Fish Passage Center

Weekly Report #10 - 16

July 2, 2010

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 156% and 242% of average at individual sub-basins over June. Precipitation above The Dalles has been 179% of average over June. Over the 2010 water year, precipitation has ranged between 88% and 104% of average.

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

Location	Water Year 2010 June 1-28		Water Year 2010 October 1, 2009 to June 28, 2010	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	3.47	156	18.24	90
Snake River Above Ice Harbor	2.65	194	14.83	99
Columbia Above The Dalles	3.00	179	18.72	96
Kootenai	3.19	139	18.28	88
Clark Fork	3.29	183	13.09	93
Flathead	4.14	168	19.19	103
Pend Oreille/ Spokane	4.44	217	25.65	95
Central Washington	1.31	220	8.20	104
Snake River Plain	1.46	163	9.16	96
Salmon/Boise/ Payette	2.99	218	17.55	100
Clearwater	5.15	222	25.78	97
SW Washington Cascades/Cowlitz	4.82	174	60.29	92
Willamette Valley	5.09	242	53.13	95

Table 2 displays the June Final and June Mid Month runoff volume forecasts for multiple reservoirs. The June Mid Month Runoff Volume Forecasts remained similar to the June Final Forecasts at Upper Columbia locations; however increased between 10-17% relative to the June Final forecasts at Snake River locations. The current forecast at The Dalles between January and July is 80900 Kaf (75% of average).

Table 2. June Final and June Mid Month Runoff Volume Forecasts for various reservoirs within the Columbia and Snake River Basins.

Location	June Final		June Mid Month	
	% Average (1971 -2000)	Probable Runoff Volume (Kaf)	% Average (1971 -2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	69	74000	75	80900
Grand Coulee (Jan-July)	74	46400	76	47800
Libby Res. Inflow, MT (Apr-Aug)	71	4420	69	4310
Hungry Horse Res. Inflow, MT (Jan-July)	75	1660	76	1680
Lower Granite Res. Inflow (Apr- July)	68	14600	85	18300
Brownlee Res. Inflow (Apr-July)	58	3670	74	4700
Dworshak Res. Inflow (Apr-July)	63	1670	73	1920

* Denotes COE Forecast

The Spring Biological Opinion flow period began on April 3rd and ended on June 20th in the lower Snake River (Lower Granite). According to the April Final Water Supply Forecast, the spring flow objective this spring was 85 Kcfs at Lower Granite, flows at Lower Granite Dam averaged 78.1 Kcfs from April 3 to June 20.

The Summer Biological Opinion flow period began on June 21 in the lower Snake River (Lower Granite). According to the June Final Water Supply Forecast, the summer flow objective this summer is 50 Kcfs at Lower Granite, flows at Lower Granite Dam have averaged 93.0 Kcfs from June 21-30.

The Biological Opinion flow period began on April 10th and ended on June 30th in the mid and lower Columbia River (Priest Rapids and McNary Dams). According to the April Final Water Supply Forecast, the flow objective this spring was 220 Kcfs at McNary and 135 Kcfs at Priest Rapids. Flows from April 10 to June 30 averaged 225.7 Kcfs at McNary Dam and 137.7 Kcfs at Priest Rapids Dam. Over the last week, flows have averaged 318.3 Kcfs at McNary Dam and 229.6 Kcfs at Priest Rapids Dam.

Grand Coulee Reservoir is at 1286.7 feet (6-30-10) and drafted 2.6 feet over the last week. Outflows at Grand Coulee have ranged between 175.4 and 189.7 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2431.5 feet (6-30-10) and has refilled 3.5 last week. The sturgeon pulse continues at Libby Dam, outflows have been decreased to 14 Kcfs. Inflows to Libby have ranged between 29.9 Kcfs to 36.5 Kcfs over the last week.

Hungry Horse is currently at an elevation of 3559.7 feet (6-30-10) and has refilled 1.5 feet last week. Outflows at Hungry Horse have been 5.2-8.0 Kcfs. Inflows to Hungry Horse Dam have ranged between 9.4 Kcfs to 12.4 Kcfs over the last week.

Dworshak is currently at an elevation of 1599.6 feet (6-30-10) and has drafted approximately 0.4 feet last week. Outflows from Dworshak have ranged between 6.6-9.4 Kcfs last week. Inflows to Dworshak have ranged between 5.7 to 9.7 Kcfs over the last week.

The Brownlee Reservoir was at an elevation of 2075.2 feet on June 30, 2010 drafting 0.4 feet last week. Over the last week, outflows at Brownlee have ranged between 14.8-24.1 Kcfs. Inflows to Brownlee have ranged between 15.5 Kcfs and 21.8 Kcfs over the last week.

Spill:

The 2010 planned spring spill program at the lower Snake River Projects began on April 3 at 0001 hours and ended on June 20th at midnight. On June 21st the Snake projects transitioned to the summer spill program. The following table shows the planned operations for summer 2010.

Project	Day/Night Spill
Lower Granite	18Kcfs/18Kcfs
Little Goose	30%/30%
Lower Monumental	17Kcfs/17Kcfs
Ice Harbor	**June 21-July 13**: 30%/30% vs. 45 Kcfs/Gas Cap **July 13-August 31**: 45 Kcfs/Gas Cap (approximate Gas Cap range = 75-95 Kcfs)

As flows receded over the past week, spill levels decreased. Spill occurred as both planned spill and, in some instances, unplanned (in excess of hydraulic or generation capacity) spill. At Dworshak, the reservoir is nearly full and has continued to spill some water. At Lower Granite Dam the project is operating with limited hydraulic capacity due to Unit 3 being out of service. Consequently, on some days spill at Lower Granite Dam was in excess of the 18 Kcfs summer spill level over the past week. Daily average spill ranged from 19.1 Kcfs to 30.0 Kcfs. Spill at Little Goose Dam was managed to the 30% level this week. Spill at Lower Monumental Dam was managed to the summer level of 17 Kcfs this week. The Ice Harbor simulated test of 30% spill versus 45 Kcfs during daytime hours and gas cap spill during nighttime hours began on April 29 and continues through the summer until July 13th. Spill at Ice Harbor ranged from a daily average of 28.5 Kcfs to 62.8 Kcfs this week.

The 2010 spill program at the lower Columbia River projects began at 0001 hours on April 10th and continues through June 30th. Summer spill programs at McNary and Bonneville dams were initiated on June 21st and at John Day and The Dalles dams on July 1st. The following table shows the planned operations for summer 2010.

Project	Day/Night Spill
McNary	50%/50%
John Day	**Testing (July 1-July 22):** 30%/30% vs. 40%/40% **Post-Testing (July 23-August 31):** 30%/30%
The Dalles	40%/40%
Bonneville	**Testing (June 16-July 20):** 85 Kcfs/121 Kcfs vs. 95 Kcfs/95 Kcfs **Post-Testing (July 21-August 31):** 75 Kcfs/Gas Cap

The planned spill levels of 50% of instantaneous flows were often not met at McNary Dam this week. Spill ranged from 47.6 to 50.2% of average daily flow. This is mostly due to high TDG in the McNary tailrace, which exceeded the 120% waiver from June 25th to June 29th. At John Day Dam the testing of 30% spill versus 40% spill occurred in two-day blocks. The objectives of the study were met on both the 30% and 40% spill days. The planned spill levels of 40% were met at The Dalles over the past week. Due to continued high flows, spill at Bonneville Dam exceeded the planned spill test levels this week. The spill test conditions cannot be implemented until river flows drop below 300 Kcfs. Therefore, spill this week continued to follow that outlined by the System Operational Request (SOR) submitted by the fishery managers on June 16, 2010. The SOR calls for a reduction of flow through the Bonneville Second Powerhouse, to the low to mid range of peak efficiency, and spill of any water above that operating range. This operation was originally requested because of high descaling and mortality rates.

Total dissolved gas levels have been below the State's water quality waiver levels throughout the lower Snake hydrosystem, with the exception of two days at the Ice Harbor Dam forebay. There were some elevated TDG levels in the Lower Columbia at McNary Dam forebay and tailrace, and at Bonneville Dam forebay and tailrace at Cascade Island.

At present, GBT monitoring is being implemented at Little Goose, Lower Monumental, McNary, Bonneville and Rock Island dams. The decreasing levels of TDG system-wide are reflected by the decrease in fish observed with signs of GBT. There was only one fish detected with minor signs of GBT at Little Goose Dam this week.

Smolt Monitoring:

Subyearling Chinook predominate at all SMP sampling sites as collections of late spring migrants continue to decline. Subyearling Chinook passage indices also continued to decrease at Snake River sites. At McNary Dam subyearling indices were higher again this week as the Mid-Columbia hatchery releases and wild Hanford subyearlings began passing the project. Subyearling Chinook indices were also higher at John Day and Bonneville dams, but not to the extent seen at McNary.

At Lower Granite Dam passage indices for all smolts decreased over the past week. Subyearling Chinook continued to predominated in the samples over the past week. Subyearling Chinook passage indices peaked on June 5 at 115,000 and the average index fell to 6,000 per day this week compared to a daily average of 14,000 last week. Passage indices at Little Goose and Lower Monumental dams followed a similar pattern, with subyearling Chinook predominating but numbers of smolts of all species declining as well.

At Rock Island Dam subyearling summer migrants predominated in the sample over the past two weeks. Passage indices for subyearlings were higher than last week with the daily index averaging 140 this week compared to about 70 per day last week.

At McNary Dam subyearling Chinook predominated over the past week. Indices for subyearling Chinook rose to 374,000 on June 26 and the weekly average was 270,000 this week compared to 137,000 last week. Subyearling Chinook, which predominated, had low descaling (at or less than 2%) and sample mortality rates were at or below 1.2% over the past week.

At Bonneville Dam the largest collections over the past week have been subyearling Chinook also. Subyearling Chinook passage indices increased from 55,000 per day last week to 93,000 per day this week. Bonneville Dam has seen lower descaling rates in subyearling Chinook the past two weeks. Descaling rates ranged between 0 and 1.3% this past week. And mortality for subyearlings has dropped this week (1.3% or less) compared to last week when mortality in the sample peaked at 6.6% on June 22. The COE had reduced turbine loading in Powerhouse 2 over the past week and mortality steadily declined to 0% (0 of 192 fish) by June 25.

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. Releases of subyearling fall Chinook surrogates to the Clearwater River continued this week. These releases are scheduled to end on or around July 3rd. As with the Snake Rive surrogates, the Clearwater River surrogates are 100% unmarked but are tagged with PIT-tags. Approximately 300,000 spring Chinook parr from the Nez Perce Tribal Hatchery are scheduled for release into the Selway River between July 1st and July 15th. These spring Chinook parr are 100% unmarked and are not expected to out-migrate until spring of 2011. There were no other releases of juvenile salmonids scheduled for this zone this week. Furthermore, there are no releases of juvenile salmonids 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. Releases of approximately 3.45 million subyearling fall Chinook from Ringgold Hatchery were scheduled to end this week. These releases began in mid-June. There are no releases of juvenile salmonids scheduled for this zone over the next two weeks.

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

Adult Fish Passage:

The summer Chinook count began June 1st at Bonneville Dam. Daily passage numbers at Bonneville Dam ranged between 1824 and 2660 adult summer Chinook in the last week. The 2010 summer Chinook count of 74468 is about 1.2 times greater than the 2009 count and 1.3 times greater than the 10 year average. The 2010 Bonneville Dam summer Chinook jack count of 10642 is only about 37.2% of the 2009 count. However, the 2010 Bonneville Dam summer Chinook jack count is about 1.2 times greater than the 10 year average count. At McNary Dam 39473 adult summer Chinook have been counted. The 2010 McNary adult summer Chinook is about 1.02 times greater than the 2009 count and about 1.12 times greater than the 10 average. The 2010 summer Chinook jack count of 4051 is about 29.3% of the 2009 count and 84.6% of the 10 year average. The adult summer Chinook count at Lower Granite Dam in the Snake River of 19962 is about 2.02 times greater than the 2009 count and 2.52 times greater than the 10 year average. The Lower Granite summer Chinook jack count of 2434 is about 28.5% of the 2009 count, while being 1.10 times greater than the 10 year average.

The Bonneville Dam 2010 steelhead count of 33354 is about 2.18 times greater than the 2009 count of 15291. The 2010 steelhead count is about 1.81 times greater than of the 10 year average of 18392. In the Snake River, this year's Lower Granite steelhead count of 11015 is about 97.5% of the 2009 count. The 2010 LGR steelhead count is about 1.23 times greater than the 10 year average count of 8947. The 2010 LGR wild steelhead count as of July 1st was 4314. At Rock Island Dam, as of June 29th, 195 adult steelhead had been counted and at Rocky Reach Dam 392 adult steelhead had been counted. At Willamette Falls Dam, the 2010 count for steelhead was 24634, as of June 24th. This year's steelhead count is only about 1.85 times greater than the 2009 count of 13288 at Willamette Falls Dam for the same date range.

Daily adult sockeye passage numbers at Bonneville Dam ranged between 8091 and 25048 last week. The 2010 adult sockeye count at Bonneville Dam of 311728 is about 2.1 times greater than the 2009 count and about 3.95 times greater than the 10 year average. The 2010 adult sockeye count at McNary Dam of 183944 is about 2.66 times greater than the 2009 count and 4.08 times greater than the 10 year average. Two of the major spawning sites for sockeye in the Upper Columbia River zone are Lake Wenatchee and Lake Osoyoos (Okanogan basin). In the Snake River zone at Ice Harbor Dam, the 2010 adult sockeye count of 364 is about 1.27 times greater than the 2009 count of 286 and about 6.4 times greater than the 10 year average count of 57. The Lower Granite Dam 2010 adult sockeye count of 96 is about 74.4% of the 2009 count, while being 4 times greater than the 10 year average.

As of July 1st at Bonneville Dam, the adult Shad count was 998134 which is about 74.1% of the 2009 count of 1346660 and about 33.4% of the 10 year average count of 2986806.

Hatchery Releases Last Two Weeks

Hatchery Release Summary

From: 6/18/2010 to 07/01/10

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
National Marine Fisheries Service	Lyons Ferry Hatchery	CH0	FA	2010	98,000	06-15-10	07-03-10	Big Canyon (Clearwater River)	Clearwater River M F
National Marine Fisheries Service Total					**98,000**				
Nez Perce Tribe	Clearwater Hatchery	CH0	SP	2011	300,000	07-01-10	07-15-10	Selway River	Clearwater River M F
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2011	400,000	06-21-10	06-25-10	Meadow Creek - CLES	S Fk Clearwater River
Nez Perce Tribe Total					**700,000**				
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH0	FA	2010	2,053,707	06-24-10	06-24-10	Little White Salmon Hatchery	Little White Salmon River
U.S. Fish and Wildlife Service Total					**2,053,707**				
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2010	6,800,000	06-09-10	06-20-10	Priest Rapids Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	CH0	FA	2010	3,450,000	06-14-10	06-29-10	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH0	SU	2010	800,000	06-10-10	06-20-10	Turtle Rock Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife Total					**11,050,000**				
Grand Total					**13,901,707**				

Hatchery Releases Next Two Weeks

Hatchery Release Summary

From: 7/2/2010 to 7/15/2010

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
National Marine Fisheries Service	Lyons Ferry Hatchery	CH0	FA	2010	98,000	06-15-10	07-03-10	Big Canyon (Clearwater River)	Clearwater River M F
National Marine Fisheries Service Total					**98,000**				
Nez Perce Tribe	Clearwater Hatchery	CH0	SP	2011	300,000	07-01-10	07-15-10	Selway River	Clearwater River M F
Nez Perce Tribe Total					**300,000**				
Grand Total					**398,000**				

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

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

	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
06/18/2010	178.3	31.1	179.6	36.9	202.5	21.0	206.2	58.2	212.4	41.5	220.8	83.8	219.7	86.4
06/19/2010	164.4	26.8	163.0	25.4	185.7	21.3	192.5	58.6	200.7	41.9	216.0	78.2	219.5	91.8
06/20/2010	139.3	4.6	146.1	3.6	167.1	10.0	176.9	41.2	184.9	41.9	181.7	49.4	189.8	73.4
06/21/2010	197.6	49.0	191.7	57.8	207.8	40.6	201.5	57.9	204.0	42.2	209.6	71.9	206.2	93.4
06/22/2010	194.2	43.0	196.0	58.6	225.4	54.6	230.4	76.1	236.6	44.3	246.7	113.3	251.6	123.2
06/23/2010	198.4	29.2	197.1	38.1	218.9	48.1	222.2	62.6	222.0	36.5	234.7	103.4	236.4	120.2
06/24/2010	188.0	31.3	188.1	34.3	217.9	47.7	220.8	81.9	225.3	24.7	236.9	104.7	246.6	118.4
06/25/2010	189.7	38.4	186.1	42.7	210.2	43.7	212.9	73.5	217.3	24.5	225.3	89.8	232.9	109.4
06/26/2010	178.8	40.6	179.5	45.1	202.2	47.7	204.4	55.7	209.8	38.0	222.7	89.3	225.7	103.3
06/27/2010	175.4	17.6	174.8	17.2	195.2	38.1	205.5	52.3	209.8	34.7	222.1	99.8	224.8	100.2
06/28/2010	185.4	15.7	188.5	24.5	210.8	32.8	209.3	54.4	212.3	33.9	225.5	99.4	225.8	99.2
06/29/2010	184.1	30.4	186.5	30.1	208.2	47.9	205.4	46.8	208.4	40.5	223.0	101.9	227.6	109.5
06/30/2010	177.1	22.9	179.6	34.1	204.0	29.7	201.5	28.1	203.3	41.9	222.2	105.2	224.0	109.0
07/01/2010	165.6	10.7	169.6	16.2	190.3	38.7	193.4	32.7	194.6	40.8	208.3	79.3	207.6	87.3

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
06/18/2010	9.5	0.8	24.2	28.1	113.4	30.2	110.4	31.8	110.8	26.9	113.9	34.4
06/19/2010	8.9	0.8	26.7	25.9	104.2	20.6	102.5	31.0	103.9	26.4	103.1	52.4
06/20/2010	11.3	2.4	24.2	24.3	100.6	20.2	100.1	30.0	99.5	26.8	100.8	65.9
06/21/2010	13.7	4.2	23.7	24.9	107.8	21.8	105.0	31.5	103.9	17.5	108.2	45.4
06/22/2010	11.2	1.7	22.6	24.9	112.8	24.9	111.7	33.4	110.0	17.5	112.0	38.6
06/23/2010	7.1	0.0	21.4	25.7	98.6	18.7	97.1	29.1	96.6	17.0	98.8	29.9
06/24/2010	8.2	0.5	21.8	24.9	93.7	22.1	94.9	28.4	91.0	17.4	93.8	32.9
06/25/2010	9.4	0.0	19.7	24.9	98.3	19.3	98.3	29.5	96.6	17.3	100.6	51.2
06/26/2010	8.4	1.2	18.4	20.8	90.3	30.0	90.7	27.2	88.3	17.4	90.2	62.8
06/27/2010	7.2	0.2	17.3	17.3	85.9	20.5	87.2	26.2	83.8	17.1	86.4	59.6
06/28/2010	6.8	0.0	16.6	17.0	81.4	19.1	81.2	24.3	77.6	17.5	80.3	55.8
06/29/2010	6.6	0.1	17.0	19.3	81.5	19.5	81.8	24.6	80.3	17.2	81.2	36.1
06/30/2010	7.4	0.4	15.5	21.4	79.6	21.5	78.8	23.7	75.5	17.5	79.6	28.5
07/01/2010	8.1	0.4	---	---	76.9	21.2	76.3	22.9	74.5	17.1	75.1	48.3

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

	McNary		John Day		The Dalles		Bonneville			
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
06/18/2010	338.6	162.0	358.5	107.7	341.8	135.6	348.3	166.8	83.4	85.7
06/19/2010	309.5	134.5	318.5	119.0	304.3	122.0	317.0	139.6	81.4	83.6
06/20/2010	281.2	120.2	290.4	116.1	273.3	109.4	281.4	99.5	84.2	85.3
06/21/2010	318.6	143.3	309.9	123.8	290.0	115.6	303.2	108.7	80.9	101.2
06/22/2010	343.2	167.8	362.9	141.9	345.1	137.7	345.5	151.1	83.8	98.2
06/23/2010	336.4	166.1	343.9	112.0	331.7	131.0	341.8	163.9	82.4	83.0
06/24/2010	333.6	162.9	343.9	103.5	327.2	125.9	335.0	154.9	82.4	85.3
06/25/2010	327.4	157.4	325.4	97.5	309.0	124.0	324.4	145.7	81.4	84.9
06/26/2010	325.2	154.9	330.5	99.4	313.3	125.3	316.4	136.5	82.1	85.4
06/27/2010	315.1	158.3	326.6	122.6	309.4	121.2	324.5	142.8	83.2	86.1
06/28/2010	297.4	146.9	304.7	121.7	288.9	115.1	299.6	131.8	74.5	80.8
06/29/2010	320.3	156.1	305.4	96.2	292.0	116.9	308.2	134.0	75.1	86.7
06/30/2010	308.9	150.4	329.7	99.3	313.7	125.3	321.3	140.4	82.9	85.6
07/01/2010	268.3	134.2	268.3	100.2	252.6	101.3	275.0	107.5	74.9	80.2

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

	Hungry H. Dnst				Boundary				Grand Coulee				Grand C. Tlwr				Chief Joseph			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/18	105.1	105.7	106.2	23	125.2	125.5	127.1	21	106.9	107.2	107.4	24	111.1	111.8	112.9	21	111.9	114.5	116.5	24
6/19	105.8	106.0	106.1	24	125.9	126.5	127.4	23	107.1	107.4	107.7	24	110.8	113.1	116.7	23	111.7	112.4	113.1	24
6/20	105.8	106.3	107.4	24	125.2	125.5	126.0	22	107.6	108.0	108.5	24	107.7	108.6	109.5	22	109.0	109.5	110.0	24
6/21	105.6	106.2	108.8	24	126.0	126.5	126.8	22	108.7	109.0	109.2	24	111.6	114.4	116.6	22	109.5	112.0	112.6	24
6/22	105.3	105.3	105.4	24	125.1	125.4	125.7	23	109.1	109.2	109.5	24	112.0	112.8	115.7	23	107.9	110.1	112.7	24
6/23	106.0	106.4	106.7	24	124.4	125.1	125.6	23	109.9	110.5	111.4	24	110.5	111.3	111.4	23	115.0	116.3	118.3	24
6/24	106.2	106.5	107.1	24	123.5	124.7	125.7	23	111.5	111.8	112.6	24	111.2	112.2	115.4	23	110.3	110.9	111.7	24
6/25	106.3	106.6	106.9	24	123.5	123.8	124.2	22	113.0	113.4	113.6	24	112.9	113.9	115.6	22	111.5	113.1	114.2	24
6/26	106.9	107.1	107.4	24	123.4	124.2	124.8	22	113.8	114.1	114.4	24	113.6	115.1	115.8	22	111.4	113.2	114.1	24
6/27	106.2	106.5	107.0	24	122.8	123.3	123.7	23	114.3	114.7	114.9	24	112.2	112.5	113.4	23	112.9	113.5	113.9	24
6/28	106.9	107.6	108.2	24	122.9	123.3	123.6	22	114.8	115.0	115.3	24	112.1	112.5	112.9	22	113.9	114.3	114.9	24
6/29	107.8	107.9	108.7	15	122.5	122.8	123.2	22	115.5	115.7	115.9	24	113.3	114.4	116.3	22	111.2	111.6	112.5	24
6/30	105.9	106.0	106.5	15	121.4	121.7	122.1	20	115.4	115.5	115.7	24	112.8	113.7	118.2	20	111.2	112.2	113.2	24
7/1	105.5	105.8	106.0	24	120.3	120.6	121.0	23	115.5	116.2	116.5	24	111.9	112.3	114.6	23	113.9	115.6	116.6	24

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

	Chief J. Dnst				Wells				Wells Dwnstrm				Rocky Reach				Rocky R. Tlwr			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/18	113.8	115.5	117.2	24	110.9	112.2	112.7	24	114.0	115.5	115.9	24	112.5	114.1	115.1	24	118.5	119.1	120.1	24
6/19	112.5	114.8	117.5	24	112.1	112.9	114.0	24	114.8	115.6	117.0	24	113.3	113.8	114.8	24	119.3	119.5	119.7	24
6/20	109.2	110.2	111.9	24	110.3	111.8	112.8	24	111.9	113.0	113.6	24	113.2	113.4	113.8	24	118.4	118.9	119.2	24
6/21	116.6	119.2	119.9	24	109.2	110.2	111.6	24	114.5	119.1	124.3	24	111.7	112.3	112.4	24	118.9	119.7	121.7	24
6/22	115.0	116.4	118.7	24	111.6	112.3	113.1	24	118.8	121.0	125.3	24	113.7	117.8	121.7	24	121.4	122.3	124.3	24
6/23	112.9	113.8	115.6	24	111.0	112.8	113.6	24	116.9	117.8	119.8	24	118.1	119.9	121.8	24	121.0	121.5	122.1	24
6/24	112.3	113.6	114.1	24	112.9	114.0	114.5	24	118.8	120.9	124.4	24	116.0	116.6	118.0	24	121.5	122.1	122.7	24
6/25	113.8	114.7	115.0	24	110.4	110.8	111.0	23	116.7	119.4	122.0	23	118.0	119.6	120.4	24	122.0	122.6	123.5	24
6/26	113.8	114.1	114.4	24	111.5	112.1	112.5	24	118.1	120.9	122.2	24	114.4	116.0	117.0	24	119.3	119.8	120.2	24
6/27	112.0	112.7	113.5	24	111.9	112.5	112.8	24	116.8	118.3	120.2	24	116.3	117.9	118.7	24	119.7	120.1	120.6	24
6/28	111.8	112.2	112.6	24	112.7	113.5	113.8	24	116.8	118.6	120.8	24	116.4	117.2	118.3	24	120.1	120.6	120.8	24
6/29	112.1	113.0	114.3	24	111.9	112.9	113.3	24	119.1	123.2	126.3	24	114.7	115.2	115.2	24	119.0	120.1	121.3	24
6/30	112.6	113.4	114.5	24	109.8	110.6	110.8	24	114.0	114.9	116.4	24	116.0	117.8	118.7	24	118.1	119.1	119.5	24
7/1	113.8	115.4	116.6	24	111.2	111.6	111.9	24	116.6	118.0	119.9	24	112.6	113.0	113.8	24	117.0	117.7	118.6	24

Total Dissolved Gas Saturation at Mid Columbia River Sites

	Rock Island				Rock I. Tlwr				Wanapum				Wanapum Tlwr				Priest Rapids			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/18	113.7	115.0	115.9	24	117.6	118.9	119.1	24	114.0	115.5	116.2	24	118.2	119.6	124.9	24	117.0	118.8	121.0	24
6/19	115.1	115.5	115.7	24	119.3	119.8	120.1	24	115.3	115.6	116.1	24	117.2	118.2	120.8	19	115.9	116.7	117.1	24
6/20	113.9	114.3	114.6	24	118.6	119.5	119.8	24	115.1	115.3	115.5	24	---	---	---	0	114.7	115.3	116.0	24
6/21	113.1	113.6	113.9	24	117.6	118.3	119.1	24	115.5	115.6	115.9	24	116.5	116.5	119.7	10	113.2	113.7	114.0	24
6/22	115.7	116.7	117.4	24	119.4	120.4	121.4	24	115.5	115.9	116.2	22	122.0	124.0	127.2	24	117.4	120.0	121.3	22
6/23	118.5	119.6	119.9	24	120.8	121.7	122.7	24	117.6	119.1	120.0	24	121.2	123.7	125.3	24	120.6	123.0	125.5	24
6/24	117.7	118.5	119.2	24	119.4	120.3	121.4	24	119.4	120.1	121.3	24	122.9	124.2	126.2	24	122.3	122.9	124.1	24
6/25	118.6	119.6	120.2	24	119.9	120.8	121.8	24	118.7	119.7	120.9	24	119.8	121.0	122.0	24	118.9	119.8	121.5	24
6/26	115.1	116.1	116.5	24	117.8	118.9	119.4	24	117.0	117.8	118.2	24	119.0	120.5	121.4	24	118.8	120.2	120.9	24
6/27	116.1	116.8	117.2	24	118.4	119.0	119.2	24	116.2	116.5	117.0	24	120.3	123.0	125.3	24	118.9	122.0	124.6	24
6/28	117.2	117.8	118.5	24	119.3	119.8	120.7	24	116.9	117.7	119.0	24	120.8	121.6	122.6	24	118.8	120.4	122.4	24
6/29	115.3	116.2	116.8	24	118.4	119.7	120.5	24	---	---	---	0	---	---	---	0	---	---	---	0
6/30	115.1	117.5	118.4	24	118.4	120.8	121.7	24	---	---	---	0	---	---	---	0	---	---	---	0
7/1	113.1	114.0	114.8	24	117.1	118.6	119.3	24	---	---	---	0	---	---	---	0	---	---	---	0

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

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

	Priest R. Dnst				Pasco				Dworshak				Clrwtr-Peck				Anatone			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/18	120.2	121.2	122.9	24	114.1	115.7	116.5	24	100.0	102.1	104.8	24	101.9	102.5	103.1	24	105.8	106.6	107.1	24
6/19	120.1	120.5	121.0	24	115.1	115.6	116.4	24	101.1	104.2	108.4	24	101.9	102.7	103.4	24	105.1	105.6	106.3	24
6/20	118.2	118.6	119.7	16	113.5	114.0	114.4	24	103.9	106.9	107.4	24	102.4	103.4	103.9	22	104.2	104.4	104.9	24
6/21	118.9	119.0	120.0	13	111.9	112.6	113.0	24	109.0	110.8	111.1	24	103.2	103.9	104.1	24	103.9	104.3	104.8	24
6/22	121.8	123.3	124.2	24	113.7	115.7	116.5	24	102.6	107.7	110.9	24	102.6	103.6	104.1	24	104.4	105.1	105.7	24
6/23	122.6	123.3	124.0	24	117.2	118.7	119.2	24	98.3	98.7	98.9	24	101.2	101.9	102.6	24	104.5	105.0	105.6	24
6/24	123.5	123.9	124.1	24	117.4	118.6	119.3	24	100.9	104.0	107.8	24	102.0	102.4	102.5	24	104.5	105.2	105.8	24
6/25	122.0	122.5	123.9	24	117.6	118.3	119.1	24	98.0	98.3	99.2	24	101.0	101.5	101.9	22	104.2	104.7	105.2	24
6/26	121.5	121.9	122.5	24	115.9	116.8	117.5	24	103.6	107.5	109.9	24	102.4	104.2	105.2	23	104.2	105.0	105.6	24
6/27	121.3	122.8	123.6	24	116.1	116.9	117.6	24	99.6	101.0	107.0	24	101.9	102.6	103.3	22	104.5	105.3	106.0	24
6/28	121.0	122.1	123.0	24	116.7	118.0	119.3	24	98.4	98.8	99.1	24	101.5	102.4	103.2	24	104.6	105.5	106.2	24
6/29	---	---	---	0	115.7	116.6	117.4	24	98.7	99.3	102.3	24	101.5	102.1	102.8	24	104.2	104.8	105.5	24
6/30	---	---	---	0	114.6	115.4	115.9	24	99.6	101.1	104.8	24	101.3	101.7	102.3	24	103.5	104.3	105.0	24
7/1	---	---	---	0	115.7	117.1	118.5	24	100.6	102.6	109.2	24	101.3	101.9	102.5	23	103.8	104.6	105.3	24

Total Dissolved Gas Saturation Data at Snake River Sites

	Clrwtr-Lewiston				Lower Granite				L. Granite Tlwr				Little Goose				L. Goose Tlwr			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/18	102.5	103.8	104.8	22	103.9	104.3	104.8	24	117.3	120.3	123.0	24	113.1	113.4	113.5	24	114.0	114.4	114.8	24
6/19	102.3	103.7	105.1	24	104.8	104.9	105.2	24	114.0	114.5	115.1	24	113.0	113.3	113.5	24	114.1	114.4	114.5	24
6/20	101.1	101.6	102.2	24	105.2	105.4	105.5	24	113.9	114.3	114.9	24	111.6	111.8	112.1	24	113.3	113.6	113.7	24
6/21	102.1	102.4	102.5	24	104.2	104.5	104.6	24	113.8	115.3	118.3	24	109.5	110.3	111.3	24	113.0	113.5	114.2	24
6/22	103.2	104.4	106.0	24	103.1	103.3	103.4	24	114.9	116.7	118.3	24	108.2	108.6	108.9	24	113.5	113.8	113.9	24
6/23	101.8	103.0	103.9	24	104.1	104.4	104.7	24	111.9	112.2	112.6	24	109.5	110.0	110.9	24	113.2	113.5	113.8	24
6/24	102.6	104.3	105.7	24	105.3	105.6	105.7	24	113.5	115.1	116.8	24	112.6	113.7	114.0	24	113.5	113.8	114.1	24
6/25	101.7	102.8	103.5	24	104.8	105.0	105.2	24	112.2	112.6	114.8	24	111.7	112.0	113.0	24	113.4	113.8	114.6	24
6/26	101.4	102.6	103.0	24	104.1	104.3	104.5	24	116.1	116.5	116.8	24	110.9	111.3	111.6	24	113.2	113.6	113.9	24
6/27	102.7	103.9	104.6	24	103.6	103.8	103.9	24	112.7	113.8	116.1	24	110.4	110.8	111.1	24	112.7	113.2	113.4	24
6/28	102.5	103.9	104.9	22	103.4	103.7	103.9	24	111.7	112.0	112.5	24	111.2	112.2	112.9	24	112.9	113.7	113.9	24
6/29	102.3	103.6	104.6	23	103.8	104.0	104.3	24	112.0	112.6	115.3	24	113.3	113.6	113.8	24	113.0	113.3	113.7	24
6/30	101.8	103.4	104.9	22	103.2	103.6	103.8	24	112.8	114.0	116.4	24	110.6	111.0	112.1	24	112.0	112.6	113.2	24
7/1	101.9	103.5	105.3	23	103.6	103.7	103.8	24	112.8	114.1	116.6	24	110.4	110.7	110.9	24	111.9	112.4	112.9	24

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

	Lower Mon.				L. Mon. Tlwr				Ice Harbor				Ice Harbor Tlwr				McNary-Oregon			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/18	113.6	114.1	114.5	24	119.5	119.8	120.2	24	114.0	114.5	114.7	24	116.4	116.9	117.2	24	---	---	---	0
6/19	114.5	114.8	115.0	24	119.4	119.8	120.1	24	114.7	115.0	115.1	24	117.0	117.4	117.9	24	---	---	---	0
6/20	114.1	114.2	114.8	24	118.9	119.1	119.3	24	113.9	114.1	114.7	24	117.7	118.8	120.2	24	---	---	---	0
6/21	113.1	113.4	113.8	24	116.2	116.8	117.2	24	113.0	113.2	113.5	24	116.9	118.2	120.2	24	---	---	---	0
6/22	112.7	113.0	113.2	24	117.0	117.4	118.2	24	112.7	113.0	113.3	24	116.4	116.9	117.3	24	---	---	---	0
6/23	114.2	114.8	115.3	24	117.0	117.3	118.0	24	114.1	114.6	114.8	24	116.4	116.6	116.9	24	---	---	---	0
6/24	114.8	115.0	115.3	24	116.7	117.0	117.3	24	115.1	115.5	115.9	24	116.4	116.9	117.1	24	---	---	---	0
6/25	114.7	114.8	115.0	24	117.3	117.8	118.4	24	115.8	115.9	116.1	24	117.1	117.5	117.9	24	---	---	---	0
6/26	113.9	114.2	114.8	24	117.1	117.4	117.5	24	114.7	114.9	115.5	24	116.7	117.5	118.7	24	---	---	---	0
6/27	113.4	113.5	113.6	24	116.7	117.2	117.5	24	114.5	114.7	114.9	24	116.7	117.6	118.7	24	---	---	---	0
6/28	113.8	114.1	114.3	24	116.8	117.0	117.5	24	114.9	115.1	115.4	24	116.0	116.3	116.6	24	---	---	---	0
6/29	113.4	113.6	113.7	24	116.1	116.4	116.7	24	114.7	114.8	114.9	24	115.7	116.2	116.8	24	---	---	---	0
6/30	112.4	112.5	112.6	24	116.3	116.7	116.9	24	113.3	113.5	114.1	23	115.5	116.2	116.5	24	---	---	---	0
7/1	112.7	112.9	113.1	24	116.6	117.0	117.2	24	113.2	113.3	113.4	24	115.3	116.1	116.5	24	---	---	---	0

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

	McNary-Wash				McNary Tlwr				John Day				John Day Tlwr				The Dalles			
	24 h	12 h		#	24 h	12 h		#	24h	12h		#	24h	12h		#	24h	12h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr
6/18	111.2	112.2	112.8	24	123.7	124.3	124.5	24	107.6	108.3	108.7	24	118.3	118.9	119.3	24	109.6	110.5	111.2	24
6/19	112.1	112.8	113.2	24	121.7	122.8	123.5	24	109.0	109.4	109.7	24	117.6	118.3	118.8	24	109.7	110.4	110.8	24
6/20	113.0	113.2	113.5	24	120.5	121.1	121.3	24	109.4	109.8	110.3	24	117.3	118.1	118.3	24	109.7	110.0	110.7	24
6/21	111.5	111.7	112.2	24	121.0	122.0	123.9	24	110.9	111.5	111.8	24	117.7	119.1	119.5	24	110.0	110.5	112.0	24
6/22	111.0	111.7	112.4	24	120.6	121.1	121.8	24	111.2	111.5	111.8	24	119.0	119.6	119.8	24	113.3	114.6	115.3	24
6/23	113.3	114.4	115.4	24	120.2	120.8	121.1	24	111.5	111.8	112.0	24	117.9	118.6	119.1	24	113.7	114.3	114.6	24
6/24	116.5	117.6	118.6	24	120.0	120.6	120.8	24	112.3	113.0	114.1	24	117.6	118.8	119.5	24	112.1	112.6	113.0	24
6/25	117.5	117.8	118.1	24	120.2	120.8	121.4	24	114.5	114.7	115.0	24	117.0	117.9	118.2	24	112.4	112.6	112.8	24
6/26	116.5	116.7	117.0	24	120.0	120.5	120.7	24	113.4	113.6	114.1	24	117.3	117.7	117.9	24	111.6	112.0	112.3	24
6/27	115.3	115.7	116.0	24	119.8	120.3	120.7	24	112.7	112.9	113.0	24	117.7	119.4	119.6	24	112.3	113.4	114.7	24
6/28	116.1	116.7	117.1	24	119.4	120.1	120.5	24	112.7	113.0	113.2	24	117.9	119.0	119.6	24	114.3	114.5	114.7	24
6/29	115.4	115.7	116.2	24	119.8	120.3	120.6	24	111.0	111.4	112.2	24	116.5	117.6	118.4	24	111.1	112.0	113.6	20
6/30	113.0	113.5	114.1	24	119.4	119.8	120.0	24	110.9	111.5	112.1	24	116.9	117.3	118.1	24	110.6	112.0	112.7	24
7/1	114.2	114.7	115.1	24	118.2	118.4	118.7	24	111.6	111.8	112.1	24	116.5	117.4	118.0	24	111.5	111.8	112.4	24

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

	The Dalles Dnst				Bonneville				Warrendale				Camas\Washougal				Cascade Island			
	24 h	12 h		#	24 h	12 h		#	24h	12h		#	24h	12h		#	24h	12h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
6/18	116.8	117.4	118.3	24	114.2	114.7	115.0	24	118.1	118.7	119.1	24	117.4	117.8	118.0	24	123.3	123.4	123.7	24
6/19	116.4	116.8	117.4	24	113.3	113.6	114.3	24	116.4	117.2	118.6	24	116.6	117.2	117.6	24	122.1	122.7	123.1	24
6/20	116.2	116.5	117.3	24	111.1	111.7	113.2	24	113.0	113.5	114.1	24	113.3	114.5	115.7	24	118.8	119.1	119.6	24
6/21	116.4	117.0	117.6	24	110.0	110.1	110.2	24	112.6	113.3	114.2	24	111.5	111.8	112.1	24	119.5	120.3	120.9	24
6/22	118.6	119.7	120.3	24	112.3	114.3	116.0	24	116.0	118.0	119.4	24	113.2	114.4	115.7	24	122.5	123.8	124.1	24
6/23	119.1	119.5	120.1	24	117.4	118.0	118.3	24	119.9	120.4	121.0	24	118.5	119.6	120.5	24	123.8	124.0	124.3	24
6/24	117.5	117.8	118.1	24	116.3	116.9	117.3	24	118.9	119.4	120.1	24	118.9	119.3	119.7	24	123.6	123.9	124.1	24
6/25	118.0	118.4	118.9	24	113.4	114.2	114.9	24	116.7	117.2	117.7	24	117.0	117.4	117.6	24	122.6	123.2	123.4	24
6/26	117.5	118.0	118.2	24	112.0	112.3	113.0	24	115.4	115.8	116.0	24	115.0	115.9	116.5	24	121.3	122.6	123.2	24
6/27	117.5	118.2	118.8	24	113.8	114.4	115.0	24	116.6	117.9	118.4	24	115.0	116.1	116.6	24	121.7	123.1	123.3	24
6/28	119.2	120.0	121.3	24	115.2	115.7	116.0	24	117.1	117.5	118.4	24	116.8	117.5	118.2	24	121.0	121.7	122.6	24
6/29	117.4	118.1	119.5	24	113.2	113.5	114.2	24	115.9	116.6	117.2	24	114.2	114.9	115.7	24	121.3	122.7	123.0	24
6/30	116.8	117.6	118.3	24	112.4	113.1	113.3	24	115.7	116.5	117.7	24	114.8	115.7	116.0	24	122.5	122.9	123.4	24
7/1	117.2	117.6	118.6	24	113.6	113.8	113.9	24	115.4	115.7	116.0	24	115.0	115.4	115.7	24	119.4	120.4	121.7	24

Two-Week Summary of Passage Indices

COMBINED YEARLING CHINOOK

Date		WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
06/18/2010		---	---	---	---	199	309	1,307	26	2,394	2,576	796
06/19/2010	*	---	---	---	---	372	599	668	28	---	2,880	593
06/20/2010		---	---	---	---	63	251	1,037	12	2,446	1,497	633
06/21/2010	*	---	---	---	---	218	187	818	4	---	1,170	1,278
06/22/2010		---	---	---	---	545	143	474	14	1,356	918	1,008
06/23/2010	*	---	---	---	---	31	143	250	4	---	655	2,075
06/24/2010		---	---	---	---	195	47	245	9	1,046	477	794
06/25/2010	*	---	---	---	---	62	95	610	5	---	143	0
06/26/2010		---	---	---	---	131	47	437	4	393	382	0
06/27/2010	*	---	---	---	---	37	72	189	2	---	384	25
06/28/2010		---	---	---	---	0	1	254	2	612	332	0
06/29/2010	*	---	---	---	---	0	108	255	7	---	0	344
06/30/2010		---	---	---	---	0	57	69	2	776	143	0
07/01/2010	*	---	---	---	---	0	0	107	2	---	144	0
07/02/2010		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**1,853**	**2,059**	**6,720**	**121**	**9,023**	**11,701**	**7,546**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**132**	**147**	**480**	**9**	**1,289**	**836**	**539**
YTD		**56,130**	**80,004**	**27,916**	**7,995**	**2,452,468**	**1,260,307**	**445,936**	**11,791**	**2,092,660**	**1,034,218**	**2,300,147**

COMBINED SUBYEARLING CHINOOK

Date		WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
06/18/2010		---	---	---	---	21,608	24,015	12,805	83	81,151	50,096	23,078
06/19/2010	*	---	---	---	---	10,575	26,281	8,418	83	---	37,728	31,645
06/20/2010		---	---	---	---	4,450	13,979	1,866	69	68,015	37,667	30,264
06/21/2010	*	---	---	---	---	7,815	13,916	8,934	105	---	26,739	50,330
06/22/2010		---	---	---	---	17,665	26,310	7,584	52	194,362	58,419	106,733
06/23/2010	*	---	---	---	---	17,766	23,194	12,088	41	---	51,978	74,312
06/24/2010		---	---	---	---	15,846	18,291	7,351	74	206,138	27,793	71,476
06/25/2010	*	---	---	---	---	6,421	12,226	4,332	73	---	77,018	74,112
06/26/2010		---	---	---	---	4,342	15,139	5,248	49	374,480	88,077	66,005
06/27/2010	*	---	---	---	---	4,465	19,193	10,979	180	---	113,508	71,722
06/28/2010		---	---	---	---	4,334	12,562	6,044	90	229,685	71,466	97,147
06/29/2010	*	---	---	---	---	6,361	6,194	8,477	238	---	56,863	102,089
06/30/2010		---	---	---	---	5,978	9,643	5,214	184	212,017	70,818	115,842
07/01/2010	*	---	---	---	---	12,738	8,118	3,973	179	---	66,756	126,421
07/02/2010		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**140,364**	**229,061**	**103,313**	**1,500**	**1,365,848**	**834,926**	**1,041,176**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**10,026**	**16,362**	**7,380**	**107**	**195,121**	**59,638**	**74,370**
YTD		**0**	**42**	**28**	**1,275**	**879,838**	**1,131,028**	**612,871**	**8,325**	**1,725,226**	**1,186,820**	**3,168,107**

Two-Week Summary of Passage Indices

COMBINED COHO

		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
06/18/2010		---	---	---	---	33	0	0	68	1,571	1,431	995
06/19/2010	*	---	---	---	---	34	143	0	96	---	1,056	791
06/20/2010		---	---	---	---	0	108	0	50	1,673	915	598
06/21/2010	*	---	---	---	---	31	71	63	27	---	1,003	959
06/22/2010		---	---	---	---	32	72	0	22	379	751	864
06/23/2010	*	---	---	---	---	125	107	61	30	---	218	1,132
06/24/2010		---	---	---	---	65	47	0	49	406	191	0
06/25/2010	*	---	---	---	---	0	0	61	47	---	501	386
06/26/2010		---	---	---	---	0	143	0	26	2	286	742
06/27/2010	*	---	---	---	---	37	36	0	21	---	96	25
06/28/2010		---	---	---	---	52	36	0	10	408	0	0
06/29/2010	*	---	---	---	---	26	36	0	22	---	0	344
06/30/2010		---	---	---	---	0	29	0	21	0	0	356
07/01/2010	*	---	---	---	---	56	14	0	10	---	0	362
07/02/2010		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**491**	**842**	**185**	**499**	**4,439**	**6,448**	**7,554**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**35**	**60**	**13**	**36**	**634**	**461**	**540**
YTD		**0**	**0**	**0**	**104**	**39,976**	**53,693**	**13,508**	**41,127**	**85,340**	**111,146**	**523,348**

COMBINED STEELHEAD

		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
06/18/2010		---	---	---	---	2,560	1,372	915	108	202	1,908	398
06/19/2010	*	---	---	---	---	2,095	1,256	535	76	---	576	0
06/20/2010		---	---	---	---	2,068	1,756	415	38	0	499	246
06/21/2010	*	---	---	---	---	2,958	1,230	440	42	---	418	160
06/22/2010		---	---	---	---	2,106	1,038	474	38	951	668	0
06/23/2010	*	---	---	---	---	1,533	1,432	629	48	---	545	38
06/24/2010		---	---	---	---	1,851	809	429	56	205	383	0
06/25/2010	*	---	---	---	---	561	858	549	73	---	429	0
06/26/2010		---	---	---	---	816	644	125	42	0	382	0
06/27/2010	*	---	---	---	---	856	752	189	51	---	0	355
06/28/2010		---	---	---	---	130	695	191	35	408	332	0
06/29/2010	*	---	---	---	---	237	358	191	15	---	0	0
06/30/2010		---	---	---	---	269	215	267	23	194	0	712
07/01/2010	*	---	---	---	---	194	86	107	33	---	0	0
07/02/2010		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**18,234**	**12,501**	**5,456**	**678**	**1,960**	**6,140**	**1,909**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**1,302**	**893**	**390**	**48**	**280**	**439**	**136**
YTD		**4,385**	**27,688**	**4,051**	**11,795**	**2,045,023**	**1,592,692**	**427,431**	**17,234**	**447,417**	**594,380**	**941,236**

Two-Week Summary of Passage Indices

				COMBINED SOCKEYE								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
06/18/2010		---	---	---	---	0	0	0	2	3,541	3,435	1,791
06/19/2010	*	---	---	---	---	0	0	0	2	---	1,344	1,582
06/20/2010		---	---	---	---	63	0	0	5	2,788	1,497	528
06/21/2010	*	---	---	---	---	31	0	0	3	---	1,253	0
06/22/2010		---	---	---	---	32	36	0	0	570	668	1,440
06/23/2010	*	---	---	---	---	0	0	0	2	---	328	1,283
06/24/2010		---	---	---	---	0	47	0	2	1,017	191	0
06/25/2010	*	---	---	---	---	0	47	0	2	---	501	0
06/26/2010		---	---	---	---	33	36	0	2	386	859	0
06/27/2010	*	---	---	---	---	0	0	0	2	---	288	0
06/28/2010		---	---	---	---	0	0	0	2	619	166	0
06/29/2010	*	---	---	---	---	26	0	0	2	---	0	344
06/30/2010		---	---	---	---	27	0	0	0	582	0	712
07/01/2010	*	---	---	---	---	0	0	0	2	---	0	0
07/02/2010		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**212**	**166**	**0**	**28**	**9,503**	**10,530**	**7,680**
# Days:		**0**	**0**	**0**	**0**	**14**	**14**	**14**	**14**	**7**	**14**	**14**
Average:		**0**	**0**	**0**	**0**	**15**	**12**	**0**	**2**	**1,358**	**752**	**549**
YTD		**80**	**0**	**0**	**188**	**8,688**	**12,646**	**2,122**	**36,476**	**1,467,697**	**655,708**	**803,092**

* 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, and sockeye. Two classes of fish counts are shown in these tables: collection counts, which account for sample rates but are not adjusted for flow; and passage indices, 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.

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/Washington Dept. of Fish and Wildlife.
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.

Two Week Transportation Summary

Source: Fish Passage Center Updated: 7/2/10 9:50 AM

06/18/10 TO 07/02/10

		Species					
Site	Data	**CH0**	**CH1**	CO	ST	SO	**Grand Total**
LGR	Sum of NumberCollected	107,350	1,425	375	14,062	165	123,377
	Sum of NumberBarged	107,242	1,419	375	14,049	165	123,250
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	11	0	0	0	0	11
	Sum of FacilityMorts	97	6	0	13	0	116
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	108	6	0	13	0	127
LGS	Sum of NumberCollected	160,781	1,449	588	8,776	116	171,710
	Sum of NumberBarged	160,654	1,446	588	8,771	115	171,574
	Sum of NumberBypassed	15	0	0	0	0	15
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	14	0	0	0	0	14
	Sum of FacilityMorts	98	3	0	5	1	107
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	112	3	0	5	1	121
LMN	Sum of NumberCollected	81,805	5,239	150	4,306		91,500
	Sum of NumberBarged	81,648	5,230	150	4,277		91,305
	Sum of NumberBypassed	75	9	0	26		110
	Sum of Numbertrucked	0	0	0	0		0
	Sum of SampleMorts	4	0	0	0		4
	Sum of FacilityMorts	78	0	0	3		81
	Sum of ResearchMorts	0	0	0	0		0
	Sum of TotalProjectMorts	82	0	0	3		85
MCN	Sum of NumberCollected	699,013	4,671	2,301	1,006	4,909	711,900
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	698,215	4,608	2,298	1,001	4,896	711,018
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	67	0	2	0	4	73
	Sum of FacilityMorts	731	63	1	5	9	809
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	798	63	3	5	13	882
Total Sum of NumberCollected		1,048,949	12,784	3,414	28,150	5,190	1,098,487
Total Sum of NumberBarged		349,544	8,095	1,113	27,097	280	386,129
Total Sum of NumberBypassed		698,305	4,617	2,298	1,027	4,896	711,143
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of SampleMorts		96	0	2	0	4	102
Total Sum of FacilityMorts		1,004	72	1	26	10	1,113
Total Sum of ResearchMorts		0	0	0	0	0	0
Total Sum of TotalProjectMorts		1,100	72	3	26	14	1,215

YTD Transportation Summary

Source: Fish Passage Center Updated: 7/2/10 9:50 AM

TO: 07/02/10

		Species					
Site	Data	**CH0**	**CH1**	CO	SO	ST	**Grand Total**
LGR	Sum of NumberCollected	525,083	1,622,282	28,225	5,750	1,357,633	3,538,973
	Sum of NumberBarged	523,483	1,428,723	28,215	5,735	1,308,973	3,295,129
	Sum of NumberBypassed	700	191,860	0	10	48,344	240,914
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	61	54	0	0	19	134
	Sum of FacilityMorts	839	1,230	10	5	280	2,364
	Sum of ResearchMorts	0	415	0	0	17	432
	Sum of TotalProjectMorts	900	1,699	10	5	316	2,930
LGS	Sum of NumberCollected	737,164	873,048	36,758	8,751	1,084,573	2,740,294
	Sum of NumberBarged	731,785	791,373	36,757	8,750	1,024,871	2,593,536
	Sum of NumberBypassed	60	81,373	0	0	59,473	140,906
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	43	29	1	0	9	82
	Sum of FacilityMorts	5,276	273	0	1	220	5,770
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	5,319	302	1	1	229	5,852
LMN	Sum of NumberCollected	415,647	301,715	8,725	1,470	239,635	967,192
	Sum of NumberBarged	415,090	300,240	8,725	1,369	234,417	959,841
	Sum of NumberBypassed	197	1,464	0	0	4,999	6,660
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	11	9	0	0	10	30
	Sum of FacilityMorts	368	200	0	1	310	879
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	379	209	0	1	320	909
MCN	Sum of NumberCollected	871,120	1,223,519	47,232	848,200	259,636	3,249,707
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	868,874	1,222,163	47,175	847,454	259,428	3,245,094
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	123	121	5	96	16	361
	Sum of FacilityMorts	2,123	1,235	52	650	192	4,252
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	2,246	1,356	57	746	208	4,613
Total Sum of NumberCollected		2,549,014	4,020,564	120,940	864,171	2,941,477	10,496,166
Total Sum of NumberBarged		1,670,358	2,520,336	73,697	15,854	2,568,261	6,848,506
Total Sum of NumberBypassed		869,831	1,496,860	47,175	847,464	372,244	3,633,574
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		238	213	6	96	54	607
Total Sum of FacilityMorts		8,606	2,938	62	657	1,002	13,265
Total Sum of ResearchMorts		0	415	0	0	17	432
Total Sum of TotalProjectMorts		8,844	3,566	68	753	1,073	14,304

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											
	06/21/10	Chinook + Steelhead	17	0	0	0.00%	0.00%	0	0	0	0
Little Goose Dam											
	06/21/10	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/28/10	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
Lower Monumental Dam											
	06/23/10	Chinook + Steelhead	39	0	0	0.00%	0.00%	0	0	0	0
	06/30/10	Chinook + Steelhead	71	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	06/19/10	Chinook + Steelhead	67	0	0	0.00%	0.00%	0	0	0	0
	06/22/10	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/29/10	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
McNary Dam											
	06/21/10	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0

Cumulative Adult Passage at Mainstem Dams Through: 07/01

		Spring Chinook						Summer Chinook						Fall Chinook					
		2010		2009		10-Yr Avg.		2010		2009		10-Yr Avg.		2010		2009		10-Yr Avg.	
DAM	EndDate	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	**07/01**	**244362**	**12613**	**114525**	**66631**	**167834**	**17301**	**74468**	**10642**	**61957**	**28619**	**56756**	**8757**	**0**	**0**	**0**	**0**	**0**	**0**
TDA	**07/01**	**189839**	**11546**	**93908**	**53646**	**121486**	**13792**	**57305**	**7966**	**57734**	**20919**	**47397**	**6453**	**0**	**0**	**0**	**0**	**0**	**0**
JDA	**07/01**	**179446**	**11794**	**76806**	**49733**	**101283**	**12037**	**46728**	**6853**	**45647**	**22647**	**41519**	**6238**	**0**	**0**	**0**	**0**	**0**	**0**
MCN	**07/01**	**153246**	**9178**	**70413**	**43328**	**93119**	**11340**	**39473**	**4051**	**38581**	**13821**	**35083**	**4787**	**0**	**0**	**0**	**0**	**0**	**0**
IHR	**07/01**	**101188**	**6047**	**55435**	**28223**	**64058**	**7222**	**23971**	**2332**	**16402**	**7721**	**11898**	**2470**	**0**	**0**	**0**	**0**	**0**	**0**
LMN	**07/01**	**97334**	**5899**	**66931**	**20009**	**63381**	**6004**	**28166**	**2759**	**17909**	**6739**	**11516**	**1828**	**0**	**0**	**0**	**0**	**0**	**0**
LGS	**07/01**	**92991**	**5461**	**52642**	**24331**	**58937**	**6617**	**24888**	**2416**	**12693**	**7101**	**8650**	**2144**	**0**	**0**	**0**	**0**	**0**	**0**
LGR	**07/01**	**94100**	**6390**	**49667**	**31064**	**59309**	**8137**	**19962**	**2434**	**9861**	**8548**	**7917**	**2203**	**0**	**0**	**0**	**0**	**0**	**0**
PRD	**06/30**	**30539**	**932**	**13469**	**2910**	**19097**	**834**	**11266**	**155**	**20566**	**655**	**16902**	**469**	**0**	**0**	**0**	**0**	**0**	**0**
RIS	**06/29**	**29684**	**1513**	**12634**	**6003**	**15841**	**1581**	**5236**	**269**	**12469**	**1889**	**8776**	**743**	**0**	**0**	**0**	**0**	**0**	**0**
RRH	**06/29**	**8660**	**523**	**6090**	**1086**	**6208**	**510**	**1659**	**42**	**6291**	**598**	**3802**	**206**	**0**	**0**	**0**	**0**	**0**	**0**
WEL	**06/30**	**7555**	**661**	**6307**	**1867**	**4866**	**487**	**292**	**3**	**1096**	**53**	**741**	**24**	**0**	**0**	**0**	**0**	**0**	**0**
WFA	**06/24**	**52776**	**1236**	**21624**	**2015**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0**	**0**	**0**	**0**	**-**	**-**

	Coho						Sockeye			Steelhead			
	2010		2009		10-Yr Avg.				10-Yr			10-Yr	Wild 2010
DAM	Adult	Jack	Adult	Jack	Adult	Jack	2010	2009	Avg.	2010	2009	Avg.	
BON	**0**	**0**	**0**	**0**	**0**	**0**	**311728**	**148463**	**78844**	**33354**	**15291**	**18392**	**13108**
TDA	**0**	**0**	**0**	**0**	**0**	**0**	**245172**	**119803**	**64125**	**13960**	**5968**	**7566**	**6033**
JDA	**0**	**0**	**0**	**0**	**0**	**0**	**235979**	**107852**	**64152**	**10952**	**8664**	**8752**	**4509**
MCN	**0**	**0**	**0**	**0**	**0**	**0**	**183944**	**69099**	**45056**	**6568**	**4742**	**5201**	**2547**
IHR	**0**	**0**	**0**	**0**	**0**	**0**	**364**	**286**	**57**	**4781**	**4396**	**3685**	**1683**
LMN	**3**	**1**	**0**	**0**	**0**	**0**	**328**	**294**	**54**	**5754**	**6190**	**3734**	**2555**
LGS	**0**	**0**	**0**	**0**	**0**	**0**	**205**	**196**	**33**	**3886**	**6038**	**3264**	**1767**
LGR	**0**	**0**	**0**	**0**	**0**	**0**	**96**	**129**	**24**	**11015**	**11297**	**8947**	**4314**
PRD	**0**	**2**	**0**	**0**	**0**	**0**	**85755**	**45712**	**31480**	**311**	**136**	**213**	**0**
RIS	**0**	**0**	**0**	**0**	**0**	**0**	**12332**	**18097**	**9763**	**195**	**138**	**167**	**145**
RRH	**0**	**0**	**0**	**0**	**1**	**0**	**7020**	**10638**	**5005**	**392**	**468**	**277**	**295**
WEL	**0**	**0**	**0**	**0**	**0**	**0**	**3554**	**7154**	**2984**	**129**	**107**	**64**	**102**
WFA	**0**	**0**	**0**	**0**	**-**	**-**	**-**	**-**	**-**	**24634**	**13288**	**-**	**0**

PRD does not post wild steelhead numbers.
These numbers were collected from USACE, Grant PUD, Douglas PUD, Chelan PUD, ODFW and DART.
Wild steelhead numbers are included in the total. Wild Steelhead are defined as unclipped fish.
Historic counts (pre-1996) were obtained from CRITFC and compiled by the FPC.
Historic counts 1997 to present were obtained from the Corps of Engineers.

Page last updated on: 07/02/2010

BON counts from January 1, 2009 to March 14, 2010 (historical counts begin March 15):

Year	Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
2010	39	0	2,318	657
2009	19	-1	321	109