Fish Passage Center

Weekly Report #12 - 18

July 13, 2012

1827 NE 44th Ave., Suite 240
Portland, OR 97213
phone: 503/230-4099
fax: 503/230-7559

Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 24% and 127% of average at individual sub-basins over the beginning of July. Precipitation above The Dalles has been 83% of average over July. Over the 2012 water year, precipitation has ranged between 90% and 125% of average.

Table 1. Summary of July precipitation and cumulative October through July 9, 2012 precipitation with respect to average (1971-2000), at select locations within the Columbia and Snake River Basins.

Location	Water Year 2012 July 1-9, 2012		Water Year 2012 October 1, 2011 to July 9, 2012	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	0.56	108	25.64	122
Snake River Above Ice Harbor	0.10	37	15.12	98
Columbia Above The Dalles	0.30	83	22.45	112
Kootenai	0.66	119	26.90	125
Clark Fork	0.16	47	15.89	109
Flathead	0.56	122	23.34	121
Pend Oreille/ Spokane	0.43	108	33.21	120
Central Washington	0.03	25	7.34	91
Snake River Plain	0.09	49	8.80	90
Salmon/Boise/ Payette	0.06	24	17.57	98
Clearwater	0.14	34	30.61	112
SW Washington Cascades/Cowlitz	0.51	127	68.71	104
Willamette Valley	0.11	46	61.79	110

Table 2 displays the May 29th and July 11th Ensemble Streamflow Prediction (ESP) runoff volume forecasts for multiple reservoirs. The July 11th forecast at The Dalles between January and July is 129,948 Kaf (121% of average).

Table 2. May 29th and July 11th ESP Runoff Volume Forecasts for various reservoirs within the Columbia and Snake River Basins.

Location	May 29, 2012 ESP		July 11, 2012 ESP	
	% Average (1971 -2000)	Runoff Volume (Kaf)	% Average (1971 -2000)	Runoff Volume (Kaf)
The Dalles (Jan-July)	109	117424	121	129948
Grand Coulee (Jan-July)	113	71280	130	81532
Libby Res. Inflow, MT (Apr-Aug)	117	7281 7155*	145	9052
Hungry Horse Res. Inflow, MT (Jan-July)	103	2290	122	2722
Lower Granite Res. Inflow (Apr- July)	99	21410	106	22828
Brownlee Res. Inflow (Apr-July)	84	5275	87	5520
Dworshak Res. Inflow (Apr-July)	114	3024 3226*	127	3349

* Denotes COE Forecast

Grand Coulee Reservoir is at 1289.2 feet (7-12-12) and held steady over the last week. Grand Coulee is currently 0.8 feet from full (1290 feet). Outflows at Grand Coulee have ranged between 234.9 and 248.2 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2459.9 feet (7-12-12) and has held steady over the last week. Libby is currently slightly above full (2459 feet). Outflows at Libby Dam have ranged between 43.0-48.0 Kcfs last week.

Hungry Horse is currently at an elevation of 3559.2 feet (7-12-12) and has held steady over the last week. Hungry Horse is currently 0.8 feet from full (3560 feet). Outflows at Hungry Horse have been 5.8-8.0 Kcfs last week.

Dworshak is currently at an elevation of 1596.1 feet (7-12-12) and has drafted 3.3 feet over the last week. Dworshak is currently 3.9 feet from full (1600 feet). Outflows from Dworshak have been approximately 7.1-12.8 Kcfs over the past week.

The Brownlee Reservoir was at an elevation of 2069.9 feet on July 11th, 2012 drafting 1.5 feet last week. Brownlee is 7.1 feet from full (2077 feet). Over the last week, outflows at Brownlee have ranged between 12.7 and 17.1 Kcfs.

The Biological Opinion summer flow objective at Lower Granite (June 21st to August 31st) is 52 Kcfs; over the summer period flows at Lower Granite have averaged 65.4 Kcfs and 50.1 Kcfs over the last week.

The Summer Biological Opinion Flow Objective is 200 Kcfs at McNary Dam (began July 1st and will end August 31st). Over the summer period, flows at McNary have averaged 349.4 Kcfs and 338.6 Kcfs over the last week.

Spill:

The summer spill program began on June 21 in the Snake River and July 1 at the lower River projects, at projects where dates were not modified for research purposes.

Snake River flows have steadily declined over the past week and some excess generation spill has occurred. At Lower Granite Dam spill met, or exceeded, the Court Ordered summer spill level of 18 Kcfs. At Little Goose Dam spill met, or exceeded, the 30% of instantaneous flow level as specified in the Court Order, and ranged between 29.9% and 38% of daily average flow at this project. At Lower Monumental Dam daily average spill to the gas cap using bulk spill ranged from 16.6 to 18.2 Kcfs. The summer spill level of 17 Kcfs began on June 21st. At Ice Harbor Dam the Court Order "test-like" conditions are in place and have been met or exceeded.

Project	Day/Night Spill
Lower Granite	18 Kcfs/18 Kcfs
Little Goose	30%/30%
Lower Monumental	17 Kcfs/17 Kcfs
Ice Harbor	**"Test-Like"**: 45 Kcfs/gas cap vs. 30%/30%

Summer spill for fish passage at the Lower Columbia projects began on July 1. Flows remained high in the lower Columbia River for the past week. Spill at McNary Dam changed to the summer level early to accommodate research studies and met, or exceeded, the Court Order as a result of flows in excess of hydraulic capacity due to unit outages and due to spill in excess of generation needs. Spill at John Day Dam continued to the test levels of 30%/30% versus 40%/40%. For the most part, the 30% spill test levels were met at John Day during the past week. However, the 40% level was not achieved due to the restriction of spill to address the TDG at The Dalles Dam forebay gage. At The Dalles Dam, spill was less than the 40%. The COE is managing spill at The Dalles Dam to control TDG at the Bonneville dam forebay monitor. Spill at Bonneville Dam switched to the summer test levels on June 17th comparing 95 Kcfs for 24 hours versus 85 Kcfs during daytime hours and gas cap spill at night. Spill generally exceeded these levels.

Project	Day/Night Spill
McNary	50%/50%
John Day	**Testing:** 30%/30% vs. 40%/40%
The Dalles	40%/40%
Bonneville	95 Kcfs/95 Kcfs vs. 85 Kcfs/121 Kcfs

Gas bubble trauma samples were taken this past week at Little Goose, Lower Monumental, McNary, Rock Island and Bonneville dams. There were no signs of GBT detected in the samples this past week at Lower Monumental, McNary and Bonneville dams. At Little Gosse Dam there were 1.2% of the fish in the sample

with minor signs of GBT. At Rock Island on July 10th there were 3% of the fish in the sample with minor signs of GBT, and 6% on July 12th. All incidents were well below the action criteria.

Smolt Monitoring:

Smolt monitoring activities are ongoing at all seven SMP dams (BON, JDA, MCN, LGR, LGS, LMN, and RIS). The Imnaha River Trap is the only SMP trap that is still collecting juvenile salmonids for the 2012 season.

Subyearling Chinook were the dominant species of salmonid at all SMP dams over the past week. The SMP sites on the Lower Columbia River, from MCN to BON, are seeing increases in the passage of subyearling Chinook migrants. This increasing passage is largely due to the passage of wild subyearling Chinook from the Hanford Reach, as well as large hatchery releases that have occurred from Priest Rapids Hatchery, Ringold Springs Hatchery, and Little White Salmon NFH over the past few weeks. The SMP sites on the Snake River, from LGR to LMN, are seeing decreases in the passage of subyearling Chinook migrants. Overall, the number of spring salmonid migrants has continued to decline, at all SMP sites, over the past few weeks.

Subyearling Chinook numbers at BON continued to increase this week, with a daily average passage index of nearly 92,500 per day, compared to last week's daily average passage index of about 80,000. Descaling rates for subyearling Chinook at BON ranged from 0.4% to 2.2% and mortality rates ranged from 0.9% to 6.4%. Finally, only pacific lamprey macropthalmia were collected at BON this week. The daily average collection for pacific lamprey macropthalmia was about 50 per day this week, which was lower than the daily average collection from last week.

Passage of subyearling Chinook at JDA continued to increase this week. The daily average passage index for subyearling Chinook at JDA this week was about 111,500 per day, compared to nearly 90,000 per day last week. Collections of pacific lamprey macropthalmia decreased this week. The daily average collection for pacific macropthalmia at JDA this week was nearly 3,500 per day, compared to about 15,000 per day last week. No pacific lamprey ammocoetes were collected at JDA this week.

Passage of subyearling Chinook at MCN increased this week, when compared to last week. The daily average passage index for subyearling Chinook at MCN this week was over 133,000 per day, compared to about 100,000 per day last week. Passage of pacific lamprey macropthalmia decreased this week, compared to last week. This week's daily average collection for pacific lamprey macropthalmia at MCN was about 1,300 per day, compared to about 6,900 per day last week. No pacific lamprey ammocoetes were collected at MCN this week.

At LGR, no sockeye or coho juveniles were collected this week. Yearling Chinook were collected on only a few days this week. The daily average passage index for steelhead this week was 56 per day, compared to 140 per day last week. This week's daily average passage index for subyearling Chinook at LGR was nearly 4,700 per day, which was lower than last week's daily average passage index of nearly 6,800. Finally, lamprey collections this week consisted of both pacific lamprey ammocoetes and pacific lamprey macropthalmia.

Passage of subyearling Chinook at LGS and LMN decreased this week, when compared to last week. The daily average passage index for subyearling Chinook at LGS this week was about 5,100 per day, compared to nearly 9,300 per day last week. This week's daily average passage index for subyearling Chinook at LMN was about 2,500 per day, compared to nearly 4,900 per day last week. Both pacific lamprey ammocoetes and macropthalmia were collected at LGS this week, while only pacific lamprey macropthalmia were collected at LMN this week.

As with the SMP sites on the Lower Columbia, passage of subyearling Chinook at RIS also increased this week. This week's daily average passage index for subyearling Chinook at RIS was 668 per day, compared to 185 per day last week. Very few spring migrants were collected at RIS this week. Finally, both pacific lamprey macropthalmia and pacific lamprey ammocoetes were collected at RIS this week

The most recent data that we have from the Imnaha River Trap are from July 2nd through July 4th. Both yearling Chinook and steelhead juveniles were collected on these dates, although in small numbers. The daily collections on these days ranged from 5 to 8 for yearling Chinook and 4 to 7 for steelhead.

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. Approximately 10,000 sockeye pre-smolts were

scheduled for release into Redfish Lake this week. These pre-smolts are 100% adipose clipped but are not expected to out-migrate until spring of 2013. This was the only new release of juvenile salmonids that was planned for this zone this week. There are no releases scheduled for this zone over 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. No new releases of juvenile salmonids were scheduled to begin in this zone this week. Ringold Spring Hatchery finished their release of subyearling fall Chinook brights this week. In all, nearly 3.33 million subyearling fall Chinook juveniles were released from Ringold Springs Hatchery. There are no new releases of juvenile salmonids scheduled for this zone over the next two weeks. However, several of the volitional releases of coho juveniles to the Wenatchee River that began in May are scheduled to end in the coming weeks.

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

Adult Fish Passage:

Daily passage numbers at Bonneville Dam ranged between 874 and 1,926 adult summer Chinook in the last week. The 2012 summer Chinook count of 70,028 is about 75.3% of the 2011 count and 87.7% of the 10 year average count. The 2012 Bonneville Dam summer Chinook jack count of 9,359 is about 21.4% of the 2011 count and 63.8% of the 10 year average count. At McNary Dam 46,273 adult summer Chinook have been counted. The 2012 McNary adult summer Chinook is about 84% of the 2011 and 85.1% of the 10 year average counts. The McNary jack summer Chinook count of 3,146 is about 14.2% of the 2011 count of 22,195 and about 36.3% of the 10 year average count of 8,668. The 2012 adult summer Chinook count at Lower Granite Dam in the Snake River of 10,572 is about 33.6% of the 2011 count and 70.3% of the 10 year average count. The 2012 Lower Granite summer Chinook jack count of 1,211 is about 9.15% of the 2011 count and 26% of the 10 year average count.

The Bonneville Dam 2012 steelhead count of 24,975 is 1.07 times greater than the 2011 count of 23,367, while being about 66.6% of the 10 year average count of 37,513. The 2012 Bonneville wild adult steelhead count of 9,966 is about 98% of the 2011 count of 10,181 and about 63% of the 10 year average count of 15,844. In the Snake River, this year's Lower Granite steelhead count of 9,292 is about 73.7% of the 2011 count of 12,603 and 82.9% of the 10 year average of 11,206. The 2012 Lower Granite wild adult steelhead count of 4,078 is about 69.6% of the 2011 count of 5,858, while being about 1.16 times greater than the 10 year average count of 3,498. At Willamette Falls Dam, the 2012 count for steelhead was 27,942, as of July 8th. This year's steelhead count is about 1.15 times greater than the 2011 count of 24,366 and 1.10 times greater than the 10 year average count of 25,394.

Daily adult sockeye passage numbers at Bonneville Dam ranged between 3,675 and 12,371 last week. The 2012 accumulated total adult sockeye count at Bonneville Dam of 507,951, as of 7/12/2012, is about 2.98 times greater than the 2011 count of 170,337 and about 4 times greater than the 10 year average count of 126,506. The 2012 McNary Dam adult sockeye count of 335,714 is about 4 times greater than the 2011 count of 82,918 and 3.94 times greater than the 10 year average count of 85,181. Two of the major spawning sites for sockeye in the Upper Columbia River zone are Lake Wenatchee and Lake Osoyoos (Okanogan basin). In the Snake River at Ice Harbor Dam, the 2012 adult sockeye count of 252 is 45.5% of the 2011 count of 554 and about 86.6% of the 10 year average count of 291. The Lower Granite Dam 2012 adult sockeye count of 170 is about 50.9% of the 2011 count of 334 and about 53% of the 10 year average count of 321.

As of July 12th at Bonneville Dam, the adult shad count was 2,412,292. This year's shad count is about 2.61 times greater than the 2011 count of 924,137, while being 82.8% of the 10 year average count of 2,911,706.

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
07/06/2012	245.6	25.7	262.9	108.4	263.7	104.0	269.3	125.9	286.6	104.1	283.4	174.8	280.2	155.1
07/07/2012	236.3	20.1	234.6	80.5	255.2	70.3	254.2	124.2	264.1	85.2	286.8	173.8	291.1	161.3
07/08/2012	244.8	25.7	241.7	76.3	261.4	80.7	255.3	121.2	262.9	76.9	277.8	195.0	283.4	162.1
07/09/2012	248.2	29.9	246.7	81.4	272.5	98.6	264.1	118.2	268.2	80.6	273.1	178.0	279.0	171.6
07/10/2012	244.1	24.3	250.7	94.6	278.0	101.3	268.2	119.6	266.2	76.6	290.7	195.4	294.4	184.1
07/11/2012	234.9	29.6	233.1	77.0	262.0	100.2	256.7	119.9	260.0	73.2	281.7	161.2	289.7	163.6
07/12/2012	245.9	28.4	240.6	96.3	262.4	91.2	255.1	118.4	255.5	65.6	274.7	160.8	275.5	147.3
07/13/2012	252.9	34.4	249.8	118.1	268.5	99.6	265.8	118.6	263.2	70.3	288.7	169.4	284.9	166.5
07/14/2012	243.0	25.0	243.1	97.9	263.2	89.4	268.4	110.6	268.2	66.7	301.0	168.9	302.7	205.7
07/15/2012	242.9	25.0	242.5	95.3	261.9	87.4	265.0	112.0	264.7	72.2	308.3	177.6	320.2	235.2
07/16/2012	241.1	23.2	240.7	104.0	255.2	88.5	265.2	100.2	262.5	60.1	283.8	161.8	282.9	186.7
07/17/2012	232.4	15.1	230.7	93.2	245.7	85.9	252.3	100.2	254.7	57.1	268.3	134.4	269.4	161.5
07/18/2012	233.5	17.3	226.9	79.4	243.4	76.7	242.7	89.2	248.0	55.8	254.4	137.6	257.6	153.3
07/19/2012	242.3	24.7	247.4	91.5	260.2	84.4	260.3	95.4	264.6	58.6	274.6	150.2	273.0	166.0

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

	Dworshak		Brownlee	Hells Canyon	Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
Date	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
07/06/2012	7.1	0.0	14.4	16.7	48.4	18.6	49.2	14.7	49.8	17.0	52.2	41.9
07/07/2012	7.1	0.0	13.5	16.2	52.0	18.4	52.1	15.6	51.2	16.6	52.0	20.5
07/08/2012	7.1	0.0	13.4	12.9	46.7	18.4	47.6	14.4	48.2	16.9	49.2	14.7
07/09/2012	8.9	0.0	13.4	14.5	46.2	18.4	44.3	13.3	43.3	16.7	45.6	31.0
07/10/2012	12.5	2.9	13.0	16.3	50.4	21.2	51.3	19.5	51.3	17.0	54.3	41.7
07/11/2012	12.8	3.3	12.4	17.6	55.9	23.4	55.7	21.0	54.7	18.2	55.2	23.4
07/12/2012	12.8	3.2	11.2	14.4	50.8	20.4	50.5	15.7	50.7	17.0	52.7	16.1
07/13/2012	12.9	3.4	10.7	12.9	49.2	22.4	49.1	18.2	47.9	17.4	48.8	32.5
07/14/2012	12.9	3.4	10.4	11.5	40.7	19.2	40.3	13.6	39.0	17.3	42.8	32.3
07/15/2012	13.0	3.4	11.6	12.2	42.5	26.5	42.5	28.6	42.0	18.7	43.1	32.3
07/16/2012	12.9	3.3	11.6	11.4	46.9	22.0	47.8	22.2	47.3	19.2	49.6	39.1
07/17/2012	12.9	3.3	11.2	13.4	45.3	18.9	45.9	15.1	45.7	16.6	48.8	38.4
07/18/2012	11.0	1.4	11.6	15.6	44.9	19.8	45.0	15.9	44.4	17.0	46.8	35.8
07/19/2012	9.6	0.0	---	---	43.9	18.2	44.3	13.3	44.5	16.7	45.9	34.9

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
07/06/2012	359.7	210.9	363.0	128.6	342.6	124.1	358.7	147.1	94.3	104.9
07/07/2012	327.0	176.9	322.7	96.5	302.2	113.0	333.8	124.0	94.9	102.5
07/08/2012	318.2	169.4	313.0	99.3	298.6	112.6	319.7	115.7	95.3	96.3
07/09/2012	347.7	216.1	342.9	133.2	321.8	114.2	331.9	140.1	89.6	89.8
07/10/2012	340.1	214.1	338.0	125.5	317.1	114.9	334.2	148.7	85.6	87.5
07/11/2012	343.1	216.7	337.6	110.0	322.5	125.1	342.0	155.1	85.4	89.1
07/12/2012	334.1	204.2	327.7	120.1	312.4	127.3	343.1	151.5	84.8	94.4
07/13/2012	338.9	188.9	338.5	131.2	320.5	124.6	331.7	132.8	85.0	101.5
07/14/2012	329.6	179.9	332.9	128.2	316.0	127.0	343.5	139.7	85.0	106.4
07/15/2012	336.7	186.3	319.6	138.5	296.9	124.4	319.3	124.2	83.0	99.7
07/16/2012	357.4	214.9	362.0	118.4	345.1	137.0	358.0	164.3	75.2	106.2
07/17/2012	332.5	197.9	335.4	103.1	319.2	128.1	339.2	142.9	75.5	108.4
07/18/2012	297.3	164.0	295.3	103.3	282.9	113.6	297.8	103.8	75.2	106.4
07/19/2012	298.8	168.4	299.0	89.7	279.6	111.2	298.5	99.0	79.8	107.2

Hatchery Releases Last Two Weeks

Hatchery Release Summary

From: 6/29/2012 to 07/12/12

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Idaho Dept. of Fish and Game	Eagle Hatchery	SO	UN	2013	10,000	07-12-12	07-12-12	Redfish Lake	Salmon River (ID)
Idaho Dept. of Fish and Game Total					**10,000**				
National Marine Fisheries Service	Lyons Ferry Hatchery	CH0	FA	2012	98,000	06-21-12	07-06-12	Big Canyon (Clearwater River)	Clearwater River M F
National Marine Fisheries Service Total					**98,000**				
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH0	FA	2012	1,995,627	07-03-12	07-03-12	Little White Salmon Hatchery	Little White Salmon River
U.S. Fish and Wildlife Service Total					**1,995,627**				
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	ST	SU	2012	25,000	05-12-12	06-30-12	Blackbird Island Acc Pond	Wenatchee River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	CH0	FA	2012	3,328,919	06-27-12	07-10-12	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife Total					**3,353,919**				
Yakama Tribe	Cascade Hatchery	CO	UN	2012	65,537	05-14-12	07-01-12	Rolfings Acclim Pond	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2012	65,564	05-13-12	07-14-12	Beaver Creek Acclim Pond	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2012	65,662	05-02-12	06-30-12	Butcher Creek Acclim. Pond	Wenatchee River
Yakama Tribe	Chelan Hatchery	ST	SU	2012	25,000	05-02-12	07-01-12	Rolfings Acclim Pond	Wenatchee River
Yakama Tribe	Eagle Creek NFH	CO	UN	2012	64,114	04-16-12	07-01-12	Stiles Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2012	67,858	04-16-12	07-01-12	Stiles Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2012	78,892	04-16-12	07-01-12	Easton Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2012	82,621	04-16-12	07-01-12	Holmes Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2012	93,312	04-16-12	07-01-12	Easton Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2012	91,112	04-20-12	07-01-12	Easton Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2012	97,073	04-20-12	07-01-12	Holmes Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2012	100,000	03-02-12	07-01-12	Prosser Acclim Pond	Yakima River
Yakama Tribe	Willard Hatchery	CO	UN	2012	31,423	05-13-12	07-14-12	Beaver Creek Acclim Pond	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2012	31,533	05-14-12	07-01-12	Rolfings Acclim Pond	Wenatchee River
Yakama Tribe Total					**959,701**				
Grand Total					**6,417,247**				

Hatchery Releases Next Two Weeks

Hatchery Release Summary

From: 7/13/2012 to 7/26/2012

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Yakama Tribe	Cascade Hatchery	CO	UN	2012	65,564	05-13-12	07-14-12	Beaver Creek Acclim Pond	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2012	31,423	05-13-12	07-14-12	Beaver Creek Acclim Pond	Wenatchee River
Yakama Tribe Total					**96,987**				
Grand Total					**96,987**				

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
06/22/2012	225.6	17.7	234.8	65.0	259.9	89.5	267.9	91.2	261.4	75.4	282.6	164.7	285.6	181.5
06/23/2012	226.5	21.1	205.3	50.7	221.9	54.5	226.3	52.9	229.6	66.4	259.3	151.4	268.2	157.4
06/24/2012	246.1	33.2	246.0	80.4	267.3	82.0	269.6	83.6	263.6	72.8	296.1	191.0	304.1	220.3
06/25/2012	278.2	64.1	285.6	145.9	300.5	133.1	310.4	142.0	308.9	119.4	313.6	207.3	309.5	179.5
06/26/2012	283.5	70.0	280.3	147.9	295.3	141.6	308.7	166.0	323.1	137.1	341.4	234.0	354.5	244.8
06/27/2012	279.8	76.1	277.9	137.0	292.3	135.0	298.5	140.3	302.9	112.8	316.3	216.8	328.0	204.0
06/28/2012	286.6	67.0	289.5	144.9	300.7	144.8	311.7	163.2	318.9	135.2	336.4	219.9	338.1	217.2
06/29/2012	276.8	54.1	275.2	133.6	293.5	135.0	300.2	143.0	307.3	123.0	328.1	218.9	338.4	221.8
06/30/2012	270.6	47.6	272.0	114.8	287.3	135.7	294.6	154.5	311.4	121.7	333.9	226.6	339.2	212.6
07/01/2012	249.2	27.5	255.2	103.3	274.5	120.7	280.3	139.3	298.1	111.7	309.8	206.7	324.5	209.5
07/02/2012	264.4	42.5	257.0	100.7	277.9	124.5	280.0	149.7	288.1	99.0	295.0	188.4	298.8	173.9
07/03/2012	266.1	43.9	264.7	120.2	282.1	132.0	285.7	164.4	291.5	105.1	282.9	203.9	280.5	179.2
07/04/2012	258.1	36.3	253.7	120.5	274.1	123.6	279.4	128.5	285.6	99.8	318.6	200.0	330.0	206.0
07/05/2012	257.4	37.5	262.9	108.4	280.6	130.1	286.0	139.1	292.9	107.4	305.4	190.9	308.4	170.6

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
06/22/2012	9.4	0.6	16.8	21.3	81.2	34.5	79.0	30.1	78.5	21.9	80.1	48.5
06/23/2012	9.5	0.8	18.0	21.9	83.6	34.3	83.9	30.0	83.7	21.6	85.7	67.7
06/24/2012	9.4	0.8	16.8	20.0	86.1	29.4	85.7	28.7	85.5	20.0	87.0	65.0
06/25/2012	9.5	0.0	17.2	21.7	83.9	21.1	79.8	25.5	80.8	17.5	84.6	36.1
06/26/2012	11.4	2.8	16.8	18.9	82.7	38.1	82.0	31.5	82.4	22.8	85.0	62.6
06/27/2012	11.8	2.4	16.6	21.5	86.4	25.2	84.5	26.8	84.6	18.0	86.0	56.6
06/28/2012	9.1	0.0	16.2	19.8	75.0	19.7	72.4	22.6	72.0	17.4	74.8	55.5
06/29/2012	8.3	0.0	14.3	16.2	65.5	23.5	65.8	21.1	65.0	17.4	68.0	27.6
06/30/2012	7.1	0.4	14.8	18.1	64.1	29.7	65.2	26.0	65.0	24.1	63.5	34.4
07/01/2012	9.7	2.5	15.2	14.4	61.2	37.4	61.7	36.9	61.9	21.4	65.2	52.8
07/02/2012	10.0	2.1	15.0	18.1	62.3	31.3	63.0	30.7	63.8	21.6	66.2	51.1
07/03/2012	9.7	1.1	14.3	16.7	61.4	24.6	58.8	26.1	58.1	19.2	57.5	30.3
07/04/2012	7.8	0.0	13.2	12.7	60.4	24.6	59.5	17.8	59.7	17.0	62.0	21.9
07/05/2012	7.1	0.4	---	---	51.2	21.6	49.1	19.7	50.3	18.7	50.9	39.1

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
06/22/2012	364.4	222.6	352.1	140.4	331.1	127.6	346.3	150.6	75.3	108.0
06/23/2012	353.6	216.2	362.5	142.3	344.9	127.9	367.2	169.0	75.6	110.2
06/24/2012	355.8	228.9	356.7	162.4	339.3	140.9	356.4	159.1	75.2	109.7
06/25/2012	394.3	277.9	416.8	173.5	402.0	196.2	409.0	212.3	74.3	110.0
06/26/2012	406.3	297.0	398.0	168.4	376.6	149.3	389.0	197.2	78.2	101.2
06/27/2012	414.4	303.2	432.2	181.9	414.5	179.3	421.0	215.7	73.9	119.0
06/28/2012	403.3	291.9	392.1	160.4	376.5	184.4	399.8	184.3	83.1	120.0
06/29/2012	393.2	268.5	393.7	160.7	372.2	185.0	388.0	160.1	93.8	121.7
06/30/2012	386.0	250.4	395.5	146.2	379.3	185.0	394.1	167.4	93.6	120.7
07/01/2012	394.2	257.7	406.9	142.2	389.6	177.9	401.1	174.9	93.7	120.2
07/02/2012	364.1	228.3	371.3	145.8	353.3	139.4	379.7	158.9	90.8	117.7
07/03/2012	354.3	216.0	353.8	135.7	336.1	126.8	362.1	140.6	93.9	115.2
07/04/2012	348.0	199.1	344.4	110.9	325.0	122.8	334.0	105.4	94.8	121.4
07/05/2012	362.7	212.7	370.1	134.8	348.3	123.2	367.1	132.7	95.1	126.9

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

	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
6/29	114.1	114.3	114.7	24	128.4	129.1	129.6	22	119.6	119.7	119.8	24	120.3	120.7	121.1	22	121.1	121.4	121.6	24
6/30	113.9	114.2	114.4	24	128.2	128.8	129.2	21	120.1	120.4	120.7	24	119.6	119.9	120.2	21	120.1	120.5	120.9	24
7/1	113.8	113.8	114.0	17	128.9	129.6	131.5	22	120.3	120.5	120.8	24	117.8	118.1	118.8	22	119.2	119.5	119.8	24
7/2	112.5	112.5	112.9	11	129.9	130.5	131.0	22	120.7	121.1	121.4	24	119.0	119.6	120.6	22	117.9	118.1	118.3	24
7/3	111.1	112.6	113.1	23	127.9	128.6	130.0	22	120.6	121.3	122.8	24	119.2	119.9	120.6	22	117.2	117.7	118.0	24
7/4	110.6	111.6	112.4	24	127.4	127.9	128.3	23	119.4	119.6	119.8	24	117.6	117.9	118.3	23	117.7	118.1	118.5	24
7/5	108.4	110.9	112.2	24	127.2	127.7	128.6	21	119.3	119.5	119.5	24	117.9	118.3	118.8	21	117.8	118.1	118.5	24
7/6	104.4	104.7	105.0	24	126.4	127.6	128.4	24	118.7	119.1	119.4	24	117.1	117.6	118.0	24	117.4	117.9	118.5	24
7/7	104.3	104.7	104.8	24	126.3	127.5	127.9	23	119.0	119.3	119.5	24	116.4	116.7	116.9	23	117.5	117.7	118.1	24
7/8	104.8	105.0	105.4	24	126.4	126.8	127.4	21	119.7	120.2	120.7	24	117.2	117.9	118.3	21	116.8	117.3	117.7	24
7/9	105.2	105.4	106.0	19	126.7	127.1	127.6	18	120.3	120.6	121.0	24	118.0	118.1	118.4	18	117.4	118.0	118.4	24
7/10	104.6	105.3	105.8	23	126.3	126.8	127.1	22	120.5	120.6	120.8	24	117.8	117.9	118.1	22	117.9	118.3	118.7	24
7/11	104.3	104.8	105.3	24	126.5	127.2	127.9	23	121.0	121.3	121.5	24	118.2	119.0	119.4	23	118.0	118.5	119.1	24
7/12	106.1	106.9	107.6	24	126.4	127.1	128.1	22	121.4	121.6	121.9	24	118.7	119.1	119.7	22	118.1	118.9	119.2	24

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
6/29	121.4	121.6	121.9	24	120.7	121.2	121.6	24	131.7	132.8	134.0	24	130.6	131.4	131.9	24	127.3	129.5	131.4	24
6/30	120.6	120.9	121.6	24	120.2	120.7	121.1	24	132.3	132.9	133.5	24	129.9	130.8	131.2	24	128.7	129.8	130.6	24
7/1	120.3	120.6	120.8	24	118.6	119.0	119.4	24	130.2	131.4	132.6	24	129.5	130.0	130.8	24	128.4	129.4	130.1	24
7/2	120.5	121.4	122.4	24	118.6	119.5	120.8	24	130.1	130.8	131.6	24	127.1	128.5	129.1	24	125.7	126.7	127.7	24
7/3	121.3	121.8	125.2	24	117.6	118.4	120.2	24	130.5	131.3	132.2	24	127.3	127.8	128.2	24	126.3	128.5	130.6	24
7/4	120.3	120.6	120.7	24	118.0	119.2	119.6	24	130.2	130.6	131.0	24	127.3	128.8	129.8	24	126.7	129.0	130.1	24
7/5	120.7	121.3	123.4	24	119.3	120.3	121.5	24	131.7	132.5	133.7	24	128.3	129.1	129.4	24	125.0	126.0	126.7	24
7/6	118.6	119.1	119.9	24	117.9	118.4	119.2	24	128.7	129.9	131.6	24	128.8	129.3	129.6	24	123.7	124.6	125.4	24
7/7	117.4	117.8	118.6	24	117.8	118.6	119.1	24	123.8	124.5	125.8	24	124.8	126.0	127.8	24	125.0	125.6	126.0	24
7/8	117.3	117.7	118.2	24	117.3	117.9	118.4	24	124.6	125.7	126.9	24	122.0	122.4	122.5	20	124.7	124.9	125.9	20
7/9	118.6	119.7	120.1	24	117.1	117.9	118.8	24	126.0	126.9	128.1	24	123.0	123.5	124.1	24	123.8	125.2	126.3	24
7/10	120.1	120.7	123.1	24	118.5	119.4	119.7	24	126.6	127.1	128.5	24	124.0	125.0	125.6	24	123.4	124.2	125.5	24
7/11	118.0	118.6	120.1	24	118.9	119.4	120.5	24	128.1	129.1	130.4	24	125.4	126.2	128.2	24	123.2	124.5	125.5	24
7/12	118.9	119.8	120.9	23	118.3	118.7	119.0	24	127.3	127.9	128.9	24	125.6	126.1	127.8	24	122.9	123.5	124.4	24

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
6/29	129.1	129.9	130.5	24	131.7	132.5	133.2	24	128.7	129.0	129.8	24	133.7	135.9	138.3	24	131.4	134.1	137.4	24
6/30	128.9	129.7	130.4	24	131.6	132.1	132.7	24	129.3	130.0	130.4	24	135.1	137.4	139.1	24	132.1	134.4	137.0	24
7/1	128.7	129.3	130.4	24	131.2	131.8	132.4	24	127.8	128.2	128.5	24	133.3	135.8	138.7	24	131.1	133.2	134.5	24
7/2	126.3	127.2	128.1	24	127.6	129.9	130.6	24	127.7	128.8	129.8	24	131.2	133.2	135.3	24	128.7	132.0	134.7	24
7/3	126.6	127.8	129.0	24	129.9	130.8	131.6	24	124.4	125.5	125.8	24	132.8	136.2	141.7	24	127.6	130.7	135.8	24
7/4	127.2	128.1	128.6	24	130.0	131.1	131.6	24	124.9	126.5	127.9	24	130.1	130.9	131.4	24	127.5	128.9	130.2	24
7/5	127.0	127.6	128.0	24	129.9	130.6	130.9	24	128.4	129.0	129.7	24	130.9	133.1	135.9	24	129.0	131.2	134.9	24
7/6	126.8	127.3	127.6	24	129.7	130.1	130.4	24	128.5	129.7	131.0	24	130.2	133.6	140.1	24	130.5	133.6	137.2	24
7/7	126.0	126.4	126.6	24	129.0	129.5	129.7	24	128.8	129.7	130.5	24	129.7	130.5	133.8	24	127.8	129.2	130.5	24
7/8	123.7	124.2	124.6	20	126.3	127.0	128.5	20	128.3	129.5	130.8	24	132.4	134.7	139.4	24	128.4	130.3	133.1	24
7/9	123.9	124.9	125.5	24	127.0	127.8	128.6	24	125.4	126.4	128.0	24	130.5	136.0	141.8	24	131.0	136.2	138.2	24
7/10	123.9	124.6	125.1	24	127.3	127.8	128.8	24	124.2	125.6	127.6	24	130.9	131.9	133.3	24	126.3	130.2	131.5	24
7/11	124.4	125.3	125.9	24	127.6	128.1	128.5	24	125.3	126.9	128.0	24	127.9	129.8	130.7	24	126.1	128.3	129.7	24
7/12	124.6	125.3	125.9	24	127.6	128.2	128.6	24	---	---	---	0	---	---	---	0	---	---	---	0

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
Lower Granite Dam											
Little Goose Dam											
	07/09/12	Chinook + Steelhead	84	1	1	1.19%	0.00%	1	0	0	0
	07/16/12	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Lower Monumental Dam											
	07/11/12	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/18/12	Chinook + Steelhead	69	0	0	0.00%	0.00%	0	0	0	0
McNary Dam											
	07/09/12	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/13/12	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/15/12	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/19/12	Chinook + Steelhead	100	2	2	2.00%	0.00%	2	0	0	0
Bonneville Dam											
	07/07/12	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/10/12	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/14/12	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	07/17/12	Chinook + Steelhead	100	2	1	1.00%	0.00%	1	0	0	0
Rock Island Dam											
	07/06/12	Chinook + Steelhead	100	8	7	7.00%	0.00%	6	1	0	0
	07/07/12	Chinook + Steelhead	100	4	4	4.00%	0.00%	4	0	0	0
	07/10/12	Chinook + Steelhead	100	3	3	3.00%	0.00%	3	0	0	0
	07/12/12	Chinook + Steelhead	101	6	6	5.94%	0.00%	6	0	0	0
	07/17/12	Chinook + Steelhead	100	3	3	3.00%	0.00%	2	1	0	0
	07/19/12	Chinook + Steelhead	100	3	3	3.00%	0.00%	3	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
6/29	128.3	129.3	130.6	24	121.7	122.3	122.7	24	101.4	101.6	101.7	24	101.8	102.4	102.9	24	103.4	104.1	104.8	24
6/30	128.2	129.0	130.2	24	121.4	122.0	122.9	24	103.2	104.4	109.1	24	102.8	103.6	104.1	24	103.5	104.2	105.0	24
7/1	127.4	128.2	128.7	24	121.2	121.6	122.0	24	106.6	108.0	108.5	24	103.7	104.6	105.3	24	103.0	103.5	104.3	24
7/2	126.4	127.5	128.4	24	121.0	121.5	121.9	24	106.4	108.1	108.4	24	104.3	105.3	106.5	24	103.5	104.5	105.3	24
7/3	125.3	126.1	128.2	24	117.1	117.9	119.3	24	104.9	108.1	110.5	24	103.4	104.6	105.6	24	102.6	103.2	103.8	24
7/4	126.3	127.1	127.4	24	119.0	120.2	120.5	24	101.8	102.4	102.8	24	102.1	103.3	104.2	24	102.8	103.9	104.8	24
7/5	127.0	127.6	128.8	24	120.5	121.2	121.6	24	103.3	104.6	108.4	24	102.9	103.7	104.2	24	102.7	103.6	104.4	24
7/6	127.0	128.2	129.4	24	120.9	121.7	122.2	24	101.8	102.4	102.8	24	102.4	103.6	104.6	24	102.9	104.0	105.0	24
7/7	126.2	127.0	127.8	24	120.9	121.2	121.6	24	101.9	102.4	103.0	24	102.8	103.8	104.8	24	102.9	103.9	104.9	24
7/8	126.2	127.5	128.6	24	120.8	121.5	122.4	24	102.0	102.5	103.0	24	103.1	104.3	105.3	24	102.9	104.1	105.3	24
7/9	127.1	128.7	130.5	24	120.6	121.1	121.8	24	101.5	101.8	102.1	24	102.5	103.1	103.6	24	102.2	102.9	103.9	24
7/10	125.6	126.7	127.3	24	120.7	121.1	121.4	24	106.9	108.2	108.9	24	106.0	107.7	108.8	24	102.8	104.1	105.2	24
7/11	125.4	126.0	126.6	24	120.3	120.9	121.4	24	108.2	108.5	108.9	24	107.3	108.4	109.2	24	103.1	104.2	105.2	24
7/12	---	---	---	0	119.9	120.4	121.0	24	108.2	108.5	108.8	24	107.7	108.7	109.5	24	103.1	104.3	105.4	24

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
6/29	102.6	104.2	105.4	24	102.1	102.9	103.8	24	114.4	116.2	119.5	24	112.7	113.8	114.3	24	112.3	112.8	114.0	24
6/30	103.0	104.9	106.6	24	103.7	103.9	104.1	24	117.1	119.4	119.8	24	114.1	114.4	114.6	24	114.0	115.6	120.0	24
7/1	102.6	104.0	104.7	24	103.1	103.3	103.7	24	119.0	119.8	120.0	24	112.4	112.8	113.1	24	116.9	119.6	120.5	24
7/2	104.3	106.2	107.6	24	103.0	103.3	103.8	24	117.3	119.1	119.7	24	113.0	114.1	114.4	24	115.8	118.4	120.1	24
7/3	102.9	104.6	105.9	24	102.0	102.5	103.3	24	115.4	117.4	119.6	24	113.1	113.5	114.0	24	114.5	116.8	119.7	24
7/4	102.7	104.6	106.1	22	101.3	101.5	101.6	24	115.5	117.1	119.6	24	112.8	113.5	114.0	24	113.0	113.3	113.6	24
7/5	103.1	105.1	107.0	23	101.5	101.8	102.0	24	116.0	116.9	118.7	24	113.2	113.4	113.8	24	114.5	115.3	116.5	24
7/6	103.0	105.1	106.5	24	100.7	100.9	101.2	24	115.4	116.1	116.7	24	114.5	115.6	117.3	24	112.8	113.1	113.4	24
7/7	103.2	105.1	106.7	23	101.0	101.5	101.9	24	114.8	115.3	116.0	24	115.3	115.9	117.8	24	112.7	113.2	113.7	24
7/8	103.6	105.4	107.0	22	102.0	102.3	102.9	24	115.4	115.7	116.3	24	116.0	116.7	117.5	24	112.8	113.2	113.5	24
7/9	102.4	103.5	104.8	24	102.8	103.3	103.7	24	115.7	116.1	117.0	24	116.4	117.2	117.9	24	113.1	113.5	113.9	24
7/10	103.9	106.4	107.9	24	102.7	103.1	103.9	24	116.3	117.2	119.0	24	115.6	115.9	116.6	24	113.5	114.3	116.1	24
7/11	105.3	107.4	108.8	24	102.3	102.7	102.8	24	115.2	116.2	117.2	24	114.8	115.0	115.3	24	113.4	114.4	116.3	24
7/12	105.6	107.8	109.3	24	101.4	101.7	102.1	24	114.9	115.6	118.1	24	116.3	117.1	117.7	24	112.7	113.1	113.8	24

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
6/29	114.1	114.5	114.7	24	116.7	117.3	118.5	24	113.7	113.9	114.1	24	114.9	115.6	115.9	24	---	---	---	0
6/30	112.0	112.2	112.8	24	117.7	118.4	118.8	24	114.3	114.6	114.8	24	115.5	115.7	116.3	24	---	---	---	0
7/1	112.6	113.0	113.3	24	117.1	118.1	118.7	24	114.3	114.5	114.6	24	116.4	116.9	117.4	24	---	---	---	0
7/2	113.7	114.5	114.8	24	117.9	118.5	119.3	24	114.5	114.7	115.0	24	116.0	116.3	116.7	24	---	---	---	0
7/3	114.3	114.6	115.7	24	116.9	117.8	118.5	24	113.1	114.2	114.6	24	113.3	114.5	115.4	24	---	---	---	0
7/4	113.5	113.9	114.2	24	117.1	117.7	118.3	24	111.1	111.3	111.4	24	114.2	114.6	115.0	24	---	---	---	0
7/5	112.8	113.4	113.9	24	117.0	117.6	118.4	24	111.0	111.1	111.1	24	113.2	113.6	113.9	24	---	---	---	0
7/6	113.1	113.3	113.5	24	116.6	117.1	118.2	24	112.1	112.8	113.4	24	114.4	115.5	116.3	24	---	---	---	0
7/7	113.2	113.8	114.6	24	116.3	117.1	117.7	24	113.4	113.7	113.9	24	113.5	114.5	116.1	24	---	---	---	0
7/8	114.3	114.8	115.1	24	116.2	116.8	117.1	24	114.3	114.6	114.8	24	113.4	114.0	115.3	24	---	---	---	0
7/9	113.9	114.1	114.2	24	115.9	116.4	117.8	24	114.9	115.2	115.5	24	113.6	114.2	115.5	24	---	---	---	0
7/10	113.1	113.2	113.7	24	116.7	116.9	117.2	24	114.7	114.9	115.0	24	114.2	115.1	115.8	24	---	---	---	0
7/11	112.9	113.1	113.3	24	117.0	117.6	118.4	24	114.4	114.5	114.7	24	113.5	114.4	115.8	24	---	---	---	0
7/12	113.5	114.0	114.4	24	117.4	118.0	119.0	24	114.3	114.5	114.8	24	114.4	115.9	116.3	24	---	---	---	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
6/29	120.2	120.5	120.7	24	123.6	124.0	124.6	24	117.7	119.0	120.2	24	120.9	121.1	121.5	24	116.0	117.4	118.0	24
6/30	120.4	120.6	120.8	24	123.0	123.2	123.5	24	121.1	121.3	121.5	24	120.3	120.7	121.3	24	118.4	119.1	119.9	24
7/1	119.4	119.9	120.2	24	123.2	123.4	123.6	24	120.3	120.7	121.1	24	120.3	120.6	121.5	24	116.7	117.3	118.1	24
7/2	118.8	119.5	120.2	24	122.4	122.9	123.1	24	118.3	118.6	119.1	24	119.9	120.4	121.0	24	116.0	116.7	117.4	24
7/3	116.1	117.3	117.9	24	121.6	122.1	122.2	24	115.2	116.0	117.2	24	119.0	119.1	119.9	24	113.3	113.8	115.0	24
7/4	113.9	114.8	115.2	24	121.3	122.4	127.6	24	113.7	114.2	114.5	24	118.1	119.1	119.9	24	114.0	114.6	115.0	24
7/5	117.0	118.4	119.5	24	121.5	122.0	122.5	24	114.8	115.1	115.3	24	119.3	119.5	119.7	24	114.5	115.6	116.5	24
7/6	119.5	120.3	120.7	24	121.4	122.0	122.7	24	114.7	115.3	115.8	24	119.3	119.8	119.9	24	114.6	115.3	116.0	24
7/7	120.4	121.1	121.9	24	120.1	120.4	120.8	24	117.2	118.3	119.0	24	117.1	118.1	119.1	24	115.0	115.7	116.3	24
7/8	121.0	121.8	122.5	24	119.8	119.9	120.2	24	119.5	120.1	120.7	24	117.2	118.0	119.3	24	116.3	117.0	117.6	24
7/9	119.7	120.0	120.5	24	121.7	122.3	122.7	24	119.9	120.3	120.7	24	119.1	119.4	120.4	24	116.4	117.0	117.5	24
7/10	119.2	119.9	120.4	24	121.3	122.4	122.7	24	118.6	118.9	119.7	24	118.8	119.3	119.5	24	114.7	115.6	116.0	24
7/11	119.2	120.0	120.6	24	121.4	122.2	122.7	24	117.3	117.6	118.0	24	118.2	118.6	119.2	24	115.3	116.3	117.3	24
7/12	119.0	119.6	120.2	24	120.9	121.2	121.4	24	116.6	116.9	117.2	24	118.0	119.2	119.7	24	113.8	114.2	115.3	24

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
6/29	121.7	122.6	123.1	24	119.8	120.3	121.1	24	121.0	121.3	121.5	24	120.0	120.2	120.6	24	122.7	122.8	123.0	24
6/30	123.0	123.7	124.1	24	121.3	121.6	121.8	24	122.3	122.5	122.7	24	120.3	120.8	120.9	24	123.5	123.7	123.8	24
7/1	121.3	121.8	122.2	24	119.7	120.3	121.0	24	121.6	121.8	122.0	24	119.8	120.1	120.2	24	123.8	124.1	124.4	24
7/2	120.1	120.8	121.9	24	118.4	118.7	119.0	24	120.4	120.7	120.9	24	119.6	119.9	120.2	24	122.9	123.1	123.5	24
7/3	117.9	118.4	119.7	24	115.0	115.5	116.4	24	117.5	117.9	119.1	24	116.2	116.8	118.0	24	123.1	124.2	124.4	24
7/4	118.3	118.7	119.3	24	115.9	116.8	117.3	24	116.8	117.4	118.0	24	115.9	116.6	117.1	24	119.9	120.3	120.7	24
7/5	118.2	118.6	119.1	24	117.2	117.4	117.6	24	118.8	119.0	119.1	24	116.7	118.3	119.0	24	122.7	124.0	125.3	24
7/6	118.5	118.9	119.3	24	116.4	116.6	116.9	24	118.8	119.1	119.3	24	117.4	118.3	118.9	24	124.4	124.7	125.1	24
7/7	118.6	119.0	119.5	24	116.1	116.4	116.6	24	117.6	117.9	118.6	24	117.3	117.8	118.3	24	122.1	122.8	124.1	24
7/8	119.4	119.9	120.6	24	116.4	116.7	116.9	24	117.5	117.7	117.9	24	116.6	117.6	118.4	24	120.9	121.0	121.1	24
7/9	119.1	119.4	119.6	24	114.9	115.4	115.8	24	117.5	117.9	118.4	24	115.8	116.5	117.2	24	122.7	123.3	123.7	24
7/10	118.2	118.6	118.9	24	112.3	112.6	113.4	24	116.6	117.4	117.7	24	115.2	115.6	116.1	24	122.6	123.6	124.0	24
7/11	119.2	119.8	120.4	24	113.9	114.5	115.2	24	117.7	117.9	118.2	24	116.9	118.1	119.0	24	123.5	123.7	124.0	24
7/12	119.2	120.2	121.7	24	114.9	115.3	115.5	24	118.1	118.5	119.0	24	116.8	117.5	118.0	24	123.5	123.8	124.1	24

Two-Week Summary of Passage Indices

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)
06/29/2012	*	---	9	---	---	74	38	566	0	---	355	0
06/30/2012		---	---	---	---	82	154	789	0	918	383	311
07/01/2012	*	---	---	---	---	39	0	16	0	---	843	13
07/02/2012	*	---	8	---	---	0	0	159	0	3	625	0
07/03/2012	*	---	6	---	---	0	0	181	0	---	233	635
07/04/2012	*	---	5	---	---	16	0	150	0	0	362	12
07/05/2012	*	---	---	---	---	0	49	37	0	---	256	0
07/06/2012		---	---	---	---	6	0	8	3	246	595	0
07/07/2012	*	---	---	---	---	8	14	52	0	---	513	666
07/08/2012		---	---	---	---	0	0	84	0	0	457	16
07/09/2012	*	---	---	---	---	0	0	31	0	---	458	0
07/10/2012		---	---	---	---	9	5	15	0	0	616	0
07/11/2012	*	---	---	---	---	0	16	16	0	---	157	0
07/12/2012		---	---	---	---	8	7	30	0	0	385	0
07/13/2012		---	---	---	---	---	---	---	---	---	0	0
Total:		**0**	**28**	**0**	**0**	**242**	**283**	**2,134**	**3**	**1,167**	**6,238**	**1,653**
# Days:		**0**	**4**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**15**	**15**
Average:		**0**	**7**	**0**	**0**	**17**	**20**	**152**	**0**	**167**	**416**	**110**
YTD		**58,098**	**10,828**	**26,417**	**13,494**	**4,042,624**	**2,265,777**	**754,298**	**25,797**	**2,179,371**	**4,289,845**	**2,538,762**

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)
06/29/2012	*	---	0	---	---	9,608	26,796	7,415	115	---	74,448	94,713
06/30/2012		---	---	---	---	6,377	14,317	5,676	154	55,725	51,637	90,227
07/01/2012	*	---	---	---	---	7,540	8,878	4,864	92	---	63,055	63,710
07/02/2012	*	---	0	---	---	8,118	2,593	5,982	163	108,264	137,068	59,980
07/03/2012	*	---	0	---	---	8,222	4,084	5,078	229	---	110,079	75,193
07/04/2012	*	---	0	---	---	4,534	2,214	3,265	274	132,144	104,365	98,545
07/05/2012	*	---	---	---	---	3,115	6,175	1,737	265	---	84,470	80,442
07/06/2012		---	---	---	---	3,967	5,678	1,683	425	162,997	85,137	79,899
07/07/2012	*	---	---	---	---	3,235	5,299	4,255	462	---	110,515	75,609
07/08/2012		---	---	---	---	4,259	5,650	4,638	671	89,620	95,708	66,151
07/09/2012	*	---	---	---	---	3,002	3,307	1,820	737	---	72,173	77,741
07/10/2012		---	---	---	---	3,387	3,783	2,091	783	153,490	99,059	110,321
07/11/2012	*	---	---	---	---	9,478	3,091	998	728	---	127,643	121,411
07/12/2012		---	---	---	---	5,283	8,816	1,673	874	127,145	190,381	116,127
07/13/2012		---	---	---	---	---	---	---	---	---	143,389	104,197
Total:		**0**	**0**	**0**	**0**	**80,125**	**100,681**	**51,175**	**5,972**	**829,385**	**1,549,127**	**1,314,266**
# Days:		**0**	**4**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**15**	**15**
Average:		**0**	**0**	**0**	**0**	**5,723**	**7,192**	**3,655**	**427**	**118,484**	**103,275**	**87,618**
YTD		**0**	**2**	**67**	**327**	**976,888**	**957,121**	**353,542**	**14,383**	**1,596,736**	**2,046,963**	**4,460,682**

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)
06/29/2012	*	---	0	---	---	0	0	137	11	---	228	324
06/30/2012		---	---	---	---	0	0	2	13	0	270	0
07/01/2012	*	---	---	---	---	0	0	3	0	---	155	13
07/02/2012	*	---	0	---	---	0	0	0	27	0	125	326
07/03/2012	*	---	0	---	---	0	0	0	28	---	0	317
07/04/2012	*	---	0	---	---	0	0	0	20	0	133	0
07/05/2012	*	---	---	---	---	0	0	0	10	---	0	272
07/06/2012		---	---	---	---	0	43	0	3	0	0	0
07/07/2012	*	---	---	---	---	0	0	0	3	---	0	0
07/08/2012		---	---	---	---	0	0	0	7	0	0	0
07/09/2012	*	---	---	---	---	0	0	0	5	---	0	0
07/10/2012		---	---	---	---	0	0	0	7	0	165	0
07/11/2012	*	---	---	---	---	0	0	0	7	---	0	0
07/12/2012		---	---	---	---	0	0	0	7	0	0	0
07/13/2012		---	---	---	---	---	---	---	---	---	0	0
Total:		**0**	**0**	**0**	**0**	**0**	**43**	**142**	**148**	**0**	**1,076**	**1,252**
# Days:		**0**	**4**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**15**	**15**
Average:		**0**	**0**	**0**	**0**	**0**	**3**	**10**	**11**	**0**	**72**	**83**
YTD		**0**	**0**	**0**	**80**	**69,763**	**78,611**	**19,953**	**49,486**	**145,761**	**287,207**	**689,477**

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)
06/29/2012	*	---	4	---	---	261	265	0	19	---	12	0
06/30/2012		---	---	---	---	164	115	153	8	0	383	0
07/01/2012	*	---	---	---	---	98	0	157	8	---	78	26
07/02/2012	*	---	6	---	---	179	47	2	17	0	187	0
07/03/2012	*	---	4	---	---	183	43	315	13	---	233	0
07/04/2012	*	---	7	---	---	82	80	147	7	0	8	12
07/05/2012	*	---	---	---	---	16	245	72	17	---	256	0
07/06/2012		---	---	---	---	39	129	56	13	246	0	296
07/07/2012	*	---	---	---	---	81	143	59	10	---	150	333
07/08/2012		---	---	---	---	79	186	107	5	0	0	0
07/09/2012	*	---	---	---	---	25	201	31	21	---	153	0
07/10/2012		---	---	---	---	74	109	15	5	0	0	0
07/11/2012	*	---	---	---	---	74	49	16	7	---	157	0
07/12/2012		---	---	---	---	24	37	25	13	0	0	0
07/13/2012		---	---	---	---	---	---	---	---	---	0	0
Total:		**0**	**21**	**0**	**0**	**1,379**	**1,649**	**1,155**	**163**	**246**	**1,617**	**667**
# Days:		**0**	**4**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**15**	**15**
Average:		**0**	**5**	**0**	**0**	**99**	**118**	**83**	**12**	**35**	**108**	**44**
YTD		**2,722**	**21,586**	**2,065**	**2,311**	**3,538,817**	**1,489,751**	**610,929**	**17,162**	**543,076**	**2,834,751**	**295,871**

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)
06/29/2012	*	---	0	---	---	0	0	0	0	---	115	0
06/30/2012		---	---	---	---	0	77	0	0	0	315	0
07/01/2012	*	---	---	---	---	0	0	0	5	---	233	0
07/02/2012	*	---	0	---	---	0	0	0	0	577	187	652
07/03/2012	*	---	0	---	---	0	0	2	3	---	932	635
07/04/2012	*	---	0	---	---	0	0	1	2	497	495	293
07/05/2012	*	---	---	---	---	0	0	0	0	---	0	0
07/06/2012		---	---	---	---	0	0	0	0	246	297	0
07/07/2012	*	---	---	---	---	0	0	0	10	---	299	333
07/08/2012		---	---	---	---	0	0	0	5	448	229	351
07/09/2012	*	---	---	---	---	0	0	0	0	---	218	0
07/10/2012		---	---	---	---	0	0	0	2	0	240	0
07/11/2012	*	---	---	---	---	0	0	0	0	---	225	0
07/12/2012		---	---	---	---	0	0	0	2	560	882	0
07/13/2012		---	---	---	---	---	---	---	---	---	0	0
Total:		**0**	**0**	**0**	**0**	**0**	**77**	**3**	**29**	**2,328**	**4,667**	**2,264**
# Days:		**0**	**4**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**15**	**15**
Average:		**0**	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**333**	**311**	**151**
YTD		**5**	**0**	**0**	**475**	**43,227**	**37,097**	**18,243**	**46,686**	**1,131,969**	**846,673**	**776,831**

				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)
06/29/2012	*	---	0	---	---	25	0	0	1	---	8,267	100
06/30/2012		---	---	---	---	0	50	0	0	8,100	8,907	100
07/01/2012	*	---	---	---	---	0	0	1	1	---	10,743	604
07/02/2012	*	---	0	---	---	20	0	0	0	8,200	18,646	100
07/03/2012	*	---	0	---	---	0	10	1	0	---	27,571	0
07/04/2012	*	---	0	---	---	10	30	0	0	4,400	21,508	20
07/05/2012	*	---	---	---	---	0	5	10	1	---	9,119	100
07/06/2012		---	---	---	---	0	40	0	1	1,300	6,625	200
07/07/2012	*	---	---	---	---	5	10	0	0	---	5,743	0
07/08/2012		---	---	---	---	5	0	0	0	1,000	5,140	120
07/09/2012	*	---	---	---	---	0	10	0	1	---	2,300	0
07/10/2012		---	---	---	---	10	40	0	1	1,000	1,827	0
07/11/2012	*	---	---	---	---	0	40	0	2	---	1,800	12
07/12/2012		---	---	---	---	0	5	0	3	2,000	800	0
07/13/2012		---	---	---	---	---	---	---	---	---	1,429	200
Total:		**0**	**0**	**0**	**0**	**75**	**240**	**12**	**11**	**26,000**	**130,425**	**1,556**
# Days:		**0**	**4**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**15**	**15**
Average:		**0**	**0**	**0**	**0**	**5**	**17**	**1**	**1**	**3,714**	**8,695**	**104**
YTD		**6**	**0**	**0**	**0**	**6,940**	**5,889**	**2,156**	**108**	**111,930**	**467,861**	**30,953**

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

Two Week Transportation Summary

Source: Fish Passage Center Updated: 7/13/12 11:04 AM

06/29/12 TO 07/13/12

		Species					
Site	Data	**CH0**	**CH1**	CO	ST	SO	**Grand Total**
LGR	Sum of NumberCollected	45,325	149		779		46,253
	Sum of NumberBarged	53,093	138		910		54,141
	Sum of NumberBypassed	14	0		0		14
	Sum of Numbertrucked	0	0		0		0
	Sum of SampleMorts	68	1		2		71
	Sum of FacilityMorts	119	5		2		126
	Sum of ResearchMorts	0	0		0		0
	Sum of TotalProjectMorts	187	6		4		197
LGS	Sum of NumberCollected	63,864	183	30	1,073	50	65,200
	Sum of NumberBarged	78,761	177	30	1,615	50	80,633
	Sum of NumberBypassed	4	0	0	0	0	4
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	21	0	0	1	0	22
	Sum of FacilityMorts	135	3	0	7	0	145
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	156	3	0	8	0	167
LMN	Sum of NumberCollected	34,119	1,451	103	753	2	36,428
	Sum of NumberBarged	42,178	1,651	104	1,024	1	44,958
	Sum of NumberBypassed	2,603	4	0	9	0	2,616
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	25	0	0	1	0	26
	Sum of FacilityMorts	98	0	0	6	1	105
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	123	0	0	7	1	131
MCN	Sum of NumberCollected	317,310	401		100	900	318,711
	Sum of NumberBarged	0	0		0	0	0
	Sum of NumberBypassed	317,281	401		100	900	318,682
	Sum of Numbertrucked	0	0		0	0	0
	Sum of SampleMorts	10	0		0	0	10
	Sum of FacilityMorts	19	0		0	0	19
	Sum of ResearchMorts	0	0		0	0	0
	Sum of TotalProjectMorts	29	0		0	0	29
Total Sum of NumberCollected		460,618	2,184	133	2,705	952	466,592
Total Sum of NumberBarged		174,032	1,966	134	3,549	51	179,732
Total Sum of NumberBypassed		319,902	405	0	109	900	321,316
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of SampleMorts		124	1	0	4	0	129
Total Sum of FacilityMorts		371	8	0	15	1	395
Total Sum of ResearchMorts		0	0	0	0	0	0
Total Sum of TotalProjectMorts		495	9	0	19	1	524

YTD Transportation Summary

Source: Fish Passage Center Updated: 7/13/12 11:04 AM

TO: 07/13/12

		Species					
Site	Data	**CH0**	**CH1**	CO	SO	ST	**Grand Total**
LGR	Sum of NumberCollected	625,405	2,693,468	47,635	30,545	2,353,286	5,750,339
	Sum of NumberBarged	608,757	989,022	39,435	29,055	949,524	2,615,793
	Sum of NumberBypassed	11,451	1,702,758	8,165	1,422	1,403,470	3,127,266
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	221	179	2	9	60	471
	Sum of FacilityMorts	1,665	1,429	33	59	182	3,368
	Sum of ResearchMorts	0	75	0	0	35	110
	Sum of TotalProjectMorts	1,886	1,683	35	68	277	3,949
LGS	Sum of NumberCollected	606,103	1,498,359	53,296	25,689	970,908	3,154,355
	Sum of NumberBarged	599,489	1,109,363	51,693	24,994	683,190	2,468,729
	Sum of NumberBypassed	116	388,249	1,601	689	287,507	678,162
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	41	30	0	1	15	87
	Sum of FacilityMorts	449	714	2	5	172	1,342
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	490	744	2	6	187	1,429
LMN	Sum of NumberCollected	237,700	543,242	14,381	13,396	438,573	1,247,292
	Sum of NumberBarged	223,380	531,108	14,352	13,372	428,254	1,210,466
	Sum of NumberBypassed	12,832	11,582	19	13	9,825	34,271
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	66	60	0	3	35	164
	Sum of FacilityMorts	395	472	10	8	147	1,032
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	461	532	10	11	182	1,196
MCN	Sum of NumberCollected	594,569	1,040,136	72,875	554,039	247,888	2,509,507
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	594,417	1,039,959	72,875	553,964	247,862	2,509,077
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	89	43	0	28	10	170
	Sum of FacilityMorts	63	134	0	47	16	260
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	152	177	0	75	26	430
Total Sum of NumberCollected		2,063,777	5,775,205	188,187	623,669	4,010,655	12,661,493
Total Sum of NumberBarged		1,431,626	2,629,493	105,480	67,421	2,060,968	6,294,988
Total Sum of NumberBypassed		618,816	3,142,548	82,660	556,088	1,948,664	6,348,776
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		417	312	2	41	120	892
Total Sum of FacilityMorts		2,572	2,749	45	119	517	6,002
Total Sum of ResearchMorts		0	75	0	0	35	110
Total Sum of TotalProjectMorts		2,989	3,136	47	160	672	7,004

Cumulative Adult Passage at Mainstem Dams Through: 07/13

		Spring Chinook						Summer Chinook						Fall Chinook					
		2012		2011		10-Yr Avg.		2012		2011		10-Yr Avg.		2012		2011		10-Yr Avg.	
DAM	EndDate	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	**07/12**	**158075**	**7591**	**167097**	**50945**	**152015**	**20110**	**70028**	**9359**	**92994**	**43808**	**79861**	**14665**	**0**	**0**	**0**	**0**	**0**	**0**
TDA	**07/09**	**117071**	**7173**	**124164**	**40146**	**112195**	**16495**	**53032**	**6649**	**62896**	**30261**	**63971**	**10542**	**0**	**0**	**0**	**0**	**0**	**0**
JDA	**07/09**	**107655**	**6755**	**103401**	**39823**	**94492**	**15370**	**43505**	**6653**	**56304**	**26101**	**57415**	**10545**	**0**	**0**	**0**	**0**	**0**	**0**
MCN	**07/12**	**102763**	**4787**	**101246**	**31750**	**86252**	**13687**	**46273**	**3146**	**55068**	**22195**	**54352**	**8668**	**0**	**0**	**0**	**0**	**0**	**0**
IHR	**07/12**	**71957**	**2905**	**69306**	**18161**	**60108**	**8392**	**12515**	**1209**	**23845**	**10733**	**17376**	**3966**	**0**	**0**	**0**	**0**	**0**	**0**
LMN	**07/12**	**68608**	**2891**	**69832**	**18094**	**58469**	**7193**	**13194**	**1241**	**27750**	**11804**	**18053**	**3688**	**0**	**0**	**0**	**0**	**0**	**0**
LGS	**07/12**	**68247**	**3449**	**67321**	**23492**	**54053**	**8198**	**11636**	**1172**	**36707**	**15372**	**16268**	**4321**	**0**	**0**	**0**	**0**	**0**	**0**
LGR	**07/12**	**66366**	**3525**	**59342**	**22063**	**54084**	**9639**	**10572**	**1211**	**31435**	**13227**	**15040**	**4660**	**0**	**0**	**0**	**0**	**0**	**0**
PRD	**07/08**	**19495**	**1015**	**15246**	**6030**	**16630**	**1325**	**22230**	**429**	**15277**	**1588**	**31038**	**1061**	**0**	**0**	**0**	**0**	**0**	**0**
RIS	**07/09**	**19881**	**800**	**13089**	**8394**	**14658**	**2236**	**17365**	**359**	**8936**	**4712**	**25305**	**1939**	**0**	**0**	**0**	**0**	**0**	**0**
RRH	**07/09**	**6641**	**459**	**6989**	**3491**	**5643**	**822**	**7808**	**280**	**4964**	**1916**	**14451**	**1111**	**0**	**0**	**0**	**0**	**0**	**0**
WEL	**07/10**	**5311**	**700**	**4153**	**3969**	**4833**	**817**	**4447**	**210**	**1723**	**447**	**8562**	**303**	**0**	**0**	**0**	**0**	**0**	**0**
WFA	**07/08**	**34535**	**1197**	**40372**	**1182**	**49166**	**982**	**-**	**-**	**-**	**-**	**-**	**-**	**0**	**0**	**0**	**0**	**0**	**0**

	Coho						Sockeye			Steelhead					
	2012		2011		10-Yr Avg.		2012	2011	10-Yr Avg.	2012	2011	10-Yr Avg.	Wild 2012	Wild 2011	10-Yr Avg.
DAM	Adult	Jack	Adult	Jack	Adult	Jack									
BON	**0**	**0**	**0**	**0**	**0**	**0**	**507951**	**170337**	**126506**	**24975**	**23367**	**37513**	**9966**	**10181**	**15844**
TDA	**0**	**0**	**0**	**0**	**0**	**0**	**384605**	**107878**	**100665**	**7874**	**6645**	**13730**	**3034**	**2761**	**6035**
JDA	**0**	**0**	**0**	**0**	**0**	**0**	**355879**	**101701**	**101692**	**6198**	**6034**	**13010**	**3041**	**2966**	**5112**
MCN	**-1**	**0**	**0**	**0**	**0**	**0**	**335714**	**82918**	**85181**	**5984**	**5769**	**9377**	**2322**	**2514**	**3314**
IHR	**0**	**0**	**0**	**0**	**0**	**0**	**252**	**554**	**291**	**4321**	**4380**	**6099**	**1495**	**1486**	**1806**
LMN	**0**	**0**	**0**	**0**	**0**	**0**	**247**	**592**	**340**	**5069**	**4949**	**6212**	**2314**	**2411**	**2218**
LGS	**0**	**0**	**0**	**0**	**0**	**0**	**217**	**490**	**295**	**4414**	**6754**	**4835**	**2463**	**3487**	**1936**
LGR	**0**	**0**	**0**	**0**	**0**	**0**	**170**	**334**	**321**	**9292**	**12603**	**11206**	**4078**	**5858**	**3498**
PRD	**0**	**0**	**0**	**0**	**0**	**0**	**240778**	**42822**	**81260**	**525**	**134**	**517**	**0**	**0**	**0**
RIS	**0**	**0**	**0**	**0**	**0**	**0**	**143729**	**25225**	**65975**	**415**	**118**	**382**	**264**	**83**	**261**
RRH	**0**	**0**	**0**	**0**	**0**	**0**	**88135**	**16570**	**47772**	**887**	**590**	**482**	**694**	**512**	**324**
WEL	**0**	**0**	**0**	**0**	**0**	**0**	**47293**	**7732**	**39688**	**193**	**131**	**139**	**134**	**100**	**80**
WFA	**0**	**0**	**0**	**0**	**0**	**0**	**-**	**-**	**-**	**27942**	**24366**	**25394**	**-**	**-**	**-**

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: 07/13/12

BON counts from January 1, 2012 to March 14, 2012 (historical counts begin March 15):

Year	Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
2012	12	1	1,471	497
2011	47	0	1,370	580