



Fish Passage Center

Weekly Report #03 - 13

June 13, 2003

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has been minimal over the first one-third of June. Of the sites in Table 1, eight of thirteen sites recorded precipitation that was less than 20% of average. However, for the entire water year, precipitation has been nearly average.

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

Location	June 1-9, 2003		Cumulative October, 1 2002 to June 9, 2003	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	0.42	58	16.90	90
Snake River Above Ice Harbor	0.01	3	13.54	96
Columbia Above The Dalles	0.16	30	17.24	93
Kootenai	0.44	60	16.08	83
Clark Fork	0.18	32	12.14	94
Flathead	0.40	50	14.34	84
Pend Oreille/Spokane	0.10	15	24.68	96
Central Washington	0.00	0	8.24	110
Snake River Plain	0.00	0	6.46	72
Salmon/Boise/Payette	0.03	7	16.90	102
Clearwater	0.03	4	26.48	106
SW Washington Cascades/Cowlitz	0.01	1	56.16	88
Willamette Valley	0.00	0	50.66	93

Water Supply Forecasts have generally increased over the spring months. However, forecasts have stabilized over the past two months (May, June Final Forecasts). Table 2 displays the April Final, May Final, and June Final runoff volume forecasts for multiple reservoirs.

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

Location	April Final		May Final		June Final	
	% Average (1971-2000)	Probable Runoff Volume (Kaf)	% Average (1971-2000)	Probable Runoff Volume (Kaf)	% Average (1971-2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	79	85300	84	90200	83	89300
Grand Coulee (Jan-July)	84	52900	88	55500	88	55600
Libby Res. Inflow, MT (Jan-July)	79	4960	82	5200	81	5100
Hungry Horse Res. Inflow, MT (Jan-July)	81	1800	85	1900	86	1920
Lower Granite Res. Inflow (Apr-July)	79	17100	86	18500	84	18100
Brownlee Res. Inflow (Apr-July)	53	3370	56	3520	56	3540
Dworshak Res. Inflow (Apr-July)	90	2390	88	2330	87	2300

Over the spring of 2003, the targeted Biological Opinion Flow Objectives have been 89 Kcfs at Lower Granite, 220 Kcfs at McNary, and 135 Kcfs at Priest Rapids. To date (6-12-03), the Biological Opinion Flow Objectives have been met at all projects, averaging 90.9, 236.0, and 139.8 Kcfs at Lower Granite, McNary, and Priest Rapids. The spring flow objective period will conclude on June 20th at Lower Granite, after which the summer flow objective period will begin (June 21st) and run through the 31st of August. The summer flow objective will be 51 Kcfs at Lower Granite. The transition date between the spring and summer flow objective

periods at McNary is June 30th; the summer flow objective will be 200 Kcfs.

The Libby Reservoir is currently at an elevation of 2450.0 feet, nine feet from its full pool elevation. Outflows over the last week have ranged between 23.0 and 25.0 Kcfs, while inflows have ranged between 36.3 and 47.8 kcf.

The Hungry Horse Reservoir is currently at an elevation of 3551.5 feet (8.5 feet from full), and has refilled 4.7 feet in the last week. Inflows to Hungry Horse are currently 11.3 Kcfs.

The Dworshak reservoir is currently at an elevation of 1594.8 feet, 5.2 feet from its full pool elevation. On June 9, 2003, the COE increased outflows above the minimum discharge to avoid refilling too rapidly. Since the 9th of June, 23.8 Kaf of water has been released above the minimum discharge of 1.5 Kcfs; this amount of water would have provided an additional 6.0 Kcfs of discharge in the Lower Snake River for two days when the Biological Opinion Flow Objectives were not being met.

The Grand Coulee Reservoir ended June 12th at an elevation of 1282.9, 7.1 feet from its full pool elevation. Grand Coulee has refilled 3.1 feet in the last week.

The Brownlee Reservoir was at an elevation of 2076.3 on June 12th, 2003, 0.7 feet from its full pool elevation. Outflows at Brownlee have ranged between 17.5 and 21.9 Kcfs over the last week.

The USBR reservoir systems along the Boise, Payette, and Upper Snake Basins are currently 94% (up 5% from last week), 100% (up 4% from last week), and 63% of capacity (down 2% from last week).

Spill: No spill occurred at Dworshak Dam over the past week. The volume of spill occurring system-wide has decreased over the past week in accordance with the receding flows in the Snake River. Total dissolved gas levels were exceeding State criteria earlier in the week. The COE responded by decreasing spill levels at all the Snake projects and TDG levels are presently well below the criteria. Lower Granite, Little Goose, Lower Monumental and Ice Harbor dams over the past week averaged spill of 24%, 20%, 18% and 54% of average

daily flow, respectively. This represents a significant reduction from the 42%, 31%, 29% and 54% observed last week.

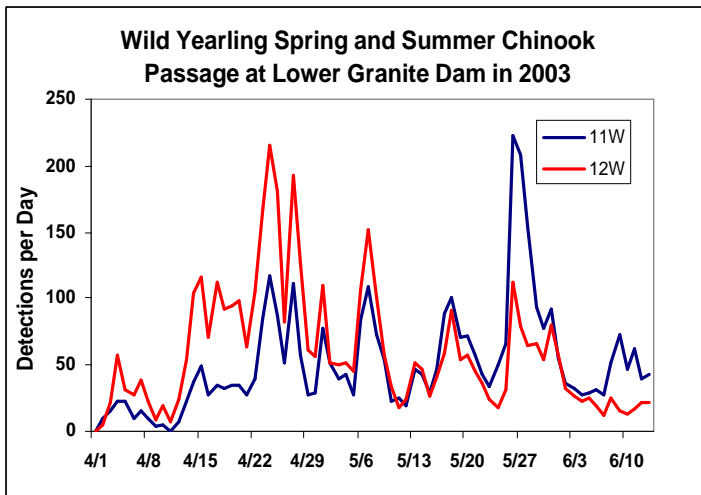
Spill over the past week at McNary, John Day, The Dalles and Bonneville dams also decreased over the past week and averaged 39%, 24%, 36%, and 40% of average daily flow, respectively.

Total dissolved gas levels are presently below the gas waiver limits at all the federal projects as peak flows have passed. Fish are responding to the decreased gas levels in the system as evidenced by the sampling that occurred at Little Goose Dam where only 1% of the fish sampled had signs of GBT (down from 5% last week) and at Lower Monumental Dam where 7% of the fish sampled exhibited signs (down from 10% last week).

Smolt Monitoring: The spring migrant numbers continued to decline in the Snake River and the Lower Columbia at smolt monitoring sites, while subyearling chinook indices increased at nearly all sites. The Imnaha Trap continues to capture small numbers of yearling chinook and steelhead, while all other SMP traps have shutdown operation for the season.

At Lower Granite Dam the indices for all spring migrants continued to decrease, while those for subyearling chinook increased. The daily average index for subyearling chinook rose to 42,000 this past week compared to 32,000 the previous week. While the overall index for yearling chinook, averaging 1,450 this past week, and has declined to a fraction of mid-season peak passage of 246,000, relatively large numbers of PIT-tagged wild fish continue to pass the project (Figure 1).

Figure 1. Daily detections of wild yearling chinook at Lower Granite Dam 2003.



Of the daily passage index over the past two weeks over 40% of yearlings were wild origin. The average daily index for steelhead dropped 4,900 compared to 29,000 last week. The index for coho averaged 1,100 this past week, down from 3,700 last week. Sockeye indices averaged 142, about a tenth of the 1,400 seen last week. Increasing numbers of subyearling chinook were also captured this past week with the daily average index rising to 32,000 compared to 3,000 the previous week. Little Goose and Lower Monumental dams show similar decreases in yearling migrants, with concomitant increases in subyearling chinook.

The bypass at Rock Island continues to cause some mortality in fish due to undetermined problems despite repairs that have been done to the seals and guides in slide gates that feed water into the bypass. The site reports a relative decrease in steelhead, coho, sockeye and yearling chinook this past week. Coho have been collected in the highest numbers over the past two weeks. Subyearling chinook indices increased again last week with the daily average at 288 compared to 166 per day the previous 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

decreased again this week to 6,100 compared to 24,000 last week. Steelhead indices decreased from 12,400 last week to 1,600 this week. The daily average index for subyearling chinook was lower at 47,000 per day this week compared to 80,000 last week. Sockeye indices were down to 5,000 this week compared to 10,400 the previous week. Coho indices were 6,600 compared to 11,600 the previous week. At John Day Dam the average daily index for yearling chinook decreased to 6,400 this week compared to 51,000 last week. Steelhead indices continued to decrease rapidly this week, with an average of 3,800 versus 31,000 last week. Coho indices decreased also averaging 3,100 this week compared to 14,200 last week. Sockeye numbers decreased to an average of 3,500 per day compared to 12,300 per day last week. Subyearling chinook indices increased from a weekly average of 33,700 last week to nearly 45,000 per day this week.

At Bonneville Dam, the average daily index for yearling chinook was at 19,000 this week compared to 43,000 last week. The steelhead index averaged 44,000 this week compared to 57,600 last week. The indices for coho were down this week with an average index of 23,000 compared to 34,000 per day last week. Subyearling chinook daily indices averaged 54,000 per day this week compared to 26,000 per day last week. Sockeye indices continued to decrease over the past week with the weekly average index this week 10,000 compared to 12,000 last week.

Hatchery Releases - The preliminary hatchery total of juvenile salmonids released above Bonneville Dam for the 2003 migration season will approximate 86.7 million from Columbia River Basin hatcheries. About 18.3 million juvenile salmonids were released or releases were initiated during the past two weeks, with an additional 19.1 million fish scheduled for release in the upcoming two weeks.

Snake River - About 27.6 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, summer, and fall chinook have been re-

leased from hatcheries, acclimation facilities, or directly released river systems in Idaho, SE Washington, and NE Oregon.

During fall 2002, approximately 140,000 sockeye were released in the upper Salmon R basin lakes and a few thousand this spring. About 1.2 million yearling coho salmon were released in the Clearwater River basin for the 2003 migration season.

Releases of juvenile steelhead (9.5 million scheduled) have been completed. Releases occurred throughout the Snake, Salmon, Clearwater, Imnaha, Grande Ronde, and Tucannon River basins for the 2003 migration.

Subyearling fall chinook have been released during the past three to four weeks both in the Snake River (Hells Canyon and Acclimation Ponds) and also in the Clearwater River. The on-site subyearling fall chinook from Lyons Ferry Hatchery were also released this month. This year's release of fall chinook in the Snake River basin ranks second highest in the FPC database.

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. All scheduled yearling spring and summer chinook from the Mid-Columbia hatcheries and acclimation ponds are completed for the year.

Subyearling fall and summer chinook releases were initiated in mid-late May in the Yakima River and are on-going (volitional release) from Ringold Hatchery with Priest Rapids Hatchery beginning an every other day release of their "sub" fall chinook from 5 separate ponds starting June 12. The Turtle Rock summer "subs" will likely be the latest group out (early July schedule).

Subyearling summer/fall chinook comprise the highest percentage and numbers of juvenile salmon released in the Mid-Columbia River (about 14.5 million scheduled).

About 209,000 sockeye were released last fall into Lake Wenatchee; there will be no sockeye releases made into the Okanogan R basin in 2003.

About 1.9 million yearling coho were released in the Yakama River basin, the Wenatchee

River basin and the Methow River basin this migration season.

Release of approximately 1.3 million juvenile steelhead was completed by the end of May. 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 will release about 36.9 million salmon and steelhead for the 2003 migration. All yearling spring, fall, steelhead, and coho salmon were released by the end of May.

Release of yearling spring chinook from State, Tribal and Federal hatcheries is completed for the year. Yearling spring chinook were released in the Klickitat, Umatilla, Deschutes, Hood, Wind, and Little White Salmon rivers with yearling fall chinook released in the Umatilla River basin. Yearling coho salmon have been released in the Klickitat, Little White Salmon, and Umatilla rivers to date. Klickitat Hatchery completed their volitional release of about 1.0 million yearling coho the end of 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 are completed at all the sites. Winter steelhead were released in the Hood River and Big White Salmon River for the 2003 season.

Subyearling fall chinook were released into the Umatilla River in May with other release groups scheduled for the Klickitat and Little White Salmon rivers in June. About 7 million subyearling fall chinook (URB) were released in these three river basins.

Adult Fish Passage - Adult spring chinook counted at McNary Dam totaled 95,550 through the end of the spring chinook season (June 8). Passage of adult spring chinook into the Snake River totaled 78,170 while the spring chinook counted at Priest Rapids Dam was 17,244 (through June 11). The count of adult spring chinook at Prosser Dam in the lower Yakama River was near 4,000. These three counting sites account for all spring chinook

counted past McNary Dam for the 2003 migration.

Based on chinook counts at the 4 Snake River projects, Ice Harbor would appear to be an overcount (potentially greater fallback there this season). Of the fish counted at Rock Island Dam, the majority have entered the Wenatchee River and tributaries as only 4,400 of the 16,100 (RI count) have moved past Rocky Reach Dam. Those fish past Rocky Reach will enter the Entiat, Methow, and Okanogan rivers and tributaries. As a point of interest, Jack spring chinook salmon counted into the Snake River through June 12 was about 4-times greater than the year 2002 and 10-year average count. At Priest Rapids, jack counts are also about 2-3 times greater than the 2002 and 10-year average.

Adult summer chinook passage at Bonneville Dam ranged between 1,600 and 4,000 for the week ending June 11. The cumulative count was 25,186 about 96% and 331% of the respective year 2002 and 10-year average count at Bonneville. Based on PIT tag data from Bonneville Dam, there appears to still be a good mix of summer chinook destined for the Salmon, Imnaha, and Grande Ronde River basins as well as summer chinook from the Mid-Columbia. The numbers of PIT tagged summer chinook from the Mid-Columbia continued to increase through the week. The early portion of the summer run chinook is normally destined for the Snake River basin with Mid-Columbia summer chinook prevalent from mid-June through July. With no summer chinook released from hatcheries below McNary Dam, the passage from Bonneville to McNary Dam should have fairly consistent passage totals moving upstream through the lower Columbia and into the Snake and Mid-Columbia Reaches.

Passage of sockeye salmon is increasing at Bonneville Dam and the upstream projects. The cumulative count past Bonneville Dam through June 11 was 888, and exceeds the 2002 count, but is less than the 10-year average.

Numbers of steelhead increased through the week with about 150 adult steelhead passing the project per day. A portion of this early returning steelhead group is destined for some of the lower (Bonneville pool) tributaries such as the Wind and

Klickitat rivers. Counts at The Dalles and John Day projects have also shown increases this week.

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

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
05/30/03	96.6	0.2	99.4	0.0	127.4	9.0	130.9	21.0	143.9	30.0	153.7	15.8	163.5	88.4
05/31/03	87.6	0.2	89.2	0.0	109.9	7.8	111.7	19.1	122.6	26.9	129.9	29.0	127.2	81.3
06/01/03	63.8	0.1	63.6	0.0	85.9	6.4	87.0	12.4	99.6	19.1	107.4	34.6	107.1	68.6
06/02/03	101.2	0.1	100.1	0.0	118.6	7.6	119.6	22.1	128.9	31.9	130.2	41.8	129.2	68.6
06/03/03	105.2	0.1	107.5	0.0	123.8	7.8	121.2	20.7	130.2	30.0	144.1	45.8	153.7	62.6
06/04/03	111.3	0.2	107.6	0.0	128.8	8.0	126.0	18.4	134.8	28.3	136.4	42.9	141.0	61.3
06/05/03	121.9	0.2	120.9	0.0	135.7	8.4	132.8	14.5	141.6	24.6	148.1	44.6	150.9	85.9
06/06/03	140.6	0.2	144.3	0.0	159.0	8.9	154.5	16.1	164.3	26.0	169.5	51.0	164.6	107.9
06/07/03	118.9	0.2	118.7	0.0	145.8	12.4	147.8	19.2	159.8	26.0	172.0	51.9	174.4	114.9
06/08/03	90.7	0.2	97.5	0.0	121.6	8.1	123.1	17.2	137.8	23.8	148.3	44.7	151.1	100.0
06/09/03	134.2	0.2	133.3	0.0	153.2	8.9	148.8	17.8	160.3	29.9	162.3	48.7	151.6	100.3
06/10/03	130.4	0.2	133.1	0.0	160.3	10.0	160.4	25.3	171.5	36.5	180.5	54.3	181.9	120.1
06/11/03	149.5	0.2	148.1	0.0	165.6	10.0	160.6	24.7	170.1	34.9	177.2	53.3	176.3	115.3
06/12/03	148.1	0.2	145.1	0.0	159.8	10.0	156.1	24.1	164.7	34.0	171.5	51.6	174.5	112.1

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

Date	Dworshak		Hells Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
05/30/03	1.5	0.0	27.3	28.6	186.2	91.9	181.2	65.1	180.9	59.2	182.0	92.1
05/31/03	1.5	0.0	28.0	42.4	208.2	114.3	206.4	90.8	203.4	83.2	202.6	113.2
06/01/03	1.5	0.0	28.6	26.9	190.8	96.5	187.7	73.5	189.2	70.0	195.1	106.2
06/02/03	1.5	0.0	25.2	32.6	165.9	72.2	165.9	52.6	164.6	43.8	169.2	84.6
06/03/03	1.6	0.0	24.6	26.0	149.1	55.6	144.8	37.3	140.7	29.7	146.4	73.3
06/04/03	1.7	0.0	21.8	21.8	133.0	43.2	133.5	28.9	134.6	27.8	140.1	82.4
06/05/03	1.7	0.0	20.2	21.2	118.1	30.1	116.0	18.1	113.5	26.0	117.6	67.1
06/06/03	1.7	0.0	20.1	21.2	114.7	27.0	114.3	17.6	112.5	22.6	119.9	59.9
06/07/03	1.7	0.0	20.2	21.3	108.7	24.5	105.2	16.2	103.2	19.4	108.7	59.2
06/08/03	1.8	0.0	20.5	20.2	111.0	26.0	108.6	14.8	106.7	17.1	109.6	62.8
06/09/03	3.0	0.0	19.7	21.0	109.0	31.3	106.9	19.9	108.8	14.1	112.9	60.2
06/10/03	5.6	0.0	20.3	21.3	110.5	31.0	109.8	28.7	109.4	18.6	110.3	54.8
06/11/03	6.3	0.0	20.3	21.0	109.7	25.8	108.5	28.8	108.1	21.1	110.8	58.1
06/12/03	6.1	0.0	---	---	101.8	20.8	103.1	22.5	103.2	25.5	107.3	68.1

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

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
05/30/03	352.5	176.3	349.1	87.4	343.1	126.6	343.4	139.6	84.1	113.0
05/31/03	352.4	176.8	356.9	86.5	354.2	137.8	350.5	140.6	94.8	108.4
06/01/03	320.2	144.9	321.9	70.8	321.0	124.0	352.9	130.7	98.8	116.7
06/02/03	289.6	115.4	295.5	73.9	298.1	105.8	325.3	107.8	93.1	117.8
06/03/03	294.5	121.4	288.5	67.7	291.2	107.5	316.4	144.7	46.3	118.6
06/04/03	296.7	125.9	304.8	73.3	286.6	101.7	302.6	142.7	36.6	116.6
06/05/03	273.8	98.8	276.4	59.0	281.8	98.5	304.5	91.7	79.3	126.8
06/06/03	262.8	92.5	267.8	62.7	272.2	93.7	295.2	90.1	70.1	128.3
06/07/03	285.9	115.1	275.8	62.9	265.8	94.0	280.9	134.1	12.9	127.2
06/08/03	283.9	108.1	269.0	65.7	281.5	99.2	289.2	129.6	30.8	122.1
06/09/03	265.0	90.4	259.4	62.4	258.9	91.6	277.7	88.6	56.1	126.4
06/10/03	278.5	108.1	266.9	62.6	268.5	95.1	290.9	89.2	63.5	131.4
06/11/03	305.2	130.1	299.3	71.0	296.0	110.2	313.7	141.3	44.9	120.8
06/12/03	201.8	129.1	297.3	70.7	298.5	117.3	308.2	144.3	40.7	116.5

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

Site	Date	Species	Number of Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank				Fish with L. Line GBT	
								Rank 1	Rank 2	Rank 3	Rank 4	Num Fish	Avg. Rank
Lower Granite Dam													
	05/06/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0		
	06/03/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0		
	06/10/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0		
Little Goose Dam													
	06/04/03	Chinook + Steelhead	100	5	5	5.00%	0.00%	5	0	0	0		
	06/11/03	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0		
Lower Monumental Dam													
	06/09/03	Chinook + Steelhead	100	8	7	7.00%	0.00%	6	1	0	0		
McNary Dam													
	06/05/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0		
	06/09/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0		
Bonneville Dam													
	06/05/03	Chinook + Steelhead	103	0	0	0.00%	0.00%	0	0	0	0		
	06/09/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0		
	06/12/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0		
Rock Island Dam													
	06/05/03	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0		
	06/09/03	Chinook + Steelhead	97	1	1	1.03%	0.00%	1	0	0	0		
	06/12/03	Chinook + Steelhead	50	1	1	2.00%	0.00%	1	0	0	0		

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	<u>Hungry H. Dnst</u>			<u>Boundary</u>			<u>Grand Coulee</u>			<u>Grand C. Tlwr</u>			<u>Chief Joseph</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
5/30	98	99	99	24	125	125	126	24	110	111	111	24	109	110	111	24	109	110	110	23
5/31	98	99	99	24	123	123	124	24	111	111	112	24	110	110	113	24	109	109	110	23
6/1	99	99	99	24	123	124	124	24	110	110	111	24	109	110	114	24	109	109	109	23
6/2	99	99	99	24	123	123	124	24	110	110	111	24	109	109	112	24	109	109	110	23
6/3	99	99	100	24	124	125	125	24	110	110	111	24	109	110	112	24	109	110	110	23
6/4	98	99	99	24	124	125	126	24	110	111	115	24	109	110	111	24	110	110	111	22
6/5	98	99	99	24	125	126	126	24	110	111	111	24	109	110	111	24	110	110	111	23
6/6	99	99	100	24	124	125	126	24	110	111	111	24	110	110	111	24	110	111	111	23
6/7	99	100	100	24	124	125	125	24	111	112	113	24	110	110	110	24	111	111	112	23
6/8	99	99	100	24	124	124	125	24	113	113	113	24	111	112	112	24	112	112	113	23
6/9	99	99	100	24	122	122	123	24	112	112	113	24	111	111	112	24	112	112	112	19
6/10	99	99	100	24	122	123	124	24	113	113	113	24	110	111	111	24	111	112	112	23
6/11	99	99	100	24	121	122	123	24	113	113	113	24	109	109	110	24	111	111	112	23
6/12	100	102	103	24	121	122	123	24	114	114	114	24	109	109	110	24	111	112	112	23

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	<u>Chief J. Dnst</u>			<u>Wells</u>			<u>Wells Dwnstrm</u>			<u>Rocky Reach</u>			<u>Rocky R. Tlwr</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
5/30	109	109	109	23	109	110	110	23	111	111	112	23	112	113	114	23	113	115	116	23
5/31	108	108	109	23	108	109	109	24	110	110	111	24	111	111	111	13	111	112	112	13
6/1	108	108	108	23	108	108	109	24	109	110	111	24	110	110	111	23	111	111	112	23
6/2	107	108	108	23	108	108	109	23	109	110	110	23	109	109	109	24	110	110	111	24
6/3	108	109	109	23	108	109	109	19	110	110	111	19	109	109	110	24	111	111	111	24
6/4	109	109	110	22	108	108	109	10	109	109	110	10	109	110	110	24	110	111	111	24
6/5	109	110	110	23	110	110	111	17	112	112	112	17	110	111	111	23	111	111	112	22
6/6	110	110	110	23	110	110	110	24	112	112	114	24	112	112	113	23	112	113	113	22
6/7	111	111	112	23	110	111	111	24	114	116	121	24	112	113	113	23	113	113	114	21
6/8	111	112	113	23	111	112	113	24	112	113	113	24	114	115	116	24	114	115	116	23
6/9	111	111	112	23	110	111	111	24	112	112	113	24	112	112	113	24	113	113	114	21
6/10	111	111	112	23	110	110	111	23	112	112	113	23	111	112	112	23	112	113	113	23
6/11	110	111	111	23	110	110	111	24	112	112	113	24	111	111	112	24	112	112	113	23
6/12	111	111	112	23	111	111	111	23	112	112	113	23	112	112	112	22	112	113	113	22

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	<u>Rock Island</u>			<u>Rock I. Tlwr</u>			<u>Wanapum</u>			<u>Wanapum Tlwr</u>			<u>Priest Rapids</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
5/30	113	113	114	23	119	121	124	23	116	116	118	24	116	116	117	14	116	117	118	24
5/31	111	111	113	13	119	119	124	13	114	115	116	24	115	116	117	24	112	113	115	24
6/1	110	110	111	23	116	118	120	22	112	113	114	24	116	116	116	24	112	113	114	24
6/2	110	110	111	24	118	120	127	23	---	---	---	0	---	---	---	0	---	---	---	0
6/3	110	111	111	24	116	117	119	24	112	113	116	24	116	117	117	24	116	117	122	24
6/4	110	111	111	24	116	116	117	23	112	114	116	24	116	116	116	24	115	116	117	24
6/5	111	111	112	23	115	117	118	23	113	115	118	24	116	116	116	24	116	117	119	24
6/6	111	112	113	23	115	116	118	22	---	---	---	0	---	---	---	0	---	---	---	0
6/7	112	113	114	22	116	117	119	22	113	114	116	24	116	116	116	24	116	117	120	24
6/8	113	113	114	23	117	117	118	22	114	114	114	24	116	116	117	24	115	115	116	24
6/9	112	113	114	22	117	117	119	21	114	116	119	24	116	116	117	24	112	114	116	24
6/10	111	112	112	22	116	117	118	19	111	112	113	24	115	115	116	24	113	114	114	24
6/11	112	112	113	23	116	117	118	20	---	---	---	0	---	---	---	0	---	---	---	0
6/12	112	112	113	21	117	118	119	21	---	---	---	0	---	---	---	0	---	---	---	0

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

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

Date	Priest R. Dnst			#	Pasco			#	Dworshak			#	Clrwtr-Peck			#	Anatone			#
	24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High	
5/30	118	119	119	24	115	115	116	24	105	106	107	24	105	105	106	24	110	110	110	24
5/31	116	116	117	24	113	115	116	24	106	107	107	24	105	106	106	24	111	112	114	24
6/1	114	115	116	24	113	114	114	24	106	106	106	1	105	106	106	24	111	111	112	24
6/2	---	---	---	0	112	113	113	24	---	---	---	0	104	105	106	24	110	110	110	24
6/3	114	115	115	24	113	114	114	24	---	---	---	0	104	105	105	24	109	109	110	24
6/4	114	115	115	24	114	115	115	24	105	105	106	9	103	104	105	24	108	108	109	24
6/5	116	117	118	24	114	115	115	24	105	106	108	13	103	104	105	24	107	108	108	24
6/6	---	---	---	0	115	116	116	24	107	108	109	24	103	104	105	24	107	107	108	24
6/7	117	118	119	24	116	117	117	24	107	108	109	24	103	104	105	24	106	107	108	24
6/8	117	118	119	24	116	116	117	24	105	105	106	24	103	104	104	24	106	107	107	20
6/9	116	117	119	24	115	115	116	24	103	105	106	24	103	104	105	24	106	107	107	22
6/10	117	118	118	24	113	114	116	24	102	105	110	24	103	103	104	24	106	106	107	24
6/11	---	---	---	0	113	114	115	24	103	104	106	24	103	104	104	24	106	106	107	24
6/12	---	---	---	0	114	115	115	24	104	105	106	24	103	104	104	23	106	107	107	24

Total Dissolved Gas Saturation Data at Snake River Sites

Date	Clrwtr-Lewiston			#	Lower Granite			#	L. Granite Tlwr			#	Little Goose			#	L. Goose Tlwr			#
	24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High	
5/30	103	103	104	24	107	107	108	24	130	131	132	24	121	121	121	24	122	123	125	24
5/31	103	103	103	1	107	107	107	24	133	134	136	24	121	123	124	24	125	127	128	24
6/1	---	---	---	0	108	108	109	24	131	132	133	24	126	127	127	24	123	125	126	24
6/2	103	103	104	12	109	109	109	24	126	127	129	24	127	127	127	24	121	122	122	24
6/3	102	102	102	10	108	109	109	24	121	124	130	24	123	124	125	24	120	122	143	23
6/4	---	---	---	0	108	109	110	24	117	118	123	24	120	120	121	24	116	117	118	24
6/5	103	103	105	9	108	109	110	24	114	117	118	22	117	118	119	23	116	117	117	24
6/6	102	103	104	24	108	108	111	24	113	118	118	24	116	116	118	24	115	116	117	24
6/7	102	104	104	24	108	109	111	24	113	117	118	23	113	115	117	24	113	115	116	24
6/8	102	103	104	24	107	107	108	24	113	118	118	23	112	113	115	24	112	113	114	24
6/9	102	103	104	24	107	107	108	24	115	118	118	24	111	112	113	24	112	114	115	24
6/10	102	103	104	24	106	106	107	24	114	117	119	23	110	111	113	24	113	115	115	24
6/11	102	103	104	24	105	105	106	24	112	117	118	24	110	111	112	24	113	116	124	23
6/12	102	102	104	16	105	106	107	24	111	118	118	24	110	110	111	24	112	115	117	24

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

Date	Lower Mon.			#	L. Mon. Tlwr			#	Ice Harbor			#	Ice Harbor Tlwr			#	McNary-Oregon			#
	24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High	
5/30	122	124	125	24	125	126	127	24	118	119	119	24	120	122	123	24	115	115	115	24
5/31	123	124	126	24	128	129	131	24	119	120	120	24	124	126	127	24	114	114	115	24
6/1	128	129	129	24	126	127	129	24	122	123	124	24	123	125	127	24	113	114	115	24
6/2	125	126	128	24	123	124	125	24	123	124	124	24	120	120	120	24	117	118	120	24
6/3	123	124	124	24	121	121	122	23	122	122	122	24	118	119	120	23	118	119	121	24
6/4	122	123	126	24	119	120	120	24	120	121	121	24	118	119	120	24	117	118	119	24
6/5	120	121	123	24	119	120	120	24	120	120	120	24	116	117	119	24	117	118	119	24
6/6	119	119	122	24	119	119	120	24	119	120	122	24	116	117	117	24	118	119	122	24
6/7	117	118	121	24	117	118	119	24	118	119	121	24	116	117	119	24	117	118	121	24
6/8	116	117	118	24	117	118	120	24	117	117	118	24	116	117	118	24	117	117	119	24
6/9	113	114	114	24	114	115	115	24	115	115	116	24	116	117	118	24	116	116	117	24
6/10	111	112	112	24	115	117	129	24	112	113	114	24	115	116	116	24	113	113	115	24
6/11	112	113	113	24	117	118	119	23	111	111	112	24	115	116	118	24	110	111	113	24
6/12	113	114	115	24	117	118	119	21	112	113	113	24	116	117	118	24	111	112	113	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

Date	<u>McNary-Wash</u>				<u>McNary Tlwr</u>				<u>John Day</u>				<u>John Day Tlwr</u>				<u>The Dalles</u>			
	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24h</u>		<u>12h</u>		#	<u>24h</u>		<u>12h</u>		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr	
5/30	115	115	115	24	123	123	123	24	115	115	115	21	115	116	118	24	113	114	116	23
5/31	114	114	114	24	123	123	123	20	113	113	114	19	115	116	116	24	111	112	113	23
6/1	112	113	115	24	121	121	121	24	113	113	114	22	114	115	116	24	112	113	115	23
6/2	116	117	118	24	119	119	120	23	113	113	114	23	113	115	116	24	112	114	116	23
6/3	116	117	118	24	119	120	120	22	114	116	117	23	114	115	118	24	113	115	117	23
6/4	116	117	118	24	119	119	120	9	116	117	119	23	114	116	117	24	114	115	116	23
6/5	116	118	119	24	118	118	120	10	117	118	119	23	114	115	117	24	115	116	117	23
6/6	116	117	118	24	118	119	120	21	118	119	122	23	115	117	117	24	117	117	118	23
6/7	116	118	119	24	119	119	119	24	119	121	123	23	116	116	118	24	117	118	119	23
6/8	116	117	118	24	119	119	119	21	118	119	119	23	115	116	117	24	116	116	117	23
6/9	115	115	116	24	118	118	118	24	115	115	116	19	116	117	118	24	112	112	113	23
6/10	112	113	115	24	118	119	120	24	112	113	114	23	114	118	119	24	110	111	113	23
6/11	111	112	113	24	120	120	120	24	109	109	110	23	113	118	119	24	110	113	116	23
6/12	112	113	113	24	120	120	120	24	108	108	108	23	113	117	119	24	110	113	115	23

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>				<u>Bonneville</u>				<u>Warrendale</u>				<u>Camas\Washugal</u>							
	<u>24 h</u>		<u>12 h</u>		#	<u>24 h</u>		<u>12 h</u>		#	<u>24h</u>		<u>12h</u>		#	<u>24h</u>		<u>12h</u>		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr	
5/30	119	119	120	24	116	117	118	23	117	118	118	23	114	115	116	24				
5/31	118	118	120	24	113	113	114	23	115	116	116	23	115	116	116	24				
6/1	118	119	120	24	114	115	115	23	115	115	115	23	115	115	116	24				
6/2	118	119	120	24	113	114	114	23	113	114	115	23	114	115	116	24				
6/3	118	120	121	24	114	115	117	23	117	117	118	23	114	116	117	24				
6/4	119	120	120	24	116	117	118	23	118	118	119	23	116	117	118	24				
6/5	119	120	121	24	116	117	118	23	116	117	118	23	116	116	117	24				
6/6	120	120	121	24	117	118	118	23	116	117	118	23	115	116	118	24				
6/7	120	121	122	24	118	118	119	23	119	119	119	23	116	118	119	24				
6/8	120	120	121	24	115	117	118	23	117	118	118	23	115	116	117	24				
6/9	117	118	118	24	111	112	113	23	112	114	116	23	112	112	113	24				
6/10	116	117	118	24	108	109	110	23	111	113	115	23	109	110	112	24				
6/11	117	118	120	24	109	110	111	23	114	115	115	23	109	112	113	24				
6/12	117	118	120	24	111	112	113	23	116	117	117	23	111	112	113	24				

HATCHERY RELEASE SUMMARY LAST TWO WEEKS

Hatchery Release Summary									
From:	5/30/2003		to		6/12/2003				
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Cherry Lane Hatchery	CH0	FA	2003	250,000	05-27-03	05-31-03	Lapwai Creek	Clearwater River M F
Nez Perce Tribe	Cherry Lane Hatchery	CH0	FA	2003	250,000	05-27-03	06-07-03	Cherry Lane Hatchery	Clearwater River M F
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2003	400,000	05-19-03	05-30-03	Pittsburg Landing Acclim Pond	Snake River
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2003	500,000	05-28-03	06-06-03	Big Canyon (Clearwater R)	Clearwater River M F
Nez Perce Tribe Total					1,400,000				
Washington Dept. of Fish and Wildlife	Klickitat Hatchery	CH0	FA	2003	4,000,000	06-03-03	06-30-03	Klickitat Hatchery	Klickitat River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH0	FA	2003	100,019	06-09-03	06-09-03	Cpt John Acclim Pond	Snake River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH0	FA	2003	200,092	06-06-03	06-06-03	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2003	3,500,000	06-06-03	06-23-03	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2003	6,700,000	06-12-03	06-25-03	Priest Rapids Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH1	SU	2003	127,969	04-07-03	05-30-03	Bel. Priest Rapids Dam	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH0	SU	2003	463,000	06-10-03	06-20-03	Wells Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2003	105,323	05-01-03	05-30-03	Twisp Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife Total					15,196,403				
Yakama Tribe	Little White Salmon NFH	CH0	FA	2003	1,700,000	05-19-03	06-02-03	Prosser Acclim Pond	Yakama River
Yakama Tribe Total					1,700,000				
Grand Total					18,296,403				

HATCHERY RELEASE SUMMARY NEXT TWO WEEKS

Hatchery Release Summary									
From:	6/13/2003		to		6/26/2003				
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2003	300,000	06-16-03	06-30-03	Cpt John Acclim Pond	Snake River
Nez Perce Tribe Total					300,000				
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH0	FA	2003	2,000,000	06-19-03	06-19-03	Little White Salmon Hatchery	Little White Salmon River
U.S. Fish and Wildlife Service Total					2,000,000				
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH0	SU	2003	426,747	06-16-03	07-07-03	Turtle Rock Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Klickitat Hatchery	CH0	FA	2003	4,000,000	06-03-03	06-30-03	Klickitat Hatchery	Klickitat River
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2003	3,500,000	06-06-03	06-23-03	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2003	6,700,000	06-12-03	06-25-03	Priest Rapids Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH0	SU	2003	658,745	06-16-03	07-07-03	Turtle Rock Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH0	SU	2003	463,000	06-10-03	06-20-03	Wells Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife Total					15,748,492				
Grand Total					18,048,492				

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

Two-Week Summary of Passage Indices

COMBINED YEARLING CHINOOK												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
05/30/2003	*	---	---	35	---	14,996	25,586	3,865	143	---	59,411	61,890
05/31/2003	*	---	---	---	---	6,428	16,712	10,309	117	37,035	33,029	40,801
06/01/2003	*	---	---	---	---	5,028	47,607	13,422	93	---	64,724	25,756
06/02/2003	*	---	---	24	---	3,806	67,914	6,647	99	17,990	80,113	43,713
06/03/2003	*	---	0	21	---	2,978	23,487	11,223	82	---	67,700	42,321
06/04/2003		---	6	24	---	1,375	22,023	1,609	66	17,133	34,748	49,139
06/05/2003	*	---	8	26	---	1,921	25,172	1,449	178	---	16,651	37,464
06/06/2003	*	---	14	27	---	935	14,587	515	212	4,780	15,411	26,330
06/07/2003	*	---	4	---	---	1,651	22,976	634	244	---	11,509	22,961
06/08/2003	*	---	3	---	---	1,685	6,072	1,167	120	3,891	6,595	28,946
06/09/2003	*	---	3	---	---	2,177	3,012	729	53	---	4,987	21,041
06/10/2003	*	---	11	---	---	1,119	14,483	758	44	10,896	2,745	10,372
06/11/2003	*	---	8	---	---	971	42,720	782	54	---	1,603	12,917
06/12/2003	*	---	4	---	---	1,625	48,630	384	51	4,829	2,200	10,166
Total:		0	61	157	0	46,695	380,981	53,493	1,556	96,554	401,426	433,817
# Days:		0	10	6	0	14	14	14	14	7	14	14
Average:		0	6	26	0	3,335	27,213	3,821	111	13,793	28,673	30,987
YTD		32,064	33,839	11,123	2,417	3,590,920	2,469,784	780,344	15,214	1,603,095	2,062,596	3,979,000

COMBINED SUBYEARLING CHINOOK												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
05/30/2003	*	---	---	0	---	8,204	0	122	309	---	7,191	20,630
05/31/2003	*	---	---	---	---	75,285	7,078	1,103	278	81,262	6,367	15,794
06/01/2003	*	---	---	---	---	55,637	48	3,322	112	---	21,691	20,137
06/02/2003	*	---	---	3	---	33,494	1,017	5,290	83	70,304	45,968	20,519
06/03/2003	*	---	0	10	---	21,720	60,809	6,851	52	---	66,598	21,161
06/04/2003		---	0	7	---	15,280	44,593	14,669	155	87,618	54,116	33,816
06/05/2003	*	---	2	3	---	14,335	20,861	18,758	172	---	33,826	46,954
06/06/2003	*	---	0	4	---	13,629	12,243	11,839	222	56,090	36,027	38,084
06/07/2003	*	---	0	---	---	19,020	9,962	12,567	163	---	45,382	43,756
06/08/2003	*	---	0	---	---	44,260	17,627	12,062	132	33,137	51,444	43,750
06/09/2003	*	---	0	---	---	48,100	5,715	3,464	333	---	35,041	54,977
06/10/2003	*	---	2	---	---	65,111	7,812	4,477	482	28,730	45,269	61,172
06/11/2003	*	---	1	---	---	50,775	11,176	9,869	409	---	41,223	72,742
06/12/2003	*	---	2	---	---	59,798	9,302	18,843	275	69,680	58,867	61,505
Total:		0	7	27	0	524,648	208,243	123,236	3,177	426,821	549,010	554,997
# Days:		0	10	6	0	14	14	14	14	7	14	14
Average:		0	1	5	0	37,475	14,875	8,803	227	60,974	39,215	39,643
YTD		1	68	74	355	551,644	209,440	124,312	4,787	533,282	570,188	2,406,877

* 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

COMBINED COHO												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
05/30/2003	*	---	---	0	---	5,094	9,940	860	1,372	---	20,927	73,312
05/31/2003	*	---	---	---	---	3,978	5,812	2,124	1,160	10,958	14,258	28,517
06/01/2003	*	---	---	---	---	5,697	7,343	2,116	1,522	---	21,603	23,882
06/02/2003	*	---	---	0	---	3,996	7,223	838	1,592	14,174	16,022	28,992
06/03/2003	*	---	0	0	---	3,854	3,422	1,202	1,290	---	9,883	44,106
06/04/2003		---	0	0	---	1,222	2,691	418	1,677	9,847	8,419	22,456
06/05/2003	*	---	0	0	---	2,365	2,545	517	2,461	---	8,785	17,982
06/06/2003	*	---	0	0	---	935	476	438	2,605	6,733	5,337	19,042
06/07/2003	*	---	0	---	---	1,123	1,141	512	3,240	---	6,539	22,095
06/08/2003	*	---	0	---	---	1,944	746	243	2,465	2,355	3,562	30,934
06/09/2003	*	---	0	---	---	1,584	447	93	1,711	---	2,100	38,688
06/10/2003	*	---	0	---	---	909	633	528	1,172	12,162	654	24,130
06/11/2003	*	---	0	---	---	763	1,083	202	1,285	---	2,582	14,956
06/12/2003	*	---	0	---	---	520	450	256	479	5,372	1,265	11,945
Total:		0	0	0	0	33,984	43,952	10,347	24,031	61,601	121,936	401,037
# Days:		0	10	6	0	14	14	14	14	7	14	14
Average:		0	0	0	0	2,427	3,139	739	1,717	8,800	8,710	28,646
YTD		0	0	0	17	121,461	112,342	35,612	38,835	92,954	239,234	1,977,700

COMBINED STEELHEAD												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
05/30/2003	*	---	---	78	---	42,722	115,036	126,870	1,006	---	113,360	96,152
05/31/2003	*	---	---	---	---	58,149	33,226	55,281	609	9,175	22,878	108,360
06/01/2003	*	---	---	---	---	37,205	46,734	30,357	352	---	18,946	53,854
06/02/2003	*	---	---	14	---	32,732	39,659	16,929	238	18,339	14,510	38,361
06/03/2003	*	---	15	5	---	18,392	25,776	8,474	193	---	12,206	37,987
06/04/2003		---	40	7	---	7,029	6,721	6,233	205	9,684	17,280	29,853
06/05/2003	*	---	54	5	---	9,124	6,494	3,803	187	---	16,782	38,962
06/06/2003	*	---	57	5	---	5,345	3,426	3,166	132	4,087	10,152	51,014
06/07/2003	*	---	28	---	---	4,623	4,094	1,806	176	---	5,624	60,869
06/08/2003	*	---	52	---	---	5,997	2,752	827	150	842	5,276	70,707
06/09/2003	*	---	11	---	---	4,545	4,072	1,526	105	---	2,494	50,226
06/10/2003	*	---	38	---	---	6,714	2,449	1,584	105	1,095	1,176	32,385
06/11/2003	*	---	21	---	---	2,766	1,219	1,262	101	---	979	28,100
06/12/2003	*	---	28	---	---	4,095	2,127	947	62	354	850	12,199
Total:		0	344	114	0	239,438	293,785	259,065	3,621	43,576	242,513	709,029
# Days:		0	10	6	0	14	14	14	14	7	14	14
Average:		0	34	19	0	17,103	20,985	18,505	259	6,225	17,322	50,645
YTD		2,347	48,247	2,521	5,601	3,317,240	2,580,846	1,860,845	15,219	242,188	546,169	1,527,837

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>

Two-Week Summary of Passage Indices

COMBINED SOCKEYE												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
05/30/2003	*	---	---	0	---	2,830	0	7	62	---	11,984	6,999
05/31/2003	*	---	---	---	---	1,837	968	519	32	15,831	11,472	11,845
06/01/2003	*	---	---	---	---	1,341	1,838	551	44	---	15,192	7,493
06/02/2003	*	---	---	0	---	1,142	1,569	516	39	7,896	20,949	10,704
06/03/2003	*	---	0	0	---	876	570	153	65	---	12,536	21,415
06/04/2003		---	0	0	---	1,222	0	481	38	7,626	8,797	15,059
06/05/2003	*	---	0	0	---	665	0	181	68	---	5,507	10,740
06/06/2003	*	---	0	0	---	334	407	77	66	6,898	4,540	9,404
06/07/2003	*	---	0	---	---	264	119	195	81	---	4,970	9,531
06/08/2003	*	---	0	---	---	194	0	170	27	3,201	4,221	12,374
06/09/2003	*	---	0	---	---	66	0	139	32	---	2,362	10,633
06/10/2003	*	---	0	---	---	70	253	92	20	6,639	2,440	8,043
06/11/2003	*	---	0	---	---	0	0	177	11	---	2,582	7,931
06/12/2003	*	---	0	---	---	65	45	128	2	3,729	3,226	12,199
Total:		0	0	0	0	10,906	5,769	3,386	587	51,820	110,778	154,370
# Days:		0	10	6	0	14	14	14	14	7	14	14
Average:		0	0	0	0	779	412	242	42	7,403	7,913	11,026
YTD		1	0	0	11	16,037	7,988	4,273	9,929	820,891	712,548	1,213,695

* See sampling comments <http://www.fpc.org/currentDaily/smpcomments.htm>

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.

Cumulative Adult Passage at Mainstem Dams Through: 06/12

DAM	Spring Chinook						Summer Chinook						Fall Chinook					
	2003		2002		10-Yr Avg.		2003		2002		10-Yr Avg.		2003		2002		10-Yr Avg.	
	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	192,010	14,258	268,813	6,477	122,177	6,086	25,186	2,459	26,232	1,152	7,633	754	0	0	0	0	0	0
TDA	131,207	11,522	181,176	3,870	80,975	4,136	18,566	1,568	17,320	640	4,983	465	0	0	0	0	0	0
JDA	101,436	10,206	139,887	2,403	67,822	3,122	11,307	904	11,479	419	3,432	246	0	0	0	0	0	0
MCN	95,550	11,123	129,357	3,872	62,536	3,162	5,788	808	6,349	323	1,995	179	0	0	0	0	0	0
IHR	78,170	8,018	85,207	1,826	38,964	1,925	1,329	151	1,986	111	455	36	0	0	0	0	0	0
LMN	69,370	7,081	74,388	1,461	37,642	1,869	0	0	0	0	0	0	0	0	0	0	0	0
LGS	66,734	6,747	72,580	1,557	35,896	1,928	0	0	0	0	0	0	0	0	0	0	0	0
LWG	64,245	7,371	68,311	1,766	33,788	1,845	0	0	0	0	0	0	0	0	0	0	0	0
PRD	17,244	638	33,805	193	15,373	312	0	0	0	0	0	0	0	0	0	0	0	0
RIS	16,058	701	23,219	797	11,071	492	0	0	0	0	0	0	0	0	0	0	0	0
RRH	4,357	412	9,426	134	3,809	111	0	0	0	0	0	0	0	0	0	0	0	0
WEL	1,774	113	6,238	20	2,040	107	0	0	0	0	0	0	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2003		2002		10-Yr Avg.		2003	2002	10-Yr Avg.	2003	2002	10-Yr Avg.	Wild 2003
	Adult	Jack	Adult	Jack	Adult	Jack							
BON	0	0	0	0	0	0	888	249	1,257	5,752	9,029	6,266	1,491
TDA	0	0	0	0	0	0	603	118	871	1,550	3,344	1,940	610
JDA	0	0	0	0	0	0	511	149	611	1,953	8,858	4,143	885
MCN	0	0	0	0	0	0	170	11	278	1,699	5,169	2,471	857
IHR	0	0	0	0	0	0	0	0	0	1,678	4,681	2,386	795
LMN	0	0	0	0	0	0	0	0	0	1,943	5,096	2,434	1,160
LGS	0	0	0	0	0	0	3	0	0	2,142	6,191	1,869	1,330
LWG	0	0	0	0	0	0	1	0	0	15,822	12,489	5,532	3,729
PRD	0	0	0	0	0	0	4	2	52	16	47	10	0
RIS	0	0	1	0	0	0	13	1	2	37	78	40	30
RRH	0	0	13	0	0	0	0	2	1	48	175	55	35
WEL	0	0	0	0	0	0	0	0	0	21	71	12	13

BON, PRD, RIS, RRH, and WEL are through 06/11.

LGR is missing data for 3/6. IHR is missing 5/16. LGS has duplicate count on 6/10 and 6/11.

**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: 6/13/03

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

05/31/03 TO 06/13/03

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	339,870	26,835	19,714	6,086	131,453	523,958
	Sum of NumberBarged	298,813	18,766	19,682	6,203	124,781	468,245
	Sum of NumberBypassed	2	6,663	0	0	6,064	12,729
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	5,662	555	337	83	736	7,373
LGS	Sum of NumberCollected	157,505	267,695	29,251	3,680	192,613	650,744
	Sum of NumberBarged	147,379	230,094	28,669	3,622	189,292	599,056
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	3,367	1,641	249	25	1,760	7,042
LMN	Sum of NumberCollected	96,747	36,726	7,240	2,452	172,607	315,772
	Sum of NumberBarged	81,947	35,917	7,035	2,351	171,460	298,710
	Sum of NumberBypassed	0	287	0	0	170	457
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	89	224	6	1	243	563
MCN	Sum of NumberCollected	243,827	53,406	35,670	29,372	24,382	386,657
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	243,391	53,161	35,599	29,264	24,321	385,736
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	436	245	71	108	61	921
Total Sum of NumberCollected		837,949	384,662	91,875	41,590	521,055	1,877,131
Total Sum of NumberBarged		528,139	284,777	55,386	12,176	485,533	1,366,011
Total Sum of NumberBypassed		243,393	60,111	35,599	29,264	30,555	398,922
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of TotalProjectMortalities		9,554	2,665	663	217	2,800	15,899

YTD Transportation Summary

TO: 06/13/03

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	357,421	2,569,758	79,472	9,463	2,303,036	5,319,150
	Sum of NumberBarged	315,446	2,462,962	79,209	9,470	2,232,938	5,100,025
	Sum of NumberBypassed	2	45,887	0	0	53,118	99,007
	Sum of NumberTrucked	816	54,208	40	78	15,402	70,544
	Sum of TotalProjectMortalities	5,764	5,850	528	115	1,707	13,964
LGS	Sum of NumberCollected	158,367	1,823,300	82,848	5,314	1,935,999	4,005,828
	Sum of NumberBarged	148,228	1,733,434	82,183	5,251	1,930,776	3,899,872
	Sum of NumberBypassed	0	22	0	0	3	25
	Sum of NumberTrucked	5	52,601	0	0	850	53,456
	Sum of TotalProjectMortalities	3,375	3,222	332	30	2,809	9,768
LMN	Sum of NumberCollected	97,507	459,585	25,060	3,116	1,226,446	1,811,714
	Sum of NumberBarged	82,646	436,305	24,166	2,972	1,146,886	1,692,975
	Sum of NumberBypassed	0	6,860	681	0	75,933	83,474
	Sum of NumberTrucked	60	15,149	0	40	1,637	16,886
	Sum of TotalProjectMortalities	90	973	14	4	1,256	2,337
MCN	Sum of NumberCollected	315,062	1,025,224	54,877	528,406	152,412	2,075,981
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	314,584	1,024,281	54,804	528,074	152,181	2,073,924
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	478	850	73	336	188	1,925
Total Sum of NumberCollected		928,357	5,877,867	242,257	546,299	5,617,893	13,212,673
Total Sum of NumberBarged		546,320	4,632,701	185,558	17,693	5,310,600	10,692,872
Total Sum of NumberBypassed		314,586	1,077,050	55,485	528,074	281,235	2,256,430
Total Sum of NumberTrucked		881	121,958	40	118	17,889	140,886
Total Sum of TotalProjectMortalities		9,707	10,895	947	485	5,960	27,994

