Fish Passage Center

Weekly Report #14 - 24

August 29, 2014

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Summary of Events

Water Supply

Precipitation throughout the Columbia Basin has varied between 17% and 298% of average at individual sub-basins over August. Precipitation above The Dalles has been 119% of average over August. Over the 2014 water year, precipitation has ranged between 79% and 97% of average.

Table 1. Summary of August precipitation and cumulative October through August 27, 2014, precipitation with respect to average (1971–2000), at select locations within the Columbia and Snake River Basins.

Location	Water Year 2014 August 1-27, 2014		Water Year 2014 October 1, 2013 to August 27, 2014	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia above Coulee	1.69	83	33.3	91
Snake River above Ice Harbor	1.67	206	17.9	82
Columbia above The Dalles	1.42	119	22.4	84
Kootenai	1.95	87	35.1	93
Clark Fork	1.72	121	21.8	82
Flathead	1.44	87	33.7	97
Pend Oreille River Basin above Waneta Dam	1.56	103	28.1	88
Salmon River Basin	2.20	187	22.0	79
Upper Snake Tributaries	3.58	298	25.2	97
Clearwater	1.39	105	35.4	89
Willamette River above Portland	0.17	17	52.0	83

Grand Coulee Reservoir is at 1281.5 feet (8-28-14) and has drafted 2.8 feet over the last week. Outflows at Grand Coulee have ranged between 82.9 and 118.0 Kcfs over the last week. The end of August draft target at Grand Coulee is 1279.7 feet this year.

The Libby Reservoir is currently at elevation 2451.5 feet (8-28-14) and has drafted 0.5 feet over the previous week. Daily average outflows at Libby Dam have been 9.0 Kcfs over the last week.

Hungry Horse is currently at an elevation of 3555.2 feet (8-28-14) and has drafted 0.9 feet over the previous week. Outflows at Hungry Horse have been 2.4–2.7 Kcfs over the last week.

Dworshak is currently at an elevation of 1544.9 feet (8-28-14) and has drafted 5.8 feet over the previous week. During the afternoon of August 15, 2014, Unit #3 at Dworshak was forced out of service. As a result, outflows at the project had been reduced to 6.6–6.8 Kcfs with the operation of the remaining smaller units (4.4 Kcfs) and spill amounts of 2.0–2.3 Kcfs, limited by the 110% TDG Cap below the project. The Salmon Managers submitted SOR 2014-2 to the Action Agencies on 8-20-14, which asked for outflows of 10 Kcfs to be restored at Dworshak while drafting to elevation 1535 feet by the end of August. To achieve this outflow with Unit #3 out of service, the SOR asked the Corps of Engineers to coordinate a temporary TDG waiver up to 120% below Dworshak (increased spill) while also coordinating with hatcheries below the project that may be impacted by the increased TDG. August 23–28 outflows below Dworshak ranged from 8.3 Kcfs to 8.8 Kcfs, with daily average spill amounts between 3.7 and 4.2 Kcfs. At these spill levels, TDG below Dworshak has been approximately 115%, which has been tolerable for the hatcheries below Dworshak Dam.

The Brownlee Reservoir was at an elevation of 2056.9 feet on August 28, 2014, and has drafted 0.3 feet last week. Inflows to Brownlee Dam have ranged between 8.3 and 9.6 Kcfs last week.

The Summer Biological Opinion flow period began on June 21st in the lower Snake River (Lower Granite).

According to the June Final Water Supply Forecast (June 6, 2014), the flow objective this summer is 52 Kcfs at Lower Granite. Flows at Lower Granite Dam have averaged 23.6 Kcfs over the past week and 41.2 since the beginning of the summer flow period.

The flow objective at McNary over the summer period (July 1st to August 31st) is 200 Kcfs. Flows at McNary Dam have averaged 148.3 Kcfs over the past week and 192.2 Kcfs since the beginning of the summer flow period.

Spill

The Snake River projects transitioned to the summer spill program on June 21st. At the lower Columbia River projects summer spill was initiated on June 16th. Summer spill operations throughout the FCRPS will continue through August 31st.

Unit 3 at Dworshak Dam failed and was forced out of service on August 15 at 1411 hours. Project outflow (which had been 10 Kcfs) was reduced to approximately 7 Kcfs in order to prevent exceeding the Nez Perce and State of Idaho 110% TDG standard. A System Operational Request was submitted to the Action Agencies on August 20th requesting that the Corps pursue coordination and/or a temporary waiver from the State of Idaho and the Nez Perce Tribe to exceed the TDG standard of 110%, up to a tailrace level of 120%, as is used to manage spill in the mainstem Snake and Columbia rivers. The temporary waiver was granted and outflow was increased on the afternoon of August 22nd. The increase in outflow was accomplished by increasing spill at the project up to a total dissolved gas level of 115% in the Dworshak tailrace. The 115% TDG was implemented because of concern regarding the effects of TDG on juvenile fish rearing at the Dworshak National Fish Hatchery. With this operation outflows ranged from 8.3 Kcfs to 8.6 Kcfs.

Spill at Lower Granite Dam was provided as flow in excess of that needed to operate one turbine unit, and ranged from 8.9 Kcfs to 13.1 Kcfs. Spill at Little Goose Dam was a flat spill operation of about 7.2 Kcfs in order to achieve the prescribed spill level downstream at Lower Monumental Dam, and to maintain minimum operating pool operations. At Lower Monumental Dam, daily average spill was less (10.9 to 15.9 Kcfs) than the 17 Kcfs specified in the Fish Operations Plan due to low flow and powerhouse minimum operation requirements. At Ice Harbor spill is occurring as river flow in excess of that needed for the operation of one turbine unit, ranging from a daily average of 14.1 to 20.5 Kcfs.

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

* FOP levels not achieved due to low flows and the requirement of operating one turbine unit.

At the Middle Columbia River projects, McNary Dam spilled 50% of daily average flow. At John Day Dam the 30% spill level is in effect. Spill at The Dalles Dam averaged 40% of total daily flow. Bonneville Dam spilled an alternating 85 Kcfs/121 Kcfs and 95 Kcfs/95 Kcfs.

Project	Spill Level Day/Night
McNary	50%/50%
John Day	30%/30%
The Dalles	40%/40%
Bonneville	85 Kcfs/121 Kcfs and 95 Kcfs/95 Kcfs

New in 2014 is a change in the way the U.S. Army Corps of Engineers will assess whether a project is in compliance with the total dissolved gas variances in place. The States of Oregon and Washington use different methodologies to estimate the 12-hour average TDG. For Oregon, the 12-hour average is based on the 12 highest hourly TDG measurements in a single calendar day (not necessarily consecutive). For Washington, the 12-hour average is based on 12-hour rolling averages. The highest of the rolling averages is what is reported as the 12-hour average for a given day. In 2014, the location of a TDG monitor and/or type of monitor will dictate which of these methodologies is used for compliance monitoring. The Washington methodology will apply to all the lower Snake River projects, as well as the lower Columbia River forebay monitors (since Oregon does not have a forebay TDG requirement). On any given day the compliance of the tailrace monitors at the lower Columbia River projects will be determined using either the Washington or Oregon methodology, whichever is the most restrictive, and spill may be decreased if needed.

Monitoring for signs of gas bubble trauma (GBT) occurred at Rock Island Dam over the past week. No fish were observed with signs of GBT. The action criteria for GBT are 15% of total fish with any signs of GBT in the fins, or 5% with severe signs (Rank 3 or greater).

Smolt Monitoring

Smolt monitoring is ongoing at all seven SMP dams (BON, JDA, MCN, RIS, LMN, LGS, and LGR). Sampling at the SMP traps has been completed for the 2014 out-migration season.

Subyearling Chinook dominated the collections at all the SMP dam sites this week. When compared to last week, subyearling Chinook passage decreased at all of the SMP dam sites. Due to the high temperature protocol at JDA, comparisons in passage are not possible.

High temperature sampling protocols were first implemented at Bonneville Dam (BON) after the July 30th sample and remained in effect this week. Under these high temperature sampling protocols, index sampling occurred every other day. All fish were bypassed on non-sample days. The high temperature protocol will remain in place until the daily average temperature in the forebay falls below 69.5°F. Subyearling Chinook passage at BON decreased again this week, when compared to the previous week. The daily average passage index for subyearling Chinook at BON this week was about 2,700 per day. Last week's daily average passage index was about 7,400 per day. Similar to last week, no Pacific lamprey were encountered in this week's samples at BON.

High temperature sampling protocols were first implemented at John Day (JDA) after the sample on July 31st and remained in effect this week. Under these high temperature sampling protocols, the SMP crew at JDA samples only twice a week (Monday and Thursday), for condition only. It is important to note that this type of sampling results in bias collection estimates, as sampling is not 24-hours. Therefore, it is not appropriate to compare passage index estimates during this period to those from previous weeks. Subyearling Chinook dominated the bypass samples at JDA this week. No Pacific lamprey ammocoetes were encountered in this week's samples, but macropthalmia were encountered in the August 26th sample. These were the first macropthalmia that have been collected at JDA since the high temperature sampling protocol began. The high temperature sampling protocols will continue until the daily average temperature in the forebay falls below 69.5°F.

High temperature sampling protocols were in effect this week at McNary Dam (MCN). Under the high temperature protocols, sampling at MCN remains every-other-day except the target sample size for handling is reduced from between 300–500 to approximately 100 fish. As with BON and JDA, this high temperature protocol will remain until the daily average temperature in the forebay falls below 69.5°F. Subyearling Chinook passage decreased again this week when compared to the previous week. The daily average passage index for subyearling Chinook at MCN this week was about 3,200 per day. Last week's daily average passage index for subyearling Chinook was about 12,276. Pacific lamprey macropthalmia were encountered in all three of this week's samples, with a daily average collection of about 270 per day. No Pacific lamprey ammocoetes were encountered in this week's samples.

This week's daily average passage index for subyearling Chinook at Lower Granite Dam (LGR) was about 900 per day, which is a decrease from last week's daily average passage index of about 1,200 per day. Five Pacific lamprey ammocoetes and 22 Pacific lamprey macropthalmia were sampled this week at LGR. In fact, Pacific macropthalmia were encountered in six of this week's samples, with a daily average sample count of four per day.

Compared to last week, passage of subyearling Chinook decreased at Little Goose (LGS) and Lower Monumental (LMN) dams. The daily average passage indices for subyearling Chinook at these two projects were 475 and 120 per day, respectively. Last week's daily average passage indices were 1,100 per day at LGS and 370 at LMN. No Pacific lamprey ammocoetes were encountered in this week's samples at LGS, but Pacific lamprey macropthalmia were encountered in all seven of this week's samples. The daily average

collection for Pacific macropthalmia at LGS was three per day. Pacific lamprey macropthalmia were encountered in three of this week's samples at LMN, but no Pacific lamprey ammocoetes were encountered this week.

Passage of subyearling Chinook at Rock Island Dam (RIS) decreased this week, when compared to last week. This week's daily average passage index for subyearling Chinook was about 120 per day whereas that for last week was about 220 per day. A total of nine Pacific lamprey ammocoetes were collected in three of this week's samples. Pacific lamprey macropthalmia were encountered in all seven of this week's samples, with a daily average collection of 11 per day.

Hatchery Release

Snake River Zone: The Snake River Zone encompasses the Snake River and its tributaries from its confluence with the Columbia River to Hells Canyon Dam. There were no new releases scheduled for this zone this week. In addition, no new releases are scheduled for this zone over the next 2 weeks.

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

Lower Columbia Zone: The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. There were no releases scheduled for this zone this week . There are no other releases scheduled for this zone over the next 2 weeks.

Adult Passage

Daily adult fall Chinook passage numbers at Bonneville Dam ranged between 749 and 9,071 last week. The adult fall Chinook count of 56,619 is about 47.6% of the 2013 count of 118,963, while having 1,899 more fish than the 10-year average count of 54,720. The 2014 Bonneville Dam fall Chinook jack count of 8,240 is about 47% of the 2013 count of 17,546 and 92.5% of the 10-year average count of 8,932. The 2014 McNary Dam adult fall Chinook count of 7,437 is about 44% of the 2013 count and 95% of the 10-year average. The 2014 McNary Dam jack count of 2,545 is about 77% of the 2013 count, while being 1.5 times greater than the 10-year average count.

During this time of year, there are times when there are higher steelhead counts at upstream projects compared to downstream projects. The higher counts of steelhead at upstream sites compared to downstream sites in any particular year is because some steelhead spend the winter between sites, for instance between Ice Harbor and Lower Granite, and then resume their migration upstream the following year. The summer steelhead run is delineated according to dates of passage past Bonneville Dam and is made up of two components. A-run steelhead are considered those that pass Bonneville Dam from the first of June through August 25th and B-run steelhead pass Bonneville from August 26th through October. The 2014 B-run adult steelhead count at Bonneville of 10,782 is about 1.5 times greater than the 2013 count of 7,134 and 1.4 times greater than the 10-year average count of 7,713. The 2014 Bonneville Dam adult steelhead count of 209,071 is about 1.2 times greater than the 2013 count of 177,060, while being 85% of the 10-year average count of 245,903. The 2014 Bonneville Dam adult wild steelhead count of 95,690 is about 1.2 times greater than the 2013 count of 81,811, and about 1.1 times greater than the 10-year average count of 85,798. In the Snake River, this year's Lower Granite steelhead count of 16,910 is about 1.4 times greater than the 2013, while having 1,978 fewer fish than the 10-year average count of 18,888. The 2014 Lower Granite Dam adult wild steelhead count of 8,477 is about 1.5 times greater than the 2013 count and about 1.2 times greater than the 10-year average. At Willamette Falls, the 2014 count for steelhead was 26,633 as of August 27th. This year's steelhead count is about 1.5 times greater than the 2013 count of 17,522 and about 1.1 times greater than the 10-year average count of 24,947.

Daily adult sockeye passage numbers at Bonneville Dam ranged between 1 and 12 last week. The 2014 adult sockeye count at Bonneville Dam of 614,162 is about 3.3 times greater than the 2013 count of 185,498 and 3.2 times greater than the 10-year average of 192,203. Two of the major spawning sites

for sockeye in the Upper Columbia River zone are Lake Wenatchee and Lake Osoyoos (Okanogan basin). The 2014 McNary Dam adult sockeye count of 545,957 is about 4 times greater than the 2013 and 10-year average counts. The Lower Granite Dam 2014 adult sockeye count of 2,741 is about 3.7 times greater than the 2013 count of 736 and 4 times greater than the 10-year average count of 681.

The 2014 Bonneville Dam adult coho count of 2,894 is 98% of the 2013 count of 2,955 and is about 45.6% of the 10-year average count of 6,339. The 2014 Bonneville Dam coho jack count of 515 is about 1.5 times greater than the 2013 count of 346 and about 1.1 times greater than the 10-year average count of 460. As of August 28th at Bonneville Dam, the adult shad count was 2,603,254. This year's shad count is about 69.4% of the 2013 count of 3,751,346 and about 93.5% of the 10-year average count of 2,782,996.

Wanapum Dam Update

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

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

Visual observations of the exit retrofits have been promising. During Wanapum Dam site visits on May 7, May 21, June 4, June 18, July 2, July 23, and August 20, 2014, many fish have been seen passing the left bank fishway weir and chute. As of August 27, 2014, a total of 608,111 sockeye and 105,089 adult Chinook had passed Priest Rapids Dam. As of August 27, 2014, 580,995 sockeye and 103,550 adult Chinook had passed Rock Island Dam.

Over the last several weeks, Grant PUD has had problems with aquatic vegetation clogging the upper ladder supply pumps (four per ladder), especially on the left bank fishway. As long as this issue continues, Grant PUD plans to clean the pumps at least 3 days per week and more often if needed. During pump cleaning, attraction water to the lower fishway will remain on and two of the four upper ladder pumps will be cleaned at a time, always leaving two pumps to supply water to the upper fishway and the weir chute.

The drawdown of Wanapum pool has also had a significant impact on the adult fishways at Rock Island Dam, operated by Chelan PUD. With the lower than normal tailrace levels, Chelan PUD has constructed extensions or denils at several ladder entrances. Chelan County PUD currently has all three denils in place, two at the right bank fishway and one on the left bank fishway.

Hatchery Releases Last Two Weeks

Hatchery Release Summary

From: 8/15/2014 to 8/28/2014

No Releases Scheduled

Hatchery Releases Next Two Weeks

Hatchery Release Summary

From: 8/29/2014 to 9/11/2014

No Releases Scheduled

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
08/15/2014	99.4	0.0	96.2	0.0	104.8	8.8	104.2	9.4	105.9	25.0	109.9	20.1	113.4	22.6
08/16/2014	93.7	0.1	94.6	0.0	99.5	7.6	96.6	10.1	98.9	21.5	96.3	20.4	91.8	25.4
08/17/2014	103.5	0.1	100.2	0.0	97.1	8.9	87.0	8.8	88.9	18.2	94.3	21.9	98.3	28.5
08/18/2014	120.7	0.2	115.4	0.0	118.9	8.4	123.1	10.6	121.3	26.5	118.1	29.4	116.6	25.6
08/19/2014	108.5	0.1	115.6	0.0	128.9	9.5	119.0	10.4	121.9	32.5	125.3	25.1	137.3	24.3
08/20/2014	103.7	0.1	97.2	0.0	99.8	0.0	104.9	10.6	106.9	22.4	114.2	19.9	114.0	21.3
08/21/2014	105.0	0.1	106.2	0.0	101.3	0.0	97.2	10.6	99.7	22.1	108.0	20.9	110.6	23.0
08/22/2014	103.9	0.1	106.3	0.0	106.3	0.0	102.0	10.2	106.5	22.0	108.3	20.7	111.4	22.6
08/23/2014	97.5	0.1	92.2	0.0	101.0	0.0	105.1	9.2	107.4	19.4	106.7	20.7	111.0	21.4
08/24/2014	82.7	0.1	88.5	0.0	88.9	0.0	88.0	8.2	90.9	27.9	92.4	20.9	91.2	23.7
08/25/2014	108.2	0.0	103.2	0.0	102.2	0.0	97.0	0.0	100.1	13.0	100.4	20.7	97.5	23.8
08/26/2014	107.4	0.1	106.4	0.0	112.9	0.0	112.0	0.0	115.0	0.0	119.4	20.8	128.8	24.2
08/27/2014	111.5	0.1	111.4	0.0	118.0	0.0	117.2	0.0	120.7	0.1	121.3	20.7	125.9	21.3
08/28/2014	118.0	0.1	112.2	0.0	111.5	0.0	111.3	0.0	116.4	0.0	115.3	11.1	115.4	12.4

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
08/15/2014	8.4	0.6	---	9.8	26.5	18.8	28.8	9.0	29.8	14.4	32.0	22.0
08/16/2014	6.6	2.0	---	9.5	26.0	13.6	25.7	9.0	24.5	9.4	26.0	15.8
08/17/2014	6.8	2.3	---	9.8	23.4	12.7	25.5	8.9	25.2	10.2	25.8	15.7
08/18/2014	6.8	2.3	---	10.5	23.4	10.5	25.5	8.9	25.9	11.0	28.1	17.8
08/19/2014	6.7	2.2	---	9.5	23.1	10.5	23.7	9.0	23.2	8.1	22.5	12.3
08/20/2014	6.7	2.2	---	9.7	23.2	10.5	23.4	9.0	22.1	7.1	23.4	13.1
08/21/2014	6.7	2.1	---	9.3	22.4	9.5	23.5	9.0	22.4	10.9	23.3	13.7
08/22/2014	7.2	2.6	---	9.2	21.7	8.9	23.3	8.0	23.3	10.9	25.3	15.4
08/23/2014	8.8	4.2	---	9.1	21.8	8.9	23.2	7.3	23.1	10.9	23.9	14.1
08/24/2014	8.7	4.2	---	9.9	23.8	11.1	24.3	7.3	22.9	10.6	24.2	14.4
08/25/2014	8.6	4.0	---	9.5	25.8	13.1	29.1	7.2	29.1	15.9	30.0	20.5
08/26/2014	8.6	4.0	---	9.5	24.0	11.2	24.4	7.3	23.4	11.2	24.5	14.8
08/27/2014	8.6	4.0	---	9.5	23.9	11.2	24.5	7.2	23.9	11.6	25.2	15.4
08/28/2014	8.3	3.7	---	9.5	23.9	11.1	24.5	7.2	24.4	12.2	26.4	16.0

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

	McNary		John Day		The Dalles		Bonneville			
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
08/15/2014	161.7	81.0	152.7	45.9	141.9	56.7	158.8	100.8	0.0	45.6
08/16/2014	139.2	69.6	132.8	40.1	127.4	51.3	148.2	95.5	0.0	40.3
08/17/2014	135.0	67.7	129.0	38.5	120.6	48.1	139.1	93.2	0.0	33.5
08/18/2014	152.7	76.4	146.1	43.7	133.7	53.4	148.7	98.2	0.0	38.2
08/19/2014	162.5	81.5	148.7	44.6	139.1	55.5	153.3	101.1	0.0	39.8
08/20/2014	162.0	81.2	139.5	41.9	128.0	50.8	145.2	94.5	0.0	38.3
08/21/2014	141.2	70.7	134.2	40.3	127.0	50.9	140.5	93.1	0.0	35.0
08/22/2014	143.6	72.2	144.7	43.3	133.9	53.5	145.7	96.3	0.0	37.0
08/23/2014	148.8	74.6	136.2	40.8	127.9	51.4	144.0	100.4	0.0	31.2
08/24/2014	139.1	69.6	132.4	39.8	123.5	49.5	139.9	96.0	0.0	31.5
08/25/2014	150.6	75.2	140.4	42.1	131.2	52.2	138.3	92.7	0.0	33.2
08/26/2014	148.7	74.4	142.1	42.6	130.0	52.0	140.0	95.1	0.0	32.6
08/27/2014	157.3	78.7	147.6	44.2	136.0	54.3	153.6	100.3	0.0	40.9
08/28/2014	150.2	75.7	140.4	42.2	131.3	52.2	149.0	95.2	0.0	41.3

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											
Lower Monumental Dam											
McNary Dam											
Bonneville Dam											
Rock Island Dam											
	08/15/14	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/19/14	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/26/14	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
8/15	106.4	106.7	107.0	24	---	---	---	0	108.2	108.4	108.5	24	107.0	107.2	107.5	24	107.8	108.0	108.3	24
8/16	106.2	106.6	106.9	24	---	---	---	0	108.1	108.3	108.4	24	106.8	107.4	107.9	24	107.6	107.9	108.2	24
8/17	105.6	105.9	106.0	24	---	---	---	0	107.8	108.0	108.3	24	106.8	107.2	107.8	24	107.4	107.8	108.1	24
8/18	106.4	106.9	107.2	24	---	---	---	0	108.0	108.1	108.3	24	107.1	107.7	108.0	24	108.4	108.9	109.2	21
8/19	106.6	106.9	107.6	24	---	---	---	0	108.3	108.5	108.7	24	107.7	108.1	108.6	24	108.8	109.2	109.7	24
8/20	105.8	106.2	106.6	24	---	---	---	0	107.9	108.1	108.3	24	106.9	107.2	107.7	24	107.7	108.1	108.5	24
8/21	106.1	106.6	106.9	24	---	---	---	0	107.7	108.0	108.3	24	106.0	106.4	107.0	24	106.6	106.9	107.3	24
8/22	105.2	105.6	106.3	24	---	---	---	0	106.8	107.0	107.7	24	105.2	105.5	106.1	24	105.9	106.1	106.3	24
8/23	105.1	105.6	106.0	24	---	---	---	0	105.8	106.1	106.3	24	104.9	105.3	105.6	24	105.4	105.8	106.1	24
8/24	104.3	104.7	105.2	24	---	---	---	0	105.4	106.8	107.3	24	104.8	105.0	105.4	24	105.4	105.7	106.1	24
8/25	104.2	104.6	105.0	24	---	---	---	0	105.6	106.2	106.7	24	105.3	105.8	106.3	24	105.3	105.6	106.1	24
8/26	104.3	104.6	105.3	24	---	---	---	0	105.2	105.5	106.0	24	105.0	105.5	105.9	24	105.7	106.0	106.4	24
8/27	104.0	104.4	104.8	24	---	---	---	0	105.3	105.8	106.3	24	104.9	105.5	106.4	24	105.8	106.2	106.6	24
8/28	104.3	104.7	105.0	23	---	---	---	0	105.4	105.7	106.3	23	104.7	105.2	108.3	23	105.2	105.6	106.0	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
8/15	108.6	109.1	109.6	24	107.5	107.6	108.1	17	108.7	109.0	109.4	17	108.9	109.1	109.3	24	111.1	111.9	112.6	24
8/16	108.1	108.5	109.0	24	108.0	108.5	109.1	21	108.7	109.3	109.8	21	108.8	109.0	109.5	24	111.2	111.9	112.6	24
8/17	107.6	108.0	108.6	24	108.6	109.0	109.8	16	110.0	110.5	111.3	16	108.4	108.8	109.6	24	110.6	111.4	112.4	24
8/18	108.3	108.7	109.1	24	108.7	109.1	109.6	18	110.0	110.5	111.5	18	108.9	109.7	110.1	24	112.3	113.9	114.8	24
8/19	108.9	109.4	110.2	24	109.3	109.5	109.9	18	110.6	111.0	111.7	18	110.5	110.6	110.7	24	113.2	114.4	115.4	24
8/20	108.5	109.0	109.6	24	108.4	108.8	109.5	18	108.4	108.9	110.0	18	109.3	109.6	110.1	24	111.9	113.1	114.6	24
8/21	107.2	107.7	108.2	24	107.6	108.1	109.0	21	107.3	108.0	109.2	21	108.4	108.7	109.1	24	111.4	112.4	113.6	24
8/22	106.5	107.0	107.5	24	106.2	106.5	106.9	20	106.1	106.6	107.2	20	106.7	107.0	107.6	24	110.5	111.3	112.4	24
8/23	106.1	106.6	107.2	24	105.7	106.1	106.5	23	105.3	105.8	106.2	23	106.0	106.3	106.7	24	110.1	110.9	111.7	24
8/24	106.6	107.1	107.8	24	106.3	106.3	107.3	12	105.9	105.9	106.9	12	105.9	106.2	106.3	24	109.0	109.4	109.9	24
8/25	105.6	106.1	106.5	24	105.5	105.7	106.0	16	105.6	105.9	106.7	16	104.7	104.9	105.1	24	104.7	105.2	108.0	24
8/26	105.7	106.0	106.4	24	105.8	105.9	106.7	15	106.0	106.2	107.1	15	105.0	105.6	105.8	24	104.5	105.3	105.5	24
8/27	106.0	106.3	106.8	24	106.3	106.9	107.5	23	106.0	106.8	107.4	23	105.8	106.2	106.5	24	105.3	105.7	106.1	24
8/28	105.4	106.0	108.0	23	106.2	106.6	107.2	22	105.9	106.4	107.1	22	105.9	106.0	106.5	23	105.3	105.5	105.7	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
8/15	108.8	109.1	109.5	24	106.6	112.1	112.7	24	108.1	108.9	110.0	24	109.0	109.2	109.4	24	107.9	108.2	108.8	24
8/16	108.6	109.0	109.4	24	111.6	112.4	112.9	24	107.0	108.2	109.2	24	108.5	108.8	109.0	24	107.4	107.9	108.4	24
8/17	108.2	108.7	109.1	24	109.9	111.6	112.7	24	107.9	109.6	110.8	24	109.3	110.0	113.9	24	106.8	107.2	108.3	24
8/18	108.7	109.5	110.5	24	112.4	113.9	114.8	24	110.1	111.0	112.1	24	111.1	113.3	119.2	24	108.3	108.7	109.2	24
8/19	109.7	110.6	111.1	24	112.2	114.2	120.0	24	109.2	109.8	111.2	24	110.5	111.6	115.2	24	109.2	110.0	111.7	24
8/20	109.4	109.6	110.4	24	110.4	113.0	113.5	24	108.1	109.0	110.8	24	109.7	111.4	114.0	24	106.8	107.5	107.9	24
8/21	108.4	109.1	109.4	24	111.4	112.5	113.1	23	108.2	109.2	110.0	24	113.6	114.0	114.4	24	106.2	108.2	110.7	24
8/22	107.7	108.1	109.1	24	111.2	111.8	112.6	24	106.9	107.4	107.8	24	113.2	113.7	114.0	24	110.2	110.7	111.0	24
8/23	106.5	107.2	107.6	24	109.9	111.1	111.5	24	106.9	108.1	109.0	24	112.8	113.2	113.4	24	110.7	111.2	111.9	24
8/24	106.7	106.9	107.5	24	109.3	111.5	117.3	24	107.1	107.7	108.3	24	114.1	114.3	114.6	24	111.5	111.9	112.2	24
8/25	105.3	105.7	106.7	24	106.5	108.9	118.7	24	108.2	109.6	110.9	24	113.7	114.0	114.5	24	111.4	112.1	113.8	24
8/26	104.0	104.6	105.0	24	103.6	104.4	104.8	24	108.5	109.4	110.7	24	113.6	113.9	114.5	15	111.8	112.5	113.0	24
8/27	105.0	105.5	105.9	24	104.8	105.2	105.7	24	---	---	---	0	---	---	---	0	---	---	---	0
8/28	105.1	105.5	105.8	23	105.0	105.3	105.6	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
8/15	110.9	111.5	113.6	24	---	---	---	0	102.4	104.2	106.4	24	103.3	104.8	105.8	24	100.3	101.1	101.8	24
8/16	111.5	112.6	115.8	24	---	---	---	0	107.1	108.1	109.1	24	106.5	108.4	109.9	24	101.0	102.0	103.1	23
8/17	112.4	113.9	115.9	24	---	---	---	0	108.2	108.9	109.3	24	107.3	108.9	110.2	24	101.3	102.3	103.3	24
8/18	112.3	113.5	116.3	24	---	---	---	0	108.9	109.4	110.0	24	108.0	109.5	110.9	24	101.0	101.8	102.6	24
8/19	112.5	113.5	114.3	24	---	---	---	0	109.1	109.4	109.7	24	107.8	109.1	110.6	24	101.1	101.9	102.7	24
8/20	110.0	110.7	111.6	24	---	---	---	0	108.9	109.1	109.3	24	106.6	107.6	109.0	24	100.5	101.1	101.9	24
8/21	110.8	111.8	114.4	24	---	---	---	0	108.4	108.9	109.7	24	106.9	108.4	109.6	24	100.3	101.2	101.9	24
8/22	112.1	112.9	114.8	24	---	---	---	0	109.8	111.9	114.4	24	106.2	107.6	109.6	24	100.3	100.8	101.7	24
8/23	111.8	112.1	112.4	24	---	---	---	0	115.1	115.3	115.6	24	111.1	112.2	113.0	24	100.4	101.2	101.9	24
8/24	113.3	114.2	115.2	24	---	---	---	0	115.2	115.6	116.0	24	111.1	112.4	113.6	24	101.0	102.0	103.1	24
8/25	113.0	113.7	114.7	24	---	---	---	0	114.9	115.1	115.3	24	111.0	112.0	113.4	24	101.1	102.0	102.9	23
8/26	113.4	113.9	115.6	24	---	---	---	0	114.7	115.0	115.3	24	110.4	111.6	112.8	24	101.3	102.4	103.5	24
8/27	---	---	---	0	---	---	---	0	115.0	115.4	116.1	24	111.0	112.1	113.3	24	101.3	102.2	103.2	24
8/28	---	---	---	0	---	---	---	0	114.0	114.3	115.0	23	109.9	110.9	112.9	23	101.3	102.2	103.1	23

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
8/15	102.6	104.2	105.2	24	101.7	101.9	102.1	24	117.8	119.0	119.3	24	112.1	112.3	112.5	24	110.5	110.8	111.1	24
8/16	103.7	106.1	107.7	24	101.5	101.8	102.0	24	115.1	117.0	118.8	24	112.9	113.6	114.0	24	110.5	111.0	111.3	24
8/17	104.2	106.3	108.0	24	101.3	101.4	101.7	24	115.7	118.9	121.2	24	113.3	113.5	113.9	24	110.4	110.8	111.2	24
8/18	104.6	106.7	108.3	24	101.4	101.6	101.8	24	113.6	113.9	114.3	24	113.0	113.2	113.4	24	110.3	110.7	111.1	24
8/19	104.2	106.0	107.1	24	101.4	101.6	101.8	24	113.6	114.3	114.7	24	113.5	113.8	114.0	24	110.6	111.1	111.4	24
8/20	103.3	104.6	106.0	24	100.1	100.6	101.1	24	112.9	113.3	113.7	24	114.0	114.3	114.7	24	110.1	110.5	111.1	24
8/21	103.7	105.8	107.3	24	99.5	99.8	100.1	24	112.4	112.9	113.7	24	112.6	113.2	113.5	24	110.6	111.0	111.5	24
8/22	102.9	104.2	106.2	24	99.3	99.6	99.9	24	111.8	112.2	112.7	24	111.7	111.9	112.2	24	110.0	110.5	111.0	24
8/23	104.5	106.8	108.0	24	99.4	99.7	100.6	24	112.3	112.6	113.3	24	110.3	110.6	111.6	24	109.5	109.9	110.4	24
8/24	105.5	107.1	108.3	24	100.5	100.9	101.3	24	114.2	115.1	115.4	24	110.2	110.3	110.4	24	109.4	109.8	110.3	24
8/25	105.4	107.2	108.7	24	99.2	99.5	99.9	24	115.0	116.0	116.8	24	109.5	109.7	109.9	24	109.2	109.5	109.9	24
8/26	105.2	107.1	108.8	24	98.0	98.2	98.4	24	113.9	114.2	114.6	24	108.8	108.9	109.1	24	108.8	109.2	109.5	24
8/27	105.5	107.6	109.1	24	98.1	98.3	99.4	24	113.6	114.1	114.5	24	108.7	108.8	109.0	24	109.0	109.6	110.1	24
8/28	105.2	106.6	107.6	23	98.6	99.1	99.9	23	113.7	114.1	114.6	23	108.7	108.8	108.9	23	109.1	109.3	109.5	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
8/15	108.9	109.1	109.3	24	114.6	115.7	116.1	24	112.3	112.5	112.8	24	112.8	114.0	114.8	24	---	---	---	0
8/16	108.9	109.3	110.2	24	112.6	113.4	114.4	24	111.7	111.9	112.5	24	110.7	111.5	112.3	24	---	---	---	0
8/17	109.7	110.0	110.1	24	113.2	113.7	114.1	24	110.7	111.1	111.3	24	110.9	112.0	112.9	24	---	---	---	0
8/18	109.8	110.1	110.7	24	113.1	113.4	113.6	24	111.0	111.4	112.1	24	112.9	113.5	114.0	24	---	---	---	0
8/19	110.3	110.5	110.6	24	112.8	113.1	113.6	24	111.4	111.7	112.1	24	111.2	112.1	112.7	24	---	---	---	0
8/20	109.2	109.5	109.9	24	112.4	112.6	112.9	24	111.1	111.4	111.7	24	110.1	110.6	111.2	24	---	---	---	0
8/21	108.1	108.3	108.5	24	113.9	115.4	117.7	24	109.9	110.1	110.5	24	110.3	110.9	111.7	24	---	---	---	0
8/22	107.5	107.7	108.0	24	111.5	112.9	113.4	24	109.8	110.0	110.2	24	110.2	110.9	111.5	24	---	---	---	0
8/23	106.6	106.9	107.2	24	111.7	112.1	112.6	24	108.8	108.9	109.6	24	110.1	110.9	111.6	24	---	---	---	0
8/24	106.0	106.1	106.3	24	116.2	120.7	136.9	24	108.1	108.3	109.3	24	109.8	110.3	110.9	24	---	---	---	0
8/25	106.3	106.7	107.1	24	123.4	134.9	137.4	24	106.7	106.9	107.2	24	111.4	112.8	113.1	24	---	---	---	0
8/26	106.6	107.0	107.2	24	112.2	112.8	113.2	24	106.9	107.3	107.7	24	109.7	110.3	111.6	24	---	---	---	0
8/27	107.1	107.5	107.9	24	112.9	113.3	113.8	24	108.3	108.9	109.1	24	109.6	110.5	111.4	24	---	---	---	0
8/28	107.1	107.3	107.4	23	112.7	113.0	113.7	23	108.8	109.0	109.7	23	110.4	111.0	111.3	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
8/15	106.7	106.9	107.2	24	115.1	115.7	116.2	24	106.8	107.3	107.6	24	108.8	109.8	110.7	24	108.0	108.4	108.7	24
8/16	106.4	106.7	107.1	24	114.3	114.6	114.8	24	106.9	107.2	107.6	24	107.7	108.5	109.2	24	108.3	108.6	109.0	24
8/17	106.6	107.1	107.5	24	114.3	114.8	115.1	24	106.7	107.0	107.3	24	109.1	110.2	111.0	24	108.5	109.0	109.4	24
8/18	108.5	109.1	110.0	24	115.0	115.5	115.8	24	107.6	108.2	108.8	24	110.0	110.9	111.6	24	109.4	110.2	110.5	24
8/19	109.1	109.5	109.7	24	115.6	116.3	116.8	24	108.6	108.9	109.5	24	110.7	111.3	111.8	24	109.2	110.0	110.3	24
8/20	107.7	107.8	108.1	24	114.9	115.7	116.5	24	106.5	106.9	107.5	24	109.7	110.0	110.2	24	105.5	106.0	106.7	24
8/21	106.7	106.9	107.1	24	113.8	115.0	115.9	24	105.0	105.3	105.7	24	107.9	108.6	109.4	24	104.5	104.7	104.9	24
8/22	105.4	106.0	106.5	24	113.7	114.3	114.5	24	104.4	104.7	105.0	24	109.2	109.8	110.5	24	105.8	106.2	106.4	24
8/23	103.6	104.0	105.7	24	113.8	114.3	114.5	24	103.8	104.2	104.5	24	109.1	109.7	110.6	24	107.8	108.4	108.7	24
8/24	105.4	105.6	106.2	24	114.4	115.0	115.3	24	105.1	105.5	106.2	24	109.1	109.8	110.3	24	109.0	109.9	110.6	24
8/25	105.3	105.9	106.8	24	114.9	115.5	115.8	24	104.1	104.4	105.0	24	109.8	110.8	111.5	24	108.4	109.0	109.3	24
8/26	106.9	107.5	109.0	24	114.8	115.2	115.5	24	104.3	104.8	105.3	24	110.9	113.9	115.4	24	108.9	109.5	110.2	24
8/27	107.7	108.0	108.5	24	115.1	115.7	116.1	24	104.7	104.9	105.7	24	114.0	114.6	115.0	24	109.3	109.9	110.3	24
8/28	108.3	108.6	108.9	23	114.8	115.3	115.9	23	104.1	104.5	104.9	23	113.8	114.7	115.4	23	107.2	107.6	107.8	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
8/15	113.5	114.3	114.8	24	108.1	108.3	108.4	24	116.8	117.5	118.0	24	112.9	114.8	116.1	24	117.1	117.2	117.4	24
8/16	114.1	114.7	115.2	24	108.8	109.2	109.6	24	116.1	116.8	117.3	24	114.0	114.0	114.9	6	117.1	117.2	117.4	24
8/17	114.2	114.8	115.1	24	108.7	109.2	109.6	24	115.9	116.1	116.3	24	145.8	147.4	150.7	24	115.5	116.9	118.7	24
8/18	114.9	116.0	116.4	24	109.5	110.5	111.0	24	117.0	117.7	118.4	24	144.7	145.9	149.9	23	116.0	117.7	118.8	24
8/19	114.8	115.3	115.8	24	109.6	110.2	110.9	24	116.9	117.8	118.4	24	143.9	143.9	146.0	12	117.4	117.8	118.9	24
8/20	112.2	112.9	113.2	24	106.0	106.4	107.7	24	115.0	115.4	115.8	24	144.0	146.0	147.8	24	116.9	117.1	117.3	24
8/21	111.5	112.3	112.8	24	104.5	104.8	105.3	24	114.4	114.8	115.5	24	144.4	146.3	148.9	23	115.2	116.6	118.6	24
8/22	112.4	113.1	113.6	24	104.3	104.8	105.0	24	115.3	116.1	117.3	24	145.0	145.6	149.0	15	115.3	116.9	118.6	24
8/23	113.3	114.6	115.2	24	106.1	107.4	108.7	24	116.7	117.1	117.4	24	144.7	146.8	149.7	24	117.2	117.6	118.5	24
8/24	114.1	114.7	115.2	24	109.4	110.2	110.6	24	116.5	116.8	117.0	24	145.8	147.8	151.9	24	117.0	117.1	117.3	24
8/25	113.5	114.0	114.4	24	110.3	111.1	112.1	24	116.5	116.8	117.3	24	132.2	146.1	152.3	24	115.6	116.9	118.7	24
8/26	113.9	115.3	115.7	24	111.9	112.3	112.4	24	117.1	117.6	118.1	24	115.7	117.1	118.1	24	115.7	117.1	118.7	24
8/27	114.9	115.5	115.9	24	111.9	112.3	112.4	24	117.5	118.0	118.7	24	115.8	117.2	118.1	24	117.5	118.0	118.9	24
8/28	113.8	114.2	114.4	23	109.1	109.5	110.3	23	116.0	116.5	117.2	23	113.8	114.6	115.6	23	117.0	117.1	117.2	23

Two-Week Summary of Passage Indices

Source: Fish Passage Center Updated: 8/29/2014 7:12

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)
08/15/2014	*	---	---	---	---	0	3	4	0	0	0	0
08/16/2014	*	---	---	---	---	0	0	0	0	---	---	---
08/17/2014	*	---	---	---	---	0	0	0	0	0	---	0
08/18/2014	*	---	---	---	---	0	0	0	0	---	---	---
08/19/2014	*	---	---	---	---	0	0	0	0	0	0	0
08/20/2014	*	---	---	---	---	0	0	0	0	---	---	---
08/21/2014	*	---	---	---	---	0	0	0	0	0	---	0
08/22/2014	*	---	---	---	---	0	0	0	0	---	0	---
08/23/2014	*	---	---	---	---	0	0	0	0	0	---	0
08/24/2014	*	---	---	---	---	0	0	2	0	---	---	---
08/25/2014	*	---	---	---	---	0	0	0	0	0	---	0
08/26/2014	*	---	---	---	---	0	0	0	0	---	0	---
08/27/2014	*	---	---	---	---	0	0	0	0	0	---	0
08/28/2014	*	---	---	---	---	2	0	0	0	---	---	---
08/29/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**2**	**3**	**6**	**0**	**0**	**0**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**4**	**7**
Average:		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
YTD		**65,404**	**63,591**	**25,420**	**10,159**	**4,807,474**	**2,838,738**	**1,969,629**	**26,427**	**2,022,048**	**2,320,483**	**2,151,268**

				COMBINED SUBYEARLING CHINOOK								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/15/2014	*	---	---	---	---	1,100	2,033	1,595	263	21,891	686	7,584
08/16/2014	*	---	---	---	---	2,865	2,960	484	199	---	---	---
08/17/2014	*	---	---	---	---	879	1,331	34	214	13,895	---	4,077
08/18/2014	*	---	---	---	---	1,419	1,099	114	128	---	---	---
08/19/2014	*	---	---	---	---	724	774	170	432	7,031	428	4,245
08/20/2014	*	---	---	---	---	913	624	113	198	---	---	---
08/21/2014	*	---	---	---	---	981	493	95	93	6,288	---	13,721
08/22/2014	*	---	---	---	---	510	549	64	108	---	464	---
08/23/2014	*	---	---	---	---	824	780	112	65	4,288	---	4,235
08/24/2014	*	---	---	---	---	1,018	840	175	98	---	---	---
08/25/2014	*	---	---	---	---	887	427	238	194	2,642	---	1,972
08/26/2014	*	---	---	---	---	1,085	214	175	135	---	138	---
08/27/2014	*	---	---	---	---	1,045	232	53	96	2,721	---	1,898
08/28/2014	*	---	---	---	---	843	274	39	112	---	---	---
08/29/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**15,093**	**12,630**	**3,461**	**2,335**	**58,756**	**1,716**	**37,732**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**4**	**7**
Average:		**0**	**0**	**0**	**0**	**1,078**	**902**	**247**	**167**	**8,394**	**429**	**5,390**
YTD		**0**	**27**	**4**	**332**	**944,110**	**1,046,152**	**379,981**	**38,539**	**4,908,849**	**2,591,597**	**4,227,790**

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)
08/15/2014	*	---	---	---	---	0	0	0	0	0	0	0
08/16/2014	*	---	---	---	---	0	0	0	0	---	---	---
08/17/2014	*	---	---	---	---	0	0	0	0	0	---	0
08/18/2014	*	---	---	---	---	0	0	0	0	---	---	---
08/19/2014	*	---	---	---	---	0	0	0	2	0	0	0
08/20/2014	*	---	---	---	---	0	0	0	0	---	---	---
08/21/2014	*	---	---	---	---	0	0	0	0	0	---	0
08/22/2014	*	---	---	---	---	0	0	0	0	---	0	---
08/23/2014	*	---	---	---	---	0	0	0	0	0	---	0
08/24/2014	*	---	---	---	---	0	0	0	0	---	---	---
08/25/2014	*	---	---	---	---	0	0	0	0	0	---	0
08/26/2014	*	---	---	---	---	0	0	0	0	---	0	---
08/27/2014	*	---	---	---	---	0	0	0	0	0	---	0
08/28/2014	*	---	---	---	---	0	0	0	0	---	---	---
08/29/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**4**	**7**
Average:		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
YTD		**0**	**0**	**0**	**267**	**74,168**	**59,431**	**27,316**	**66,433**	**147,455**	**225,188**	**776,651**

				COMBINED STEELHEAD								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/15/2014	*	---	---	---	---	0	0	0	4	0	0	0
08/16/2014	*	---	---	---	---	0	0	0	6	---	---	---
08/17/2014	*	---	---	---	---	0	0	2	4	0	---	0
08/18/2014	*	---	---	---	---	0	0	2	5	---	---	---
08/19/2014	*	---	---	---	---	0	0	0	15	0	0	0
08/20/2014	*	---	---	---	---	0	0	2	5	---	---	---
08/21/2014	*	---	---	---	---	2	0	0	0	0	---	0
08/22/2014	*	---	---	---	---	2	0	0	1	---	0	---
08/23/2014	*	---	---	---	---	3	0	0	4	0	---	0
08/24/2014	*	---	---	---	---	3	0	0	0	---	---	---
08/25/2014	*	---	---	---	---	0	0	2	0	0	---	0
08/26/2014	*	---	---	---	---	2	0	0	5	---	0	---
08/27/2014	*	---	---	---	---	2	0	0	1	0	---	0
08/28/2014	*	---	---	---	---	0	1	0	5	---	---	---
08/29/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**14**	**1**	**8**	**55**	**0**	**0**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**4**	**7**
Average:		**0**	**0**	**0**	**0**	**1**	**0**	**1**	**4**	**0**	**0**	**0**
YTD		**2,080**	**43,465**	**4,243**	**12,842**	**3,376,184**	**1,975,614**	**1,183,209**	**27,515**	**586,885**	**1,032,890**	**459,444**

Two-Week Summary of Passage Indices

				COMBINED SOCKEYE								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/15/2014	*	---	---	---	---	0	3	0	6	0	0	0
08/16/2014	*	---	---	---	---	9	0	7	3	---	---	---
08/17/2014	*	---	---	---	---	2	0	0	0	0	---	0
08/18/2014	*	---	---	---	---	7	0	0	0	---	---	---
08/19/2014	*	---	---	---	---	2	2	0	6	0	0	0
08/20/2014	*	---	---	---	---	0	0	0	0	---	---	---
08/21/2014	*	---	---	---	---	2	2	0	1	0	---	0
08/22/2014	*	---	---	---	---	2	0	0	3	---	0	---
08/23/2014	*	---	---	---	---	0	0	0	0	0	---	0
08/24/2014	*	---	---	---	---	5	0	0	3	---	---	---
08/25/2014	*	---	---	---	---	0	1	0	3	0	---	0
08/26/2014	*	---	---	---	---	4	0	2	6	---	0	---
08/27/2014	*	---	---	---	---	0	0	0	0	0	---	0
08/28/2014	*	---	---	---	---	2	0	0	5	---	---	---
08/29/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**35**	**8**	**9**	**36**	**0**	**0**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**4**	**7**
Average:		**0**	**0**	**0**	**0**	**3**	**1**	**1**	**3**	**0**	**0**	**0**
YTD		**0**	**0**	**2**	**0**	**182,049**	**88,439**	**69,804**	**37,958**	**1,495,564**	**577,701**	**590,103**

				COMBINED LAMPREY JUVENILES								
		WTB	IMN	GRN	LEW	LGR†	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(Samp)	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)
08/15/2014	*	---	---	---	---	0	12	0	11	0	0	0
08/16/2014	*	---	---	---	---	0	17	0	4	---	---	---
08/17/2014	*	---	---	---	---	2	0	0	5	0	---	0
08/18/2014	*	---	---	---	---	0	4	0	1	---	---	---
08/19/2014	*	---	---	---	---	1	0	0	1	100	0	0
08/20/2014	*	---	---	---	---	0	2	0	3	---	---	---
08/21/2014	*	---	---	---	---	4	2	1	1	660	---	0
08/22/2014	*	---	---	---	---	4	0	0	0	---	0	---
08/23/2014	*	---	---	---	---	11	3	0	2	660	---	0
08/24/2014	*	---	---	---	---	1	2	2	2	---	---	---
08/25/2014	*	---	---	---	---	6	3	1	3	80	---	0
08/26/2014	*	---	---	---	---	0	2	0	61	---	8	---
08/27/2014	*	---	---	---	---	8	5	1	18	80	---	0
08/28/2014	*	---	---	---	---	1	4	0	3	---	---	---
08/29/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**38**	**56**	**5**	**115**	**1,580**	**8**	**0**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**4**	**7**
Average:		**0**	**0**	**0**	**0**	**3**	**4**	**0**	**8**	**226**	**2**	**0**
YTD		**1**	**3**	**0**	**0**	**165**	**20,873**	**29,482**	**218**	**60,435**	**98,903**	**19,310**

Two-Week Summary of Passage Indices

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

Smolt indices, clipped & unclipped or combined, are presented in the following order: yearling chinook (chinook 1's,) subyearling chinook (chinook 0's), steelhead, coho, sockeye, and lamprey juveniles. Two classes of fish counts are shown in these tables:
Two classes of fish counts are shown in these tables:
Sample counts (Samp) are provided for juvenile lamprey at LGR. See note below for details †.
Collection counts (Coll), which account for sample rates but are not adjusted for flow;
Passage indices (INDEX), which are collection counts divided by the proportion of water passing through the sampled powerhouse.
Passage indices are not population estimates, but are used to adjust collection counts for daily fluctuations in the site's or project's operations.
The classes of counts presented in the report are defined below for each site. Most samples occur over a 24-hr period that spans two calendar days. In this report, the date shown corresponds with the sample end date.
Combined lamprey juvenile collection counts are provided for all sites. Combined lamprey juveniles is a combination of pacific lamprey ammocoetes, brook lamprey ammocoetes, unknown lamprey ammocoetes, pacific lamprey macropthalmia, and unidentified lamprey species.
† In 2013 it was confirmed that juvenile lamprey can escape the sample tank at LGR which would lead to unreliable estimates of collection. Therefore, only sample counts are provided in this report.

Definitions for Smolt Index Counts
WTB (Collection) = Salmon River Trap at Whitebird : Collection Counts
IMN (Collection) = Imnaha River Trap : Collection Counts
GRN (Collection) = Grande Ronde River Trap : Collection Counts
LEW (Collection) = Snake River Trap at Lewiston : Collection Counts
LGR (Index) = Lower Granite Dam Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}
MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

JDA and BO2 data collected for the FPC by Pacific States Marine Fisheries Commission.
RIS data collected for the FPC by Chelan Co. PUD.
LGR, LMN, and MCN data collected for the FPC by Washington Dept. of Fish and Wildlife.
LGS and GRN data collected for the FPC by Oregon Dept. of Fish and Wildlife.
IMN data collected for the FPC by the Nez Perce Tribe.
Fall (post SMP season) trapping at the Imnaha River Fish Trap (IMN) is funded by the Lower Snake River Compensation Program (LSRCP)
WTB and LEW data collected for the FPC by Idaho Dept. of Fish and Game.

Two Week Transportation Summary

Source: Fish Passage Center Updated: 8/29/14 7:14 AM

08/15/14 TO 08/29/14

		Species				
Site	Data	**CH0**	**CH1**	ST	SO	**Grand Total**
LGR	Sum of NumberCollected	7,027	1	8	15	7,051
	Sum of NumberBarged	1,152	0	0	2	1,154
	Sum of NumberBypassed	0	0	8	0	8
	Sum of Numbertrucked	5,787	0	0	12	5,799
	Sum of SampleMorts	85	1	0	1	87
	Sum of FacilityMorts	3	0	0	0	3
	Sum of ResearchMorts	0	0	0	0	0
	Sum of TotalProjectMorts	88	1	0	1	90
LGS	Sum of NumberCollected	8,370	2	1	5	8,378
	Sum of NumberBarged	3,465	2	0	2	3,469
	Sum of NumberBypassed	0	0	0	0	0
	Sum of Numbertrucked	4,805	0	1	2	4,808
	Sum of SampleMorts	42	0	0	1	43
	Sum of FacilityMorts	58	0	0	0	58
	Sum of ResearchMorts	0	0	0	0	0
	Sum of TotalProjectMorts	100	0	0	1	101
LMN	Sum of NumberCollected	1,786	3	4	5	1,798
	Sum of NumberBarged	1,023	2	0	4	1,029
	Sum of NumberBypassed	0	0	0	0	0
	Sum of Numbertrucked	724	1	4	1	730
	Sum of SampleMorts	33	0	0	0	33
	Sum of FacilityMorts	6	0	0	0	6
	Sum of ResearchMorts	0	0	0	0	0
	Sum of TotalProjectMorts	39	0	0	0	39
Total Sum of NumberCollected		17,183	6	13	25	17,227
Total Sum of NumberBarged		5,640	4	0	8	5,652
Total Sum of NumberBypassed		0	0	8	0	8
Total Sum of Numbertrucked		11,316	1	5	15	11,337
Total Sum of SampleMorts		160	1	0	2	163
Total Sum of FacilityMorts		67	0	0	0	67
Total Sum of ResearchMorts		0	0	0	0	0
Total Sum of TotalProjectMorts		227	1	0	2	230

YTD Transportation Summary

Source: Fish Passage Center Updated: 8/29/14 7:14 AM

TO: 08/29/14

		Species					
Site	Data	**CH0**	**CH1**	CO	SO	ST	**Grand Total**
LGR	Sum of NumberCollected	642,062	3,442,338	52,722	130,967	2,404,237	6,672,326
	Sum of NumberBarged	622,537	1,939,440	48,991	70,855	1,326,856	4,008,679
	Sum of NumberBypassed	11,727	1,501,375	3,722	59,638	1,077,093	2,653,555
	Sum of NumberTrucked	5,787	0	0	12	0	5,799
	Sum of SampleMorts	454	139	1	47	60	701
	Sum of FacilityMorts	1,547	1,305	8	415	121	3,396
	Sum of ResearchMorts	10	79	0	0	107	196
	Sum of TotalProjectMorts	2,011	1,523	9	462	288	4,293
LGS	Sum of NumberCollected	737,867	1,951,719	41,832	61,233	1,369,625	4,162,276
	Sum of NumberBarged	731,173	1,768,377	40,932	54,864	1,149,468	3,744,814
	Sum of NumberBypassed	324	182,657	890	6,109	220,103	410,083
	Sum of NumberTrucked	4,805	0	0	2	1	4,808
	Sum of SampleMorts	193	34	1	21	16	265
	Sum of FacilityMorts	1,372	651	9	237	167	2,436
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	1,565	685	10	258	183	2,701
LMN	Sum of NumberCollected	257,221	1,326,223	19,905	48,375	792,146	2,443,870
	Sum of NumberBarged	253,846	1,138,579	17,505	45,110	686,179	2,141,219
	Sum of NumberBypassed	616	177,066	0	2,568	89,957	270,207
	Sum of NumberTrucked	724	1	0	1	4	730
	Sum of SampleMorts	94	25	0	1	17	137
	Sum of FacilityMorts	541	964	0	301	193	1,999
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	635	989	0	302	210	2,136
Total Sum of NumberCollected		1,637,150	6,720,280	114,459	240,575	4,566,008	13,278,472
Total Sum of NumberBarged		1,607,556	4,846,396	107,428	170,829	3,162,503	9,894,712
Total Sum of NumberBypassed		12,667	1,861,098	4,612	68,315	1,387,153	3,333,845
Total Sum of NumberTrucked		11,316	1	0	15	5	11,337
Total Sum of SampleMorts		741	198	2	69	93	1,103
Total Sum of FacilityMorts		3,460	2,920	17	953	481	7,831
Total Sum of ResearchMorts		10	79	0	0	107	196
Total Sum of TotalProjectMorts		4,211	3,197	19	1,022	681	9,130

Cumulative Adult Passage at Mainstem Dams Through: 08/28

		Spring Chinook						Summer Chinook						Fall Chinook					
	END	2014		2013		10-Yr Avg.		2014		2013		10-Yr Avg.		2014		2013		10-Yr Avg.	
DAM	DATE	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	08/28	188083	26094	83345	33820	130283	22257	109734	25342	93097	26186	85511	18881	56619	8240	118963	17546	54720	8932
TDA	08/28	143142	21080	69202	32311	99813	18973	96134	19525	85639	20750	73080	14947	22130	5120	49517	9920	23856	5014
JDA	08/28	123224	19103	56991	28957	87036	17743	86033	17655	75248	19714	65621	15576	12093	3053	25869	5695	13080	3560
MCN	08/28	107147	16033	52176	22279	79413	14950	87974	17022	75741	14808	61586	11232	7437	2545	16940	3292	7831	1680
IHR	08/28	79298	12428	38017	18611	54814	9602	17433	4474	11912	6321	16717	4436	2486	239	5740	1061	2110	460
LMN	08/28	79942	14020	36470	19053	54458	8539	16064	8136	11765	7703	18241	4639	2151	236	4260	809	1498	390
LGS	08/28	77966	13649	35072	19443	49920	9660	17058	7477	10120	7632	17208	5330	1572	135	3433	612	1107	196
LGR	08/28	79167	13732	35031	19940	49728	11001	14668	7106	8423	7572	15316	5918	1164	174	1405	347	635	154
PRD	08/27	23742	2649	13725	1298	14700	1468	78434	4889	71083	3174	52746	2498	2913	1552	4192	3012	2700	1279
WAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	08/27	23247	2934	13345	3100	13890	2468	77982	6494	68386	3986	50079	5174	2321	1446	2307	3942	1521	881
RRH	08/27	12376	2377	6841	2101	5576	1020	58569	5017	59685	4044	38940	4099	1920	1019	1728	2183	1170	498
WEL	08/27	15376	2544	7133	2980	4880	1164	49116	5908	49332	4242	29117	2987	0	0	0	0	0	0
WFA	08/27	30071	1598	27897	1664	40347	1124	0	0	0	0	0	0	151	26	239	77	88	22

		Coho						Sockeye			Steelhead						Lamprey		
	END	2014		2013		10-Yr Avg.				10-Yr			10-Yr	Wild	Wild	10-Yr			10-Yr
DAM	DATE	Adult	Jack	Adult	Jack	Adult	Jack	2014	2013	Avg.	2014	2013	Avg.	2014	2013	Avg.	2014	2013	Avg.
BON	08/28	2894	515	2955	346	6339	460	614162	185498	192203	209071	177060	245903	95690	81811	85798	30744	22202	23058
TDA	08/28	197	111	234	65	939	233	586126	161888	159035	88757	72077	110711	46383	38451	43873	10514	7796	5844
JDA	08/28	50	7	111	26	426	131	557498	155472	161061	50215	41103	84608	24957	20579	32300	7510	5197	5178
MCN	08/28	13	3	7	0	74	16	545957	134174	135990	45670	36423	59730	22561	18015	22038	1453	1300	1710
IHR	08/28	0	1	1	0	0	0	2391	895	505	22907	25289	32212	8344	7931	9056	608	235	233
LMN	08/28	0	0	0	0	0	0	2802	1013	632	23327	19056	29626	10234	7879	10087	203	89	69
LGS	08/28	0	0	1	0	0	0	2808	989	607	14565	10214	19719	7532	4991	6753	114	26	39
LGR	08/28	0	0	0	0	0	0	2741	736	681	16910	12047	18888	8477	5740	6909	67	13	8
PRD	08/27	0	0	0	0	20	0	608111	163070	167425	7502	5632	8067	0	0	0	4978	4267	2257
WAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	08/27	0	0	0	0	0	0	580995	159174	164824	4728	4203	6546	2413	2543	3389	1878	643	583
RRH	08/27	0	0	0	0	0	0	492744	131641	139935	2794	2987	4923	1368	1724	2375	2143	534	238
WEL	08/27	0	0	0	0	0	0	490512	129916	133644	1886	2164	2682	1004	1191	1291	3	17	2
WFA	08/27	12	0	100	71	22	30	0	0	0	26633	17522	24947	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: 08/29/14