Fish Passage Center

Weekly Report #13 - 08

May 10, 2013

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has been very low over early May, varying between only 1% and 28% of average at individual sub-basins over May. Precipitation above The Dalles has been 10% of average over May. Over the 2013 water year, precipitation has ranged between 71% and 101% of average.

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

Location	Water Year 2013 May 1-8, 2013		Water Year 2013 October 1, 2012 to May 8, 2013	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	0.05	6	25.0	96
Snake River Above Ice Harbor	0.10	17	12.4	75
Columbia Above The Dalles	0.07	10	16.7	83
Kootenai	0.02	2	26.5	101
Clark Fork	0.08	9	14.1	75
Flathead	0.16	16	24.6	98
Pend Oreille Basin	0.09	10	19.9	86
Snake Basin abv Hells Canyon	0.14	28	10.0	73
Salmon River Basin	0.05	6	14.6	71
Clearwater	0.01	1	27.2	89
Willamette River abv Portland	0.02	2	48.4	87

Snowpack within the Columbia Basin has generally been decreasing with average snowpack in the Columbia River for basins above the Snake River confluence now at 88% of average, for Snake River Basins the average snowpack is now 61% of average, and for lower Columbia Basins between McNary and Bonneville Dam average snowpack is currently 50% of average.

Table 2 displays the April 7th and May 8th ESP runoff volume forecasts for multiple reservoirs. The May 8th forecast at The Dalles between January and July is 92,585 Kaf (91% of average).

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

Location	April 7, 2013 ESP		May 8, 2013 ESP	
	% Average (1971-2000)	Runoff Volume (Kaf)	% Average (1971-2000)	Runoff Volume (Kaf)
The Dalles (Jan-July)	93	94287	91	92585
Grand Coulee (Jan-July)	101	60415	100	59609
Libby Res. Inflow, MT (Apr-Aug)	102	6001 *6189	97	5682 *6535
Hungry Horse Res. Inflow, MT (Jan-July)	99	2084	100	2089
Lower Granite Res. Inflow (Apr- July)	83	16485	71	14014
Brownlee Res. Inflow (Apr-July)	62	3376	51	2812
Dworshak Res. Inflow (Apr-July)	96	2319 *2036	88	2135 *2296

* Denotes COE Forecast

Grand Coulee Reservoir is at 1254.5 feet (5-9-13) and drafted 1.3 feet over the last week. Outflows at Grand Coulee have ranged between 108.1 and 163.3 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2404.2 feet (5-9-13) and has drafted 0.5 feet last week. Outflows at Libby Dam have increased from 12.8 Kcfs to 18.0 Kcfs over the last week.

Hungry Horse is currently at an elevation of 3528.0 feet (5-9-13) and has refilled 1.8 feet last week. Outflows at Hungry Horse have ranged from 7.6 Kcfs to 7.8 Kcfs over the last week.

Dworshak is currently at an elevation of 1568.6 feet (5-9-13) and has refilled 3.6 feet last week. Out-flows from Dworshak have decreased from 9.9 Kcfs to 7.6 Kcfs over the last week.

The Brownlee Reservoir was at an elevation of 2056.1 feet on May 9th, 2013 refilling 2.9 feet over the last week. Over the last week, inflows at Brownlee have ranged between 9.5 and 12.1 Kcfs.

The Biological Opinion flow period began on April 3rd in the lower Snake River (Lower Granite). According to the April Final Water Supply Forecast, the flow objective this spring is 85 Kcfs at Lower Granite. Flows at Lower Granite Dam have averaged 59.0 Kcfs from April 3rd-May 9th. Over the last week flows at Lower Granite have averaged 65.9 Kcfs and are currently 93.2 Kcfs.

Based on the April Final Water Supply Forecast, the Spring Biological Opinion Flow Objectives will be 226 Kcfs at McNary Dam (began April 10th) and 135 Kcfs at Priest Rapids Dam (began April 10th). Flows at McNary Dam have averaged 239.8 Kcfs between April 10th and May 9th. Over the last week flows at McNary have averaged 241.9 Kcfs and are currently 286.2 Kcfs. Flows at Priest Rapids Dam have averaged 171.9 Kcfs between April 10th and May 9th. Over the last week flows have averaged 167.8 Kcfs at Priest Rapids and are currently 197.4 Kcfs

Spill: Spill for fish passage began on April 3rd at the lower Snake River projects.

Project	Spill Level Day/Night
Lower Granite	20 Kcfs/20 Kcfs
Little Goose	30%/30%
Lower Monumental	Gas Cap/Gas Cap
Ice Harbor	April 28-June 20: 30%/30% vs. 45 kcfs/Gas Cap

At Lower Granite Dam, spill to the Court Order began on April 3rd. Over the last week, spill volumes at Lower Granite have been decreased due to the total dissolved gas (TDG) waiver being exceeded in the Little Goose forebay, beginning the week at 20.3 Kcfs and ending the week at 18.4 Kcfs. At Little Goose Dam spill has been provided at the 30% of instantaneous flow level as specified in the Court Order, despite the TDG waiver being exceeded in the Lower Monumental forebay over the last five days. At Lower Monumental Dam the Court Order calls for spill to the gas cap. Over the past week the COE decreased spill from 29.9 Kcfs to 23.4 Kcfs, due to TDG waiver being exceeded all week in the Ice Harbor forebay with several days also exceeding TDG waivers in the Lower Monumental tailrace. At Ice Harbor Dam the Fish Operations Plan (FOP) calls for the test schedule of 45 Kcfs spill during the day and gas cap spill at night versus a constant 30% day and night. Spill at Ice Harbor has been provided in accordance with the FOP test schedule and the Court Order. TDG levels have remained below the gas cap in the Ice Harbor tailrace.

Spill for fish passage at the Lower Columbia projects began on April 10th.

Project	Spill Level Day/Night
McNary	40%/40%
John Day	**Testing:** 30%/30% vs. 40%/40%
The Dalles	40%/40%
Bonneville	100 Kcfs/100 Kcfs

At McNary dams spill has met or exceeded the court order over the past week. At John Day Dam the COE is implementing the test conditions of 30% versus 40%. At The Dalles Dam spill has been slightly less than the Court Order early in the past week (due to TDG exceedance in the Bonneville Forebay). Over the last two days at The Dalles (5/8-9), spill levels have been below the Court Order, although TDG waivers have not been in exceedance since May 6th. At Bonneville Dam spill was at the Court order on 5/3-4 but was less than the Court Order 5/2 through 5/9. The restriction on spill at Bonneville Dam was to decrease the TDG at the Camas/Washougal monitor, in spite of the fact that this is not a point of monitoring for TDG compliance. The Action Agencies regard this monitor as necessary as part of the “rolled over” Court Order.

In the past week, TDG standards have been exceeded at multiple Snake River locations (Lower granite, Little Goose, Lower Monumental) and for several days at The Dalles Dam. Despite these TDG exceedances, gas bubble trauma (GBT) signs have only been detected at Rock Island Dam with two fish detected with minor signs of GBT on 5/2 and one fish also with minor signs of GBT detected on 5/7.

Smolt Monitoring: Smolt monitoring is ongoing at all seven SMP dams (BON, JDA, MCN, RIS, LMN, LGS, and LGR) and all three of the SMP traps (SNK, GRN, IMN). Collections at the Salmon River Trap were terminated on the afternoon May 8th. At this time, it is unclear whether collections at this trap will resume before the 2013 sampling season ends on May 25th. Finally, sampling at MCN is every-other-day.

Passage at BON was dominated by subyearling Chinook this week. This was because of the release of about 4.8 million subyearling fall Chinook tules from Spring Creek NFH on the morning of May 2nd. These tules began arriving at BON at around midnight on May 4th. Peak passage of these subyearling Chinook occurred on May 5th, after which time the passage index has steadily decreased. Overall, this week's daily average passage index for subyearling Chinook at BON was about 90,800 per day. Passage of yearling Chinook at BON also increased this week. This week's daily average passage index for yearling Chinook at BON was nearly 42,000 per day, compared to last week's daily average passage index of just under 40,000 per day. Steelhead passage at BON decreased this week, when compared to last week. The daily average passage index for steelhead at BON was nearly 13,600 per day this week. Last week's daily average passage index was just nearly 16,600 per day. Passage of coho and sockeye both increased this week at BON. This week's daily average passage indices for coho and sockeye at BON were about 12,100 and 2,000, respectively. The daily average passage indices for these two species last week were about 6,900 and 300 per day. Finally, no lamprey juveniles were collected at BON this week.

Yearling Chinook continued to dominate the bypass sample at JDA this week. This week's daily average passage index for yearling Chinook was nearly 52,000 per day, which is an increase over last week's daily average passage index of about 38,000 per day. Steelhead, coho, and sockeye passage also increased again this week. This week's daily average passage indices for steelhead, coho, and sockeye were about 25,700, 1,950, and 3,900 per day, respectively. Last week's daily average passage indices were about 19,600, 950, and 1,250 per day, respectively. No subyearling Chinook were collected at JDA this week. Finally, only pacific lamprey macropthalmia were sampled at JDA this week. Passage of pacific lamprey macropthalmia decreased week. The daily average collection for pacific lamprey macropthalmia this week was about 200 per day, compared to last week's daily average collection of about 1,100 per day.

Sampling at MCN is every-other-day until transportation begins in the summer. This week's bypass samples were dominated by yearling Chinook. In fact, yearling Chinook passage increased substantially this week, when compared to last week. This week's daily average passage index for yearling Chinook was nearly 195,000 per day. Last week's daily average passage index was about 47,000 per day. Steelhead passage also increased this week. The daily average passage index for steelhead this week was about 36,000 per day. Passage of coho, sockeye, and subyearling Chinook also increased this week, when compared to last week. This week's daily average passage indices for coho, sockeye, and subyearling Chinook were about 1,170, 19,700, and 800, respectively. Last week's daily average passage indices were about 730, 16,850, and 170, respectively. Unlike last week, not all subyearling Chinook juveniles that were collected at MCN this week were fry. So far this season, pacific lamprey macropthalmia continue to be the only species and life-stage of lamprey collected at MCN. This week's daily average collection for pacific lamprey macropthalmia was about 250 per day, which represents a decrease over last week's daily average collection of about 670 per day. Finally, descaling at MCN has been relatively high over the past couple of weeks, particularly for yearling Chinook, steelhead, and sockeye. This is likely due to increased debris loads in the forebay.

Yearling Chinook continued to dominate the bypass samples at LGR this week. This week's daily average passage index for yearling Chinook was nearly 119,000 per day, which is a substantial increase over last week's daily average passage index of about 65,500 per day. This increase in yearling Chinook passage is likely due to the recent increases in flows in the Snake River above LGR, particularly over the past three days. Of the yearling Chinook that were collected at LGR this week, approximately 92% were of known hatchery origin, which means that they either had fin clips or were unclipped but had coded-wire-tags. Steelhead passage at LGR stayed relatively the same this week, when compared to last week. This week's daily average passage index for steelhead at LGR was about 39,500 per day. Last week's daily average passage index was nearly 36,000 per day. Approximately 81% of the steelhead in the bypass sample this week were of known hatchery origin, which means that they either

had clipped fins or had eroded fins, which is indicative of hatchery rearing practices. Chinook fry passed LGR in relatively low numbers this week and sockeye/kokanee were only sampled on two days (May 4th and May 9th) this week. Coho passage at LGR increased this week, when compared to last week. The daily average passage index for coho this week was about 900 per day, whereas last week's daily average passage index was about 375 per day. Only pacific lamprey macropthalmia were sampled at LGR this week and only on one day (May 5th). Finally, it is worth noting that, due to the possible resampling of PIT-tagged research fish that are released into the gatewells, daily estimates of yearling Chinook and steelhead collection and passage indices may be inflated. The FPC is aware of this possible bias and is investigating ways to correct these inflated estimates after the research has ended. However, the magnitude of this bias is relatively low and is unlikely to skew estimates of timing for these two species.

With the initiation of full sampling for transportation on May 2nd, sampling at LGS is no longer limited. This week's bypass samples at LGS were dominated by yearling Chinook and steelhead. The daily average passage indices for yearling Chinook and steelhead this week were about 63,500 and 67,000, respectively. Other than yearling Chinook and steelhead, LGS collected relatively low numbers of coho juveniles this week. The daily average passage index for coho at LGS this week was about 650 per day. No lamprey juveniles were collected at LGS this week.

Sampling at LMN remained limited much of this week, until the initiation of full sampling for transportation on May 7th. The first transportation barge from LMN was loaded on May 8th. Since this time, yearling Chinook and steelhead have dominated the bypass samples. For the period of May 7th to May 9th, the daily average passage indices for yearling Chinook and steelhead at LMN were about 35,400 and 33,700, respectively. The only other species of salmonid that was collected at LMN this week was coho, which were only collected in the May 8th sample. Finally, no lamprey juveniles were collected at LMN this week.

Yearling Chinook continued to dominate the collections of salmonids at RIS this week. In fact, yearling Chinook passage increased this week, when compared to last week. This week's daily average passage index for yearling Chinook at RIS was about 640 per day. Last week's daily average passage index was just over 300 per day. Sockeye passage decreased this week. This week's daily average passage index for sockeye at RIS was only about 70 per day, compared to last week's daily average passage index of nearly 150 per day. Passage of coho and steelhead increased this week. The daily average passage indices for coho and steelhead were about 130 and 160 per day, respectively. Finally, subyearling Chinook passage was very similar this week to what has been seen in the past few weeks. As with past weeks, the majority of subyearling Chinook that were collected this week were fry. Finally, only pacific lamprey macropthalmia were collected at RIS this week and in very low numbers.

The Grande Ronde Trap continued to collect mostly yearling Chinook this week. Passage of yearling Chinook seems to have remained steady, when compared to last week. The daily average collection for yearling Chinook at GRN was about 190 per day this week. Of the yearling Chinook that were collected at this trap this week, approximately 73% were of known hatchery origin, which means that they either had fin clips or were unclipped but had coded-wire-tags. Collections of steelhead increased slightly this week, when compared to last week. This week's daily average collection for steelhead at GRN was about 75 per day. Last week's daily average collection was about 50 per day. Descaling for yearling Chinook and steelhead at the Grande Ronde Trap has been relatively high for much of the past week. It is unclear at this point what may be causing these high descaling, given that debris has not been a problem.

Due to increasing flows and debris, collections at the Salmon River Trap were terminated on the afternoon of May 8th. At this time, it is unknown whether collections will resume before the 2013 sampling season ends on May 25th. The daily average collections of yearling Chinook decreased this week, when compared to last week. This week's daily average collection for yearling Chinook at the Salmon River Trap were about 120 per day. Last week's daily average collection was about 1,060 per day. Steelhead collections at the Salmon River Trap remained the same this week, when compared to last week. The daily average collection for steelhead this week was about 164 per day. Finally, one sockeye juvenile was collected on May 7th.

Collections at the Snake River Trap were dominated by steelhead again this week. The daily average collection for steelhead this week was about 350 per day, which is a decrease from last week's daily average collection of about 450 per day. Collections

of yearling Chinook increased this week. This week's daily average collection for yearling Chinook at the Snake River Trap was nearly 120 per day, compared to last week's daily average of nearly 50 per day. Finally, a few Chinook fry and coho were collected at the Snake River Trap this week.

At this time, data from the Imnaha Trap are available only through May 4th. For the period of April 28-May 4, passage of steelhead and yearling Chinook both increased, when compared to the April 21-27 period. For the April 28-May 4 period, the daily average collections for steelhead and yearling Chinook were about 190 and 1,600 per day, respectively. These averages for the April 21-27 period were about 80 and 220 per day, respectively. Finally, the Imnaha River Trap collected three Chinook fry on May 3rd and one pacific lamprey ammocoete on April 30th.

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 500,000 subyearling fall Chinook were scheduled for release into Lapwai Creek this week. Lapwai Creek is a tributary of the Clearwater River. Of these 500,000 subyearling fall Chinook, about 40% were unmarked and, thus, will be undistinguishable from wild subyearling Chinook. The only other releases that were scheduled for this week were of sockeye. In all, about 271,000 sockeye juveniles were scheduled to be released into Redfish Lake Creek, a tributary of the Salmon River, on or around May 9th.

Approximately 1.5 million subyearling fall Chinook juveniles are scheduled for release to this zone over the next two weeks. Of these, about 1.0 million are scheduled to be released into the Snake River just below Hells Canyon. The remaining 500,000 are scheduled to be released from Captain Johns Rapids Acclimation Pond on the Snake River. Approximately 60% of the Captain Johns Rapids AP release is unmarked, which means that they are undistinguishable from wild subyearling fall Chinook. There are no other new 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. The only release that was scheduled to begin this week was a release of approximately 1.5 million subyearling fall Chinook to the Yakima River. Several releases of juvenile salmonids are scheduled for this zone over the next two weeks. First, approximately 172,000 subyearling fall Chinook are scheduled for release to the Yakima River over the next two weeks. In addition, about 484,000 subyearling summer Chinook are scheduled for release from Wells Hatchery into the Mid-Columbia River. This release is scheduled to occur on or around May 15th. Wells Hatchery is also scheduled to release about 140,000 summer steelhead on or around May 15th. Finally, nearly 182,000 coho juveniles are scheduled for release into the Wenatchee River over the next two weeks.

Lower Columbia Zone: The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. No releases were scheduled to begin this week in this zone. There are two releases of juvenile salmonids scheduled for this zone over the next two weeks. The first is a release of approximately 600,000 subyearling fall Chinook to the Umatilla River, which is planned for May 20th. The second is a release of about 12,500 winter steelhead to Hood River. This winter steelhead release is scheduled to take place on or around May 14th.

Adult Fish Passage:

Adult counts at Bonneville Dam have been updated through May 9th. Daily adult spring Chinook counts at Bonneville Dam ranged from 1,834 to 7,311 adult salmon per day. As of May 9th, a total of 60,373 spring Chinook have been counted at Bonneville Dam. In 2012, 81,863 adult spring Chinook were counted at Bonneville Dam for the same time period. The 2013 adult spring Chinook count at Bonneville Dam is about 73.7% of the 2012 count and 61.9% of the of the 10 year average count of 97,521. The 2013 spring Chinook jack count of 18,032 is 10.3 times greater than the 2012 count of 1,747 and 3.4 times greater than the 10 year average count of 5,304. At Willamette Falls Dam 10,853 adult spring Chinook has been counted so far this year. In 2012, 2,133 adult spring Chinook were counted at Willamette. This year's count is 5.1 times greater than the 2012 count. However, the 2013 Willamette Falls adult spring Chinook count is 72.2% of the 10 year average count of 15,024. As of May 9th, a total of 43,469 adult spring Chinook have been counted at The Dalles Dam and 20,339 have been counted at McNary Dam. The Dalles Dam 2013 adult spring Chinook count is 1.6 times greater than the 2012 count while being 70% of the 10 year average count. The

2013 McNary Dam adult spring Chinook count is about 2.5 times greater than the 2012 count, while being only 59.1% of the 10 year average count.

The 2013 Bonneville Dam adult steelhead count of 2,810 is about 62.4% of the 2012 count of 4,501 and 64.6% of the 10 year average count of 4,347. The 2013 Bonneville Dam adult wild steelhead count of 831 is about 58.9% of the 2012 count of 1,410 and 73.9% of the 10 year average count of 1,125. At upriver sites, adult steelhead continue to move through the hydro system to reach their tributaries and spawning sites. The majority of these fish over-wintered in pools and will complete their trip to their spawning grounds in March through early May. Daily adult steelhead counts at Lower Granite Dam ranged from 15 to 24 adults per day last week. This year's Lower Granite steelhead count of 7,346 is about 84.7% of the 2012 count of 8,676 and 77.5% of the 10 year average count of 9,482. The 2013 Lower Granite Dam adult wild steelhead count of 3,176 is about 84.8% of the 2012 count of 3,745, while being about 1.03 times greater than the 10 year average count of 3,095. At Willamette Falls Dam, the 2013 count for steelhead was 7,500 as of May 6th. This year's steelhead count is about 69.8% of the 2012 count of 10,736 and about 76.1% of the 10 year average count of 9,860.

Hatchery Releases Last Two Weeks

Hatchery Release Summary

From: 4/26/2013 to 05/09/13

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Colville Tribe	Wells Hatchery	ST	SU	2013	9,189	04-13-13	04-27-13	Omak Creek	Okanogan River
Colville Tribe Total					**9,189**				
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2013	63,298	05-01-13	05-02-13	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2013	124,875	05-02-13	05-03-13	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2013	188,145	04-26-13	05-01-13	Squaw Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Oxbow-Oregon	SO	UN	2013	100,000	05-09-13	05-09-13	Redfish Lake Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Sawtooth Hatchery	SO	UN	2013	1,300	05-09-13	05-09-13	Redfish Lake Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Sawtooth Hatchery	SO	UN	2013	170,000	05-09-13	05-09-13	Redfish Lake Creek	Salmon River (ID)
Idaho Dept. of Fish and Game Total					**647,618**				
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2013	159,674	04-20-13	05-02-13	Wallowa Acclim Pond	Wallowa River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2013	320,000	04-11-13	05-08-13	Big Canyon Acclim.Pd (Grande Ronde)	Grande Ronde River
Oregon Dept. of Fish and Wildlife	Round Butte Hatchery	ST	SU	2013	300,000	05-01-13	05-01-13	Crooked River (OR)	Deschutes River
Oregon Dept. of Fish and Wildlife Total					**779,674**				
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2013	127,363	05-01-13	05-10-13	Salmon River (ID)	Salmon River (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2013	155,941	04-25-13	04-30-13	East Fk Salmon River	Salmon River (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2013	215,523	05-01-13	05-10-13	Yankee Fk (Salmon R)	Salmon River (ID)
U.S. Fish and Wildlife Service	Spring Creek NFH	CH0	FA	2013	4,801,111	05-02-13	05-02-13	Spring Creek Hatchery	L Col R (D/s McN Dam)
U.S. Fish and Wildlife Service	Winthrop NFH	ST	SU	2013	55,500	04-15-13	05-24-13	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	ST	SU	2013	59,300	04-15-13	05-24-13	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service Total					**5,414,738**				
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2013	25,000	04-30-13	04-30-13	E Fk Irrig Dist Sand Trap	Hood River
Warm Springs Tribe	Parkdale Acclim. Pond	ST	WI	2013	12,500	04-30-13	04-30-13	Parkdale Acclim Pond	Hood River
Warm Springs Tribe Total					**37,500**				
Washington Dept. of Fish and Wildlife	Chiwawa Hatchery	CH1	SP	2013	275,000	04-15-13	05-01-13	Chiwawa Hatchery	Wenatchee River
Washington Dept. of Fish and Wildlife	Chiwawa Hatchery	ST	SU	2013	223,000	04-25-13	05-05-13	Chiwawa Hatchery	Wenatchee River
Washington Dept. of Fish and Wildlife	COOP	CH0	FA	2013	175	05-01-13	05-31-13	Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	COOP	CH0	FA	2013	225	05-01-13	05-31-13	Above McNary Dam	Mid-Columbia River
Washington Dept. of Fish and Wildlife	COOP	CH0	FA	2013	4,500	05-01-13	05-31-13	Above McNary Dam	Mid-Columbia River
Washington Dept. of Fish and Wildlife	COOP	CH0	FA	2013	18,975	05-01-13	05-31-13	Yakama River	Yakima River
Washington Dept. of Fish and Wildlife	COOP	CH0	SU	2013	225	05-01-13	05-31-13	Methow River	Methow River
Washington Dept. of Fish and Wildlife	COOP	CH0	SU	2013	225	05-01-13	05-31-13	Similkameen Acclim Pd	Okanogan River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2013	627,978	04-16-13	05-08-13	Similkameen Acclim Pd	Okanogan River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	ST	SU	2013	24,000	04-25-13	06-20-13	Blackbird Island Acc Pond	Wenatchee River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2013	39,000	04-20-13	04-30-13	Baileysburg Bridge	Touchet River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2013	145,000	04-15-13	05-20-13	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2013	206,000	04-10-13	04-30-13	Cottonwood Acclim Pond	Grande Ronde River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2013	18,200	04-20-13	04-30-13	Twisp Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SU	2013	435,000	04-20-13	04-30-13	Carlton Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Methow Hatchery	ST	SU	2013	50,000	04-20-13	04-30-13	Twisp Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Methow Hatchery	ST	SU	2013	95,000	04-25-13	05-05-13	Methow Hatchery	Methow River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2013	3,000	05-01-13	05-10-13	Drano Lake	Little White Salmon River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2013	90,000	04-25-13	05-05-13	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2013	260,000	04-01-13	04-27-13	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2013	90,000	04-20-13	05-20-13	Okanogan River	Okanogan River
Washington Dept. of Fish and Wildlife Total					**2,605,503**				
Yakama Tribe	Cascade Hatchery	CO	UN	2013	130,722	04-22-13	06-15-13	Nason Wetlands	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2013	130,867	04-15-13	06-15-13	Icicle Creek	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2013	306,946	04-15-13	06-15-13	Icicle Creek	Wenatchee River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2013	249,305	03-15-13	05-15-13	Easton Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2013	255,745	03-15-13	05-15-13	Clark Flat Acclim Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2013	266,311	03-15-13	05-15-13	Jack Creek Acclim Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2013	102,975	04-15-13	07-01-13	Stiles Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2013	104,059	04-15-13	07-01-13	Holmes Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2013	237,043	04-15-13	07-01-13	Easton Pond	Yakima River
Yakama Tribe	Klickitat Hatchery	CO	NO	2013	1,080,000	05-01-13	05-01-13	Klickitat Hatchery	Klickitat River
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2013	300,000	04-27-13	04-27-13	Prosser Acclim Pond	Yakima River

Hatchery Releases Last Two Weeks, continued

Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2013	1,500,000	05-04-13	05-04-13	Prosser Acclim Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2013	124,425	04-15-13	07-01-13	Lost Creek Acclim Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2013	131,858	04-15-13	07-01-13	Stiles Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2013	322,100	04-01-13	07-01-13	Prosser Acclim Pond	Yakima River
Yakama Tribe	Willard Hatchery	CO	UN	2013	30,343	04-15-13	06-15-13	Icicle Creek	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2013	35,838	05-01-13	06-15-13	Methow River	Methow River
Yakama Tribe	Willard Hatchery	CO	UN	2013	40,957	04-22-13	06-15-13	Winthrop Hatchery	Methow River
Yakama Tribe	Willard Hatchery	CO	UN	2013	66,881	05-01-13	06-15-13	Biddle Pond	Methow River
Yakama Tribe	Willard Hatchery	CO	UN	2013	72,764	05-01-13	06-15-13	Twisp Acclim Pond	Methow River
Yakama Tribe	Willard Hatchery	CO	UN	2013	73,036	04-15-13	06-15-13	Icicle Creek	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2013	101,818	05-01-13	06-15-13	Wells Hatchery	Mid-Columbia River
Yakama Tribe	Willard Hatchery	CO	UN	2013	109,826	05-01-13	06-15-13	Wenatchee River	Wenatchee River
Yakama Tribe	Winthrop NFH	CO	UN	2013	253,485	04-15-13	06-15-13	Winthrop Hatchery	Methow River
Yakama Tribe Total					**6,027,304**				
Grand Total					**15,521,526**				

Hatchery Releases Next Two Weeks

Hatchery Release Summary

From: 5/10/2013 to 5/23/2013

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2013	500,000	05-23-13	05-23-13	Cpt John Acclim Pond	Snake River
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	FA	2013	500,000	05-10-13	05-10-13	Lapwai Creek	Clearwater River M F
Nez Perce Tribe Total					**1,000,000**				
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	CH0	FA	2013	1,000,000	05-20-13	05-24-13	Hells Canyon Dam	Snake River
Oregon Dept. of Fish and Wildlife Total					**1,000,000**				
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2013	127,363	05-01-13	05-10-13	Salmon River (ID)	Salmon River (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2013	215,523	05-01-13	05-10-13	Yankee Fk (Salmon R)	Salmon River (ID)
U.S. Fish and Wildlife Service	Winthrop NFH	ST	SU	2013	55,500	04-15-13	05-24-13	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	ST	SU	2013	59,300	04-15-13	05-24-13	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service Total					**457,686**				
Umatilla Tribe	Umatilla Hatchery	CH0	FA	2013	600,000	05-20-13	05-31-13	Umatilla River	Umatilla River
Umatilla Tribe Total					**600,000**				
Warm Springs Tribe	Parkdale Acclim. Pond	ST	WI	2013	12,500	05-14-13	05-14-13	Parkdale Acclim Pond	Hood River
Warm Springs Tribe Total					**12,500**				
Washington Dept. of Fish and Wildlife	COOP	CH0	FA	2013	175	05-01-13	05-31-13	Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	COOP	CH0	FA	2013	225	05-01-13	05-31-13	Above McNary Dam	Mid-Columbia River
Washington Dept. of Fish and Wildlife	COOP	CH0	FA	2013	4,500	05-01-13	05-31-13	Above McNary Dam	Mid-Columbia River
Washington Dept. of Fish and Wildlife	COOP	CH0	FA	2013	18,975	05-01-13	05-31-13	Yakama River	Yakima River
Washington Dept. of Fish and Wildlife	COOP	CH0	SU	2013	225	05-01-13	05-31-13	Methow River	Methow River
Washington Dept. of Fish and Wildlife	COOP	CH0	SU	2013	225	05-01-13	05-31-13	Similkameen Acclim Pd	Okanogan River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	ST	SU	2013	24,000	04-25-13	06-20-13	Blackbird Island Acc Pond	Wenatchee River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2013	145,000	04-15-13	05-20-13	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2013	3,000	05-01-13	05-10-13	Drano Lake	Little White Salmon River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH0	SU	2013	484,000	05-15-13	05-31-13	Wells Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2013	90,000	04-20-13	05-20-13	Okanogan River	Okanogan River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2013	140,000	05-15-13	05-25-13	Wells Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife Total					**910,325**				
Yakama Tribe	Cascade Hatchery	CO	UN	2013	65,362	05-13-13	06-15-13	Rolfings Acclim Pond	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2013	130,722	04-22-13	06-15-13	Nason Wetlands	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2013	130,867	04-15-13	06-15-13	Icicle Creek	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2013	306,946	04-15-13	06-15-13	Icicle Creek	Wenatchee River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2013	249,305	03-15-13	05-15-13	Easton Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2013	255,745	03-15-13	05-15-13	Clark Flat Acclim Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2013	266,311	03-15-13	05-15-13	Jack Creek Acclim Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2013	102,975	04-15-13	07-01-13	Stiles Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2013	104,059	04-15-13	07-01-13	Holmes Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2013	237,043	04-15-13	07-01-13	Easton Pond	Yakima River
Yakama Tribe	Marion Drain Hatchery	CH0	FA	2013	70,000	05-14-13	05-14-13	Prosser Acclim Pond	Yakima River
Yakama Tribe	Marion Drain Hatchery	CH0	FA	2013	102,000	05-18-13	05-18-13	Nelson Springs	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2013	124,425	04-15-13	07-01-13	Lost Creek Acclim Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2013	131,858	04-15-13	07-01-13	Stiles Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2013	322,100	04-01-13	07-01-13	Prosser Acclim Pond	Yakima River
Yakama Tribe	Willard Hatchery	CO	UN	2013	30,343	04-15-13	06-15-13	Icicle Creek	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2013	35,838	05-01-13	06-15-13	Methow River	Methow River
Yakama Tribe	Willard Hatchery	CO	UN	2013	40,957	04-22-13	06-15-13	Winthrop Hatchery	Methow River
Yakama Tribe	Willard Hatchery	CO	UN	2013	56,507	05-15-13	06-15-13	Coulter Creek	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2013	59,798	05-13-13	06-15-13	Rolfings Acclim Pond	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2013	66,881	05-01-13	06-15-13	Biddle Pond	Methow River
Yakama Tribe	Willard Hatchery	CO	UN	2013	72,764	05-01-13	06-15-13	Twisp Acclim Pond	Methow River
Yakama Tribe	Willard Hatchery	CO	UN	2013	73,036	04-15-13	06-15-13	Icicle Creek	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2013	101,818	05-01-13	06-15-13	Wells Hatchery	Mid-Columbia River
Yakama Tribe	Willard Hatchery	CO	UN	2013	109,826	05-01-13	06-15-13	Wenatchee River	Wenatchee River
Yakama Tribe	Winthrop NFH	CO	UN	2013	253,485	04-15-13	06-15-13	Winthrop Hatchery	Methow River
Yakama Tribe Total					**3,500,971**				
Grand Total					**7,481,482**				

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
04/26/2013	139.6	0.0	140.8	0.0	146.6	10.0	147.9	0.0	154.3	15.0	167.0	30.1	165.5	32.4
04/27/2013	117.3	0.0	119.1	0.0	132.3	10.0	135.4	0.0	145.3	15.3	157.1	24.0	157.4	28.1
04/28/2013	124.4	0.0	122.4	0.0	131.7	9.7	127.0	0.0	132.8	14.4	150.9	18.9	148.4	26.4
04/29/2013	136.0	0.0	137.5	0.0	145.8	9.5	138.6	0.0	145.3	16.1	147.8	18.9	145.8	26.1
04/30/2013	147.1	0.0	147.8	0.0	154.7	9.9	153.5	3.7	159.0	18.2	155.6	20.4	150.7	27.2
05/01/2013	143.2	0.0	147.9	0.0	155.4	10.0	159.5	6.0	168.4	14.4	172.6	33.3	165.5	33.6
05/02/2013	142.1	0.0	145.2	0.0	153.6	10.0	150.1	2.4	157.8	14.5	168.0	28.1	165.1	30.8
05/03/2013	140.4	0.0	136.9	0.0	149.9	10.0	150.0	0.2	155.5	13.9	161.1	21.6	158.7	29.6
05/04/2013	108.1	0.0	118.0	0.0	129.2	10.0	132.4	0.0	142.7	11.5	158.8	21.8	157.6	27.6
05/05/2013	119.3	0.0	117.7	0.0	130.8	9.3	128.2	0.0	136.0	13.3	147.1	19.4	148.8	26.3
05/06/2013	135.3	0.0	133.1	0.0	145.4	9.9	143.7	0.0	154.3	16.2	155.9	19.6	148.0	26.3
05/07/2013	138.0	0.0	143.5	0.0	159.9	14.1	157.6	6.5	168.0	18.0	170.9	32.7	165.4	31.2
05/08/2013	145.6	0.0	145.2	0.0	168.8	23.0	172.5	21.5	186.4	17.9	198.6	60.9	198.7	65.2
05/09/2013	163.3	0.0	157.4	15.8	184.5	20.8	179.8	21.1	192.0	18.2	199.4	71.4	197.4	77.3

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
04/26/2013	9.9	0.0	---	---	47.8	20.2	48.1	14.4	52.3	28.0	55.3	45.3
04/27/2013	9.9	0.0	---	---	52.6	20.2	52.4	15.8	54.6	28.0	52.7	42.1
04/28/2013	9.9	0.0	---	---	51.7	20.3	51.6	15.5	53.1	26.7	51.8	21.6
04/29/2013	9.8	0.0	---	---	61.2	20.3	62.6	18.8	65.2	26.0	64.9	19.5
04/30/2013	9.9	0.0	---	---	63.5	20.2	63.7	19.2	65.7	26.7	64.8	41.7
05/01/2013	9.8	0.0	---	---	61.2	20.2	61.7	18.5	64.7	29.9	66.0	47.9
05/02/2013	9.9	0.0	---	---	59.8	20.3	59.3	17.8	60.1	31.2	59.4	44.2
05/03/2013	9.9	0.0	---	---	53.4	20.3	51.8	15.5	53.4	29.9	53.2	42.8
05/04/2013	9.9	0.0	---	---	55.4	20.2	57.2	17.2	59.5	29.9	59.9	24.8
05/05/2013	9.9	0.0	---	---	54.3	20.2	53.1	16.0	56.0	28.9	54.8	16.4
05/06/2013	9.9	0.0	---	---	61.4	20.3	62.4	18.9	64.6	28.0	64.5	41.1
05/07/2013	9.9	0.0	---	---	67.1	20.2	68.5	20.6	68.9	26.1	68.3	51.3
05/08/2013	7.6	0.0	---	---	76.6	19.3	75.6	22.6	75.1	23.3	76.4	31.7
05/09/2013	7.6	0.0	---	---	93.2	18.4	91.3	27.6	93.9	23.4	95.3	30.4

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
04/26/2013	219.1	87.8	219.6	65.9	203.3	76.1	211.6	94.8	4.9	99.4
04/27/2013	226.9	90.9	222.0	66.4	206.6	76.2	223.7	92.8	19.4	99.1
04/28/2013	223.7	89.9	221.6	66.7	202.5	80.7	229.2	89.6	24.7	102.4
04/29/2013	220.9	88.7	217.2	69.0	203.6	81.2	219.4	96.1	19.1	91.9
04/30/2013	219.6	88.2	229.7	91.9	210.1	83.1	239.2	99.7	35.2	91.9
05/01/2013	234.0	94.0	244.3	93.8	227.5	91.0	251.7	99.5	55.2	84.6
05/02/2013	237.9	95.7	232.2	69.8	210.2	84.1	231.1	99.6	37.5	81.6
05/03/2013	243.0	97.6	244.2	78.0	227.9	90.4	241.7	99.5	39.8	90.0
05/04/2013	223.3	89.7	230.6	91.8	213.5	84.9	225.8	99.9	24.5	89.0
05/05/2013	220.8	88.6	211.9	80.9	195.8	78.6	231.6	98.6	30.9	89.7
05/06/2013	224.2	90.0	221.7	66.5	205.3	82.1	227.1	97.4	28.7	88.6
05/07/2013	234.5	94.2	233.3	73.5	222.7	89.0	242.6	96.0	44.9	89.3
05/08/2013	261.2	114.8	269.9	107.3	245.1	93.0	266.6	94.6	68.8	90.7
05/09/2013	286.2	139.3	269.9	103.5	255.8	98.5	274.6	97.0	76.0	89.1

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											
	04/30/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/07/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Little Goose Dam											
	04/27/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/02/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/06/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Lower Monumental Dam											
	04/28/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/01/13	Chinook + Steelhead	75	0	0	0.00%	0.00%	0	0	0	0
McNary Dam											
	04/28/13	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	05/02/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/06/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	04/27/13	Chinook + Steelhead	94	1	1	1.06%	0.00%	1	0	0	0
	04/30/13	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/08/13	Chinook + Steelhead	94	0	0	0.00%	0.00%	0	0	0	0
Rock Island Dam											
	04/30/13	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	05/02/13	Chinook + Steelhead	100	2	2	2.00%	0.00%	2	0	0	0
	05/07/13	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	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
4/26	---	---	---	0	---	---	---	0	105.7	106.0	106.3	24	103.4	103.7	103.9	24	104.3	104.6	104.7	24
4/27	---	---	---	0	---	---	---	0	106.0	106.3	106.6	24	104.1	104.7	105.2	24	104.6	104.9	105.2	24
4/28	---	---	---	0	---	---	---	0	105.9	106.3	106.5	24	103.7	104.4	104.8	24	104.8	105.1	105.2	24
4/29	---	---	---	0	---	---	---	0	106.3	106.6	106.8	24	104.4	104.6	104.8	24	104.7	105.0	105.3	24
4/30	---	---	---	0	---	---	---	0	105.3	105.5	105.6	24	102.9	103.1	103.3	24	103.8	104.0	104.2	24
5/1	---	---	---	0	---	---	---	0	104.4	104.6	104.8	24	102.1	102.4	102.5	24	102.6	102.7	102.8	24
5/2	---	---	---	0	---	---	---	0	105.3	106.1	106.8	24	102.8	103.3	103.6	24	103.4	103.9	104.1	24
5/3	---	---	---	0	---	---	---	0	106.3	106.6	106.8	24	103.7	104.0	104.2	24	104.6	105.0	105.3	24
5/4	---	---	---	0	---	---	---	0	106.7	107.1	107.6	24	103.7	104.1	104.3	24	105.4	106.3	106.7	24
5/5	---	---	---	0	---	---	---	0	107.8	108.4	109.4	24	104.9	105.9	106.4	24	106.5	107.2	107.6	24
5/6	---	---	---	0	---	---	---	0	109.7	110.7	111.8	24	106.0	106.8	107.3	24	107.3	108.0	108.6	24
5/7	---	---	---	0	---	---	---	0	110.0	110.6	112.9	24	107.0	107.6	108.1	24	107.9	108.6	109.0	24
5/8	---	---	---	0	---	---	---	0	109.8	110.0	110.4	24	106.8	107.4	107.9	24	108.3	108.7	109.2	24
5/9	---	---	---	0	---	---	---	0	110.2	110.9	111.7	23	106.7	106.9	107.1	23	108.2	108.5	108.7	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
4/26	104.4	104.8	105.4	24	104.3	104.6	104.9	22	106.8	107.2	107.6	22	106.7	107.2	107.8	24	107.1	107.6	110.1	24
4/27	105.3	105.6	106.1	24	104.8	105.0	105.6	20	107.1	107.4	107.7	20	107.4	107.6	107.8	24	107.3	107.4	107.5	24
4/28	104.9	105.2	105.7	24	104.8	105.2	105.6	22	107.1	107.5	107.8	22	106.8	107.1	107.3	24	106.7	107.0	107.3	24
4/29	104.8	105.3	106.0	24	104.4	104.8	105.2	19	106.5	106.8	107.3	19	106.7	106.9	107.3	24	106.7	106.9	107.3	24
4/30	103.5	104.0	104.7	24	102.8	103.0	103.6	19	105.2	105.5	106.2	19	105.0	105.3	106.1	24	105.8	106.9	112.5	24
5/1	102.1	102.4	103.1	24	102.4	102.6	102.8	23	104.8	105.2	105.7	23	103.8	104.1	104.4	24	106.7	109.2	112.1	24
5/2	102.9	103.4	103.7	24	103.0	103.5	103.7	20	105.4	106.0	106.3	20	104.9	105.9	106.3	24	106.3	107.3	109.0	24
5/3	104.2	104.5	104.7	24	104.4	104.9	105.4	23	106.6	107.2	107.8	23	106.1	106.7	107.1	24	106.2	106.9	108.3	24
5/4	105.0	105.7	106.8	24	105.3	105.8	106.2	21	107.6	108.3	108.8	21	106.6	107.3	107.7	24	106.4	107.0	107.4	24
5/5	106.3	106.6	107.1	24	106.8	107.4	108.3	17	108.5	109.2	109.8	17	107.9	108.6	109.0	24	107.7	108.3	108.8	24
5/6	107.0	107.3	107.6	24	107.5	108.0	108.8	21	109.4	110.1	110.7	21	108.9	109.4	109.7	24	108.6	109.0	109.5	24
5/7	107.8	108.1	108.6	24	108.0	108.4	108.7	22	110.5	111.3	113.6	22	109.3	109.7	110.1	24	110.8	112.9	114.2	24
5/8	108.1	108.6	109.1	24	108.0	108.3	108.8	23	112.2	114.0	115.3	23	109.2	109.6	109.9	23	114.9	116.2	117.7	23
5/9	109.6	110.8	111.1	23	108.0	108.3	108.4	21	111.1	112.3	113.1	21	111.3	112.1	112.7	23	116.0	118.1	118.9	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
4/26	107.2	108.0	108.5	24	109.5	110.6	111.7	24	109.0	109.5	109.6	24	110.6	111.2	111.5	24	110.2	110.9	111.9	24
4/27	106.5	106.8	107.0	24	109.2	109.5	110.5	24	108.9	109.1	109.5	24	110.2	110.4	110.6	24	110.3	110.6	111.0	24
4/28	106.4	106.6	106.7	24	109.2	109.9	110.8	24	108.7	108.8	109.0	24	109.8	110.1	110.2	24	109.9	110.3	110.5	24
4/29	105.7	106.0	106.6	24	108.7	109.6	111.3	24	107.7	108.4	108.8	24	108.9	109.3	109.7	24	108.8	110.0	110.8	24
4/30	104.6	105.0	105.2	24	107.8	108.4	109.6	24	105.7	106.2	106.6	24	107.8	108.2	109.0	24	106.4	106.7	106.8	24
5/1	103.9	104.3	104.9	24	106.2	106.6	107.4	24	---	---	---	0	---	---	---	0	---	---	---	0
5/2	105.0	105.6	105.8	24	107.3	107.8	108.6	24	---	---	---	0	---	---	---	0	---	---	---	0
5/3	105.6	106.2	106.5	24	107.6	108.6	109.1	24	---	---	---	0	---	---	---	0	---	---	---	0
5/4	106.1	106.7	107.0	24	108.3	109.2	109.5	24	---	---	---	0	---	---	---	0	---	---	---	0
5/5	107.1	107.8	108.1	24	109.3	110.2	110.6	24	---	---	---	0	---	---	---	0	---	---	---	0
5/6	107.9	108.6	108.9	24	110.7	111.4	112.1	24	---	---	---	0	---	---	---	0	---	---	---	0
5/7	108.3	108.9	109.4	24	111.1	111.8	112.5	24	---	---	---	0	---	---	---	0	---	---	---	0
5/8	109.9	110.8	111.1	23	112.2	112.7	113.4	23	---	---	---	0	---	---	---	0	---	---	---	0
5/9	110.3	112.1	113.2	23	112.6	114.0	115.3	23	---	---	---	0	---	---	---	0	---	---	---	0

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

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

	Priest R. Dnst				Pasco				Dworshak				Clrwtr-Peck				Anatone			
	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
4/26	112.5	112.6	112.8	24	---	---	---	0	95.6	96.0	96.3	24	98.9	99.9	100.7	24	102.6	104.0	105.2	24
4/27	112.5	112.7	112.8	24	---	---	---	0	95.6	95.9	96.2	24	98.7	99.2	99.4	24	102.3	103.0	103.6	23
4/28	112.1	112.5	112.7	24	---	---	---	0	96.0	96.3	96.6	24	99.3	100.1	100.6	24	102.5	103.5	104.5	24
4/29	111.4	112.3	112.8	24	---	---	---	0	96.3	96.6	97.3	24	99.8	100.2	100.6	24	102.4	103.1	104.2	22
4/30	109.6	109.8	110.0	24	---	---	---	0	95.3	95.6	95.8	24	98.9	99.3	99.8	24	101.4	101.9	102.4	24
5/1	---	---	---	0	---	---	---	0	94.5	94.8	95.1	24	98.9	99.7	100.4	24	102.3	103.5	104.5	24
5/2	---	---	---	0	---	---	---	0	94.8	95.2	95.5	24	99.3	100.3	100.9	24	103.3	104.6	105.6	24
5/3	---	---	---	0	---	---	---	0	95.5	95.8	96.1	24	99.4	99.9	100.4	24	103.4	104.4	105.4	23
5/4	---	---	---	0	---	---	---	0	96.0	96.4	96.6	24	99.6	100.5	101.2	24	103.2	104.3	105.3	24
5/5	---	---	---	0	---	---	---	0	96.6	97.0	97.2	24	100.2	101.2	101.8	24	103.5	104.8	105.9	24
5/6	---	---	---	0	---	---	---	0	97.0	97.3	97.7	24	100.5	101.5	102.2	24	103.6	104.9	106.0	24
5/7	---	---	---	0	---	---	---	0	96.7	97.0	97.5	24	100.7	101.6	102.4	24	103.6	104.7	105.7	24
5/8	---	---	---	0	---	---	---	0	96.4	96.7	97.1	24	101.3	102.3	102.9	24	103.7	104.8	105.6	24
5/9	---	---	---	0	---	---	---	0	96.0	96.4	96.8	23	101.9	103.0	103.9	23	104.3	105.3	106.1	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
4/26	96.8	97.9	98.7	24	103.1	103.3	103.4	24	112.4	112.8	113.9	24	112.2	112.6	113.1	24	112.7	113.0	113.4	24
4/27	96.0	96.6	97.0	24	103.1	103.3	103.5	24	112.1	112.4	112.7	24	114.0	114.9	115.6	24	112.6	113.0	113.5	24
4/28	95.7	96.6	97.1	24	103.5	103.8	104.7	24	112.3	112.6	113.6	24	113.8	114.2	114.6	24	112.8	113.1	113.5	24
4/29	96.0	96.2	96.4	24	104.0	104.4	104.7	24	111.2	111.9	112.6	24	112.2	112.9	113.6	24	111.4	111.8	112.3	24
4/30	96.5	97.1	97.7	24	102.3	102.9	103.4	24	110.9	111.2	111.6	24	109.9	110.3	110.7	24	110.7	111.3	115.0	24
5/1	97.1	98.5	99.2	24	100.7	100.9	101.2	24	110.3	110.8	111.7	24	107.9	108.3	108.8	24	110.2	110.4	110.8	24
5/2	98.4	99.9	100.5	24	101.0	101.4	101.6	24	111.0	111.4	111.8	24	108.7	109.5	110.2	24	110.9	111.1	111.4	24
5/3	98.8	99.4	99.9	24	101.3	101.5	101.7	24	111.1	111.3	111.7	24	110.5	110.8	111.4	24	111.7	112.2	112.6	24
5/4	98.6	100.0	100.9	24	103.2	104.3	106.1	24	111.3	111.9	112.5	24	114.8	116.8	118.2	24	112.5	113.3	114.2	24
5/5	99.1	100.2	101.0	24	106.0	106.4	106.8	24	112.1	112.9	113.7	24	116.4	116.9	118.8	24	113.2	113.7	114.4	24
5/6	99.2	100.5	101.0	24	106.1	106.3	106.5	24	112.0	112.6	113.4	24	116.8	117.3	117.8	24	112.7	113.0	113.5	24
5/7	100.3	101.5	102.2	24	105.4	105.7	105.8	24	111.2	111.7	112.1	24	116.2	117.0	117.9	24	112.2	112.5	113.0	24
5/8	100.8	102.1	103.0	24	104.4	104.7	105.0	24	111.0	111.7	112.0	24	115.3	115.6	116.0	24	111.7	112.0	112.2	24
5/9	101.6	102.5	103.2	23	103.8	104.0	104.2	23	109.7	110.0	110.4	23	115.1	115.4	115.9	23	114.0	115.3	116.7	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
4/26	111.8	111.9	112.0	24	118.0	118.3	118.6	24	117.9	118.2	118.4	24	115.0	115.5	115.9	24	---	---	---	0
4/27	112.5	112.8	113.1	24	118.6	118.8	119.2	24	118.6	118.9	119.1	24	114.3	115.2	116.2	24	---	---	---	0
4/28	113.0	113.2	113.4	24	117.8	118.0	118.4	24	117.3	117.4	117.7	24	113.4	114.3	116.2	24	---	---	---	0
4/29	112.5	113.1	113.6	24	117.8	118.0	118.2	24	115.1	115.9	116.6	24	112.7	113.6	114.6	24	---	---	---	0
4/30	110.3	110.6	111.3	24	117.6	118.1	118.7	24	112.2	112.6	113.2	24	114.7	115.1	115.4	24	---	---	---	0
5/1	108.6	109.0	109.6	24	119.1	120.1	120.7	24	110.9	111.2	111.4	24	114.8	115.5	115.8	24	---	---	---	0
5/2	109.6	110.3	110.8	24	119.8	120.5	120.9	24	112.9	113.9	114.7	24	115.0	116.0	116.9	24	---	---	---	0
5/3	112.0	112.7	114.2	24	119.5	119.9	120.6	24	116.1	117.2	118.5	24	114.6	115.5	116.4	24	---	---	---	0
5/4	113.8	114.7	115.4	24	119.5	120.1	120.3	24	118.5	119.2	119.8	24	115.5	116.7	117.3	24	---	---	---	0
5/5	114.7	115.2	115.9	24	119.4	119.7	120.0	24	119.6	120.1	120.8	24	115.9	117.4	118.2	24	---	---	---	0
5/6	115.4	115.9	116.5	24	119.8	120.4	120.7	24	118.8	119.2	119.8	24	115.7	116.4	116.7	24	---	---	---	0
5/7	115.3	115.5	115.7	24	117.6	120.2	121.1	24	118.4	118.8	119.5	24	116.1	116.5	116.7	24	---	---	---	0
5/8	115.2	115.3	115.7	24	114.4	114.6	115.6	24	118.9	119.0	119.1	24	116.8	117.2	117.6	24	---	---	---	0
5/9	114.8	115.2	115.7	23	115.2	115.9	117.2	23	118.8	119.0	119.2	23	117.2	117.9	118.5	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
4/26	112.2	112.4	112.9	24	114.7	115.2	115.6	24	109.8	110.4	110.6	24	113.5	113.9	114.3	24	110.6	111.0	111.3	24
4/27	112.3	112.7	113.1	24	114.7	115.0	115.3	24	111.1	111.7	111.8	24	114.1	114.5	115.0	24	111.3	111.4	111.6	24
4/28	110.7	110.9	111.2	24	114.1	114.3	114.8	24	111.1	111.2	111.5	24	114.0	114.4	115.2	24	110.8	111.1	111.2	24
4/29	108.6	109.4	110.4	24	113.7	113.9	114.2	24	109.9	110.5	111.1	24	114.4	115.0	115.9	24	109.6	110.5	111.3	24
4/30	106.7	106.9	107.4	24	113.5	113.7	113.8	24	107.5	107.9	108.5	24	115.2	116.1	117.2	24	107.7	108.6	109.0	24
5/1	105.7	106.3	107.1	24	113.2	113.4	113.7	24	105.5	105.8	106.1	24	115.8	117.1	117.9	24	109.6	110.7	111.3	24
5/2	108.0	109.0	109.7	24	113.5	114.0	115.5	24	106.3	106.7	107.4	24	113.2	113.7	114.4	24	110.7	111.1	111.3	24
5/3	110.4	111.3	111.9	24	114.2	114.6	116.0	24	106.9	107.3	107.7	24	114.5	115.3	117.7	24	109.8	110.2	110.5	24
5/4	112.2	112.5	112.7	24	114.1	114.6	115.0	24	108.4	109.2	109.8	24	116.1	117.8	118.3	24	110.8	111.5	112.2	24
5/5	112.2	112.9	114.6	24	114.5	115.0	115.5	24	111.5	112.4	112.8	24	114.7	115.0	115.6	24	112.8	113.3	113.9	24
5/6	113.0	113.8	114.9	24	114.9	115.1	115.3	24	113.5	114.2	114.6	24	114.2	114.8	115.3	24	113.7	114.1	114.3	24
5/7	113.8	114.2	114.5	24	114.6	114.8	115.2	24	114.1	114.3	114.6	24	114.5	115.1	115.7	24	112.6	113.1	114.0	24
5/8	113.3	113.7	114.2	24	114.7	115.3	116.4	24	112.9	113.2	113.3	24	117.2	118.0	118.5	24	112.0	113.0	113.7	24
5/9	112.8	113.5	113.9	23	116.6	116.8	117.3	23	113.3	113.9	114.5	23	117.0	118.0	118.3	23	113.0	113.8	114.4	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
4/26	115.0	115.2	115.4	24	114.1	114.5	114.8	24	116.6	117.1	117.6	24	115.7	117.0	117.8	24	118.1	118.4	118.5	24
4/27	115.2	115.6	116.1	24	113.2	113.5	113.8	24	115.9	116.4	116.9	24	115.1	115.9	116.7	24	117.9	118.3	118.4	24
4/28	115.4	115.6	115.8	24	111.8	112.2	112.6	24	114.7	115.0	115.3	24	113.4	113.8	114.2	24	116.8	116.9	117.1	24
4/29	114.7	115.0	115.2	24	110.4	110.9	111.8	24	114.3	114.7	115.2	24	111.5	112.3	112.8	24	117.9	118.5	118.6	24
4/30	113.1	113.7	114.0	24	108.3	108.6	109.0	24	113.4	113.8	114.1	24	110.8	111.3	111.9	24	118.1	118.2	118.4	24
5/1	115.5	116.5	116.8	24	109.3	110.0	111.1	24	113.3	113.6	114.5	24	110.8	112.0	112.7	24	118.0	118.1	118.2	24
5/2	116.7	117.2	117.5	24	112.9	114.1	115.5	24	115.2	115.9	116.0	24	111.1	112.7	113.6	24	118.5	118.5	118.8	24
5/3	116.1	116.4	116.6	24	117.1	118.0	118.4	24	117.4	118.1	118.6	24	115.5	117.5	118.5	24	118.8	119.0	121.5	24
5/4	116.4	117.1	117.4	24	116.5	116.9	117.4	24	117.4	117.6	117.8	24	116.6	117.3	118.1	24	118.8	118.9	119.0	24
5/5	117.5	118.2	118.5	24	115.9	116.3	116.6	24	117.2	117.4	117.7	24	116.0	116.9	117.5	24	118.8	118.9	119.0	24
5/6	118.1	118.6	119.1	24	116.9	117.5	118.0	24	117.5	118.1	118.5	24	116.1	117.8	118.8	24	118.7	118.8	118.9	24
5/7	117.4	117.6	117.8	24	114.4	115.0	116.3	24	116.0	116.7	117.1	24	116.0	117.0	117.9	24	118.4	118.5	118.6	24
5/8	116.7	117.2	117.5	24	111.3	111.7	112.4	24	113.4	113.9	114.8	24	113.1	113.7	114.7	24	118.0	118.1	118.3	24
5/9	117.8	118.1	118.3	23	111.4	111.9	112.3	23	113.1	113.5	114.0	23	112.1	113.0	114.2	23	118.1	118.3	118.4	23

Two-Week Summary of Passage Indices

Source: Fish Passage Center Updated: 5/10/2013 12:23

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)
04/26/2013	*	128	81	40	16	17,207	---	---	334	---	22,557	17,070
04/27/2013	*	91	68	29	25	25,577	---	---	411	31,303	25,877	19,498
04/28/2013	*	584	172	38	17	21,184	27,490	234	448	---	32,480	31,207
04/29/2013	*	585	177	56	21	48,305	---	---	318	48,110	48,336	34,397
04/30/2013	*	4,952	286	320	33	181,060	---	---	199	---	47,385	53,398
05/01/2013	*	740	397	548	96	66,985	---	331	249	62,432	45,322	64,157
05/02/2013	*	330	99	297	123	98,524	---	---	252	---	47,211	58,520
05/03/2013	*	288	93	105	195	135,840	27,948	---	253	90,098	47,107	54,043
05/04/2013	*	97	90	116	78	56,298	33,295	234	360	---	62,866	32,322
05/05/2013	*	108	---	117	101	78,103	100,545	---	473	82,471	59,139	32,215
05/06/2013	*	35	---	108	158	33,754	85,401	---	429	---	45,247	30,597
05/07/2013	*	158	---	95	72	111,807	63,092	10,238	1,017	224,281	39,943	44,318
05/08/2013	*	39	---	229	65	217,033	63,689	55,686	1,043	---	43,528	43,302
05/09/2013		---	---	562	165	199,790	70,748	40,233	907	382,135	65,469	56,171
05/10/2013		---	---	---	---	---	---	---	---	---	---	---
Total:		**8,135**	**1,463**	**2,660**	**1,165**	**1,291,467**	**472,208**	**106,956**	**6,693**	**920,830**	**632,467**	**571,215**
# Days:		**13**	**9**	**14**	**14**	**14**	**8**	**6**	**14**	**7**	**14**	**14**
Average:		**626**	**163**	**190**	**83**	**92,248**	**59,026**	**17,826**	**478**	**131,547**	**45,176**	**40,801**
YTD		**50,632**	**54,615**	**24,495**	**1,762**	**1,718,090**	**511,729**	**108,181**	**7,952**	**1,017,997**	**797,541**	**710,414**

				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)
04/26/2013	*	0	0	3	0	0	---	---	8	---	0	1,948
04/27/2013	*	0	0	5	0	0	---	---	6	339	0	1,888
04/28/2013	*	0	0	1	1	0	288	0	3	---	143	3,705
04/29/2013	*	0	0	2	0	328	---	---	4	170	143	4,531
04/30/2013	*	0	0	2	0	0	---	---	31	---	153	6,089
05/01/2013	*	0	3	0	0	0	---	0	34	0	0	7,717
05/02/2013	*	0	0	1	0	151	---	---	19	---	0	5,338
05/03/2013	*	0	0	5	0	0	0	---	1	0	0	3,824
05/04/2013	*	0	0	39	0	0	0	0	14	---	0	215,829
05/05/2013	*	0	---	4	0	0	1	---	4	679	0	251,174
05/06/2013	*	0	---	8	2	160	0	---	15	---	0	83,663
05/07/2013	*	0	---	6	1	294	0	0	41	1,017	0	39,715
05/08/2013	*	0	---	3	3	0	0	0	30	---	0	20,990
05/09/2013		---	---	4	20	0	0	0	36	1,507	0	20,257
05/10/2013		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**3**	**83**	**27**	**933**	**289**	**0**	**246**	**3,712**	**439**	**666,668**
# Days:		**13**	**9**	**14**	**14**	**14**	**8**	**6**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**6**	**2**	**67**	**36**	**0**	**18**	**530**	**31**	**47,619**
YTD		**2**	**19**	**112**	**132**	**2,929**	**289**	**18**	**678**	**9,246**	**585**	**1,911,821**

Two-Week Summary of Passage Indices

COMBINED COHO

Date		WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
04/26/2013	*	0	0	0	1	0	---	---	13	---	501	3,427
04/27/2013	*	0	0	0	0	0	---	---	17	339	215	3,643
04/28/2013	*	0	0	0	0	0	288	0	18	---	286	3,044
04/29/2013	*	0	0	0	1	0	---	---	24	510	717	4,167
04/30/2013	*	0	0	0	0	511	---	---	6	---	917	7,494
05/01/2013	*	0	0	0	2	447	---	0	23	1,356	1,338	12,304
05/02/2013	*	0	0	0	6	1,660	---	---	7	---	2,658	14,039
05/03/2013	*	0	0	0	4	305	574	---	10	1,018	1,230	14,772
05/04/2013	*	0	0	0	2	643	287	0	24	---	3,045	8,863
05/05/2013	*	0	---	0	2	955	1,724	---	33	679	1,908	5,034
05/06/2013	*	0	---	0	7	160	0	---	45	---	1,110	5,737
05/07/2013	*	0	---	0	1	1,177	288	0	117	339	1,288	16,692
05/08/2013	*	0	---	0	6	1,270	287	148	272	---	1,527	15,472
05/09/2013		---	---	0	7	1,809	1,432	0	415	2,637	3,571	18,145
05/10/2013		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**39**	**8,937**	**4,880**	**148**	**1,024**	**6,878**	**20,311**	**132,833**
# Days:		**13**	**9**	**14**	**14**	**14**	**8**	**6**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**3**	**638**	**610**	**25**	**73**	**983**	**1,451**	**9,488**
YTD		**0**	**0**	**0**	**48**	**9,246**	**4,880**	**148**	**1,129**	**12,389**	**26,095**	**297,917**

COMBINED STEELHEAD

Date		WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR†† (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
04/26/2013	*	37	176	28	583	33,339	---	---	41	---	11,099	10,685
04/27/2013	*	28	281	20	33	24,620	---	---	33	15,597	11,039	11,337
04/28/2013	*	114	700	10	523	15,622	13,537	188	27	---	17,742	14,353
04/29/2013	*	193	1,902	21	461	39,284	---	---	54	29,393	20,941	20,544
04/30/2013	*	352	3,174	94	405	44,006	---	---	52	---	19,565	19,322
05/01/2013	*	349	2,675	141	716	34,630	---	98	60	51,538	18,731	29,043
05/02/2013	*	159	1,310	58	434	59,446	---	---	66	---	37,988	10,875
05/03/2013	*	162	568	32	193	43,347	41,975	---	67	66,537	31,337	10,948
05/04/2013	*	162	864	17	90	24,128	34,730	215	73	---	35,892	11,991
05/05/2013	*	202	---	15	320	33,996	91,639	---	93	19,685	30,285	13,087
05/06/2013	*	281	---	35	689	41,112	89,129	---	115	---	28,169	10,996
05/07/2013	*	110	---	37	707	49,872	68,561	20,650	177	20,707	18,653	17,410
05/08/2013	*	66	---	75	148	41,140	80,615	49,622	215	---	20,313	13,605
05/09/2013		---	---	315	329	42,646	62,130	30,832	354	38,443	15,475	17,132
05/10/2013		---	---	---	---	---	---	---	---	---	---	---
Total:		**2,215**	**11,650**	**898**	**5,631**	**527,188**	**482,316**	**101,605**	**1,427**	**241,900**	**317,229**	**211,328**
# Days:		**13**	**9**	**14**	**14**	**14**	**8**	**6**	**14**	**7**	**14**	**14**
Average:		**170**	**1,294**	**64**	**402**	**37,656**	**60,290**	**16,934**	**102**	**34,557**	**22,659**	**15,095**
YTD		**3,789**	**21,876**	**2,343**	**7,835**	**1,036,134**	**563,779**	**102,995**	**1,791**	**305,307**	**364,040**	**234,467**

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)
04/26/2013	*	0	0	0	0	0	---	---	199	---	501	135
04/27/2013	*	0	0	0	0	0	---	---	261	3,725	430	202
04/28/2013	*	0	0	0	0	0	0	0	68	---	859	0
04/29/2013	*	0	0	0	0	0	---	---	148	28,146	1,434	0
04/30/2013	*	0	0	0	0	0	---	---	86	---	1,223	234
05/01/2013	*	0	0	0	0	0	---	0	225	18,681	2,007	1,052
05/02/2013	*	0	0	0	0	0	---	---	52	---	2,345	394
05/03/2013	*	0	0	0	0	0	0	---	48	23,079	2,252	1,043
05/04/2013	*	0	0	0	0	322	0	0	29	---	3,481	521
05/05/2013	*	0	---	0	0	0	0	---	39	25,111	3,100	503
05/06/2013	*	0	---	0	0	0	0	---	88	---	4,880	1,434
05/07/2013	*	1	---	0	0	0	0	0	102	14,922	2,720	2,158
05/08/2013	*	0	---	0	0	0	0	0	100	---	6,546	5,442
05/09/2013		---	---	0	0	258	0	0	94	15,830	4,523	2,402
05/10/2013		---	---	---	---	---	---	---	---	---	---	---
Total:		**1**	**0**	**0**	**0**	**580**	**0**	**0**	**1,539**	**129,494**	**36,301**	**15,520**
# Days:		**13**	**9**	**14**	**14**	**14**	**8**	**6**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**41**	**0**	**0**	**110**	**18,499**	**2,593**	**1,109**
YTD		**1**	**0**	**0**	**0**	**644**	**0**	**3**	**2,289**	**162,076**	**39,731**	**18,359**

				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)
04/26/2013	*	0	0	0	0	0	---	---	2	---	800	0
04/27/2013	*	0	0	0	0	0	---	---	0	1,000	1,150	0
04/28/2013	*	0	0	0	0	0	0	1	1	---	300	33
04/29/2013	*	0	0	0	0	0	---	---	0	200	3,200	0
04/30/2013	*	0	1	0	0	0	---	---	1	---	1,700	0
05/01/2013	*	0	0	0	0	0	---	3	2	800	300	4
05/02/2013	*	0	0	0	0	0	---	---	0	---	200	67
05/03/2013	*	0	0	0	0	0	0	---	0	600	286	0
05/04/2013	*	0	0	0	0	0	0	0	1	---	286	0
05/05/2013	*	0	---	0	0	50	0	---	0	200	286	0
05/06/2013	*	0	---	0	0	0	0	---	0	---	286	0
05/07/2013	*	0	---	0	0	0	0	0	0	0	0	0
05/08/2013	*	0	---	0	0	0	0	0	1	---	143	0
05/09/2013		---	---	0	0	0	0	0	1	200	143	0
05/10/2013		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**1**	**0**	**0**	**50**	**0**	**4**	**9**	**3,000**	**9,080**	**104**
# Days:		**13**	**9**	**14**	**14**	**14**	**8**	**6**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**4**	**0**	**1**	**1**	**429**	**649**	**7**
YTD		**0**	**8**	**0**	**0**	**742**	**613**	**60**	**40**	**7,610**	**30,592**	**2,712**

Two-Week Summary of Passage Indices

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

Smolt indices, clipped & unclipped or combined, are presented in the following order: yearling chinook (chinook 1's,) subyearling chinook (chinook 0's), steelhead, coho, sockeye, and lamprey juveniles. Two classes of fish counts are shown in these tables:
Two classes of fish counts are shown in these tables:
Collection counts (Coll), which account for sample rates but are not adjusted for flow;
Passage indices (INDEX), which are collection counts divided by the proportion of water passing through the sampled powerhouse.
Passage indices are not population estimates, but are used to adjust collection counts for daily fluctuations in the site's or project's operations.
The classes of counts presented in the report are defined below for each site. Most samples occur over a 24-hr period that spans two calendar days. In this report, the date shown corresponds with the sample end date.
Combined lamprey juvenile collection counts are provided for all sites. Combined lamprey juveniles is a combination of pacific lamprey ammocoetes, brook lamprey ammocoetes, unknown lamprey ammocoetes, pacific lamprey macropthalmia, and unidentified lamprey species.
†† Passage index for yearling Chinook and steelhead at LGR may be inflated in 2013 due to possible resampling of PIT-tagged research fish
† Caution should be used with interpreting lamprey juvenile collection counts at LGR because of the possibility that lamprey may escape the sample tank before being sampled

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

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

Two Week Transportation Summary

Source: Fish Passage Center Updated: 5/10/13 12:13 PM

04/26/13 TO 05/10/13

		Species						
Site	Data	**CH0**	**CH1**	CO	ST	SO	LU	**Grand Total**
LGR	Sum of NumberCollected	600	879,513	6,150	345,537	400		1,232,200
	Sum of NumberBarged	591	857,972	6,150	316,486	399		1,181,598
	Sum of NumberBypassed	8	20,994	0	28,983	0		49,985
	Sum of Numbertrucked	0	0	0	0	0		0
	Sum of SampleMorts	0	48	0	7	0		55
	Sum of FacilityMorts	1	470	0	29	1		501
	Sum of ResearchMorts	0	29	0	32	0		61
	Sum of TotalProjectMorts	1	547	0	68	1		617
LGS	Sum of NumberCollected	201	328,852	3,400	335,900			668,353
	Sum of NumberBarged	0	309,680	3,200	326,483			639,363
	Sum of NumberBypassed	200	19,099	200	9,405			28,904
	Sum of Numbertrucked	0	0	0	0			0
	Sum of SampleMorts	0	0	0	1			1
	Sum of FacilityMorts	1	73	0	11			85
	Sum of ResearchMorts	0	0	0	0			0
	Sum of TotalProjectMorts	1	73	0	12			86
LMN	Sum of NumberCollected		73,059	100	67,998		1	141,158
	Sum of NumberBarged		72,514	100	67,657		0	140,271
	Sum of NumberBypassed		458	0	298		1	757
	Sum of Numbertrucked		0	0	0		0	0
	Sum of SampleMorts		2	0	3		0	5
	Sum of FacilityMorts		85	0	40		0	125
	Sum of ResearchMorts		0	0	0		0	0
	Sum of TotalProjectMorts		87	0	43		0	130
MCN	Sum of NumberCollected	2,100	520,583	3,901	140,402	75,432		742,418
	Sum of NumberBarged	0	0	0	0	0		0
	Sum of NumberBypassed	2,100	520,405	3,900	140,373	75,392		742,170
	Sum of Numbertrucked	0	0	0	0	0		0
	Sum of SampleMorts	0	16	0	1	7		24
	Sum of FacilityMorts	0	162	1	28	33		224
	Sum of ResearchMorts	0	0	0	0	0		0
	Sum of TotalProjectMorts	0	178	1	29	40		248
Total Sum of NumberCollected		2,901	1,802,007	13,551	889,837	75,832	1	2,784,129
Total Sum of NumberBarged		591	1,240,166	9,450	710,626	399	0	1,961,232
Total Sum of NumberBypassed		2,308	560,956	4,100	179,059	75,392	1	821,816
Total Sum of Numbertrucked		0	0	0	0	0	0	0
Total Sum of SampleMorts		0	66	0	12	7	0	85
Total Sum of FacilityMorts		2	790	1	108	34	0	935
Total Sum of ResearchMorts		0	29	0	32	0	0	61
Total Sum of TotalProjectMorts		2	885	1	152	41	0	1,081

YTD Transportation Summary

Source: Fish Passage Center Updated: 5/10/13 12:13 PM

TO: 05/10/13

		Species						
Site	Data	**CH0**	**CH1**	CO	SO	ST	LU	**Grand Total**
LGR	Sum of NumberCollected	1,935	1,155,566	6,360	450	655,409		1,819,720
	Sum of NumberBarged	591	857,972	6,150	399	316,486		1,181,598
	Sum of NumberBypassed	1,339	296,963	210	50	338,844		637,406
	Sum of NumberTrucked	0	0	0	0	0		0
	Sum of SampleMorts	4	117	0	0	15		136
	Sum of FacilityMorts	1	486	0	1	30		518
	Sum of ResearchMorts	0	30	0	0	33		63
	Sum of TotalProjectMorts	5	633	0	1	78		717
LGS	Sum of NumberCollected	201	356,455	3,400		392,698		752,754
	Sum of NumberBarged	0	309,680	3,200		326,483		639,363
	Sum of NumberBypassed	200	46,698	200		66,201		113,299
	Sum of NumberTrucked	0	0	0		0		0
	Sum of SampleMorts	0	3	0		3		6
	Sum of FacilityMorts	1	74	0		11		86
	Sum of ResearchMorts	0	0	0		0		0
	Sum of TotalProjectMorts	1	77	0		14		92
LMN	Sum of NumberCollected	8	73,601	100	2	68,561	1	142,273
	Sum of NumberBarged	0	72,514	100	0	67,657	0	140,271
	Sum of NumberBypassed	8	1,000	0	2	860	13	1,883
	Sum of NumberTrucked	0	0	0	0	0	0	0
	Sum of SampleMorts	0	2	0	0	4	0	6
	Sum of FacilityMorts	0	85	0	0	40	0	125
	Sum of ResearchMorts	0	0	0	0	0	0	0
	Sum of TotalProjectMorts	0	87	0	0	44	0	131
MCN	Sum of NumberCollected	5,170	574,557	6,931	94,009	176,811		857,478
	Sum of NumberBarged	0	0	0	0	0		0
	Sum of NumberBypassed	5,168	574,315	6,930	93,960	176,771		857,144
	Sum of NumberTrucked	0	0	0	0	0		0
	Sum of SampleMorts	2	24	0	8	4		38
	Sum of FacilityMorts	0	218	1	41	36		296
	Sum of ResearchMorts	0	0	0	0	0		0
	Sum of TotalProjectMorts	2	242	1	49	40		334
Total Sum of NumberCollected		7,314	2,160,179	16,791	94,461	1,293,479	1	3,572,225
Total Sum of NumberBarged		591	1,240,166	9,450	399	710,626	0	1,961,232
Total Sum of NumberBypassed		6,715	918,976	7,340	94,012	582,676	13	1,609,732
Total Sum of NumberTrucked		0	0	0	0	0	0	0
Total Sum of SampleMorts		6	146	0	8	26	0	186
Total Sum of FacilityMorts		2	863	1	42	117	0	1,025
Total Sum of ResearchMorts		0	30	0	0	33	0	63
Total Sum of TotalProjectMorts		8	1,039	1	50	176	0	1,274

Cumulative Adult Passage at Mainstem Dams Through: 05/10

DAM	ENDDATE	Spring Chinook 2013 Adult	Spring Chinook 2013 Jack	Spring Chinook 2012 Adult	Spring Chinook 2012 Jack	Spring Chinook 10-Yr Avg. Adult	Spring Chinook 10-Yr Avg. Jack	Summer Chinook 2013 Adult	Summer Chinook 2013 Jack	Summer Chinook 2012 Adult	Summer Chinook 2012 Jack	Summer Chinook 10-Yr Avg. Adult	Summer Chinook 10-Yr Avg. Jack	Fall Chinook 2013 Adult	Fall Chinook 2013 Jack	Fall Chinook 2012 Adult	Fall Chinook 2012 Jack	Fall Chinook 10-Yr Avg. Adult	Fall Chinook 10-Yr Avg. Jack
BON	**05/09**	**60373**	**18032**	**81863**	**1747**	**97521**	**5304**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TDA	**05/09**	**43469**	**13181**	**26283**	**903**	**62019**	**2977**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
JDA	**05/09**	**33353**	**8750**	**17366**	**707**	**48402**	**2318**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
MCN	**05/08**	**20339**	**2541**	**7954**	**184**	**34422**	**1085**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IHR	**05/09**	**17548**	**2536**	**4933**	**108**	**23998**	**677**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
LMN	**05/09**	**12555**	**1348**	**3642**	**112**	**19192**	**400**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
LGS	**05/09**	**9033**	**845**	**1836**	**76**	**14454**	**294**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
LGR	**05/09**	**7000**	**577**	**1326**	**59**	**12921**	**203**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PRD	**05/08**	**1656**	**25**	**416**	**3**	**4367**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
WAN	**05/08**	**1328**	**30**	**234**	**0**	**2401**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
RIS	**05/04**	**103**	**1**	**20**	**0**	**1934**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
RRH	**05/04**	**32**	**0**	**4**	**0**	**384**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
WEL	**05/08**	**21**	**0**	**2**	**1**	**205**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
WFA	**05/06**	**10853**	**394**	**2133**	**35**	**15024**	**145**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

DAM	ENDDATE	Coho 2013 Adult	Coho 2013 Jack	Coho 2012 Adult	Coho 2012 Jack	Coho 10-Yr Avg. Adult	Coho 10-Yr Avg. Jack	Sockeye 2013	Sockeye 2012	Sockeye 10-Yr Avg.	Steelhead 2013	Steelhead 2012	Steelhead 10-Yr Avg.	Steelhead Wild 2013	Steelhead Wild 2012	Steelhead 10-Yr Avg.	Lamprey 2013	Lamprey 2012	Lamprey 10-Yr Avg.
BON	**05/09**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2810**	**4501**	**4347**	**831**	**1410**	**1125**	**1**	**43**	**18**
TDA	**05/09**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**705**	**1618**	**2565**	**330**	**908**	**895**	**0**	**0**	**0**
JDA	**05/09**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**813**	**1727**	**6133**	**445**	**1179**	**1941**	**5**	**2**	**10**
MCN	**05/08**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1350**	**4610**	**6117**	**673**	**2177**	**2054**	**21**	**3**	**0**
IHR	**05/09**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3779**	**2218**	**5188**	**1498**	**1035**	**1497**	**8**	**0**	**0**
LMN	**05/09**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2412**	**3427**	**9626**	**1361**	**1832**	**2953**	**0**	**1**	**0**
LGS	**05/09**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2146**	**3722**	**9427**	**1142**	**2163**	**2992**	**1**	**1**	**0**
LGR	**05/09**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7346**	**8676**	**9482**	**3176**	**3745**	**3095**	**1**	**0**	**0**
PRD	**05/08**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**36**	**75**	**25**	**0**	**0**	**0**	**0**	**0**	**0**
WAN	**05/08**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**54**	**117**	**89**	**0**	**0**	**0**	**0**	**0**	**0**
RIS	**05/04**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**52**	**113**	**61**	**34**	**76**	**36**	**0**	**0**	**0**
RRH	**05/04**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**103**	**592**	**263**	**83**	**501**	**197**	**0**	**0**	**0**
WEL	**05/08**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29**	**52**	**29**	**25**	**38**	**18**	**0**	**0**	**0**
WFA	**05/06**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7500**	**10736**	**9860**	**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.

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