394163	149056	144513	144335	257140	60934	53822	76778	6568	4591	7361
MCN	10/10	10849	1579	15395	1305	16187	1655	134200	364147	125774	136225	132379	213474	52792	44296	59795	1566	968	3334
IHR	10/10	1651	281	2394	300	1848	176	895	453	425	100481	88089	161418	27448	22782	38656	324	472	404
LMN	10/10	1465	270	1863	238	1698	175	1014	486	530	92897	83893	157741	29179	23401	39050	108	132	110
LGS	10/10	1040	271	2076	228	1570	166	993	453	508	78823	79926	142480	24139	23206	33822	32	86	106
LGR	10/10	764	166	1796	152	1469	226	757	470	613	78326	79950	135784	24359	23079	33823	19	48	32
PRD	10/07	1956	267	7832	1524	3864	459	163078	408258	154770	13659	16438	18675	0	0	0	5846	3871	3631
WAN	10/07	867	144	4209	902	3097	338	155694	450198	196435	11172	14735	19107	0	0	0	4172	2832	2388
RIS	09/28	71	6	4805	86	2550	283	159187	410615	152394	9209	13604	15993	4916	5784	7491	2075	979	1435
RRH	09/28	8	1	1097	17	396	45	131651	363301	129825	6839	11046	12106	3556	4585	5163	1606	723	663
WEL	10/09	59	0	1352	6	437	0	129988	326104	123601	6070	8828	9759	2934	3820	4090	21	3	71
WFA	10/09	9040	2290	5267	5709	6356	1722	0	0	0	17797	31579	26036	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.