

Fish Passage Center Weekly Report #07 - 8

April 27, 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. 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.

	Water Y	ear 2007	Water Y	ear 2007
			October 1	l, 2006 to
	April	1-23	April 2	3, 2007
	Observed	%	Observed	%
Location	(inches)	Average	(inches)	Average
Columbia Above	1.19	94	17.54	113
Coulee				
Snake River Above	1.18	106	10.25	90
Ice Harbor				
Columbia Above	1.18	94	16.59	107
The Dalles				
Kootenai	1.19	89	19.05	120
Clark Fork	1.09	114	10.8	109
Flathead	1.48	123	14.47	108
Pend	1.10	63	21.71	99
Oreille/Spokane				
Central Washington	0.29	60	6.22	97
Snake River Plain	0.99	124	6.06	88
Salmon/Boise/	1.07	87	12.35	88
Payette				
Clearwater	1.65	81	21.63	105
SW Washington	2.52	61	59.98	104
Cascades/Cowlitz				
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).

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

	April Final		May	Early
	% Average (1971-	Probable Runoff Volume	% Average (1971-	Probable Runoff Volume
Location	2000)	(Kaf)	2000)	(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	74	1982		
(Apr-July), COE	(April	(April		
Forecast	Final)	Final)		

Grand Coulee Reservoir is at 1250.9 feet (4-26-07) and has drafted 2.8 feet in the last week. The end of April flood control elevation is 1249.4 feet.

Dworshak is currently at an elevation of 1572.6 feet (4-26-07) and refilled 0.5 feet last week. The COE's official forecast has dropped from 82% of average (March final) to 74% of average (April Final), which has caused the end of April Flood Control elevation to increase to 1574.8 feet. As a result Dworshak the project is being operated to achieve this elevation with the objective of gradually refilling to the end of April flood control elevation, without decreasing flow form Dworshak towards the end of the month. Outflows at Dworshak have ranged between 7.6 and 9.8 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2387.5 feet (4-26-07) and drafted 5.2 feet last week. Outflows at Libby are currently 24.5 Kcfs. The end of April Flood Control Elevation is 2378.7 feet.

Hungry Horse is currently at an elevation of 3536.1 feet (4-26-07) and filled one foot last week. Outflows at Hungry Horse are currently 3 Kcfs. Hungry Horse's end of April VarQ Flood Control Elevation is 3548.4 feet.

The Brownlee Reservoir was at an elevation of 2070.4 feet on April 26th, 2007, refilling 1.5 feet last week. Outflows at Brownlee Dam have been 9.0 to 11.8 Kcfs over the last week. The end of April Flood Control Elevation is 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 218.6 Kcfs. The Lower Granite Dam flow over the past week averaged 47.3 Kcfs. The Priest Rapids Dam flow over the past week averaged 167.5 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 and spill at Little Goose Dam is at the 30% instantaneous level. Daily average spill at Lower Monumental Dam has been consistently decreased over the past week, from just over 25 Kcfs to 21.4 Kcfs, as the COE lowered their estimate of spill that would achieve the gas cap. The total dissolved gas readings (average of the 12 highest hourly readings) in the tailrace of this project was 120.6 on April 20 and dropped to 116.4 on April 26. The TDG at Ice Harbor Dam forebay is ranging between 114.5 and 115.4. The project is presently employing a bulk spill pattern. Spill at Ice Harbor Dam has been equal to all flow in excess of that needed to operate one turbine unit.

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 averaged 56% spill between 1900 and 0600 hours over the past week. Total dissolved gas reached a high of 120.1% in the John Day Dam tailrace, and 116.3% at The Dalles forebay monitor. The total dissolved gas has averaged 119% over the past four days at the

John Day Dam tailrace and 113.4% over the past five days at The Dalles Dam forebay. 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 is 120Kcfs (4/24) and from the TDG data and the dissolved gas generation curve, it appears an increase in spill would be appropriate. Spill at The Dalles has met the Court's Order. Spill at Bonneville Dam has averaged 99 Kcfs over the past week, slightly less than the Court's Order.

Total dissolved gas at the federal hydroprojects was near waiver limits over the past week, with the exception of slight exceedences of TDG at Lower Monumental tailrace, Ice Harbor forebay, John Day tailrace and The Dalles forebay. Gas bubble trauma (GBT) monitoring continued this week at Lower Granite, Lower Monumental, Rock Island, and Bonneville dams. The April 24 sample of 100 Chinook & steelhead at Lower Monumental saw 2 fish with minor signs of GBT. All other samples showed no fish with signs of GBT.

Smolt Monitoring: Sampling is ongoing at all SMP locations. Sampling at Little Goose and Lower Monumental dams is limited to condition and research sampling; full sampling, in support of transportation will begin in late April or early May at those sites. Sampling at McNary Dam has been resumed on a regular schedule; every other day for spring migrants. Rock Island Dam sampling was shutdown for three days this week as brushes on bypass gates were replaced in response to higher mortality in recent samples. Sampling resumed April 27.

Smolt Monitoring at Snake River tributary traps continued this past week, where large numbers of yearling Chinook are being captured at the Imnaha, Grande Ronde and Salmon traps. 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 1,624 on April 20. Over 3 million hatchery Chinook were released into the basin above the trap in the past three weeks. At the Grande Ronde Trap the catch of yearling chinook increased over the past week. The numbers of clipped hatchery

origin fish in the catch went up to 651 of 744 total yearling Chinook but then decreased rapidly so that by the last four days of the week, roughly half of the Chinook were unclipped fish. But many of the unclipped fish are coded-wire tagged fish. Those unclipped fish are from an acclimation release of 118,000 fish that ended on April 11. The Imnaha Trap has had very large numbers of hatchery yearling chinook pass the trap. Peak collection of over 13,000 per day on April 10 and 11 was 90% hatchery origin fish. Numbers have declined over the past three weeks, the site is now collecting a little more than 300 per day over the past week. The Imnaha Trap also saw another spike in steelhead passage last week on April 24 and 25. All three of the rivers these traps operate in showed a peak in discharge between April 10 and 11 that coincided with the high collection numbers reported for that time period. The higher numbers collected reflect increased passage as well as improved trap efficiency at moderately higher discharge. Flows in the Imnaha and Salmon rivers have risen over the past 5 days as temperatures have risen.

At the Snake River Trap collection numbers are gradually increasing, but flows remain very low for this time of year and the trap does not fish as effectively at these low flows. Discharge in the Snake River, measured at Anatone gage, has fluctuated between 25 and 30 kcfs over the past two weeks, compared to median historic flows averaging between 40 and 45 kcfs for the same time period.

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 86,000 on April 22, averaging 50,000 per day, while steelhead indices rose to 30,000 on the 22nd, averaging 19,000 over the past week. Based on estimated collection efficiency roughly 2 million yearling Chinook have passed Lower Granite Dam, while an estimated 300,000 to 750,000 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 and 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 shutdown on Monday April 23rd and remained shutdown 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.

In the Lower Columbia, at McNary Dam the yearling chinook index averaged 15,000 over the past 4 sample dates, while steelhead indices averaged just over 5,000 for those same dates, compared to 1,000 per day average the previous week. While at John Day Dam the yearling Chinook index averaged 190,000 per day this week compared to 8,500 last week, and steelhead numbers were up slightly, with the average index this week at 1,900 compared to 1,300 the previous week.

At Bonneville Dam the yearling chinook index averaged 14,000 over the past week, compared to 23,000 the previous week. Subyearling chinook index rose to 262,000 on April 14, as passage from the second Spring Creek release peaked. Another release of 3.5 million is scheduled for May 1.

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. This week marked the end of a volitional release of just under 2.5 million yearling spring Chinook from Rapid River Hatchery into the Little Salmon River. Also scheduled to end this week were two volitional releases of approximately 197,000 yearling spring Chinook into the Tucannon

River from Tucannon Hatchery. Summer steelhead releases from Niagara Springs Hatchery to the Pahsimeroi and Salmon Rivers also wrapped up this week, with a total of 830,447 and 266,738 being released into these rivers, respectively. In addition, approximately 453,000 summer steelhead were released into the Salmon River from Magic Valley Hatchery in Idaho.

Approximately 110,000 subyearling fall Chinook are scheduled for release in this zone on May 1st. Releases of sockeye to the Salmon River are scheduled to begin within the next two weeks, with 54,000 scheduled for release into Redfish Lake and 46,000 scheduled for direct release into the Salmon River. Finally, approximately 1.74 million summer steelhead are scheduled for release into this zone over the next two weeks. Of these, approximately 78% are scheduled for release into the Salmon River and its tributaries with the remaining 22% scheduled for release into the Imnaha, Grande Ronde, and Wallowa Rivers.

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 1.2 million subyearling fall Chinook into the Yakima River is scheduled to begin on April 27th. A volitional release of approximately 358,000 summer Chinook from Wells Hatchery on the Mid-Columbia River began on April 23rd and is scheduled to run through early to mid-May. The Yakama Tribal Program to re-establish coho runs into the Methow and Wenatchee Rivers Basins continued this week with the release of approximately 105,000 smolts into the Wenatchee and 70,000 smolts into the Methow River. Volitional releases of approximately 345,000 summer steelhead into the Methow River began this week from various acclimation facilities. In addition, about 122,000 summer steelhead from Winthrop NFH are scheduled for release into the Methow River on April 27th. This week marked the end of a volitional release of approximately 300,000 summer steelhead from Ringold Hatchery into the Mid-Columbia River. Finally, volitional releases of summer steelhead to the Okanogan and Touchet Rivers began this week, with an estimated 150,000 and 88,000 being released into these rivers, respectively.

Approximately 95,000 subyearling fall Chinook are scheduled for release into the Yakima River on or around May 7th. The only release of yearling spring Chinook scheduled for the next two weeks is a volitional release of about 493,000 yearling spring Chinook to the Wenatchee River that is scheduled to end on May 4th. Volitional releases totaling approximately 1.53 million summer Chinook are scheduled to run through the next two weeks. The Yakama Tribal Program to reestablish coho runs into the Methow and Wenatchee Rivers Basins will continue over the next two weeks with the release of an estimated 550,000 coho into the Wenatchee and Mid-Columbia Rivers. Finally, approximately 240,000 summer steelhead are scheduled for release into the Wenatchee River, beginning May 1st.

Lower Columbia Zone: The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. Volitional releases of approximately 47,500 yearling spring Chinook began this week. These releases are from acclimation facilities on Hood River and are scheduled to end in early May. A volitional release of about 9,750 summer steelhead from an acclimation facility on Hood River was scheduled to end this week.

The final release of tule fall Chinook from Spring Creek NFH is scheduled to occur on May 1st. An estimated 3.5 million smolts will be released from the hatchery into Lower Columbia River. Just under 400,000 yearling spring Chinook are scheduled for release into this zone over the next two weeks. Of these, approximately 80% will be released into the Deschutes River, with the remaining 20% scheduled for release into Hood River. Approximately 1.0 million type-N Coho are scheduled for release into the Klickitat River, beginning May 1st. A volitional release of about 92,684 summer steelhead to the Klickitat River is scheduled to end in the next two weeks (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, a volitional release of approximately 9,750 winter steelhead to Hood

River is scheduled to begin on May 3rd and will run through May 16th.

Adult Fish Passage: Adult counts at Bonneville Dam have been updated through April 26th. Between March 15th and April 26th, 21,024 adult spring Chinook had passed Bonneville Dam; this compares to 1,559 spring Chinook adults over the same period last year. From March 15th through the April 26th spring Chinook adults have been counted daily except for two days when no adults were counted. Daily passage numbers at Bonneville Dam have ranged between 616 and 3,428 adult spring Chinook in the last week. The 2007 spring Chinook count thus far is about 26 percent of the 10-year average count. When the 2007 count of 21,024 is compared to the 2006 count of 1,559, it increased about 13.5 times. In 2006, the spring Chinook migration arrived much later than usual. As of April 26th, 1,741 steelhead had passed the dam which is about 1.17 times the 2006 count of 1,483. The 2007 Bonneville steelhead of 1,741 count was 335 steelhead less than the 10-year average count of 2,076 as of April 26th.

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 had ranged between 8 and 34 adult steelhead in the last week. The total steelhead count passing at Lower Granite Dam as of April 25th was 10,259 which was approximately 1.43 times greater than the 2006 count of 7,172 and 1.59 times greater than the 10-year average count of 6,435. As of April 25th, 32 spring Chinook adults had passed Lower Granite dam compared to only 2 fish during the same time last year.

0.0 0.0

0.0

12.3

13.8 163.5

26.0 174.5

			Daily Ave	rage Flo	w and	Spill (iı	n kcfs)	at Mid-	Columbia	Projects	5			
	Gr	and	Chi	ef			Ro	cky	Ro	ck			Pr	iest
	Co	ulee	ee Joseph		Wells		Reach		Island		Wanapum		Rapids	
)	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
	153.8	0.0	151.3	0.0	158.4	19.9	154.7	5.0	158.5	0.0	168.4	12.6	157.2	0.0
	135.7	0.0	147.3	0.0	161.2	41.9	166.3	14.4	172.3	0.0	182.4	23.5	184.1	9.3
	111.0	0.0	103.7	0.0	131.3	9.7	133.9	0.0	140.8	0.0	160.7	0.0	165.3	0.1
	155.3	0.0	166.5	0.0	165.9	17.1	151.6	4.6	151.2	0.0	145.5	0.0	158.5	0.0
	141.2	0.0	136.6	0.0	152.1	13.4	153.0	3.9	160 4	16.6	171 8	10.8	162 4	0.0

Date

04/13/07

04/14/07

04/15/07

04/16/07

04/17/07 04/18/07

04/19/07

151.5

148.2

0.0

0.0

156.4

150.8

0.0

0.0

163.3

162.3

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

32.0 158.9

15.8 160.8

12.3

8.8

158.4

164.8

16.5 159.9

15.8 175.9

	Daily Average Flow and Spill (in kcfs) at Snake Basin Projects												
				Hells	Lo	wer	Li	ttle	Lov	ver	I	ce	
	Dwo	rshak	shak Brownlee C		Gra	Granite		ose	Monumental		Ha	rbor	
Date	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	
04/13/07	7.5	0.0	15.6	12.6	50.0	20.0	49.6	13.4	49.9	26.7	52.3	42.2	
04/14/07	5.5	0.0	14.1	11.9	47.2	19.8	45.2	13.8	47.5	23.2	49.5	39.5	
04/15/07	5.5	0.0	13.5	12.2	45.2	20.0	42.7	12.9	44.3	29.6	45.5	35.5	
04/16/07	5.7	0.0	13.8	14.0	49.5	20.0	48.5	14.4	49.2	29.6	50.2	40.0	
04/17/07	5.8	0.0	11.9	12.0	48.1	19.9	46.7	14.2	51.1	28.2	53.1	43.0	
04/18/07	5.8	0.0	14.3	11.2	46.5	20.0	42.1	12.5	40.9	24.2	40.3	30.1	
04/19/07	7.2	0.0	12.8	10.1	47.8	20.0	46.7	14.0	48.2	25.5	50.5	40.4	
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			51.6	20.0	49.8	15.1	51.0	21.4	52.8	42.7	

	•	verage Narv	Flow and	er Colu	Columbia Projects Bonneville					
Date	Flow	Spill	Flow	Spill	The D	Spill	Flow	Spill	PH1	PH2
04/13/07	223.5	89.1	246.2	50.7	245.1	98.1	266.9	100.5	67.5	86.6
04/14/07	234.7	93.8	214.7	49.8	207.7	83.3	219.5	101.1	24.9	82.0
04/15/07	223.9	90.1	229.6	54.5	230.4	94.5	255.7	100.4	65.5	78.3
04/16/07	231.3	92.8	219.9	60.4	210.2	84.1	211.5	100.9	53.4	45.6
04/17/07	229.6	92.4	224.0	71.0	226.2	90.8	251.6	98.9	46.6	94.6
04/18/07	222.4	89.8	215.8	63.3	208.7	83.6	230.6	97.7	26.8	94.7
04/19/07	231.2	92.5	217.0	63.3	211.8	83.8	222.9	98.9	20.4	92.1
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

Gas Bubble Trauma Monitoring Results from Representative Sites on the Snake River and Columbia River

									sh with I Highest	Fin GBT Rank	
			Number of	Number w	Number w	% Fin	% Severe	Rank	Rank	Rank	Rank
Site Da	ate	Species	Fish	GBT signs	Fin Signs	GBT	Fin GBT	1	2	3	4
Lower	Granit	e Dam									
04	4/24/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Little G	Goose	Dam									
04	4/24/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Lower	Monu	mental Dam									
04	4/23/07	Chinook + Steelhead	100	2	2	2.00%	0.00%	2	0	0	0
McNar	y Dam										
04	4/20/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
04	4/22/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
04	4/27/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonne	ville D	am									
04	4/21/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
04	4/24/07	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0

HATCHERY RELEASE LAST TWO WEEKS

04/26/07

Hatchery Release Summary 4/13/2007 to

From:

	i ioiii.	4/13/2001		10	04/20/01			
Agency	Hatchery	Species	Race	MigYr	NumRel RelStart	RelEnd	RelSite	RelRiver
Colville Tribe	Cassimer Bar Hatchery	ST	SU	2007	9,000 04-14-07	04-14-07	Omak Creek Bonaparte Acclimation	Okanogan River
Colville Tribe Colville Tribe Total	Eastbank Hatchery	CH1	SU	2007	8,000 04-20-07 17,000	04-20-07	Pond	Okanogan River
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2007	100,329 04-15-07	04-17-07	Red River Redhouse (SFk	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2007	272,819 04-13-07	04-17-07	`	S Fk Clearwater River
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007			Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	41,136 04-18-07			Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	60,000 04-23-07			Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007			Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	· ·		Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	119,727 04-19-07	04-20-07	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	125,000 04-23-07	04-26-07	Squaw Creek `	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	129,930 04-12-07	04-16-07	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2007	165,473 04-16-07	04-17-07	Salmon River (ID)	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	Pahsimeroi Hatchery	CH1	SU	2007	978,462 04-15-07	04-15-07	Pahsimeroi River	Pahsimeroi 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					5,965,671			
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2007	28.050 04-17-07	04-17-07	Meadow Creek - CLES	S Fk Clearwater River
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2007	28,338 04-17-07			S Fk Clearwater River
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2007	49,890 04-19-07		•	Clearwater River M F
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2007	83,811 04-15-07	04-17-07		S Fk Clearwater River
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2007	151,317 04-15-07			S Fk Clearwater River
Nez Perce Tribe	Lookingglass Hatchery	CH1	SP	2007	124,901 03-28-07	04-17-07	Lostine Accim Pond Pittsburg Landing	Wallowa River
Nez Perce Tribe	Lyons Ferry Hatchery	CH1	FA	2007	146,677 04-16-07	04-17-07	0 0	Snake River
Nez Perce Tribe Nez Perce Tribe Total	Lyons Ferry Hatchery	CH1	FA	2007	155,540 04-18-07 768,524	04-19-07		Clearwater River M F
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 Oregon Dept. of Fish and Wildlife	Umatilla Hatchery	ST	SU	2007	50,000 04-16-07	04-16-07	Meacham Creek	Umatilla River
Total					215,000			
U.S. Fish and Wildlife Service	Dworshak NFH	ST	SU	2007	1,200,000 04-16-07	04-19-07	Dworshak Hatchery	Clearwater River M F
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2007	756,000 04-09-07	04-30-07	Salmon River (ID)	Salmon River (ID)
U.S. Fish and Wildlife Service	Leavenworth NFH	CH1	SP	2007	1,177,568 04-18-07	04-18-07	Icicle Creek Warm Springs	Wenatchee River
U.S. Fish and Wildlife Service	Warm Springs NFH	CH1	SP	2007	520,000 03-21-07	04-18-07	Hatchery	Deschutes River
U.S. Fish and Wildlife Service Total					3,653,568		Minthorn Acclimation	
Umatilla Tribe	Umatilla Hatchery	ST	SU	2007	50,000 04-20-07	04-20-07		Umatilla River
Umatilla Tribe	Umatilla Hatchery	ST	SU	2007	53,000 04-20-07	04-20-07	Pendelton Acclim Pond	Umatilla River
Umatilla Tribe	Willard Hatchery	CH1	SP	2007	·		Imegues Acclim Pond	Umatilla River
Umatilla Tribe Total	•				313,000		·	
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2007	9,750 04-19-07	04-25-07	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	_	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2007	20,000 04-10-07	04-16-07		Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2007	20,000 04-24-07	05-07-07		Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2007	27,500 04-10-07	04-16-07	Blackberry Acclim Pond	Hood River
Warm Springs Tribe Warm Springs Tribe Warm Springs Tribe Total	Round Butte Hatchery Round Butte Hatchery	CH1 CH1	SP SP	2007 2007	•		Blackberry Acclim Pond Parkdale Acclim Pond	

HATCHERY RELEASE LAST TWO WEEKS (con't)

to

4/13/2007

From:

Grand Total

Species Race MigYr NumRel RelRiver Hatchery RelStart RelEnd RelSite Agency Washington Dept. of Fish and Wildlife Chelan Hatchery CH1 SP 2007 493,000 04-16-07 05-04-07 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 **Touchet River** Washington Dept. of Fish and Wildlife Lyons Ferry Hatchery ST SU 2007 59,000 04-18-07 04-20-07 Baileysburg Bridge Washington Dept. of Fish and Wildlife 62,000 04-16-07 04-18-07 Lyons Ferry Hatchery Lyons Ferry Hatchery ST SU 2007 Snake River Washington Dept. of Fish and Wildlife Lyons Ferry Hatchery 88,000 04-23-07 04-27-07 Dayton Acclim Pond ST SU 2007 Touchet River Washington Dept. of Fish and Wildlife Lyons Ferry Hatchery ST SU 104,000 04-16-07 04-18-07 Tucannon River **Tucannon River** 2007 104,000 04-16-07 04-18-07 Walla Walla River Walla Walla River Washington Dept. of Fish and Wildlife Lyons Ferry Hatchery ST SU 2007 Washington Dept. of Fish and Wildlife Methow Hatchery CH1 SP 27,000 04-16-07 04-18-07 Twisp Acclim Pond Methow River 2007 Washington Dept. of Fish and Wildlife Methow Hatchery CH1 SP 2007 157,000 04-16-07 04-18-07 Methow River Methow River CH1 SP 2007 Methow River Washington Dept. of Fish and Wildlife Methow Hatchery 233,000 04-16-07 04-18-07 Chewuch Acclim Pond Washington Dept. of Fish and Wildlife CH₁ SU 2007 264.000 04-16-07 05-01-07 Methow River Methow River Methow Hatchery Ringold Springs ST SU 300,000 04-09-07 04-27-07 Hatchery Washington Dept. of Fish and Wildlife Ringold Springs Hatchery 2007 Mid-Columbia River Washington Dept. of Fish and Wildlife Skamania Hatchery ST SU 26.684 04-15-07 05-10-07 White Salmon River White Salmon River 2007 92,684 04-15-07 05-10-07 Klickitat River Washington Dept. of Fish and Wildlife Skamania Hatchery ST SU 2007 Klickitat River Washington Dept. of Fish and Wildlife ST WI 22,500 04-15-07 05-10-07 White Salmon River White Salmon River Skamania Hatchery 2007 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 **Tucannon Hatchery** ST SU 2007 62,964 04-03-07 04-15-07 Tucannon River **Tucannon River** Washington Dept. of Fish and Wildlife Wells Hatchery SU 358,000 04-23-07 05-07-07 Wells Hatchery Mid-Columbia River CH1 2007 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 122,500 04-23-07 05-15-07 Methow River Washington Dept. of Fish and Wildlife Wells Hatchery ST SU 2007 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 3,422,404 Yakama Tribe Cascade Hatchery CO UN 2007 70.015 04-25-07 04-25-07 Winthrop Hatchery Methow River Yakama Tribe Cascade Hatchery CO UN 2007 247.189 04-16-07 04-17-07 Icicle 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 Yakima River Jack Creek Acclim Yakama Tribe CH₁ SP Cle Elem Hatchery 2007 291,991 03-15-07 05-15-07 Pond Yakima River Yakama Tribe Eagle Creek NFH 25,000 04-02-07 04-18-07 Yakama River CO UN 2007 Yakima River Yakama Tribe Eagle Creek NFH CO UN 2007 150,000 04-02-07 04-18-07 Yakama River Yakima River 550,000 04-16-07 04-16-07 Prosser Acclim Pond Yakama Tribe Prosser Acclim. Pond CH₀ FΑ 2007 Yakima River Yakama Tribe Prosser Acclim. Pond UN 2007 30,382 04-02-07 04-18-07 Yakama River Yakima River CO Yakama Tribe Washougal Hatchery CO NO 2007 40,000 04-02-07 04-18-07 Yakama River Yakima River Yakama Tribe Willard Hatchery CO UN 2007 368,576 04-16-07 04-17-07 Icicle Creek Wenatchee River Yakama Tribe Winthrop NFH CO UN 2007 270,349 04-19-07 04-19-07 Winthrop Hatchery Methow River Yakama Tribe Yakama Hatchery CH₀ FA 2007 20,000 04-16-07 04-16-07 Marion Drain Yakima River Yakama Tribe Total 2,632,323

17,143,740

HATCHERY RELEASE NEXT TWO WEEKS

Hatchery Release Summary

	From:	4/27/200°		to	5/10/2007			
Agency Idaho Dept. of Fish and Game Idaho Dept. of Fish and Game Idaho Dept. of Fish and Game	Hatchery Magic Valley Hatchery Magic Valley Hatchery Magic Valley Hatchery	Species ST ST ST	Race SU SU SU	MigYr 2007 2007 2007		05-03-07	East Fk Salmon River Valley Creek	RelRiver Salmon River (ID) Salmon River (ID) Salmon River (ID)
Idaho Dept. of Fish and Game Idaho Dept. of Fish and Game	Magic Valley Hatchery Oxbow-Idaho Oxbow-Idaho Rapid River Hatchery Sawtooth Hatchery	ST CH0 SO CH1 SO	SU FA UN SP UN	2007 2007 2007 2007 2007	110,000 05-01-07 54,000 05-08-07 2,498,246 03-15-07	05-01-07 05-08-07 04-27-07		Salmon River (ID) Snake River Salmon River (ID) Little Salmon River Salmon River (ID)
Idaho Dept. of Fish and Game Total					2,958,246			
Oregon Dept. of Fish and Wildlife Oregon Dept. of Fish and Wildlife Oregon Dept. of Fish and Wildlife Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex Irrigon Hatchery Complex Irrigon Hatchery Complex	ST ST ST	SU SU SU	2007 2007 2007	·	05-10-07	Big Canyon Acclim.Pd (Grande Ronde) Wallowa Acclim Pond Little Sheep Creek	Grande Ronde River Wallowa River Imnaha River
Total	Hannan a NEH	0.	011	0007	385,000	05 00 07	Fact El Oalas a Dissa	O-1 D' (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2007	100,000 05-01-07	05-03-07	East Fk Salmon River	Salmon River (ID)
U.S. Fish and Wildlife Service U.S. Fish and Wildlife Service U.S. Fish and Wildlife Service U.S. Fish and Wildlife Service	Hagerman NFH Hagerman NFH Spring Creek NFH Winthrop NFH	ST ST CH0 ST	SU SU FA SU	2007 2007 2007 2007	756,000 04-09-07 3,500,000 05-01-07	04-30-07 05-01-07	Yankee Fk (Salmon R) Salmon River (ID) White Salmon River Winthrop Hatchery	Salmon River (ID) Salmon River (ID) White Salmon River Methow River
U.S. Fish and Wildlife Service Total					4,722,000			
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2007		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	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2007	20,000 04-24-07	05-07-07	Jones Creek Acclim Pond	Hood River
Warm Springs Tribe Warm Springs Tribe Warm Springs Tribe Total	Round Butte Hatchery Round Butte Hatchery	CH1 CH1	SP SP	2007 2007			Blackberry Acclim Pond Parkdale Acclim Pond	Hood River Hood River
Washington Dept. of Fish and Wildlife	Chelan Hatchery	CH1	SP	2007	493,000 04-16-07	05-04-07	Chiwawa Hatchery	Wenatchee River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery Eastbank Hatchery Lyons Ferry Hatchery Methow Hatchery	CH1 CH1 ST CH1	SU SU SU SU	2007 2007 2007 2007	704,000 04-30-07	04-30-07 04-27-07	Similkameen Acclim Pd Dryden Acclim Pond Dayton Acclim Pond Methow River	Okanogan River Wenatchee River Touchet River Methow River
Washington Dept. of Fish and Wildlife Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery Skamania Hatchery	ST ST	SU SU	2007 2007	300,000 04-09-07 26,684 04-15-07		Ringold Springs Hatchery White Salmon River	Mid-Columbia 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 Washington Dept. of Fish and Wildlife	Skamania Hatchery Turtle Rock Hatchery	ST CH1	WI SU	2007 2007	·		White Salmon River Turtle Rock Hatchery	White Salmon River Mid-Columbia River
Washington Dept. of Fish and Wildlife Washington Dept. of Fish and Wildlife Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery Turtle Rock Hatchery	ST ST	SU SU	2007 2007 2007		05-04-07	Wenatchee River	Wenatchee River Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2007			Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH1	SU	2007	358,000 04-23-07		•	Mid-Columbia River
Washington Dept. of Fish and Wildlife Washington Dept. of Fish and Wildlife	Wells Hatchery Wells Hatchery	ST ST	SU SU	2007 2007	100,000 04-23-07 122,500 04-23-07		•	Methow River Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2007	122,500 04-23-07			Methow River
Washington Dept. of Fish and Wildlife Washington Dept. of Fish and	Wells Hatchery	ST	SU	2007	150,000 04-23-07			Okanogan River
Wildlife Total					3,564,440			

HATCHERY RELEASE NEXT TWO WEEKS (cont'd)

	From:	4/27/200)7	to	5/10/2007				
Agency	Hatchery	Species	Race	e MigYr	NumRel	RelStar	t RelEnc	I RelSite	RelRiver
Yakama Tribe	Cascade Hatchery	СО	UN	2007	70,035	05-07-07	05-07-07	Nason Creek	Wenatchee 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	Klickitat Hatchery	CO	NO	2007	1,000,000	05-01-07	05-15-07	Klickitat Hatchery	Klickitat 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	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	34,585	04-27-07	04-27-07	Nason Creek	Wenatchee 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	Willard Hatchery	CO	UN	2007	136,631	05-02-07	05-02-07	Nason Creek	Wenatchee River
Yakama Tribe Total	·				3,810,426				
Grand Total					15.548.862				

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

	Hungry H. Dnst Boundary						Grand	d Coul	<u>ee</u>		Grand	d C. T	<u>lwr</u>		Chief	Jose	<u>ph</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>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>
4/13	97	98	98	24	112	114	115	24	108	108	109	24	106	106	107	24	105	105	106	24
4/14	98	98	99	24	110	111	113	24	109	110	110	24	106	107	108	24	106	106	106	24
4/15	97	98	98	24	111	114	117	24	108	108	109	24	106	107	107	24	105	106	106	24
4/16	98	98	98	24	112	116	117	24	109	109	110	24	107	107	108	24	106	106	107	24
4/17	98	99	99	24	110	113	116	24	110	110	111	24	108	108	109	24	107	107	108	24
4/18	98	99	99	24	111	113	115	24	109	110	110	24	108	108	109	24	107	107	107	24
4/19	98	98	98	24	109	111	112	24	110	110	110	24	108	109	109	24	107	107	108	24
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

Total Dissolved Gas	Saturation I	Data at Mid	Columbia River	Sites

	Chief J. Dnst Wells								Wells	Dwns	<u>strm</u>		Rock	y Rea	<u>ch</u>		Rock	y R. T	wr	
	<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>Date</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>Avq</u>	<u>High</u>	<u>hr</u>
4/13	105	105	106	24	104	104	104	24	108	110	115	24	108	109	109	24	109	109	111	24
4/14	105	106	107	24	105	105	105	24	113	117	119	24	110	111	112	24	110	112	114	24
4/15	106	107	108	24	104	104	105	24	106	106	108	24	112	113	114	24	112	113	114	24
4/16	105	106	106	24	105	105	106	23	108	109	122	23	110	112	114	24	110	111	114	24
4/17	106	107	108	24	105	105	105	9	110	110	122	9	107	108	108	24	108	108	112	24
4/18	106	106	107	24				0				0	109	110	111	24	110	111	112	24
4/19	107	107	107	24				0				0	110	111	113	24	110	112	116	24
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

Total Dissolved Gas Saturation at Mid Columbia River Sites

	Rock	Islan	<u>d</u>		Rock	I. Tlw	<u>r</u>		<u>Wana</u>	pum			<u>Wana</u>	pum ·	<u>Tlwr</u>		Pries	t Rapi	<u>ds</u>	
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	Avg	Avg	<u>High</u>	<u>hr</u>
4/13	108	110	110	24	108	110	110	24	104	104	104	24	105	105	106	16	105	105	106	24
4/14	111	112	114	24	111	112	114	24	104	104	105	24	106	107	108	24	106	107	108	24
4/15	109	112	114	24	109	112	114	24	104	105	106	24	106	107	107	24	106	106	106	24
4/16	111	112	113	24	111	113	113	24	105	107	108	24	109	109	110	24	107	108	109	24
4/17	108	109	111	24	111	112	113	24	107	108	109	24	111	112	118	24	110	111	114	24
4/18	109	110	112	24	111	113	114	24	107	108	108	24	110	110	112	24	108	109	109	24
4/19	109	110	111	24	112	112	114	24	107	107	107	24	112	113	115	24	109	110	112	24
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

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

Total Dissolved Gas Saturation Data at Lower Co	olumbia and Snake River Sites
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	Priest R. Dnst Pasco				2			Dwor	<u>shak</u>			Clrwt	r-Pecl	<u><</u>		Anato	<u>one</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>Date</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>
4/13	104	105	105	24	105	106	107	24	95	95	96	12				0	102	103	105	24
4/14	106	106	107	24	104	105	105	24	96	96	97	23				0	102	103	103	24
4/15	105	105	106	24	104	105	106	24	95	95	96	8	100	100	100	24	101	102	103	24
4/16	107	108	108	24	105	105	106	24	101	102	103	18	101	102	103	24	102	103	104	24
4/17	109	110	113	24	106	108	108	24	102	102	102	24	102	102	102	24	102	102	103	24
4/18	108	109	109	24	107	108	109	24	102	102	103	24	101	101	102	24	102	102	104	24
4/19	109	110	110	24	106	107	108	24	98	99	102	24	100	101	102	24	102	103	104	24
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

Total Dissolved Gas Saturation Data at Snake River Sites

	Clrwtr-Lewiston Lower Granite				<u>nite</u>		L. Gra	anite 1	lwr		Little	Goos	<u>e</u>		L. Go	ose T	<u>lwr</u>			
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		#	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>
4/13	101	104	105	24	99	100	100	24	110	110	111	24	106	106	106	24	112	114	114	24
4/14	101	102	104	24	100	100	101	24	110	110	111	24	108	108	109	24	113	114	114	24
4/15	101	102	104	24	100	100	101	24	110	111	111	24	107	108	108	24	111	112	112	24
4/16	101	103	105	24	101	101	101	24	110	111	111	24	108	108	109	24	114	114	115	24
4/17	102	103	104	24	102	102	102	24	111	112	113	24	108	109	109	24	114	114	115	24
4/18	101	102	103	24	102	102	102	24	111	112	113	24	108	108	108	24	112	113	114	24
4/19	102	104	105	24	102	102	102	24	111	112	113	24	107	108	108	24	113	113	114	24
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

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

	Lowe	<u>r Mon</u>	<u>ı.</u>		<u>L. Mo</u>	<u>n. Tlw</u>	<u>/r</u>		Ice Ha	<u>arbor</u>			Ice Ha	<u>arbor</u>	<u>Tlwr</u>		<u>McNa</u>	ary-Or	<u>egon</u>	
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>
<u>Date</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<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>	Avg	<u>High</u>	<u>hr</u>
4/13	109	110	111	24	119	120	124	24	113	114	115	24	114	115	116	24				0
4/14	112	112	113	24	118	120	121	24	114	114	115	24	114	115	116	24				0
4/15	110	110	111	24	120	120	120	24	114	114	114	24	113	114	115	24				0
4/16	110	110	111	24	119	120	120	24	115	116	116	24	113	113	114	24				0
4/17	111	111	111	24	119	120	120	24	115	115	116	24	114	114	115	24				0
4/18	111	111	111	24	118	119	120	24	115	115	116	24	113	114	115	24				0
4/19	110	111	111	24	119	120	120	24	114	114	115	24	114	115	115	24				0
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

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

	McNary-Wash McNary Tlwr				<u>/r</u>		<u>John</u>	Day			<u>John</u>	Day T	<u>lwr</u>		The [<u>Dalles</u>				
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		#	<u>24h</u>	<u>12h</u>		#	<u>24h</u>	<u>12h</u>		<u>#</u>	<u>24h</u>	<u>12h</u>		<u>#</u>
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<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>
4/13	107	107	108	24	115	117	118	24	107	107	108	24	113	118	119	24	110	111	112	24
4/14	107	107	108	24	114	115	117	24	107	107	107	24	112	118	119	24	109	110	112	24
4/15	106	106	107	24	115	117	117	24	106	106	107	24	112	117	118	24	108	110	111	24
4/16	106	107	107	24	115	115	116	24	107	108	108	24	112	117	118	24	110	113	114	24
4/17	107	107	107	24	114	115	115	24	107	108	108	24	113	118	118	24	111	114	115	24
4/18	107	107	107	15	114	115	115	24	107	108	108	24	112	117	118	24	109	111	112	24
4/19	107	107	108	24	114	114	116	24	107	108	109	24	113	118	121	24	110	113	115	24
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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

	The D	Dalles	Dnst		Bonn	eville			Warre	endale	<u>;</u>		Cama	as\Wa	shouga	<u> </u>	Casc	ade Is	land	
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		#	<u>24h</u>	<u>12h</u>		<u>#</u>	<u>24h</u>	<u>12h</u>		#	<u>24h</u>	<u>12h</u>		#
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<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>
4/13	115	115	116	24	112	112	113	24	114	115	115	24	114	114	115	24	119	119	120	24
4/14	113	114	115	24	114	115	115	24	116	116	117	24	114	114	114	24	118	118	118	24
4/15	113	114	115	24	110	110	111	24	113	113	114	24	113	114	114	24	118	118	119	24
4/16	114	115	116	24	111	112	112	24	114	114	115	24	112	113	113	24	117	118	118	24
4/17	114	115	116	24	112	112	112	24	114	115	115	24	113	113	114	24	118	118	118	24
4/18	113	114	116	24	110	111	111	24	114	114	115	24	112	113	113	24	117	118	118	24
4/19	114	115	118	24	111	112	112	24	115	116	117	24	113	115	116	24	117	118	118	24
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

Two-Week Summary of Passage Indices

* One or more of the sites on this date had an incomplete or biased sample.

See Sampling Comments:

http://www.fpc.org/currentDaily/smpcomments.htm

For clip information see: http://www.fpc.org/CurrentDaily/catch.htm

For sockeye and yearling chinook (Snake only) race information see: http://www.fpc.org/smoltqueries/currentsmpsubmitdata.asp

WTB (Coll) 990 773	IMN (Coll) 694 642	GRN (Coll) 456	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN	RIS	MCN	JDA	BO2
990 773	694	\/	\/	(INDEX)	(INDEX)	(1) (5) (5) (1)				
773		456	40		(INDLA)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
	642		49	15,731	0	0	18	7,642	2,493	1,996
1 044	012	218	135	22,681	97	3,144	292		3,773	21,782
1,044	664	214	30	37,340	0	0	622	15,297	5,743	41,550
1,419	868	423	10	21,879	321	0	480		7,445	34,033
1,017	341	716	15	38,727	795	890	393	13,463	11,596	28,375
1,365	761	302	21	36,428	372	0	142		14,855	24,549
1,535	763	367	31	50,159	3,362	0	124	14,564	14,242	9,000
1,624	299	429	14	42,473	1,775	353	1,053		25,958	14,484
1,402	313	744	39	68,084	0	0	662	8,243	17,403	12,182
1,063	292	388	1	86,633	1,623	0	252		19,664	14,264
567	196	241	11	58,211	1,535	222	274	13,593	17,336	13,530
815	483	67	21	25,525	1,829	20	0		18,623	18,037
879	420	129	9	37,606	3,247	0	0	24,532	13,900	14,337
1,263		86	4	32,683	791	294	0		19,822	15,771
15 756	6 736	4 780	390	574 160	15 747	4 923	4 312	97 334	192 853	263,890
								71,334		203,030
								13 905		18,849
	1									291,059
	1,044 1,419 1,017 1,365 1,535 1,624 1,402 1,063 567 815 879 1,263	1,044 664 1,419 868 1,017 341 1,365 761 1,535 763 1,624 299 1,402 313 1,063 292 567 196 815 483 879 420 1,263 15,756 6,736 14 13 1,125 518	1,044 664 214 1,419 868 423 1,017 341 716 1,365 761 302 1,535 763 367 1,624 299 429 1,402 313 744 1,063 292 388 567 196 241 815 483 67 879 420 129 1,263 86 15,756 6,736 4,780 14 13 14 1,125 518 341	1,044 664 214 30 1,419 868 423 10 1,017 341 716 15 1,365 761 302 21 1,535 763 367 31 1,624 299 429 14 1,402 313 744 39 1,063 292 388 1 567 196 241 11 815 483 67 21 879 420 129 9 1,263 86 4 15,756 6,736 4,780 390 14 13 14 14 1,125 518 341 28	1,044 664 214 30 37,340 1,419 868 423 10 21,879 1,017 341 716 15 38,727 1,365 761 302 21 36,428 1,535 763 367 31 50,159 1,624 299 429 14 42,473 1,402 313 744 39 68,084 1,063 292 388 1 86,633 567 196 241 11 58,211 815 483 67 21 25,525 879 420 129 9 37,606 1,263 86 4 32,683 15,756 6,736 4,780 390 574,160 14 13 14 14 14 1,125 518 341 28 41,011	1,044 664 214 30 37,340 0 1,419 868 423 10 21,879 321 1,017 341 716 15 38,727 795 1,365 761 302 21 36,428 372 1,535 763 367 31 50,159 3,362 1,624 299 429 14 42,473 1,775 1,402 313 744 39 68,084 0 1,063 292 388 1 86,633 1,623 567 196 241 11 58,211 1,535 815 483 67 21 25,525 1,829 879 420 129 9 37,606 3,247 1,263 86 4 32,683 791 15,756 6,736 4,780 390 57	1,044 664 214 30 37,340 0 0 1,419 868 423 10 21,879 321 0 1,017 341 716 15 38,727 795 890 1,365 761 302 21 36,428 372 0 1,535 763 367 31 50,159 3,362 0 1,624 299 429 14 42,473 1,775 353 1,402 313 744 39 68,084 0 0 0 1,063 292 388 1 86,633 1,623 0 567 196 241 11 58,211 1,535 222 815 483 67 21 25,525 1,829 20 879 420 129 9 37,606 3,247 0 1,263 86 4 32,683 791 294	1,044 664 214 30 37,340 0 0 622 1,419 868 423 10 21,879 321 0 480 1,017 341 716 15 38,727 795 890 393 1,365 761 302 21 36,428 372 0 142 1,535 763 367 31 50,159 3,362 0 124 1,624 299 429 14 42,473 1,775 353 1,053 1,402 313 744 39 68,084 0 0 662 1,063 292 388 1 86,633 1,623 0 252 567 196 241 11 58,211 1,535 222 274 815 483 67 21 25,525 1,829 20 0 879 420 129 9 37,606 3,247 0 0 15,756 6,736 4,780 390 574,160 15	1,044 664 214 30 37,340 0 0 622 15,297 1,419 868 423 10 21,879 321 0 480 1,017 341 716 15 38,727 795 890 393 13,463 1,365 761 302 21 36,428 372 0 142 1,535 763 367 31 50,159 3,362 0 124 14,564 1,624 299 429 14 42,473 1,775 353 1,053 1,402 313 744 39 68,084 0 0 662 8,243 1,063 292 388 1 86,633 1,623 0 252 567 196 241 11 58,211 1,535 222 274 13,593 815 483 67 21 25,525 1,82	1,044 664 214 30 37,340 0 0 622 15,297 5,743 1,419 868 423 10 21,879 321 0 480 7,445 1,017 341 716 15 38,727 795 890 393 13,463 11,596 1,365 761 302 21 36,428 372 0 142 14,855 1,535 763 367 31 50,159 3,362 0 124 14,564 14,242 1,624 299 429 14 42,473 1,775 353 1,053 25,958 1,402 313 744 39 68,084 0 0 662 8,243 17,403 1,063 292 388 1 86,633 1,623 0 252 19,664 567 196 241 11 58,211 1,535 222 </td

	П		I		COMBIN	ED SUBYE	ARI ING C	HINOOK	1			
	Ħ	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/13/2007	*	0	1	0	1	0	0	0	18	34	38	9,708
04/14/2007	*	0	3	0	0	0	1	0	6		13	262,393
04/15/2007	*	0	0	0	0	531	0	0	11	25	17	47,845
04/16/2007	*	0	0	0	0	0	0	0	3		0	12,803
04/17/2007	*	0	0	0	1	84	0	0	23	0	0	5,479
04/18/2007	*	0	0	0	0	0	1	0	20		0	2,560
04/19/2007	*	0	0	0	2	0	0	0	20	0	0	868
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		0	2	0	0	0	0		0	179
04/27/2007												
Total:		0	6	2	10	1,075	2	0	138	161	109	345,486
# Days:	Ш	14	13	14	14	14	14	14	14	7	14	14
Average:	Ц	0	0	0	1	77	0	0	10	23	8	24,678
YTD		0	55	2	35	1,701	2	0	219	260	127	1,423,223

Two-Week Summary of Passage Indices

						COMBINE	ED COHO					
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)						
04/13/2007	*	0	0	0	1	33	0	0	3	12	25	3,867
04/14/2007	*	0	0	0	4	131	3	0	0		7	3,777
04/15/2007	*	0	0	0	1	0	0	0	6	8	35	840
04/16/2007	*	0	0	0	1	89	0	0	3		13	3,889
04/17/2007	*	0	0	0	0	335	6	2	0	24	36	2,544
04/18/2007	*	0	0	0	2	266	6	0	0		75	5,643
04/19/2007	*	0	0	0	0	171	100	0	64	25	70	3,243
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	1	0	3	0	0		224	3,943
04/27/2007												
Total:		0	0	0	19	2,257	220	9	165	3,255	953	50,011
# Days:		14	13	14	14	14	14	14	14	7	14	14
Average:		0	0	0	1	161	16	1	12	465	68	3,572
YTD		0	0	0	25	2,656	220	9	195	3,286	1,011	63,513

					C	OMBINED	STEELHEA	\D				
	П	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	П	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/13/2007	*	28	1,187	56	57	3,414	0	0	5	1,121	1,452	314
04/14/2007	*	56	607	20	37	4,668	98	254	17		1,416	0
04/15/2007	*	80	573	16	18	6,282	0	0	19	837	1,293	1,680
04/16/2007	*	109	607	8	11	7,948	311	0	15		1,117	324
04/17/2007	*	79	303	11	24	7,712	1,394	92	46	1,009	1,495	196
04/18/2007	*	52	499	13	40	7,592	469	0	17		1,427	553
04/19/2007	*	79	434	154	124	6,933	4,993	0	15	1,173	972	503
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		11	8	13,309	668	309	0		3,087	762
04/27/2007												
Total:	Ц	1,250	6,947	389	554	179,872	20,287	1,708	253	19,387	22,470	7,705
# Days:	Ц	14	13	14	14	14	14	14	14	7	14	14
Average:	Ц	89	534	28	40	12,848	1,449	122	18	2,770	1,605	550
YTD		1,828	9,255	460	713	193,174	20,409	1,839	284	21,000	25,646	10,721

Two-Week Summary of Passage Indices

					(OMBINED	SOCKEYE	<u> </u>				
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/13/2007	*	0	0	0	0	67	0	0	62	145	13	0
04/14/2007	*	0	0	0	0	0	6	0	190		46	0
04/15/2007	*	0	0	0	0	88	0	0	170	93	26	0
04/16/2007	*	0	0	0	0	0	1	0	174		66	0
04/17/2007	*	0	0	0	0	168	4	0	152	161	36	0
04/18/2007	*	0	0	0	0	0	4	0	144		42	0
04/19/2007	*	0	0	0	0	0	0	0	191	386	0	91
04/20/2007	*	0	0	0	0	0	7	0	206		254	48
04/21/2007	*	0	0	0	0	0	0	0	157	390	43	0
04/22/2007	*	0	0	0	0	0	0	0	59		277	0
04/23/2007	*	0	0	0	0	0	0	3	134	696	241	0
04/24/2007	*	0	0	0	0	0	1	0	0		210	0
04/25/2007	*	0	0	0	0	0	0	0	0	645	80	16
04/26/2007	*	0		0	1	0	0	0	0		252	45
04/27/2007												
Total:		0	0	0	1	323	23	3	1,639	2,516	1,586	200
# Days:		14	13	14	14	14	14	14	14	7	14	14
Average:		0	0	0	0	23	2	0	117	359	113	14
YTD		1	0	0	1	560	23	6	1,837	2,647	1,635	253

^{*} 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: 4/27/07 9:33 AM

04/13/07 TO 04/27/07 Species CH1 ST **Grand Total** Site Data CH₀ CO SO LGR Sum of NumberCollected 1,300 102,693 433,320 328,537 Sum of NumberBarged 77,543 25,058 102,891 Sum of NumberBypassed 250,694 1,028 77,614 330,105 Sum of Numbertrucked Sum of SampleMorts Sum of FacilityMorts Sum of ResearchMorts Sum of TotalProjectMorts LGS Sum of NumberCollected 14.997 26,833 11,655 Sum of NumberBarged 11,630 14,994 26,802 Sum of NumberBypassed Sum of Numbertrucked Sum of SampleMorts Sum of FacilityMorts Sum of ResearchMorts Sum of TotalProjectMorts LMN Sum of NumberCollected 2,297 3,065 Sum of NumberBarged 2,295 3,062 Sum of NumberBypassed Sum of Numbertrucked Sum of SampleMorts Sum of FacilityMorts Sum of ResearchMorts Sum of TotalProjectMorts 72,403 MCN Sum of NumberCollected 57,463 1,921 1,484 11,440 Sum of NumberBarged n Sum of NumberBypassed 57,403 1,921 1,481 11,433 72,333 Sum of Numbertrucked Sum of SampleMorts Sum of FacilityMorts Sum of ResearchMorts Sum of TotalProjectMorts 399,952 Total Sum of NumberCollected 3,381 129,893 535,621 1,696 Total Sum of NumberBarged 77,543 25,058 102,891 Total Sum of NumberBypassed 322,022 3,109 1,691 104,803 432,302 Total Sum of Numbertrucked Total Sum of SampleMorts Total Sum of FacilityMorts Total Sum of ResearchMorts Total Sum of TotalProjectMorts

YTD Transportation Summary

Source: Fish Passage Center Updated: 4/27/07 9:33 AM

TO: 04/27/07 **Species** Site CH0 CH1 SO ST CO **Grand Total** Data LGR Sum of NumberCollected 1,560 364,909 111,481 479,280 Sum of NumberBarged 26.017 117.337 90.851 Sum of NumberBypassed 273,735 1,252 85,440 361,590 Sum of NumberTrucked Sum of SampleMorts Sum of FacilityMorts Sum of ResearchMorts Sum of TotalProjectMorts LGS Sum of NumberCollected 11,740 15,081 27,002 Sum of NumberBarged 15,078 Sum of NumberBypassed 11,715 26,971 Sum of NumberTrucked Sum of SampleMorts Sum of FacilityMorts Sum of ResearchMorts Sum of TotalProjectMorts LMN Sum of NumberCollected 3,438 4,262 Sum of NumberBarged Sum of NumberBypassed 3,434 4,256 Sum of NumberTrucked Sum of SampleMorts Sum of FacilityMorts Sum of ResearchMorts Sum of TotalProjectMorts MCN Sum of NumberCollected 1,939 58,767 1,575 12,547 75,003 Sum of NumberBarged Sum of NumberBypassed 58,699 1,939 1,572 12,537 74,921 Sum of NumberTrucked Sum of SampleMorts Sum of FacilityMorts Sum of ResearchMorts Sum of TotalProjectMorts Total Sum of NumberCollected 1,149 438,854 3,659 1,958 139,927 585,547 Total Sum of NumberBarged 90,851 26,017 117,337 Total Sum of NumberBypassed 347,583 3,351 1,944 113,871 467,738 Total Sum of NumberTrucked Total Sum of SampleMorts Total Sum of FacilityMorts Total Sum of ResearchMorts Total Sum of TotalProjectMorts

Cumulative Adult Passage at Mainstem Dams Through: 04/26

			Spring Chinook						Summer Chinook					Fall Chinook					
		200)7	20	106	10-Y	r Avg.	200	07	200	06	10-Y	r Avg.	20	07	20	06	10-Yr	Avg.
DAM	EndDate	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	04/26	21024	448	1559	5	80700	734	0	0	0	0	0	0	0	0	0	0	0	0
TDA	04/25	9107	122	232	-1	44877	267	0	0	0	0	0	0	0	0	0	0	0	0
JDA	04/25	5684	72	133	-2	33033	151	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	04/22	-2	2	0	0	7627	11	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	04/25	32	2	0	0	7491	11	0	0	0	0	0	0	0	0	0	0	0	0
PRD	04/25	40	0	9	0	2257	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	04/25	7	0	2	0	723	1	0	0	0	0	0	0	0	0	0	0	0	0
RRH	04/25	2	0	0	0	95	0	0	0	0	0	0	0	0	0	0	0	0	0
WEL	04/25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WFA	04/24	1054	18	1464	0	-	-	0	0	0	0	-	-	0	0	0	0	-	-

			Col	10			Sockeye Steelhead							
	20	07	20	006	10-Yr	Avg.			10-Yr			10-Yr	Wild	
DAM	Adult	Jack	Adult	Jack	Adult	Jack	2007	2006	Avg.	2007	2006	Avg.	2007	
BON	0	0	0	0	0	0	0	0	0	1741	1483	2076	551	
TDA	0	0	0	0	0	0	0	0	0	997	946	785	372	
JDA	0	0	0	0	0	0	0	0	0	1553	2047	2487	651	
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	2065	2451	1591	687	
LGS	0	0	0	0	0	0	0	0	0	1993	2383	1843	633	
LGR	0	0	0	0	0	0	0	0	0	10259	7172	6435	2226	
PRD	0	0	0	0	0	0	0	0	0	7	15	2	0	
RIS	0	0	0	0	0	0	0	0	0	15	31	19	4	
RRH	0	0	0	0	0	0	0	0	0	71	95	79	29	
WEL	0	0	0	0	0	0	0	0	0	0	0	0	0	
WFA	2	0	0	0	-	-	0	0	-	5092	5826	-		

BON and LGR have switched to video counts so the data is delayed.

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:

04/27/07

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

^{*}PRD is not posting wild steelhead numbers.