



Fish Passage Center Weekly Report #08 - 10

May 9, 2008

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

Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 29% and 80% of average at individual sub-basins over April. Precipitation above The Dalles has been 59% of average over April. Over the entire water year, precipitation has generally been near or above average.

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

Location	Water Year 2008 April 1-28		Water Year 2008 October 1, 2007 to April 1-28, 2008	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	1.03	67	16.02	101
SNAKE RIVER ABOVE ICE HARBOR	0.72	53	12.04	103
Columbia Above The Dalles	0.91	59	16.04	101
Kootenai	1.06	65	15.49	96
Clark Fork	0.62	53	10.81	107
Flathead	1.07	72	13.25	97
Pend Oreille/Spokane	1.31	62	23.28	104
Central Washington	0.18	31	4.75	73
SNAKE RIVER PLAIN	0.29	29	5.89	83
Salmon/Boise/Payette	0.76	51	15.06	106
Clearwater	1.70	68	21.64	103
SW Washington Cascades/Cowlitz	3.24	65	54.05	92
Willamette Valley	3.62	80	52.11	105

Snowpack within the Columbia Basin is above average. Average snowpack in the Columbia River for basins above the Snake River confluence is 126% of average, for Snake River Basins the average snowpack is 116% of average, and for lower Columbia Basins between McNary and Bonneville

Dam average snowpack is 296% of average.

Table 2. Displays the April Final and May Final runoff volume forecasts for multiple reservoirs. Water Supply Forecasts decreased slightly between the April Final and May Final forecasts. The current forecast (May Final) at The Dalles between January and July is 97300 Kaf (91% of average).

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

Location	April Final		May Final	
	% Average (1971- 2000)	Probable Runoff Volume (Kaf)	% Average (1971- 2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan- July)	94	101000	91	97300
Grand Coulee (Jan-July)	97	61200	95	59800
Libby Res. Inflow, MI (Jan- July)	96	6080	92	5820
Hungry Horse Res. Inflow, MI (Jan-July)	96	2140	91	2030
Lower Granite Res. Inflow (Apr- July)	108	23300	101	21800
Brownlee Res. Inflow (Apr-July)	86	5400	77	4860
Dworshak Res. Inflow (Apr-July)	120	3160	111	2930

The Biological Opinion flow period began on April 3rd in the lower Snake River (Lower Granite) and began on April 10th in the mid (Priest Rapids) and lower (McNary) Columbia River. According to the April Final Water Supply Forecast, the flow objectives this spring are 100 Kcfs at Lower Granite, 260 Kcfs at McNary, and 135 Kcfs at Priest Rapids. Generally, flows have increased over the last week. Flows at Lower Granite Dam have averaged 76.5 Kcfs over the last week and 58.4 Kcfs over the spring season, flows at Priest Rapids have averaged 107.3 Kcfs over the last week and 101.3 Kcfs over the spring season and flows at McNary have averaged 198.9 Kcfs over the last week and 175.1 Kcfs over the spring season.

On April 29th, 2008, the Salmon Mangers submitted SOR 2008-2, in response to projected flow decreases. The SOR requested the Action Agencies provide flows that will not decline from the average over the past week (about 180 kcfs) to use Grand Coulee, Libby, and Albeni Falls at McNary Dam. The Colville Tribe disagreed with any draft of Grand Coulee below its flood control elevation of 1228.8 feet due to impacts to ferries in the area. This issue was raised to an IT meeting held on 5-5-08. At the 5-5-08 IT Meeting, it was agreed to operate Grand Coulee within an elevation range of 1227.8-1229.8 feet until the initial control flow allowed the BOR to refill Grand Coulee.

Grand Coulee Reservoir is at 1229.2 feet (5-8-08) and has held within the range decided on at IT over the last several days. Outflows at Grand Coulee have ranged between 63.5 and 117.7 Kcfs over the last week. Inflows last week increased from 90.5 Kcfs on May 2nd to 132.4 Kcfs on May 8th, 2008.

The Libby Reservoir is currently at elevation 2396.8 feet (5-8-08) and refilled 0.8 feet last week. Outflows at Libby were increased to 9 Kcfs at 8pm on May 2nd, 2008 in response to SOR 2008-2. Inflows at Libby have increased from 5.7 Kcfs to 16.4 Kcfs over the last week.

Hungry Horse is currently at an elevation of 3501.9 ft (5-8-08) and has refilled 2.6 feet last week. Outflows remained at 4.7 Kcfs last week; inflows increased from 5.5 Kcfs early in the week to

10.9 kcfs on May 8th, 2008.

Dworshak is currently at an elevation of 1478.8 feet (5-8-08) and refilled 3.7 feet last week. At the TMT meeting on 5-7-08, it was decided to reduce DWR outflows to 7.2-7.5 Kcfs on 5-8-08 and further reduce outflows to 5.4 Kcfs on 5-11-08 and hold this outflow until 5-16-08, after which time DWR outflows will likely be reduced to the minimum outflow. Dworshak inflows have ranged between 8.1 and 16.1 Kcfs last week.

The Brownlee Reservoir was at an elevation of 2033.6 feet on May 8th, 2008, refilling 4.7 feet last week. Outflows at Brownlee Dam have been 11.5 to 18.6 Kcfs over the last week. Inflows at Brownlee Dam have been 16.6 to 20.9 Kcfs over the last week.

Spill: In accordance with the Court Order, spill was initiated at the Snake River Projects at 0001 hours on April 3, 2007. The Court Order calls for the following spill levels at the Federal Snake River Projects:

Project	Day/Night Spill
Lower Granite	20Kcfs/20Kcfs
Little Goose	30% /30%
Lower Monumental	Gas Cap/Gas Cap
Ice Harbor	30% /30% vs 45Kcfs/Gas Cap Study

Spill at Lower Granite Dam averaged an instantaneous 20.2 Kcfs until Thursday when flow increased and exceeded powerhouse capacity. Presently, two units are out of service at this project limiting powerhouse capacity to about 70 Kcfs. The Court ordered 14 days of nighttime gas cap spill at Little Goose Dam began at 1800 hours on April 25, 2008 and ended on the morning of May 9, 2008. Little Goose Dam has been meeting the 30% spill during daytime hours and spill to the gas cap at night. The project has been testing bulk versus uniform spill patterns. The uniform pattern has been implemented during nighttime hours to allow for a higher spill cap. The gas cap at Lower Monumental Dam was decreased to about 20 Kcfs based on the TDG readings at the Ice Harbor forebay. TDG at the Ice Harbor forebay exceeded

the 115% waiver for four days (May 4 - May 7). Currently, the instantaneous spill level at Lower Monumental Dam is approximately 20Kcfs. Spill at Ice Harbor Dam has met the court ordered 45 Kcfs daytime spill and gas cap nighttime spill. The 30%/30% spill level for the Ice Harbor study began on May 2, 2008 and the project will now vary between the two levels in randomized two day blocks. Spill has exceeded the test requirements since May 8th due to a unit outage.

Court ordered spill at the lower Columbia projects began on April 10, 2007. The Court Order calls for the following spill levels at the Federal Lower Columbia River Projects:

Project	Day/Night Spill
McNary	40%/40%
John Day	0/60% ; 30%/30% vs 40%/40% test
The Dalles	40%/40%
Bonneville	100 Kcfs/100 Kcfs

Spill at McNary and The Dalles dams met the Court ordered spill this past week. At John Day Dam TSW testing began on April 29th. During TSW testing, spill at John Day Dam will alternate between 30% of instantaneous flow for 24 hours and 40% of instantaneous flow for 24 hours. Spill at Bonneville Dams was close to the Court's Order of 100 Kcfs earlier in the week. However, the Camas/Washougal gauge read in excess of 115% on May 4-6 and spill at Bonneville Dam was reduced below about 96 Kcfs. The Camas/Washougal gage is not a required point of compliance. Spill on May 8 exceeded 100 Kcfs for removal of trash building up in the forebay. This resulted in a daily exceedence of the 120% TDG at the Cascade Island gage.

Gas bubble trauma (GBT) monitoring occurred at all the Snake River sites, Rock Island Dam and at Bonneville Dam. There were no observations of GBT at Lower Granite, or McNary dams this week. At both Little Goose, Lower Monumental and Bonneville dams 1 of 100 (1%) fish sampled was observed with minor signs of GBT. Finally, on May 5th and 8th, Rock Island Dam had a 6% and 3% occurrence of minor signs of

GBT, respectively.

Smolt Monitoring: Relatively large numbers of smolts continue to be captured at SMP traps over the past week as hatchery releases and wild out-migrants continued passing the traps steadily. The Salmon River Trap and the Grande Ronde Trap both were removed from the thalweg due to high flows and debris in those rivers. Smolt passage continued to pick up in the hydro-system this past week as well; with daily passage indices at Lower Granite Dam averaging 150,000 yearling Chinook and 120,000 per day for steelhead smolts.

At the Salmon River Trap this week the catch was again predominantly hatchery origin yearling Chinook that out-number wild Chinook more than 10 to 1. A large increase in catch occurred on May 1 as nearly 3,100 yearling Chinook were collected at the trap. PIT-tag recaptures of yearling Chinook were primarily from releases at Rapid River Hatchery and Knox Bridge (McCall Hatchery). Flows in the Salmon River, as measured at the USGS gage at White Bird, rose above historic average this week as flows peaked at 30 Kcfs on May 8.

At the Imnaha River Trap the numbers of yearling Chinook captured declined steadily through the past two weeks. Steelhead capture has increased by contrast; with collections above 1,700 fish occurring on 3 days in the past two weeks.

At the Grande Ronde Trap they captured 1,500 yearling Chinook on April 20 and April 21. Those fish were almost entirely hatchery origin fish (either ad-clipped or coded wire tagged). Since April 21 the catch of Chinook smolts has declined at the trap. Steelhead catch increased, with collection peaking at 718 fish on May 1. In the past week the trap has averaged just over 200 yearling Chinook and steelhead each per day. Flows on the Grande Ronde River increased to over 11,000 cfs on May 6 which was well above historic average of 6,500 cfs for this date.

At the Lewiston Trap on the Snake River IDFG crews caught increasing numbers of yearling Chinook and steelhead again this past week. The highest catch for the season to date occurred this week for yearling Chinook the capture of 991 fish

on May 7. Just over 600 steelhead were captured on May 8. The increased catch coincides with increasing flows. Flows rose to historic average of 50 Kcfs on May 5 and then exceeded historic average by May 7 when flows rose to about 68 Kcfs.

At Lower Granite Dam the daily passage indices for yearling Chinook rose to 278,000 fish on May 8, and the weekly average of 148,000 per day was much higher than last weeks' 40,000 fish per day. Steelhead indices were higher this week, averaging 119,000 per day compared to 54,000 per day last week. The yearling Chinook timing appears late this season while steelhead timing has been relatively early. In the past few days the population index for Chinook appear to have risen above steelhead for the first time since April 18. Collection for transportation began at Lower Granite Dam on May 1.

In the lower River at McNary, John Day and Bonneville dams passage indices for all spring migrants continued to increase. Yearling Chinook and steelhead indices rose to a seasonal high of 25,000 and 47,000 (respectively) at McNary on their most recent sampling date May 7. Coho and Sockeye passage indices increased as well over the past week. At Bonneville Dam passage numbers of subyearling Chinook decreased over the past several days as the most recent release of Spring Creek Hatchery fish passed the dam. The peak passage occurred on May 4 and 5 when the daily index rose to 233,000 on the 4th and then 242,000 the 5th. Subyearling numbers have been steadily declining since that peak to an index of 16,000 on May 9.

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 400,000 subyearling fall Chinook were scheduled for release into the Clearwater (50%) and Snake (50%) rivers this week. The subyearling Chinook scheduled for release into the Snake River were to be released below Hells Canyon Dam. A volitional release of approximately 782,000 summer steelhead to the Salmon River was scheduled to end this week.

This release began in mid-April. Finally, about 100,000 summer steelhead were scheduled for release into the East Fork Salmon River this week. There were no other releases of juvenile salmonids scheduled for this week.

Approximately 800,000 subyearling fall Chinook from the Umatilla Hatchery are scheduled to be released into the Snake River, below Hells Canyon Dam, beginning May 20th. Nearly 370,000 summer steelhead are scheduled for release into this zone next week. Approximately 67% of these summer steelhead are scheduled for release into the Salmon River, while the remaining 33% are scheduled for release into the Wallowa River.

Mid-Columbia Zone: The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam. Approximately 110,000 subyearling fall Chinook juveniles were scheduled for release into the Yakima River this week. Nearly 420,000 yearling summer Chinook were released into the Methow River this week.

In addition, a volitional release of nearly 605,000 yearling summer Chinook from the Similkameen Acclimation Ponds on the Okanogan River ended this week. Many Yakama Tribal releases of coho to the Methow, Wenatchee, and Yakima rivers continued this week. These releases are part of the tribal program to re-establish coho runs to these basins and are expected to run through the end of May. Approximately 118,470 summer steelhead were scheduled for release into the Methow River this week. In addition, nearly 330,000 summer steelhead were released to the Wenatchee River this week. These releases began on May 5th and are expected to end on or around May 9th. All of these juveniles are tagged with pink or green Elastomer tags.

Several volitional releases of yearling spring Chinook to this zone are scheduled to end next week. In all, these releases will total about 1.26 million spring Chinook juveniles. Of these, approximately 51% were scheduled for release to the Yakima River, while the remaining 49% were scheduled for release to the Wenatchee River. A volitional release of approximately 313,000 yearling summer Chinook from Wells Hatchery is

scheduled to end next week. In addition, approximately 143,000 yearling summer Chinook are scheduled for release into the Mid-Columbia River next week. Finally several releases of summer steelhead to the Methow and Okanogan rivers are scheduled to end next week. These releases began in late April and are expected to total about 448,000 juveniles.

Lower Columbia Zone: The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. On May 2nd, Spring Creek NFH conducted the final release of subyearling fall Chinook Tules for 2008. This final release consisted of nearly 3.5 million fall Chinook Tules. In all, Spring Creek NFH released approximately 14.9 million subyearling fall Chinook Tules this year. A volitional release of about 72,000 yearling spring Chinook from the Blackberry Acclimation Pond on Hood River was scheduled to end this week. Finally, nearly 1.1 million coho juveniles were scheduled for release into the Klickitat River this week.

Approximately 600,000 subyearling fall Chinook are scheduled for release into the Umatilla River next week. Finally, several releases of summer and winter steelhead to the White Salmon, Hood, and Klickitat rivers are scheduled to end next week. In all, these releases are expected to total nearly 119,000 summer steelhead and 49,000 winter steelhead juveniles. There are no other releases of juveniles salmonids scheduled for this zone over the next two weeks

Adult Fish Passage

Adult counts at Bonneville Dam have been updated through May 8th. Between March 15th and May 8th, 74,228 adult spring Chinook had passed Bonneville Dam. Daily adult spring Chinook counts at Bonneville ranged from 1,841 to 9,686. The 2008 count was about 1.58 times larger than the 2007 adult spring Chinook count of 46,711 at Bonneville Dam but is about 62.3% of the ten year average. The 2008 spring Chinook jack count at Bonneville Dam of 2,617 is about 43.8% of the 2007 count and about 65.1% of the ten year average.

Allen Thomas, a writer for the Columbian, wrote in an article on Thursday, that state, federal

and tribal biologists noted that the spring Chinook run is late this year, as it was during the past few springs. Officials met on Monday and reduced the predicted run size of spring Chinook for 2008 to 200,000 fish. The preseason forecast published in December was for 269,300 spring Chinook.

The 2008 Bonneville adult steelhead count was 2,208 fish, as of May 8th, which was 91 more fish when compared to the 2007 count of 2,117 fish. The 2008 wild steelhead count at Bonneville Dam was 735 fish. At Willamette Falls Dam, the 2008 count for steelhead was 6,654, as of May 6th. This year's steelhead count has 178 more fish than the 2007 count of 6,476 at Willamette Falls Dam.

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 the pools and will complete their trip to the spawning grounds in March through early May. Daily counts at Lower Granite ranged from 16 to 43 adult steelhead last week. The total steelhead count passing at Lower Granite Dam as of May 8th was 7,479. The 2008 count was about 71.2% of the 2007 count of 10,492. The 2008 Lower Granite adult steelhead count had 133 more fish than the 10-year average count of 7,346. The 2008 wild steelhead count at Lower Granite Dam as of May 8th was 2,267. At Rock Island Dam, as of May 7th, 176 adult steelhead had been counted and at Rocky Reach Dam 343 adult steelhead had been counted so far this season.

William McCall, an Associated Press writer, wrote in an article on Monday May 5th that six sea lions were found dead in two closed traps at Bonneville Dam on Sunday May 4th. Each trap contained the bodies of two California sea lions and one Stellar sea lion. Both species are protected under the Marine Mammal Protection Act, however, Stellar sea lions are an endangered species and are also protected under the Endangered Species Act. During trapping operations, the traps are left open so that the sea lions can get used to the traps. State and federal authorities are investigating the deaths and the circumstances surrounding the deaths, including how the trap doors were closed. On Tuesday, May 6th, a staff writer for KGW wrote that an additional sea lion

was found dead in the Columbia River near the Interstate Bridge. At this time the cause of death is unknown. It was also reported that the Humane Society of the United States reached an agreement with state and federal governments to block killing or permanent removal of sea lions in the Columbia River until 2009. The Humane Society is dropping its appeals case in federal court against the US Commerce Department and Oregon and Washington governments.

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

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
04/25/2008	116.9	0.0	116.8	0.0	120.0	7.8	116.6	0.0	119.5	10.2	145.5	0.0	149.7	0.0
04/26/2008	113.4	0.0	107.0	0.0	121.7	8.4	121.6	0.0	125.9	9.8	125.1	0.0	122.6	0.0
04/27/2008	112.6	0.0	122.9	19.2	117.7	8.1	112.1	0.0	114.1	9.0	112.4	0.0	117.9	0.0
04/28/2008	116.2	0.0	113.8	0.0	116.6	7.9	111.7	0.0	114.0	10.5	124.3	0.0	122.0	0.0
04/29/2008	99.7	0.0	105.8	0.0	111.2	7.9	111.6	0.0	116.1	12.6	124.7	0.0	119.2	0.0
04/30/2008	78.8	0.0	70.6	0.0	95.0	6.5	92.3	0.0	97.1	13.0	105.9	7.5	107.4	0.0
05/01/2008	100.9	0.0	108.0	0.0	101.0	6.7	96.0	0.0	97.8	12.4	117.9	17.8	117.1	9.1
05/02/2008	98.3	0.0	101.1	0.0	102.9	7.5	102.8	0.0	103.8	11.8	110.1	16.5	104.0	20.3
05/03/2008	98.2	0.0	99.7	0.0	102.8	7.3	97.0	0.0	100.5	11.5	93.5	17.4	96.2	20.5
05/04/2008	63.5	0.0	65.4	0.0	82.4	6.1	88.8	0.0	92.8	9.8	100.2	17.5	96.2	20.1
05/05/2008	105.7	0.0	103.4	0.0	99.2	7.9	92.5	0.2	94.3	11.4	96.6	17.3	91.2	20.2
05/06/2008	107.5	0.0	108.6	0.0	113.8	8.0	108.2	0.0	112.4	11.1	100.7	18.5	94.8	20.5
05/07/2008	112.0	0.0	111.4	0.0	121.7	8.3	125.9	0.0	131.9	10.5	136.5	19.6	128.4	22.2
05/08/2008	117.7	0.0	125.9	0.0	137.7	8.7	130.4	0.0	134.8	13.0	144.4	19.2	142.8	21.4

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

Date	Dworshak		Hells Brownlee Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
04/25/2008	10.6	0.0	16.0	20.4	60.2	20.4	59.7	21.0	56.7	24.3	63.1	49.0
04/26/2008	10.7	0.0	15.2	21.6	56.1	20.4	53.5	22.9	51.8	25.3	56.3	44.9
04/27/2008	10.7	0.0	15.7	19.0	58.3	20.3	57.7	23.0	54.5	25.3	58.7	46.1
04/28/2008	10.7	0.0	15.8	21.4	55.2	20.2	54.9	22.6	50.8	24.5	54.8	42.1
04/29/2008	10.7	0.0	17.7	14.7	67.2	20.4	65.6	25.7	62.9	22.9	67.7	48.9
04/30/2008	10.7	0.0	18.1	14.2	71.2	20.4	71.6	26.6	68.6	21.5	74.3	55.5
05/01/2008	10.7	0.0	18.5	12.3	67.7	20.4	66.1	27.9	66.3	22.5	73.6	49.8
05/02/2008	10.7	0.0	17.5	14.5	63.5	20.4	62.3	28.0	60.7	23.8	61.7	22.8
05/03/2008	10.8	0.0	16.6	14.8	62.3	20.3	62.1	29.1	61.5	23.8	65.2	19.5
05/04/2008	10.8	0.0	17.4	17.2	63.2	20.3	63.1	29.0	61.2	23.8	64.9	43.7
05/05/2008	10.7	0.0	18.1	20.1	74.0	20.2	72.0	30.7	71.2	23.1	76.9	50.8
05/06/2008	10.7	0.0	19.4	13.6	83.9	20.1	82.0	31.3	79.5	20.6	81.0	30.6
05/07/2008	10.4	0.0	19.6	15.7	87.5	20.3	84.8	31.1	86.6	19.7	88.0	26.2
05/08/2008	7.5	0.0	---	---	101.2	32.8	100.7	34.6	100.8	21.5	105.3	54.1

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

Date	McNary		John Day		The Dalles		Bonneville			
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
04/25/2008	219.0	87.7	227.9	68.9	216.6	86.1	205.4	98.8	5.0	90.3
04/26/2008	210.1	84.3	206.0	61.7	197.0	78.7	213.5	100.6	6.4	95.1
04/27/2008	169.7	68.0	157.5	47.4	154.8	61.9	185.0	99.5	1.3	72.8
04/28/2008	179.1	72.0	186.7	56.4	178.4	71.2	198.1	99.1	11.0	76.6
04/29/2008	184.1	73.9	167.7	51.1	165.5	66.3	186.5	98.9	0.9	75.3
04/30/2008	191.1	76.4	190.2	57.3	179.8	71.6	183.6	99.3	0.0	72.8
05/01/2008	200.9	80.4	206.8	62.3	198.9	79.7	223.4	99.8	10.0	102.3
05/02/2008	195.7	78.3	213.7	81.0	207.0	82.9	218.0	100.1	12.3	94.2
05/03/2008	182.6	73.5	180.4	72.3	169.4	67.7	183.3	101.0	0.7	70.6
05/04/2008	154.3	62.3	147.4	59.0	140.0	56.1	159.5	101.1	0.0	47.0
05/05/2008	190.8	76.5	190.1	76.0	188.8	75.7	201.0	99.1	7.2	83.3
05/06/2008	187.6	75.1	191.9	61.4	186.7	74.4	209.8	95.7	10.8	91.9
05/07/2008	241.4	96.9	240.3	72.5	230.4	92.2	236.8	97.0	37.8	90.7
05/08/2008	239.8	96.4	230.7	69.6	222.6	88.9	237.8	102.4	33.6	90.4

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											
	04/29/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/06/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Little Goose Dam											
	04/29/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	05/06/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
Lower Monumental Dam											
	04/28/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/05/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
McNary Dam											
	04/28/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/02/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/04/08	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	04/29/08	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	05/03/08	Chinook + Steelhead	57	0	0	0.00%	0.00%	0	0	0	0
	05/06/08	Chinook + Steelhead	100	1	0	0.00%	0.00%	0	0	0	0
Rock Island Dam											
	05/01/08	Chinook + Steelhead	100	5	5	5.00%	0.00%	5	0	0	0
	05/05/08	Chinook + Steelhead	100	6	6	6.00%	0.00%	5	1	0	0
	05/08/08	Chinook + Steelhead	100	3	3	3.00%	0.00%	2	1	0	0

HATCHERY RELEASE LAST TWO WEEKS

Hatchery Release Summary

From: **4/25/2008** to **05/08/08**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Colville Tribe	Cassimer Bar Hatchery	ST	SU	2008	20,000	04-04-08	04-30-08	Omak Creek	Okanogan River
Colville Tribe Total					20,000				
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2008	30,695	04-30-08	04-30-08	Yankee Fk (Salmon R)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2008	30,733	04-14-08	04-27-08	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2008	60,084	05-01-08	05-01-08	Slate Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2008	61,431	04-30-08	04-30-08	Yankee Fk (Salmon R)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2008	62,485	04-29-08	04-29-08	Valley Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2008	63,020	04-25-08	04-28-08	East Fk Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2008	830,894	04-10-08	04-29-08	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Oxbow-Idaho	CH0	FA	2008	200,000	05-06-08	05-06-08	Hells Canyon Dam	Snake River
Idaho Dept. of Fish and Game	Oxbow-Idaho	SO	UN	2008	70,000	05-01-08	05-01-08	Redfish Lake Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Sawtooth Hatchery	SO	UN	2008	70,000	05-01-08	05-01-08	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game Total					1,479,342				
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	FA	2008	200,000	05-04-08	05-10-08	Lapwai Creek	Clearwater River M F
Nez Perce Tribe Total					200,000				
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2008	160,000	05-01-08	05-01-08	Big Canyon Acclim.Pd (Grande Ronde)	Grande Ronde River
Oregon Dept. of Fish and Wildlife Total					160,000				
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2008	100,000	05-08-08	05-09-08	East Fk Salmon River	Salmon River (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2008	782,000	04-16-08	05-07-08	Salmon River (ID)	Salmon River (ID)
U.S. Fish and Wildlife Service	Spring Creek NFH	CH0	FA	2008	3,492,789	05-02-08	05-02-08	Spring Creek Hatchery	L Col R (D/s McN Dam)
U.S. Fish and Wildlife Service	Winthrop NFH	ST	SU	2008	118,470	05-08-08	05-08-08	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service Total					4,493,259				
Umatilla Tribe	Umatilla Hatchery	ST	SU	2008	50,000	04-29-08	04-29-08	Minthorn Acclimation Pond	Umatilla River
Umatilla Tribe	Umatilla Hatchery	ST	SU	2008	50,000	04-29-08	04-29-08	Pendelton Acclim Pond	Umatilla River
Umatilla Tribe Total					100,000				
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2008	26,918	04-24-08	05-16-08	Parkdale Acclim Pond	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2008	27,787	04-25-08	05-15-08	E Fk Hood River	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2008	72,000	04-23-08	05-09-08	Blackberry Acclim Pond	Hood River
Warm Springs Tribe Total					126,705				
Washington Dept. of Fish and Wildlife	Chiwawa Hatchery	CH1	SP	2008	615,000	04-14-08	05-14-08	Chiwawa River	Wenatchee River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2008	604,335	04-16-08	05-07-08	Similkameen Acclim Pd	Okanogan River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2008	926,000	04-28-08	04-28-08	Dryden Acclim Pond	Wenatchee River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2008	68,000	04-21-08	05-01-08	Baileysburg Bridge	Touchet River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SU	2008	419,938	05-02-08	05-02-08	Carlton Acclim Pond Ringold Springs	Methow River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	ST	SU	2008	134,164	04-14-08	04-28-08	Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2008	24,750	04-24-08	05-15-08	White Salmon River	White Salmon River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2008	94,000	04-24-08	05-15-08	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	WI	2008	21,000	04-24-08	05-15-08	White Salmon River	White Salmon River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	6,000	05-05-08	05-09-08	Chiwawa River	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	43,000	05-05-08	05-09-08	Chiwawa River	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	87,000	05-05-08	05-09-08	Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	95,000	05-05-08	05-09-08	Nason Creek	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	97,567	05-05-08	05-09-08	Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH1	SU	2008	313,000	04-14-08	05-15-08	Wells Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2008	90,000	04-21-08	05-15-08	Twisp River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2008	110,000	04-21-08	05-15-08	Chewuch River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2008	110,000	04-21-08	05-15-08	Methow River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2008	138,000	04-21-08	05-15-08	Okanogan River	Okanogan River
Washington Dept. of Fish and Wildlife Total					3,996,754				

HATCHERY RELEASE LAST TWO WEEKS-cont'd

Yakama Tribe	Cascade Hatchery	CO	UN	2008	62,201	05-01-08	05-10-08	Wenatchee River	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2008	69,402	05-01-08	05-10-08	Rolfings Acclim Pond Butcher Creek Acclim.	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2008	147,905	05-01-08	05-10-08	Pond	Wenatchee River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2008	211,004	03-15-08	05-15-08	Clark Flat Acclim Pond Jack Creek Acclim	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2008	217,146	03-15-08	05-15-08	Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2008	219,470	03-15-08	05-15-08	Easton Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2008	40,964	04-21-08	05-01-08	Prosser Acclim Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2008	100,000	04-21-08	05-01-08	Easton Pond Lost Creek Acclim	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2008	100,000	04-21-08	05-01-08	Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2008	100,000	04-21-08	05-01-08	Stiles Pond	Yakima River
Yakama Tribe	Eagle Creek NFH	CO	UN	2008	150,000	04-21-08	05-01-08	Holmes Pond	Yakima River
Yakama Tribe	Klickitat Hatchery	CO	NO	2008	1,093,800	05-07-08	05-07-08	Klickitat River	Klickitat River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2008	12,000	04-28-08	05-02-08	Cle Elum Lake	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2008	40,150	04-21-08	05-01-08	Prosser Acclim Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2008	40,579	04-21-08	05-01-08	Boone Pond Lost Creek Acclim	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2008	41,095	04-21-08	05-01-08	Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2008	42,447	04-21-08	05-01-08	Stiles Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CO	UN	2008	120,425	04-21-08	05-01-08	Holmes Pond	Yakima River
Yakama Tribe	Washougal Hatchery	CO	NO	2008	39,726	04-21-08	05-01-08	Yakama River	Yakima River
Yakama Tribe	Washougal Hatchery	CO	NO	2008	89,328	04-21-08	05-01-08	Boone Pond	Yakima River
Yakama Tribe	Willard Hatchery	CO	UN	2008	27,570	05-01-08	05-10-08	Wenatchee River	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2008	30,425	05-01-08	05-10-08	Rolfings Acclim Pond	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2008	70,299	05-01-08	05-10-08	Coulter Creek	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2008	83,866	05-05-08	05-05-08	Methow River	Methow River
Yakama Tribe	Willard Hatchery	CO	UN	2008	211,543	05-01-08	05-10-08	Wells Hatchery	Mid-Columbia River
Yakama Tribe	Winthrop NFH	CO	UN	2008	260,796	04-29-08	04-29-08	Winthrop Hatchery	Methow River
Yakama Tribe Total					3,622,141				
Grand Total					14,198,201				

HATCHERY RELEASE NEXT TWO WEEKS

Hatchery Release Summary

From: 5/9/2008 to 5/22/2008

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	FA	2008	200,000	05-04-08	05-10-08	Lapwai Creek	Clearwater River M F
Nez Perce Tribe Total					200,000				
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2008	120,000	05-10-08	05-10-08	Wallowa Acclim Pond	Wallowa River
Oregon Dept. of Fish and Wildlife	Umatilla Hatchery	CH0	FA	2008	300,000	05-15-08	05-15-08	Umatilla River	Umatilla River
Oregon Dept. of Fish and Wildlife	Umatilla Hatchery	CH0	FA	2008	800,000	05-20-08	05-21-08	Hells Canyon Dam	Snake River
Oregon Dept. of Fish and Wildlife Total					1,220,000				
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2008	100,000	05-08-08	05-09-08	East Fk Salmon River	Salmon River (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2008	103,000	05-12-08	05-16-08	Yankee Fk (Salmon R)	Salmon River (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2008	144,000	05-12-08	05-16-08	Yankee Fk (Salmon R)	Salmon River (ID)
U.S. Fish and Wildlife Service Total					347,000				
Umatilla Tribe	Umatilla Hatchery	CH0	FA	2008	300,000	05-15-08	05-15-08	Thornhollow Acclim Pond	Umatilla River
Umatilla Tribe Total					300,000				
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2008	26,918	04-24-08	05-16-08	Parkdale Acclim Pond	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2008	27,787	04-25-08	05-15-08	E Fk Hood River	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2008	72,000	04-23-08	05-09-08	Blackberry Acclim Pond	Hood River
Warm Springs Tribe Total					126,705				
Washington Dept. of Fish and Wildlife	Chiwawa Hatchery	CH1	SP	2008	615,000	04-14-08	05-14-08	Chiwawa River	Wenatchee River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2008	24,750	04-24-08	05-15-08	White Salmon River	White Salmon River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2008	94,000	04-24-08	05-15-08	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	WI	2008	21,000	04-24-08	05-15-08	White Salmon River	White Salmon River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH1	SU	2008	44,000	05-12-08	05-15-08	Turtle Rock Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH1	SU	2008	99,000	05-12-08	05-15-08	Chelan Falls	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	6,000	05-05-08	05-09-08	Chiwawa River	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	43,000	05-05-08	05-09-08	Chiwawa River	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	87,000	05-05-08	05-09-08	Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	95,000	05-05-08	05-09-08	Nason Creek	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	97,567	05-05-08	05-09-08	Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH1	SU	2008	313,000	04-14-08	05-15-08	Wells Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2008	90,000	04-21-08	05-15-08	Twisp River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2008	110,000	04-21-08	05-15-08	Chewuch River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2008	110,000	04-21-08	05-15-08	Methow River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2008	138,000	04-21-08	05-15-08	Okanogan River	Okanogan River
Washington Dept. of Fish and Wildlife Total					1,987,317				
Yakama Tribe	Cascade Hatchery	CO	UN	2008	62,201	05-01-08	05-10-08	Wenatchee River	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2008	69,402	05-01-08	05-10-08	Rolfings Acclim Pond Butcher Creek Acclim. Pond	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2008	147,905	05-01-08	05-10-08	Pond	Wenatchee River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2008	211,004	03-15-08	05-15-08	Clark Flat Acclim Pond Jack Creek Acclim Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2008	217,146	03-15-08	05-15-08	Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2008	219,470	03-15-08	05-15-08	Easton Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2008	55,000	05-09-08	05-09-08	Stiles Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2008	55,000	05-09-08	05-09-08	Yakama River	Yakima River
Yakama Tribe	Willard Hatchery	CO	UN	2008	27,570	05-01-08	05-10-08	Wenatchee River	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2008	30,425	05-01-08	05-10-08	Rolfings Acclim Pond	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2008	70,299	05-01-08	05-10-08	Coulter Creek	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2008	211,543	05-01-08	05-10-08	Wells Hatchery	Mid-Columbia River
Yakama Tribe Total					1,376,965				
Grand Total					5,557,987				

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

Date	<u>Hungry H. Dnst</u>			<u>Boundary</u>			<u>Grand Coulee</u>			<u>Grand C. Tlwr</u>			<u>Chief Joseph</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>					
	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>				
4/25	97	97	97	24	104	104	105	24	105	105	105	24	104	105	105	24	104	104	105	24
4/26	96	96	97	24	104	104	105	24	104	105	105	24	103	104	105	24	104	105	105	24
4/27	97	97	97	24	104	104	106	14	107	108	108	24	104	104	105	14	105	105	105	24
4/28	97	98	98	24	106	107	108	22	108	109	110	24	106	106	107	22	106	106	106	24
4/29	98	98	99	24	106	107	108	21	108	108	108	24	106	107	107	21	106	106	106	24
4/30	97	98	98	24	105	106	107	22	106	107	107	24	105	106	107	22	106	106	106	24
5/1	96	96	97	24	104	105	106	23	106	106	107	24	105	105	106	23	105	105	106	24
5/2	96	96	97	24	105	107	107	22	107	108	109	24	105	105	106	22	105	105	106	24
5/3	97	97	97	24	106	107	108	22	108	108	109	24	106	106	107	22	106	106	106	24
5/4	97	97	97	24	106	107	107	22	107	107	107	24	106	106	107	22	106	107	107	24
5/5	97	97	97	24	106	107	108	19	108	109	109	24	107	107	108	19	107	107	108	24
5/6	97	97	98	24	108	110	114	23	107	108	108	24	106	107	108	23	107	107	108	23
5/7	97	97	98	24	110	112	113	24	108	109	109	24	107	107	108	24	107	107	108	24
5/8	97	97	98	24	114	115	116	22	107	108	108	24	106	106	108	22	106	106	107	24

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	<u>Chief J. Dnst</u>			<u>Wells</u>			<u>Wells Dwnstrm</u>			<u>Rocky Reach</u>			<u>Rocky R. Tlwr</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>					
	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>				
4/25	104	105	105	24	104	104	104	24	105	106	106	24	105	105	106	24	105	106	106	24
4/26	104	104	105	24	104	104	105	24	105	106	106	24	105	105	105	24	105	105	105	24
4/27	113	117	120	24	105	106	106	24	106	107	107	24	106	106	107	24	106	106	107	24
4/28	106	107	107	24	109	110	111	24	110	111	111	24	107	108	108	24	108	108	108	24
4/29	106	107	107	24	107	108	109	24	109	110	111	24	108	108	108	24	108	108	108	24
4/30	106	107	107	24	105	106	106	24	107	107	108	24	108	108	108	24	108	109	109	24
5/1	105	106	106	24	104	105	105	24	105	106	107	24	106	107	107	24	106	107	107	24
5/2	105	105	106	24	105	106	107	24	107	108	108	24	106	106	107	24	106	106	107	24
5/3	106	107	107	24	106	107	108	24	108	108	109	24	106	107	107	24	106	107	107	24
5/4	106	107	109	24	106	107	108	23	108	109	110	23	107	108	108	24	107	108	108	24
5/5	106	107	107	24	107	108	109	24	109	110	110	24	108	109	109	24	108	109	109	24
5/6	106	107	107	24	107	108	109	24	109	110	110	24	108	109	109	24	109	109	109	24
5/7	107	107	108	24	107	108	108	24	109	109	110	24	108	109	109	24	109	109	109	24
5/8	105	106	106	24	106	107	108	24	108	109	110	24	108	108	108	24	108	108	108	24

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	<u>Rock Island</u>			<u>Rock I. Tlwr</u>			<u>Wanapum</u>			<u>Wanapum Tlwr</u>			<u>Priest Rapids</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>					
	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>				
4/25	106	106	106	24	108	109	111	24	---	---	---	0	---	---	---	0	---	---	---	0
4/26	105	105	106	24	108	109	112	24	---	---	---	0	---	---	---	0	---	---	---	0
4/27	106	107	107	24	109	110	113	24	---	---	---	0	---	---	---	0	---	---	---	0
4/28	107	108	109	24	110	111	112	24	109	110	111	24	110	110	111	24	109	110	111	24
4/29	108	108	108	24	110	111	115	24	109	109	109	24	109	110	110	24	109	109	110	24
4/30	107	107	108	24	111	112	114	24	107	107	108	24	109	110	111	24	107	107	108	24
5/1	107	107	108	24	111	112	113	24	106	106	107	24	110	110	110	24	106	108	109	24
5/2	106	107	107	24	110	111	113	24	108	109	111	24	110	111	111	24	110	110	112	24
5/3	107	107	107	24	110	111	112	24	108	109	110	24	111	112	112	24	110	110	111	24
5/4	107	108	109	24	111	112	114	24	109	111	111	24	112	113	113	24	112	115	120	24
5/5	109	109	109	24	112	114	117	24	110	111	112	24	112	113	113	24	113	114	117	24
5/6	109	109	110	24	111	112	116	24	109	110	110	24	112	113	113	24	111	112	114	24
5/7	108	108	109	24	110	111	115	24	108	108	109	24	112	112	113	24	109	109	110	24
5/8	108	108	109	24	110	111	113	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

Date	<u>Priest R. Dnst</u>			<u>Pasco</u>			<u>Dworshak</u>			<u>Clrwtr-Peck</u>			<u>Anatone</u>							
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>
	<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
4/25	---	---	---	0	104	105	106	24	95	95	95	7	98	99	100	24	102	102	103	24
4/26	---	---	---	0	105	106	106	24	96	96	96	16	99	100	101	24	102	103	104	24
4/27	---	---	---	0	106	107	108	24	96	97	97	24	100	101	101	24	103	104	104	24
4/28	110	110	110	24	108	109	109	24	98	98	99	24	101	102	103	24	103	104	105	24
4/29	109	109	110	24	107	108	108	24	97	98	98	23	100	100	100	23	101	102	102	24
4/30	107	108	108	24	106	106	107	24	97	97	98	24	100	100	100	24	101	102	102	24
5/1	107	109	111	24	105	106	106	24	96	96	97	24	99	100	101	23	102	103	104	24
5/2	112	113	113	24	106	107	108	24	96	97	97	24	100	101	102	24	102	103	104	24
5/3	112	113	113	24	109	109	110	24	96	97	97	24	100	101	102	24	102	103	104	24
5/4	113	114	114	24	109	110	111	24	96	97	97	24	100	101	102	24	102	103	104	24
5/5	114	115	116	24	110	111	112	24	97	98	98	23	100	101	102	23	102	103	104	24
5/6	113	114	114	24	110	111	112	24	98	98	99	24	100	101	102	24	102	103	103	24
5/7	112	112	113	24	109	109	110	24	97	98	98	24	100	101	101	24	102	103	103	24
5/8	---	---	---	0	107	108	109	24	97	97	97	24	101	101	102	24	103	103	104	24

Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clrwtr-Lewiston</u>			<u>Lower Granite</u>			<u>L. Granite Tlwr</u>			<u>Little Goose</u>			<u>L. Goose Tlwr</u>							
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>
	<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
4/25	100	102	104	24	100	101	101	24	110	110	111	24	105	106	106	24	114	116	119	24
4/26	101	104	105	24	100	100	101	24	110	110	111	24	105	105	105	24	116	119	120	24
4/27	102	104	105	24	101	101	102	24	110	110	111	24	106	107	108	24	112	114	117	24
4/28	102	105	107	24	102	103	103	24	111	111	112	24	109	110	111	24	112	114	115	24
4/29	100	101	102	23	104	105	105	24	111	111	113	24	109	110	110	24	113	114	115	24
4/30	100	101	102	24	103	104	104	24	110	110	111	24	109	109	110	24	113	114	114	24
5/1	101	103	104	24	101	102	103	24	110	111	112	24	107	108	108	24	115	116	116	24
5/2	102	104	105	24	101	101	101	24	110	110	111	24	106	107	107	24	116	116	117	24
5/3	102	103	105	24	101	102	102	24	110	110	111	24	108	109	111	24	114	117	117	24
5/4	102	104	105	24	103	103	104	24	111	111	111	24	109	109	110	24	114	116	117	24
5/5	101	103	104	23	104	104	105	24	110	111	111	24	111	112	113	24	117	117	117	24
5/6	101	102	103	24	104	104	104	24	110	110	111	24	111	111	112	24	117	117	119	24
5/7	101	101	101	24	103	103	104	24	110	110	110	24	110	110	110	24	114	116	117	24
5/8	101	102	103	24	102	102	102	24	114	117	118	24	108	108	109	24	114	115	116	24

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

Date	<u>Lower Mon.</u>			<u>L. Mon. Tlwr</u>			<u>Ice Harbor</u>			<u>Ice Harbor Tlwr</u>			<u>McNary-Oregon</u>							
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>
	<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
4/25	107	107	107	17	118	118	118	17	112	112	112	24	115	115	115	24	---	---	---	0
4/26	107	107	108	24	118	118	119	24	111	112	112	24	114	115	115	24	---	---	---	0
4/27	109	110	112	24	118	119	119	24	113	114	115	24	114	115	116	24	---	---	---	0
4/28	114	116	117	24	119	119	120	24	116	117	118	24	115	115	116	24	---	---	---	0
4/29	116	116	116	24	119	119	120	24	117	118	118	24	115	116	117	24	---	---	---	0
4/30	112	112	113	24	113	115	118	24	115	116	116	24	116	116	116	24	---	---	---	0
5/1	110	110	110	24	112	113	116	24	113	113	113	24	115	116	116	24	---	---	---	0
5/2	111	111	112	24	117	119	120	24	112	112	113	24	113	114	115	24	---	---	---	0
5/3	112	112	112	2	119	119	119	2	113	113	114	24	114	115	115	24	---	---	---	0
5/4	115	116	116	24	115	117	119	24	114	115	116	24	114	116	116	24	---	---	---	0
5/5	116	116	117	24	112	113	114	24	117	118	118	24	116	116	117	24	---	---	---	0
5/6	115	116	117	24	115	116	118	24	117	118	118	24	116	117	117	24	---	---	---	0
5/7	115	116	117	24	115	115	116	24	115	115	117	24	116	116	116	24	---	---	---	0
5/8	114	114	114	24	114	115	116	24	113	113	114	24	117	119	120	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

Date	<u>McNary-Wash</u>			<u>McNary Tlwr</u>			<u>John Day</u>			<u>John Day Tlwr</u>			<u>The Dalles</u>							
	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#					
	Avg	Avg		High	hr		Avg	Avg		High	hr		Avg	Avg		High	hr	Avg	AVG	High
4/25	105	106	107	24	113	113	114	24	104	104	105	24	114	115	115	24	107	107	108	24
4/26	106	106	107	24	113	113	114	24	106	107	108	24	113	114	115	24	109	109	110	24
4/27	108	109	110	24	114	114	115	24	108	108	109	24	113	113	114	24	111	111	112	24
4/28	110	110	110	24	114	115	116	24	109	109	110	24	113	114	114	24	112	112	113	24
4/29	110	110	110	24	114	115	116	24	108	108	109	24	112	114	114	24	110	111	111	24
4/30	108	108	109	24	114	115	116	24	108	108	108	24	112	113	113	24	108	109	109	23
5/1	106	107	108	24	114	114	114	24	107	108	108	24	114	115	116	24	108	109	110	24
5/2	108	109	109	24	114	114	115	24	108	109	109	24	115	115	116	24	111	111	112	24
5/3	109	109	110	24	115	116	116	24	109	109	109	24	114	115	115	24	112	113	113	24
5/4	110	110	111	24	116	116	116	24	108	108	109	24	114	114	115	24	111	112	112	24
5/5	111	112	113	24	115	115	117	24	109	109	109	24	115	115	116	24	113	113	114	24
5/6	112	113	113	24	115	115	116	24	109	110	110	24	114	114	115	24	111	112	112	24
5/7	112	112	113	24	114	115	116	24	109	109	110	24	114	115	115	24	108	108	110	24
5/8	110	111	111	24	114	115	115	24	108	109	109	24	114	115	116	24	108	108	109	24

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>Camas\Washougal</u>			<u>Cascade Island</u>							
	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#					
	Avg	Avg		High	hr		Avg	Avg		High	hr		Avg	Avg		High	hr	Avg	Avg	High
4/25	113	113	114	24	109	110	111	24	115	115	116	24	113	114	115	24	117	117	118	24
4/26	114	115	115	24	110	111	112	24	115	116	116	24	112	113	113	24	117	118	118	24
4/27	114	115	115	24	113	114	114	24	116	117	118	24	113	115	116	24	117	117	118	24
4/28	115	115	116	24	115	115	115	24	117	117	117	24	116	117	118	24	117	118	118	24
4/29	113	114	114	24	113	114	115	24	116	117	117	24	115	115	116	24	117	117	117	24
4/30	113	113	114	24	110	111	112	24	115	116	116	24	113	114	115	24	117	117	117	24
5/1	114	115	115	24	110	111	112	24	115	115	116	16	114	115	116	24	117	118	118	24
5/2	116	116	117	24	112	113	114	24	---	---	---	0	113	114	114	24	118	118	119	24
5/3	116	116	117	24	114	114	114	24	---	---	---	0	114	115	116	21	117	118	118	24
5/4	116	116	117	24	114	114	115	24	---	---	---	0	116	118	119	22	118	118	119	24
5/5	116	117	117	24	115	116	116	24	---	---	---	0	118	119	121	24	117	118	118	24
5/6	115	116	116	24	113	114	115	24	---	---	---	0	115	115	116	24	117	117	117	24
5/7	114	114	115	24	110	110	112	24	---	---	---	0	112	113	113	24	118	119	119	24
5/8	114	114	115	24	108	109	109	24	---	---	---	0	111	113	113	24	119	120	130	24

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/currentsmppsubmitdata.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)	
04/25/2008	*	983	90	812	31	35,903	0	2,547	80	3,520	10,639	22,754
04/26/2008	*	609	85	530	41	36,220	0	4,454	37	---	12,417	18,092
04/27/2008	*	278	98	210	48	22,132	0	4,546	19	6,002	12,568	18,070
04/28/2008	*	199	91	366	30	31,154	22,587	2,569	17	---	11,132	17,547
04/29/2008	*	416	253	980	54	35,222	30,765	2,908	71	5,929	7,546	18,255
04/30/2008	*	1,886	144	222	272	78,843	30,373	11,726	523	---	11,159	20,513
05/01/2008	*	3,099	142	427	209	52,640	38,246	13,878	648	11,421	7,802	18,759
05/02/2008	*	1,214	72	295	271	112,073	20,892	16,232	335	---	10,538	20,637
05/03/2008	*	724	59	168	300	105,345	30,115	18,280	214	18,668	9,011	17,279
05/04/2008	*	391	26	140	139	92,715	91,368	13,318	174	---	10,975	21,725
05/05/2008	*	173	18	368	171	100,818	56,334	10,434	128	14,147	10,455	19,051
05/06/2008	*	279	---	275	434	163,678	54,810	14,651	158	---	7,317	21,846
05/07/2008	*	361	---	134	991	195,672	68,525	22,095	171	25,352	9,577	28,156
05/08/2008	*	159	---	113	918	271,477	102,962	23,357	386	---	16,825	32,347
05/09/2008		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
Total:		10,771	1,078	5,040	3,909	1,333,892	546,977	160,995	2,961	85,039	147,961	295,031
# Days:		14	11	14	14	14	14	14	14	7	14	14
Average:		769	98	360	279	95,278	39,070	11,500	212	12,148	10,569	21,074
YTD		55,983	78,519	18,145	4,961	1,652,447	547,620	200,278	3,236	192,323	221,757	497,784

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)	
04/25/2008	*	0	0	0	1	0	0	0	10	0	0	1,144
04/26/2008	*	0	0	0	0	0	0	0	0	---	0	1,429
04/27/2008	*	0	0	0	1	0	0	0	18	12	0	2,046
04/28/2008	*	0	0	0	0	0	35	0	3	---	0	949
04/29/2008	*	0	0	0	1	282	0	0	11	119	0	683
04/30/2008	*	0	0	0	1	0	0	0	4	---	0	723
05/01/2008	*	0	0	0	0	0	0	0	1	34	0	670
05/02/2008	*	0	0	0	0	0	2	0	1	---	0	1,075
05/03/2008	*	0	0	0	0	298	0	0	4	102	28	9,221
05/04/2008	*	0	0	0	0	0	95	0	0	---	0	233,573
05/05/2008	*	0	0	0	1	1,449	0	0	0	341	0	242,780
05/06/2008	*	0	---	0	0	0	0	0	1	---	0	102,484
05/07/2008	*	0	---	0	9	263	0	0	10	68	0	34,895
05/08/2008	*	0	---	2	6	0	309	0	3	---	0	18,869
05/09/2008		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
Total:		0	0	2	20	2,292	441	0	66	676	28	650,541
# Days:		14	11	14	14	14	14	14	14	7	14	14
Average:		0	0	0	1	164	32	0	5	97	2	46,467
YTD		0	0	2	54	4,319	458	0	480	686	28	1,960,445

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)	
04/25/2008	*	0	0	0	0	0	0	3	0	14	3,576	
04/26/2008	*	0	0	0	0	154	0	20	0	96	4,147	
04/27/2008	*	0	0	0	2	157	0	0	0	36	2,182	
04/28/2008	*	0	0	0	0	463	0	0	0	57	1,756	
04/29/2008	*	0	0	0	1	188	0	0	4	85	1,900	
04/30/2008	*	0	0	0	7	715	202	0	14	85	2,186	
05/01/2008	*	0	0	0	4	566	0	0	5	186	2,457	
05/02/2008	*	0	0	0	3	2,006	714	0	5	253	2,436	
05/03/2008	*	0	0	0	6	1,194	94	168	3	102	2,092	
05/04/2008	*	0	0	0	8	1,789	95	169	8	134	1,642	
05/05/2008	*	0	0	0	6	1,159	466	157	2	0	1,330	
05/06/2008	*	0	---	0	7	4,307	83	0	6	898	1,284	
05/07/2008	*	0	---	0	67	3,944	321	263	15	306	2,450	
05/08/2008	*	0	---	0	41	14,482	928	251	182	2,224	5,905	
05/09/2008		---	---	---	---	---	---	---	---	---	---	
<hr/>												
Total:		0	0	0	152	31,124	2,903	1,028	247	715	6,159	35,343
# Days:		14	11	14	14	14	14	14	14	7	14	14
Average:		0	0	0	11	2,223	207	73	18	102	440	2,525
YTD		0	0	0	171	31,295	2,904	1,028	259	1,388	6,489	53,690

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)	
04/25/2008	*	54	51	135	223	22,166	0	2,512	18	2,569	2,286	1,073
04/26/2008	*	47	105	76	382	28,205	0	4,159	10	---	2,967	2,072
04/27/2008	*	53	104	28	156	41,438	0	3,112	12	7,383	3,438	898
04/28/2008	*	72	210	74	81	51,666	66,760	3,026	7	---	3,353	2,009
04/29/2008	*	139	1,745	515	249	72,604	80,177	1,945	34	8,925	1,971	1,633
04/30/2008	*	263	1,807	378	506	92,080	137,502	5,330	29	---	3,038	3,199
05/01/2008	*	317	709	718	848	71,884	127,951	8,371	35	16,876	3,901	3,796
05/02/2008	*	743	405	287	317	85,129	44,640	14,143	52	---	8,691	2,795
05/03/2008	*	278	345	197	461	111,313	38,928	35,721	42	24,092	14,596	2,480
05/04/2008	*	211	559	128	479	124,614	66,845	21,916	76	---	14,716	4,951
05/05/2008	*	141	1,774	280	216	152,095	34,884	23,563	49	18,592	20,477	7,976
05/06/2008	*	203	---	188	308	155,063	67,907	19,212	123	---	19,647	11,564
05/07/2008	*	82	---	210	504	84,992	245,330	9,864	193	46,662	20,202	25,139
05/08/2008	*	108	---	235	601	116,648	131,398	16,576	298	---	27,484	12,964
05/09/2008		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
Total:		2,711	7,814	3,449	5,331	1,209,897	1,042,322	169,450	978	125,099	146,767	82,549
# Days:		14	11	14	14	14	14	14	14	7	14	14
Average:		194	710	246	381	86,421	74,452	12,104	70	17,871	10,483	5,896
YTD		4,399	18,964	4,763	6,719	1,492,226	1,044,034	182,422	1,086	134,723	157,018	86,775

Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE											
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
04/25/2008	*	0	0	0	0	0	0	3	36	0	0	
04/26/2008	*	0	0	0	0	0	0	39	3	---	0	
04/27/2008	*	0	0	0	0	0	0	49	3	48	0	
04/28/2008	*	0	0	0	1	0	35	0	7	---	0	
04/29/2008	*	0	0	0	0	0	0	17	9	68	0	
04/30/2008	*	0	0	0	0	0	0	0	11	---	12	
05/01/2008	*	0	0	0	0	0	0	0	8	390	0	
05/02/2008	*	0	0	0	0	0	0	0	16	---	36	
05/03/2008	*	0	0	0	0	0	0	0	19	408	0	
05/04/2008	*	0	0	0	0	0	0	0	17	---	34	
05/05/2008	*	0	0	0	0	290	0	0	9	85	113	
05/06/2008	*	0	---	0	0	0	0	0	10	---	67	
05/07/2008	*	0	---	0	0	0	0	0	20	679	29	
05/08/2008	*	0	---	0	0	0	0	0	37	---	215	
05/09/2008		---	---	---	---	---	---	---	---	---	---	
<hr/>												
Total:		0	0	0	1	290	35	105	172	1,714	506	314
# Days:		14	11	14	14	14	14	14	14	7	14	14
Average:		0	0	0	0	21	3	8	12	245	36	22
YTD		0	0	0	3	791	36	132	179	1,767	520	316

* 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:

5/9/08 11:16 AM

		Species					
		04/25/08 TO 05/09/08					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	1,583	953,236	22,922	200	845,764	1,823,705
	Sum of NumberBarged	1,390	746,826	21,569	161	640,995	1,410,941
	Sum of NumberBypassed	193	203,963	1,346	28	204,646	410,176
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	34	1	0	15	50
	Sum of FacilityMorts	0	826	6	11	108	951
	Sum of ResearchMorts	0	1,587	0	0	0	1,587
	Sum of TotalProjectMorts	0	2,447	7	11	123	2,588
LGS	Sum of NumberCollected	271	321,429	1,725	20	626,552	949,997
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	270	321,411	1,725	20	626,546	949,972
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	4	0	0	4	8
	Sum of FacilityMorts	1	14	0	0	2	17
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	1	18	0	0	6	25
LMN	Sum of NumberCollected		107,850	710	55	109,835	218,450
	Sum of NumberBarged		0	0	0	0	0
	Sum of NumberBypassed		107,837	710	55	109,829	218,431
	Sum of Numbertrucked		0	0	0	0	0
	Sum of SampleMorts		1	0	0	0	1
	Sum of FacilityMorts		12	0	0	6	18
	Sum of ResearchMorts		0	0	0	0	0
	Sum of TotalProjectMorts		13	0	0	6	19
MCN	Sum of NumberCollected	397	50,030	421	1,009	73,609	125,466
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	397	49,990	421	1,009	73,557	125,374
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	15	0	0	10	25
	Sum of FacilityMorts	0	15	0	0	35	50
	Sum of ResearchMorts	0	4	0	0	5	9
	Sum of TotalProjectMorts	0	34	0	0	50	84
Total Sum of NumberCollected		2,251	1,432,545	25,778	1,284	1,655,760	3,117,618
Total Sum of NumberBarged		1,390	746,826	21,569	161	640,995	1,410,941
Total Sum of NumberBypassed		860	683,201	4,202	1,112	1,014,578	1,703,953
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of SampleMorts		0	54	1	0	29	84
Total Sum of FacilityMorts		1	867	6	11	151	1,036
Total Sum of ResearchMorts		0	1,591	0	0	5	1,596
Total Sum of TotalProjectMorts		1	2,512	7	11	185	2,716

YTD Transportation Summary

Source: Fish Passage Center

Updated:

5/9/08 11:16 AM

TO: 05/09/08

Site	Data	Species					Grand Total
		CH0	CH1	CO	SO	ST	
LGR	Sum of NumberCollected	2,943	1,162,236	23,042	510	1,032,497	2,221,228
	Sum of NumberBarged	1,682	810,140	21,611	305	685,529	1,519,267
	Sum of NumberBypassed	1,258	349,451	1,424	194	346,830	699,157
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	2	95	1	0	20	118
	Sum of FacilityMorts	1	960	6	11	118	1,096
	Sum of ResearchMorts	0	1,590	0	0	0	1,590
	Sum of TotalProjectMorts	3	2,645	7	11	138	2,804
LGS	Sum of NumberCollected	283	321,875	1,726	21	627,744	951,649
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	282	321,856	1,726	21	627,737	951,622
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	5	0	0	5	10
	Sum of FacilityMorts	1	14	0	0	2	17
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	1	19	0	0	7	27
LMN	Sum of NumberCollected		128,705	710	70	116,607	246,092
	Sum of NumberBarged		0	0	0	0	0
	Sum of NumberBypassed		128,231	710	70	116,571	245,582
	Sum of NumberTrucked		0	0	0	0	0
	Sum of SampleMorts		14	0	0	0	14
	Sum of FacilityMorts		451	0	0	36	487
	Sum of ResearchMorts		0	0	0	0	0
	Sum of TotalProjectMorts		465	0	0	36	501
MCN	Sum of NumberCollected	407	144,254	985	1,040	79,333	226,019
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	407	144,162	985	1,040	79,278	225,872
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	38	0	0	11	49
	Sum of FacilityMorts	0	42	0	0	36	78
	Sum of ResearchMorts	0	6	0	0	6	12
	Sum of TotalProjectMorts	0	86	0	0	53	139
Total Sum of NumberCollected		3,633	1,757,070	26,463	1,641	1,856,181	3,644,988
Total Sum of NumberBarged		1,682	810,140	21,611	305	685,529	1,519,267
Total Sum of NumberBypassed		1,947	943,700	4,845	1,325	1,170,416	2,122,233
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		2	152	1	0	36	191
Total Sum of FacilityMorts		2	1,467	6	11	192	1,678
Total Sum of ResearchMorts		0	1,596	0	0	6	1,602
Total Sum of TotalProjectMorts		4	3,215	7	11	234	3,471

Cumulative Adult Passage at Mainstem Dams Through: 05/08

DAM	EndDate	Spring Chinook						Summer Chinook						Fall Chinook					
		2008		2007		10-Yr Avg.		2008		2007		10-Yr Avg.		2008		2007		10-Yr Avg.	
		Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	05/08	74228	2617	46711	5974	118997	4016	0	0	0	0	0	0	0	0	0	0	0	0
TDA	05/07	47081	1373	30316	3046	74701	1918	0	0	0	0	0	0	0	0	0	0	0	0
JDA	05/08	35596	1363	24178	3013	60578	1516	0	0	0	0	0	0	0	0	0	0	0	0
MCN	05/08	19621	506	18355	1539	50531	1144	0	0	0	0	0	0	0	0	0	0	0	0
IHR	05/07	12329	156	10721	489	30402	522	0	0	0	0	0	0	0	0	0	0	0	0
LMN	05/08	9998	120	9557	546	28383	451	0	0	0	0	0	0	0	0	0	0	0	0
LGS	05/08	6695	77	6134	306	25089	403	0	0	0	0	0	0	0	0	0	0	0	0
LGR	05/08	3847	76	4356	215	23273	308	0	0	0	0	0	0	0	0	0	0	0	0
PRD	05/07	2100	28	1214	4	8406	8	0	0	0	0	0	0	0	0	0	0	0	0
RIS	05/07	1246	4	600	16	4355	23	0	0	0	0	0	0	0	0	0	0	0	0
RRH	05/07	216	0	177	0	1312	1	0	0	0	0	0	0	0	0	0	0	0	0
WEL	05/07	3	0	15	0	352	1	0	0	0	0	0	0	0	0	0	0	0	0
WFA	05/06	1933	17	7271	22	-	-	0	0	0	0	-	-	0	0	0	0	-	-

DAM	Coho						Sockeye			Steelhead			
	2008		2007		10-Yr Avg.		2008	2007	10-Yr Avg.	2008	2007	10-Yr Avg.	Wild 2008
	Adult	Jack	Adult	Jack	Adult	Jack							
BON	0	0	0	0	0	0	0	0	0	2208	2117	2438	735
TDA	0	0	0	0	0	0	0	0	0	1185	1074	932	480
JDA	-1	0	0	0	0	0	1	0	0	2644	1694	2787	1245
MCN	0	0	0	0	0	0	0	0	0	2280	1756	1555	1042
IHR	0	0	0	0	0	0	0	0	0	3085	2231	1863	1135
LMN	0	0	0	0	0	0	0	0	0	3840	2260	1893	1644
LGS	0	0	0	0	0	0	0	0	0	2432	2194	2128	930
LGR	0	0	0	0	0	0	1	0	0	7479	10492	7346	2267
PRD	0	0	0	0	0	0	0	0	0	42	20	3	0
RIS	0	0	0	0	0	0	0	0	0	176	32	29	91
RRH	0	0	0	0	0	0	0	0	0	343	112	113	165
WEL	0	0	0	0	0	0	0	0	0	28	16	14	19
WFA	0	0	2	0	-	-	0	0	-	6654	6476	-	-

*PRD is not posting 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: 05/09/08

BON counts from January 1, 2008 to March 14, 2008 (our traditional counts begin March 15):

Year	Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
2008	42	0	578	278
2007	22	0	1,677	517