



Fish Passage Center Weekly Report #07 - 9

May 4, 2007

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 60% and 124% of average at individual sub-basins over the first 23-days of April (last date of data available). Precipitation above The Dalles has been 94% of average over the first 23-days of 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 2007		Water Year 2007	
	April 1-23		October 1, 2006 to April 23, 2007	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	1.19	94	17.54	113
SNAKE RIVER ABOVE ICE HARBOR	1.18	106	10.25	90
Columbia Above The Dalles	1.18	94	16.59	107
Kootenai	1.19	89	19.05	120
Clark Fork	1.09	114	10.8	109
Flathead	1.48	123	14.47	108
Pend Oreille/Spokane	1.10	63	21.71	99
Central Washington	0.29	60	6.22	97
SNAKE RIVER PLAIN	0.99	124	6.06	88
Salmon/Boise/Payette	1.07	87	12.35	88
Clearwater	1.65	81	21.63	105
SW Washington Cascades/Cowlitz	2.52	61	59.98	104
Willamette Valley	3.38	91	53.42	109

Table 2 displays the April Final and May Early runoff volume forecasts for multiple reservoirs. Water Supply Forecasts did not vary much between the April Final and May Early forecasts at Columbia Basins and Snake Basin sites. The current forecast at The Dalles between January and July remained the same and is 100000 Kaf (93% of average). The May final forecast will be issued on May 7, 2007.

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

Location	April Final		May Early	
	% Average (1971- 2000)	Probable Runoff Volume (Kaf)	% Average (1971- 2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	93	100000	93	100000
Grand Coulee (Jan-July)	105	65900	105	66100
Libby Res. Inflow, MT (Jan-July)	106	6700	108	6820
Hungry Horse Res. Inflow, MT (Jan-July)	93	2070	93	2060
Lower Granite Res. Inflow (Apr- July)	70	15100	68	14600
Brownlee Res. Inflow (Apr-July)	52	3300	50	3170
Dworshak Res. Inflow (Apr-July), RFC Forecast	83	2200	80	2110
Dworshak Res. Inflow (Apr-July), COE Forecast	74 (April Final)	1982 (April Final)		

Grand Coulee Reservoir is at 1249.4 feet (5-03-07) and has drafted 1.5 feet in the last week. The end of April flood control elevation was 1249.4 feet. The project is scheduled to pass inflow until additional guidance is received next week with the updated forecast.

Dworshak is currently at an elevation of 1575.6 feet (5-03-07) and refilled 3 feet last week. The COE's official forecast dropped from 82% of average (March final) to 74% of average (April Final), which caused the end of April Flood Control elevation to increase to 1574.8 feet. Outflows at Dworshak have been 9.8 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2386.7 feet (5-03-07) and drafted 0.7 feet last week. Outflows at Libby are currently 19.3 Kcfs. The end of April Flood Control Elevation is 2378.7 feet. The VAR Q flow of 14.4 is scheduled to be implemented.

Hungry Horse is currently at an elevation of 3539.61 feet (5-03-07) and filled 3.5 feet last week. Outflows at Hungry Horse are currently 7.5 Kcfs and will continue at this level until the May forecast is issued. Hungry Horse's end of April VarQ Flood Control Elevation was 3548.4 feet.

The Brownlee Reservoir was at an elevation of 2072.96 feet on May 3rd, 2007, refilling 2.6 feet last week. Outflows at Brownlee Dam have been 8.7 to 12.1 Kcfs over the last week. The end of April Flood Control Elevation was 2071.6 feet.

The Biological Opinion flow period began on April 3rd in the lower Snake River (Lower Granite) and on April 10th in the mid (Priest Rapids) and lower (McNary) Columbia River. According to the last Water Supply Forecast (April Final), the flow objectives this spring will be 85 Kcfs at Lower Granite, 237 Kcfs at McNary, and 135 Kcfs at Priest Rapids. The McNary Dam flow over the past week averaged 247 Kcfs. The Lower Granite Dam flow over the past week averaged 72.5 Kcfs. The Priest Rapids Dam flow over the past week averaged 162.3 Kcfs.

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 has averaged an instantaneous 20 Kcfs. Spill at Little Goose Dam was at the 30% instantaneous level until the evening of April 29th. The 2007 operations agreement calls for the implementation of fourteen days of nighttime spill to the gas cap at Little Goose Dam. Nighttime gas cap spill was implemented at this time. The COE estimated that the 120% gas cap would be reached at a spill level of 29 Kcfs. In fact this spill level generated TDG of only about 118% in the tailrace, so spill never actually reached the 120% gas cap. However, the nighttime spill was decreased on May 2 when the COE established a new, lower spill level at this project. This spill level was changed based on the forebay readings downstream at Lower Monumental Dam, where the 115% was exceeded. On May 3, 2007 the 30% Court Ordered spill was not achieved in 17 out of 24 hours because of the spill limitation imposed by the COE. Tailrace TDG readings averaged 116.8% for the 12 highest hours on May 3, while the forebay at Lower Monumental averaged 115.5%. Spill for fish protection is being limited based on forebay TDG readings.

Daily average spill at Lower Monumental Dam is supposed to be 24 hours to gas cap. The monitoring of forebay gas at the downstream project (Ice Harbor) has consistently limited spill at Lower Monumental Dam. The total dissolved gas readings exceeded the 115% at Ice Harbor forebay on April 27 to May 1, and monitors were recording values that were higher than being observed below the spill in the tailrace of Lower Monumental Dam. Clearly, the downstream TDG monitors are exceeding gas criteria due to local effects (temperature and biological processes) and are not repre-

sentative of TDG due to spill at the upstream project.

Spill at Lower Monumental decreased from about 21-24 Kcfs last week, to just 13.5 to 18.7 this week, as the COE lowered their estimate of spill that would achieve the gas cap. A special spill level of 30 Kcfs was requested and provided for four hours on the evening of May 2 due to the accumulation of fish in the Lower Monumental forebay that were not passing the project as a result of the low spill levels. Subsequent to the special spill the level was decreased to 13.5 Kcfs until 1700 hours on May 3 when the spill was increased to 21.5 Kcfs.

As flows increase the Ice Harbor spill is being provided to achieve the study conditions specified in the Court's Order.

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%
The Dalles	40%/40%
Bonneville	100Kcfs/100Kcfs

Spill at McNary Dam is meeting the Court's Order. Spill at John Day Dam has not been achieving the Court's Order, and has only averaged about 48% spill between 1900 and 0600 hours over the past week. Total dissolved gas has been below the 120% in the John Day Dam tailrace, and 115% at The Dalles forebay monitor. JDA has been shown to have a flat dissolved gas generation curve with increasing spill above 100 kcfs up to approximately 140 kcfs. The COE established cap on spill was 120Kcfs from 4/27 to the evening of April 30th when it was increased to 128 Kcfs. It remained at 128 Kcfs until it was increased to 140 Kcfs on the evening of May 3, 2007. Spill at The Dalles has met the Court's Order. Spill at Bonneville Dam averaged 95 Kcfs over the past week, rather than the 100 Kcfs specified in the Court's Order. The TDG at the downstream fore-

bay (Camas/Washougal) slightly exceeded the 115% on April 27-April 29. Spill was reduced on April 28th. No exceedences were observed in gas since the 29th, but as of May 4th, spill has not been increased to the Court Order level.

Total dissolved gas at the federal hydro-projects was near waiver limits over the past week, with the exception of slight exceedences of TDG at Lower Monumental forebay, Ice Harbor forebay, and Camas/Washougal. Gas bubble trauma (GBT) monitoring continued this week at Lower Granite, Lower Monumental, Rock Island, and Bonneville dams. The April 28 sample of 100 Chinook & steelhead at Bonneville Dam observed 2 fish with minor signs of GBT and the May 1 sample had one fish with minor signs. All other samples showed no fish with signs of GBT.

Smolt Monitoring: Sampling is ongoing at all SMP locations. Full transportation (as opposed to research transportation) began at Lower Granite Dam on May 1. Sampling at Little Goose and Lower Monumental dams is limited to condition and research sampling; full sampling, in support of transportation will begin in May at those sites. Sampling at McNary Dam has been resumed on a regular schedule; every other day for spring migrants.

Smolt Monitoring at Snake River tributary traps continued this past week, where large numbers of yearling Chinook and steelhead are being captured at all traps. Flows have increased in the major tributaries beginning April 29, as warmer weather apparently increased snow melt. At the Salmon River Trap, operated by IDFG, hatchery yearling Chinook dominated the catch over the past week. Catch of yearling Chinook at the trap reached 2,877 on April 29. Over 3 million hatchery Chinook were released into the basin above the trap in the past month. The trap was temporarily shutdown this week due to a large log wedged into the screen. At the Grande Ronde Trap the catch of yearling Chinook and steelhead increased over the past week, with the highest catch reported on May 3 of 559 Chinook and 275 steelhead. The Imnaha Trap has had large numbers of hatchery yearling

Chinook and steelhead also pass the trap. Peak collection of steelhead of 2,787 occurred on April 30. At the Snake River Trap collection numbers increased sharply over the past 5 days, as the flows increased in the Snake River from 30 Kcfs on April 27 to 50 Kcfs by May 2, measured at USGS Anatone gage.

At Lower Granite Dam, there was a significant increase in collection of spring migrants the past week. The passage index for yearling Chinook rose to 207,000 on May 3, averaging 72,000 per day, while steelhead indices rose to 146,000 on the same date, averaging 54,000 over the past week. Based on estimated collection efficiency, roughly 4 million yearling Chinook have passed Lower Granite Dam, while an estimated 2 million steelhead have passed.

Full 24-hour sampling at Little Goose and Lower Monumental dams will begin when transportation begins at those sites. Transportation will begin on a delayed schedule this year similar to 2006. Some sampling for research and fish condition is occurring at those dams. For now sampling at these sites is limited to condition and research sub-samples which are samples taken for a few hours each date so the passage index and collection data should be used with caution for either timing or species composition information.

At Rock Island Dam the bypass was shut-down on Monday April 23rd and remained shut-down until April 26, so that crews could inspect and repair seals and brushes in the collection gates. Mortality had increased last week at the site leading the Chelan PUD to inspect and subsequently repair the gates. Normal sampling resumed on Friday, April 27, but the first real sample would not be available until April 28 to assess if the repairs had alleviated the mortality problem. Numbers of all spring migrants have increased rapidly in the past week as sampling has resumed.

In the Lower Columbia, at McNary Dam, just as at Rock Island, numbers of all spring migrants increased rapidly this past week. Yearling Chinook predominate in the sample, with the index averaging 77,000 over the past 4 sample dates, while steelhead indices averaged 15,000 for those same dates, compared to 5,000 per day average the

previous week. While at John Day Dam the yearling Chinook index averaged 49,000 per day this week compared to 19,000 last week, and steelhead numbers were up, with the average index this week at 9,90 compared to 1,900 the previous week.

At Bonneville Dam the yearling Chinook index averaged 26,000 over the past week, compared to 15,000 the previous week. Subyearling Chinook index rose to 259,000 on May 3, as passage from the third Spring Creek release peaked. During passage of this subyearling release, turbines units (11-13, and 16-17) were operated at the low end of 1% to minimize gateway turbulence as these smaller fish passed, as requested by the Salmon Managers in SOR# 2007-5. The mortality rate was much lower during this release than was seen in the earlier two Spring Creek releases this year. SMP personnel reported that mortality was well below 1% during the peak of passage, seeming to indicate that the operation helped reduce bypass mortality.

Adult Fish Passage: Adult counts at Bonneville Dam have been updated through May 3rd. Between March 15th and May 3rd, 37,024 adult spring Chinook had passed Bonneville Dam; this compares to 13,314 spring Chinook adults over the same period last year. Daily passage numbers at Bonneville Dam have ranged between 1,606 and 2,976 adult spring Chinook in the last week. The 2007 spring Chinook count thus far is about 34.3 percent of the 10-year average count. When the 2007 count of 37,024 is compared to the 2006 count of 13,314, it increased about 2.78 times. In 2006, the spring Chinook migration arrived much later than usual. The 2007 spring Chinook migration arrived earlier than the 2006 migration, but arrived later than the 10-year average migration. As of May 3rd, 1,938 steelhead had passed the dam which is about 1.14 times the 2006 count of 1,702. The 2007 Bonneville steelhead count of 1,938 was 400 steelhead less than the 10-year average count of 2,338 as of May 3rd.

Cassandra Profita of The Daily Astorian reported on April 16th in an article entitled, "Cap-

tured sea lions swing back to Astoria's O dock", that Oregon Department of Fish and Wildlife has done sea lion trapping and branding in Astoria for many years. This year the program has been expanded and includes a trap below Bonneville Dam. This trap has been set to catch sea lions below Bonneville dam who have been feeding on salmon. The National Oceanic and Atmospheric Administration, U.S. Army Corp of Engineers, and the Washington Department of Fish and Wildlife are helping with the effort. During early April, the program caught 6 pinnipeds. One goal of this program is to ensure that nuisance pinnipeds are identified and properly marked.

At upriver sites, adult steelhead continue to move through the hydro system to reach their tributaries and spawning sites. The majority of these fish over-wintered in pools and will complete their trip to the spawning grounds in March through early May. Daily counts at Lower Granite ranged between 10 and 22 adult steelhead in the last week. The total steelhead count passing at Lower Granite Dam as of May 3rd was 10,398 which was approximately 1.39 times greater than the 2006 count of 7,472 and 1.57 times greater than the 10-year average count of 6,599. As of May 2nd, 1,449 spring Chinook adults had passed Lower Granite dam compared to only 12 fish during the same period last year.

Note: The Corp of Engineers are currently working on their computer systems causing the delay in updating the counts at McNary, Ice Harbor, Lower Monumental and Little Goose Dams. They expect to have the counts updated by early to mid next week.

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 110,000 subyearling fall Chinook were scheduled for release on May 1st into the Snake River, just below Hells Canyon Dam. Several summer steelhead releases occurred in this zone over the past week. In all, these releases totaled about 1.72 million juveniles. Approximately 78% of these summer steelhead were released into the Salmon River, while 10%, 7%, and 6% were released into the Imnaha, Wallowa, and Grande Ronde Rivers, respectively.

Approximately 180,000 subyearling fall Chinook are scheduled for release into the Clearwater River, beginning May 17th. Next week (May 8th) marks the beginning of juvenile sockeye releases to the Salmon River, with about 54,000 scheduled for release into Redfish Lake and 46,000 scheduled for direct release into the Salmon River. Finally, approximately 464,000 summer steelhead are scheduled for release into this zone over the next two weeks. Of these, approximately 53%, 26%, and 22% will be released into the Salmon, Wallowa, and Grande Ronde Rivers, respectively.

Mid-Columbia Zone: The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam. A release of approximately 55,000 yearling spring Chinook into Lake Wenatchee was scheduled to occur on May 2nd. A volitional release of about 358,000 summer Chinook from the Wells Hatchery into the Mid-Columbia continued this week. This release began on April 23rd and is expected to run through May 7th. In addition, this week marked the end of a volitional release of an estimated 264,000 summer Chinook from the Carlton Acclimation Ponds into the Methow River. Finally, over the past week, an additional 908,000 summer Chinook were scheduled for release into the Wenatchee (78%) and Mid-Columbia Rivers (22%).

The Yakama Tribal Program to re-establish coho runs into the Methow and Wenatchee Rivers Basins continued this week with the release of approximately 136,631 smolts into the Wenatchee and 140,157 smolts into the Mid-Columbia River. On April 30th, 122,515 summer steelhead were released into the Methow River from Winthrop NFH. In addition, approximately 240,000 summer steelhead from Turtle Rock Hatchery were scheduled for release into the Wenatchee River this week. Of these, up to 95,000 were released into Nason Creek, a tributary of the Wenatchee River, and were tagged with pink Elastomer tags.

Approximately 95,000 subyearling fall Chinook are scheduled for release into the Yakima River on or around May 7th. Several long volitional releases of yearling spring Chinook are scheduled to end over the next two weeks. In all, these volitional releases total about 1.35 million juveniles. Of these, approximately 64% are being released into the Yakima River (Cle Elem Hatchery) and 36% are being released into the Wenatchee River. In addition, about 635,000 summer Chinook are scheduled to be volitionally released into this zone over the next two weeks. The Yakama Tribal Program to re-establish coho runs into the Methow and Wenatchee Rivers Basins will continue over the next two weeks with the release of an estimated 273,000 coho into the Wenatchee River. Finally, approximately 495,000 summer steelhead are scheduled for release into the Methow and Okanogan Rivers 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. On May 1st, just under 3.5 million Tule fall Chinook were released from Spring Creek NFH into the Lower Columbia River. This was the last release of Tule fall Chinook from this facility for migration year 2007. In all, just over 15.4 million Tule fall Chinook were released from Spring Creek NFH this year. A volitional release of approximately 32,000 yearling spring Chinook from Parkdale Acclimation Facility on Hood River was scheduled to end this week. In addition, Parkdale Acclimation Facility began a volitional release of about 9,750 summer steelhead

into Hood River this week. This release is scheduled to run through mid-May.

Approximately 300,000 subyearling fall Chinook are scheduled for release into the Umatilla River over the next two weeks. In addition, about 367,500 yearling spring Chinook are scheduled for release into this zone over the next two weeks. Of these, approximately 87% will be released into the Deschutes River, with the remaining 13% scheduled for release from acclimation facilities on Hood River. A release of about 1.07 million type-N coho into the Klickitat River has been delayed slightly and is now scheduled to begin on May 7th. This release was originally scheduled to begin May 1st. A volitional release of about 92,684 summer steelhead to the Klickitat River is scheduled to end on May 10th. Also scheduled to end on May 10th are two volitional releases of steelhead to the White Salmon River, totaling 49,184 smolts. Of these, approximately 54% are summer steelhead and 46% are winter steelhead. Finally, volitional releases of approximately 29,250 winter steelhead to Hood River are scheduled to end within the next two weeks.

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
04/20/07	149.4	0.0	149.5	0.0	160.8	13.6	161.0	12.0	163.6	16.5	177.7	31.7	180.6	75.7
04/21/07	132.3	0.0	132.2	0.0	147.6	10.0	149.1	0.0	154.4	14.9	163.9	23.0	167.3	102.1
04/22/07	109.8	0.0	115.3	10.5	124.2	9.2	118.2	0.7	121.1	13.6	151.1	20.4	156.4	95.5
04/23/07	147.1	0.0	153.6	2.9	164.7	23.1	162.5	12.4	163.4	16.5	147.6	21.1	159.5	97.2
04/24/07	153.4	0.0	149.4	0.0	159.4	15.9	157.8	11.1	160.1	16.0	161.6	21.9	157.7	96.0
04/25/07	146.6	0.0	151.3	0.0	163.6	15.4	161.9	7.7	165.5	16.1	171.2	28.9	173.8	106.2
04/26/07	137.0	0.0	138.2	0.0	147.7	10.0	152.5	2.7	160.2	16.2	170.2	29.3	176.9	107.9
04/27/07	143.4	0.0	151.3	0.0	162.6	25.4	158.5	12.3	159.6	16.1	163.8	23.4	167.9	52.8
04/28/07	126.0	0.0	123.7	0.0	136.7	10.1	140.2	0.2	148.1	16.1	168.1	25.0	164.4	14.9
04/29/07	121.7	0.0	118.9	0.0	129.2	10.4	124.0	3.5	128.9	13.4	154.9	21.4	153.8	15.2
04/30/07	141.9	0.0	147.6	0.0	163.6	16.2	165.9	9.4	169.4	17.0	145.7	20.1	156.2	12.0
05/01/07	130.0	0.0	141.4	0.0	154.9	13.0	158.5	5.6	163.0	16.1	178.3	39.8	160.2	14.3
05/02/07	130.4	0.0	129.2	0.0	143.3	10.3	148.0	5.6	154.8	16.1	169.3	24.7	174.0	15.1
05/03/07	150.8	0.0	147.1	0.0	161.4	15.6	156.7	3.8	159.9	16.9	168.3	22.8	159.6	12.4

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

Date	Dworshak		Brownlee Canyon		Hells Granite		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
04/20/07	7.6	0.0	12.3	11.5	46.3	20.0	45.3	13.8	44.0	25.1	46.8	36.8		
04/21/07	7.6	0.0	12.1	10.1	47.4	19.9	48.4	14.5	49.9	23.4	54.5	44.4		
04/22/07	7.6	0.0	11.7	11.1	45.3	20.0	41.5	12.5	39.3	23.4	40.2	30.2		
04/23/07	7.6	0.0	12.2	12.9	46.1	20.0	42.6	12.9	41.7	23.4	45.8	35.8		
04/24/07	7.6	0.0	11.9	10.2	45.8	19.9	45.9	13.7	47.2	23.4	51.4	41.1		
04/25/07	8.3	0.0	10.9	10.2	48.9	19.9	46.0	13.5	44.8	21.8	46.2	36.0		
04/26/07	9.8	0.0	11.4	10.0	51.6	20.0	49.8	15.1	51.0	21.4	52.8	42.7		
04/27/07	9.8	0.0	11.6	10.3	53.8	19.9	53.6	16.1	54.7	20.3	56.3	43.3		
04/28/07	9.8	0.0	11.8	11.8	55.8	19.8	52.7	15.9	53.4	18.7	55.5	45.3		
04/29/07	9.8	0.0	12.2	12.2	60.9	19.9	59.5	20.9	60.6	18.7	61.7	47.0		
04/30/07	9.8	0.0	12.4	12.1	71.8	20.0	69.9	25.7	71.3	17.2	72.1	54.1		
05/01/07	9.8	0.0	13.0	11.3	83.0	19.9	82.8	26.9	85.7	15.2	86.5	61.7		
05/02/07	9.8	0.0	14.9	11.7	88.5	20.0	83.2	26.6	83.7	17.5	86.3	33.9		
05/03/07	9.8	0.0	---	---	94.0	20.0	91.4	25.6	92.1	16.0	91.7	27.6		

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

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
04/20/07	218.5	87.9	220.6	71.1	214.6	86.3	226.9	99.6	22.6	93.2
04/21/07	216.8	87.4	217.3	65.3	213.4	85.8	232.4	100.2	27.2	93.6
04/22/07	221.7	88.9	215.8	63.9	214.9	85.9	231.7	99.5	28.5	92.2
04/23/07	217.8	87.7	219.8	63.9	216.4	86.3	242.8	98.5	36.9	95.9
04/24/07	208.7	83.4	198.2	55.2	193.7	77.2	209.3	98.1	8.7	91.0
04/25/07	216.0	87.0	206.1	59.9	207.0	81.9	220.9	98.8	14.2	96.4
04/26/07	230.5	92.7	222.5	60.9	216.7	86.8	235.6	98.6	35.5	90.0
04/27/07	235.3	94.5	229.2	60.4	226.3	90.6	223.2	99.3	17.9	94.5
04/28/07	233.6	93.8	222.8	60.5	216.8	86.2	236.0	97.4	36.3	90.8
04/29/07	228.5	91.9	227.4	59.5	225.4	90.4	240.8	93.9	44.8	90.7
04/30/07	235.4	94.5	227.3	62.6	223.1	89.6	244.4	93.9	44.4	94.6
05/01/07	259.2	104.1	247.9	64.5	247.6	98.9	268.6	92.7	68.4	96.1
05/02/07	266.1	106.8	256.0	64.6	255.1	101.3	267.3	92.8	69.7	93.2
05/03/07	270.6	108.0	269.4	67.4	262.9	104.4	271.8	93.3	74.6	92.5

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											
	04/24/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Little Goose Dam											
	04/24/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/01/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Lower Monumental Dam											
	04/30/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
McNary Dam											
	04/30/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	04/24/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	04/28/07	Chinook + Steelhead	100	2	2	2.00%	0.00%	1	1	0	0
	05/01/07	Chinook + Steelhead	101	1	1	0.99%	0.00%	1	0	0	0
Rock Island Dam											
	04/30/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/01/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0

HATCHERY RELEASE LAST TWO WEEKS

Hatchery Release Summary

From: **4/20/2007** to **05/03/07**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	30,451	04-27-07	04-27-07	Yankee Fk (Salmon R)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	50,592	04-30-07	04-30-07	East Fk Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	54,640	04-30-07	04-30-07	Valley Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	60,392	05-01-07	05-02-07	Slate Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	60,439	04-20-07	04-23-07	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	60,783	04-27-07	04-27-07	Yankee Fk (Salmon R)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	63,669	04-26-07	04-26-07	Squaw Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	132,159	04-25-07	04-27-07	Squaw Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	207,487	04-23-07	04-25-07	East Fk Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2007	266,738	04-04-07	04-26-07	Little Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2007	830,447	04-06-07	04-24-07	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Oxbow-Idaho	CH0	FA	2007	110,000	05-01-07	05-01-07	Hells Canyon Dam	Snake River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2007	2,498,246	03-15-07	04-27-07	Rapid River	Little Salmon River
Idaho Dept. of Fish and Game Total					4,426,043				
									Big Canyon Acclim.Pd
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2007	100,000	05-01-07	05-11-07	(Grande Ronde)	Grande Ronde River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2007	120,000	04-28-07	05-10-07	Wallowa Acclim Pond	Wallowa River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2007	165,000	04-10-07	05-01-07	Little Sheep Creek	Imnaha River
Oregon Dept. of Fish and Wildlife Total					385,000				
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2007	102,551	05-01-07	05-02-07	East Fk Salmon River	Salmon River (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2007	244,000	05-02-07	05-09-07	Yankee Fk (Salmon R)	Salmon River (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2007	820,559	04-09-07	04-30-07	Salmon River (ID)	Salmon River (ID)
U.S. Fish and Wildlife Service	Spring Creek NFH	CH0	FA	2007	3,494,735	05-01-07	05-01-07	White Salmon River	White Salmon River
U.S. Fish and Wildlife Service	Winthrop NFH	ST	SU	2007	122,515	04-30-07	04-30-07	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service Total					4,784,360				
Umatilla Tribe	Cascade Hatchery	CO	UN	2007	750,220	04-24-07	04-24-07	Pendelton Acclim Pond Minthorn Acclimation	Umatilla River
Umatilla Tribe	Umatilla Hatchery	ST	SU	2007	50,000	04-19-07	04-26-07	Pond	Umatilla River
Umatilla Tribe	Umatilla Hatchery	ST	SU	2007	53,000	04-19-07	04-26-07	Pendelton Acclim Pond	Umatilla River
Umatilla Tribe Total					853,220				
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2007	9,750	04-19-07	04-25-07	Parkdale Acclim Pond	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2007	9,750	05-03-07	05-16-07	Parkdale Acclim Pond E Fk Irrig Dist Sand	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2007	19,500	04-20-07	05-15-07	Trap Jones Creek Acclim	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2007	20,000	04-24-07	05-07-07	Pond	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2007	27,500	04-24-07	05-08-07	Blackberry Acclim Pond	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2007	32,000	03-22-07	05-04-07	Parkdale Acclim Pond	Hood River
Warm Springs Tribe Total					118,500				
Washington Dept. of Fish and Wildlife	Chiwawa Hatchery	CH1	SP	2007	55,000	05-02-07	05-02-07	Lake Wenatchee	Wenatchee River
Washington Dept. of Fish and Wildlife	Chiwawa Hatchery	CH1	SP	2007	493,000	04-16-07	05-15-07	Chiwawa Hatchery	Wenatchee River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2007	276,572	04-18-07	05-16-07	Similkameen Acclim Pd	Okanogan River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2007	704,000	04-30-07	04-30-07	Dryden Acclim Pond	Wenatchee River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2007	86,984	04-23-07	04-25-07	Dayton Acclim Pond	Touchet River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SU	2007	264,000	04-16-07	05-01-07	Carlton Acclim Pond Ringold Springs	Methow River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	ST	SU	2007	300,000	04-09-07	04-27-07	Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2007	26,684	04-15-07	05-10-07	White Salmon River	White Salmon River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2007	92,684	04-15-07	05-10-07	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	WI	2007	22,500	04-15-07	05-10-07	White Salmon River	White Salmon River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2007	86,000	04-03-07	04-23-07	Tucannon River	Tucannon River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2007	111,000	04-03-07	04-23-07	Tucannon River	Tucannon River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH1	SU	2007	204,000	05-01-07	05-01-07	Turtle Rock Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2007	36,000	05-01-07	05-04-07	Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2007	95,000	05-01-07	05-04-07	Nason Creek	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2007	109,000	05-01-07	05-04-07	Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH1	SU	2007	358,000	04-23-07	05-07-07	Wells Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2007	100,000	04-23-07	05-15-07	Twisp River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2007	122,500	04-23-07	05-15-07	Chewuch River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2007	122,500	04-23-07	05-15-07	Methow River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2007	150,000	04-23-07	05-15-07	Okanogan River	Okanogan River
Washington Dept. of Fish and Wildlife Total					3,815,424				

HATCHERY RELEASE LAST TWO WEEKS (con't)

From: 4/20/2007 to 05/03/07

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Yakama Tribe	Cascade Hatchery	CO	UN	2007	69,381	04-27-07	04-27-07	Winthrop Hatchery	Methow River
Yakama Tribe	Cascade Hatchery	CO	UN	2007	70,048	04-27-07	04-27-07	Nason Creek	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2007	140,157	05-01-07	05-01-07	Wells Hatchery	Mid-Columbia River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2007	281,176	03-15-07	05-15-07	Easton Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2007	287,645	03-15-07	05-15-07	Clark Flat Acclim Pond Jack Creek Acclim	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2007	291,991	03-15-07	05-15-07	Pond	Yakima River
Yakama Tribe	Little White Salmon NFH	CH0	FA	2007	1,200,000	04-27-07	04-27-07	Prosser Acclim Pond	Yakima River
Yakama Tribe	Willard Hatchery	CO	UN	2007	34,585	04-27-07	04-27-07	Nason Creek	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2007	136,631	05-02-07	05-02-07	Nason Creek	Wenatchee River
Yakama Tribe	Winthrop NFH	CO	UN	2007	268,150	04-19-07	04-27-07	Winthrop Hatchery	Methow River
Yakama Tribe Total					2,779,764				
Grand Total					17,162,311				

HATCHERY RELEASE NEXT TWO WEEKS

Hatchery Release Summary

From: 5/4/2007 to 5/17/2007

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Idaho Dept. of Fish and Game	Oxbow-Idaho	SO	UN	2007	54,000	05-08-07	05-08-07	Redfish Lake	Salmon River (ID)
Idaho Dept. of Fish and Game	Sawtooth Hatchery	SO	UN	2007	46,000	05-08-07	05-08-07	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game Total					100,000				
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	FA	2007	180,000	05-17-07	05-17-07	Lapwai Creek	Clearwater River M F
Nez Perce Tribe Total					180,000				
									Big Canyon Acclim.Pd
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2007	100,000	05-01-07	05-11-07	(Grande Ronde)	Grande Ronde River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2007	120,000	04-28-07	05-10-07	Wallowa Acclim Pond	Wallowa River
Oregon Dept. of Fish and Wildlife	Round Butte Hatchery	CH1	SP	2007	320,000	05-11-07	05-11-07	Deschutes River	Deschutes River
Oregon Dept. of Fish and Wildlife	Umatilla Hatchery	CH0	FA	2007	300,000	05-15-07	05-15-07	Umatilla River	Umatilla River
Oregon Dept. of Fish and Wildlife Total					840,000				
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2007	244,000	05-02-07	05-09-07	Yankee Fk (Salmon R)	Salmon River (ID)
U.S. Fish and Wildlife Service Total					244,000				
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2007	9,750	05-03-07	05-16-07	Parkdale Acclim Pond E Fk Irrig Dist Sand	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2007	19,500	04-20-07	05-15-07	Trap Jones Creek Acclim	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2007	20,000	04-24-07	05-07-07	Pond	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2007	27,500	04-24-07	05-08-07	Blackberry Acclim Pond	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2007	32,000	03-22-07	05-04-07	Parkdale Acclim Pond	Hood River
Warm Springs Tribe Total					108,750				
Washington Dept. of Fish and Wildlife	Chiwawa Hatchery	CH1	SP	2007	493,000	04-16-07	05-15-07	Chiwawa Hatchery	Wenatchee River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2007	276,572	04-18-07	05-16-07	Similkameen Acclim Pd	Okanogan River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2007	26,684	04-15-07	05-10-07	White Salmon River	White Salmon River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2007	92,684	04-15-07	05-10-07	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	WI	2007	22,500	04-15-07	05-10-07	White Salmon River	White Salmon River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2007	36,000	05-01-07	05-04-07	Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2007	95,000	05-01-07	05-04-07	Nason Creek	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2007	109,000	05-01-07	05-04-07	Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH1	SU	2007	358,000	04-23-07	05-07-07	Wells Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2007	100,000	04-23-07	05-15-07	Twisp River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2007	122,500	04-23-07	05-15-07	Chewuch River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2007	122,500	04-23-07	05-15-07	Methow River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2007	150,000	04-23-07	05-15-07	Okanogan River	Okanogan River
Washington Dept. of Fish and Wildlife Total					2,004,440				
Yakama Tribe	Cascade Hatchery	CO	UN	2007	70,035	05-07-07	05-07-07	Nason Creek	Wenatchee River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2007	281,176	03-15-07	05-15-07	Easton Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2007	287,645	03-15-07	05-15-07	Clark Flat Acclim Pond Jack Creek Acclim	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2007	291,991	03-15-07	05-15-07	Pond	Yakima River
Yakama Tribe	Klickitat Hatchery	CO	NO	2007	1,073,000	05-07-07	05-10-07	Klickitat Hatchery	Klickitat River
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2007	95,000	05-07-07	05-07-07	Stiles Pond	Yakima River
Yakama Tribe	Willard Hatchery	CO	UN	2007	99,930	05-07-07	05-07-07	Nason Creek	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2007	103,228	05-08-07	05-08-07	Wenatchee River	Wenatchee River
Yakama Tribe Total					2,302,005				
Grand Total					5,779,195				

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>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
4/20	98	99	99	24	111	113	113	24	111	111	111	24	108	109	109	24	107	108	108	24
4/21	98	99	99	24	109	111	114	24	112	112	112	24	108	109	110	24	108	108	108	24
4/22	98	98	99	24	108	109	109	24	112	112	113	24	108	108	110	24	108	109	109	24
4/23	98	98	98	24	110	112	114	24	112	112	113	24	108	109	110	24	108	109	109	24
4/24	98	98	99	24	110	111	114	24	112	113	113	24	109	110	110	24	109	109	109	24
4/25	98	99	99	24	109	110	113	24	112	112	112	24	110	110	111	24	109	109	110	24
4/26	99	100	100	24	109	112	114	24	112	112	113	24	109	110	111	24	109	109	109	24
4/27	99	100	100	24	110	111	114	24	112	112	113	24	109	110	111	24	109	109	110	24
4/28	99	99	99	24	111	113	115	24	112	112	113	24	110	110	111	24	110	110	110	24
4/29	99	99	99	21	109	110	111	24	112	112	113	24	109	110	111	24	110	110	111	24
4/30	---	---	---	0	112	115	117	24	112	112	113	24	110	110	111	24	110	111	111	24
5/1	---	---	---	0	113	115	117	24	113	113	113	24	111	111	113	24	111	111	111	24
5/2	99	99	99	11	112	113	116	24	113	113	114	24	111	112	113	24	111	111	111	24
5/3	98	99	99	24	115	116	117	24	112	113	113	24	110	111	111	24	110	110	110	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>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
4/20	107	107	108	24	---	---	---	0	---	---	---	0	111	112	113	24	112	113	116	24
4/21	107	107	108	24	---	---	---	0	---	---	---	0	109	109	109	24	109	109	109	24
4/22	111	115	120	24	---	---	---	0	---	---	---	0	109	109	109	24	109	109	109	24
4/23	109	111	120	24	108	109	111	16	112	114	118	16	109	109	109	24	109	109	111	24
4/24	108	108	109	24	108	108	108	24	111	111	119	24	108	108	108	24	109	111	116	24
4/25	109	109	110	24	108	108	108	24	110	111	115	24	109	111	112	24	112	114	118	24
4/26	108	109	109	24	108	108	108	24	109	110	112	24	110	110	110	24	110	111	115	24
4/27	109	109	110	24	108	108	109	24	111	114	119	24	110	110	110	24	110	111	112	24
4/28	109	110	111	24	108	108	109	24	110	110	114	24	110	110	111	24	110	110	111	24
4/29	110	110	112	24	109	109	109	24	110	110	111	24	112	113	113	24	112	113	113	24
4/30	110	110	111	24	109	109	110	24	111	112	119	24	110	110	110	24	110	111	114	24
5/1	110	110	111	24	109	110	110	24	112	113	116	24	111	112	112	24	111	112	115	24
5/2	110	110	111	24	109	110	110	24	111	112	115	24	112	112	113	24	112	113	115	24
5/3	110	110	111	24	109	109	109	24	110	111	119	24	110	110	111	24	110	111	114	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>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
4/20	113	114	114	24	115	116	117	24	108	109	109	24	115	116	118	24	112	113	114	24
4/21	114	114	114	24	116	116	116	24	109	109	109	24	115	116	117	24	113	113	114	24
4/22	114	114	114	24	116	116	116	24	108	109	109	24	116	116	117	24	114	114	114	24
4/23	112	114	114	24	114	116	116	24	109	109	110	24	113	114	115	24	112	113	114	24
4/24	109	110	111	24	111	112	113	24	108	109	109	24	114	114	114	24	111	112	112	24
4/25	112	114	117	24	114	115	118	24	107	108	108	24	114	114	115	24	111	111	112	24
4/26	110	111	113	24	112	113	115	24	107	107	109	24	114	115	116	24	112	113	114	24
4/27	110	111	112	24	112	113	114	24	110	111	112	24	116	116	117	24	114	117	118	24
4/28	110	111	112	24	113	114	115	24	110	110	111	24	115	116	117	24	117	117	118	24
4/29	110	111	112	24	112	113	114	24	109	110	110	24	114	114	114	24	115	116	117	24
4/30	110	111	112	24	112	113	114	24	111	112	113	24	114	115	116	24	115	116	116	24
5/1	110	111	113	24	113	114	115	24	111	111	112	24	115	117	126	24	116	118	123	24
5/2	111	112	113	24	114	114	115	24	111	111	112	24	114	116	118	24	114	115	116	24
5/3	110	110	110	24	112	113	114	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>Clwrtr-Peck</u>			<u>Anatone</u>			#				
	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
4/20	115	119	119	24	108	109	109	24	97	97	97	24	---	---	---	0	102	103	104	23
4/21	119	119	119	24	112	114	114	24	97	97	97	24	---	---	---	0	102	103	103	24
4/22	119	119	119	24	113	113	114	24	97	97	98	24	100	101	101	24	102	102	103	24
4/23	118	119	119	24	114	115	115	24	96	97	97	24	100	100	101	24	102	103	104	24
4/24	118	118	119	24	113	114	114	24	96	97	97	24	100	101	101	24	102	103	104	24
4/25	118	118	119	24	113	113	114	24	96	96	97	24	99	100	100	24	102	102	103	24
4/26	118	119	120	17	113	113	114	24	96	96	97	24	100	101	101	24	102	104	105	24
4/27	118	118	119	24	114	114	115	24	96	97	97	24	100	101	102	24	103	104	105	24
4/28	117	117	118	24	113	113	114	24	97	97	97	24	---	---	---	0	103	104	105	24
4/29	115	116	117	24	112	113	114	24	97	98	98	24	101	101	102	24	103	103	104	24
4/30	114	115	115	24	111	112	112	24	97	98	98	24	101	102	103	24	103	104	105	24
5/1	116	117	121	24	111	111	111	24	98	98	98	24	102	102	103	24	104	105	105	24
5/2	115	116	117	24	110	111	111	23	98	98	98	21	101	101	102	23	104	104	104	23
5/3	---	---	---	0	108	109	110	24	98	98	98	24	101	102	102	24	104	105	105	24

Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clwrtr-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>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
4/20	101	103	105	24	102	103	103	24	112	112	113	24	108	108	108	24	113	114	115	24
4/21	101	102	104	24	102	103	103	24	111	112	112	24	108	109	109	24	114	114	115	24
4/22	101	102	103	24	102	102	102	24	111	111	112	24	108	108	109	24	112	113	114	24
4/23	101	103	104	24	101	101	101	9	111	112	113	24	108	108	108	24	112	113	114	24
4/24	101	103	105	24	101	101	102	16	111	112	112	24	109	109	110	24	113	114	115	24
4/25	100	101	102	24	101	101	102	24	111	111	112	24	109	109	110	24	113	114	114	24
4/26	101	103	104	24	101	102	102	24	111	111	112	24	109	109	110	24	114	114	115	24
4/27	101	103	104	24	102	103	104	24	111	111	111	24	110	110	111	24	114	115	116	24
4/28	101	103	104	24	102	102	103	24	110	111	111	24	110	110	111	24	114	115	115	24
4/29	101	102	103	24	103	103	104	24	110	111	111	24	111	112	112	24	116	117	118	24
4/30	101	102	103	24	103	104	104	24	110	111	111	24	112	113	113	24	118	118	119	24
5/1	101	102	103	24	103	104	104	24	110	111	111	24	113	114	116	24	118	118	118	24
5/2	100	101	101	23	103	103	103	23	110	110	111	23	112	112	113	23	118	118	119	23
5/3	101	101	102	24	102	102	102	24	109	109	109	24	109	109	110	24	116	117	117	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>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
4/20	111	111	111	24	120	121	121	24	114	115	115	24	114	115	115	24	---	---	---	0
4/21	111	111	111	24	119	120	120	24	114	115	115	24	115	115	116	24	---	---	---	0
4/22	111	111	111	24	118	119	119	24	115	115	116	24	114	115	115	24	---	---	---	0
4/23	110	111	111	24	118	119	119	24	115	115	116	24	113	114	114	24	---	---	---	0
4/24	111	111	111	24	118	119	120	24	115	115	116	24	114	114	115	24	---	---	---	0
4/25	111	111	111	24	117	119	119	24	115	115	116	24	114	114	115	24	---	---	---	0
4/26	111	111	111	24	116	116	117	24	115	115	116	24	113	114	115	24	---	---	---	0
4/27	111	111	112	24	115	116	116	24	115	116	116	24	115	115	116	24	---	---	---	0
4/28	112	112	112	24	114	115	115	24	116	116	116	24	114	115	116	24	---	---	---	0
4/29	113	113	113	24	114	114	115	24	116	116	117	24	115	115	116	24	---	---	---	0
4/30	114	114	115	24	113	114	115	24	115	115	115	24	116	116	116	24	---	---	---	0
5/1	115	116	119	24	113	114	115	24	115	116	116	24	117	118	120	24	---	---	---	0
5/2	118	118	119	23	115	116	121	24	115	116	116	23	116	117	120	23	---	---	---	0
5/3	115	115	116	24	115	116	119	24	113	113	113	24	115	116	116	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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>AVG</u>	<u>High</u>	<u>#</u>	
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr
4/20	108	108	109	24	114	115	116	24	108	109	109	24	114	120	121	24	112	116	117	24
4/21	109	109	110	24	114	114	114	24	108	109	109	24	114	119	120	24	113	116	117	24
4/22	109	110	110	24	114	114	115	24	108	108	108	24	114	120	121	24	111	114	115	24
4/23	112	113	114	24	116	116	118	24	107	108	108	24	114	119	120	24	111	114	116	24
4/24	113	113	113	24	115	116	119	24	108	109	109	24	113	119	119	24	110	112	114	24
4/25	113	113	113	24	114	115	118	24	109	109	110	24	114	118	119	24	111	113	114	24
4/26	112	113	113	24	114	115	115	24	109	109	109	24	114	118	119	24	112	114	115	24
4/27	113	113	114	24	115	116	116	24	109	110	111	24	114	118	118	24	112	114	115	24
4/28	114	115	116	24	115	116	116	24	110	111	111	24	114	118	118	24	112	114	115	24
4/29	115	115	115	24	114	114	115	24	111	111	111	24	114	118	118	24	112	113	114	24
4/30	114	115	115	24	116	117	118	24	111	111	112	24	115	118	119	24	112	114	115	24
5/1	114	115	115	24	116	116	116	24	112	113	114	24	115	119	119	24	113	115	116	24
5/2	113	114	115	23	115	116	116	23	113	113	114	24	116	119	119	24	113	114	114	24
5/3	111	111	111	24	115	116	116	24	112	112	112	24	115	118	119	24	112	113	114	24

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>CamasWashougal</u>			<u>Cascade Island</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>	
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
4/20	116	117	118	24	113	113	114	24	115	116	117	24	114	115	116	24	118	118	118	24
4/21	116	117	118	24	114	114	115	24	116	117	117	24	113	114	115	24	118	118	118	24
4/22	115	116	118	24	114	115	115	24	116	117	117	24	114	115	116	24	118	118	118	24
4/23	114	116	117	24	112	113	113	24	115	115	116	24	114	115	116	24	117	118	118	24
4/24	115	116	117	24	112	112	112	24	115	115	116	24	113	113	114	24	117	117	117	24
4/25	115	116	117	24	112	112	113	24	115	115	116	24	113	113	113	24	117	117	117	24
4/26	116	117	118	24	112	112	113	24	115	115	115	24	114	115	115	24	117	117	118	24
4/27	116	117	118	24	113	114	115	24	116	116	117	24	114	116	116	24	117	117	117	24
4/28	116	117	118	24	114	114	115	24	116	116	117	24	115	116	117	24	117	117	118	24
4/29	116	116	117	24	113	114	115	24	115	116	116	24	114	115	115	24	117	118	118	24
4/30	116	117	117	24	113	114	114	24	115	116	116	24	114	115	116	23	118	118	119	24
5/1	117	118	119	24	113	114	114	24	114	115	115	24	114	115	116	24	118	119	119	24
5/2	116	116	118	24	114	115	115	24	115	115	115	24	113	113	114	24	118	119	119	24
5/3	115	116	117	24	113	114	114	24	114	115	115	24	113	114	115	24	118	119	119	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/currentsmptsubmitdata.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)	(INDEX)
04/20/2007	*	1,624	299	429	14	42,473	1,775	353	1,053	---	25,958	14,484
04/21/2007	*	1,402	313	744	39	68,084	0	0	662	8,243	17,403	12,182
04/22/2007	*	1,063	292	388	1	86,633	1,623	0	252	---	19,664	14,264
04/23/2007	*	567	196	241	11	58,211	1,535	222	274	13,593	17,336	13,530
04/24/2007	*	815	483	67	21	25,525	1,829	20	0	---	18,623	18,037
04/25/2007	*	879	420	129	9	37,606	3,247	0	0	24,532	13,900	14,337
04/26/2007	*	1,263	471	86	4	32,683	791	294	0	---	19,822	15,771
04/27/2007	*	606	258	71	52	33,164	1,785	0	85	41,772	21,860	15,760
04/28/2007	*	421	320	92	14	36,736	4,489	0	97	---	22,058	14,973
04/29/2007	*	2,877	---	138	24	30,537	434	623	106	62,474	26,675	17,715
04/30/2007	*	2,123	771	211	108	22,152	608	472	181	---	44,515	23,502
05/01/2007	*	---	302	294	1,589	65,978	740	917	425	79,627	56,836	32,947
05/02/2007	*	---	---	182	1,627	107,191	481	234	281	---	73,263	34,872
05/03/2007	*	---	---	559	510	207,214	832	595	333	123,318	98,190	47,685
05/04/2007		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
Total:		13,640	4,125	3,631	4,023	854,187	20,169	3,730	3,749	353,559	476,103	290,059
# Days:		11	11	14	14	14	14	14	14	7	14	14
Average:		1,240	375	259	287	61,013	1,441	266	268	50,508	34,007	20,719
YTD		43,281	80,638	13,353	4,436	1,142,161	25,238	10,515	5,943	406,600	559,756	478,513

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)	(INDEX)
04/20/2007	*	0	0	0	1	89	0	0	14	---	0	1,817
04/21/2007	*	0	0	0	0	0	0	0	15	0	0	653
04/22/2007	*	0	0	0	1	0	0	0	2	---	41	410
04/23/2007	*	0	0	1	1	371	0	0	6	34	0	96
04/24/2007	*	0	0	1	1	0	0	0	0	---	0	541
04/25/2007	*	0	2	0	0	0	0	0	0	68	0	134
04/26/2007	*	0	1	0	2	0	0	0	0	---	0	179
04/27/2007	*	0	0	1	1	0	0	0	24	102	0	198
04/28/2007	*	0	0	1	0	0	14	0	15	---	0	142
04/29/2007	*	0	---	2	2	156	0	22	72	51	0	26
04/30/2007	*	0	0	3	1	0	0	11	34	---	0	197
05/01/2007	*	---	0	0	15	0	2	4	17	169	0	26
05/02/2007	*	---	---	0	28	0	0	0	18	---	0	71,021
05/03/2007	*	---	---	0	25	0	1	0	6	507	0	259,419
05/04/2007		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
Total:		0	3	9	78	616	17	37	223	931	41	334,859
# Days:		11	11	14	14	14	14	14	14	7	14	14
Average:		0	0	1	6	44	1	3	16	133	3	23,919
YTD		0	56	9	107	1,857	19	37	405	1,089	127	1,754,252

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)
04/20/2007	*	0	0	0	2	178	14	2	42	---	36	3,633
04/21/2007	*	0	0	0	6	343	0	0	31	85	43	2,987
04/22/2007	*	0	0	0	0	536	17	0	2	---	47	2,667
04/23/2007	*	0	0	0	0	0	14	5	14	85	97	2,831
04/24/2007	*	0	0	0	0	175	14	0	0	---	124	6,094
04/25/2007	*	0	0	0	1	0	43	0	0	3,016	121	4,053
04/26/2007	*	0	0	0	1	0	3	0	0	---	224	3,943
04/27/2007	*	0	0	0	2	163	0	0	22	2,442	321	4,312
04/28/2007	*	0	0	0	1	0	14	0	7	---	657	2,409
04/29/2007	*	0	---	0	1	0	1	2	6	1,727	925	2,493
04/30/2007	*	0	0	0	0	145	0	0	16	---	2,197	2,950
05/01/2007	*	---	0	0	3	0	3	1	25	1,188	2,732	5,999
05/02/2007	*	---	---	0	6	131	2	2	214	---	4,114	9,238
05/03/2007	*	---	---	0	3	515	6	0	41	2,701	8,698	9,939
05/04/2007	*	---	---	---	---	---	---	---	---	---	---	---
<hr/>												
Total:		0	0	0	26	2,186	131	12	420	11,244	20,336	63,548
# Days:		11	11	14	14	14	14	14	14	7	14	14
Average:		0	0	0	2	156	9	1	30	1,606	1,453	4,539
YTD		0	0	0	41	3,610	246	14	526	11,344	20,655	100,853

		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)
04/20/2007	*	108	353	33	109	6,322	2,515	345	23	---	1,454	765
04/21/2007	*	76	348	22	40	17,471	0	0	21	4,441	883	653
04/22/2007	*	78	197	20	12	30,724	2,173	0	30	---	1,480	393
04/23/2007	*	70	254	10	42	18,168	1,700	506	45	4,468	2,065	432
04/24/2007	*	129	802	6	21	34,617	2,048	202	0	---	2,200	491
04/25/2007	*	99	783	9	11	14,712	3,918	0	0	6,338	2,129	639
04/26/2007	*	207	1,174	11	8	13,309	668	309	0	---	3,087	762
04/27/2007	*	291	639	10	21	21,134	7,122	0	24	9,198	4,310	545
04/28/2007	*	147	1,160	22	10	14,472	3,057	0	18	---	3,722	897
04/29/2007	*	520	---	49	15	14,489	343	668	17	22,660	5,607	1,312
04/30/2007	*	385	2,787	31	226	31,128	313	304	50	---	6,589	2,139
05/01/2007	*	---	1,932	83	465	65,020	386	413	81	11,892	9,912	1,776
05/02/2007	*	---	---	76	884	85,148	395	344	37	---	13,670	1,070
05/03/2007	*	---	---	275	1,423	146,980	301	342	58	16,421	23,774	1,340
05/04/2007	*	---	---	---	---	---	---	---	---	---	---	---
<hr/>												
Total:		2,110	10,429	657	3,287	513,694	24,939	3,433	404	75,418	80,882	13,214
# Days:		11	11	14	14	14	14	14	14	7	14	14
Average:		192	948	47	235	36,692	1,781	245	29	10,774	5,777	944
YTD		3,171	16,947	1,006	3,757	571,545	32,326	3,910	569	81,171	93,230	19,800

Two-Week Summary of Passage Indices

COMBINED SOCKEYE											
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/20/2007	*	0	0	0	0	7	0	206	---	254	48
04/21/2007	*	0	0	0	0	0	0	157	390	43	0
04/22/2007	*	0	0	0	0	0	0	59	---	277	0
04/23/2007	*	0	0	0	0	0	3	134	696	241	0
04/24/2007	*	0	0	0	0	1	0	0	---	210	0
04/25/2007	*	0	0	0	0	0	0	0	645	80	16
04/26/2007	*	0	0	0	1	0	0	0	---	252	45
04/27/2007	*	0	0	0	0	0	0	123	1,578	345	0
04/28/2007	*	0	0	0	0	0	0	64	---	438	47
04/29/2007	*	0	---	0	0	0	0	126	3,607	327	105
04/30/2007	*	0	0	0	0	0	0	403	---	1,042	98
05/01/2007	*	---	0	0	3	0	2	114	3,220	2,130	161
05/02/2007	*	---	---	0	9	0	0	28	---	1,062	69
05/03/2007	*	---	---	0	9	257	0	14	6,595	580	335
05/04/2007	*	---	---	---	---	---	---	---	---	---	---
<hr/>											
Total:	0	0	0	22	257	10	3	1,428	16,731	7,281	924
# Days:	11	11	14	14	14	14	14	14	7	14	14
Average:	0	0	0	2	18	1	0	102	2,390	520	66
YTD	1	0	0	22	817	25	6	2,709	17,647	7,559	1,068

* 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:

5/4/07 9:02 AM

04/20/07 TO 05/04/07

Site	Data	Species					Grand Total
		CH0	CH1	CO	SO	ST	
LGR	Sum of NumberCollected	350	568,309	1,400	200	356,341	926,600
	Sum of NumberBarged	74	341,608	792	194	226,459	569,127
	Sum of NumberBypassed	274	234,623	638	4	130,996	366,535
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	2	18	0	0	8	28
	Sum of FacilityMorts	0	507	0	2	110	619
	Sum of ResearchMorts	0	465	0	0	0	465
	Sum of TotalProjectMorts	2	990	0	2	118	1,112
LGS	Sum of NumberCollected	14	14,612	94	11	18,118	32,849
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	14	14,568	94	9	18,060	32,745
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	17	0	1	7	25
	Sum of FacilityMorts	0	26	0	1	51	78
	Sum of ResearchMorts	0	1	0	0	0	1
	Sum of TotalProjectMorts	0	44	0	2	58	104
LMN	Sum of NumberCollected	25	2,532	7	1	2,132	4,697
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	25	2,527	7	1	2,113	4,673
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	5	0	0	19	24
	Sum of FacilityMorts	0	0	0	0	1	1
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	0	5	0	0	20	25
MCN	Sum of NumberCollected	550	208,934	6,642	9,889	44,550	270,565
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	550	208,842	6,641	9,880	44,504	270,417
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	21	0	0	7	28
	Sum of FacilityMorts	0	66	1	9	39	115
	Sum of ResearchMorts	0	5	0	0	0	5
	Sum of TotalProjectMorts	0	92	1	9	46	148
Total Sum of NumberCollected		939	794,387	8,143	10,101	421,141	1,234,711
Total Sum of NumberBarged		74	341,608	792	194	226,459	569,127
Total Sum of NumberBypassed		863	460,560	7,380	9,894	195,673	674,370
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of SampleMorts		2	61	0	1	41	105
Total Sum of FacilityMorts		0	599	1	12	201	813
Total Sum of ResearchMorts		0	471	0	0	0	471
Total Sum of TotalProjectMorts		2	1,131	1	13	242	1,389

YTD Transportation Summary

Source: Fish Passage Center

Updated:

5/4/07 9:02 AM

TO: 05/04/07

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	1,070	734,154	2,260	560	390,936	1,128,980
	Sum of NumberBarged	208	354,916	828	203	227,418	583,573
	Sum of NumberBypassed	856	378,201	1,432	355	163,395	544,239
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	5	38	0	0	10	53
	Sum of FacilityMorts	1	534	0	2	113	650
	Sum of ResearchMorts	0	465	0	0	0	465
	Sum of TotalProjectMorts	6	1,037	0	2	123	1,168
LGS	Sum of NumberCollected	16	18,154	174	22	23,277	41,643
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	15	18,102	174	20	23,219	41,530
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	22	0	1	7	30
	Sum of FacilityMorts	1	29	0	1	51	82
	Sum of ResearchMorts	0	1	0	0	0	1
	Sum of TotalProjectMorts	1	52	0	2	58	113
LMN	Sum of NumberCollected	25	5,568	8	2	2,348	7,951
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	25	5,559	8	2	2,328	7,922
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	9	0	0	20	29
	Sum of FacilityMorts	0	0	0	0	1	1
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	0	9	0	0	21	30
MCN	Sum of NumberCollected	665	240,352	6,701	10,443	48,105	306,266
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	664	240,205	6,700	10,432	48,054	306,055
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	1	45	0	0	9	55
	Sum of FacilityMorts	0	93	1	11	42	147
	Sum of ResearchMorts	0	9	0	0	0	9
	Sum of TotalProjectMorts	1	147	1	11	51	211
Total Sum of NumberCollected		1,776	998,228	9,143	11,027	464,666	1,484,840
Total Sum of NumberBarged		208	354,916	828	203	227,418	583,573
Total Sum of NumberBypassed		1,560	642,067	8,314	10,809	236,996	899,746
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		6	114	0	1	46	167
Total Sum of FacilityMorts		2	656	1	14	207	880
Total Sum of ResearchMorts		0	475	0	0	0	475
Total Sum of TotalProjectMorts		8	1,245	1	15	253	1,522

Cumulative Adult Passage at Mainstem Dams Through: 05/03

DAM	EndDate	Spring Chinook						Summer Chinook						Fall Chinook					
		2007		2006		10-Yr Avg.		2007		2006		10-Yr Avg.		2007		2006		10-Yr Avg.	
		Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	05/03	37024	2455	13314	66	107848	1905	0	0	0	0	0	0	0	0	0	0	0	0
TDA	05/03	24793	1417	2790	14	65679	901	0	0	0	0	0	0	0	0	0	0	0	0
JDA	05/03	17599	1038	1241	21	49954	615	0	0	0	0	0	0	0	0	0	0	0	0
MCN	04/24	1853	22	28	0	22145	105	0	0	0	0	0	0	0	0	0	0	0	0
IHR	04/24	562	12	1	0	13641	41	0	0	0	0	0	0	0	0	0	0	0	0
LMN	04/26	-2	2	2	0	13486	33	0	0	0	0	0	0	0	0	0	0	0	0
LGS	04/24	19	0	1	0	8449	44	0	0	0	0	0	0	0	0	0	0	0	0
LGR	05/03	1449	36	12	0	17255	98	0	0	0	0	0	0	0	0	0	0	0	0
PRD	05/01	470	2	24	0	5318	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	05/02	93	0	6	0	2418	7	0	0	0	0	0	0	0	0	0	0	0	0
RRH	05/02	23	0	1	0	646	1	0	0	0	0	0	0	0	0	0	0	0	0
WEL	05/01	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0
WFA	04/29	3075	20	7067	6	-	-	0	0	0	0	-	-	0	0	0	0	-	-

DAM	Coho						Sockeye			Steelhead			
	2007		2006		10-Yr Avg.		10-Yr			10-Yr			Wild
	Adult	Jack	Adult	Jack	Adult	Jack	2007	2006	Avg.	2007	2006	Avg.	2007
BON	0	0	0	0	0	0	0	0	0	1938	1702	2338	606
TDA	0	0	0	0	0	0	0	0	0	1052	984	867	394
JDA	0	0	0	0	0	0	0	0	0	1630	2123	2738	672
MCN	0	0	0	0	0	0	0	0	0	1613	1931	1358	469
IHR	0	0	0	0	0	0	0	0	0	2101	2497	1628	537
LMN	0	0	0	0	0	0	0	0	0	2096	2649	1670	702
LGS	0	0	0	0	0	0	0	0	0	1993	2383	1843	633
LGR	0	0	0	0	0	0	0	0	0	10398	7472	6599	2299
PRD	0	0	0	0	0	0	0	0	0	12	18	2	0
RIS	0	0	0	0	0	0	0	0	0	27	42	24	9
RRH	0	0	0	0	0	0	0	0	0	97	118	99	45
WEL	0	0	0	0	0	0	0	0	0	4	3	2	3
WFA	2	0	0	0	-	-	0	0	0	5475	6834	-	0

NOTE: The Corp of Engineers are currently working on their computer systems causing the delay in updating the counts at McNary, Ice Harbor, Lower Monumental, and Little Goose Dams.

*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: 05/04/07

BON counts from January 1, 2006 to March 14, 2006 (our traditional counts begin March 15):

Year	Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
2007	22	0	1,677	517
2006	2	0	2,523	239