



Fish Passage Center

Weekly Report #02 - 6

April 19, 2002

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SUMMARY OF EVENTS:

- **Increased precipitation and associated snowmelt have led to increased discharge at many tributaries within the Columbia Basin.**
- **The April mid-month water supply forecast was issued on the 18th of April 2002, all observed sites reported increasing forecasts relative to the April final water supply forecast.**
- **Flows at Lower Granite have averaged 79.3 Kcfs between April 3rd and 18th (BiOp target = 97 Kcfs)**
- **Flows at McNary have averaged 235.5 Kcfs between April 10th and 18th (BiOp target = 246 Kcfs).**
- **Flows at Priest Rapids have averaged 142.9 Kcfs between April 10th and 18th (BiOp target = 135 Kcfs).**
- **Approximately 75K yearling spring chinook mortality occurred at the Twisp Acclimation Pond.**
- **To date, the adult return of spring chinook is appearing to be less than predicted**

Water Supply: Over the past week, many Columbia River Basins have experienced above average precipitation. Precipitation has ranged from 67% to 176% of average over the period from April 1-16, 2002; 10 of the 12 locations displayed in Table 1 recorded precipitation over 120% of the precipitation average over the years 1971-2000 from April 1-16. WY 2002 remains approximately average to above average in terms of cumulative precipitation.

Table 1. Summary of early 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 1-16, 2002		Cumulative 10-1-01 to 4-16-02	
	Observed (inches)	% Avg	Observed (inches)	% Avg
Columbia Above Coulee	1.32	151	15.45	102
Snake R. Above Ice Harbor	0.99	127	10.74	97
Columbia Above The Dalles	1.19	135	15.37	101
Kootenai	1.17	125	13.65	88
Clark Fork	0.87	131	10.76	111
Flathead	1.48	176	14.27	110
Pend Oreille/Spokane	1.76	146	26.04	122
Central Washington	0.23	67	5.86	94
Snake R. Plain	0.50	90	5.22	78
Clearwater	1.71	121	22.67	113
SW Washington Cascades/Cowlitz	4.47	157	64.67	115
Willamette Valley	3.42	133	51.40	107

On April 18, 2002, the NWRFC released the April mid-month water supply forecast. Table 2 displays the 2002 March and April final runoff volume forecasts along with the April mid-month forecast for multiple reservoirs. Of the ten locations displayed in Table 2, all reported increasing forecasts between the April final and April mid-month water supply forecasts.

Table 2. March Final, April Final, and April Mid-Month Runoff Volume Forecasts for various reservoirs within the Columbia and Snake River Basins during WY 2002.

Site	March Final		April Final		April Mid-Month	
	Runoff Volume (Kaf)	% of Avg	Runoff Volume (Kaf)	% of Avg	Runoff Volume (Kaf)	% of Avg
Mica (April-Sept)	11300	90	11700	94	12100	97
Hungry Horse (April-Sept)	1910	90	2060	97	2230	105
Libby (April-Sept)	6290	95	6570	99	6950	105
Grand Coulee (Jan-July)	60000	95	61100	97	63300	101
The Dalles (Jan-July)	97300	91	96400	90	100000	93
Brownlee (April-July)	4090	65	3630	58	3850	61
Dworshak (April-July)	2950	112	3050	115	3200	121
Lower Granite (Jan-July)	25700	86	24200	81	25100	84
Heise (ID) (April-July)	2710	76	2670	75	2910	82
Weiser (ID) (April-July)	3630	63	3210	56	3390	59

Generally, increased precipitation and snowmelt over the past week have led to increased discharge at many reservoirs within the Columbia Basin. For example, total discharge at Bonneville increased from 183.5 Kcfs on April 10th to 348.4 Kcfs on April 17th, 2002. Also, inflows at Dworshak increased from 14.9 Kcfs on April 10th to 43.9 Kcfs on April 14th, 2002.

Operations have varied at the major reservoirs within the Columbia and Snake River Basins. Table 3 displays the USACE determined flood control targets over April (15th and 30th) along with the actual April 15th reservoir elevations for Libby, Hungry Horse, Grand Coulee, Brownlee, and Dworshak. From Table 3, the Libby, Grand Coulee, and Dworshak reservoirs were 18.8, 6.9 and 15.7 feet above their April 15th flood control targets, respectively. On the other hand, the Hungry Horse

and Brownlee reservoirs were 9.1 and 4.6 feet below their April 15th flood control targets, respectively.

Table 3. USACE determined flood control targets issued in April of 2002 along with actual reservoir elevations for Libby, Hungry Horse, Grand Coulee, Brownlee, and Dworshak.

Reservoir	Actual Elevation 4/15/02 (ft. Above MSL)	USACE Determined 4/15/02 Flood Control Target (ft. Above MSL)*	USACE Determined 4/30/02 Flood Control Target (ft. Above MSL)
Libby	2373.7	2354.9	2362.6
Hungry Horse	3511.6	3520.7	3516.2
Grand Coulee	1260.8	1253.9*	1244.9
Brownlee	2058.3	2062.9	2064.4
Dworshak*	1516.5	1500.8	na

* Flood control targets reflect the flood control shift between Dworshak and Grand Coulee.

Over the past week (April 10th to 18th), increased inflows at Dworshak have led to 10.9 feet of increase in reservoir elevation. Over this period, Dworshak has released water at or near the powerhouse maximum of 10.5 Kcfs and has spilled a daily average amount of water between 4.2 and 4.9 Kcfs.

Over the last week (April 10th to 18th), the Libby reservoir continues to operate at a minimum outflow of 4 kcfs. However, inflows have increased from 6.7 Kcfs to 19.7 Kcfs over the past week, resulting in 4.3 feet of reservoir refill. Furthermore, Table 2 shows that the April mid-month water supply forecast at Libby has increased 6% of average and 380 Kaf relative to the April final forecast. The increased water supply forecast appears promising in terms of refill.

According to the 2000 Biological Opinion, the minimum outflow at the Hungry Horse reservoir should be 0.9 kcfs over the month of April. Over the first part of April, outflows at Hungry Horse ranged between 1.8 and 2.4 kcfs to meet the Columbia Falls minimum flow requirements.

Based upon the April final forecasts, flow objectives will be 97 kcfs at Lower Granite between 4/3/02 and 6/20/02, 246 kcfs at McNary between 4/10/02 and 6/30/02, and 135 kcfs at Priest Rapids from 4/10/02 and 6/30/02. The flow objectives are intended to represent averages over the designated time periods. From April 3-18, 2002, outflows at Lower Granite have averaged 79.3 Kcfs. From April 10-18, 2002, outflows at McNary have averaged 235.5 Kcfs. From April 10-18, 2002, outflows at Priest Rapids have averaged 142.9 Kcfs.

Over the beginning of WY 2002, reservoirs on the Upper Snake River have been consistently refilling, yet many remain behind where they are ordinarily in terms refill. Currently, as of April 18th, 2002, the entire Upper Snake River System is at 59% of capacity. Individually, American Falls is at 86% of capacity, Palisades is at 40% of capacity, Jackson Lake is at 23% of capacity, Island Park is at 89% of capacity, and Grassy Lake is at 66% of capacity.

Spill. Spill has been occurring daily at Dworshak Dam as the COE releases water from the project towards achieving the end of April flood control elevation. Spill from Dworshak Dam is being limited so as to not exceed the water quality criteria of 110%. Spill for fish passage at the other lower Snake projects occurred as described in last week's report. Some involuntary spill did occur at Lower Monumental Dam this past week when flows exceeded the hydraulic capacity of the project.

Spill for fish passage is also being implemented in the lower Columbia River.

All Mid Columbia River projects are spilling at this time. Some spill occurred at Chief Joseph Dam this past week.

Spill volumes at all the federal hydroprojects is being adjusted to meet the water quality waiver standards. Only one fish was observed with minor signs of GBT at Rock Island Dam this past week.

Smolt Monitoring: In general the numbers of migrant yearling chinook and steelhead passing the dams increased over the past week. With the higher flows in the Snake and Columbia rivers the numbers of fish increased quickly. Overall the yearling chinook migration seems to be at least a few days behind the historic run especially at McNary, Rock Island and Bonneville dams while the numbers at Lower Granite appear closer to historic timing due to the large spike in fish numbers associated with the increased flows that occurred there over the past week. For steelhead, the numbers at Lower Granite appear near normal or slightly ahead of historic timing because of the large numbers of fish that came out with the higher flows of the past week.

With the high flows in the Snake River basin the Imnaha and Grande Ronde traps were affected by the increase in flows and debris. The Imnaha Trap did not fish over the past week while the Grande Ronde Trap was not operated on 4/15 and 4/16 due to high flows and remained outside the thalweg on 4/17 as high flows and large amounts of debris were encountered. At the White Bird Trap the numbers of yearling chinook averaged 1,028 less than half of last weeks numbers. The catch of steelhead increased to an average of 80 per day versus 13 last week. At the Lewiston Trap there was a large increase in captures of yearling chinook and steelhead; this week the average daily capture of yearling chinook was 1,167 compared to 36 per day last; and steelhead averaged 224 per day versus 92 last week.

At Lower Granite Dam the passage index continued upward for both yearling chinook and steelhead this past week. Yearling chinook passage index rose to 83,000 on 4/16 with an average of 36,000 per day compared to an average of 3,100 last week. The steelhead index was also much higher rising from 5,600 on 4/12 to nearly 57,000 by 4/18. Sockeye numbers at Lower Granite continued to increase over the past week with the average daily index of 610 this past week compared to 197 for the previous week. No Coho were collected this week but subyearling chinook were showing up in small numbers again this week.

Rock Island Dam yearling chinook index were still relatively low over the past week averaging 94 per day, but higher compared to last week's average of 30 fish per day. McNary saw an increase in juvenile migrants this past week, with an average index of 5,600 yearling chinook this week versus 1,300 last week. Similarly, steelhead numbers also increased with an average daily index of 3,100 this week compared to 500 last week. Several studies were underway at McNary Dam this past week that introduced fish into the bypass, and thus collection numbers could have been affected to some extent.

At John Day Dam passage index for yearling chinook averaged 2,400 per day this week compared to 540 per day last. Steelhead indices averaged 2,900 this week versus 400 last. Coho, subyearling chinook and sockeye were captured in relatively low numbers this past week. This reporting period saw the PIT tagged yearling chinook (tagged for migration year 2002) start arriving at John Day Dam on April 15 from John Day River and April 18 from the Yakima, Mid-Columbia, and Snake River basins. PIT tagged yearling chinook from the Umatilla River basin have been present since late March. PIT tagged steelhead (tagged for migration year 2002) started arriving at John Day Dam on April 3 from the Umatilla River, April 14 from the Walla Walla River, April 16 from the Yakima River basin, and April 18 from the Snake River basin (excluding the Lyons Ferry Hatchery steelhead being released at Little Goose and McNary dams for research purposes).

At Bonneville Dam yearling chinook, and steelhead numbers increased this past week with an average daily index this week of 6,000 chinook and 1,900 steelhead versus 1,400 and 300 for last week respectively. An estimated 6,300 subyearling chinook passed the project each day this week versus 2,700 per day last week. Coho indices increased quickly over the last week with an average index of 3,900 versus 260 last week. Low numbers of sockeye also passed this week with daily average index of 124 versus 45 last week.

Adult Fish Passage: At Bonneville Dam, adult spring chinook numbers ranged between 5,884 and 1,569 per day through the past 7-days, with the total counted now at 32,370, counted through April 18. This compares to 225,119 in 2001 and 42,153 for the 10-year average to-date. This year's total is about 14.4% of the 2001 count and about 77% of the 10-year average at this date in the chinook run. The projected total of adult spring chinook appears greatly inflated (333,000), and that total was anticipated to be the second largest return since counting began at Bonneville Dam in 1938. Through April 18, only 10% of the projected number of adult spring chinook has returned, whereas last year (2001) 57% of the Bonneville adult spring chinook count had been tallied by this date. Through 4/18, 9,995 adult spring chinook have been counted at The Dalles Dam, about 8% and 49% of last year's count and the ten-year average, respectively. A total of 3,064 adult spring chinook have been counted at McNary Dam, with 1,003 of those counted at Ice Harbor Dam. Approximately 100 adult spring chinook have been counted at Lower Granite Dam, again well below the 2001 total of almost 10,000 and the 10-year average of 1,000.

During the past week, flows in the Columbia and Snake rivers increased to the point that all projects had some level of spill and the water clarity reduced to somewhat chocolate colored at Snake projects and to a lesser extent the Columbia projects. At several of the projects, water temperatures also were reduced. Overall, when hydraulic changes (increased flows, etc) occur, fish migration can be affected and normally passage decreases until conditions become more stable. This can account for some of the reduction in counts of adult spring chinook at Bonneville and upstream dams for the past 3-4 days; however, it doesn't explain the huge shortfall that is now occurring. The main hope appears to be that these spring chinook are later in arriving to the Columbia River and will move upstream in large numbers later this month and early May.

Winter steelhead continue to pass Bonneville Dam with a small number of summer steelhead still moving upstream to spawning sites. The total counted through April 11 was 2,941, and

was greater than the 2001 total and the 10-year average. At Lower Granite Dam, summer steelhead passage ranged between 440 and 191 fish per day with the season total through April 18 of 10,186. This compares to about 5,100 in 2001 and 4,300 for the 10-year average.

Hatchery Releases: For the past two weeks, approximately 25.5 million juvenile chinook and coho salmon and steelhead were directly or volitionally released from State, Federal or Tribal facilities in the Columbia River basin. During the next two weeks, about 21.1 million chinook, sockeye, coho, and steelhead are scheduled for release in the various fish basins.

Snake River - For the week, hatchery releases of yearling spring chinook are nearly completed for the season with most fish from the acclimation ponds or hatcheries in the rivers. Final releases of fish in the Grande Ronde and Imnaha River basins completed this week. The Clearwater River and final releases of yearling spring chinook in the Salmon River basins should be completed next week. Overall, about 10 million yearling chinook were released from hatcheries in the Snake River this migration season. Yearling spring chinook from the Tucannon River should be in the river by the end of April. Yearling summer chinook from McCall and Pahsimeroi hatcheries were released in the S. Fk Salmon and Pahsimeroi River basins in late March. About 560,000 coho have been released into Lapwai Creek and Potlatch River with the remaining group scheduled for release from Kooskia NFH next week. Releases of yearling fall chinook from Lyons Ferry H (direct Snake R releases) and those from the Acclimation ponds at CPT Johns, Pittsburg Landing and Big Canyon (Clearwater) were completed during the week as well. As noted in earlier reports, about 9.5 million steelhead will be released in the Snake R basin during April/May. Steelhead releases into the Snake River at Hells Canyon have been completed (about 526k) with many of the upper Salmon River sites releasing fish daily during the past two weeks. About 700k juvenile steelhead were released into NE Oregon streams during the past two weeks. Normally steelhead will be released through mid-May.

Mid-Columbia [above McNary Dam] -

Volitional releases of spring chinook from the Acclimation Ponds in the Yakama River began in mid March and will continue into June. The Colville Tribal releases of yearling spring chinook salmon are on-going volitional and a direct stream plant in the Okanogan R basin. During the past two weeks, Federal and State hatcheries began or completed releases of yearling spring chinook in the Methow and Entiat River basins with Leavenworth Hatchery scheduled to release their spring chinook on April 23. Releases were made directly from hatcheries or acclimation ponds. Sockeye in the Mid-Columbia are normally released into Lake Wenatchee (direct releases) during the fall prior to their migration in April through May. Also, steelhead releases in the Mid-Columbia Reach were initiated during the week into the Methow/Okanogan and Wenatchee rivers and are normally completed by mid-May from State and Federal hatcheries. Ringold H completed volitional release of their steelhead during this week. Coho will again be released in the Yakama, Wenatchee, and Methow River basins in 2002. Releases should begin next week and will be completed by late May.

- ◆ About 75k yearling spring chinook were unfortunately killed when an alarm system that was connected to the water intake system at the Twisp Acclimation Pond failed to respond as the intake screens became plugged with debris, etc., caused by the rapid increase of flow from the creeks and tributaries of the Twisp River. The result was that oxygen in the pond became depleted and fish mortality was the result.

Lower Columbia [Bonneville Dam to McNary Dam] During the past week, yearling spring chinook were released in the Wind and Little White Salmon rivers. The Umatilla, Klickitat and Hood rivers had earlier releases. The Umatilla, Hood and Deschutes rivers should be completed during the next week or the end of April. The remaining release of spring chinook in the Klickitat River will be subyearling spring chinook scheduled

for release in the upper Klickitat in late May. The final release of yearling "bright" fall chinook should be completed in the Umatilla River (Thornhollow Pond) by April 19. Yearling coho salmon were released in the Umatilla and Klickitat River basin with coho released into the Little White Salmon this week. The final release of coho will be completed in the Klickitat River during the next 3 weeks. Steelhead will be released from mid-April through early May in the Umatilla, Klickitat, Deschutes, Hood, and White Salmon rivers. A small number of these released steelhead will be Winter-Run fish.

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
04/05/02	59.3	0.0	56.2	0.0	58.9	0.0	58.3	0.0	58.9	0.0	58.0	6.4	67.2	0.0
04/06/02	31.2	0.0	35.5	0.0	38.3	0.0	39.9	0.0	43.1	0.0	56.1	6.4	54.3	0.0
04/07/02	28.2	0.0	32.9	0.0	33.4	0.0	37.8	0.0	40.2	0.0	48.9	5.5	53.8	0.0
04/08/02	42.9	0.0	38.9	0.0	51.7	0.0	56.8	0.0	59.6	0.0	58.3	0.0	54.3	0.0
04/09/02	42.8	0.0	49.9	0.0	59.6	0.0	61.5	0.0	64.6	0.0	56.4	0.0	60.0	0.0
04/10/02	68.1	0.0	66.5	0.0	51.1	0.4	46.4	0.0	55.1	0.0	79.1	0.0	83.5	0.0
04/11/02	111.9	0.0	113.2	0.0	115.1	19.6	106.6	11.3	104.8	0.0	74.1	3.4	77.0	0.0
04/12/02	116.0	0.0	114.6	0.0	116.4	8.8	120.2	19.3	126.7	0.0	132.6	10.8	139.2	0.0
04/13/02	89.0	0.0	92.1	0.0	94.7	7.7	100.2	16.2	106.6	0.0	116.0	0.5	115.6	0.0
04/14/02	109.7	0.0	111.1	0.0	112.7	8.7	109.1	14.1	119.7	12.2	115.5	1.3	110.1	9.8
04/15/02	134.4	0.0	135.0	5.4	141.2	20.9	141.1	25.7	146.3	22.5	147.7	8.3	150.4	26.5
04/16/02	165.2	0.0	163.7	5.6	176.8	44.9	173.1	41.7	175.4	34.3	187.7	57.6	189.4	56.3
04/17/02	170.8	0.0	177.6	3.1	186.1	50.0	186.7	43.4	187.1	35.1	203.5	91.9	201.0	89.5
04/18/02	181.4	0.0	181.6	0.0	188.8	62.7	184.8	48.3	188.8	35.4	203.1	84.2	219.6	135.6

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
04/05/02	15.5	4.7	18.7	18.0	55.9	28.5	52.5	12.0	55.3	0.0	55.1	0.0
04/06/02	15.3	4.5	18.8	19.5	66.3	27.1	63.6	47.3	70.6	0.0	69.5	0.0
04/07/02	13.3	3.9	18.1	15.8	72.1	35.3	67.0	45.7	68.3	0.0	67.2	0.0
04/08/02	15.3	4.5	19.1	19.3	71.1	28.6	67.0	46.0	70.3	0.0	68.7	0.0
04/09/02	15.3	4.6	18.3	18.4	70.8	23.2	69.3	43.9	76.0	0.0	76.2	0.0
04/10/02	15.4	4.7	18.0	16.6	74.9	26.2	74.0	39.7	79.5	0.0	80.1	20.7
04/11/02	15.6	4.9	20.0	10.4	76.7	26.6	75.2	38.5	80.0	0.0	83.9	57.0
04/12/02	15.5	4.8	20.0	9.5	73.2	26.0	69.1	35.8	71.4	0.0	74.7	51.9
04/13/02	15.2	4.4	18.8	9.5	76.6	24.5	76.0	30.5	78.6	0.0	80.7	57.8
04/14/02	14.9	4.2	19.4	9.5	91.5	23.8	89.6	33.1	95.3	0.0	100.0	66.6
04/15/02	15.0	4.2	26.5	16.9	122.1	42.7	120.1	33.6	127.2	8.3	129.7	79.4
04/16/02	15.0	4.2	29.9	20.4	112.2	30.0	112.0	36.2	120.3	1.0	122.5	70.8
04/17/02	15.1	4.2	23.2	24.2	100.0	32.2	97.5	43.9	105.6	0.0	108.0	72.5
04/18/02	15.2	4.4	---	---	91.1	28.0	85.6	48.3	90.8	0.0	93.8	67.0

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		
04/05/02	114.7	0.0	131.2	0.0	131.0	0.0	135.5	0.0	25.0	103.8
04/06/02	121.8	0.0	119.4	0.0	118.2	0.0	126.1	0.0	25.0	94.4
04/07/02	117.9	0.0	109.1	0.0	109.9	0.0	127.8	0.0	24.2	96.9
04/08/02	145.6	0.0	165.4	0.0	163.9	0.6	161.4	0.0	50.4	104.7
04/09/02	138.2	0.0	150.8	0.0	150.9	0.0	157.9	0.0	45.0	106.2
04/10/02	154.0	28.6	177.8	27.3	171.8	15.3	183.5	12.7	54.7	109.5
04/11/02	170.0	61.0	180.8	53.6	182.5	72.4	213.2	51.5	39.4	115.7
04/12/02	173.4	65.5	183.9	49.0	179.2	70.2	204.9	65.4	7.7	125.1
04/13/02	213.9	71.2	214.5	48.9	211.7	84.2	230.7	76.6	18.9	128.6
04/14/02	199.8	75.6	207.3	49.5	205.8	81.1	252.8	76.2	45.8	124.2
04/15/02	267.6	134.9	271.4	79.1	262.3	107.5	270.2	87.9	50.8	124.5
04/16/02	319.2	151.2	350.8	109.9	334.7	125.0	345.5	134.3	71.3	133.3
04/17/02	320.5	153.0	345.3	97.6	339.7	128.3	348.4	151.9	66.9	122.9
04/18/02	301.0	147.4	245.4	74.2	315.7	123.9	324.0	159.8	38.4	119.6

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

Site	Date	Species	Number of Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank			
								Rank 1	Rank 2	Rank 3	Rank 4
Lower Granite Dam											
	04/09/02	Yearling Chinook	44	0	0	0.00%	0.00%	0	0	0	0
	04/09/02	Steelhead	56	0	0	0.00%	0.00%	0	0	0	0
	04/16/02	Yearling Chinook	44	0	0	0.00%	0.00%	0	0	0	0
	04/16/02	Steelhead	56	0	0	0.00%	0.00%	0	0	0	0
Little Goose Dam											
	04/10/02	Yearling Chinook	28	0	0	0.00%	0.00%	0	0	0	0
	04/10/02	Steelhead	72	0	0	0.00%	0.00%	0	0	0	0
	04/17/02	Yearling Chinook	47	0	0	0.00%	0.00%	0	0	0	0
	04/17/02	Steelhead	51	0	0	0.00%	0.00%	0	0	0	0
Lower Monumental Dam											
	04/15/02	Yearling Chinook	57	0	0	0.00%	0.00%	0	0	0	0
	04/15/02	Steelhead	43	0	0	0.00%	0.00%	0	0	0	0
McNary Dam											
	04/11/02	Yearling Chinook	69	0	0	0.00%	0.00%	0	0	0	0
	04/11/02	Steelhead	4	0	0	0.00%	0.00%	0	0	0	0
	04/15/02	Yearling Chinook	66	0	0	0.00%	0.00%	0	0	0	0
	04/15/02	Steelhead	31	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	04/11/02	Yearling Chinook	62	0	0	0.00%	0.00%	0	0	0	0
	04/11/02	Steelhead	8	0	0	0.00%	0.00%	0	0	0	0
	04/16/02	Yearling Chinook	69	0	0	0.00%	0.00%	0	0	0	0
	04/16/02	Steelhead	31	0	0	0.00%	0.00%	0	0	0	0
Rock Island Dam											
	04/11/02	Yearling Chinook	94	2	2	2.12%	0.00%	2	0	0	0
	04/11/02	Steelhead	3	0	0	0.00%	0.00%	0	0	0	0
	04/15/02	Yearling Chinook	63	1	1	1.58%	0.00%	1	0	0	0
	04/15/02	Steelhead	18	0	0	0.00%	0.00%	0	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		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
4/5	---	---	---	0	104	106	106	24	104	105	105	24	103	103	104	23	---	---	---	0
4/6	---	---	---	0	104	106	107	24	104	105	105	23	103	105	105	23	---	---	---	0
4/7	---	---	---	0	103	104	105	23	104	104	105	23	104	105	106	24	---	---	---	0
4/8	---	---	---	0	103	105	105	24	103	103	104	24	103	103	103	24	---	---	---	0
4/9	---	---	---	0	103	104	104	24	104	104	104	24	104	104	105	24	---	---	---	0
4/10	---	---	---	0	103	105	106	24	104	104	105	24	103	103	104	24	---	---	---	0
4/11	---	---	---	0	103	105	106	24	104	104	105	24	102	102	103	24	---	---	---	0
4/12	---	---	---	0	109	111	111	24	105	105	105	24	102	102	103	24	---	---	---	0
4/13	---	---	---	0	109	112	113	24	105	105	105	24	103	104	104	24	---	---	---	0
4/14	---	---	---	0	110	112	113	24	105	105	105	24	103	103	104	24	---	---	---	0
4/15	---	---	---	0	114	116	119	24	105	105	106	24	103	103	104	24	---	---	---	0
4/16	---	---	---	0	118	120	120	24	105	105	105	24	102	103	103	24	---	---	---	0
4/17	---	---	---	0	118	120	120	24	105	105	106	24	102	102	102	24	---	---	---	0
4/18	---	---	---	0	118	119	120	24	103	103	104	24	101	101	102	24	102	102	103	14

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		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
4/5	---	---	---	0	106	107	107	24	106	107	107	24	107	107	108	24	106	107	107	24
4/6	---	---	---	0	106	106	106	24	106	106	107	24	107	108	108	24	107	107	108	23
4/7	---	---	---	0	106	106	107	22	106	107	107	22	107	107	108	21	107	107	107	21
4/8	---	---	---	0	106	107	107	23	106	107	107	23	106	107	107	24	106	107	107	24
4/9	---	---	---	0	106	107	107	20	106	107	107	20	106	106	107	18	106	106	107	18
4/10	---	---	---	0	106	106	107	24	106	107	107	24	106	106	106	24	106	106	106	24
4/11	---	---	---	0	106	106	106	24	109	111	122	24	106	107	107	23	107	107	116	23
4/12	---	---	---	0	105	106	106	24	109	110	121	24	107	107	107	24	109	110	119	24
4/13	---	---	---	0	107	107	107	24	108	109	109	24	111	113	114	23	111	113	115	23
4/14	---	---	---	0	106	107	107	24	108	109	109	24	110	111	113	22	111	112	113	22
4/15	---	---	---	0	104	105	105	24	108	110	116	24	108	108	108	21	109	110	114	21
4/16	---	---	---	0	105	105	105	24	113	117	119	24	107	107	108	21	110	112	115	21
4/17	---	---	---	0	103	104	104	24	113	118	122	24	110	112	114	23	113	114	116	22
4/18	102	102	104	16	102	103	103	24	114	119	120	24	112	115	117	24	114	117	122	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>	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		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
4/5	106	107	107	24	106	106	107	24	108	108	109	23	109	111	113	24	111	111	112	24
4/6	107	107	108	24	107	107	108	24	107	107	108	24	109	112	113	24	110	111	111	24
4/7	107	107	108	21	107	107	107	21	106	106	107	24	108	111	113	24	110	110	111	24
4/8	106	107	107	24	106	107	107	24	105	106	106	24	105	105	106	24	109	109	109	24
4/9	107	107	107	18	107	107	107	18	107	107	108	18	106	106	106	18	109	110	110	24
4/10	106	106	106	24	106	106	106	24	107	108	109	24	106	106	107	24	106	106	106	24
4/11	106	107	107	23	106	106	107	23	108	108	108	24	107	107	108	24	106	107	108	24
4/12	109	111	115	24	109	111	115	24	108	108	109	24	109	110	126	24	108	110	113	24
4/13	110	110	111	24	110	110	111	24	108	108	109	24	108	108	108	24	109	110	111	24
4/14	112	113	114	22	114	114	116	22	108	108	109	24	108	109	109	24	107	108	109	24
4/15	109	109	110	22	114	116	118	22	109	110	110	24	109	110	112	24	108	109	110	24
4/16	110	111	113	22	117	119	122	22	110	110	111	24	116	122	126	24	111	114	119	24
4/17	112	113	114	24	118	120	122	24	---	---	---	0	---	---	---	0	---	---	---	0
4/18	114	115	118	24	118	120	124	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	Priest R. Dnst			Pasco				Dworshak				Clrwr-Peck				Anatone				
	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#		
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High		Avg	Avg
4/5	109	110	110	24	107	108	108	24	109	109	110	24	105	106	107	24	101	102	102	24
4/6	109	110	110	24	107	107	108	21	108	108	109	22	104	104	105	22	101	102	103	22
4/7	108	109	109	24	106	106	107	23	108	108	109	23	104	104	104	21	101	102	103	23
4/8	107	108	108	24	108	108	109	20	109	109	110	24	104	105	106	24	102	103	104	21
4/9	107	108	108	24	107	107	108	24	109	109	110	24	104	105	105	24	101	102	102	24
4/10	105	106	106	24	105	106	106	24	109	109	109	22	103	104	104	23	101	102	103	23
4/11	106	107	107	24	106	106	107	24	109	109	110	24	104	104	104	24	102	102	103	22
4/12	108	110	115	24	105	106	106	24	109	109	110	24	104	104	104	24	101	102	102	24
4/13	108	108	109	24	106	107	108	24	109	109	110	24	104	104	104	24	101	102	102	24
4/14	107	108	108	24	105	106	108	24	108	109	109	24	103	103	104	24	101	102	102	24
4/15	110	113	117	23	105	106	107	23	108	108	109	24	103	104	104	24	101	102	102	23
4/16	113	117	118	24	106	107	109	24	109	109	109	24	103	104	104	24	102	102	103	21
4/17	---	---	---	0	110	112	112	24	108	109	109	24	103	103	103	24	102	102	102	22
4/18	---	---	---	0	114	115	116	21	108	108	108	24	103	103	103	24	101	102	102	24

Total Dissolved Gas Saturation Data at Snake River Sites

Date	Clrwr-Lewiston			Lower Granite				L. Granite Tlwr				Little Goose				L. Goose Tlwr				
	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#		
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High		Avg	Avg
4/5	103	104	105	24	103	104	105	24	114	122	123	22	103	104	105	24	106	111	120	24
4/6	102	103	103	22	103	104	104	22	113	121	124	22	103	103	103	22	119	120	120	22
4/7	102	102	103	23	103	103	104	23	118	120	121	22	106	107	108	23	119	119	119	21
4/8	102	104	105	24	102	102	103	24	114	118	118	24	108	109	110	24	119	119	119	24
4/9	102	103	104	23	102	103	103	24	112	118	119	24	110	110	111	24	119	119	120	24
4/10	102	103	104	24	102	102	102	24	112	119	120	24	111	112	112	24	117	118	118	24
4/11	102	103	104	24	103	103	103	24	112	118	121	24	111	112	112	24	117	117	117	24
4/12	103	103	104	24	102	103	103	24	111	116	117	24	109	110	110	24	116	117	118	24
4/13	103	104	104	24	103	104	104	24	111	118	119	24	110	111	112	24	114	115	116	24
4/14	102	103	103	24	104	104	104	24	111	119	120	24	110	110	111	24	115	115	116	24
4/15	102	103	103	24	103	103	103	24	117	118	120	24	109	109	110	23	115	115	116	23
4/16	102	103	103	24	101	101	102	24	112	114	117	24	108	110	110	24	115	116	116	24
4/17	102	102	103	24	101	101	101	24	112	114	123	24	110	110	111	24	117	118	119	24
4/18	102	102	103	24	101	101	101	24	111	114	117	23	108	110	111	24	119	120	120	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	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#		
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High		Avg	Avg
4/5	103	103	104	24	102	102	103	24	104	105	108	24	103	103	104	24	104	105	107	24
4/6	102	103	103	22	102	102	103	22	103	104	104	22	103	103	104	22	104	105	105	21
4/7	102	103	103	23	102	103	104	23	103	103	103	23	103	103	103	23	104	104	105	23
4/8	111	114	117	24	111	113	114	24	103	103	106	24	102	103	103	24	105	107	110	24
4/9	117	117	118	24	116	117	117	24	103	103	104	24	103	103	103	24	105	106	108	24
4/10	117	118	118	24	117	117	117	24	107	109	111	24	108	111	116	24	104	105	106	24
4/11	118	118	118	24	117	117	117	24	113	114	115	24	114	115	116	24	107	108	111	24
4/12	117	117	117	24	116	116	117	24	115	115	116	24	113	114	116	24	104	104	105	24
4/13	117	117	117	24	116	116	117	24	116	116	116	24	114	115	117	24	106	107	109	24
4/14	115	116	117	24	114	116	116	24	114	115	116	24	115	117	118	24	107	108	109	22
4/15	112	113	113	24	114	116	119	24	112	112	112	24	119	120	126	24	106	106	107	22
4/16	112	113	113	24	112	112	112	24	111	111	111	24	116	119	120	24	107	107	108	19
4/17	112	113	113	24	112	112	112	23	110	110	111	24	116	119	120	23	108	108	110	16
4/18	114	116	118	24	114	115	115	24	109	110	110	24	115	116	120	21	108	109	111	21

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>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#		
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High		Avg	AVG
4/5	105	105	106	24	104	104	105	24	104	105	106	24	104	104	106	24	104	105	105	24
4/6	104	104	104	21	104	104	104	21	103	103	103	21	104	104	105	22	104	104	105	21
4/7	104	104	104	23	104	104	104	22	103	103	103	23	103	104	104	23	103	103	104	23
4/8	105	106	109	24	104	104	105	24	104	104	105	23	103	103	106	24	103	104	104	23
4/9	106	106	108	24	104	105	105	24	104	105	105	23	104	104	105	24	104	104	105	23
4/10	104	104	104	24	106	109	117	24	104	104	105	23	106	109	118	24	103	104	104	23
4/11	105	105	106	24	111	116	117	24	104	105	107	23	110	116	118	24	108	112	119	23
4/12	104	104	105	24	110	116	118	24	103	103	104	23	111	117	119	24	111	114	119	23
4/13	107	108	110	24	113	118	119	24	104	105	105	24	111	119	119	24	110	113	115	24
4/14	107	108	109	24	113	118	119	24	105	105	106	23	112	119	119	24	107	108	109	23
4/15	105	106	106	24	118	119	119	23	105	105	106	23	117	120	120	24	107	109	112	23
4/16	105	106	106	24	118	119	119	24	106	107	107	23	119	120	121	24	108	110	111	23
4/17	106	106	107	24	118	119	119	24	105	106	106	23	119	120	121	24	109	109	111	23
4/18	107	108	109	21	117	118	118	24	105	105	106	23	116	118	118	24	107	108	109	23

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>Skamania</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>	#	<u>24h</u>	<u>12h</u>	#	<u>24h</u>	<u>12h</u>	#		
	Avg	Avg		High	Avg		Avg	High		Avg	Avg		High	Avg		Avg	High		Avg	AVG
4/5	105	105	105	23	105	105	106	24	105	106	106	24	---	---	---	0	105	106	106	23
4/6	104	104	105	22	105	105	105	21	105	105	106	21	---	---	---	0	105	106	107	22
4/7	104	104	104	23	104	104	104	23	105	105	105	23	---	---	---	0	105	106	106	21
4/8	104	104	105	24	104	105	105	23	105	106	106	23	---	---	---	0	106	107	109	24
4/9	104	105	105	24	105	105	105	23	105	105	105	23	---	---	---	0	105	105	106	24
4/10	104	105	109	23	104	104	105	23	105	105	106	23	---	---	---	0	104	105	105	24
4/11	114	116	119	24	105	105	105	23	106	106	107	23	---	---	---	0	105	105	106	24
4/12	116	118	120	24	106	107	110	23	107	108	111	23	---	---	---	0	105	106	106	24
4/13	116	118	118	24	113	115	117	24	113	113	115	24	---	---	---	0	109	111	112	24
4/14	115	116	118	24	112	112	115	23	112	112	114	23	---	---	---	0	110	111	111	24
4/15	115	116	118	24	110	111	111	23	111	112	113	23	---	---	---	0	109	109	110	24
4/16	115	116	117	24	113	114	116	23	115	117	118	23	---	---	---	0	111	112	114	24
4/17	115	116	117	24	114	114	114	23	117	118	119	23	---	---	---	0	115	115	116	24
4/18	115	116	116	24	113	113	114	23	119	120	120	23	---	---	---	0	116	117	118	24

HATCHERY RELEASE SUMMARY LAST TWO WEEKS

Hatchery Release Summary

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite
Colville Tribe	Winthrop	CH1	SP	2002	265,000	03-18-02	04-18-02	Okanogan R
Colville Tribe Total					265,000			
IDFG	Clearwater	CH1	SP	2002	206,000	04-10-02	04-10-02	N Fk Clearwater R
IDFG	Clearwater	ST	SU	2002	40,000	04-14-02	04-14-02	Clear Cr
IDFG	Clearwater	ST	SU	2002	135,000	04-18-02	04-18-02	Crooked R Acclim Pd
IDFG	Clearwater	ST	SU	2002	180,000	04-17-02	04-17-02	Red River Acclim Pd
IDFG	Magic Valley	ST	SU	2002	40,000	04-15-02	04-15-02	Salmon R Idaho
IDFG	Magic Valley	ST	SU	2002	40,000	04-15-02	04-15-02	Salmon R Idaho
IDFG	Magic Valley	ST	SU	2002	40,000	04-17-02	04-17-02	Salmon R Idaho
IDFG	Magic Valley	ST	SU	2002	54,000	04-12-02	04-12-02	Little Salmon R
IDFG	Magic Valley	ST	SU	2002	80,000	04-16-02	04-17-02	Lemhi R
IDFG	Magic Valley	ST	SU	2002	94,440	04-08-02	04-08-02	Squaw Cr Acclim Pd
IDFG	Magic Valley	ST	SU	2002	104,750	04-08-02	04-09-02	Little Salmon R
IDFG	Magic Valley	ST	SU	2002	110,000	04-18-02	04-22-02	Salmon R Idaho
IDFG	Magic Valley	ST	SU	2002	150,000	04-12-02	04-18-02	Shoup Br (Salmon R)
IDFG	Magic Valley	ST	SU	2002	179,558	04-10-02	04-12-02	Hammer Cr
IDFG	Niagara Springs	ST	SU	2002	445,000	04-06-02	05-05-02	Little Salmon R
IDFG	Niagara Springs	ST	SU	2002	526,168	03-25-02	04-05-02	Hells Canyon Dam
IDFG	Niagara Springs	ST	SU	2002	830,000	04-13-02	05-01-02	Pahsimeroi H
IDFG	Rapid River	CH1	SP	2002	2,600,000	03-11-02	04-22-02	Rapid River H
IDFG	Sawtooth	CH1	SP	2002	390,000	04-08-02	04-22-02	Sawtooth H
IDFG Total					6,244,916			
Nez Perce Tribe	Clearwater	CH1	SP	2002	20,200	04-01-02	04-19-02	Lochsa R
Nez Perce Tribe	Clearwater	CH1	SP	2002	57,400	04-10-02	04-10-02	Papoose Cr
Nez Perce Tribe	Clearwater	CH1	SP	2002	81,500	04-01-02	04-19-02	Lochsa R
Nez Perce Tribe	Clearwater	CH1	SP	2002	115,000	04-01-02	04-19-02	Newsome Cr
Nez Perce Tribe	Clearwater	CH1	SP	2002	149,300	04-01-02	04-19-02	Lolo Cr
Nez Perce Tribe	Clearwater	CH1	SP	2002	297,500	04-01-02	04-19-02	Meadow Cr
Nez Perce Tribe	Clearwater	ST	SU	2002	29,700	04-02-02	04-30-02	Lolo Cr
Nez Perce Tribe	Clearwater	ST	SU	2002	50,000	04-02-02	04-30-02	Meadow Cr
Nez Perce Tribe	Hagerman	ST	SU	2002	50,000	04-01-02	05-07-02	Hazard Cr/Little Salmon R
Nez Perce Tribe	Hagerman	ST	SU	2002	100,000	04-01-02	05-07-02	American R
Nez Perce Tribe	Hagerman	ST	SU	2002	100,000	04-01-02	05-07-02	Newsome Cr
Nez Perce Tribe	Hagerman	ST	SU	2002	140,000	04-01-02	05-07-02	Yankee Fk (Salmon R)
Nez Perce Tribe	Hagerman	ST	SU	2002	150,000	04-01-02	05-07-02	Little Salmon R
Nez Perce Tribe	Lookingglass	CH1	SP	2002	31,000	04-01-02	04-14-02	Lostine Accim Pd
Nez Perce Tribe	Lookingglass	CH1	SP	2002	77,500	04-01-02	04-14-02	Lostine Accim Pd
Nez Perce Tribe	Lyons Ferry	CH1	FA	2002	150,000	04-09-02	04-17-02	Big Canyon (Clearwater R)
Nez Perce Tribe	Lyons Ferry	CH1	FA	2002	150,000	04-09-02	04-17-02	Cpt John Acclim Pd
Nez Perce Tribe	Lyons Ferry	CH1	FA	2002	150,000	04-09-02	04-17-02	Pittsburg Landing
Nez Perce Tribe Total					1,899,100			
ODFW	Irrigon	ST	SU	2002	100,000	04-17-02	04-18-02	Big Sheep Cr
ODFW	Irrigon	ST	SU	2002	128,500	04-11-02	04-12-02	L Sheep Acclim Pd
ODFW	Irrigon	ST	SU	2002	174,000	04-10-02	04-12-02	Big Canyon Acclim.Pd
ODFW	Lookingglass	CH1	SP	2002	303,800	03-21-02	04-17-02	Imnaha Acclim Pd
ODFW	Wallowa	ST	SU	2002	348,000	04-04-02	04-06-02	Wallowa Acclim Pd
ODFW Total					1,054,300			
Umatilla Tribe	Bonneville	CH1	FA	2002	260,000	04-10-02	04-19-02	Thornhollow Acclim Pd
Umatilla Tribe	Cascade	CO	UN	2002	750,000	04-08-02	04-19-02	Pendelton Acclim Pd
Umatilla Tribe	Lookingglass	CH1	SP	2002	151,388	04-01-02	04-15-02	Grande Ronde Acclim Pd
Umatilla Tribe	Lookingglass	CH1	SP	2002	180,500	04-01-02	04-15-02	Catherine Cr Acclim Pd
Umatilla Tribe	Umatilla	ST	SU	2002	54,000	04-01-02	04-05-02	Bonifer Acclim Pd
Umatilla Tribe	Willard	CH1	SP	2002	255,000	04-12-02	04-22-02	Imequas Acclim Pd
Umatilla Tribe Total					1,650,888			

HATCHERY RELEASE SUMMARY NEXT TWO WEEKS

		From:			4/5/02	to	4/18/02 (con't)			
USFWS	Carson	CH1	SP	2002	1,420,000	04-16-02	04-17-02	Carson H		
USFWS	Dworshak	CH1	SP	2002	500,000	03-25-02	04-05-02	Kooskia H		
USFWS	Dworshak	ST	SU	2002	580,000	04-15-02	04-19-02	Redhouse (SFk ClearH20 R)		
USFWS	Entiat	CH1	SP	2002	550,000	04-08-02	04-08-02	Entiat H		
USFWS	Hagerman	ST	SU	2002	750,000	04-01-02	05-07-02	Sawtooth H		
USFWS	Kooskia	CH1	SP	2002	50,000	03-25-02	04-05-02	Clear Cr		
USFWS	Kooskia	ST	SU	2002	260,000	04-15-02	04-19-02	Kooskia H		
USFWS	L White Salmon	CH1	SP	2002	1,037,000	04-18-02	04-18-02	Little White Salmon H		
USFWS	Warm Springs	CH1	SP	2002	582,800	03-26-02	04-18-02	Warm Springs H		
USFWS	Willard	CO	UN	2002	974,000	04-18-02	04-18-02	Little White Salmon R		
USFWS	Winthrop	CH1	SP	2002	201,604	04-15-02	04-15-02	Winthrop H		
USFWS	Winthrop	ST	SU	2002	150,000	04-14-02	04-30-02	Winthrop H		
USFWS Total					7,055,404					
Warm Spgs Tribe	Blackberry Pond	CH1	SP	2002	47,000	04-01-02	04-26-02	Blackberry Acclim Pd		
Warm Spgs Tribe	Jones Cr Pond	CH1	SP	2002	33,000	04-01-02	04-26-02	Jones Creek Acclim Pd		
Warm Spgs Tribe	Parkdale Pond	CH1	SP	2002	7,000	04-10-02	04-22-02	Parkdale Acclim Pd		
Warm Spgs Tribe	Round Butte	CH1	SP	2002	31,000	04-01-02	04-15-02	Parkdale Acclim Pd		
Warm Spgs Tribe Total					118,000					
WDFW	East Bank	CH1	SP	2002	47,000	04-15-02	04-30-02	Chiwawa H		
WDFW	East Bank	CH1	SU	2002	335,000	04-15-02	05-15-02	Turtle Rock H		
WDFW	Lyons Ferry	CH1	FA	2002	600,000	04-01-02	04-15-02	Lyons Ferry H		
WDFW	Lyons Ferry	ST	SU	2002	45,000	04-01-02	04-30-02	Dayton Acclim Pd		
WDFW	Lyons Ferry	ST	SU	2002	50,000	04-15-02	04-30-02	Lyons Ferry H		
WDFW	Lyons Ferry	ST	SU	2002	60,000	04-10-02	04-30-02	Tucannon H		
WDFW	Lyons Ferry	ST	SU	2002	100,000	04-01-02	04-30-02	Dayton Acclim Pd		
WDFW	Lyons Ferry	ST	SU	2002	100,000	04-10-02	04-30-02	Tucannon R		
WDFW	Lyons Ferry	ST	SU	2002	100,000	04-15-02	04-30-02	Walla Walla R		
WDFW	Lyons Ferry	ST	SU	2002	200,000	04-01-02	04-30-02	Cottonwood Acclim Pd		
WDFW	Methow	CH1	SP	2002	75,000	04-17-02	04-20-02	Twisp Acclim Pd		
WDFW	Methow	CH1	SP	2002	266,000	04-17-02	04-20-02	Methow H		
WDFW	Methow	CH1	SU	2002	360,000	04-18-02	04-18-02	Carlton Acclim Pd		
WDFW	Ringold Springs	ST	SU	2002	160,000	04-01-02	04-15-02	Ringold Springs H		
WDFW	Tucannon	CH1	SP	2002	3,000	04-01-02	04-30-02	Curl Lake		
WDFW	Tucannon	CH1	SP	2002	105,000	04-01-02	04-30-02	Curl Lake		
WDFW	Washougal	CO	NO	2002	2,500,000	04-02-02	04-10-02	Klickitat R		
WDFW	Wells	CH1	SU	2002	343,000	04-16-02	04-20-02	Wells H		
WDFW	Wells	CH1	SU	2002	532,470	04-08-02	04-08-02	Similkameen Acclim Pd		
WDFW	Wells	ST	SU	2002	88,000	04-16-02	05-10-02	Chewuch R		
WDFW	Wells	ST	SU	2002	88,000	04-16-02	05-10-02	Methow R		
WDFW	Wells	ST	SU	2002	88,000	04-16-02	05-10-02	Twisp R		
WDFW	Wells	ST	SU	2002	113,000	04-16-02	05-10-02	Okanogan R		
WDFW Total					6,358,470					
Yakima Tribe	Cle Elum	CH1	SP	2002	265,500	03-18-02	06-07-02	Easton Pd		
Yakima Tribe	Cle Elum	CH1	SP	2002	288,000	03-18-02	06-07-02	Clark Flat Acclim Pd		
Yakima Tribe	Cle Elum	CH1	SP	2002	288,000	03-18-02	06-07-02	Jack Creek Acclim Pd		
Yakima Tribe Total					841,500					
Grand Total					25,487,578					

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

HATCHERY RELEASE SUMMARY NEXT TWO WEEKS

Hatchery Release Summary

From: 4/19/02 to 5/2/02

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite
IDFG	Bonneville	SO	UN	2002	70,000	05-02-02	05-02-02	Redfish Lake Cr
IDFG	Clearwater	ST	SU	2002	138,500	04-22-02	04-22-02	Redhouse (SFk ClearH20 R)
IDFG	Magic Valley	ST	SU	2002	3,800	04-22-02	04-22-02	E Fk Salmon R
IDFG	Magic Valley	ST	SU	2002	100,000	04-29-02	04-29-02	Yankee Fk (Salmon R)
IDFG	Magic Valley	ST	SU	2002	100,000	05-01-02	05-01-02	Lemhi R
IDFG	Magic Valley	ST	SU	2002	110,000	04-18-02	04-22-02	Salmon R Idaho
IDFG	Magic Valley	ST	SU	2002	120,000	04-19-02	04-22-02	Salmon R Idaho
IDFG	Magic Valley	ST	SU	2002	140,000	04-30-02	04-30-02	Lemhi R
IDFG	Magic Valley	ST	SU	2002	225,000	04-25-02	04-26-02	E Fk Salmon R
IDFG	Magic Valley	ST	SU	2002	280,000	04-23-02	04-24-02	Squaw Cr
IDFG	Niagara Springs	ST	SU	2002	445,000	04-06-02	05-05-02	Little Salmon R
IDFG	Niagara Springs	ST	SU	2002	830,000	04-13-02	05-01-02	Pahsimeroi H
IDFG	Rapid River	CH1	SP	2002	2,600,000	03-11-02	04-22-02	Rapid River H
IDFG	Sawtooth	CH1	SP	2002	390,000	04-08-02	04-22-02	Sawtooth H
IDFG	Sawtooth	SO	UN	2002	37,000	05-02-02	05-02-02	Salmon R Idaho
IDFG Total					5,589,300			
Nez Perce Tribe	Clearwater	CH1	SP	2002	20,200	04-01-02	04-19-02	Lochsa R
Nez Perce Tribe	Clearwater	CH1	SP	2002	81,500	04-01-02	04-19-02	Lochsa R
Nez Perce Tribe	Clearwater	CH1	SP	2002	115,000	04-01-02	04-19-02	Newsome Cr
Nez Perce Tribe	Clearwater	CH1	SP	2002	149,300	04-01-02	04-19-02	Lolo Cr
Nez Perce Tribe	Clearwater	CH1	SP	2002	297,500	04-01-02	04-19-02	Meadow Cr
Nez Perce Tribe	Clearwater	ST	SU	2002	29,700	04-02-02	04-30-02	Lolo Cr
Nez Perce Tribe	Clearwater	ST	SU	2002	50,000	04-02-02	04-30-02	Meadow Cr
Nez Perce Tribe	Dworshak	CO	UN	2002	280,000	05-01-02	05-31-02	Kooskia H
Nez Perce Tribe	Hagerman	ST	SU	2002	50,000	04-01-02	05-07-02	Hazard Cr/Little Salmon R
Nez Perce Tribe	Hagerman	ST	SU	2002	100,000	04-01-02	05-07-02	American R
Nez Perce Tribe	Hagerman	ST	SU	2002	100,000	04-01-02	05-07-02	Newsome Cr
Nez Perce Tribe	Hagerman	ST	SU	2002	140,000	04-01-02	05-07-02	Yankee Fk (Salmon R)
Nez Perce Tribe	Hagerman	ST	SU	2002	150,000	04-01-02	05-07-02	Little Salmon R
Nez Perce Tribe Total					1,563,200			
ODFW	Round Butte	CH1	SP	2002	320,000	04-22-02	04-23-02	Bel. Pelton Dam
ODFW	Wallowa	ST	SU	2002	217,500	05-01-02	05-16-02	Wallowa Acclim Pd
ODFW Total					537,500			
Umatilla Tribe	Bonneville	CH1	FA	2002	260,000	04-10-02	04-19-02	Thornhollow Acclim Pd
Umatilla Tribe	Cascade	CO	UN	2002	750,000	04-08-02	04-19-02	Pendelton Acclim Pd
Umatilla Tribe	Umatilla	ST	SU	2002	54,000	04-22-02	04-30-02	Minthorn Acclim Pd
Umatilla Tribe	Umatilla	ST	SU	2002	54,000	04-22-02	04-30-02	Pendelton Acclim Pd
Umatilla Tribe	Willard	CH1	SP	2002	255,000	04-12-02	04-22-02	Imeques Acclim Pd
Umatilla Tribe Total					1,373,000			
USFWS	Dworshak	ST	SU	2002	580,000	04-15-02	04-19-02	Redhouse (SFk ClearH20 R)
USFWS	Dworshak	ST	SU	2002	1,360,000	04-22-02	04-24-02	Dworshak H
USFWS	Hagerman	ST	SU	2002	750,000	04-01-02	05-07-02	Sawtooth H
USFWS	Kooskia	ST	SU	2002	260,000	04-15-02	04-19-02	Kooskia H
USFWS	Leavenworth	CH1	SP	2002	1,620,000	04-23-02	04-23-02	Leavenworth H
USFWS	Winthrop	CO	SO	2002	186,000	04-19-02	04-30-02	Winthrop H
USFWS	Winthrop	ST	SU	2002	150,000	04-14-02	04-30-02	Winthrop H
USFWS Total					4,906,000			
Warm Spgs Tribe	Blackberry Pond	CH1	SP	2002	47,000	04-01-02	04-26-02	Blackberry Acclim Pd
Warm Spgs Tribe	Jones Cr Pond	CH1	SP	2002	33,000	04-01-02	04-26-02	Jones Creek Acclim Pd
Warm Spgs Tribe	Oak Springs	ST	SU	2002	42,000	04-26-02	05-10-02	Blackberry Acclim Pd
Warm Spgs Tribe	Oak Springs	ST	WI	2002	30,000	05-01-02	05-17-02	E Fk Irrig Dist Sand Trap
Warm Spgs Tribe	Oak Springs	ST	WI	2002	30,000	05-01-02	05-17-02	Parkdale Acclim Pd
Warm Spgs Tribe	Parkdale Pond	CH1	SP	2002	7,000	04-10-02	04-22-02	Parkdale Acclim Pd
Warm Spgs Tribe Total					189,000			

HATCHERY RELEASE SUMMARY NEXT TWO WEEKS

		Hatchery Release Summary							
From:		4/19/02	to	5/2/02					
WDFW	East Bank	CH1	SP	2002	47,000	04-15-02	04-30-02	Chiwawa H	
WDFW	East Bank	CH1	SU	2002	335,000	04-15-02	05-15-02	Turtle Rock H	
WDFW	East Bank	CH1	SU	2002	943,000	04-23-02	04-23-02	Dryden Acclim Pd	
WDFW	East Bank	ST	SU	2002	54,000	04-24-02	05-03-02	Chiwawa H	
WDFW	East Bank	ST	SU	2002	75,000	04-24-02	05-03-02	Wenatchee R	
WDFW	East Bank	ST	SU	2002	93,000	04-24-02	05-03-02	Chiwawa H	
WDFW	East Bank	ST	SU	2002	120,500	04-24-02	05-03-02	Chiwawa H	
WDFW	Klickitat	CO	SO	2002	1,000,000	05-01-02	05-31-02	Klickitat H	
WDFW	Lyons Ferry	ST	SU	2002	45,000	04-01-02	04-30-02	Dayton Acclim Pd	
WDFW	Lyons Ferry	ST	SU	2002	50,000	04-15-02	04-30-02	Lyons Ferry H	
WDFW	Lyons Ferry	ST	SU	2002	60,000	04-10-02	04-30-02	Tucannon H	
WDFW	Lyons Ferry	ST	SU	2002	100,000	04-01-02	04-30-02	Dayton Acclim Pd	
WDFW	Lyons Ferry	ST	SU	2002	100,000	04-10-02	04-30-02	Tucannon R	
WDFW	Lyons Ferry	ST	SU	2002	100,000	04-15-02	04-30-02	Walla Walla R	
WDFW	Lyons Ferry	ST	SU	2002	200,000	04-01-02	04-30-02	Cottonwood Acclim Pd	
WDFW	Methow	CH1	SP	2002	75,000	04-17-02	04-20-02	Twisp Acclim Pd	
WDFW	Methow	CH1	SP	2002	266,000	04-17-02	04-20-02	Methow H	
WDFW	Skamania	ST	SU	2002	20,000	05-01-02	05-10-02	Drano L	
WDFW	Skamania	ST	SU	2002	100,000	05-01-02	05-10-02	Klickitat R	
WDFW	Skamania	ST	WI	2002	20,000	04-25-02	04-30-02	White Salmon R	
WDFW	Tucannon	CH1	SP	2002	3,000	04-01-02	04-30-02	Curl Lake	
WDFW	Tucannon	CH1	SP	2002	105,000	04-01-02	04-30-02	Curl Lake	
WDFW	Wells	CH1	SU	2002	343,000	04-16-02	04-20-02	Wells H	
WDFW	Wells	ST	SU	2002	88,000	04-16-02	05-10-02	Chewuch R	
WDFW	Wells	ST	SU	2002	88,000	04-16-02	05-10-02	Methow R	
WDFW	Wells	ST	SU	2002	88,000	04-16-02	05-10-02	Twisp R	
WDFW	Wells	ST	SU	2002	113,000	04-16-02	05-10-02	Okanogan R	
WDFW Total					4,631,500				
Yakima Tribe	Cle Elum	CH1	SP	2002	265,500	03-18-02	06-07-02	Easton Pd	
Yakima Tribe	Cle Elum	CH1	SP	2002	288,000	03-18-02	06-07-02	Clark Flat Acclim Pd	
Yakima Tribe	Cle Elum	CH1	SP	2002	288,000	03-18-02	06-07-02	Jack Creek Acclim Pd	
Yakima Tribe	Klickitat	CH0	SP	2002	210,000	05-02-02	05-10-02	Upper Klickitat R	
Yakima Tribe	Leavenworth	CO	UN	2002	298,500	04-25-02	05-06-02	Nason Cr	
Yakima Tribe	Leavenworth	CO	UN	2002	701,500	04-25-02	04-25-02	Icicle Cr	
Yakima Tribe	Prosser	CH0	FA	2002	3,100	04-25-02	04-26-02	Prosser Acclim Pd	
Yakima Tribe	Prosser	CH0	FA	2002	80,000	04-22-02	05-22-02	Prosser Acclim Pd	
Yakima Tribe	Winthrop	CO	UN	2002	150,000	04-25-02	05-10-02	Winthrop H	
Yakima Tribe Total					2,284,600				
Grand Total					21,074,100				

Two-Week Summary of Passage Indices

COMBINED YEARLING CHINOOK

Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
04/05/2002 *	2,089	855	95	7	1,722	146	10,450	5	588	315	189
04/06/2002 *	---	---	---	---	1,512	204	25,260	0	584	240	807
04/07/2002	---	213	---	---	1,639	354	6,630	0	672	300	623
04/08/2002 *	2,847	381	215	26	2,142	62	6,029	5	1,152	350	662
04/09/2002	3,044	514	304	26	1,758	198	---	10	1,579	420	1,653
04/10/2002	3,197	546	429	44	3,464	221	---	14	1,352	850	1,781
04/11/2002 *	2,244	---	352	48	6,797	494	---	120	1,711	778	2,567
04/12/2002	723	345	228	89	7,403	533	---	131	2,334	560	2,805
04/13/2002 *	---	110	---	---	9,958	930	---	44	2,799	699	2,904
04/14/2002	---	93	---	---	17,302	1,806	---	83	4,123	1,541	5,608
04/15/2002 *	2,013	---	---	1,314	30,238	3,657	---	108	4,467	769	4,347
04/16/2002 *	914	---	---	1,234	83,425	9,708	---	65	5,550	3,247	7,361
04/17/2002	1,083	---	140	2,108	60,804	11,385	---	77	8,839	5,514	6,028
04/18/2002	408	---	455	1,090	43,012	17,796	---	149	11,467	4,478	13,176
Total:	18,562	3,057	2,218	5,986	271,176	47,494	48,369	811	47,217	20,061	50,511
# Days:	10	8	8	10	14	14	4	14	14	14	14
Average:	1,856	382	277	599	19,370	3,392	12,092	58	3,373	1,433	3,608
YTD	34,557	23,227	2,513	6,034	280,931	48,286	54,759	819	47,929	22,071	58,670

COMBINED SUBYEARLING CHINOOK

Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
04/05/2002 *	0	0	0	0	0	0	0	1	126	25	3,785
04/06/2002 *	---	---	---	---	0	0	0	3	120	35	2,358
04/07/2002	---	0	---	---	0	0	0	4	24	10	1,994
04/08/2002 *	0	0	0	0	20	0	0	9	44	5	2,058
04/09/2002	0	0	0	1	0	0	---	1	84	25	2,215
04/10/2002	0	0	0	0	16	0	---	2	204	60	2,375
04/11/2002 *	0	---	0	3	16	0	---	11	495	50	3,934
04/12/2002	0	0	0	1	30	0	---	48	222	35	3,968
04/13/2002 *	---	0	---	---	5	0	---	48	332	34	2,678
04/14/2002	---	0	---	---	0	0	---	26	451	64	4,280
04/15/2002 *	0	---	---	4	0	0	---	36	439	27	6,404
04/16/2002 *	0	---	---	1	0	0	---	29	347	74	8,735
04/17/2002	0	---	0	0	138	0	---	13	3,447	24	8,322
04/18/2002	0	---	2	1	0	0	---	52	5,784	126	10,023
Total:	0	0	2	11	225	0	0	283	12,119	594	63,129
# Days:	10	8	8	10	14	14	4	14	14	14	14
Average:	0	0	0	1	16	0	0	20	866	42	4,509
YTD	0	1	5	22	255	0	0	285	12,179	659	1,094,013

*The total, #days and average do not include the current day's data. *See sampling comments. <http://www.fpc.org/current/daily/smpcomments.htm>. This means that one or more of the sites on this date had an incomplete or biased sample.

These data are preliminary and have been derived from various sources. For verification and/or origin of these data, contact the operators of the Fish Passage Data System at (503) 230-4099.

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

Date	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/05/2002 *	0	0	0	1	0	0	0	0	12	0	0
04/06/2002 *	---	---	---	---	0	0	0	0	20	0	0
04/07/2002	---	0	---	---	0	0	0	0	16	5	62
04/08/2002 *	0	0	0	0	0	0	0	0	32	5	147
04/09/2002	0	0	0	1	0	0	---	0	64	0	281
04/10/2002	0	0	0	2	0	0	---	0	64	0	267
04/11/2002 *	0	---	0	0	0	0	---	0	86	14	400
04/12/2002	0	0	0	1	0	0	---	0	26	7	684
04/13/2002 *	---	0	---	---	0	0	---	0	83	0	1,065
04/14/2002	---	0	---	---	0	0	---	0	113	45	1,144
04/15/2002 *	0	---	---	3	0	0	---	0	40	13	1,359
04/16/2002 *	0	---	---	3	0	0	---	0	127	216	3,592
04/17/2002	0	---	0	1	0	0	---	5	308	319	8,375
04/18/2002	0	---	0	2	0	0	---	0	645	251	11,712
Total:	0	0	0	14	0	0	0	5	1,636	875	29,088
# Days:	10	8	8	10	14	14	4	14	14	14	14
Average:	0	0	0	1	0	0	0	0	117	63	2,078
YTD	0	0	0	16	20	4	0	5	1,680	910	29,232

COMBINED STEELHEAD

Date	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/05/2002 *	11	3	0	15	772	154	290	2	570	460	0
04/06/2002 *	---	---	---	---	1,336	310	360	0	344	330	62
04/07/2002	---	26	---	---	1,323	218	300	0	308	180	62
04/08/2002 *	3	12	196	79	2,815	141	268	0	296	210	196
04/09/2002	8	7	120	90	3,404	384	---	2	594	645	374
04/10/2002	26	10	120	67	3,842	390	---	4	788	695	327
04/11/2002 *	21	---	132	131	5,975	1,369	---	8	800	530	300
04/12/2002	8	105	228	92	5,654	1,895	---	4	463	411	718
04/13/2002 *	---	48	---	---	8,629	3,727	---	0	491	444	1,420
04/14/2002	---	44	---	---	13,464	6,759	---	17	871	1,235	2,287
04/15/2002 *	25	---	---	248	23,150	9,376	---	30	1,047	951	1,553
04/16/2002 *	99	---	---	232	52,779	15,878	---	50	2,724	3,900	2,971
04/17/2002	230	---	21	256	37,766	14,792	---	33	6,528	5,038	1,440
04/18/2002	36	---	145	291	57,349	19,314	---	46	9,673	8,468	3,097
Total:	467	255	962	1,501	218,258	74,707	1,218	196	25,497	23,497	14,807
# Days:	10	8	8	10	14	14	4	14	14	14	14
Average:	47	32	120	150	15,590	5,336	305	14	1,821	1,678	1,058
YTD	481	407	981	1,562	221,129	75,423	1,528	197	26,375	24,337	14,912

Two-Week Summary of Passage Indices

COMBINED SOCKEYE

Date	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/05/2002 *	0	0	0	0	99	0	20	0	24	40	0
04/06/2002 *	---	---	---	---	137	23	20	0	16	35	62
04/07/2002	---	0	---	---	165	0	0	0	4	15	0
04/08/2002 *	0	0	0	0	61	0	20	0	0	0	49
04/09/2002	0	0	0	0	144	28	---	2	8	25	0
04/10/2002	0	0	0	0	297	11	---	9	12	10	0
04/11/2002 *	0	---	0	0	300	21	---	11	12	14	67
04/12/2002	0	0	0	0	271	21	---	15	13	0	137
04/13/2002 *	---	0	---	---	354	42	---	37	6	7	97
04/14/2002	---	0	---	---	236	53	---	127	31	6	332
04/15/2002 *	0	0	---	0	650	30	---	464	40	0	155
04/16/2002 *	0	0	---	0	1,238	155	---	272	23	61	89
04/17/2002	0	---	0	0	1,104	204	---	202	193	9	0
04/18/2002	0	---	0	0	414	382	---	143	181	0	56
Total:	0	0	0	0	5,470	970	60	1,282	563	222	1,044
# Days:	10	10	8	10	14	14	4	14	14	14	14
Average:	0	0	0	0	391	69	15	92	40	16	75
YTD	0	0	0	5	5,719	1,034	70	1,285	579	287	1,089

* See sampling comments

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

These data are preliminary and have been derived from various sources. For verification and/or origin of these data, contact the operators of the Fish Passage Data System at (503) 230-4099.

Smolt indices, clipped & unclipped or combined, are presented in the following order: yearling chinook (chinook 1's), subyearling chinook (chinook 0's), steelhead, coho, and sockeye. Two classes of fish counts are shown in these tables: collection counts, which account for sample rates but are not adjusted for flow; and passage indices, which are collection counts divided by the proportion of water passing through the sampled powerhouse. Passage indices are not population estimates, but are used to adjust collection counts for daily fluctuations in the site's or project's operations. The classes of counts presented in the report are defined below for each site. Most samples occur over a 24-hr period that spans two calendar days. In this report, the date shown corresponds with the sample end date.

Definitions for Smolt Index Counts

WTB (Collection) = Salmon River Trap at Whitebird : Collection Counts

IMN (Collection) = Imnaha River Trap : Collection Counts

GRN (Collection) = Grande Ronde River Trap : Collection Counts

LEW (Collection) = Snake River Trap at Lewiston : Collection Counts

LGR (Index) = Lower Granite Dam Bypass Collection System : Passage Index Counts

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

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

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

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

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

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

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

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

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

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

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

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

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

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: 04/17

DAM	Spring Chinook						Summer Chinook						Fall Chinook					
	2002		2001		10-Yr Avg.		2002		2001		10-Yr Avg.		2002		2001		10-Yr Avg.	
	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	29,227	41	198,099	351	37,341	147	0	0	0	0	0	0	0	0	0	0	0	0
TDA	9,378	21	119,333	156	18,201	55	0	0	0	0	0	0	0	0	0	0	0	0
JDA	3,945	0	59,771	37	10,850	33	0	0	0	0	0	0	0	0	0	0	0	0
MCN	2,706	5	48,334	87	8,001	24	0	0	0	0	0	0	0	0	0	0	0	0
IHR	903	1	26,641	50	3,080	5	0	0	0	0	0	0	0	0	0	0	0	0
LMN	658	0	20,178	18	2,269	2	0	0	0	0	0	0	0	0	0	0	0	0
LGS	328	0	13,150	267	1,399	24	0	0	0	0	0	0	0	0	0	0	0	0
LWG	65	0	8,044	2	856	0	0	0	0	0	0	0	0	0	0	0	0	0
PRD	0	0	1,388	0	165	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	0	0	354	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0
RRH	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEL	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

DAM	Coho						Sockeye			Steelhead			
	2002		2001		10-Yr Avg.		10-Yr Avg.			10-Yr Avg.			Wild
	Adult	Jack	Adult	Jack	Adult	Jack	2002	2001	Avg.	2002	2001	Avg.	2002
BON	0	0	0	0	0	0	0	0	0	2,847	2,169	1,587	823
TDA	0	0	0	0	0	0	0	0	0	1,927	559	661	689
JDA	0	0	0	0	0	0	0	0	0	5,489	1,307	1,624	1,750
MCN	0	0	0	0	0	0	0	0	0	4,083	1,052	1,224	1,528
IHR	0	0	0	0	0	0	0	0	0	3,861	1,070	1,552	1,016
LMN	0	0	0	0	0	0	0	0	0	4,397	1,316	1,620	1,696
LGS	0	0	0	0	0	0	0	0	0	4,974	1,429	776	1,871
LWG	0	0	0	0	0	0	0	0	0	9,995	5,097	4,195	2,319
PRD	0	0	0	0	0	0	0	0	0	0	4	1	**
RIS	0	0	0	0	0	0	0	0	0	0	8	6	0
RRH	0	0	0	0	0	0	0	0	0	0	18	9	0
WEL	---	---	---	---	---	---	---	---	---	---	---	---	---

COE did not update adult numbers - all through 04/17, except JDA through 04/15.

**PRD is not reporting Wild Steelhead numbers.

These numbers were collected from the COE's Running Sums text files.

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.

Two Week Transportation Summary

04/06/02 TO 04/19/02

4/19/02

		Species						
Site	Data	CH0	CH1	CO	SO	ST	Grand Total	
LGR	Sum of NumberCollected	153	186,742			3,695	150,902	341,492
	Sum of NumberBarged	141	179,275			3,421	144,423	327,260
	Sum of NumberBypassed	0	5,518			1	5,380	10,899
	Sum of Numbertrucked	0	1,633			118	1,069	2,820
	Sum of TotalProjectMortalities	12	316			155	30	513
LGS	Sum of NumberCollected		28,546			560	45,453	74,559
	Sum of NumberBarged		28,241			537	45,129	73,907
	Sum of NumberBypassed		0			0	0	0
	Sum of Numbertrucked		248			10	308	566
	Sum of TotalProjectMortalities		57			13	16	86
LMN	Sum of NumberCollected		48,369			60	1,218	49,647
	Sum of NumberBarged		0			0	0	0
	Sum of NumberBypassed		34,538			57	1,165	35,760
	Sum of Numbertrucked		13,720			3	46	13,769
	Sum of TotalProjectMortalities		111			0	7	118
MCN	Sum of NumberCollected	6,662	28,711	974		330	14,803	51,480
	Sum of NumberBarged	0	0	0		0	0	0
	Sum of NumberBypassed	6,648	28,662	974		328	14,797	51,409
	Sum of Numbertrucked	0	0	0		0	0	0
	Sum of TotalProjectMortalities	14	49	0		2	6	71
Total Sum of NumberCollected		6,815	292,368	974		4,645	212,376	517,178
Total Sum of NumberBarged		141	207,516			3,958	189,552	401,167
Total Sum of NumberBypassed		6,648	68,718	974		386	21,342	98,068
Total Sum of Numbertrucked		0	15,601	0		131	1,423	17,155
Total Sum of TotalProjectMortalities		26	533	0		170	59	788

YTD Transportation Summary

TO: 04/19/02

		Species						
Site	Data	CH0	CH1	CO	SO	ST	Grand Total	
LGR	Sum of NumberCollected	183	194,992		20	3,925	153,222	352,342
	Sum of NumberBarged	141	179,275			3,421	144,423	327,260
	Sum of NumberBypassed	0	5,518			1	5,380	10,899
	Sum of NumberTrucked	29	9,847		20	343	3,383	13,622
	Sum of TotalProjectMortalities	13	352			160	36	561
LGS	Sum of NumberCollected		29,338		4	624	46,169	76,135
	Sum of NumberBarged		28,241			537	45,129	73,907
	Sum of NumberBypassed		0			0	0	0
	Sum of NumberTrucked		1,034		4	74	1,024	2,136
	Sum of TotalProjectMortalities		63			13	16	92
LMN	Sum of NumberCollected		54,759			70	1,528	56,357
	Sum of NumberBarged		0			0	0	0
	Sum of NumberBypassed		34,538			57	1,165	35,760
	Sum of NumberTrucked		20,104			13	356	20,473
	Sum of TotalProjectMortalities		117			0	7	124
MCN	Sum of NumberCollected	6,722	29,423	1,018		346	15,681	53,190
	Sum of NumberBarged	0	0	0		0	0	0
	Sum of NumberBypassed	6,708	29,373	1,018		344	15,675	53,118
	Sum of NumberTrucked	0	0	0		0	0	0
	Sum of TotalProjectMortalities	14	50	0		2	6	72
Total Sum of NumberCollected		6,905	308,512	1,042		4,965	216,600	538,024
Total Sum of NumberBarged		141	207,516			3,958	189,552	401,167
Total Sum of NumberBypassed		6,708	69,429	1,018		402	22,220	99,777
Total Sum of NumberTrucked		29	30,985	24		430	4,763	36,231
Total Sum of TotalProjectMortalities		27	582	0		175	65	849

