Fish Passage Center

Weekly Report #13 - 17

July 12, 2013

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has generally been below average over July, ranging between 0% and 76% of average at individual sub-basins. Precipitation above The Dalles has been 27% of average over July. Over the 2013 water year, precipitation has ranged between 68% and 108% of average.

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

Location	Water Year 2013 July1–10, 2013		Water Year 2013 October 1, 2012 to July 10, 2013	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia above Coulee	0.18	22	32.4	99
Snake River above Ice Harbor	0.15	47	14.8	73
Columbia above The Dalles	0.13	27	20.8	85
Kootenai	0.23	25	36.0	108
Clark Fork	0.13	25	18.5	76
Flathead	0.26	36	31.4	99
Pend Oreille Basin	0.16	26	25.7	89
Snake Basin above Hells Canyon	0.19	76	11.7	70
Salmon River Basin	0.15	30	17.6	68
Clearwater	0.03	6	31.6	85
Willamette River above Portland	0.00	0	55.1	90

Table 2 displays the April 7th and July 11th ESP runoff volume forecasts for multiple reservoirs. The July 11th forecast at The Dalles between January and July is 98,347 Kaf (97% of average).

Table 2. April and July ESP Runoff Volume Forecasts for various reservoirs within the Columbia and Snake River Basins.

Location	April 7, 2013 ESP		July 11, 2013 ESP	
	% Average (1971–2000)	Runoff Volume (Kaf)	% Average (1981–2010)	Runoff Volume (Kaf)
The Dalles (Jan–July)	93	94287	97	98347
Grand Coulee (Jan–July)	101	60415	108	64296
Libby Res. Inflow, MT (Apr–Aug)	102	6001 *6189	126	7396 **6464
Hungry Horse Res. Inflow, MT (Jan–July)	99	2084	111	2323
Lower Granite Res. Inflow (Apr–July)	83	16485	71	14091
Brownlee Res. Inflow (Apr–July)	62	3376	48	2617
Dworshak Res. Inflow (Apr–July)	96	2319 *2036	87	2111 **2158

* Denotes COE April Forecast
** Denotes COE June Forecast

Grand Coulee Reservoir is at 1289.5 feet (7-11-13) and refilled 2.4 feet over the last week. Outflows at Grand Coulee have ranged between 144.5 and 185.1 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2457.1 feet (7-11-13) and has drafted 0.7 feet last week. Outflows at Libby Dam have been 23.6–36.0 Kcfs over the last week; inflows to Libby have ranged from 22.0 Kcfs to 38.3 Kcfs over the same period.

Hungry Horse is currently at an elevation of 3559.4 feet (7-11-13) and has refilled 0.2 feet last week. Outflows at Hungry Horse Dam have ranged from 3.0 Kcfs to 4.0 Kcfs over the last week.

Dworshak is currently at an elevation of 1589.2 feet (7-11-13) and has drafted 5.5 feet last week. Outflows from Dworshak have increased from 9.5 Kcfs to 12.6 Kcfs over the last week for temperature and flow augmentation in the lower Snake River.

The Brownlee Reservoir was at an elevation of 2069.8 feet on July 11th, 2013, drafting 3.4 feet over the last week. Over the last week, inflows at Brownlee have ranged between 7.2 and 7.8 Kcfs.

The flow objective at Lower Granite over the summer period (June 21st to August 31st) is 50 Kcfs. Over the summer period, flows at Lower Granite have averaged 43.4 Kcfs and 37.3 Kcfs over the last week.

The flow objective at McNary over the summer period (July 1st to August 31st) is 200 Kcfs. Over the summer period flows at McNary have averaged 254.5 Kcfs and over the last week have averaged 238.1 Kcfs.

Spill: Summer Spill began on June 20th at the lower Snake River projects and will extend through August 31st.

Project	Spill Level Day/Night
Lower Granite	18 Kcfs/18 Kcfs
Little Goose	30%/30%
Lower Monumental	17 Kcfs/17 Kcfs
Ice Harbor	30%/30% vs. 45 Kcfs/Gas Cap

Flow in the Snake River has remained fairly constant over the past week. Outflow from Dworshak Reservoir was increased above powerhouse capacity, causing some spill for flow augmentation and temperature control. All the lower Snake River dams met the court-ordered summer spill levels described in the table.

Spring spill for fish passage at the Lower Columbia projects began on April 10th and ended on June 30th, except at McNary Dam where summer spill began on June 20th, and Bonneville Dam where summer spill began on June 16th.

Project	Summer Spill Level Day/Night
McNary	50%/50%
John Day	July 1–20: 30%/30% vs. 40%/40% July 20–August 3: 30%/30%
The Dalles	40%/40%
Bonneville	June 16–July 20: 85 Kcfs/121 Kcfs and 95 Kcfs/95 Kcfs July 21–August 31: 75 Kcfs/Gas Cap

Flow in the Columbia River has decreased slightly since last week. All the middle Columbia River dams met the court-ordered summer spill levels described in the table.

While, in general, summer spill levels are less due to decreased flows and lower requirements, a few forebay TDG exceedences occurred at Little Goose and Ice Harbor dams earlier in the week. This reflects the recent hot weather, and the relation between TDG and increasing water temperatures. Based on historic data collected since 1995 from the gas bubble trauma (GBT) monitoring program, we would not expect to see fish exhibit signs of GBT at the present TDG levels. Consistent with historic data, only one fish was detected with minor signs of GBT at Rock Island Dam on 7/5.

Smolt Monitoring: Smolt monitoring is ongoing at all seven SMP dams (BON, JDA, MCN, RIS, LMN, LGS, and LGR). The Imnaha River Trap is the only trap that continues to operate for the 2013 season.

Passage of all spring migrant salmonid species remained low during the week of July 5 to July 11 at BON, similar to the previous seven days. This week's daily average passage indices for yearling Chinook, coho, sockeye, and steelhead at BON were about 175, 60, 100, and 200 per day, respectively. This week's daily average passage index for subyearling Chinook was about 170,000, which was a large increase over last week's daily average passage index of about 66,000 per day. Finally, only pacific lamprey macropthalmia were collected at BON this week. Pacific macropthalmia were collected five of the seven days of sampling, with a daily average collection for the week of 82 per day.

Subyearling Chinook dominated the bypass sample at JDA this week. This week's daily average

passage index for subyearling Chinook was about 62,000 per day, which is a decrease compared to last week's daily average passage index of about 135,000 per day. Passage of yearling Chinook decreased this week, as did indices for coho. This week's daily average passage index for yearling Chinook at JDA was about 120 per day. Last week's daily average passage index for yearling Chinook was just over 450 per day. This week's daily average passage indices for steelhead, sockeye, and coho at JDA were about 20, 200, and 0 per day, respectively. Last week's daily average passage indices were about 250 for steelhead, 100 for sockeye, and 20 for coho. Finally, only pacific lamprey macropthalmia were sampled at JDA this week. Passage of pacific lamprey macropthalmia decreased this week, when compared to last week. The daily average collection for pacific lamprey macropthalmia this week was about 900 per day. Last week's daily average collection was about 350 per day.

Sampling at MCN for the 2013 season is every-other-day. Passage of nearly all salmonid species increased this week, when compared to last week. Subyearling Chinook continue to dominate passage. This week's daily average passage index for subyearling Chinook at MCN was over 300,000 per day. Last week's daily average passage index for subyearling Chinook was about 250,000 per day. Pacific lamprey macropthalmia continue to be the only species and life-stage of lamprey collected at MCN this season. This week's daily average collection for pacific lamprey macropthalmia was about 3,000, which was higher than last week's daily average collection of about 700 per day. Small numbers of all spring migrants continue to be sampled at the project.

Subyearling Chinook continued to dominate the bypass samples at LGR this week. This week's daily average passage index for subyearling Chinook was about 5,500 per day, which was higher than last week's daily average passage index of about 4,400 per day. Passage of all other juvenile salmonids decreased, or was very low this past week. This week's daily average passage indices for yearling Chinook and steelhead at LGR were about 3 and 30 per day, respectively. Last week's daily average passage indices were about 5 for yearling Chinook and 200 for steelhead. Passage of coho and sockeye was very low this week at LGR also. This week's daily average passage indices for coho and sockeye at LGR were 0 and 3 per day, respectively. Pacific macropthalmia were the only lamprey juveniles collected at LGR this week. An estimated 10 were collected on July 11. Finally, due to the possible resampling of PIT-tagged research fish that are released into the gatewells, daily estimates of subyearling Chinook collection and passage indices may have been inflated. The FPC is aware of this possible bias and is investigating ways to correct these inflated estimates after the research has ended. However, the magnitude of this bias is relatively low and is unlikely to skew estimates of timing for this species.

Passage of subyearling Chinook at LGS decreased this week. This week's daily average passage index for subyearling Chinook at LGS was about 4,900 per day. Last week's daily average passage index was about 8,400 per day. Yearling Chinook, coho, and steelhead passage at LGS continued to decrease this week, when compared to last week. The largest decrease among these species was for steelhead. The daily average passage index for steelhead was 90 per day. Last week's daily average passage index for steelhead was about 360 per day. Finally, pacific lamprey macropthalmia were collected every day of sampling at LGS this week.

Similar to LGS, subyearling Chinook continued to predominate in passage at LMN this week. This week's daily average passage index for subyearling Chinook at LMN was about 1,600 per day. Last week's daily average passage index was only about 4,300 per day. Only pacific lamprey macropthalmia were collected at LMN this week. This week's daily average collection for pacific lamprey macropthalmia was 7 per day.

This week's collections at RIS were also dominated by subyearling Chinook. And, when compared to last week, subyearling Chinook passage increased this week. This week's daily average passage index for subyearling Chinook at RIS was about 400 per day. Last week's daily average passage index for subyearling Chinook was about 370 per day. Passage of yearling Chinook, coho, sockeye, and steelhead all decreased slightly this week, when compared to last week. This week's daily average passage indices for yearling

Chinook, coho, sockeye, and steelhead at RIS were about 1, 8, 16, and 6 per day, respectively. Last week's daily average passage indices were about 5 for yearling Chinook, 18 for coho, 14 for sockeye, and 11 for steelhead. Finally, a few pacific lamprey macropthalmia were collected this week at Rock Island.

As with previous weeks, the Imnaha River Trap continues to collect only steelhead and Chinook at this time. However, as of this writing no additional sample data was available since June 24.

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 the last week. There are also no new releases scheduled for the next two weeks.

Mid-Columbia Zone: The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam. There were no new releases scheduled for the past week. There are also no new releases scheduled to begin in the next two weeks.

Lower Columbia Zone: The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. There were no new releases scheduled for this zone over the last week.

On July 15th, approximately 2 million fall Chinook are scheduled for release into the Little White Salmon River. All of these smolts will be marked.

Adult Fish Passage

Daily adult summer Chinook passage numbers at Bonneville Dam ranged between 1,079 and 1,543 in the last week. The 2013 summer Chinook count of 78,355 is about 1.13 times greater than the 2012 count of 68,857 and 1.05 times greater than the 10-year average count of 74,645. The 2013 Bonneville Dam summer Chinook jack count of 23,143 is 2.5 times greater than the 2012 count of 9,137 and 1.6 times greater than the 10-year average count of 14,653. At McNary Dam 59,241 adult summer Chinook have been counted. The 2013 adult summer Chinook count at McNary Dam is about 1.3 times greater than the 2012 count and 1.2 times greater than the 10-year average. The 2013 McNary Dam summer Chinook jack count of 11,784 is about 3.9 times greater than the 2012 count and 1.5 times greater than the10-year average count. The 2013 adult summer Chinook count at Lower Granite Dam in the Snake River of 6,354 is about 60.8% of the 2012 count and 46.3% of the 10-year average count. The 2013 Lower Granite summer Chinook jack count of 5,608 is about 4.7 times greater than the 2012 count and 1.3 times greater than the 10-year average count.

The 2013 Bonneville Dam adult steelhead count of 13,286 is about 54% of the 2012 count of 24,618 and 39.3% of the 10-year average count of 33,795. The 2013 Bonneville Dam adult wild steelhead count of 5,319 is about 55.5% of the 2012 count of 9,579 and 39% of the 10-year average count of 13,652. In the Snake River, this year's Lower Granite steelhead count of 7,739 is about 83.5% of the 2012 count of 9,264 and 72.6% of the 10-year average count of 10,659. The 2013 Lower Granite Dam adult wild steelhead count of 3,314 is about 81.5% of the 2012 count of 4,067 and about 95.2% of the 10-year average count of 3,482. At Willamette Falls, the 2013 count for steelhead was 16,427 as of July 2nd. This year's steelhead count is about 55.9% of the 2012 count of 29,391 and about 70.8% of the 10-year average count of 23,195.

Daily adult sockeye passage numbers at Bonneville Dam ranged between 2,768 and 5,280 last week. The 2013 adult sockeye count at Bonneville Dam of 166,989 is about 33.1% of the 2012 count of 504,276 and about 97.4% of the 10-year average count of 171,414. The 2013 McNary Dam adult sockeye count of 104,892 is about 32.8% of the 2012 count of 319,392 and 95% of the 10-year average count of 110,459. The Lower Granite Dam 2013 adult sockeye count of 325 is about 2.1 times greater than the 2012 count of 154 and 1.08 times greater than the 10-year average count of 301. As of July 11th at Bonneville Dam, the adult shad count was 3,727,766. This year's shad count is about 1.5 times greater than the 2012 count of 2,410,899 and 1.3 times greater than the 10-year average count of 2,835,047.

Hatchery Releases Last Two Weeks

Hatchery Release Summary

From: 6/28/2013 to 07/11/13

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Dworshak NFH	CH0	SP	2014	300,000	07-01-13	08-01-13	Selway River	Clearwater River M F
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2014	400,000	06-25-13	06-29-13	Meadow Creek - SELW	Selway River
Nez Perce Tribe Total					**700,000**				
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH0	FA	2013	2,500,000	07-01-13	07-01-13	Little White Salmon Hatchery	Little White Salmon River
U.S. Fish and Wildlife Service Total					2,500,000				
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	CH0	FA	2013	**3,450,000**	06-20-13	07-15-13	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife Total					3,450,000				
Yakama Tribe	Eagle Creek NFH	CO	UN	2013	102,975	04-15-13	07-01-13	Stiles Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2013	104,059	04-15-13	07-01-13	Holmes Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2013	237,043	04-15-13	07-01-13	Easton Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2013	124,425	04-15-13	07-01-13	Lost Creek Acclim Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2013	131,858	04-15-13	07-01-13	Stiles Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2013	322,100	04-01-13	07-01-13	Prosser Acclim Pond	Yakima River
Yakama Tribe Total					**1,022,460**				
Grand Total					**7,672,460**				

Hatchery Releases Next Two Weeks

Hatchery Release Summary

From: 7/12/2013 to 7/25/2013

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Dworshak NFH	CH0	SP	2014	300,000	07-01-13	08-01-13	Selway River	Clearwater River M F
Nez Perce Tribe Total					**300,000**				
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH0	FA	2013	2,000,000	07-15-13	07-15-13	Little White Salmon Hatchery	Little White Salmon River
U.S. Fish and Wildlife Service Total					**2,000,000**				
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	CH0	FA	2013	3,450,000	06-20-13	07-15-13	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife Total					**3,450,000**				
Grand Total					**5,750,000**				

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
06/28/2013	200.9	27.9	199.1	15.0	225.7	40.3	224.2	45.7	222.1	40.0	234.8	101.0	237.8	107.8
06/29/2013	200.2	26.3	196.3	15.1	217.6	38.6	215.8	41.6	216.9	42.2	232.1	95.5	229.7	107.7
06/30/2013	198.4	25.0	201.6	15.1	224.2	50.5	229.8	49.6	229.9	42.3	240.4	109.8	242.5	112.7
07/01/2013	200.0	25.0	197.2	15.1	214.8	42.6	218.6	50.6	219.6	37.0	234.1	106.2	237.1	106.9
07/02/2013	200.4	24.9	198.4	15.2	219.8	45.1	219.5	42.6	219.4	42.3	229.4	93.5	230.8	105.6
07/03/2013	194.1	27.3	195.3	17.7	214.0	50.5	219.2	49.2	219.4	45.7	238.7	100.6	243.8	119.9
07/04/2013	170.7	0.2	171.4	0.1	184.9	25.5	186.7	28.3	191.5	37.5	202.5	75.4	205.2	86.5
07/05/2013	183.6	0.1	182.4	0.0	200.0	24.0	199.6	37.9	199.8	32.6	214.7	90.8	215.4	97.7
07/06/2013	185.1	0.1	187.8	0.0	210.4	34.1	206.7	27.2	207.0	36.9	217.1	81.8	216.6	79.4
07/07/2013	172.6	0.0	175.4	0.0	190.3	20.2	190.8	19.4	195.2	36.3	204.4	69.7	205.3	69.4
07/08/2013	148.7	0.2	148.7	0.0	165.9	10.0	169.5	30.9	174.3	36.8	184.0	47.6	184.9	40.7
07/09/2013	144.5	0.3	145.8	0.0	163.3	10.0	163.4	21.0	165.8	37.7	172.3	30.5	172.0	25.8
07/10/2013	152.0	0.2	142.3	2.6	146.7	10.0	147.9	15.8	153.4	34.8	164.3	23.6	163.6	24.5
07/11/2013	154.7	5.1	158.0	20.3	163.5	10.5	160.1	22.1	161.4	36.2	172.4	41.2	161.6	27.4

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
06/28/2013	5.3	0.0	---	---	44.3	18.6	44.9	13.4	45.7	16.9	47.7	37.5
06/29/2013	5.3	0.0	---	---	47.5	20.2	47.5	15.0	50.3	17.1	52.2	23.5
06/30/2013	7.4	0.0	---	---	48.4	18.4	48.2	14.5	48.8	17.0	49.3	14.8
07/01/2013	10.9	1.4	---	---	47.3	18.5	46.2	13.8	44.8	16.5	44.2	29.4
07/02/2013	12.9	3.4	---	---	52.0	19.8	53.1	18.1	55.7	18.4	58.6	46.7
07/03/2013	13.0	3.5	---	---	47.2	20.1	44.6	17.0	44.6	18.8	45.8	18.8
07/04/2013	12.9	3.4	---	---	43.2	18.1	42.4	12.7	43.2	17.0	43.9	13.3
07/05/2013	11.2	1.7	---	---	40.1	19.0	40.6	12.9	43.2	17.3	43.1	32.8
07/06/2013	9.6	0.0	---	---	36.7	18.7	36.3	10.9	34.7	16.7	34.5	24.2
07/07/2013	9.5	0.0	---	---	37.3	18.7	36.8	11.0	38.6	16.6	41.4	16.4
07/08/2013	9.6	0.0	---	---	37.4	18.7	36.8	11.0	37.8	17.0	37.0	11.1
07/09/2013	9.6	0.0	---	---	37.8	18.7	38.3	11.5	39.0	16.7	40.0	26.2
07/10/2013	10.9	1.3	---	---	35.6	18.4	34.8	10.4	34.6	17.0	35.0	24.7
07/11/2013	12.6	2.9	---	---	36.5	18.4	35.3	10.6	35.3	16.6	35.1	13.5

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
06/28/2013	275.9	150.3	267.0	84.5	247.6	98.0	270.4	99.3	66.8	91.9
06/29/2013	292.2	173.7	302.2	122.1	282.8	104.3	286.2	96.2	81.2	96.5
06/30/2013	284.7	161.7	262.2	100.7	245.6	96.4	277.2	104.4	85.5	74.9
07/01/2013	282.2	159.7	283.8	85.4	261.8	98.0	275.7	94.3	85.8	83.2
07/02/2013	285.2	165.6	280.5	96.0	263.7	97.0	280.5	99.4	81.0	87.7
07/03/2013	284.4	160.4	274.1	114.8	256.2	98.7	275.4	100.9	74.4	87.7
07/04/2013	280.5	156.7	275.0	105.0	254.8	97.3	268.2	90.7	---	---
07/05/2013	241.1	133.2	250.1	85.9	236.2	97.2	270.6	95.1	73.5	89.6
07/06/2013	269.0	136.7	266.3	84.8	244.4	97.8	271.3	99.3	72.2	87.4
07/07/2013	261.3	131.7	251.7	100.3	237.3	94.8	256.9	94.5	62.2	87.8
07/08/2013	250.0	135.4	248.2	94.3	232.9	92.6	247.8	89.7	56.6	89.1
07/09/2013	223.6	116.7	215.8	64.5	200.5	80.3	225.7	94.4	34.0	84.9
07/10/2013	217.9	109.0	204.7	65.2	188.9	75.5	201.9	100.0	5.7	83.9
07/11/2013	203.8	102.0	201.1	80.6	183.1	73.1	207.5	95.6	15.7	83.8

Gas Bubble Trauma Monitoring Results from Representative Sites on the Snake River and Columbia River

Site	Date	Species	Number of Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank: Rank 1	Rank 2	Rank 3	Rank 4
Little Goose Dam											
	07/01/13	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	07/08/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Lower Monumental Dam											
	07/03/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/10/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
McNary Dam											
	07/01/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/03/13	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	07/07/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/11/13	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
Bonneville Dam											
	06/29/13	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	07/02/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/06/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/09/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Rock Island Dam											
	07/02/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/05/13	Chinook + Steelhead	50	1	1	2.00%	2.00%	0	0	0	1
	07/09/13	Chinook + Steelhead	50	0	0	0.00%	0.00%	0	0	0	0
	07/11/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	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 Upper Columbia River Sites

	Hungry H. Dnst				Boundary				Grand Coulee				Grand C. Tlwr				Chief Joseph			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/28	105.0	105.3	105.5	24	---	---	---	0	112.6	112.9	113.3	24	112.9	113.4	113.7	24	112.3	113.0	113.4	24
6/29	105.4	105.6	105.8	24	---	---	---	0	113.1	113.3	113.4	24	113.5	113.6	113.9	24	113.5	114.2	114.6	24
6/30	105.5	105.7	106.0	24	---	---	---	0	113.1	113.3	113.6	24	113.2	113.5	113.8	24	114.1	114.5	115.0	24
7/1	105.9	106.2	106.6	24	---	---	---	0	113.5	113.8	114.6	24	113.5	113.8	114.1	24	113.8	114.2	114.5	24
7/2	106.5	107.1	107.3	24	---	---	---	0	113.6	113.8	114.0	24	113.6	113.9	114.1	24	114.0	114.4	114.7	24
7/3	107.2	107.5	107.6	24	---	---	---	0	113.2	113.4	113.6	24	113.5	114.0	114.5	24	113.9	114.3	114.7	24
7/4	107.3	107.7	108.0	24	---	---	---	0	113.5	113.8	114.1	24	111.6	112.1	113.4	24	114.0	114.2	114.5	24
7/5	107.4	107.7	108.0	24	---	---	---	0	113.6	113.8	114.0	24	111.8	112.1	112.3	24	114.0	114.3	114.5	24
7/6	107.3	107.6	108.0	24	---	---	---	0	113.4	113.6	113.7	24	111.7	112.0	112.2	24	112.5	112.8	113.1	24
7/7	107.6	107.9	108.1	24	---	---	---	0	113.4	113.6	113.8	24	111.2	111.6	111.9	24	112.2	112.4	112.7	24
7/8	106.8	107.3	107.5	24	---	---	---	0	113.2	113.4	113.7	24	110.0	110.4	111.4	24	111.8	111.9	112.0	14
7/9	106.1	106.3	106.6	24	---	---	---	0	113.0	113.1	113.2	24	109.6	110.2	110.5	24	111.8	111.9	112.1	17
7/10	106.6	107.2	107.5	24	---	---	---	0	114.2	114.4	114.6	24	110.6	111.1	111.7	24	112.3	112.7	113.1	24
7/11	107.2	107.4	107.8	23	---	---	---	0	114.2	114.3	114.5	23	110.2	110.5	111.2	23	111.9	112.2	112.5	23

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

	Chief J. Dnst				Wells				Wells Dwnstrm				Rocky Reach				Rocky R. Tlwr			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/28	110.4	110.7	110.8	24	110.8	111.7	112.2	23	115.8	117.0	118.5	23	113.0	113.4	114.0	24	119.8	120.1	120.4	24
6/29	110.9	111.3	111.5	24	111.9	112.0	112.1	23	116.4	117.0	118.1	23	115.2	115.5	115.9	24	120.1	120.7	122.8	24
6/30	111.3	111.5	111.7	24	112.9	113.6	113.8	21	119.0	119.6	119.9	21	115.6	116.2	116.9	24	121.3	121.7	121.9	24
7/1	111.1	111.7	112.3	24	113.0	113.2	113.5	21	118.1	118.6	119.5	21	117.5	117.7	118.0	24	121.7	121.8	122.1	24
7/2	111.6	111.9	112.2	24	113.1	113.5	113.8	21	118.4	119.3	120.1	21	117.2	117.6	118.1	24	121.1	121.3	121.5	24
7/3	111.3	111.6	111.9	24	113.0	113.3	113.4	22	119.6	119.9	120.4	22	116.5	116.8	117.2	24	121.5	121.6	121.8	24
7/4	113.0	113.3	114.0	24	112.8	113.0	113.2	21	116.3	117.6	119.7	21	117.5	117.7	117.9	24	119.5	120.6	121.5	24
7/5	113.1	113.6	113.8	24	113.2	113.4	113.7	21	116.0	116.9	117.0	21	115.4	116.5	117.1	24	119.3	120.3	121.7	24
7/6	111.6	111.8	111.9	24	112.6	112.8	113.6	20	116.5	117.1	118.1	20	114.2	115.3	115.6	24	118.0	119.0	119.7	24
7/7	111.3	111.4	111.6	24	112.0	112.3	112.9	21	114.6	115.5	116.3	21	115.8	116.1	116.4	24	117.9	118.2	118.5	24
7/8	111.2	111.2	111.8	14	111.2	111.5	111.8	24	112.8	113.2	113.7	24	114.1	114.6	114.6	24	117.8	119.4	120.6	24
7/9	110.8	111.0	111.2	17	111.4	111.8	112.2	24	112.9	113.5	114.2	24	112.2	112.5	112.9	24	115.9	116.8	118.0	24
7/10	111.7	112.3	112.9	24	111.8	112.2	112.9	24	113.3	113.9	114.7	24	112.7	113.3	113.7	24	115.4	117.1	117.8	24
7/11	110.7	110.9	111.2	23	111.2	111.4	111.7	23	112.8	113.2	113.7	23	111.6	111.9	112.3	23	116.2	117.2	118.7	23

Total Dissolved Gas Saturation at Mid Columbia River Sites

	Rock Island				Rock I. Tlwr				Wanapum				Wanapum Tlwr				Priest Rapids			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/28	114.0	115.0	115.5	24	117.8	119.3	119.9	24	---	---	---	0	---	---	---	0	---	---	---	0
6/29	115.0	115.5	116.1	24	118.8	119.6	120.2	24	---	---	---	0	---	---	---	0	---	---	---	0
6/30	115.4	116.3	116.7	24	119.1	120.2	120.6	24	117.3	118.3	119.2	24	120.1	121.3	121.4	24	119.5	121.0	122.1	24
7/1	116.6	117.2	117.5	24	119.7	120.3	120.8	24	118.1	119.3	120.7	24	120.0	120.3	120.7	24	120.2	121.3	122.1	24
7/2	116.8	117.1	117.3	24	120.0	120.6	120.9	24	---	---	---	0	---	---	---	0	---	---	---	0
7/3	116.3	116.9	117.2	24	119.8	121.0	121.4	24	116.3	117.0	117.8	24	118.6	118.8	119.4	24	116.9	117.9	118.8	24
7/4	116.2	116.5	116.9	24	119.2	120.0	120.4	24	114.3	114.7	115.3	24	116.3	118.1	119.8	24	115.6	116.2	116.9	24
7/5	115.1	116.2	117.1	24	118.5	119.7	121.2	24	113.7	114.4	115.1	24	117.6	118.1	120.1	24	113.9	116.5	118.7	24
7/6	113.3	114.5	115.3	24	117.7	119.1	119.9	24	114.8	116.3	116.7	24	116.3	116.8	117.5	24	115.9	116.7	117.7	24
7/7	114.9	115.5	115.9	24	119.0	120.0	120.4	24	115.2	116.0	117.3	24	115.6	116.6	117.5	24	116.6	117.5	118.6	24
7/8	114.3	115.5	116.4	24	118.4	120.0	121.1	24	114.4	115.0	115.5	24	114.5	114.7	115.0	24	113.4	114.3	114.9	24
7/9	112.4	113.3	115.3	24	117.7	118.6	119.8	24	115.0	115.8	116.5	24	114.7	115.1	115.4	24	114.2	114.9	115.9	24
7/10	112.4	113.0	113.4	24	117.3	117.9	118.4	23	---	---	---	0	---	---	---	0	---	---	---	0
7/11	112.0	112.6	113.9	23	117.0	117.8	118.5	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			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/28	---	---	---	0	---	---	---	0	98.7	99.2	99.5	24	102.0	103.2	104.0	24	103.2	104.5	105.5	24
6/29	---	---	---	0	---	---	---	0	99.2	99.8	100.5	24	102.3	103.4	104.5	24	103.0	104.0	105.0	24
6/30	120.9	121.7	122.2	24	---	---	---	0	99.0	99.4	99.7	24	102.3	103.4	104.2	24	102.9	104.0	105.1	24
7/1	121.4	121.6	122.1	24	---	---	---	0	102.4	105.9	109.4	24	104.0	106.6	109.5	24	103.0	104.2	105.3	24
7/2	---	---	---	0	---	---	---	0	107.2	107.5	107.7	24	107.5	108.3	109.1	24	103.1	104.3	105.4	24
7/3	120.2	120.6	120.8	24	---	---	---	0	107.7	108.2	108.3	24	107.9	108.8	109.5	24	102.1	102.9	103.7	24
7/4	119.2	119.8	120.4	24	---	---	---	0	107.5	107.8	108.2	24	107.6	108.4	109.1	24	102.0	103.1	104.0	24
7/5	117.5	118.7	119.5	24	---	---	---	0	103.7	107.3	108.1	24	105.4	107.1	108.0	24	101.9	103.1	104.1	24
7/6	118.2	118.6	119.0	24	---	---	---	0	99.6	99.9	100.3	24	102.4	103.5	104.4	24	102.1	103.4	104.5	24
7/7	118.5	118.8	119.1	24	---	---	---	0	99.6	99.9	100.3	24	102.5	103.6	104.4	24	102.2	103.3	104.5	24
7/8	115.7	116.4	118.0	24	---	---	---	0	99.3	99.6	100.0	24	102.1	103.0	103.8	24	101.8	102.6	103.4	24
7/9	115.4	115.7	116.1	24	---	---	---	0	98.9	99.4	99.6	24	102.0	103.2	104.0	24	102.0	103.0	103.9	24
7/10	---	---	---	0	---	---	---	0	102.2	104.9	106.8	24	103.8	106.1	107.3	24	102.4	103.5	104.4	24
7/11	---	---	---	0	---	---	---	0	106.5	106.8	107.3	22	106.6	107.4	108.4	22	101.6	101.9	103.2	17

Total Dissolved Gas Saturation Data at Snake River Sites

	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		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/28	103.5	105.7	107.2	24	100.7	100.9	101.1	24	114.7	114.9	115.3	24	110.7	111.4	112.8	24	113.3	113.8	114.0	24
6/29	103.4	105.4	107.0	24	100.7	100.8	100.9	24	115.3	116.0	119.2	24	113.4	114.1	115.2	24	113.7	114.1	115.1	24
6/30	103.4	105.7	107.2	24	101.9	102.7	103.6	24	115.2	115.5	116.4	24	115.5	116.4	116.9	24	113.8	114.2	114.5	24
7/1	103.6	105.9	107.4	24	104.5	104.8	105.1	24	115.5	115.8	116.1	24	116.3	116.9	117.2	24	114.0	114.6	115.0	24
7/2	105.6	107.8	109.4	24	104.5	104.7	105.0	24	115.7	116.6	118.5	24	116.7	117.0	117.2	24	113.9	114.4	115.1	24
7/3	105.9	108.2	109.7	24	103.3	103.5	103.9	24	115.9	116.4	117.5	24	116.2	116.3	116.4	24	113.5	114.0	114.6	24
7/4	105.8	108.0	109.7	24	102.9	103.0	103.1	24	115.5	115.8	116.5	24	116.8	117.0	117.2	24	113.0	113.3	113.6	24
7/5	105.6	108.1	109.7	24	103.3	103.7	104.0	24	116.3	116.6	118.3	24	116.3	117.0	117.3	24	112.5	113.1	113.8	24
7/6	103.9	106.4	108.1	24	103.6	103.7	103.8	24	116.7	117.0	117.4	24	114.9	115.4	116.1	24	111.5	112.0	113.1	24
7/7	103.9	106.4	108.1	24	103.1	103.3	103.6	24	116.3	116.7	117.2	24	114.1	114.4	115.0	24	110.7	111.4	111.9	24
7/8	103.4	105.6	107.1	24	101.7	102.0	102.3	24	116.0	116.5	117.0	24	111.5	112.3	113.7	24	109.9	110.7	111.1	24
7/9	103.8	106.3	108.0	24	101.4	101.7	102.0	24	116.1	116.5	117.4	24	112.1	113.2	113.7	24	109.0	109.9	110.9	24
7/10	104.1	106.6	108.3	24	102.2	102.5	102.8	24	116.2	116.7	117.2	24	113.4	113.7	113.9	24	108.4	109.0	109.6	24
7/11	105.2	107.5	109.3	22	102.0	102.2	102.4	23	116.1	116.4	117.3	23	112.6	113.1	113.4	23	108.0	108.5	109.2	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			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/28	110.2	110.6	111.0	24	115.6	115.9	116.6	24	111.3	111.9	112.6	24	113.2	113.6	113.9	24	---	---	---	0
6/29	112.0	112.4	113.0	24	115.9	116.6	117.5	24	113.1	113.4	113.5	24	113.3	114.0	115.2	24	---	---	---	0
6/30	112.4	113.0	113.5	24	116.4	116.9	117.4	24	114.4	114.8	115.2	24	113.9	115.1	116.0	24	---	---	---	0
7/1	114.4	115.0	115.4	24	116.6	117.0	117.2	24	115.4	115.6	116.0	24	113.9	114.8	115.3	24	---	---	---	0
7/2	114.4	114.6	114.9	24	117.5	118.1	118.4	24	115.9	116.2	116.5	24	114.5	115.5	116.1	24	---	---	---	0
7/3	114.2	114.6	115.1	24	116.9	117.6	118.2	24	115.4	115.6	116.0	24	113.4	113.9	115.5	24	---	---	---	0
7/4	114.5	114.8	115.0	24	116.9	117.1	117.4	24	115.6	116.0	116.6	24	112.8	113.4	113.9	24	---	---	---	0
7/5	114.0	114.2	114.6	24	116.6	117.1	117.4	24	115.8	115.9	116.1	24	114.2	114.8	115.3	24	---	---	---	0
7/6	114.0	114.1	114.2	24	116.6	117.0	117.3	24	115.2	115.4	115.7	24	113.9	114.6	114.8	24	---	---	---	0
7/7	113.7	113.9	114.3	24	116.4	117.0	117.7	24	114.4	114.7	115.0	24	113.0	113.6	113.9	24	---	---	---	0
7/8	113.1	113.4	113.9	24	116.4	116.7	117.1	24	113.4	113.8	114.0	24	112.0	112.6	113.1	24	---	---	---	0
7/9	113.1	113.4	113.9	24	115.7	116.6	117.1	24	113.7	114.3	114.6	24	113.1	114.1	114.7	24	---	---	---	0
7/10	112.4	113.0	113.2	24	115.9	116.1	116.4	24	114.5	114.7	115.0	24	112.7	113.4	114.1	24	---	---	---	0
7/11	110.8	111.3	111.9	23	115.7	116.1	116.9	23	113.6	113.9	114.4	23	112.4	112.7	113.0	23	---	---	---	0

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

	McNary-Wash				McNary Tlwr				John Day				John Day Tlwr				The Dalles			
	24 h	12 h		#	24 h	12 h		#	24h	12h		#	24h	12h		#	24h	12h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr
6/28	112.4	113.2	114.3	24	125.9	133.3	154.5	24	110.7	111.4	112.2	24	115.0	116.3	118.1	24	111.9	112.5	113.1	24
6/29	115.5	116.3	117.2	24	119.6	119.9	120.2	24	112.8	113.3	113.7	24	118.0	118.4	118.8	24	112.9	113.6	114.5	24
6/30	116.9	117.5	118.2	24	119.4	119.6	119.9	24	114.4	115.4	116.6	24	116.5	117.8	118.6	24	115.0	115.6	116.0	24
7/1	116.4	116.7	116.8	24	119.5	119.8	120.1	24	115.8	116.4	117.0	23	115.5	116.4	117.4	24	115.2	115.5	115.8	24
7/2	116.7	117.5	117.9	24	119.5	119.8	120.1	24	116.3	116.7	117.2	24	116.5	117.7	118.8	24	114.1	114.6	115.1	24
7/3	116.9	117.2	117.6	24	119.4	119.6	120.0	24	115.8	116.0	116.1	24	118.0	118.4	118.6	24	113.5	114.0	114.3	24
7/4	115.7	116.1	116.7	24	119.6	119.7	119.9	24	113.4	114.0	114.9	24	117.3	118.4	119.0	24	111.4	112.1	113.1	24
7/5	114.0	114.5	115.4	24	118.4	118.8	119.6	24	111.0	111.3	111.9	24	115.1	116.1	117.7	24	109.7	110.5	111.4	24
7/6	113.6	114.1	114.4	24	118.5	119.2	119.6	24	110.7	111.5	112.2	24	114.9	116.4	118.4	24	110.1	111.4	112.4	24
7/7	113.0	113.7	114.9	24	118.5	119.1	119.3	24	111.5	111.8	112.3	24	116.8	117.6	118.1	24	111.6	112.3	112.4	24
7/8	113.7	114.2	114.5	24	118.5	118.9	119.1	24	110.2	110.4	110.9	24	116.0	117.2	118.0	24	110.7	111.3	112.1	24
7/9	113.8	114.4	114.8	24	117.5	117.7	117.9	24	109.9	110.4	110.9	24	113.6	114.1	114.6	24	111.8	112.1	112.2	24
7/10	113.3	113.6	114.3	24	117.3	117.5	117.7	24	111.1	111.5	112.3	24	114.8	115.3	115.9	24	110.4	110.8	111.1	24
7/11	111.8	112.2	112.9	23	116.7	116.9	117.3	23	110.2	110.5	110.9	23	114.5	115.2	116.1	23	108.3	108.7	109.3	23

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

	The Dalles Dnst				Bonneville				Warrendale				Camas\Washougal				Cascade Island			
	24 h	12 h		#	24 h	12 h		#	24h	12h		#	24h	12h		#	24h	12h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/28	117.4	118.1	118.4	24	116.0	116.5	116.9	24	117.3	117.7	118.0	24	116.3	117.8	118.9	24	119.0	119.3	120.0	24
6/29	117.4	117.8	118.3	24	115.3	115.8	116.6	24	116.3	116.5	116.9	24	115.9	116.7	117.5	24	119.0	119.2	119.3	24
6/30	118.4	119.1	119.9	24	115.5	116.1	116.4	24	116.7	117.8	119.7	24	115.5	116.3	117.2	24	118.5	119.9	121.4	24
7/1	118.4	118.9	119.2	24	116.9	117.2	117.3	24	117.4	117.7	118.3	24	116.9	117.8	118.3	24	117.5	118.3	119.5	24
7/2	117.6	117.9	118.4	24	114.7	115.2	115.5	24	116.1	116.8	117.3	24	115.3	116.1	116.8	24	119.3	119.4	119.5	24
7/3	117.6	118.1	118.6	24	112.1	112.6	112.9	24	114.8	115.3	115.8	24	113.8	114.6	115.6	24	118.5	119.6	123.3	24
7/4	116.2	116.8	117.5	24	110.5	111.0	111.3	24	112.9	113.3	113.4	24	111.6	112.2	112.9	24	116.9	117.7	119.7	24
7/5	115.5	116.0	117.4	24	108.8	109.0	109.3	24	112.6	114.1	115.5	24	110.7	111.9	113.0	24	117.0	118.0	119.7	24
7/6	116.4	117.1	117.5	24	109.9	110.9	111.1	24	112.9	113.4	113.8	24	111.0	112.8	114.0	24	118.8	119.0	119.6	24
7/7	117.0	117.5	117.8	24	111.0	111.1	111.2	24	113.3	113.7	114.3	24	111.5	112.3	113.2	24	118.5	118.6	118.7	24
7/8	116.3	116.5	116.8	24	109.8	110.1	110.3	24	112.8	113.2	113.5	24	111.5	112.8	113.8	24	116.9	117.6	119.6	24
7/9	116.7	117.0	117.6	24	111.9	113.0	113.5	24	114.7	115.2	115.7	24	112.6	114.6	116.2	24	117.2	118.2	119.7	24
7/10	115.6	115.9	116.6	24	112.2	112.7	113.0	24	115.8	116.3	116.8	24	112.8	114.0	115.3	24	118.5	118.8	119.6	24
7/11	114.0	114.3	114.8	23	108.5	109.0	110.3	23	114.0	114.6	115.1	23	111.2	112.2	113.2	23	118.1	118.4	118.4	23

Two-Week Summary of Passage Indices

Source: Fish Passage Center Updated: 7/12/2013 8:33

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)
06/28/2013	*	---	---	---	---	17	14	0	4	818	714	569
06/29/2013	*	---	---	---	---	18	0	84	18	---	220	440
06/30/2013		---	---	---	---	0	43	17	4	245	477	296
07/01/2013	*	---	---	---	---	0	14	12	2	---	445	389
07/02/2013		---	---	---	---	0	12	10	4	961	638	0
07/03/2013	*	---	---	---	---	0	16	8	0	---	450	0
07/04/2013		---	---	---	---	0	0	11	0	0	238	304
07/05/2013	*	---	---	---	---	18	0	88	0	---	2	0
07/06/2013		---	---	---	---	0	0	4	3	421	204	869
07/07/2013	*	---	---	---	---	0	0	28	0	---	436	0
07/08/2013		---	---	---	---	0	0	0	3	0	0	0
07/09/2013	*	---	---	---	---	0	1	35	0	---	0	0
07/10/2013		---	---	---	---	0	0	15	0	0	0	353
07/11/2013	*	---	---	---	---	0	0	4	0	---	219	0
07/12/2013		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**53**	**100**	**316**	**38**	**2,445**	**4,043**	**3,220**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**4**	**7**	**23**	**3**	**349**	**289**	**230**
YTD		**50,632**	**55,599**	**26,301**	**2,797**	**2,607,054**	**1,500,072**	**614,177**	**28,312**	**2,123,119**	**2,056,739**	**1,881,076**

				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)
06/28/2013	*	---	---	---	---	5,138	4,124	5,445	234	147,432	126,415	46,226
06/29/2013	*	---	---	---	---	3,482	15,592	6,738	399	---	86,336	67,381
06/30/2013		---	---	---	---	3,723	9,728	6,261	335	197,185	76,737	71,837
07/01/2013	*	---	---	---	---	7,302	7,748	5,478	634	---	65,169	64,980
07/02/2013		---	---	---	---	5,726	7,683	2,927	449	290,741	173,352	50,874
07/03/2013	*	---	---	---	---	3,586	4,007	2,046	46	---	244,350	61,640
07/04/2013		---	---	---	---	2,031	9,783	1,033	607	382,072	173,158	101,878
07/05/2013	*	---	---	---	---	3,235	6,468	1,695	484	---	895	157,103
07/06/2013		---	---	---	---	5,396	4,631	986	520	282,092	94,560	169,444
07/07/2013	*	---	---	---	---	7,210	3,889	1,415	410	---	82,280	173,889
07/08/2013		---	---	---	---	5,091	6,134	1,072	364	269,592	42,450	153,531
07/09/2013	*	---	---	---	---	4,814	3,097	1,684	323	---	63,420	206,365
07/10/2013		---	---	---	---	6,085	5,309	2,554	279	368,126	77,223	170,183
07/11/2013	*	---	---	---	---	6,571	4,687	1,931	271	---	72,812	162,245
07/12/2013		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**69,390**	**92,880**	**41,265**	**5,355**	**1,937,240**	**1,379,157**	**1,657,576**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**4,956**	**6,634**	**2,948**	**383**	**276,749**	**98,511**	**118,398**
YTD		**2**	**60**	**195**	**2,668**	**625,986**	**549,256**	**235,870**	**10,095**	**2,805,704**	**1,930,953**	**3,983,314**

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)
06/28/2013	*	---	---	---	---	0	0	2	16	0	143	0
06/29/2013	*	---	---	---	---	0	29	2	9	---	0	294
06/30/2013		---	---	---	---	17	0	0	22	0	0	0
07/01/2013	*	---	---	---	---	0	0	2	36	---	0	389
07/02/2013		---	---	---	---	0	31	0	9	0	0	0
07/03/2013	*	---	---	---	---	0	0	0	0	---	0	15
07/04/2013		---	---	---	---	17	0	2	28	0	0	0
07/05/2013	*	---	---	---	---	0	0	0	18	---	0	0
07/06/2013		---	---	---	---	0	0	0	9	211	0	0
07/07/2013	*	---	---	---	---	0	0	7	2	---	0	428
07/08/2013		---	---	---	---	0	0	0	3	0	0	0
07/09/2013	*	---	---	---	---	0	0	7	3	---	0	0
07/10/2013		---	---	---	---	0	0	0	5	0	0	0
07/11/2013	*	---	---	---	---	0	0	0	7	---	0	0
07/12/2013		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**34**	**60**	**22**	**167**	**211**	**143**	**1,126**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**2**	**4**	**2**	**12**	**30**	**10**	**80**
YTD		**0**	**0**	**0**	**107**	**61,810**	**54,156**	**10,580**	**49,912**	**85,339**	**188,357**	**770,597**

				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)
06/28/2013	*	---	---	---	---	102	216	115	9	822	0	284
06/29/2013	*	---	---	---	---	417	279	198	7	---	220	147
06/30/2013		---	---	---	---	249	647	422	20	980	239	1,149
07/01/2013	*	---	---	---	---	230	588	118	18	---	445	389
07/02/2013		---	---	---	---	120	416	211	9	0	638	0
07/03/2013	*	---	---	---	---	131	207	32	0	---	225	31
07/04/2013		---	---	---	---	83	158	13	8	0	0	304
07/05/2013	*	---	---	---	---	0	103	7	12	---	0	288
07/06/2013		---	---	---	---	77	58	19	12	0	0	435
07/07/2013	*	---	---	---	---	0	129	35	6	---	0	30
07/08/2013		---	---	---	---	106	158	40	6	0	0	0
07/09/2013	*	---	---	---	---	0	119	21	2	---	0	0
07/10/2013		---	---	---	---	21	0	22	3	840	143	353
07/11/2013	*	---	---	---	---	0	43	8	5	---	0	324
07/12/2013		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**1,536**	**3,121**	**1,261**	**117**	**2,642**	**1,910**	**3,734**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**110**	**223**	**90**	**8**	**377**	**136**	**267**
YTD		**3,789**	**40,840**	**3,547**	**9,925**	**2,036,879**	**1,715,541**	**610,830**	**14,949**	**471,593**	**732,216**	**469,888**

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)
06/28/2013	*	---	---	---	---	0	14	0	14	204	0	0
06/29/2013	*	---	---	---	---	0	0	0	18	---	220	147
06/30/2013		---	---	---	---	0	0	0	24	0	0	0
07/01/2013	*	---	---	---	---	0	0	0	23	---	0	0
07/02/2013		---	---	---	---	0	0	0	14	240	213	314
07/03/2013	*	---	---	---	---	0	0	0	0	---	225	15
07/04/2013		---	---	---	---	0	1	3	13	945	0	304
07/05/2013	*	---	---	---	---	0	0	0	7	---	3	0
07/06/2013		---	---	---	---	0	0	0	27	1,475	409	0
07/07/2013	*	---	---	---	---	0	0	0	16	---	654	0
07/08/2013		---	---	---	---	0	0	0	24	1,645	239	389
07/09/2013	*	---	---	---	---	0	0	0	14	---	196	395
07/10/2013		---	---	---	---	0	0	0	10	1,261	143	0
07/11/2013	*	---	---	---	---	21	0	0	7	---	0	0
07/12/2013		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**21**	**15**	**3**	**211**	**5,770**	**2,302**	**1,564**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**2**	**1**	**0**	**15**	**824**	**164**	**112**
YTD		**1**	**0**	**0**	**326**	**54,652**	**32,984**	**11,379**	**24,921**	**628,354**	**413,063**	**393,907**

				COMBINED LAMPREY JUVENILES								
		WTB	IMN	GRN	LEW	LGR†	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)
06/28/2013	*	---	---	---	---	0	90	352	0	200	300	0
06/29/2013	*	---	---	---	---	0	70	101	0	---	286	50
06/30/2013		---	---	---	---	0	40	150	8	600	286	8
07/01/2013	*	---	---	---	---	0	10	52	4	---	429	0
07/02/2013		---	---	---	---	10	40	50	0	600	143	100
07/03/2013	*	---	---	---	---	0	20	150	0	---	143	200
07/04/2013		---	---	---	---	0	120	10	1	1,300	857	100
07/05/2013	*	---	---	---	---	0	100	3	2	---	17	0
07/06/2013		---	---	---	---	0	80	4	2	2,600	1,429	143
07/07/2013	*	---	---	---	---	0	250	8	0	---	571	0
07/08/2013		---	---	---	---	0	270	0	0	4,300	857	143
07/09/2013	*	---	---	---	---	0	150	4	0	---	850	143
07/10/2013		---	---	---	---	0	95	16	1	2,000	1,000	0
07/11/2013	*	---	---	---	---	10	140	16	1	---	1,571	143
07/12/2013		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**20**	**1,475**	**916**	**19**	**11,600**	**8,739**	**1,030**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**1**	**105**	**65**	**1**	**1,657**	**624**	**74**
YTD		**0**	**8**	**0**	**0**	**4,942**	**53,622**	**63,556**	**115**	**72,810**	**164,584**	**5,182**

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 macropthalmia, 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: 7/12/13 8:36 AM

06/28/13 TO 07/12/13

		Species					
Site	Data	**CH0**	**CH1**	CO	ST	SO	**Grand Total**
LGR	Sum of NumberCollected	37,470	30	20	880	10	38,410
	Sum of NumberBarged	37,361	30	20	879	10	38,300
	Sum of NumberBypassed	5	0	0	0	0	5
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	46	0	0	0	0	46
	Sum of FacilityMorts	58	0	0	1	0	59
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	104	0	0	1	0	105
LGS	Sum of NumberCollected	63,700	69	40	2,135	11	65,955
	Sum of NumberBarged	63,617	69	40	2,131	10	65,867
	Sum of NumberBypassed	2	0	0	0	0	2
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	18	0	0	0	0	18
	Sum of FacilityMorts	63	0	0	4	1	68
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	81	0	0	4	1	86
LMN	Sum of NumberCollected	25,138	189	12	789	2	26,130
	Sum of NumberBarged	22,092	183	12	775	2	23,064
	Sum of NumberBypassed	2,970	5	0	6	0	2,981
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	19	1	0	3	0	23
	Sum of FacilityMorts	57	0	0	5	0	62
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	76	1	0	8	0	85
MCN	Sum of NumberCollected	875,523	1,100	100	1,202	2,700	880,625
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	875,326	1,099	100	1,201	2,700	880,426
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	151	1	0	0	0	152
	Sum of FacilityMorts	47	0	0	1	0	48
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	198	1	0	1	0	200
Total Sum of NumberCollected		1,001,831	1,388	172	5,006	2,723	1,011,120
Total Sum of NumberBarged		123,070	282	72	3,785	22	127,231
Total Sum of NumberBypassed		878,303	1,104	100	1,207	2,700	883,414
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of SampleMorts		234	2	0	3	0	239
Total Sum of FacilityMorts		225	0	0	11	1	237
Total Sum of ResearchMorts		0	0	0	0	0	0
Total Sum of TotalProjectMorts		459	2	0	14	1	476

YTD Transportation Summary

Source: Fish Passage Center Updated: 7/12/13 8:36 AM

TO: 07/12/13

		Species						
Site	Data	**CH0**	**CH1**	CO	SO	ST	LU	**Grand Total**
LGR	Sum of NumberCollected	418,465	1,865,111	48,070	42,630	1,444,788		3,819,064
	Sum of NumberBarged	403,998	1,554,564	47,801	42,561	1,087,871		3,136,795
	Sum of NumberBypassed	13,692	308,258	210	52	356,574		678,786
	Sum of NumberTrucked	0	0	0	0	0		0
	Sum of SampleMorts	436	173	2	2	39		652
	Sum of FacilityMorts	301	2,066	57	15	256		2,695
	Sum of ResearchMorts	38	52	0	0	47		137
	Sum of TotalProjectMorts	775	2,291	59	17	342		3,484
LGS	Sum of NumberCollected	381,629	1,026,506	36,885	22,601	1,174,513		2,642,134
	Sum of NumberBarged	381,162	979,234	36,685	22,599	1,108,180		2,527,860
	Sum of NumberBypassed	251	46,698	200	1	66,201		113,351
	Sum of NumberTrucked	0	0	0	0	0		0
	Sum of SampleMorts	40	14	0	0	9		63
	Sum of FacilityMorts	176	560	0	1	123		860
	Sum of ResearchMorts	0	0	0	0	0		0
	Sum of TotalProjectMorts	216	574	0	1	132		923
LMN	Sum of NumberCollected	151,080	470,861	7,998	8,064	459,541	1	1,097,545
	Sum of NumberBarged	137,176	469,249	7,997	8,058	458,147	0	1,080,627
	Sum of NumberBypassed	13,112	1,079	0	2	1,141	83	15,417
	Sum of NumberTrucked	0	0	0	0	0	0	0
	Sum of SampleMorts	66	15	0	0	18	0	99
	Sum of FacilityMorts	209	518	1	4	235	0	967
	Sum of ResearchMorts	0	0	0	0	0	0	0
	Sum of TotalProjectMorts	275	533	1	4	253	0	1,066
MCN	Sum of NumberCollected	1,344,045	1,098,780	43,783	311,935	255,352		3,053,895
	Sum of NumberBarged	0	0	0	0	0		0
	Sum of NumberBypassed	1,343,794	1,097,957	43,779	311,687	255,297		3,052,514
	Sum of NumberTrucked	0	0	0	0	0		0
	Sum of SampleMorts	173	62	1	33	8		277
	Sum of FacilityMorts	79	761	3	215	47		1,105
	Sum of ResearchMorts	0	0	0	0	0		0
	Sum of TotalProjectMorts	252	823	4	248	55		1,382
Total Sum of NumberCollected		2,295,219	4,461,258	136,736	385,230	3,334,194	1	10,612,638
Total Sum of NumberBarged		922,336	3,003,047	92,483	73,218	2,654,198	0	6,745,282
Total Sum of NumberBypassed		1,370,849	1,453,992	44,189	311,742	679,213	83	3,860,068
Total Sum of NumberTrucked		0	0	0	0	0	0	0
Total Sum of SampleMorts		715	264	3	35	74	0	1,091
Total Sum of FacilityMorts		765	3,905	61	235	661	0	5,627
Total Sum of ResearchMorts		38	52	0	0	47	0	137
Total Sum of TotalProjectMorts		1,518	4,221	64	270	782	0	6,855

Cumulative Adult Passage at Mainstem Dams Through: 07/12

		Spring Chinook						Summer Chinook						Fall Chinook					
		2013		2012		10-Yr Avg.		2013		2012		10-Yr Avg.		2013		2012		10-Yr Avg.	
DAM	ENDDATE	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	**07/11**	**83345**	**33820**	**158089**	**7592**	**141713**	**20323**	**78355**	**23143**	**68857**	**9137**	**74645**	**14653**	**0**	**0**	**0**	**0**	**0**	**0**
TDA	**07/11**	**69202**	**32311**	**117087**	**7175**	**107368**	**16911**	**70556**	**17889**	**54429**	**6919**	**62022**	**11082**	**0**	**0**	**0**	**0**	**0**	**0**
JDA	**07/11**	**56991**	**28957**	**107655**	**6755**	**92410**	**15875**	**61346**	**16443**	**45527**	**7045**	**55300**	**11264**	**0**	**0**	**0**	**0**	**0**	**0**
MCN	**07/10**	**52176**	**22279**	**102763**	**4787**	**83990**	**13854**	**59241**	**11784**	**44090**	**2984**	**48509**	**8070**	**0**	**0**	**0**	**0**	**0**	**0**
IHR	**07/11**	**38017**	**18611**	**71957**	**2905**	**58986**	**8558**	**9904**	**5744**	**12397**	**1183**	**15756**	**3755**	**0**	**0**	**0**	**0**	**0**	**0**
LMN	**07/11**	**36470**	**19053**	**68608**	**2891**	**58025**	**7379**	**9401**	**6769**	**13097**	**1209**	**16752**	**3546**	**0**	**0**	**0**	**0**	**0**	**0**
LGS	**07/11**	**35072**	**19443**	**68247**	**3449**	**53406**	**8429**	**7509**	**6280**	**11572**	**1158**	**15109**	**4112**	**0**	**0**	**0**	**0**	**0**	**0**
LGR	**07/11**	**35031**	**19940**	**66366**	**3525**	**53382**	**9851**	**6354**	**5608**	**10448**	**1186**	**13729**	**4434**	**0**	**0**	**0**	**0**	**0**	**0**
PRD	**07/06**	**13725**	**1298**	**19495**	**1015**	**15225**	**1406**	**35482**	**1074**	**18073**	**378**	**25836**	**946**	**0**	**0**	**0**	**0**	**0**	**0**
WAN	**07/06**	**13715**	**1661**	**19804**	**973**	**15699**	**2278**	**30175**	**678**	**15698**	**369**	**20072**	**775**	**0**	**0**	**0**	**0**	**0**	**0**
RIS	**07/10**	**13345**	**3100**	**19881**	**800**	**14248**	**2237**	**38238**	**1230**	**19383**	**402**	**25520**	**2025**	**0**	**0**	**0**	**0**	**0**	**0**
RRH	**07/10**	**6841**	**2101**	**6641**	**459**	**5306**	**853**	**28682**	**1094**	**9221**	**348**	**14477**	**1194**	**0**	**0**	**0**	**0**	**0**	**0**
WEL	**07/05**	**7133**	**2980**	**5311**	**700**	**4618**	**880**	**9471**	**757**	**596**	**36**	**3863**	**142**	**0**	**0**	**0**	**0**	**0**	**0**
WFA	**07/02**	**26210**	**1411**	**32990**	**1129**	**43630**	**970**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

		Coho						Sockeye			Steelhead						Lamprey		
		2013		2012		10-Yr Avg.				10-Yr			10-Yr	Wild	Wild	10-Yr			10-Yr
DAM	ENDDATE	Adult	Jack	Adult	Jack	Adult	Jack	2013	2012	Avg.	2013	2012	Avg.	2013	2012	Avg.	2013	2012	Avg.
BON	**07/11**	**0**	**0**	**0**	**0**	**0**	**0**	**166989**	**504276**	**171414**	**13286**	**24618**	**33795**	**5319**	**9579**	**13652**	**11555**	**11878**	**17842**
TDA	**07/11**	**0**	**0**	**0**	**0**	**0**	**0**	**141899**	**392965**	**139189**	**5778**	**10057**	**16491**	**2456**	**4180**	**7076**	**2322**	**665**	**2216**
JDA	**07/11**	**0**	**0**	**0**	**0**	**0**	**0**	**134839**	**371037**	**138722**	**4950**	**6999**	**17396**	**1966**	**3443**	**6194**	**1545**	**241**	**1427**
MCN	**07/10**	**1**	**0**	**0**	**0**	**0**	**0**	**104892**	**319392**	**110459**	**4093**	**8408**	**12023**	**1375**	**3303**	**3846**	**190**	**22**	**236**
IHR	**07/11**	**0**	**0**	**0**	**0**	**0**	**0**	**721**	**243**	**293**	**5862**	**4218**	**8264**	**1885**	**1462**	**2207**	**48**	**1**	**22**
LMN	**07/11**	**0**	**0**	**0**	**0**	**0**	**0**	**717**	**232**	**339**	**3957**	**4989**	**12496**	**1682**	**2288**	**3652**	**9**	**7**	**4**
LGS	**07/11**	**0**	**0**	**0**	**0**	**0**	**0**	**555**	**212**	**295**	**2721**	**4397**	**10823**	**1319**	**2452**	**3411**	**8**	**1**	**7**
LGR	**07/11**	**0**	**0**	**0**	**0**	**0**	**0**	**325**	**154**	**301**	**7739**	**9264**	**10659**	**3314**	**4067**	**3482**	**4**	**1**	**1**
PRD	**07/06**	**0**	**0**	**0**	**0**	**0**	**0**	**67751**	**159371**	**86333**	**282**	**423**	**453**	**0**	**0**	**0**	**121**	**46**	**98**
WAN	**07/06**	**0**	**1**	**0**	**0**	**0**	**0**	**50837**	**124568**	**85784**	**389**	**405**	**456**	**0**	**0**	**0**	**30**	**11**	**41**
RIS	**07/10**	**0**	**0**	**0**	**0**	**0**	**0**	**85110**	**178419**	**88541**	**327**	**451**	**432**	**204**	**287**	**283**	**9**	**0**	**9**
RRH	**07/10**	**0**	**0**	**0**	**0**	**0**	**0**	**60996**	**112310**	**64204**	**277**	**932**	**574**	**200**	**733**	**396**	**0**	**0**	**1**
WEL	**07/05**	**0**	**0**	**0**	**0**	**0**	**0**	**18482**	**3738**	**15012**	**107**	**166**	**111**	**92**	**122**	**69**	**0**	**0**	**0**
WFA	**07/02**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16427**	**29391**	**23195**	**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: 07/12/13