



Fish Passage Center

Weekly Report #03 - 6

April 25, 2003

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Summary of Events:

Water Supply: Most Columbia Basin watersheds have continued to receive average precipitation through the 21st of April (Table 1). For the water year (October 1, 2002 to April 21, 2003), precipitation in most basins has been near average, with the Central Washington and Clearwater locations receiving the highest yearly totals at 117% and 109% of average, respectively.

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

Location	April 1-21, 2003		Cumulative October, 1 2002 to April 21, 2003	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	1.23	107	13.87	90
SNAKE RIVER ABOVE ICE HARBOR	1.04	102	10.71	95
Columbia Above The Dalles	1.18	103	14.46	94
Kootenai	1.23	100	13.43	85
Clark Fork	0.98	113	9.67	98
Flathead	1.13	102	11.72	88
Pend Oreille/Spokane	1.61	102	21.73	100
Central Washington	0.63	140	7.42	117
Snake River Plain	0.76	105	4.71	69
Clearwater	1.36	73	22.33	109
SW Washington Cascades/Cowlitz	3.79	101	51.17	89
Willamette Valley	4.69	138	46.33	95

Table 2 displays the March Final, April Final, and April Mid-Month 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 April Forecasts; the Clearwater Basin has increased 20%.

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

Location	March Final		April Final		April Mid-Month	
	% 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)	70	74900	79	85300	81	87000
Grand Coulee (Jan-July)	74	46300	84	52900	86	54300
Libby Res. Inflow, MT (Jan-July)	70	4440	79	4960	82	5150
Hungry Horse Res. Inflow, MT (Jan-July)	66	1470	81	1800	82	1830
Lower Granite Res. Inflow (Apr-July)	68	14700	79	17100	79	17000
Brownlee Res. Inflow (Apr-July)	49	3100	53	3370	54	3430
Dworshak Res. Inflow (Apr-July)	70	1860	90	2390	89	2340

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 April 24, 2003 has been 69.8 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 April 24, 2003 has been 195.1 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 April 24, 2003 has been 118.5 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. On the 24th of April, daily average flows at Priest Rapids were 143.2 Kcfs.

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 21st to April 24th.

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 21st to April 24th.

Date	Daily Average Flow (Kcfs)	Daily Flow Fluctuation (Kcfs)	Flow Band According to 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

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

Table 4 displays the April 30th Flood Control Targets along with actual reservoir elevations recorded on April 24th, 2003 for Libby, Hungry Horse, Grand Coulee, Brownlee, and Dworshak.

Table 4. April Flood Control Targets along with actual reservoir elevations recorded on April 24, 2003 for Libby, Hungry Horse, Grand Coulee, Brownlee, and Dworshak.

Reservoir	Actual Elevation April 24 th , 2003	April 30 th , 2003 Flood Control Target
Libby	2407.7	2449.8
Hungry Horse	3520.4	3537.3
Grand Coulee	1279.6	1283.3
Brownlee	2068.5	2077.0
Dworshak	1570.8	1541.9

The Libby Reservoir is currently at an elevation of 2407.7 feet, 42.1 feet below its April 30th Flood Control Target (Table 4). Libby has been operating to a minimum discharge of 4.0 Kcfs; inflows to Libby have increased over the last week from 6.8 Kcfs (4-18-03) to 13.6 Kcfs (4-24-03), resulting in approximately 1.7 feet of reservoir refill.

The Hungry Horse Reservoir is currently at an elevation of 3520.4 feet, 16.9 feet below its April 30th Flood Control Target (Table 4). Inflows to Hungry Horse have increased over the last week from 4.3 Kcfs (4-18-03) to 10.1 Kcfs (4-24-03). Hungry Horse continues to operate to meet the Columbia Falls Minimum discharge, which is currently 3,372 cfs, and has refilled four feet in the last week.

The Dworshak reservoir is currently at an elevation of 1570.8 feet, 28.9 feet above its end of April Flood control Target. Dworshak has been releasing approximately 15.6 kcfs of water (9.5 Kcfs through the powerhouse and the rest spill).

The Grand Coulee Reservoir ended April 24th at an elevation of 1279.6 feet, 3.7 feet below its April 30th flood control elevation.

The Brownlee Reservoir was at an elevation of 2068.5 on April 24th, 8.5 feet below its April 30th Flood Control Target (Table 4).

The USBR reservoir systems along the Boise, Payette, and Upper Snake Basins are currently 57% (+2% from last week), 69% (+1% from last week), and 61% (+1% from last week) of capacity.

Spill: Dworshak Dam is at full powerhouse and is spilling to the 110% TDG gas cap. Spill at Lower Granite, Little Goose, Lower Monumental and Ice Harbor dams over the past week averaged 37%, 30%, 27% and 46% of average daily flow, respectively. The relative survival of juvenile salmonids under spill for operation of the Removable Spillway Weir is being tested against survival under operations of spill to the gas cap at Lower Granite Dam. Spill at Lower Monumental Dam has been decreased to determine if observations observed in the physical models could be verified as impacting juvenile survival. A modified spill schedule is also being tested at Ice Harbor Dam.

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 averaged 40%, 27%, 39%, and 55% of average daily flow, respectively. Spill is presently occurring at all mid Columbia projects.

A few fish have been sampled at McNary and Rock Island dams with rank 1 signs of GBT in their fins. Total dissolved gas levels remain below the gas waiver limits.

Smolt Monitoring: The monitoring sites at Snake River dams recorded large increases in the passage of yearling chinook and steelhead this past week. The tributary traps captured relatively fewer yearling chinook and increasing numbers of steelhead. In the mid-Columbia the collection of yearling chinook continued to increase despite a disruption in trapping at the project due to mechanical repairs. At the Lower Columbia the numbers of yearling chinook and steelhead have increased significantly this past week.

The White Bird Trap collected an average of 180 yearling chinook per day this week compared to 1,200 per day last week. Steelhead numbers doubled this week, with the average daily collection this week at 58 compared to 29 per day last week. At the Imnaha Trap the average daily catch of yearling chinook this week was 609 compared to 1,147 last week. The numbers of steelhead increased rapidly this week corresponding with the recent releases of over 200,000 hatchery fish in Little and Big Sheep basins this past week. The average daily collection was 1,213 per day this week versus 580 per day last week. Numbers of yearling chinook captured at the Grande Ronde trap decreased again this past week with a daily average of 167 compared to 196 last week. At the Lewiston Trap the collection of yearling chinook was down to 28 fish per day average, compared to 93 last week, while steelhead collection increased to 135 this week compared to 104 per day last 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 59,500 this week compared to 20,800 last week while the steelhead

average daily passage index increased from 9,200 last week to 30,400 this week. Small numbers of sockeye, coho and subyearling chinook were also captured this past week. Little Goose and Lower Monumental dams both saw large increases in yearling chinook and steelhead indices. At Little Goose the index for yearling chinook averaged 19,800 this week compared to 4,800 last week, while at Lower Monumental the index averaged 8,600 this week compared to 7,000 last. The index for steelhead at Little Goose averaged approximately 9,900 compared to 2,300 last week and at Lower Monumental the index was up to 6,900 compared to 1,360 last week.

Rock Island Dam has reported a relative increase in yearling chinook collection this week with an average collection of 200 versus 110 last week. Sockeye collection was also up this week averaging 179 this week compared to 75 last week. Steelhead, coho and subyearling chinook have been collected in very low numbers. The project continues to have problems with the smolt trap and may have to dewater it again this week to determine the cause of high mortality in collected fish.

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 5,300 last week to 11,800 this week. Steelhead indices increased from 850 last week to 3,300 this week. The daily average index for subyearling chinook dropped to 800 per day this week compared to near 1,200 last week. At John Day Dam the average daily index for yearling chinook increased rapidly to 6,200 this week compared to 2,100 last week. Steelhead indices were also up, with an average of 1,360 this week versus 750 last week. Small numbers of subyearling chinook, sockeye, and coho smolts have been reported this past week. At Bonneville Dam, the average daily index for yearling chinook was at 69,500 this week compared to 9,300 last week. The peak index of 112,000 on April 20th, likely marks the passage of 1.7 million yearling chinook released from Carson NFH starting on April 16. The steelhead index averaged 2,740 this week compared to 930 last week. The indices for coho were up again this week with an average

index of 9,100 compared to 1,200 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. Low numbers of sockeye were also reported in the sample this past week.

Hatchery Releases - The preliminary hatchery release schedules for the three Columbia River Basin Zones are updated daily or weekly throughout the migration season. The FPC hatchery release numbers can be obtained from the FPC website. Approximately 28.6 million juvenile salmonids were released or releases were initiated during the past two weeks, with 17.6 million fish scheduled for release in the upcoming two weeks.

Snake River - About 27.9 million smolts will be released from State, Federal, and Tribal hatcheries and acclimation ponds during the 2003 migration year. Basically, yearling chinook releases scheduled for the Snake River basin should be in-river and migrating to the ocean. To date, about 12.5 million yearling spring and summer chinook have been released into the Salmon River basin, the Clearwater River basin, from acclimation ponds in the Grande Ronde and Imnaha River basins, into the Tucannon River from the Curl Lake acclimation pond, and the main stem Snake River below Hells Canyon Dam. Another 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, about 140,000 sockeye were released in the upper Salmon R basin lakes. About 550,000 yearling coho salmon were released in early March into Lapwai Creek and Potlatch River with another 700,000 to be released in the Clearwater River basin.

Releases of juvenile steelhead (9.7 million) are ongoing from most hatcheries with the majority to be planted by mid-May. Releases will occur throughout the Snake, Salmon, Clearwater, Imnaha, Grande Ronde, and Tucannon River basins.

Mid-Columbia River - About 22.2 million yearling and subyearling salmon species will be released in the Mid-Columbia during the 2003

migration year. Volitional release of yearling spring chinook are on-going from the acclimation ponds in the Yakima River basin with greater than 80% of the fish already exited from the ponds and migrating downstream. Releases of spring yearling chinook were completed at Federal hatcheries this week or the previous week (Leavenworth, Entiat, and Winthrop) with additional spring chinook released from acclimation ponds on the Twisp and Chewuch rivers. Most yearling spring chinook should be in-river from the Mid-Columbia.

Yearling summer chinook scheduled for release from Wells and Eastbank Complex hatcheries should be mostly completed during the next two weeks. Some volitional releases have begun (Wells H) with the Methow and Wenatchee rivers scheduled for releases during the next two weeks. Subyearling fall and summer chinook will be released later in the season, normally late May or 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 R basin this year. About 1.9 million coho are scheduled for release in this Zone. The yearling coho are normally released from early to mid-April through mid-May. A portion of these fish has been released.

Approximately 1.3 million juvenile steelhead will be released from mid-April through early May. These releases are just beginning from the State Hatcheries this week. Ringold Hatchery releases its steelhead volitionally (began mid-April) with the final fish pushed out by the end of April.

Lower Columbia River - The Lower Columbia River Zone is scheduled to release about 37 million salmon and steelhead for the 2003 migration. The majority of fish released in this Reach is comprised of subyearling fall chinook, many from Spring Creek NFH. About 7.6 million subyearling fall chinook were released on March 8 with another 4.1 million released on April 10. Release of yearling spring chinook from State, Tribal and Federal hatcheries is nearing completion 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 season. Winter and summer steelhead are scheduled for release into the Klickitat, possibly Little White Salmon (Drano L), Big White Salmon, Umatilla, Deschutes, and Hood rivers this year. Most releases will be completed by first week in May.

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 2,362 to 6,358. Through April 24, the cumulative count of adult spring chinook was 111,851, about 1.7 times and 1.9 times greater than the respective 2002 and 10-year average counts. Counts of adult spring chinook at The Dalles ranged from 2,329 to 3,911 with the average passage for the week of 3,035 per day, about 1,000 less per day than the previous week. The cumulative count was 69,944, about 62.5% of the Bonneville count through April 24. Upstream at McNary Dam, about 45,000 were counted past the project through April 24 with about 32,200 counted into the Snake River (missing 4/23 count at Ice Harbor). At Priest Rapids Dam, 6,524 adult spring chinook were tallied through April 24. About 350 adult chinook were counted into the Yakima River (Prosser Dam count) through April 18.

About 15,500 adult summer steelhead have been counted at Lower Granite Dam to date, and this total exceeded the 2002 and 10-year average for the spring migration. These steelhead that over-wintered below Lower Granite or other dams should be completing migration by the end of May. Daily counts of steelhead averaged near 50/day for the week and should be winding down soon.

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

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
04/11/03	89.3	0.0	92.8	0.0	96.8	0.0	96.1	0.0	101.1	0.0	108.6	0.0	113.1	0.0
04/12/03	83.0	0.0	80.8	0.0	84.3	6.3	80.8	0.0	87.2	0.0	91.3	0.0	91.0	0.0
04/13/03	50.4	0.0	57.3	0.0	67.7	5.1	69.0	0.0	71.7	0.0	84.2	0.0	84.9	0.0
04/14/03	100.6	0.0	100.8	0.0	101.2	6.9	95.3	0.0	100.4	0.0	94.9	0.0	97.7	0.0
04/15/03	113.0	0.0	116.4	0.0	115.9	8.9	112.2	0.0	119.2	0.0	113.7	0.0	107.1	0.0
04/16/03	126.1	0.0	122.9	0.0	127.0	7.8	127.1	0.0	133.3	0.0	137.0	0.0	134.0	0.0
04/17/03	109.9	0.0	112.2	0.0	120.5	9.1	122.4	0.0	129.7	24.8	143.9	0.0	148.3	0.0
04/18/03	105.2	0.0	106.7	0.0	109.8	7.9	105.8	0.0	110.3	21.8	107.8	0.0	112.6	0.0
04/19/03	110.6	0.0	106.6	0.0	108.7	7.8	107.1	0.0	113.1	21.0	121.0	0.0	117.6	0.0
04/20/03	65.3	0.0	66.4	0.0	68.7	5.2	67.0	11.6	71.9	16.0	90.0	0.0	98.9	0.0
04/21/03	140.7	0.0	142.7	0.0	145.6	8.5	141.5	17.1	143.8	22.0	126.2	11.5	114.6	0.0
04/22/03	115.5	0.0	120.5	0.0	133.9	8.9	135.4	18.6	142.5	22.9	157.2	63.0	158.4	15.4
04/23/03	136.5	0.0	136.5	0.0	135.9	8.6	135.1	20.0	139.2	26.3	147.0	59.7	149.1	90.3
04/24/03	134.6	0.0	138.1	0.0	144.1	9.3	140.9	21.0	144.6	27.2	145.3	58.8	143.2	86.8

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

Date	Dworshak		Hells Brownlee Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
04/11/03	15.9	6.3	14.9	17.6	64.6	19.8	62.2	21.0	60.3	31.4	64.0	49.8
04/12/03	15.9	6.4	14.3	14.6	68.5	20.2	67.1	20.9	66.2	30.1	72.3	55.7
04/13/03	16.0	6.3	16.0	11.2	73.9	20.2	74.0	20.9	73.2	28.6	77.1	52.7
04/14/03	16.0	6.2	15.9	15.6	82.3	25.5	79.6	20.0	77.8	27.4	81.7	56.4
04/15/03	16.1	6.3	16.4	18.5	82.2	20.5	82.8	18.8	83.7	29.1	87.1	62.5
04/16/03	16.1	6.3	15.7	18.4	75.4	15.0	75.8	18.5	74.5	29.4	80.7	53.7
04/17/03	15.8	6.0	14.6	17.0	73.8	20.3	70.8	18.6	70.6	31.8	76.3	56.0
04/18/03	15.6	5.8	14.4	13.7	70.4	20.3	68.9	18.5	68.1	31.9	72.8	53.9
04/19/03	15.6	5.8	13.9	14.5	65.0	20.0	65.3	18.7	64.0	31.5	69.7	52.1
04/20/03	15.6	5.7	13.2	15.5	63.6	25.4	61.5	18.5	60.3	28.2	65.6	51.5
04/21/03	15.5	5.6	14.1	18.5	65.2	20.5	63.3	17.8	62.8	30.0	66.0	51.1
04/22/03	15.6	5.8	13.7	19.7	67.6	15.3	69.1	17.6	69.5	31.0	76.5	60.9
04/23/03	15.7	5.8	15.6	18.9	74.3	20.4	80.3	17.6	71.4	31.9	84.7	54.5
04/24/03	15.6	5.8	---	---	80.7	25.5	---	---	80.1	33.2	---	---

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

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
04/11/03	174.7	0.0	178.0	0.0	183.9	0.0	190.9	2.1	63.2	119.0
04/12/03	174.3	0.0	175.2	0.0	178.9	0.0	186.8	2.0	53.2	124.9
04/13/03	174.1	0.0	179.3	0.0	179.9	0.0	178.9	2.1	48.0	122.0
04/14/03	177.7	33.9	178.8	23.6	182.3	21.5	197.8	69.9	12.0	109.2
04/15/03	189.1	68.1	194.3	46.2	197.7	77.1	209.1	95.4	8.9	98.0
04/16/03	193.3	68.5	194.2	46.8	190.4	72.8	224.0	139.7	0.0	77.6
04/17/03	222.3	83.1	218.2	49.8	218.4	85.8	216.1	149.6	0.0	59.8
04/18/03	216.0	75.9	229.9	56.5	232.1	90.9	253.0	148.0	0.0	98.0
04/19/03	201.9	80.3	210.2	56.2	208.8	82.5	222.9	147.2	0.1	69.0
04/20/03	188.4	73.8	184.7	55.8	184.9	73.8	207.6	104.0	10.7	86.2
04/21/03	173.5	59.9	172.2	46.4	177.3	69.4	209.7	103.4	17.8	81.9
04/22/03	228.1	102.7	222.9	54.5	216.3	84.6	230.6	142.2	3.8	78.0
04/23/03	231.9	101.1	239.3	62.3	239.5	93.5	248.8	142.4	21.3	78.4
04/24/03	201.8	98.3	212.2	66.3	211.9	84.6	238.1	101.5	33.0	96.9

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													
	04/15/03	Yearling Chinook	41	0	0	0.00%	0.00%	0	0	0	0		
	04/15/03	Steelhead	59	0	0	0.00%	0.00%	0	0	0	0		
	04/22/03	Yearling Chinook	79	0	0	0.00%	0.00%	0	0	0	0		
	04/22/03	Steelhead	21	0	0	0.00%	0.00%	0	0	0	0		
Little Goose Dam													
	04/16/03	Yearling Chinook	75	0	0	0.00%	0.00%	0	0	0	0		
	04/16/03	Steelhead	25	0	0	0.00%	0.00%	0	0	0	0		
	04/23/03	Yearling Chinook	71	0	0	0.00%	0.00%	0	0	0	0		
	04/23/03	Steelhead	29	0	0	0.00%	0.00%	0	0	0	0		
Lower Monumental Dam													
	04/21/03	Yearling Chinook	43	0	0	0.00%	0.00%	0	0	0	0		
	04/21/03	Steelhead	58	1	1	1.72%	0.00%	1	0	0	0		
McNary Dam													
	04/18/03	Yearling Chinook	78	0	0	0.00%	0.00%	0	0	0	0		
	04/18/03	Steelhead	22	0	0	0.00%	0.00%	0	0	0	0		
	04/20/03	Yearling Chinook	76	0	0	0.00%	0.00%	0	0	0	0		
	04/20/03	Steelhead	24	0	0	0.00%	0.00%	0	0	0	0		
	04/24/03	Yearling Chinook	76	2	2	2.63%	0.00%	2	0	0	0		
	04/24/03	Steelhead	24	1	1	4.16%	0.00%	1	0	0	0		
Bonneville Dam													
	04/21/03	Yearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0		
Rock Island Dam													
	04/17/03	Yearling Chinook	94	3	3	3.19%	0.00%	3	0	0	0		
	04/17/03	Steelhead	6	0	0	0.00%	0.00%	0	0	0	0		
	04/21/03	Yearling Chinook	47	1	1	2.12%	0.00%	1	0	0	0		
	04/21/03	Steelhead	6	3	3	50.00%	0.00%	3	0	0	0		

NOTE: Incomplete sample at Rock Island Dam on 4/21/03, sample size target is 100 fish.

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	<u>Hungry H. Dnst</u>			<u>Boundary</u>			<u>Grand Coulee</u>			<u>Grand C. Tlwr</u>			<u>Chief Joseph</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>		
	<u>Avg</u>	<u>Avg</u>		<u>High</u>	<u>Avg</u>		<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>		<u>High</u>	<u>Avg</u>		<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>
4/11	100	101	101	24	105	106	113	24	105	105	106	24	103	104	107	24	---	---	---	0
4/12	100	101	101	24	107	110	113	24	106	107	108	24	104	104	106	24	---	---	---	0
4/13	100	101	101	24	106	108	113	24	105	106	106	24	104	105	107	24	---	---	---	0
4/14	100	100	101	24	112	113	114	24	105	105	106	24	103	104	106	24	105	105	105	16
4/15	100	100	101	24	111	116	116	24	105	106	106	24	103	104	105	24	104	104	105	23
4/16	100	100	101	24	116	117	118	24	105	105	105	24	103	104	104	24	104	104	105	23
4/17	101	102	102	23	115	118	120	24	105	106	106	24	104	105	106	24	104	104	105	23
4/18	101	101	102	24	115	117	119	24	104	105	105	24	103	104	105	24	104	104	104	23
4/19	100	100	101	24	114	118	120	24	105	105	107	24	103	104	104	24	103	103	104	23
4/20	100	101	101	24	114	117	120	24	107	107	108	24	105	106	107	24	104	105	106	23
4/21	101	101	102	24	115	119	121	23	109	110	115	24	105	105	107	24	105	106	106	22
4/22	101	102	102	24	117	119	120	21	108	109	110	24	106	106	107	24	106	106	106	23
4/23	101	101	101	24	110	112	113	24	109	109	110	24	105	106	107	24	105	106	106	23
4/24	101	101	102	24	113	117	118	24	109	109	110	24	106	106	107	24	105	106	106	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>	<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>24 h</u>	<u>12 h</u>	<u>#</u>		
	<u>Avg</u>	<u>Avg</u>		<u>High</u>	<u>Avg</u>		<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>		<u>High</u>	<u>Avg</u>		<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>
4/11	104	104	104	23	105	105	105	20	104	105	105	20	105	105	105	21	105	105	106	21
4/12	104	104	104	23	105	105	105	24	106	107	107	24	106	106	106	24	106	106	106	24
4/13	104	105	105	23	105	105	105	24	106	106	107	24	106	106	106	24	106	106	106	24
4/14	104	105	107	23	105	105	105	24	106	107	107	24	106	106	106	24	106	106	107	24
4/15	104	105	106	23	105	105	105	24	107	107	108	24	106	106	107	24	107	107	107	24
4/16	104	104	106	23	105	105	105	23	107	107	108	23	106	107	107	23	106	107	107	23
4/17	104	105	106	23	105	105	106	24	107	107	108	24	107	107	108	24	107	108	108	23
4/18	103	103	103	23	104	104	104	24	106	106	107	24	106	107	107	24	107	107	107	24
4/19	102	103	103	23	104	104	105	23	106	107	107	23	106	106	106	23	106	106	106	22
4/20	104	105	106	23	105	106	106	24	106	107	108	24	107	107	108	23	108	109	110	23
4/21	105	105	105	22	106	106	107	24	108	108	109	24	108	108	109	24	109	110	110	24
4/22	105	106	107	23	106	107	112	23	108	108	109	23	108	108	108	23	109	109	110	23
4/23	105	105	107	23	106	106	107	24	108	108	109	24	108	108	108	23	109	109	110	23
4/24	106	106	107	23	106	106	106	23	108	108	108	23	107	108	108	24	109	109	110	24

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	<u>Rock Island</u>			<u>Rock I. Tlwr</u>			<u>Wanapum</u>			<u>Wanapum Tlwr</u>			<u>Priest Rapids</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>		
	<u>Avg</u>	<u>Avg</u>		<u>High</u>	<u>Avg</u>		<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>		<u>High</u>	<u>Avg</u>		<u>Avg</u>	<u>High</u>		<u>Avg</u>	<u>Avg</u>
4/11	105	105	105	21	103	105	106	20	104	105	106	24	105	106	106	24	105	105	105	24
4/12	105	106	106	24	106	106	106	24	105	106	106	24	107	107	108	24	106	106	106	24
4/13	106	106	106	24	106	106	106	24	105	106	106	24	107	107	107	24	106	106	106	24
4/14	105	106	106	24	106	106	106	24	105	105	105	24	106	106	106	24	105	106	106	24
4/15	106	106	107	24	106	107	107	24	105	105	106	24	105	105	106	24	105	105	105	24
4/16	106	106	106	24	106	106	107	24	105	105	106	24	105	106	106	24	105	105	105	24
4/17	107	107	107	24	115	118	122	23	104	105	105	24	106	106	107	24	105	105	105	24
4/18	106	106	107	24	114	117	120	24	104	105	106	24	105	105	106	24	104	105	105	24
4/19	106	106	106	23	113	114	118	22	104	105	105	24	106	108	109	24	104	105	105	24
4/20	106	107	108	23	114	115	117	22	107	109	110	24	110	111	112	24	105	105	106	24
4/21	109	109	110	24	114	116	117	24	110	111	113	24	112	112	113	18	106	107	109	24
4/22	109	109	111	23	115	116	117	23	107	107	108	18	117	117	120	20	109	110	110	24
4/23	109	109	110	23	116	120	125	23	107	108	109	24	117	118	120	24	111	112	114	24
4/24	109	109	110	24	116	118	125	23	---	---	---	0	---	---	---	0	---	---	---	0

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

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

Date	<u>Priest R. Dnst</u>			<u>Pasco</u>			<u>Dworshak</u>			<u>Clrwtr-Peck</u>			<u>Anatone</u>			#	hr			
	<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>
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg					Avg	Avg
4/11	106	106	106	24	106	106	107	24	108	109	109	24	103	104	105	24	101	102	103	24
4/12	107	108	108	24	107	107	108	24	109	109	109	24	103	104	104	24	102	102	103	24
4/13	107	107	108	24	107	107	108	24	109	109	109	24	103	103	104	24	101	102	102	24
4/14	106	107	107	24	105	106	106	24	109	109	109	24	103	103	104	24	101	102	102	24
4/15	106	106	106	24	105	106	106	24	109	110	110	24	103	104	104	24	101	102	102	24
4/16	105	106	106	24	105	106	107	24	109	109	110	24	103	104	104	24	101	102	102	24
4/17	106	106	106	24	105	106	106	24	109	109	110	24	104	104	104	24	102	102	102	24
4/18	104	105	105	24	104	105	105	24	108	108	109	24	103	103	104	24	100	101	102	24
4/19	104	105	105	24	105	106	106	24	108	108	109	24	104	105	105	24	100	101	103	24
4/20	106	107	108	24	106	107	107	24	108	108	109	24	104	105	106	24	102	103	104	24
4/21	108	109	110	24	107	108	109	24	109	109	110	24	104	105	106	24	102	103	103	23
4/22	109	109	110	24	108	109	110	24	109	109	110	24	104	104	104	24	101	102	102	24
4/23	110	111	112	24	109	111	114	24	109	109	110	24	103	104	104	24	101	102	103	24
4/24	---	---	---	0	113	113	114	24	109	109	110	24	103	104	104	24	101	101	102	24

Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clrwtr-Lewiston</u>			<u>Lower Granite</u>			<u>L. Granite Tlwr</u>			<u>Little Goose</u>			<u>L. Goose Tlwr</u>			#	hr			
	<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>
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg					Avg	Avg
4/11	102	103	103	24	105	105	107	24	111	118	119	24	109	110	111	24	114	117	117	24
4/12	102	103	104	24	104	105	105	24	112	119	119	24	111	111	112	24	114	117	118	24
4/13	102	103	103	24	104	104	105	24	112	119	119	24	112	113	113	24	115	117	118	24
4/14	102	103	104	24	102	103	103	24	112	114	119	24	111	111	112	24	113	116	118	24
4/15	102	103	104	24	102	102	102	24	109	109	110	24	109	109	110	24	112	115	116	24
4/16	102	103	104	24	101	102	102	24	107	114	119	24	108	110	111	24	112	116	116	24
4/17	103	104	105	24	102	102	102	24	110	118	119	24	109	109	110	24	112	116	117	24
4/18	102	103	104	24	102	102	102	24	110	118	119	24	106	107	108	24	111	115	116	24
4/19	103	104	106	24	103	103	104	24	110	118	119	24	106	107	108	24	110	115	116	24
4/20	103	105	106	24	103	104	105	24	113	115	119	24	108	109	110	24	112	116	116	24
4/21	103	105	106	24	104	104	104	24	110	111	111	24	109	109	110	24	113	116	117	24
4/22	103	103	104	24	104	105	105	24	109	114	119	24	110	110	111	24	113	116	116	24
4/23	103	104	105	24	105	106	107	24	112	119	119	24	111	111	111	14	113	114	116	14
4/24	102	103	104	24	103	104	104	24	112	115	119	24	110	110	111	16	112	113	116	16

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

Date	<u>Lower Mon.</u>			<u>L. Mon. Tlwr</u>			<u>Ice Harbor</u>			<u>Ice Harbor Tlwr</u>			<u>McNary-Oregon</u>			#	hr			
	<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>
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg					Avg	Avg
4/11	114	115	115	24	118	118	119	24	113	114	116	24	113	114	114	24	105	107	110	24
4/12	114	114	116	24	118	118	120	24	116	117	119	24	114	114	115	24	106	107	110	24
4/13	114	115	116	24	118	118	119	24	115	116	117	24	114	114	115	24	109	110	113	24
4/14	114	115	116	24	117	118	118	24	114	114	115	24	114	114	115	24	107	108	108	24
4/15	113	113	114	24	117	118	119	24	112	112	113	24	114	115	116	24	107	107	108	24
4/16	112	113	115	24	117	118	119	24	112	113	113	24	114	114	116	24	108	109	113	24
4/17	112	113	114	24	117	118	119	24	113	113	114	24	114	115	117	24	107	108	109	24
4/18	111	112	115	24	117	118	119	24	113	113	113	24	113	114	116	24	107	108	109	24
4/19	110	111	112	24	117	118	118	24	113	115	117	24	113	114	114	24	107	109	112	24
4/20	111	112	113	24	117	119	120	24	114	115	116	24	113	114	114	24	107	108	109	24
4/21	112	113	115	24	117	119	120	24	116	116	116	24	113	114	115	24	109	110	113	24
4/22	112	113	114	24	118	119	120	24	115	116	116	24	114	115	117	24	109	109	110	24
4/23	112	112	113	14	117	117	119	13	114	114	115	14	113	113	114	13	108	109	112	24
4/24	112	112	113	23	117	118	118	23	112	113	114	24	114	114	115	24	107	107	108	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>High</u>		<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>	
4/11	106	107	108	24	104	105	106	24	103	103	104	23	102	103	103	24	105	106	106	23
4/12	109	110	111	24	107	107	108	24	106	107	108	23	104	104	105	24	104	104	104	23
4/13	109	109	110	24	107	107	108	24	105	105	106	23	104	104	105	24	104	104	104	23
4/14	108	108	109	24	109	111	117	24	104	104	104	23	107	111	119	24	103	104	104	23
4/15	107	107	107	24	112	117	118	24	104	104	104	23	110	117	119	24	106	108	111	23
4/16	107	107	108	24	112	117	118	24	104	104	105	23	111	118	119	24	108	110	112	23
4/17	108	108	108	24	114	118	119	24	105	105	105	23	111	118	119	24	108	111	112	23
4/18	106	106	106	24	112	118	120	24	104	104	104	23	111	117	118	24	106	108	109	23
4/19	106	107	109	24	113	120	121	24	105	107	109	23	111	117	118	24	107	110	114	23
4/20	108	109	110	24	113	119	121	24	108	110	112	23	112	117	118	24	109	111	114	23
4/21	109	110	110	23	113	118	122	24	109	109	109	23	113	117	119	24	110	112	114	23
4/22	109	110	110	24	117	119	122	24	108	108	109	23	112	117	118	24	108	109	111	23
4/23	108	108	109	24	116	120	122	24	109	110	111	23	113	118	119	24	109	112	114	23
4/24	108	108	109	24	116	119	120	24	110	110	110	23	113	117	118	24	110	112	113	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>High</u>		<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>	
4/11	105	107	107	24	103	103	104	23	104	104	104	23	104	105	105	24
4/12	104	104	105	24	104	104	105	23	104	105	105	23	105	105	106	24
4/13	104	104	105	24	105	106	106	23	106	106	107	23	104	105	106	24
4/14	105	106	112	24	103	103	104	23	107	109	110	23	105	105	106	24
4/15	114	115	117	24	103	103	103	23	110	112	115	23	107	109	111	24
4/16	115	116	117	24	106	109	110	23	116	117	118	23	109	112	113	24
4/17	115	117	117	24	112	113	113	23	119	119	119	23	114	115	116	24
4/18	114	115	117	24	110	110	111	23	118	119	119	23	114	115	115	24
4/19	115	116	119	24	110	111	111	23	119	119	120	23	114	115	116	24
4/20	116	117	119	24	113	114	115	23	116	117	119	23	116	116	117	24
4/21	116	117	118	24	112	112	113	23	115	117	119	23	113	114	115	24
4/22	115	116	117	24	109	109	110	23	117	118	118	23	112	115	116	24
4/23	116	118	120	24	109	110	111	23	117	118	118	23	113	114	116	24
4/24	116	117	118	24	111	112	112	23	114	116	118	23	113	114	115	24

HATCHERY RELEASE SUMMARY LAST TWO WEEKS

Hatchery Release Summary

From: 4/11/03 to 4/24/03

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Colville Tribe	Winthrop NFH	CH1	SP	2003	45,000	04-14-03	04-18-03	Omak Creek	Okanogan River
Colville Tribe	Winthrop NFH	CH1	SP	2003	100,000	04-14-03	04-18-03	Ellisford Pond	Okanogan River
Colville Tribe Total					145,000				
Idaho Dept. of Fish and Wildlife	Clearwater Hatchery	ST	SU	2003	106,000	04-17-03	04-30-03	Clear Creek	Clearwater River M F
Idaho Dept. of Fish and Wildlife	Clearwater Hatchery	ST	SU	2003	148,000	04-17-03	04-30-03	Redhouse (SFk ClearH20 R)	S Fk Clearwater River
Idaho Dept. of Fish and Wildlife	Clearwater Hatchery	ST	SU	2003	251,700	04-17-03	04-30-03	Red River Acclim Pond	S Fk Clearwater River
Idaho Dept. of Fish and Wildlife	Clearwater Hatchery	ST	SU	2003	263,700	04-17-03	04-30-03	Crooked R Acclim Pond	S Fk Clearwater River
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	28,500	04-24-03	04-24-03	East Fk Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	54,000	04-12-03	04-12-03	Little Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	59,356	04-24-03	04-25-03	Squaw Creek	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	128,035	04-15-03	04-15-03	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	169,747	04-18-03	04-21-03	McNabb/Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	183,634	04-14-03	04-14-03	Hammer Creek	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	202,079	04-23-03	04-23-03	Squaw Creek	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	222,000	04-24-03	04-24-03	East Fk Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	230,308	04-16-03	04-17-03	Shoup Br (Salmon R)	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Niagara Springs	ST	SU	2003	830,000	04-12-03	04-30-03	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	Sawtooth Hatchery	CH1	SP	2003	144,976	04-07-03	04-18-03	Sawtooth Hatchery	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Sawtooth Hatchery	CH1	SP	2003	960,193	04-07-03	04-18-03	Sawtooth Hatchery	Salmon River (ID)
Idaho Dept. of Fish and Wildlife Total					6,312,785				
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2003	24,600	04-17-03	04-30-03	Mill Cr Bridge	S Fk Clearwater River
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2003	25,000	04-17-03	04-30-03	Meadow Creek - CLES	S Fk Clearwater River
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2003	49,500	04-17-03	04-30-03	Lolo Creek	Clearwater River M F
Nez Perce Tribe	Lookingglass Hatchery	CH1	SP	2003	133,170	03-28-03	04-14-03	Lostine Accim Pond	Wallowa River
Nez Perce Tribe	Lyons Ferry Hatchery	CH1	FA	2003	140,383	04-13-03	04-14-03	Pittsburg Landing Acclim Pond	Snake River
Nez Perce Tribe	Lyons Ferry Hatchery	CH1	FA	2003	145,331	04-14-03	04-15-03	Big Canyon (Clearwater R)	Clearwater River M F
Nez Perce Tribe Total					517,984				
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2003	100,000	04-14-03	04-18-03	Big Sheep Creek	Imnaha River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2003	166,000	04-14-03	04-16-03	Big Canyon Acclim.Pd (Grande Ro	Grande Ronde River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2003	330,000	04-11-03	04-15-03	Wallowa Acclim Pond	Wallowa River
Oregon Dept. of Fish and Wildlife	Lookingglass Hatchery	CH1	SP	2003	268,600	04-01-03	04-15-03	Imnaha Acclim Pond	Imnaha 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 Total					1,184,600				
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	Carson NFH	CH1	SP	2003	1,678,000	04-16-03	04-17-03	Carson Hatchery	Wind River
U.S. Fish and Wildlife Service	Dworshak NFH	ST	SU	2003	200,000	04-14-03	04-18-03	Clear Creek	Clearwater River M F
U.S. Fish and Wildlife Service	Dworshak NFH	ST	SU	2003	500,000	04-14-03	04-18-03	Redhouse (SFk ClearH20 R)	S Fk Clearwater River
U.S. Fish and Wildlife Service	Dworshak NFH	ST	SU	2003	1,300,000	04-21-03	04-25-03	Dworshak Hatchery	Clearwater River M F
U.S. Fish and Wildlife Service	Entiat Hatchery	CH1	SP	2003	395,000	04-15-03	04-15-03	Entiat Hatchery	Entiat River
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2003	750,000	04-09-03	04-28-03	Sawtooth Hatchery	Salmon River (ID)
U.S. Fish and Wildlife Service	Leavenworth NFH	CH1	SP	2003	1,290,800	04-21-03	04-21-03	Leavenworth Hatchery	Wenatchee River
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH1	SP	2003	1,050,000	04-17-03	04-17-03	Little White Salmon Hatchery	Little White Salmon River
U.S. Fish and Wildlife Service	Spring Creek NFH	CH0	FA	2003	4,070,365	04-14-03	04-14-03	Spring Creek Hatchery	L Col R (D/s McN Dam)
U.S. Fish and Wildlife Service	Warm Springs NFH	CH1	SP	2003	620,000	03-26-03	04-16-03	Warm Springs Hatchery	Deschutes River
U.S. Fish and Wildlife Service	Willard Hatchery	CO	UN	2003	634,000	04-17-03	04-17-03	Little White Salmon River	Little White Salmon Rive
U.S. Fish and Wildlife Service	Winthrop NFH	CH1	SP	2003	460,000	04-15-03	04-15-03	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	CO	UN	2003	243,000	04-21-03	05-02-03	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	ST	SU	2003	120,000	04-15-03	04-30-03	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service Total					13,311,165				
Umatilla Tribe	Bonneville Hatchery	CH1	FA	2003	240,000	04-11-03	04-18-03	Thornhollow Acclim Pond	Umatilla River
Umatilla Tribe	Cascade Hatchery	CO	UN	2003	750,000	04-01-03	04-15-03	Pendelton Acclim Pond	Umatilla River
Umatilla Tribe	Little White Salmon NFH	CH1	SP	2003	350,000	04-10-03	04-18-03	Imequas Acclim Pond	Umatilla River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2003	24,400	03-28-03	04-14-03	Catherine Cr Acclim Pond	Grande Ronde River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2003	127,200	03-28-03	04-14-03	Grande Ronde Acclim Pond	Grande Ronde River
Umatilla Tribe	Umatilla Hatchery	ST	SU	2003	50,000	04-01-03	04-11-03	Bonifer Acclim Pond	Umatilla River
Umatilla Tribe	Umatilla Hatchery	ST	SU	2003	50,000	04-21-03	04-30-03	Minthorn Acclimation Pond	Umatilla River
Umatilla Tribe	Umatilla Hatchery	ST	SU	2003	50,000	04-21-03	04-30-03	Pendelton Acclim Pond	Umatilla River
Umatilla Tribe Total					1,641,600				
Warm Springs Tribe	Oak Springs Hatchery	ST	SU	2003	39,900	04-03-03	05-01-03	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	Round Butte Hatchery	CH1	SP	2003	40,231	04-07-03	04-22-03	Jones Creek Acclim Pond	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2003	55,978	04-07-03	04-22-03	Blackberry Acclim Pond	Hood River
Warm Springs Tribe Total					190,156				

HATCHERY RELEASE SUMMARY LAST TWO WEEKS (con't)

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	Lyons Ferry Hatchery	ST	SU	2003	31,000	04-14-03	04-18-03	Dayton Acclim Pond	Touchet River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2003	50,000	04-14-03	04-18-03	Curl Lake	Tucannon River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2003	60,000	04-14-03	04-18-03	Lyons Ferry Hatchery	Snake 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	125,000	04-14-03	04-18-03	Walla Walla River	Walla Walla River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2003	135,000	04-14-03	04-18-03	Tucannon River	Tucannon River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2003	200,000	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	262,500	04-14-03	04-25-03	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	WI	2003	20,000	04-15-03	04-15-03	Salmon Creek (WA)	Columbia 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	Tucannon Hatchery	CH1	SP	2003	150,000	03-15-03	04-18-03	Curl Lake	Tucannon River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2003	150,000	03-15-03	04-18-03	Curl Lake	Tucannon River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH1	SU	2003	120,000	04-15-03	05-23-03	Above Rocky Reach Dam	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH1	SU	2003	204,400	04-18-03	04-25-03	Turtle Rock Hatchery	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	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 Total					3,099,590				
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	39,319	03-14-03	05-15-03	Easton Pond	Yakama 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	Prosser Acclim. Pond	CH0	FA	2003	12,000	04-12-03	04-13-03	Yakama River	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					2,017,402				
Grand Total					28,559,727				

HATCHERY RELEASE SUMMARY NEXT TWO WEEKS

Hatchery Release Summary

From: 4/25/03 to 5/8/03

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Idaho Dept. of Fish and Wildlife	Clearwater Hatchery	ST	SU	2003	106,000	04-17-03	04-30-03	Clear Creek	Clearwater River M F
Idaho Dept. of Fish and Wildlife	Clearwater Hatchery	ST	SU	2003	148,000	04-17-03	04-30-03	Redhouse (SFk ClearH20 R)	S Fk Clearwater R
Idaho Dept. of Fish and Wildlife	Clearwater Hatchery	ST	SU	2003	251,700	04-17-03	04-30-03	Red River Acclim Pond	S Fk Clearwater R
Idaho Dept. of Fish and Wildlife	Clearwater Hatchery	ST	SU	2003	263,700	04-17-03	04-30-03	Crooked R Acclim Pond	S Fk Clearwater R
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	30,000	04-25-03	04-25-03	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	59,356	04-24-03	04-25-03	Squaw Creek	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	190,000	04-25-03	04-29-03	Yankee Fk (Salmon R)	Salmon River (ID)
Idaho Dept. of Fish and Wildlife	Magic Valley Hatchery	ST	SU	2003	190,000	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	830,000	04-12-03	04-30-03	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					4,569,313				
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2003	24,600	04-17-03	04-30-03	Mill Cr Bridge	S Fk Clearwater R
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2003	25,000	04-17-03	04-30-03	Meadow Creek - CLES	S Fk Clearwater R
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2003	49,500	04-17-03	04-30-03	Lolo Creek	Clearwater River M F
Nez Perce Tribe	Dworshak NFH	CO	UN	2003	295,000	05-01-03	05-01-03	Clear Creek	Clearwater River M F
Nez Perce Tribe	Hagerman NFH	ST	SU	2003	100,000	04-29-03	05-05-03	American River	S Fk Clearwater R
Nez Perce Tribe Total					494,100				
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2003	3,000	05-03-03	05-04-03	Deer Creek	Grande Ronde River
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	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 Total					399,500				
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				
U.S. Fish and Wildlife Service	Dworshak NFH	ST	SU	2003	1,300,000	04-21-03	04-25-03	Dworshak Hatchery	Clearwater River M F
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2003	750,000	04-09-03	04-28-03	Sawtooth Hatchery	Salmon River (ID)
U.S. Fish and Wildlife Service	Spring Creek NFH	CH0	FA	2003	3,500,000	05-08-03	05-08-03	Spring Creek Hatchery	L Col R (D/s McN Dam)
U.S. Fish and Wildlife Service	Winthrop NFH	CO	UN	2003	243,000	04-21-03	05-02-03	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	ST	SU	2003	120,000	04-15-03	04-30-03	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service Total					5,913,000				
Umatilla Tribe	Umatilla Hatchery	ST	SU	2003	50,000	04-21-03	04-30-03	Minthorn Acclimation Pond	Umatilla River
Umatilla Tribe	Umatilla Hatchery	ST	SU	2003	50,000	04-21-03	04-30-03	Pendelton Acclim Pond	Umatilla River
Umatilla Tribe Total					100,000				
Warm Springs Tribe	Oak Springs Hatchery	ST	SU	2003	39,900	04-03-03	05-01-03	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				
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SP	2003	378,000	04-21-03	04-30-03	Chiwawa Hatchery	Wenatchee R
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2003	25,000	04-30-03	04-30-03	Similkameen Acclim Pd	Okanogan R
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2003	151,208	05-05-03	05-05-03	Wenatchee River	Wenatchee R
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	Eastbank Hatchery	CH1	SU	2003	497,689	05-05-03	05-05-03	Dryden Acclim Pond	Wenatchee R
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	200,000	04-01-03	04-30-03	Cottonwood Acclim Pond	Grande Ronde R
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	262,500	04-14-03	04-25-03	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 R
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	WI	2003	20,000	04-21-03	04-30-03	White Salmon River	White Salmon R
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH1	SU	2003	120,000	04-15-03	05-23-03	Above Rocky Reach Dam	Mid-Columbia R
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	CH1	SU	2003	204,400	04-18-03	04-25-03	Turtle Rock Hatchery	Mid-Columbia R
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2003	16,868	04-30-03	04-30-03	Nason Creek	Wenatchee R
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2003	16,869	04-30-03	04-30-03	Chiwawa Hatchery	Wenatchee R
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2003	112,943	04-30-03	04-30-03	Chiwawa Hatchery	Wenatchee R
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2003	156,430	04-30-03	04-30-03	Nason Creek	Wenatchee R
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 R
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH1	SU	2003	177,300	04-14-03	04-30-03	Wells Hatchery	Mid-Columbia R
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 Total					3,604,640				

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

HATCHERY RELEASE SUMMARY NEXT TWO WEEKS (con't)

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Yakama Tribe	Cascade Hatchery	CO	UN	2003	75,027	04-23-03	05-02-03	Wenatchee River	Wenatchee R
Yakama Tribe	Cascade Hatchery	CO	UN	2003	272,755	04-23-03	05-02-03	Nason Creek	Wenatchee R
Yakama Tribe	Cascade Hatchery	CO	UN	2003	453,098	04-23-03	05-02-03	Icicle Creek	Wenatchee R
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2003	39,319	03-14-03	05-15-03	Easton Pond	Yakama 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 R
Yakama Tribe	Klickitat Hatchery	CH0	SP	2003	300,000	05-06-03	05-07-03	Klickitat River	Klickitat R
Yakama Tribe	Stiles Pond	CO	UN	2003	169,629	04-07-03	05-07-03	Yakama River	Yakama R
Yakama Tribe	Willard Hatchery	CO	UN	2003	37,483	04-23-03	05-02-03	Wenatchee River	Wenatchee R
Yakama Tribe	Willard Hatchery	CO	UN	2003	100,794	04-23-03	05-02-03	Little Wenatchee River	Wenatchee R
Yakama Tribe Total					2,305,402				
Grand Total					17,619,347				

Two-Week Summary of Passage Indices

Date	COMBINED YEARLING CHINOOK										
	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
04/11/2003	493	1,074	146	5	4,128	664	6,918	3	1,354	2,642	5,951
04/12/2003 *	---	1,954	---	---	10,464	1,342	9,887	6	---	1,840	7,790
04/13/2003	---	1,189	---	---	15,909	3,341	4,459	5	4,973	2,560	5,100
04/14/2003 *	1,682	1,223	130	5	36,020	4,550	8,536	4	---	2,808	4,815
04/15/2003 *	1,936	1,072	196	145	20,713	4,167	7,033	2	8,307	2,173	8,486
04/16/2003 *	1,469	770	189	235	18,860	11,159	5,924	137	---	1,478	14,261
04/17/2003	449	744	317	77	39,839	8,963	6,298	647	6,646	1,171	18,612
04/18/2003 *	193	432	264	84	30,962	9,310	6,778	191	---	3,641	48,690
04/19/2003 *	---	943	---	---	37,034	11,153	8,733	224	15,423	4,497	77,547
04/20/2003 *	---	851	---	---	43,732	10,332	7,001	125	---	5,720	111,984
04/21/2003 *	64	614	153	4	40,568	9,761	7,236	69	5,663	6,592	61,443
04/22/2003 *	56	410	112	13	69,019	15,910	8,223	10	---	5,274	51,590
04/23/2003 *	115	608	160	9	95,806	20,212	13,526	---	14,236	6,500	66,845
04/24/2003 *	469	407	148	31	99,732	62,404	9,086	567	---	11,171	68,424
Total:	6,926	12,291	1,815	608	562,786	173,268	109,638	1,990	56,602	58,067	551,538
# Days:	10	14	10	10	14	14	14	13	7	14	14
Average:	693	878	182	61	40,199	12,376	7,831	153	8,086	4,148	39,396
YTD	25,976	31,086	9,987	742	650,967	177,589	143,276	2,038	59,689	70,800	585,122

Date	COMBINED SUBYEARLING CHINOOK										
	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
04/11/2003	0	0	0	1	406	6	21	21	813	66	575
04/12/2003 *	---	0	---	---	115	0	0	4	---	56	584
04/13/2003	---	0	---	---	28	6	0	28	1,446	24	368
04/14/2003 *	0	0	0	2	167	0	24	33	---	8	817
04/15/2003 *	0	0	0	0	402	0	0	73	1,114	42	16,149
04/16/2003 *	0	1	0	5	132	0	0	116	---	43	563,878
04/17/2003	0	0	0	1	340	0	0	95	1,491	23	107,697
04/18/2003 *	0	0	0	0	0	0	0	52	---	26	12,645
04/19/2003 *	---	0	---	---	0	0	0	37	925	11	12,156
04/20/2003 *	---	0	---	---	0	0	0	8	---	0	6,639
04/21/2003 *	0	0	1	2	149	0	0	40	1,008	14	7,164
04/22/2003 *	0	0	0	2	144	35	0	1	---	0	7,107
04/23/2003 *	0	2	0	2	0	0	0	---	524	0	1,692
04/24/2003 *	0	0	0	0	415	0	0	39	---	0	3,769
Total:	0	3	1	15	2,298	47	45	547	7,321	313	741,240
# Days:	10	14	10	10	14	14	14	13	7	14	14
Average:	0	0	0	2	164	3	3	42	1,046	22	52,946
YTD	1	8	7	80	3,487	52	165	1,168	15,945	743	1,094,489

* 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)
04/11/2003	0	0	0	0	0	0	0	0	7	38	908
04/12/2003 *	---	0	---	---	0	6	0	0	---	0	869
04/13/2003	---	0	---	---	0	6	0	0	7	32	907
04/14/2003 *	0	0	0	0	0	0	0	0	---	16	1,032
04/15/2003 *	0	0	0	0	0	5	0	0	16	21	436
04/16/2003 *	0	0	0	3	0	0	0	0	---	0	2,170
04/17/2003	0	0	0	2	0	0	0	4	16	23	2,349
04/18/2003 *	0	0	0	0	0	27	0	1	---	52	2,326
04/19/2003 *	---	0	---	---	142	87	0	0	65	57	1,806
04/20/2003 *	---	0	---	---	0	71	0	0	---	77	3,541
04/21/2003 *	0	0	0	0	0	29	0	3	0	85	4,493
04/22/2003 *	0	0	0	0	0	0	0	1	---	18	7,633
04/23/2003 *	0	0	0	0	0	0	0	---	37	148	14,102
04/24/2003 *	0	0	0	0	0	0	0	5	---	218	29,573
Total:	0	0	0	5	142	231	0	14	148	785	72,145
# Days:	10	14	10	10	14	14	14	13	7	14	14
Average:	0	0	0	1	10	17	0	1	21	56	5,153
YTD	0	0	0	10	269	237	0	14	160	840	75,876

COMBINED STEELHEAD											
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/11/2003	43	138	0	13	3,655	810	666	1	440	1,091	1,201
04/12/2003 *	---	500	---	---	3,286	1,176	603	3	---	912	1,019
04/13/2003	---	264	---	---	3,306	1,357	621	0	1,020	1,016	1,077
04/14/2003 *	22	241	30	107	4,419	1,850	1,394	5	---	856	1,146
04/15/2003 *	19	309	154	231	9,921	3,117	1,501	0	900	700	1,794
04/16/2003 *	23	717	348	80	14,447	2,805	1,497	4	---	431	310
04/17/2003	37	1,548	6	89	25,970	4,762	3,221	7	1,078	283	0
04/18/2003 *	44	3,419	273	172	31,658	7,330	7,826	7	---	844	727
04/19/2003 *	---	1,738	---	---	25,683	6,681	8,019	9	4,058	879	2,453
04/20/2003 *	---	818	---	---	32,762	8,120	4,430	5	---	772	1,475
04/21/2003 *	25	487	150	66	26,748	11,148	7,641	8	1,123	923	3,157
04/22/2003 *	61	338	48	263	34,870	7,290	6,508	0	---	896	3,422
04/23/2003 *	68	452	48	62	26,356	15,171	6,348	---	4,720	1,669	6,205
04/24/2003 *	93	1,237	14	114	35,041	13,644	7,217	40	---	3,521	1,740
Total:	435	12,206	1,071	1,197	278,122	85,261	57,492	89	13,339	14,793	25,726
# Days:	10	14	10	10	14	14	14	13	7	14	14
Average:	44	872	107	120	19,866	6,090	4,107	7	1,906	1,057	1,838
YTD	602	13,158	1,171	1,325	309,246	88,456	60,033	100	16,488	20,268	33,874

* See sampling comments

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

Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE										
	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
04/11/2003	0	0	0	0	0	6	0	93	14	0	11
04/12/2003 *	---	0	---	---	0	0	0	173	---	8	15
04/13/2003	---	0	---	---	57	42	0	4	53	0	0
04/14/2003 *	0	0	0	0	0	10	24	2	---	0	29
04/15/2003 *	0	0	0	0	0	20	23	46	63	11	0
04/16/2003 *	0	0	0	0	0	0	31	120	---	0	0
04/17/2003	0	0	0	0	0	0	0	90	32	0	0
04/18/2003 *	0	0	0	0	0	0	0	69	---	0	0
04/19/2003 *	---	0	---	---	142	0	0	157	16	0	0
04/20/2003 *	---	0	---	---	0	64	0	291	---	22	0
04/21/2003 *	0	0	0	0	0	0	0	278	39	0	0
04/22/2003 *	0	0	0	0	0	0	0	25	---	34	0
04/23/2003 *	0	0	0	0	0	0	0	---	489	0	282
04/24/2003 *	0	0	0	0	0	0	0	251	---	0	0
Total:	0	0	0	0	199	142	78	1,599	706	75	337
# Days:	10	14	10	10	14	14	14	13	7	14	14
Average:	0	0	0	0	14	10	6	123	101	5	24
YTD	0	0	0	0	308	167	138	1,669	770	121	468

* 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 = $\text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$

LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts

Passage Index = $\text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$

LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts

Passage Index = $\text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$

RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts

Passage Index = $\text{Collection Counts} / \{ \text{Powerhouse 2 Flow} / (\text{Powerhouse 1 \& 2 Flow} + \text{Spill}) \}$

MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts

Passage Index = $\text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$

JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts

Passage Index = $\text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$

BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts

Passage Index = $\text{Collection Counts} / \{ \text{Powerhouse 2 Flow} / (\text{Powerhouse 1 \& 2 Flow} + \text{Spill}) \}$

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

Passage Index = $\text{Collection Counts} / \{ \text{Powerhouse 1 Flow} / (\text{Powerhouse 1 \& 2 Flow} + \text{Spill}) \}$

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: 04/24

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	111,851	759	64,221	241	59,570	466	0	0	0	0	0	0	0	0	0	0	0	0
TDA	69,944	225	21,553	30	32,858	194	0	0	0	0	0	0	0	0	0	0	0	0
JDA	49,866	122	11,764	15	22,452	88	0	0	0	0	0	0	0	0	0	0	0	0
MCN	45,035	189	4,743	30	15,933	70	0	0	0	0	0	0	0	0	0	0	0	0
IHR	32,222	66	2,013	1	8,647	30	0	0	0	0	0	0	0	0	0	0	0	0
LMN	24,563	39	1,401	10	7,209	14	0	0	0	0	0	0	0	0	0	0	0	0
LGS	17,776	53	584	4	5,623	34	0	0	0	0	0	0	0	0	0	0	0	0
LWG	18,472	22	285	1	4,039	3	0	0	0	0	0	0	0	0	0	0	0	0
PRD	6,524	1	303	0	1,290	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	2,907	20	72	2	231	0	0	0	0	0	0	0	0	0	0	0	0	0
RRH	331	0	9	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0
WEL	0	0	0	0	0	0	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	0	0	0	2,412	3,375	2,029	582
TDA	0	0	0	0	0	0	0	0	0	761	2,184	906	422
JDA	0	0	0	0	0	0	0	0	0	1,293	6,788	2,724	774
MCN	0	0	0	0	0	0	0	0	0	1,290	4,491	1,747	767
IHR	0	0	0	0	0	0	0	0	0	1,355	4,389	2,096	654
LMN	0	0	0	0	0	0	0	0	0	1,692	4,742	2,197	991
LGS	0	0	0	0	0	0	1	0	0	1,797	5,585	1,543	1,064
LWG	0	0	0	0	0	0	0	0	0	15,472	11,751	5,199	3,449
PRD	0	0	0	0	0	0	1	0	0	5	21	2	0
RIS	0	0	0	0	0	0	0	0	0	13	31	15	10
RRH	0	0	0	0	0	0	0	0	0	32	103	30	22
WEL	0	0	0	0	0	0	0	0	0	0	0	0	0

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

RIS, RRH are through 04/23. Although WEL began their counts early on 4/15, they won't have data posted until May 1.

**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.

*As Chelan CO PUD does not report wild, these numbers are from the COE.

Page last updated on: 4/25/03

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

		04/12/03 TO 04/25/03					
		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	1,609	399,149	100	140	196,570	597,568
	Sum of NumberBarged	1,608	386,569	100	136	188,976	577,389
	Sum of NumberBypassed	0	11,832	0	0	7,465	19,297
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	1	748	0	4	129	882
LGS	Sum of NumberCollected	33	128,884	166	100	62,495	191,678
	Sum of NumberBarged	33	128,685	164	99	62,458	191,439
	Sum of NumberBypassed	0	1	0	0	0	1
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	0	176	1	1	37	215
LMN	Sum of NumberCollected	25	60,380		50	31,106	91,561
	Sum of NumberBarged	25	60,101		50	31,014	91,190
	Sum of NumberBypassed	0	125		0	76	201
	Sum of Numbertrucked	0	0		0	0	0
	Sum of TotalProjectMortalities	0	154		0	16	170
MCN	Sum of NumberCollected	5,409	36,574	94	423	8,460	50,960
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	5,408	36,549	94	422	8,459	50,932
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	1	25	0	1	1	28
Total Sum of NumberCollected		7,076	624,987	360	713	298,631	931,767
Total Sum of NumberBarged		1,666	575,355	264	285	282,448	860,018
Total Sum of NumberBypassed		5,408	48,507	94	422	16,000	70,431
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of TotalProjectMortalities		2	1,103	1	6	183	1,295

YTD Transportation Summary

TO: 04/25/03

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	2,609	469,700	200	240	220,379	693,128
	Sum of NumberBarged	1,786	401,696	160	155	196,644	600,441
	Sum of NumberBypassed	0	12,273	0	0	8,175	20,448
	Sum of NumberTrucked	816	54,208	40	78	15,402	70,544
	Sum of TotalProjectMortalities	7	1,523	0	7	158	1,695
LGS	Sum of NumberCollected	38	132,387	170	118	64,897	197,610
	Sum of NumberBarged	33	130,246	168	111	64,005	194,563
	Sum of NumberBypassed	0	1	0	0	0	1
	Sum of NumberTrucked	5	1,871	0	5	850	2,731
	Sum of TotalProjectMortalities	0	247	1	2	42	292
LMN	Sum of NumberCollected	145	88,222		110	33,321	121,798
	Sum of NumberBarged	85	72,603		70	31,573	104,331
	Sum of NumberBypassed	0	157		0	81	238
	Sum of NumberTrucked	60	15,149		40	1,637	16,886
	Sum of TotalProjectMortalities	0	313		0	30	343
MCN	Sum of NumberCollected	14,033	39,661	106	487	11,609	65,896
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	14,000	39,629	106	485	11,608	65,828
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	33	32	0	2	1	68
Total Sum of NumberCollected		16,825	729,970	476	955	330,206	1,078,432
Total Sum of NumberBarged		1,904	604,545	328	336	292,222	899,335
Total Sum of NumberBypassed		14,000	52,060	106	485	19,864	86,515
Total Sum of NumberTrucked		881	71,228	40	123	17,889	90,161
Total Sum of TotalProjectMortalities		40	2,115	1	11	231	2,398

