

Fish Passage Center

Weekly Report #03 - 8

May 9, 2003

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Summary of Events:

Water Supply: Columbia Basin snowpack is currently (May 1, 2003) at 89% of average. At specific Columbia River Sub-basins, snowpacks are: 87% at Columbia above Castlegar, 88% above Grand Coulee, and 98% above Ice Harbor. Additionally, the NRCS reports significant snowpack improvements in April over the Columbia mainstem in Canada, the Kettle River, the Snake River Plain, much of eastern Oregon, and the Salmon River.

Most Columbia Basin watersheds have received above average precipitation over the beginning of May (Table 1). For the water year (October 1, 2002 to May 5, 2003), precipitation in most basins has been near average, with the Central Washington and Clearwater locations receiving the highest yearly totals at 121% and 111% of average, respectively.

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

	May 1-5	5, 2003	Cumulative October, 1 2002 to May 5, 2003				
Location	Observed	%	Observed	%			
	(inches)	Average	(inches)	Average			
Columbia Above	0.60	167	15.27	94			
Coulee							
Snake River	0.57	187	12.33	102			
Above Ice Harbor							
Columbia Above	0.50	156	15.91	98			
The Dalles							
Kootenai	0.52	145	14.62	88			
Clark Fork	0.69	207	10.99	104			
Flathead	0.72	182	12.72	90			
Pend	0.41	97	22.71	99			
Oreille/Spokane							
Central	0.03	20	8.04	121			
Washington							
Snake River Plain	0.46	191	5.93	80			
Salmon/Boise/	0.68	234	15.34	105			
Payette							
Clearwater	0.58	118	24.08	111			
SW Washington	0.88	144	54.52	92			
Cascades/Cowlitz							
Willamette	0.85	150	49.25	97			
Valley							

Table 2 displays the March Final, April, and May Final runoff volume forecasts for multiple reservoirs. Generally, runoff volume forecasts have been steadily rising over the spring. Most basins have increased in excess of 10% of average between the March and May Forecasts. Six of the seven locations presented in the following table had increased water supply forecasts in May relative to that forecasted in April.

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

	March	n Final	April	Final	May	Final
	%	Probable	%	Probable	%	Probable
	Average	Runoff	Average	Runoff	Average	Runoff
	(1971-	Volume	(1971-	Volume	(1971-	Volume
Location	2000)	(Kaf)	2000)	(Kaf)	2000)	(Kaf)
The Dalles (Jan-July)	70	74900	79	85300	84	90200
Grand Coulee (Jan-July)	74	46300	84	52900	88	55500
Libby Res. Inflow, MT (Jan-July)	70	4440	79	4960	82	5200
Hungry Horse Res. Inflow, MT (Jan-July)	66	1470	81	1800	85	1900
Lower Granite Res. Inflow (Apr- July)	68	14700	79	17100	86	18500
Brownlee Res. Inflow (Apr-July)	49	3100	53	3370	56	3520
Dworshak Res. Inflow (Apr-July)	70	1860	90	2390	88	2330

Based on the April Final Forecasts, the following Biological Opinion actions will be targeted in the spring of 2003:

- ◆ Lower Granite: The Spring Flow Objective will be 89.1 Kcfs between April 3rd and June 20th. To date, the average flow at Lower Granite between April 3rd and May 7th, 2003 has been 70.9 Kcfs.
- ♦ McNary: The Spring Flow Objective will be 220 Kcfs between April 10th and June 30th. To date, the average flow at McNary between April 10th and May 7th, 2003 has been 204.1 Kcfs.
- ♦ Priest Rapids: The Spring Flow Objective will be 135 Kcfs between April 10th and June 30th. To date, the average flow at Priest Rapids between April 10th and May 7th, 2003 has been 128.6 Kcfs.

On April 17th, SOR 2003-7 was submitted to the Action Agencies and asked for the Biological Opinion flow objective of 135 Kcfs to be met at Priest Rapids from April 24th through the end of June. This SOR was accepted by the Action Agencies. Outflows at Priest Rapids averaged 139.3 Kcfs April 24-30 and 141.5 Kcfs May 1-7.

Also on the 17th of April, SOR 2003-8 was submitted to the Action Agencies based upon survey reports indicating increased stranding and entrapment of juvenile fall chinook below Priest Rapids Dam. The SOR asks for flow fluctuations to be limited relative to the previous days flow average. The action agencies maintain that Grant County PUD is the responsible party and Grant County has maintained that federal flow control is responsible. No indication of compromise between Grant County PUD and the Action Agencies on the implementation of SOR 2003-8 has been indicated to date. However, since the submittal of SOR 2003-8, flow fluctuations have been monitored and compared to the flow bands indicated in the SOR. The following table displays the actual daily average flow (determines flow band), actual daily flow fluctuations, and the flow band suggested by SOR 2003-8 at Priest Rapids Dam from April 17th to May 7th.

Table 3. Actual daily average flow (determines flow band), actual daily flow fluctuation, and the flow band suggested by SOR 2003-8 at Priest Rapids Dam from April 17th to May 7th.

	Daily	Daily Flow	Flow Band
	Average	Fluctuation	According to
Date	Flow (Kcfs)	(Kcfs)	SOR 2003-8
4-17-2003	148.3	14.9	20
4-18-2003	112.6	40.4	20
4-19-2003	117.6	29.4	20
4-20-2003	98.9	42.2	10
4-21-2003	114.6	76.8	20
4-22-2003	158.4	18.9	20
4-23-2003	149.1	42.6	20
4-24-2003	143.2	70.2	20
4-25-2003	160.8	39.6	20
4-26-2003	129.1	28.1	20
4-27-2003	111.8	17.0	20
4-28-2003	128.3	28.9	20
4-29-2003	151.9	55.3	20
4-30-2003	149.9	60.4	20
5-1-2003	128.6	35.8	20
5-2-2003	125.3	50.1	20
5-3-2003	131.4	39.0	20
5-4-2003	143.1	44.1	20
5-5-2003	154.8	45.4	20
5-6-2003	161.8	41.3	20

From Table 3, the flow bands recommended by SOR 2003-8 at Priest Rapids Dam were met in three of the twenty days since April 17th, 2003.

The Libby Reservoir is currently at an elevation of 2415 feet and has been operating to a minimum discharge of 4.0 Kcfs. Inflows to Libby are currently 12.6 Kcfs (5-8-03); over the last week Libby has filled 3.1 feet.

The Hungry Horse Reservoir is currently at an elevation of 3526.6 feet, and has refilled about one foot in the last week.

The Dworshak reservoir is currently at an elevation of 1565.7 feet and continues to release approximately 15.6 kcfs of water (9.5 Kcfs through the powerhouse and the rest spill). A unit outage on May 3, 4 and part of May 5 resulted in flows being reduced to 12.6 to 12.8 Kcfs. The unit was brought back into service on May 5, 2003. On April 29, SOR 2003-9 was submitted to the action agencies and requested that Dworshak outflows remain at their current levels (Approximately 15.6 Kcfs) unless the 89.1 Kcfs flow objective is met at Lower Granite. The action agencies agreed to implement the SOR for an additional week and then revisit water supply and refill forecasts at Dworshak.

The Grand Coulee Reservoir ended May 8th at an elevation of 1275 feet.

The Brownlee Reservoir was at an elevation of 2072 on May 8th, 2003.

The USBR reservoir systems along the Boise, Payette, and Upper Snake Basins are currently 60% (+1% from last week), 73% (+1% from last week), and 62% (+0% from last week) of capacity.

Spill: Dworshak Dam continued operating at full powerhouse and spilling to the 110% TDG gas cap. Spill at Lower Granite, Little Goose, Lower Monumental and Ice Harbor dams over the past week averaged slightly higher levels of spill at 29%, 28%, 47% and 65% of average daily flow, respectively.

Spill at the lower Columbia projects was initiated on April 14. Spill over the past week at McNary, John Day, The Dalles and Bonneville

dams over the past week averaged 34%, 25%, 39%, and 41% of average daily flow, respectively.

A few fish have been sampled at Rock Island Dam with signs of GBT in their fins. Total dissolved gas levels remain at, or very near, the gas waiver limits.

Smolt Monitoring: At the Snake River tributary traps the numbers of yearling chinook captured decreased rapidly over the past week, while steel-head numbers continued to increase at all but the Grande Ronde Trap. The passage indices of yearling chinook at Lower Snake dams remained high this past week, as the peak of the Spring migration appears to be passing. In the mid-Columbia the collection of coho and sockeye continued to increase despite diminished trapping at the project due to mechanical problems with the bypass. In the Lower Columbia the numbers of yearling chinook and steelhead have again increased significantly this past week at all SMP sites.

The White Bird Trap collected an average of 53 yearling chinook per day in the seven days from April 25 to May 1 compared to 1,100 per day the previous week. Steelhead numbers were up again this week, with the average daily collection this week at 130 compared to 90 per day last week. At the Imnaha Trap the average daily catch of yearling chinook this week was 80 compared to 180 last week. The numbers of steelhead increased rapidly this week with 1,300 per day average collection compared to 650 per day last week. Numbers of yearling chinook and steelhead captured at the Grande Ronde trap decreased again this week with a daily average of 44 chinook and 14 steelhead compared to 83 and 16 respectively, last week. At the Lewiston Trap the collection of yearling chinook was relatively steady at 46 per day average, compared to 53 last week, while steelhead collection jumped from 130 last week to 217 per day this week.

At Lower Granite Dam the average daily passage index for both yearling chinook and steelhead increased rapidly this past week. The

yearling chinook index averaged 127,000 this week compared to 106,000 last week with the largest single day index of the season of 247,000 on May 6. The steelhead average daily passage index decreased from 89,000 last week to 46,000 this week. Small numbers of sockeye and coho were also captured this past week. Little Goose and Lower Monumental dams both continued to have large numbers of yearling chinook and steelhead at the projects. At Little Goose the index for yearling chinook averaged 85,000 this week compared to 51,000 last week, while at Lower Monumental the index averaged 18,100 this week compared to 18,800 last. The index for steelhead at Little Goose averaged approximately 50,000 compared to 58,000 last week and at Lower Monumental the index was relatively unchanged at 22,700 compared to 23,500 last week.

The bypass at Rock Island is operating at less than capacity as Chelan PUD seeks to isolate the source of injuries to juvenile fish captured in the smolt trap. At present the operators have identified seals and guides in slide gates that feed water into the bypass as the potential problems. The system is scheduled to be shut down next week to replace those seals.

Despite operating only a portion of the bypass system this week, Rock Island Dam has reported a relative increase in steelhead and coho indices this week with an average collection of 250 steelhead and 12 coho compared to 70 steelhead and 2 coho per day last week. Sockeye indices were relatively steady this week at 195 this week compared to an average of 210 per day last week. The yearling chinook index was relatively unchanged also; it averaged 450 per day this week compared to 442 last week.

In the Lower Columbia, at McNary, where sampling is carried out every other day, in conjunction with NMFS transportation study that began April 20, the passage index for yearling chinook increased from 48,000 last week to 95,000 this week. Steelhead indices increased from 3,700 last week to 4,700 this week. The daily average index for subyearling chinook dropped from 1,600 per day last week to 600 this week. Sockeye indices continued to increase with an average per

day of 71,000 this week compared to 18,300 the previous week. At John Day Dam the average daily index for yearling chinook continued to increase rapidly to 38,500 this week compared to 13,600 last week. Steelhead indices were also up, with an average of 6,700 this week versus 4,800 last week. Coho indices increased substantially this week averaging 2,800 this week compared to 700 last week. Sockeye numbers increased dramatically last week to an average of nearly 8,000 per day compared to just over 100 per day last week.

At Bonneville Dam, the average daily index for yearling chinook was at 75,000 this week compared to 59,500 last week. The steelhead index averaged 17,600 this week compared to 9,300 last week. The indices for coho were up again this week with an average index of 57,000 compared to 33,500 per day last week. Subyearling chinook numbers spiked at 560,000 on April 16 after the release of 4 million subs, on April 14, from Spring Creek Hatchery, and have steadily declined to this weeks average of 700 per day. Low numbers of sockeye were also reported in the sample this past week with the average daily index near 1,600.

Hatchery Releases - The preliminary hatchery totals for juvenile salmonids released above Bonneville Dam are shown in the Table below. For the season, approximately 86.7 million juvenile salmon will be released from the Columbia River Basin hatcheries for the 2003 migration season. The FPC hatchery release numbers can be obtained from the FPC website. Approximately 15.7 million juvenile salmonids were released or releases were initiated during the past two weeks, with only 2.3 million fish scheduled for release in the upcoming two weeks.

Columbia River Basin Hatchery Releases - 2003

Hatchery Zone Release Report		Thursday 02	1-May-2003	
	Snake	Mid-	Lower	Total
	River	Columbia	Columbia	Release
Fall				
Chinook	3,909,701	12,232,000	25,326,162	41,467,863
Spring				
Chinook	10,428,528	3,478,244	5,479,624	19,386,396
Summer				
Chinook	2,331,578	3,052,521		5,384,099
Coho	1,244,591	1,876,519	5,634,000	8,755,110
Sockeye	140,410	208,986		349,396
Summer				
Steelhead	9,468,208	1,283,670	480,673	11,232,551
Winter				
Steelhead			94,047	94,047
Total	27,523,016	22,131,940	37,014,506	86,669,462

Snake River - About 27.5 million smolts will be released in the Snake River Basin from State, Federal, and Tribal hatcheries and acclimation ponds for the 2003 migration year. All yearling spring chinook and yearling summer chinook have been released either from the hatcheries or acclimation facilities or directly released into the Salmon River basin, the Clearwater River basin, the Grande Ronde and Imnaha River basins, the Tucannon River, and the main stem Snake River below Hells Canyon Dam. About 500,000 yearling fall chinook were released from acclimation ponds in the Snake and Clearwater River basins with an on-site release from Lyons Ferry Hatchery of 518,436 yearling fall chinook.

During fall 2002, approximately 140,000 sockeye were released in the upper Salmon River basin lakes.

About 550,000 yearling coho salmon were released in early March into Lapwai Creek and Potlatch River with the remainder released in the Clearwater River basin in April; about 300,000 were released into Clear Creek from Kooskia NFH on April 23.

Releases of juvenile steelhead (9.5 million scheduled) are nearing completion from most hatcheries with the final groups to be planted by

mid-May. Releases occurred throughout the Snake, Salmon, Clearwater, Imnaha, Grande Ronde, and Tucannon River basins for the 2003 migration.

Mid-Columbia River - About 22.1 million yearling and subyearling salmon species will be released in the Mid-Columbia River and its tributaries during the 2003 migration year. Nearly all of the scheduled yearling spring chinook are in-river from the acclimation ponds in the Yakima River basin. Releases of yearling spring chinook were completed at Federal and State hatcheries during April. Yearling spring chinook were planted in the Methow, Okanogan, Entiat, Yakama, and Wenatchee rivers in 2003.

Yearling summer chinook released from Wells and Eastbank Complex hatcheries have been completed for the season with only the research release groups remaining. Yearling summer chinook were released into the Methow, Wenatchee, and mainstem Mid-Columbia rivers for the 2003 migration.

Subyearling fall and summer chinook are scheduled for release from late May through June. These fish comprise the highest percentage of salmon released in the Mid-Columbia River. About 209,000 sockeye were released last fall into Lake Wenatchee; there will be no sockeye releases made into the Okanogan River basin this year.

About 1.9 million coho are scheduled for release in this Zone. The yearling coho were released from early to mid-April through mid-May. These fish should all be in-river by the end of May.

Approximately 1.3 million juvenile steelhead were scheduled for release from mid-April through mid-May. These releases are on-going during this week from the State Hatcheries. Ringold Hatchery releases its steelhead volitionally (began mid-April) with the final fish pushed out by April 30. Steelhead were released in the Okanogan, Methow, Entiat, Wenatchee, and mainstem Mid-Columbia rivers for the 2003 migration.

Lower Columbia River - The Lower Columbia River Zone is scheduled to release about 37.0 million salmon and steelhead for the 2003 migration. The main fish remaining to be released

are the upriver bright fall chinook with the yearling release groups essentially completed for the year. Release of yearling spring chinook from State, Tribal and Federal hatcheries is completed for the year. Fish have been released in the Klickitat, Umatilla, Deschutes, Hood, Wind, and Little White Salmon rivers to date. Yearling fall chinook have also been released in the Umatilla River basin. Yearling coho salmon have been released in the Klickitat, Little White Salmon, and Umatilla rivers to date. The Klickitat Hatchery will release another 1.0 million yearling coho this May.

Summer steelhead were released in the Klickitat, possibly Little White Salmon (Drano L), Big White Salmon, Umatilla, Deschutes, and Hood rivers this year. Releases should be completed at all the sites. Winter steelhead were released in the Hood River and Big White Salmon River for the 2003 season.

Adult Fish Passage - Most COE projects began counting adult fish on April 1 with the PUD facilities initiating counts on April 15. Counts officially started at Lower Granite Dam on March 1st with Bonneville Dam counts beginning March 15. Adult fish counts at Bonneville Dam recorded by video prior to March 14 are summarized below the Cumulative Adult Table, with adult chinook and steelhead counts exceeding 3,700 and 3,400, respectively.

During the past week, daily counts of adult spring chinook at Bonneville Dam ranged from 1,412 to 4,031. Through May 8, the cumulative count of adult spring chinook was 152,586, about 74% of the 2002 count, and 153% of the 10-year average count. Based on sampling by CRITFC at Bonneville Dam, about 58.5% of the adult chinook passage through Sample/Statistical week 18 were 5-year old fish; 39% 4-year old fish, and 2.5% were 3-year old fish (jacks). Sampling from week 18 only reported 54% 4-yr old, 33% 5-yr old and 12.7% Jack chinook; note, this aging is based on reading scales from the individual sampled fish. Counts of adult spring chinook at The Dalles ranged from 8583,368 with the average passage for the week of 1,968 per day, about 300 less per day than the previous week. The cumulative count

was 99,223 about 65.0% of the Bonneville count through May 8th. At McNary Dam, 68,114 were counted through May 8 with about 47,500 counted into the Snake River (missing 4/23 and 4/26 counts at Ice Harbor). At Priest Rapids Dam, close to 12,500 adult spring chinook have been tallied through May 8. For the Yakama River, about 2,400 adult chinook have been counted at Prosser Dam through May 5.

As is normal for this time of year, jack chinook counts are increasing with the total passage at Bonneville Dam through May 8th at 4,825. This total exceeds both the 2002 count of 2,687 and the 10-year average count of 2,957.

Daily Average Flow and Spill (in kcfs) at Mid-Columbia Projects														
	Gr	and	Chi	ef		- '	Ro	cky	Ro	ck			Pr	iest
	Co	ulee	Jose	ph	We	ells	Re	ach	Isla	nd	Wan	apum	Ra	pids
Date	Flow	Spill												
04/25/03	133.2	0.0	134.1	0.0	141.9	9.5	141.7	21.2	146.7	27.7	155.9	62.5	160.8	97.3
04/26/03	94.6	0.0	95.8	0.0	102.9	7.6	104.2	20.5	109.5	25.5	122.7	48.8	129.1	80.2
04/27/03	86.7	0.0	85.8	0.0	93.2	6.9	93.7	18.9	98.6	23.6	103.6	41.7	111.8	69.3
04/28/03	124.2	0.0	123.4	0.0	128.0	9.5	129.8	27.2	133.4	29.1	131.4	52.1	128.3	79.6
04/29/03	125.8	0.0	128.1	0.0	139.5	9.7	138.0	22.4	141.3	29.9	150.3	60.6	151.9	93.8
04/30/03	114.0	0.0	124.1	0.0	132.0	9.2	131.9	21.8	137.4	29.7	148.1	60.5	149.9	92.1
05/01/03	104.4	0.0	108.8	0.0	115.6	8.2	114.3	20.5	119.7	28.9	123.5	28.1	128.6	79.3
05/02/03	128.7	0.0	123.8	0.0	132.8	8.7	130.3	20.7	134.3	28.7	130.2	11.9	125.3	77.1
05/03/03	113.0	0.0	110.8	0.0	115.8	8.1	114.3	17.7	120.5	24.9	125.9	12.2	131.4	74.1
05/04/03	95.7	0.0	107.5	0.0	117.7	8.5	118.6	15.4	125.8	21.2	136.0	40.6	143.1	65.9
05/05/03	144.6	0.0	137.9	0.0	145.7	9.2	143.1	18.5	147.2	29.2	153.4	62.3	154.8	64.2
05/06/03	125.1	0.0	127.1	0.0	137.2	8.4	133.7	17.8	140.4	27.9	157.1	59.7	161.7	84.0
05/07/03	127.7	0.0	133.7	0.0	140.2	8.2	136.6	18.9	139.8	29.2	143.4	54.6	145.5	89.8
05/08/03	137.1	0.0	135.0	0.0	145.7	8.3	143.1	17.6	146.3	28.6	161.6	61.3	162.9	91.6

Daily Average Flow and Spill (in kcfs) at Snake Basin Projects												
				Hells	Lov	wer	Li	ttle	Lov	ver	I	ce
	Dwo	rshak	Brownlee	Canyon	Gra	nite	Go	ose	Monum	ental	На	rbor
Date	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
04/25/03	15.6	5.8	14.9	16.7	81.0	20.5	79.9	17.9	78.7	34.0	81.9	54.7
04/26/03	15.6	5.8	15.3	17.1	82.1	15.4	80.1	18.2	81.2	36.2	84.7	56.9
04/27/03	15.6	5.7	17.3	16.4	81.3	20.8	79.6	18.9	79.1	35.8	83.7	53.5
04/28/03	15.5	5.6	14.8	18.3	79.3	26.1	78.3	19.2	78.5	34.8	81.7	50.8
04/29/03	15.5	5.6	14.3	17.4	72.6	20.5	70.9	19.0	71.1	31.3	74.6	55.3
04/30/03	15.3	5.6	14.6	19.3	73.1	20.5	73.4	18.4	72.6	32.2	78.0	46.3
05/01/03	15.4	5.6	13.7	12.9	70.8	20.5	71.3	19.0	70.9	33.2	76.0	37.6
05/02/03	15.6	5.7	14.6	12.3	67.5	15.8	65.2	19.6	64.4	30.8	66.7	48.9
05/03/03	12.8	5.0	13.6	10.3	65.8	20.7	65.5	19.0	63.5	30.9	67.3	54.8
05/04/03	12.6	4.9	15.2	8.8	63.4	25.5	62.2	17.8	58.7	29.1	66.6	40.9
05/05/03	14.0	5.3	18.6	14.3	65.7	20.5	63.3	17.7	62.6	29.4	65.8	32.3
05/06/03	15.8	5.8	18.0	14.9	73.3	15.2	75.2	18.4	72.8	32.9	78.8	48.1
05/07/03	15.7	5.8	19.0	16.5	69.7	20.3	68.9	19.0	66.4	30.4	72.0	49.7
05/08/03	15.5	5.5			70.4	20.4	68.9	20.5	67.5	31.6	74.1	44.1

Daily Average Flow and Spill (in kcfs) at Lower Columbia Projects												
	McI	Nary	John [Day	The D	alles		В	onneville			
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2		
04/25/03	201.8	77.3	198.7	63.4	195.6	76.9	219.6	102.3	13.1	97.4		
04/26/03	238.8	90.9	251.4	73.4	254.9	99.8	278.4	103.6	61.6	106.4		
04/27/03	205.6	72.3	198.3	60.6	193.6	76.7	235.3	103.0	33.0	92.6		
04/28/03	207.9	70.5	229.3	64.4	230.7	90.0	245.2	146.7	5.1	86.7		
04/29/03	217.5	69.5	220.5	61.9	216.7	85.4	238.5	141.6	0.0	90.2		
04/30/03	225.6	69.5	221.7	57.3	222.4	84.0	251.6	134.2	9.5	101.2		
05/01/03	222.6	70.7	233.7	52.6	231.1	88.6	255.6	128.4	17.3	103.2		
05/02/03	192.8	69.6	198.9	52.9	192.3	76.3	232.5	92.5	25.6	107.5		
05/03/03	201.2	68.8	195.7	60.0	198.9	77.8	227.9	87.1	22.9	107.6		
05/04/03	203.0	67.7	195.7	52.9	193.1	75.3	219.6	101.8	9.7	101.0		
05/05/03	220.9	68.8	214.4	47.8	220.0	84.3	225.0	111.2	5.3	101.8		
05/06/03	218.3	76.6	230.2	52.5	222.1	84.4	258.1	94.2	42.2	115.1		
05/07/03	230.8	76.1	237.6	52.5	247.0	95.8	273.1	97.5	56.5	112.4		
05/08/03	201.8	84.2	210.4	53.4	196.8	79.3	226.8	100.0	19.5	100.7		

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

										sh with F Highest I		Fish with L. Line GBT
			Number of	Number w	Number w	% Fin	% Severe	Rank	Rank	Rank	Rank	Num Avg.
Site	Date	Species	Fish	GBT signs	Fin Signs	GBT	Fin GBT	1	2	3	4	Fish Rank
Low	er Granit	te Dam										
	04/29/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0	
	05/06/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0	
Little	e Goose	Dam										
	04/30/03	Chinook + Steelhead	100	3	3	3.00%	0.00%	3	0	0	0	
	05/07/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0	
Low	er Monu	mental Dam										
	05/05/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0	
McN	lary Dam											
		Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0	
	05/04/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0	
	05/08/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0	
Bon	neville D	am										
	05/01/03	Chinook + Steelhead	99	0	0	0.00%	0.00%	0	0	0	0	
	05/08/03	Chinook + Steelhead	102	0	0	0.00%	0.00%	0	0	0	0	
Roc	k Island l	Dam										
	05/01/03	Chinook + Steelhead	100	4	4	4.00%	0.00%	4	0	0	0	
	05/05/03	Chinook + Steelhead	99	4	4	4.04%	0.00%	4	0	0	0	
	05/08/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0	

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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																			
	Hung	ry H. I	Dnst		Boun	dary			Grane	d Coul	<u>ee</u>		Grane	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>24 h</u>	<u>12 h</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>	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>
4/25	101	101	101	24	112	116	117	24	107	108	109	24	105	106	106	24	105	105	106	23
4/26	101	102	103	24	115	118	118	24	108	109	110	24	106	106	107	24	105	106	106	23
4/27	101	101	102	24	115	118	119	24	108	108	109	24	106	107	108	24	105	105	106	23
4/28	101	102	102	24	118	120	121	24	109	110	110	24	105	106	107	24	106	106	106	23
4/29	102	102	103	24	120	121	121	24	110	110	112	24	106	106	107	24	106	106	107	23
4/30	102	102	102	24	118	121	122	24	108	109	109	24	106	106	107	24	106	106	107	24
5/1	100	101	101	24	122	126	129	24	108	109	109	24	106	106	107	24	105	106	106	23
5/2	100	101	101	24	122	125	130	24	110	110	111	24	106	107	108	24	106	107	108	23
5/3	101	101	102	24	127	130	131	24	110	110	111	24	107	108	109	24	107	108	108	23
5/4	101	101	101	24	123	127	129	24	110	110	110	24	107	107	107	24	107	107	107	23
5/5	99	100	100	24	127	130	131	24	108	109	110	24	106	106	107	24	106	106	107	23
5/6	99	99	99	24	127	129	130	24	108	108	108	24	106	106	107	24	106	106	107	23
5/7	99	99	99	24	126	128	128	24	108	108	109	24	106	107	107	24	106	106	107	22

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	Total Dissolved Gas Saturation Data at Mid Columbia River Sites																			
	Chief	J. Dn	<u>st</u>		Wells				Wells	Dwns	<u>strm</u>		Rock	y Read	c <u>h</u>		Rock	y R. T	<u>wr</u>	
	<u>24 h</u>	<u>12 h</u>		<u>#</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>#</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>
4/25	105	105	106	23	105	106	106	24	107	108	108	24	107	107	108	24	109	109	110	24
4/26	105	105	105	23	106	106	107	24	108	109	110	24	108	108	108	22	110	110	110	22
4/27	104	105	105	23	105	106	106	22	107	108	108	22	108	108	108	24	110	110	110	24
4/28	105	106	106	23	106	106	107	24	108	109	109	24	108	108	108	23	110	111	112	22
4/29	106	106	106	23	106	107	108	24	108	108	109	24	108	108	108	22	110	110	113	22
4/30	105	106	106	24	106	107	107	23	108	108	109	23	108	108	108	22	109	110	110	21
5/1	105	105	106	23	106	107	107	21	108	109	109	21	108	108	108	24	109	110	110	22
5/2	106	107	107	23	107	108	108	22	109	110	110	22	109	110	110	23	110	111	112	21
5/3	107	107	108	23	108	108	108	24	109	110	110	24	110	110	110	23	111	111	112	23
5/4	106	107	107	23	107	107	108	23	109	109	109	23	109	109	109	22	110	110	111	21
5/5	106	106	106	23	106	106	107	24	108	108	109	24	107	108	108	22	109	109	109	21
5/6	105	106	106	23	106	107	107	22	108	108	109	22	108	108	108	23	109	109	110	22
5/7	106	106	107	22	107	107	107	24	108	109	109	24	108	108	108	22	109	110	110	19
5/8	106	106	106	23	106	107	107	22	108	108	109	22	108	108	108	23	109	109	110	22

	Total Dissolved Gas Saturation at Mid Columbia River Sites																			
	Rock	Island	<u>d</u>		Rock	I. Tlw	<u>r</u>		Wana	pum			Wana	pum '	<u>Tlwr</u>		Pries	t Rapi	<u>ds</u>	
	<u>24 h</u>	<u>12 h</u>		<u>#</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>#</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>	Avg	<u>High</u>	<u>hr</u>
4/25	108	109	109	24	116	118	123	24	108	109	111	24	116	117	117	24	112	112	114	24
4/26	109	109	109	22	116	116	116	22	108	108	109	24	116	116	117	24	111	112	114	24
4/27	109	109	109	24	116	116	116	24	107	108	108	24	115	116	116	24	110	112	112	24
4/28	109	110	110	22	117	119	121	21	110	110	111	24	116	116	116	24	111	112	113	24
4/29	110	110	111	22	118	120	123	22	110	110	111	24	117	117	118	24	113	113	114	24
4/30	109	109	110	22	117	118	121	20	110	111	111	24	117	118	119	24	113	114	115	24
5/1	109	110	110	24	118	120	125	23				0				0				0
5/2	110	111	111	24	118	120	123	24	112	114	115	24	115	116	116	24	114	115	116	24
5/3	111	111	111	23	117	119	121	23	113	113	115	24	116	116	117	24	115	116	116	24
5/4				0	115	116	119	21	112	112	113	24	117	119	120	24	115	116	116	24
5/5	108	109	109	21	117	120	124	21				0				0				0
5/6	109	109	110	23	117	119	123	23	110	111	111	24	117	117	118	24	116	117	117	22
5/7	109	109	110	21	117	119	124	21	110	110	111	18	117	117	118	24	113	114	115	24
5/8	109	109	110	22	117	119	123	21	111	112	113	24	116	117	118	24	115	115	116	11

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

Total Dissolved G	as Saturation Data a	t Lower Columbia	and Snake River Sites
TOTAL DISSUIVED G	as saluralion bala a	IL LUWEI GUIUIIIDIA	allu Silake Kivel Siles

	Pries	t R. Dı	<u>nst</u>		Pasco	<u>2</u>			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>
4/25	116	118	118	24	113	115	116	24	109	109	109	24	103	104	104	24	101	102	103	24
4/26	116	117	118	24	113	114	115	24	109	109	109	24	103	103	104	24	101	101	102	24
4/27	112	113	113	24	112	114	114	24	109	109	109	24	104	104	105	24	101	102	102	24
4/28	113	113	113	11	113	114	115	24	109	109	110	24	104	105	105	24	102	103	103	24
4/29	120	120	120	14	114	115	116	24	109	109	109	24	104	104	105	24	101	102	102	24
4/30	120	120	120	24	114	115	116	24	108	108	108	24	103	103	104	24	101	102	103	24
5/1				0	115	116	117	24	107	108	108	24	103	104	104	24	102	103	104	24
5/2	119	119	120	24	116	117	118	24	109	109	109	24	104	105	105	24	103	104	105	24
5/3	118	120	120	24	113	114	115	24	109	109	109	24	104	104	105	24	102	102	102	24
5/4	116	117	117	24	110	111	111	24	108	109	109	24	103	103	104	24	102	102	103	24
5/5				0	110	111	114	21	108	109	109	24	103	104	105	24	102	103	103	24
5/6	117	117	117	10	113	114	114	24	109	109	109	24	104	104	105	24	102	103	103	24
5/7				0	114	116	116	24	109	109	110	24	104	105	106	24	102	103	104	24
5/8	120	120	121	10	115	116	116	24	109	109	110	24	104	105	106	24	103	104	104	24

Total Dissolved Gas Saturation Data at Snake River Sites

	Clrwt	r-Lew	iston		Lowe	r Grar	<u>nite</u>		L. Gr	anite 1	<u> Iwr</u>		Little	Goos	<u>e</u>		L. Go	ose T	lwr	
	<u>24 h</u>	<u>12 h</u>		<u>#</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>#</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>																
4/25	103	104	105	24	103	103	104	24	110	110	110	24	108	110	111	24	111	115	116	24
4/26	102	102	103	24	102	102	103	24	108	113	118	24	108	109	110	24	111	115	116	24
4/27	103	104	105	24	102	103	104	24	110	118	120	24	107	108	109	24	111	116	116	24
4/28	103	104	105	24	103	104	105	24	112	115	120	24	107	108	109	24	112	116	116	24
4/29	103	104	105	24	103	104	105	24	110	111	111	24	107	109	112	24	111	116	117	24
4/30	102	102	103	24	104	104	104	24	110	110	111	24	108	109	111	24	112	116	116	24
5/1	103	104	105	24	104	104	105	24	110	110	111	24	110	110	111	24	113	116	116	24
5/2	103	105	105	24	105	106	108	24	110	115	120	24	110	110	111	24	114	117	118	24
5/3	102	103	103	24	104	104	105	24	112	119	121	24	110	111	111	24	113	116	117	24
5/4	102	103	105	24	103	104	104	24	113	115	119	24	109	110	110	24	113	116	116	24
5/5	102	103	104	24	102	102	103	24	110	110	112	24	107	107	108	24	111	115	116	24
5/6	103	104	104	24	101	102	102	24	108	113	119	24	107	107	108	24	111	115	116	24
5/7	103	105	106	24	102	103	103	24	111	118	119	24	108	108	108	24	112	116	117	24
5/8	104	105	106	24	103	103	105	24	111	118	119	24	108	109	109	24	113	117	117	24

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

	Lowe	r Mon	<u>ı.</u>		L. Mo	n. Tlv	<u>/r</u>		Ice Ha	<u>arbor</u>			Ice H	<u>arbor</u>	<u>Tlwr</u>		<u>McNa</u>	ry-Or	<u>egon</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>	Avg	<u>High</u>	<u>hr</u>	Avg	Avg	<u>High</u>	<u>hr</u>	Avg	Avg	<u>High</u>	<u>hr</u>	Avg	Avg	<u>High</u>	<u>hr</u>	Avg	Avg	<u>High</u>	<u>hr</u>
4/25	112	113	113	24	118	119	120	24	113	114	116	24	114	115	116	24	108	109	110	24
4/26	110	112	112	24	118	118	119	24	112	112	113	24	114	114	115	24	109	109	110	24
4/27	109	111	113	24	118	119	120	24	112	113	116	24	114	115	115	24	110	112	115	24
4/28	111	113	114	24	119	120	120	24	114	116	118	24	114	115	117	24	110	111	112	24
4/29	112	113	115	24	118	119	120	24	115	115	115	24	114	115	117	24	112	114	117	24
4/30	111	113	115	24	118	119	120	24	114	115	115	24	113	114	114	24	112	113	114	24
5/1	111	112	113	24	118	119	120	24	115	115	116	24	113	113	114	24	113	115	116	24
5/2	112	113	114	24	118	120	121	24	115	116	116	24	113	114	117	24	115	117	119	24
5/3	114	115	116	24	118	118	120	24	116	116	116	24	114	114	117	24	114	114	115	24
5/4	113	114	115	24	117	118	118	24	114	115	115	24	112	113	115	24	113	113	114	24
5/5	110	111	112	24	117	117	118	24	110	111	112	24	111	112	113	24	108	109	110	24
5/6	110	111	111	24	118	118	120	24	110	111	111	24	113	114	114	24	108	108	109	24
5/7	110	111	112	24	117	118	118	24	113	114	114	24	114	114	116	24	109	111	112	24
5/8	111	112	113	24	118	119	119	24	115	116	117	24	113	114	114	24	111	113	115	24

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

	McNa	ıry-Wa	ash_		McNa	ry Tlv	<u>vr</u>		John	Day			John	Day 1	lwr		The [Dalles		
	<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>24h</u>	<u>12h</u>		<u>#</u>	<u>24h</u>	<u>12h</u>		<u>#</u>
Date	Avg	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>	<u>Avg</u>	<u>AVG</u>	<u>High</u>	<u>hr</u>
4/25	109	111	111	24	115	120	122	24	109	110	110	23	113	117	118	24	111	113	114	23
4/26	110	111	111	24	117	121	122	24	108	108	109	23	113	118	119	24	111	113	115	23
4/27	110	111	113	24	115	120	121	24	109	110	113	23	113	117	118	24	111	114	116	23
4/28	111	111	112	24	115	120	121	24	109	110	111	23	113	117	118	24	113	115	116	23
4/29	113	114	114	24	116	119	120	24	109	110	110	23	113	116	117	24	111	113	115	23
4/30	112	113	113	24	116	119	120	24	109	110	110	24	113	117	118	24	111	112	113	24
5/1	114	115	116	24	116	119	120	24	111	112	114	23	114	117	118	24	111	113	114	21
5/2	115	116	116	24	117	119	120	24	114	115	116	23	116	118	119	24	112	114	115	23
5/3	116	116	116	24	117	119	119	24	114	114	115	23	116	118	119	24	113	113	114	23
5/4	113	114	115	24	116	119	119	24	112	113	113	23	115	117	118	24	112	113	114	23
5/5	108	109	110	24	114	118	119	22	110	110	111	23	114	118	119	24	110	111	113	23
5/6	107	108	108	24	114	119	120	24	110	110	110	23	114	118	119	24	110	112	113	23
5/7	109	110	111	24	114	120	120	24	109	109	109	23	113	118	119	24	110	111	112	23
5/8	112	113	114	24	116	120	121	24	108	108	109	23	113	118	119	24	108	110	111	23

	/25 117 117 11 /26 117 118 11 /27 116 118 11 /28 118 119 12 /29 117 118 11 /30 116 117 11 5/1 117 118 11 5/2 117 118 11 5/3 117 117 11 5/4 116 116 11				Bonn	<u>eville</u>			Warre	endale	<u>) </u>		Cama	ıs\Wa	shugal	
	<u>24 h</u>	12 h		<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>
Date	<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>
4/25	117	117	118	24	112	113	113	23	115	117	118	23	112	113	118	24
4/26	117	118	119	24	113	114	115	23	115	116	118	23	113	115	121	24
4/27	116	118	119	24	114	114	115	23	115	117	118	23	115	117	124	24
4/28	118	119	120	24	115	116	116	23	119	119	120	23	115	115	118	16
4/29	117	118	119	24	115	116	116	23	119	119	120	23	116	117	118	24
4/30	116	117	118	24	114	115	115	24	118	118	118	24	116	116	117	24
5/1	117	118	119	24	113	113	114	23	117	117	118	23	115	116	117	24
5/2	117	118	118	24	116	116	116	23	116	116	117	23	116	117	118	24
5/3	117	117	118	24	114	115	115	20	114	115	116	23	113	114	115	24
5/4	116	116	117	24	111	112	112	23	113	114	114	23	111	111	112	24
5/5	115	116	117	24	111	111	111	23	114	115	115	23	111	112	113	24
5/6	116	117	117	24	112	113	114	23	114	114	115	23	113	114	115	24
5/7	116	117	117	24	112	113	113	22	113	115	117	23	112	114	114	24
5/8	115	115	116	24	111	112	113	22	114	115	117	23	112	113	115	24

HATCHERY RELEASE SUMMARY LAST TWO WEEKS

5/8/03

Hatchery Release Summary

4/25/03

From:

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003		04-25-03	04-25-03	Valley Creek	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	166,791	04-28-03	04-29-03	Yankee Fk (Salmon R)	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	215,666	04-23-03	04-25-03	East Fk Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	336,983	04-29-03	05-01-03	Little Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Niagara Springs	ST	SU	2003	170,000	05-01-03	05-04-03	Little Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Niagara Springs	ST	SU	2003	843,257	04-12-03	05-01-03	Pahsimeroi Hatchery	Pahsimeroi River
Idaho Dept. of Fish and Wildlife	Rapid River Hatchery	CH1	SP	2003	2,330,557	03-17-03	04-28-03	Rapid River Hatchery	Little Salmon River
Idaho Dept. of Fish and Wildlife Total					4,095,919				
Nez Perce Tribe	Hagerman NFH	ST	SU	2003	100,000	04-29-03	05-05-03	American River	S Fk Clearwater Riv
Nez Perce Tribe	Hagerman NFH	ST	SU	2003	100,000	05-07-03	05-12-03	Newsome Creek	S Fk Clearwater Riv
Nez Perce Tribe Total					200,000				
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2003	,			Deer Creek	Grande Ronde Rive
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2003	76,500	05-07-03	05-08-03	L Sheep Acclim Pond	Imnaha River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2003	130,500	05-08-03	05-23-03	Big Canyon Acclim.Pd (G. R.)	Grande Ronde Rive
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2003	217,000	05-07-03	05-22-03	Wallowa Acclim Pond	Wallowa River
Oregon Dept. of Fish and Wildlife	Round Butte Hatchery	CH1	SP	2003	320,000	04-15-03	05-09-03	Bel. Pelton Dam	Deschutes River
Oregon Dept. of Fish and Wildlife Tot	al				747,000				
Shoshone-Bannock Tribe	Hagerman NFH	ST	SU	2003	139,445	04-18-03	05-16-03	Yankee Fk Pond	Salmon River (ID)
Shoshone-Bannock Tribe Total					139,445				
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2003	748,027	04-09-03	04-29-03	Sawtooth Hatchery	Salmon River (ID)
U.S. Fish and Wildlife Service	Spring Creek NFH	CH0	FA	2003	3,370,867	05-08-03	05-08-03	Spring Creek Hatchery	L Col R (D/s McN D
U.S. Fish and Wildlife Service	Winthrop NFH	CO	UN	2003	242,401	04-21-03	04-28-03	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	ST	SU	2003	119,370	04-15-03	04-28-03	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service Total					4,480,665				
Umatilla Tribe	Umatilla Hatchery	ST	SU	2003	41,369	04-22-03	04-28-03	Bonifer Acclim Pond	Umatilla River
Umatilla Tribe	Umatilla Hatchery	ST	SU	2003	42,783	04-22-03	04-30-03	Pendelton Acclim Pond	Umatilla River
Umatilla Tribe	Umatilla Hatchery	ST	SU	2003	42,805	04-22-03	04-29-03	Minthorn Acclimation Pond	Umatilla River
Umatilla Tribe Total					126,957				
Warm Springs Tribe	Oak Springs Hatchery	ST	SU	2003				Blackberry Acclim Pond	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2003	26,679	04-10-03	04-29-03	Parkdale Acclim Pond	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2003	27,368	04-10-03	04-29-03	E Fk Irrig Dist Sand Trap	Hood River
Warm Springs Tribe Total					93,947				

HATCHERY RELEASE SUMMARY LAST TWO WEEKS (con't)

to

5/8/03

Hatchery Release Summary

4/25/03

From:

	1101111	1/20/0			0/0/00	•			
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SP	2003	378,000	04-21-03	04-30-03	Chiwawa Hatchery	Wenatchee River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2003	25,000	04-30-03	04-30-03	Similkameen Acclim Pd	Okanogan River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2003	249,043	04-30-03	04-30-03	Carlton Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2003	100,000	04-01-03	04-30-03	Dayton Acclim Pond	Touchet River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2003	240,000	04-01-03	04-30-03	Cottonwood Acclim Pond	Grande Ronde River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2003	58,700	04-14-03	04-25-03	Twisp Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2003	131,500	04-14-03	04-25-03	Methow Hatchery	Methow River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2003	,			Chewuch Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	ST	SU	2003	171,000	04-09-03	04-30-03	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2003	15,000	05-01-03	05-10-03	Drano Lake	Little White Salmon Rive
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2003	100,000	05-01-03	05-10-03	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	WI	2003	20,000	04-21-03	04-30-03	White Salmon River	White Salmon River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH1	SU	2003	120,000	04-13-03	05-23-03	Above Rocky Reach Dam	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH1	SU	2003	204,400	04-30-03	04-30-03	Turtle Rock Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2003	16,868	04-30-03	04-30-03	Nason Creek	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2003	16,869	04-28-03	04-30-03	Chiwawa Hatchery	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2003	112,943	04-28-03	04-30-03	Chiwawa Hatchery	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2003	156,430	04-29-03	05-01-03	Nason Creek	Wenatchee River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH1	SU	2003	121,000	04-07-03	05-30-03	Bel. Priest Rapids Dam	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH1	SU	2003	177,300	04-14-03	04-30-03	Wells Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2003	57,095	04-21-03	05-16-03	Okanogan River	Okanogan River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2003	57,095	04-21-03	05-16-03	Similkameen Acclim Pd	Okanogan River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2003	105,890	04-15-03	05-16-03	Twisp Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2003	107,055	04-21-03	05-16-03	Chewuch River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2003	107,055	04-21-03	05-16-03	Methow River	Methow River
Washington Dept. of Fish and Wildlife	e Total				3,110,743				
Yakama Tribe	Cascade Hatchery	CO	UN	2003	75,027	04-23-03	05-02-03	Wenatchee River	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2003	272,755	04-23-03	05-02-03	Nason Creek	Wenatchee River
Yakama Tribe	Cascade Hatchery	CO	UN	2003	453,098	04-23-03	05-02-03	Icicle Creek	Wenatchee River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2003	81,113	03-14-03	05-15-03	Clark Flat Acclim Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2003	250,852	03-14-03	05-15-03	Jack Creek Acclim Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CO	UN	2003	82,525	04-07-03	05-07-03	Yakama River	Yakama River
Yakama Tribe	Cle Elem Hatchery	CO	UN	2003	180,761	04-07-03	05-07-03	Lost Creek Acclim Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CO	UN	2003	262,046	04-07-03	05-07-03	Easton Pond	Yakama River
Yakama Tribe	Klickitat Hatchery	CH0	SP	2003	300,000	05-06-03	05-07-03	Klickitat River	Klickitat River
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2003	320,000	05-05-03	05-20-03	Prosser Acclim Pond	Yakama River
Yakama Tribe	Stiles Pond	CO	UN	2003	169,629	04-07-03	05-07-03	Yakama River	Yakama River
Yakama Tribe	Willard Hatchery	CO	UN	2003	37,483	04-23-03	05-02-03	Wenatchee River	Wenatchee River
Yakama Tribe	Willard Hatchery	CO	UN	2003	100,794	04-23-03	05-02-03	Little Wenatchee River	Wenatchee River
Yakama Tribe Total	•				2,586,083				
Grand Total					15,580,759				

HATCHERY RELEASE SUMMARY NEXT TWO WEEKS

	Hatchery Releas	e Summar	у
From:	5/9/03	to	5/22/03

Agency	Hatchery	Species		MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Hagerman NFH	ST	SU	2003	100,000	05-07-03	05-12-03	Newsome Creek	S Fk Clearwater River
Nez Perce Tribe Total					100,000				
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2003	130,500	05-08-03	05-23-03	Big Canyon Acclim.Pd (G. R.)	Grande Ronde River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2003	217,000	05-07-03	05-22-03	Wallowa Acclim Pond	Wallowa River
Oregon Dept. of Fish and Wildlife	Round Butte Hatchery	CH1	SP	2003	320,000	04-15-03	05-09-03	Bel. Pelton Dam	Deschutes River
Oregon Dept. of Fish and Wildlife To	tal				667,500				
Shoshone-Bannock Tribe	Hagerman NFH	ST	SU	2003	139,445	04-18-03	05-16-03	Yankee Fk Pond	Salmon River (ID)
Shoshone-Bannock Tribe Total					139,445				
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2003	15,000	05-01-03	05-10-03	Drano Lake	Little White Salmon Riv
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2003	100,000	05-01-03	05-10-03	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH1	SU	2003	120,000	04-13-03	05-23-03	Above Rocky Reach Dam	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH1	SU	2003	121,000	04-07-03	05-30-03	Bel. Priest Rapids Dam	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2003	57,095	04-21-03	05-16-03	Okanogan River	Okanogan River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2003	57,095	04-21-03	05-16-03	Similkameen Acclim Pd	Okanogan River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2003	105,890	04-15-03	05-16-03	Twisp Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2003	107,055	04-21-03	05-16-03	Chewuch River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2003	107,055	04-21-03	05-16-03	Methow River	Methow River
Washington Dept. of Fish and Wildli	fe Total				790,190				
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2003	81,113	03-14-03	05-15-03	Clark Flat Acclim Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2003	250,852	03-14-03	05-15-03	Jack Creek Acclim Pond	Yakama River
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2003	320,000	05-05-03	05-20-03	Prosser Acclim Pond	Yakama River
Yakama Tribe Total					651,965				
Grand Total					2,349,100				

Two-Week Summary of Passage Indices

					COMBI	NED YEA	RLING C	HINOOK				
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/25/2003	*	1,209	327	198	118	134,922	43,308	11,658	1,008	24,281	11,265	61,779
04/26/2003	*		122			76,540	62,566	19,094	430		13,850	59,861
04/27/2003			235			167,516	61,111	23,189	409	47,282	11,741	59,662
04/28/2003	*	2,188	217	114	65	118,134	52,806	17,756	426		10,244	47,980
04/29/2003	*	1,117	96	46	46	63,420	53,122	16,925	68	51,461	12,394	57,580
04/30/2003	*	930	112	20	19	75,718	37,366	23,931	484		13,744	66,937
05/01/2003	*	116	167	36	15	105,409	45,591	19,867	270	68,810	21,852	62,716
05/02/2003	*	108	119	36	27	69,084	251,130	13,851	264		24,497	71,222
05/03/2003	*		70			66,656	73,264	9,111	446	76,797	18,617	66,725
05/04/2003	*		209			105,782	37,046	16,762	283		27,459	68,431
05/05/2003	*	19	91	30	25	83,926	67,298	22,506	248	119,072	39,200	64,116
05/06/2003	*	65	41	84	121	246,906	57,671	21,538	514		48,106	77,285
05/07/2003	*	56	24	32	29	151,196	56,918	29,953	463	90,231	46,341	91,520
05/08/2003	*	17	21	39	27	167,373	48,750	15,278	941		65,231	85,948
Total:		5,825	1,851	635	492	1,632,582	947,947	261,419	6,254	477,934	364,541	941,762
# Days:		10	14	10	10	14	14	14	14	7	14	14
Average:		583	132	64	49	116,613	67,711	18,673	447	68,276	26,039	67,269
YTD		31,801	32,937	10,622	1,234	2,246,515	1,125,536	404,695	8,292	537,623	435,341	1,526,884

	П				OMDINE	D SUBYE	ADLING	CHINIOC	NZ			
	Н											
	Ш	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)						
04/25/2003	*	0	6	1	1	0	0	0	27	612	0	2,323
04/26/2003	*		0			0	0	0	13		0	1,541
04/27/2003	П		0			197	0	0	11	1,206	0	517
04/28/2003	*	0	0	0	2	207	0	37	19		36	1,072
04/29/2003	*	0	0	0	0	0	7	0	80	3,441	11	1,614
04/30/2003	*	0	0	0	0	207	5	0	1		14	722
05/01/2003	*	0	0	1	0	208	0	0	4	1,306	70	120
05/02/2003	*	0	0	0	2	0	0	0	9		0	1,191
05/03/2003	*		0			0	4	0	3	637	0	416
05/04/2003	*		0			0	0	0	3		0	394
05/05/2003	*	0	17	1	1	0	0	0	3	602	0	838
05/06/2003	*	0	12	0	1	0	0	0	13		0	1,474
05/07/2003	*	0	0	0	1	0	0	0	3	609	0	463
05/08/2003	*	0	0	0	0	0	1	0	4		0	240
Total:		0	35	3	8	819	17	37	193	8,413	131	12,925
# Days:		10	14	10	10	14	14	14	14	7	14	14
Average:		0	3	0	1	59	1	3	14	1,202	9	923
YTD		1	43	10	88	4,306	69	202	1,361	24,358	874	1,107,414

^{*} 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.

Two-Week Summary of Passage Indices

						COMBINI	ED COHO)				
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)						
04/25/2003	*	0	0	0	0	0	87	0	1	0	404	29,031
04/26/2003	*		0			0	0	0	1		899	34,992
04/27/2003			0			791	0	56	1	0	392	34,609
04/28/2003	*	0	0	0	0	207	0	37	1		416	20,371
04/29/2003	*	0	0	0	0	206	0	36	0	299	592	31,346
04/30/2003	*	0	0	0	0	0	0	0	1		712	44,063
05/01/2003	*	0	0	0	0	0	0	37	7	145	1,340	39,975
05/02/2003	*	0	0	0	0	207	0	148	4		1,160	38,350
05/03/2003	*		0		-	439	4	0	12	0	1,184	44,068
05/04/2003	*		0			220	0	244	13		3,218	59,951
05/05/2003	*	0	0	0	0	441	0	231	11	0	4,078	55,525
05/06/2003	*	0	0	0	0	418	0	75	13		2,789	61,281
05/07/2003	*	0	0	0	0	0	1,077	188	14	913	4,320	85,033
05/08/2003	*	0	0	0	0	212	293	376	14		3,091	56,898
Total:		0	0	0	0	3,141	1,461	1,428	93	1,357	24,595	635,493
# Days:		10	14	10	10	14	14	14	14	7	14	14
Average:		0	0	0	0	224	104	102	7	194	1,757	45,392
YTD		0	0	0	10	3,268	1,698	1,428	107	1,517	25,435	711,369

					CO	MBINED	STEELH	EAD				
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/25/2003	*	57	1,469	33	219	96,718	18,469	6,563	41	4,474	3,033	6,271
04/26/2003	*		1,136			95,083	43,319	12,476	31		5,366	5,942
04/27/2003			634			79,705	28,105	19,294	49	2,975	5,352	6,715
04/28/2003	*	126	450	20	151	135,780	21,492	15,399	79		3,560	8,845
04/29/2003	*	102	214	8	79	61,773	28,319	26,508	25	2,703	4,312	10,225
04/30/2003	*	66	339	6	68	93,955	33,128	31,753	142		5,871	12,882
05/01/2003	*	87	326	11	132	59,279	234,189	53,079	125	4,645	5,843	14,243
05/02/2003	*	206	324	12	102	62,217	180,621	23,240	127	-	5,231	12,863
05/03/2003	*		385			34,300	33,652	15,974	161	2,940	4,699	14,966
05/04/2003	*		2,804			33,347	33,117	27,472	167		6,103	17,551
05/05/2003	*	93	1,489	8	142	36,346	27,031	18,919	207	5,279	6,314	14,248
05/06/2003	*	147	605	13	534	62,875	24,300	14,123	309		7,896	21,269
05/07/2003	*	95	529	12	169	38,903	31,129	37,770	297	5,790	8,836	21,316
05/08/2003	*	128	3,267	26	136	54,730	21,562	21,571	471		7,760	21,127
Total:		1,107	13,971	149	1,732	945,011	758,433	324,141	2,231	28,806	80,176	188,463
# Days:		10	14	10	10	14	14	14	14	7	14	14
Average:		111	998	15	173	67,501	54,174	23,153	159	4,115	5,727	13,462
YTD		1,709	27,129	1,320	3,057	1,228,574	846,889	384,174	2,331	45,294	100,444	222,337

Note 1: 4/27-5/1 Little Goose Dam coho -potential misidentification of species; sample correction pending further analysis

Note 2: May 1 Little Goose Dam sample partly estimated based on electronic counts.

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

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	Ш				CC	DMBINED	SOCKE	YE				
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)						
04/25/2003	*	0	0	0	0	201	0	0	204	2,414	58	0
04/26/2003	*		0			0	0	0	40		90	0
04/27/2003			0			0	0	56	182	9,328	28	0
04/28/2003	*	0	0	0	0	0	0	37	627	-	72	0
04/29/2003	*	0	0	0	0	0	11	0	67	20,197	72	135
04/30/2003	*	0	0	0	0	207	1	36	271	-	197	120
05/01/2003	*	0	0	0	0	0	0	0	101	41,227	363	239
05/02/2003	*	0	0	0	0	0	0	0	188	-	313	0
05/03/2003	*		0			0	291	0	229	113,261	674	0
05/04/2003	*		0			0	281	0	130	-	669	0
05/05/2003	*	0	0	0	0	0	0	0	169	55,705	1,842	419
05/06/2003	*	0	0	0	0	418	0	0	335		2,961	1,264
05/07/2003	*	0	0	0	0	0	0	0	96	43,978	19,047	4,171
05/08/2003	*	0	0	0	0	0	1	0	217		29,588	5,282
Total:		0	0	0	0	826	585	129	2,856	286,110	55,974	11,630
# Days:		10	14	10	10	14	14	14	14	7	14	14
Average:		0	0	0	0	59	42	9	204	40,873	3,998	831
YTD		0	0	0	0	992	752	267	4,525	286,880	56,095	12,098

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)}

BO1 (Index) = Bonneville Dam First Powerhouse Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 1 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.

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

Cumulative Adult Passage at Mainstem Dams Through: 05/08

				5	Summer (Chinook	(Fall C	hinook						
	200	3	200)2	10-Yr	Avg.	200	03	200	02	10-Y	r Avg.	20	03	20	002	10-Yr	Avg.
DAM	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	152,586	4,825	205,526	2,687	99,780	2,957	0	0	0	0	0	0	0	0	0	0	0	0
TDA	99,223	2,718	121,475	984	60,306	1,431	0	0	0	0	0	0	0	0	0	0	0	0
JDA	73,257	2,043	89,528	512	47,172	895	0	0	0	0	0	0	0	0	0	0	0	0
MCN	68,114	1,820	65,938	1,090	38,419	703	0	0	0	0	0	0	0	0	0	0	0	0
IHR	47,348	1,067	34,017	167	21,747	369	0	0	0	0	0	0	0	0	0	0	0	0
LMN	40,534	552	25,539	130	19,740	302	0	0	0	0	0	0	0	0	0	0	0	0
LGS	34,341	516	21,061	106	17,693	298	0	0	0	0	0	0	0	0	0	0	0	0
LWG	36,871	411	16,043	165	15,726	212	0	0	0	0	0	0	0	0	0	0	0	0
PRD	12,486	7	9,870	5	7,016	7	0	0	0	0	0	0	0	0	0	0	0	0
RIS	8,851	62	1,580	68	2,823	13	0	0	0	0	0	0	0	0	0	0	0	0
RRH	2,203	0	382	0	883	1	0	0	0	0	0	0	0	0	0	0	0	0
WEL	411	0	32	1	277	1	0	0	0	0	0	0	0	0	0	0	0	0

			Col	10			Sockeye			Steelhead			
	200)3	20	02	10-Yr	Avg.			10-Yr			10-Yr	Wild
DAM	Adult	Jack	Adult	Jack	Adult	Jack	2003	2002	Avg.	2003	2002	Avg.	2003
BON	0	0	0	0	0	0	0	0	0	2,877	4,213	2,620	704
TDA	0	0	0	0	0	0	0	0	0	840	2,418	1,053	466
JDA	0	0	0	0	0	0	0	0	0	1,388	7,635	3,185	821
MCN	0	0	0	0	0	0	0	0	0	1,368	4,741	1,928	816
IHR	0	0	0	0	0	0	0	0	0	1,454	4,594	2,280	717
LMN	0	0	0	0	0	0	0	0	0	1,808	5,014	2,362	1,090
LGS	0	0	0	0	0	0	1	0	0	1,977	6,062	1,771	1,212
LWG	0	0	0	0	0	0	0	0	0	15,677	12,339	5,447	3,646
PRD	0	0	0	0	0	0	1	0	0	8	24	4	0
RIS	0	0	0	0	0	0	0	0	0	20	60	31	16
RRH	0	0	0	0	0	0	0	0	0	44	157	50	33
WEL	5	0	0	0	0	0	0	0	0	9	21	4	0

IHR, LMN, LGS are missing data for 4/23. IHR is missing data for 04/26. LGR is missing data for 3/6.

RIS, RRH are through 5/6. PRD, WEL are through 5/7. Although WEL began their counts early on 4/15, they won't have data posted until later in t **PRD is not reporting Wild Steelhead numbers.

These numbers were collected from the COE's Running Sums text files, except where otherwise noted.

Wild steelhead numbers are included in the total.

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: 5/9/03

BON counts from January 1, 2003 to March 14, 2003 (our counts begin March 15)

Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
3,758	0	3,443	408

Two Week Transportation Summary

04/26/03 TO 05/09/03

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	596	1,171,331	2,239	597	682,796	1,857,559
	Sum of NumberBarged	596	1,158,343	2,238	592	673,421	1,835,190
	Sum of NumberBypassed	0	11,377	0	0	9,278	20,655
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	0	1,611	1	5	97	1,714
LGS	Sum of NumberCollected	13	694,311	1,077	414	557,095	1,252,910
	Sum of NumberBarged	10	673,974	1,075	412	556,975	1,232,446
	Sum of NumberBypassed	0	4	0	0	0	4
	Sum of Numbertrucked	0	21,745	0	0	0	21,745
	Sum of TotalProjectMortalities	3	548	2	2	120	675
LMN	Sum of NumberCollected	20	140,409	750	70	173,426	314,675
	Sum of NumberBarged	20	139,110	745	70	173,167	313,112
	Sum of NumberBypassed	0	1,189	0	0	101	1,290
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	0	110	5	0	158	273
MCN	Sum of NumberCollected	5,490	311,310	900	186,062	18,500	522,262
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	5,489	311,094	900	186,008	18,431	521,922
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	1	123	0	58	26	208
Total S	um of NumberCollected	6,119	2,317,361	4,966	187,143	1,431,817	3,947,406
Total S	um of NumberBarged	626	1,971,427	4,058	1,074	1,403,563	3,380,748
Total S	um of NumberBypassed	5,489	323,664	900	186,008	27,810	543,871
Total S	um of Numbertrucked	0	21,745	0	0	0	21,745
Total S	um of TotalProjectMortalities	4	2,392	8	65	401	2,870

YTD Transportation Summary

TO: 05/09/03

		Species					
Site	Data	CH0	CH1	СО	SO	ST	Grand Total
LGR	Sum of NumberCollected	3,205	1,614,931	2,339	737	885,075	2,506,287
	Sum of NumberBarged	2,382	1,560,039	2,398	747	870,065	2,435,631
	Sum of NumberBypassed	0	22,923	0	0	16,036	38,959
	Sum of NumberTrucked	816	54,208	40	78	15,402	70,544
	Sum of TotalProjectMortalities	7	3,092	1	9	249	3,358
LGS	Sum of NumberCollected	51	826,698	1,247	532	621,992	1,450,520
	Sum of NumberBarged	43	804,220	1,243	523	620,980	1,427,009
	Sum of NumberBypassed	0	5	0	0	0	5
	Sum of NumberTrucked	5	23,616	0	5	850	24,476
	Sum of TotalProjectMortalities	3	795	3	4	162	967
LMN	Sum of NumberCollected	165	228,631	750	180	206,747	436,473
	Sum of NumberBarged	105	211,713	745	140	204,740	417,443
	Sum of NumberBypassed	0	1,346	0	0	182	1,528
	Sum of NumberTrucked	60	15,149	0	40	1,637	16,886
	Sum of TotalProjectMortalities	0	423	5	0	188	616
MCN	Sum of NumberCollected	19,523	350,971	1,006	186,549	30,109	588,158
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	19,489	350,723	1,006	186,493	30,039	587,750
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	34	155	0	60	27	276
Total Sur	n of NumberCollected	22,944	3,021,231	5,342	187,998	1,743,923	4,981,438
Total Sur	n of NumberBarged	2,530	2,575,972	4,386	1,410	1,695,785	4,280,083
Total Sur	n of NumberBypassed	19,489	374,997	1,006	186,493	46,257	628,242
Total Sur	n of NumberTrucked	881	92,973	40	123	17,889	111,906
Total Sur	n of TotalProjectMortalities	44	4,465	9	73	626	5,217