



## Fish Passage Center

# Weekly Report #02 - 8

May 3, 2002

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### SUMMARY OF EVENTS:

- Precipitation over the month of April has averaged between 82% and 112% of that recorded over the same period between 1971 and 2000.
- Due to an expected cooling trend, snowmelt is expected to decline over much of the PNW, likely delaying the spring freshet.
- Over the upcoming week, Grand Coulee is expected to draft reservoir water at a rate of approximately 0.5 feet/day (not to exceed an elevation of 1240 feet AMSL), to supplement flows in the Columbia River.
- The NWRFC released the May Early-Bird water supply forecast; many sites reported increasing forecasts between the April Final and May Early-Bird forecasts.
- Flows at Lower Granite have averaged 73.6 Kcfs between April 3rd and May 2nd and 61.3 Kcfs over the week from April 26th to May 2nd (BiOp target = 97 Kcfs).
- Flows at McNary have averaged 238.7 Kcfs between April 10th and May 2nd and 213.2 Kcfs over the week from April 26th to May 2nd (BiOp target = 246 Kcfs).
- Flows at Priest Rapids have averaged 157.2 Kcfs between April 10th and May 2nd and 147.4 Kcfs over the week from April 26th to May 2nd (BiOp target = 135 Kcfs).
- Combined storage in the Upper Snake River System is at 62% of capacity.

**Water Supply:** Precipitation has ranged from 82% to 112% of average over the month of April 2002. WY 2002 remains approximately average in terms of cumulative precipitation.

**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 2002		Cumulative 10/1/01 - 4/30/02	
	Observed (inches)	% Avg	Observed (inches)	% Avg
Columbia Above Coulee	1.61	98	15.74	99
Snake R. Above Ice Harbor	1.49	102	11.24	96
Columbia Above The Dalles	1.60	97	15.79	99
Kootenai	1.43	82	13.91	85
Clark Fork	1.14	92	11.03	108
Flathead	1.77	112	14.56	106
Pend Oreille/Spokane	2.07	92	26.35	117
Central Washington	0.54	85	6.18	94
Snake R. Plain	0.87	84	5.59	78
Clearwater	2.23	84	23.19	109
SW Washington Cascades/Cowlitz	5.23	98	65.43	111
Willamette Valley	4.41	91	52.39	111

According to the Northwest River Forecast Center (NWRFC), cooler conditions will prevail throughout the Pacific Northwest (PNW) over the next several days, accompanied with some precipitation. In general, due to the cooling trend, snowmelt is expected to decline over much of the PNW, with the exception of the Upper and Lower Snake region. Lesser snowmelt will like delay the spring freshet.

The NWRFC released the May Early-Bird water supply forecast. Table 2 displays the 2002 April Final runoff volume forecast along with the April Mid-month and May Early-Bird forecast for multiple reservoirs. Of the ten locations displayed in Table 2, all reported increasing forecasts between the April Final and May Early-Bird water supply forecasts.

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

Site	April Final		April Mid-Month		May Early-Bird	
	Runoff Volume (Kaf)	% of Avg	Runoff Volume (Kaf)	% of Avg	Runoff Volume (Kaf)	% of Avg
Mica (April-Sept)	11700	94	12100	97	11900	95
Hungry Horse (April-Sept)	2060	97	2230	105	2150	101
Libby (April-Sept)	6570	99	6950	105	6760	102
Grand Coulee (Jan-July)	61100	97	63300	101	62000	99
The Dalles (Jan-July)	96400	90	100000	93	98200	92
Brownlee (April-July)	3630	58	3850	61	3700	59
Dworshak (April-July)	3050	115	3200	121	3070	116
Lower Granite (Jan-July)	24200	81	25100	84	24500	82
Heise (ID) (April-July)	2670	75	2910	82	2920	82
Weiser (ID) (April-July)	3210	56	3390	59	3270	57

Generally, the storage reservoirs have been operating to meet the end of April flood control targets. Table 3 displays the actual elevations and the end of April flood control target elevations for Libby, Hungry Horse, Grand Coulee, Brownlee, and Dworshak.

**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 4/30/02 (ft. Above MSL)	USACE Determined 4/30/02 Flood Control Target (ft. Above MSL)
Libby	2379.0	2362.6
Hungry Horse	3515.5	3516.2
Grand Coulee	1244.9	1244.9
Brownlee	2062.1	2064.4
Dworshak	1513.6	1486.5

The Grand Coulee Reservoir met its end of April flood control target of 1244.9 feet AMSL. Grand Coulee is currently (5-2-02) at an elevation of 1244.3 feet AMSL, and outflows are 127.7 Kcfs. Over the upcoming week, Grand Coulee is expected to draft reservoir water at a rate of approximately 0.5 feet/day (not to exceed an elevation of 1240 feet AMSL), to supplement flows in the Columbia River.

The Libby reservoir ended April well above its flood control target. On 4-30-2002, Libby was at an elevation of 2379.0 feet AMSL; the end of April flood control elevation was 2362.6 feet AMSL. Libby has been refilling over the past 3 ½ weeks, operating to a minimum outflow of 4.0 Kcfs, in anticipation of future flows needed for bull trout and sturgeon.

Dworshak ended April well above its system flood control target of 1486.5 feet AMSL. On 4-30-2002, Dworshak was at an elevation of 1513.6 feet AMSL, 27.1 feet above the end of April target. According to USACE, operations at Dworshak will include maximizing draft while also maintaining a 110% TDG level. Over the month of April, total

outflow at Dworshak has been very close to 15 Kcfs; approximately 10.5 Kcfs through the powerhouse and 4.5 Kcfs of spill.

Brownlee ended April below its flood control elevation of 2064.4. On 4-30-2002, the Brownlee reservoir was at an elevation of 2062.1 feet AMSL, 2.3 feet below its flood control target. Over the past week, Brownlee has refilling, gaining approximately 4.8 feet from April 26th to May 2nd, 2002.

The Hungry Horse reservoir met its end of April flood control target. On 4-30-2002, the Hungry Horse reservoir was at an elevation of 3515.5 feet AMSL, its end of April flood control target was 3516.2 feet AMSL.

Flows along the Columbia River are projected to decrease over the next week, influencing the Biological Opinion flow targets at McNary, Priest Rapids, and Lower Granite. To meet flow targets, flows will likely need to be supplemented with water from the storage reservoirs.

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 3rd to May 2nd, 2002, outflows at Lower Granite have averaged 73.6 Kcfs; from April 10th to May 2nd, 2002, outflows at McNary have averaged 238.7 Kcfs; from April 10th to May 2nd, 2002, outflows at Priest Rapids have averaged 157.2 Kcfs. Therefore, to date, flow objectives are only being met at Priest Rapids. Over the week from April 26th to May 2nd, 2002 flows have averaged 61.3 Kcfs at Lower Granite, 213.2 Kcfs at McNary, and 147.4 Kcfs at Priest Rapids. On a weekly basis, BiOp flow objectives are again only being met at Priest Rapids. It is important to note that without significant supplemental water from storage reservoirs, each of the projects will likely continue to struggle to meet the BiOp flow objectives.

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 May 2nd, 2002, the entire Upper Snake River System is at

62% of capacity. Individually, American Falls is at 86% of capacity, Palisades is at 47% of capacity, Jackson Lake is at 27% of capacity, Island Park is at 96% of capacity, Lake Walcott is at 97% of capacity, Milner is at 92% of capacity, and Grassy Lake is at 69% of capacity.

**Spill.** Spill has been occurring daily at Dworshak Dam and has been reduced this week to target a dissolved gas concentration of 109%, which is less than the water quality criteria of 110%. On May 1st only one turbine unit at Lower Granite Dam remained operational, and water above the hydraulic capacity of one unit is being spilled. Twenty-four hour spill ended at Little Goose Dam on May 1, 2002 and the project returned to a 12-hour spill schedule. Lower Monumental Dam will operate in alternating blocks of a transportation mode for two days followed by one day of primary bypass mode.

Spill for fish passage is also being implemented in the lower Columbia River. All Mid Columbia River projects are spilling at this time. Spill volumes at all the federal hydroprojects are being adjusted to meet the water quality waiver standards. A few fish with minor signs of GBT were observed at Rock Island, Little Goose and Lower Monumental dams this past week.

**Smolt Monitoring:** The yearling chinook numbers collected at Snake River Basin traps were down this week with a total of 4,099 collected at all SMP traps versus over 7,847 last week. The average daily collection for all traps combined declined from 286 to 195. Steelhead numbers decreased compared to the previous week with 4,908 being collected this week versus 5,987 the previous week, with the overall decrease due mainly to much lower collection at the Imnaha Trap this past week. Other traps showed large increases, especially the lower traps at Grande Ronde and Lewiston. The passage index for migrant yearling chinook at Lower Granite increased over the past week averaging 39,000 per day versus 25,000 per day last week, while steelhead numbers reached a high of 96,000 on 4/28 but declined to 27,000 on 5/2. At Little Goose the average daily index for chinook increased to 38,000 this week compared

to 27,000 the previous week. Steelhead numbers remained relatively steady at Little Goose Dam with an average daily index of 31,000 this week versus 34,000 last week. At Lower Monumental the project began sampling on 5/1 and there were over 104,000 on that day and the index increased to 146,000 on 5/2. Steelhead indices averaged 39,000 over the first two days of sampling. Rock Island Dam yearling chinook index increased slightly over the past week with the average daily index increasing from 255 to 274 this week compared to last. Steelhead numbers also increased from an average of 39 to 51 comparing this week to last. The sockeye numbers have begun to increase at Rock Island Dam with 380 average daily index this week versus 280 the previous week. In the lower Columbia McNary saw an increase in juvenile migrants this past week, with an average index of 28,000 yearling chinook this week versus 24,000 last week. Steelhead numbers dropped this week with an average daily index of 8,000 this week compared to 16,000 last week. Sockeye indices were up again this week, about 16% above last week, with the average daily index of 7,800 compared to 6,700 per day last week. Subyearling chinook numbers were about 20% of last week with an average index of 980 this week compared to 4,600 the previous week. At John Day Dam passage index for yearling chinook averaged 20,000 per day this week compared to 14,000 per day last for a 40% increase. Steelhead indices averaged 8,400 this week versus 9,800 last. Coho numbers increased to an average index of 1,200 this week versus about 800 per day last week, and sockeye average index increased from 800 to nearly 3,000 over the past week. At Bonneville Dam yearling chinook numbers held relatively steady with average daily index this week of 42,000 versus 38,000 last week, while steelhead numbers rose to 14,600 per day versus 8,400 per day for last week. An estimated 111,000 subyearling chinook passed the project on 5/2 to increase the weekly average to 18,000 per day versus 3,500 per day last week. Coho indices increased slightly over the last week with an average index of 6,300 versus 5,300 last week for an 18% increase. Low numbers of sockeye continued to

pass this week with daily average index of 750 versus 78 last week.

**Adult Fish Passage:** Sometimes it's good to be later than expected but still make an appearance: At Bonneville Dam, passage of adult spring chinook increased dramatically through the past week with counts ranging between 5,058 and 26,340 per day. For the week, 100,134 adult chinook were counted with the daily average being 14,305. The total count of 176,748 for 2002 compares to 314,405 in 2001 and 76,460 for the 10-year average through May 2. This year's total is about 56.2% of the 2001 count and 231% of the 10-year average. The jack chinook count at Bonneville Dam is about 110% of the 10-year average and 63% of the 2001 count. Through May 2, 85,063 adult spring chinook have been counted at The Dalles Dam, about 36.3% and 185% of the respective 2001 count and the ten-year average. A total of 25,303 adult spring chinook have been counted at McNary Dam with about 8,940 turning off into the Snake River (count at Ice Harbor Dam) and 1,898 counted at Lower Granite Dam. Adult spring chinook at Priest Rapids Dam totaled 2,183 through May 1st with daily counts ranging from 79 to 772 per day. The 2002 counts lag well below the 2001 count, but rose to about 42% of the 10-year average.

Numbers of over-wintering summer steelhead passing upstream projects are reducing through time with the Lower Granite Dam count for the spring season totaling 11,335, about double the 2001 and 10-year average. At Bonneville Dam, most steelhead passing the project should still be destined for the lower river tributaries such as the Wind, Hood, White Salmon, and Klickitat. The upriver run of "fresh" or new steelhead is generally expected to begin after June 1st.

**Hatchery Releases:** For the past two weeks, approximately 23.9 million juvenile chinook and coho salmon and steelhead were directly or volitionally released from State, Federal or Tribal facilities in the Columbia River basin. For the

upcoming two weeks, about 6.8 million chinook, sockeye, coho, and steelhead are scheduled for release in the various fish basins.

*Snake River* - Releases of yearling spring chinook are nearly completed for the season with most fish from the acclimation ponds or hatcheries in the rivers. Overall, about 10 million yearling chinook were released from hatcheries in the Snake River this migration season; Note that this total includes chinook released during the late fall season. Yearling spring chinook from the Tucannon River enter the Snake River in the Lower Monumental pool; the rest of the hatchery spring chinook released in this Snake River Zone are from hatcheries above Lower Granite Dam. 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 in the 2nd week of May. 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) have been completed for the season. About 9.5 million steelhead will be released in the Snake R basin during April/May. Steelhead releases into the Snake River and most of the upper Salmon and Clearwater River basins are nearing completion. About 700k juvenile steelhead have been released into NE Oregon streams during the past two weeks. As in previous years, juvenile steelhead will be released up through mid-May in this Zone.

*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 in the Okanogan R basin were volitional and direct stream outplants this year. During the past two weeks, Federal and State hatcheries completed releases of yearling spring chinook in the Methow, Entiat and Wenatchee River basins. 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 have been completed at Ringold H with most of the Methow, Okanogan, and Wenatchee River basins initiating releases this week and will continue for the next 3-weeks. Coho were scheduled for release in the Yakama, Wenatchee, and Methow River basins from mid- to late-April and will be completed by late May. Subyearling summer and fall chinook will be liberated from hatcheries from late May through early July the subyearling run comprises almost 50% of the total fish released in this River Zone.

*Lower Columbia [Bonneville Dam to McNary Dam]* - Yearling spring chinook have been released in the Wind, Little White Salmon, Hood, Deschutes, and Umatilla rivers in April with the Umatilla, Klickitat and Hood rivers also planting fish in March. 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 was completed in the Umatilla River (Thornhollow Pd) this month.

The final release of subyearling "tule" fall chinook from Spring Creek NFH was completed on April 30 with 3.5 million the estimated total. The remaining subyearling upriver "bright" fall chinook will be released from mid-May through late June. Most yearling coho salmon have been released in this Zone for the season with the final release of coho scheduled for completion in the Klickitat River by May 10. Steelhead releases were scheduled 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.

Year 2002 Migration - Hatchery Releases by River Zone above Bonneville Dam.

	Spr Chin	Sum Chin	Fall Chin
Snake R	10,192,483	1,677,497	3,711,000
Mid-Col	3,931,118	3,669,662	11,983,100
L. Col	5,803,974		26,338,361
Total	19,927,575	5,347,159	42,032,461

	Steelhead	Coho	Sockeye	Total
Snake R	9,421,483	840,000	214,163	26,056,626
Mid-Col	1,274,684	2,124,000	308,042	23,290,606
L Colum	559,150	5,249,000		37,950,485
Total	11,255,317	8,213,000	522,205	87,297,717

**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
04/19/02	172.6	0.0	173.3	0.0	179.8	31.6	185.6	34.6	187.4	36.6	197.0	80.7	182.2	113.6
04/20/02	155.3	0.0	168.1	0.0	179.3	42.4	180.1	35.9	183.5	32.6	195.7	89.8	196.6	120.6
04/21/02	157.1	0.0	155.9	0.0	154.7	16.0	154.1	24.6	160.0	30.0	170.6	65.0	177.9	109.1
04/22/02	168.8	0.0	173.8	0.0	176.3	19.4	187.0	27.5	187.0	36.3	204.8	77.7	205.8	125.5
04/23/02	157.6	0.0	155.8	0.0	159.3	9.4	164.2	28.0	168.4	37.0	184.8	70.1	192.0	117.9
04/24/02	149.5	0.0	153.8	0.0	157.0	9.5	160.2	28.0	162.1	38.8	166.0	63.6	171.1	104.7
04/25/02	143.4	0.0	147.5	0.0	152.0	9.5	157.2	26.1	159.0	38.2	167.4	63.9	173.2	106.2
04/26/02	132.5	0.0	135.8	0.0	145.2	9.4	145.1	24.5	147.9	31.0	157.6	60.4	165.5	101.2
04/27/02	108.6	0.0	112.8	0.0	124.1	8.6	125.4	19.6	126.3	25.6	122.2	46.6	119.4	72.7
04/28/02	112.1	0.0	110.7	0.0	113.5	7.5	110.1	17.3	116.0	23.1	118.2	27.2	121.4	74.8
04/29/02	139.8	0.0	142.7	0.0	151.9	9.3	152.6	25.7	152.9	31.5	151.8	12.8	157.6	96.2
04/30/02	149.2	0.0	145.9	0.0	151.9	9.1	153.6	40.6	148.0	33.8	161.9	11.8	176.3	95.5
05/01/02	110.9	0.0	117.4	0.0	124.0	8.9	129.6	39.7	131.9	32.7	142.5	11.6	143.1	88.5
05/02/02	127.7	0.0	124.1	0.0	133.0	8.2	134.2	33.8	135.6	26.6	136.5	32.8	148.4	90.2

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

Date	Dworshak		Brownlee Canyon		Hells Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
04/19/02	15.4	4.5	19.7	23.0	85.2	24.7	81.6	48.2	87.3	0.0	89.2	60.7
04/20/02	15.3	4.5	18.3	20.8	75.8	25.7	74.5	44.3	80.0	0.0	81.4	61.4
04/21/02	15.0	4.2	16.2	14.4	72.3	30.7	69.2	42.1	72.9	0.0	75.7	58.0
04/22/02	15.0	4.2	17.7	24.1	67.3	24.4	63.2	38.3	67.4	0.0	70.0	57.4
04/23/02	15.0	4.2	16.1	23.9	73.9	18.6	74.4	33.1	77.3	0.0	80.6	59.8
04/24/02	15.0	4.3	15.0	18.6	71.8	15.1	70.3	33.5	73.3	0.0	77.2	56.6
04/25/02	15.0	4.2	13.6	15.0	62.4	14.4	62.0	32.1	65.9	0.0	69.0	52.4
04/26/02	14.9	4.1	13.1	9.3	59.8	19.6	59.0	28.6	61.4	0.0	63.4	47.4
04/27/02	14.7	3.9	14.0	9.4	59.7	18.5	59.5	28.3	62.0	0.0	65.2	50.7
04/28/02	14.7	3.9	13.5	9.4	59.3	19.5	57.0	29.4	59.2	0.0	59.9	51.4
04/29/02	14.7	3.9	12.2	9.4	61.5	22.1	60.6	29.9	64.3	0.0	68.6	56.7
04/30/02	14.6	3.8	12.2	9.4	51.8	23.7	48.9	26.3	47.5	0.0	48.9	38.3
05/01/02	14.4	3.6	14.3	9.3	62.6	43.1	61.7	14.8	66.0	0.0	69.9	56.5
05/02/02	14.4	3.6	---	---	74.1	53.6	69.4	14.7	72.0	0.0	75.0	56.6

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

Date	McNary		John Day		The Dalles		Bonneville			
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
04/19/02	296.3	138.3	295.6	54.0	291.5	116.2	310.3	150.4	35.6	117.6
04/20/02	282.4	133.8	283.2	90.3	275.1	109.0	283.1	107.7	48.3	117.7
04/21/02	265.2	117.5	280.2	83.1	280.5	111.3	301.8	106.8	61.6	126.7
04/22/02	261.9	114.6	258.0	51.3	249.2	98.2	259.4	149.0	1.6	102.1
04/23/02	275.0	131.9	281.4	62.1	270.9	107.3	271.1	149.0	0.2	115.3
04/24/02	257.8	129.6	262.6	92.0	258.9	103.0	278.5	107.5	34.9	128.1
04/25/02	240.5	112.3	243.1	74.3	239.0	94.0	252.2	103.5	25.6	116.5
04/26/02	232.2	101.7	226.6	67.5	217.9	86.0	242.2	102.6	27.4	105.5
04/27/02	205.2	93.8	228.4	66.7	229.2	82.1	245.9	98.9	30.2	110.1
04/28/02	187.1	77.0	181.3	42.4	169.2	68.6	199.3	139.0	0.3	53.4
04/29/02	217.2	79.6	214.7	65.2	208.9	79.8	205.4	135.3	0.0	63.3
04/30/02	224.8	87.3	234.4	86.6	228.0	88.4	240.3	93.8	17.2	122.6
05/01/02	211.0	76.2	211.6	62.0	210.0	81.8	230.6	90.2	16.7	117.0
05/02/02	214.7	50.2	203.6	38.3	196.3	77.0	213.9	109.1	-0.3	98.8

## 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
<b>Lower Granite Dam</b>											
	04/23/02	Yearling Chinook	36	0	0	0.00%	0.00%	0	0	0	0
	04/23/02	Steelhead	64	0	0	0.00%	0.00%	0	0	0	0
	04/30/02	Yearling Chinook	51	0	0	0.00%	0.00%	0	0	0	0
	04/30/02	Steelhead	49	0	0	0.00%	0.00%	0	0	0	0
<b>Little Goose Dam</b>											
	04/24/02	Yearling Chinook	38	0	0	0.00%	0.00%	0	0	0	0
	04/24/02	Steelhead	62	0	0	0.00%	0.00%	0	0	0	0
	05/01/02	Yearling Chinook	59	1	0	0.00%	0.00%	0	0	0	0
	05/01/02	Steelhead	41	0	0	0.00%	0.00%	0	0	0	0
<b>Lower Monumental Dam</b>											
	04/29/02	Yearling Chinook	49	1	1	2.04%	0.00%	1	0	0	0
	04/29/02	Steelhead	51	0	0	0.00%	0.00%	0	0	0	0
<b>McNary Dam</b>											
	04/25/02	Yearling Chinook	75	0	0	0.00%	0.00%	0	0	0	0
	04/25/02	Steelhead	25	0	0	0.00%	0.00%	0	0	0	0
	04/29/02	Yearling Chinook	72	0	0	0.00%	0.00%	0	0	0	0
	04/29/02	Steelhead	28	0	0	0.00%	0.00%	0	0	0	0
	05/02/02	Yearling Chinook	85	0	0	0.00%	0.00%	0	0	0	0
	05/02/02	Steelhead	15	0	0	0.00%	0.00%	0	0	0	0
<b>Bonneville Dam</b>											
	04/23/02	Yearling Chinook	96	0	0	0.00%	0.00%	0	0	0	0
	04/23/02	Steelhead	15	0	0	0.00%	0.00%	0	0	0	0
	04/25/02	Yearling Chinook	90	0	0	0.00%	0.00%	0	0	0	0
	04/25/02	Steelhead	10	0	0	0.00%	0.00%	0	0	0	0
	04/29/02	Yearling Chinook	54	0	0	0.00%	0.00%	0	0	0	0
	04/29/02	Steelhead	3	0	0	0.00%	0.00%	0	0	0	0
	05/02/02	Yearling Chinook	56	0	0	0.00%	0.00%	0	0	0	0
	05/02/02	Steelhead	2	0	0	0.00%	0.00%	0	0	0	0
<b>Rock Island Dam</b>											
	04/25/02	Yearling Chinook	73	4	4	5.47%	0.00%	3	1	0	0
	04/25/02	Steelhead	31	1	1	3.22%	3.22%	0	0	0	1
	04/29/02	Yearling Chinook	73	2	2	2.73%	0.00%	2	0	0	0
	04/29/02	Steelhead	27	0	0	0.00%	0.00%	0	0	0	0
	05/02/02	Yearling Chinook	60	2	1	1.66%	0.00%	1	0	0	0
	05/02/02	Steelhead	40	2	2	5.00%	0.00%	2	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	Hungry H. Dnst			Boundary			Grand Coulee			Grand C. Tlwr			Chief Joseph							
	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
4/19	---	---	---	0	118	119	120	24	104	105	106	21	102	102	102	24	103	104	104	21
4/20	97	97	99	12	114	116	117	24	105	106	106	24	103	103	104	24	104	105	105	23
4/21	96	96	97	23	114	116	117	24	106	107	108	24	104	104	104	24	105	105	105	23
4/22	96	97	97	23	116	117	120	24	106	106	108	24	104	104	107	24	105	106	106	23
4/23	96	96	96	20	115	115	117	24	105	105	105	24	103	103	104	24	104	104	105	23
4/24	95	95	95	6	114	117	118	24	105	106	106	24	103	103	104	24	104	104	104	23
4/25	96	96	96	19	112	116	118	24	107	108	109	24	104	105	105	24	105	106	106	23
4/26	96	96	97	24	116	119	121	24	109	109	110	24	106	106	106	24	107	107	108	23
4/27	96	97	97	24	115	116	118	24	109	109	110	23	106	106	107	24	107	107	108	24
4/28	96	96	97	24	115	115	116	24	109	109	109	24	106	106	107	24	106	107	107	23
4/29	97	97	97	24	114	116	117	24	109	109	109	21	106	107	107	24	107	108	109	23
4/30	97	98	98	24	114	115	116	20	110	110	111	24	107	107	108	24	109	109	109	23
5/1	98	99	99	24	112	116	117	24	110	110	111	24	108	108	108	24	109	109	110	23
5/2	99	100	100	24	115	117	123	24	111	111	112	21	108	109	110	22	109	110	111	23

### Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	Chief J. Dnst			Wells			Wells Dwnstrm			Rocky Reach			Rocky R. Tlwr							
	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#				
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr				
4/19	103	104	105	23	103	103	104	24	109	113	119	24	114	118	121	24	115	118	122	24
4/20	105	105	106	23	104	104	104	24	111	115	121	24	112	115	118	24	114	116	118	24
4/21	105	106	106	23	104	105	105	24	107	108	116	24	112	114	117	23	112	114	117	23
4/22	106	106	107	23	104	105	105	24	108	111	121	24	108	110	113	24	109	111	115	23
4/23	105	105	106	23	103	103	104	23	105	106	106	23	107	109	110	24	109	110	111	24
4/24	104	105	105	23	103	103	104	24	105	106	106	24	104	105	105	24	106	107	108	24
4/25	106	106	107	23	104	105	105	23	107	107	107	23	106	107	107	24	107	108	109	23
4/26	107	108	109	23	106	106	106	24	107	108	109	24	107	108	108	22	108	109	110	22
4/27	108	108	109	24	106	106	106	24	108	108	108	24	107	108	111	24	108	109	111	24
4/28	107	107	108	23	105	105	105	24	107	107	108	24	106	106	107	23	107	108	109	23
4/29	108	108	109	23	105	105	106	24	108	109	109	24	107	107	108	24	108	109	111	24
4/30	109	109	110	23	106	106	106	23	109	109	110	23	108	109	109	24	111	112	113	24
5/1	109	109	110	23	105	106	106	24	109	110	110	24	108	109	109	24	111	113	114	24
5/2	110	111	112	23	106	106	107	23	110	111	111	23	110	110	110	24	112	113	116	24

### Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	Rock Island			Rock I. Tlwr			Wanapum			Wanapum Tlwr			Priest Rapids							
	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#				
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr				
4/19	115	117	120	24	120	122	125	24	114	115	117	24	119	120	127	24	115	116	117	24
4/20	116	118	120	24	121	124	127	24	117	119	122	24	121	124	129	24	118	120	122	24
4/21	112	112	113	23	118	120	124	23	117	118	119	24	118	119	120	24	118	120	123	24
4/22	112	114	115	24	119	121	124	24	114	115	116	24	118	119	124	24	115	116	117	24
4/23	109	110	110	24	118	120	122	24	112	112	113	24	116	117	118	24	114	115	116	24
4/24	108	108	108	24	118	121	122	24	112	113	114	24	116	117	119	24	115	116	117	24
4/25	109	109	110	23	119	120	121	23	---	---	---	0	---	---	---	0	---	---	---	0
4/26	110	110	110	22	118	121	123	22	---	---	---	0	---	---	---	0	---	---	---	0
4/27	109	110	110	24	118	122	125	24	---	---	---	0	---	---	---	0	---	---	---	0
4/28	109	109	109	23	116	117	119	23	---	---	---	0	---	---	---	0	---	---	---	0
4/29	109	110	111	24	117	121	123	24	---	---	---	0	---	---	---	0	---	---	---	0
4/30	111	111	112	24	120	123	125	23	---	---	---	0	---	---	---	0	---	---	---	0
5/1	112	112	114	24	121	123	126	23	---	---	---	0	---	---	---	0	---	---	---	0
5/2	113	114	114	24	120	122	126	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>Clwrtr-Peck</u>			<u>Anatone</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>					
	Avg	Avg		hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg		hr			
4/19	120	121	121	24	116	117	118	24	108	109	109	24	103	104	105	24	102	103	104	24
4/20	121	122	123	24	116	117	118	24	109	109	110	24	104	105	105	24	102	103	103	24
4/21	121	122	122	24	115	116	117	24	108	108	109	24	104	104	105	24	102	103	103	24
4/22	120	121	121	24	114	114	115	24	108	108	108	24	104	104	105	24	102	103	104	24
4/23	120	120	121	24	113	113	114	24	107	107	108	24	103	103	103	24	101	101	102	24
4/24	120	120	121	24	114	115	116	24	107	107	108	24	103	104	105	23	102	103	104	24
4/25	---	---	---	0	116	117	117	24	108	109	109	24	104	105	106	24	102	103	104	24
4/26	---	---	---	0	116	117	118	24	109	109	109	24	104	105	105	24	102	103	104	24
4/27	---	---	---	0	115	115	116	24	108	108	108	24	---	---	---	0	101	101	102	24
4/28	---	---	---	0	113	114	115	24	107	107	107	24	103	104	105	24	102	103	104	24
4/29	---	---	---	0	114	115	116	24	108	108	109	24	104	105	106	24	102	103	104	24
4/30	---	---	---	0	116	117	117	24	109	109	109	24	104	105	105	24	102	103	104	24
5/1	---	---	---	0	115	116	116	24	109	109	110	24	104	105	106	24	102	103	104	23
5/2	---	---	---	0	114	115	116	24	108	109	109	24	104	105	106	24	102	103	104	22

### Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clwrtr-Lewiston</u>			<u>Lower Granite</u>			<u>L. Granite Tlwr</u>			<u>Little Goose</u>			<u>L. Goose Tlwr</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>					
	Avg	Avg		hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg		hr			
4/19	102	104	105	24	102	102	104	24	110	119	122	24	107	108	109	24	119	120	121	24
4/20	103	104	105	24	103	103	103	24	112	121	122	24	109	109	109	24	119	119	120	24
4/21	103	104	105	24	103	104	104	24	114	117	122	24	111	112	113	24	118	119	119	24
4/22	103	104	105	24	103	104	104	24	112	112	113	24	110	111	111	24	117	118	118	24
4/23	102	102	103	24	102	102	103	24	108	110	112	24	107	108	109	24	115	115	116	24
4/24	102	104	105	24	102	103	104	24	107	108	108	24	108	108	110	23	115	115	116	23
4/25	104	105	106	24	102	103	104	24	108	113	120	24	109	110	110	24	115	116	116	24
4/26	104	105	106	24	103	103	104	24	111	118	120	24	109	110	110	24	114	114	115	24
4/27	102	103	104	24	104	104	104	24	110	116	118	24	109	109	110	24	114	114	115	24
4/28	103	104	106	24	103	104	104	18	109	112	119	18	107	107	107	18	114	114	114	18
4/29	103	105	106	24	104	105	105	24	111	114	119	24	108	109	110	24	114	115	115	24
4/30	103	105	106	24	103	104	105	24	112	115	118	24	110	111	112	24	114	115	115	24
5/1	103	105	106	24	103	104	104	24	116	116	117	24	111	111	112	24	112	114	115	24
5/2	104	105	107	24	105	105	106	24	118	119	121	23	111	112	112	24	112	114	115	24

### 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>			#				
	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>	#	<u>24 h</u>	<u>12 h</u>					
	Avg	Avg		hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg		hr			
4/19	118	119	120	24	117	118	119	24	111	112	113	24	114	115	117	24	112	113	115	24
4/20	121	122	122	24	120	121	121	24	114	115	115	24	115	116	117	24	116	117	119	24
4/21	121	121	122	24	120	121	121	24	116	117	117	24	114	115	115	24	115	115	116	24
4/22	118	119	119	24	117	118	118	24	117	117	118	24	114	114	116	24	113	113	114	24
4/23	114	115	116	24	114	114	115	24	115	115	116	24	114	115	117	24	109	110	111	24
4/24	114	115	117	24	113	113	113	24	114	115	117	24	114	114	116	24	110	112	113	24
4/25	115	116	117	24	114	115	115	24	114	115	116	24	113	114	115	24	114	116	119	24
4/26	117	118	118	24	117	117	117	24	115	116	116	24	113	114	115	24	117	119	121	24
4/27	126	126	143	11	116	117	117	24	114	115	115	24	113	113	113	24	116	117	118	24
4/28	---	---	---	0	114	114	115	18	113	113	114	18	113	113	113	18	116	118	122	24
4/29	114	114	116	12	113	113	114	24	115	116	118	24	113	114	115	24	114	115	116	24
4/30	116	117	119	24	114	115	116	24	116	117	118	24	112	113	114	24	115	117	121	24
5/1	116	116	118	24	115	115	115	24	115	115	116	24	114	114	115	23	114	116	118	24
5/2	115	116	117	24	115	115	115	24	113	114	114	24	114	114	116	24	113	114	114	24

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

### Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>McNary-Wash</u>			<u>McNary Tlwr</u>			<u>John Day</u>			<u>John Day Tlwr</u>			<u>The Dalles</u>			#				
	<u>24 h</u>		<u>12 h</u>	#	<u>24 h</u>		<u>12 h</u>	#	<u>24h</u>		<u>12h</u>	#	<u>24h</u>		<u>12h</u>					
	Avg	Avg	High		hr	Avg	Avg		High	hr	Avg		Avg	High	hr		Avg	AVG	High	hr
4/19	111	113	114	24	117	118	119	24	107	108	108	23	112	118	118	24	107	109	110	23
4/20	115	116	118	24	118	119	119	24	110	110	111	23	119	119	120	24	108	110	111	23
4/21	115	115	116	24	118	119	120	24	110	110	111	23	119	120	120	24	110	110	110	23
4/22	113	113	114	24	116	119	120	24	110	110	110	23	114	119	119	24	109	109	110	23
4/23	109	110	111	24	116	119	119	24	108	108	108	23	113	118	118	24	108	109	110	23
4/24	110	112	113	24	116	119	120	24	108	109	109	23	119	119	119	24	110	113	115	23
4/25	114	115	117	24	116	120	120	24	108	109	109	23	118	119	119	24	111	112	112	22
4/26	117	117	117	24	118	120	121	24	109	109	110	23	117	119	120	24	110	110	111	23
4/27	116	117	118	24	117	120	121	24	111	111	111	24	117	119	119	24	109	109	110	24
4/28	115	115	115	24	116	119	121	24	111	111	112	16	113	113	115	16	110	110	110	16
4/29	115	116	118	24	117	119	121	24	113	115	116	23	115	118	119	24	113	115	117	22
4/30	116	117	121	23	118	122	125	23	115	115	115	23	118	119	120	24	115	115	116	23
5/1	116	117	118	24	118	122	123	24	115	115	116	23	116	118	119	24	112	112	113	23
5/2	116	116	117	24	117	120	123	24	115	115	116	23	116	118	119	24	111	111	112	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>					
	Avg	Avg	High		hr	Avg	Avg		High	hr	Avg		Avg	High	hr		Avg	Avg	High	hr
4/19	115	116	117	24	112	113	113	23	117	118	118	23	---	---	---	0	115	115	116	24
4/20	116	117	118	24	112	112	113	23	114	117	118	23	---	---	---	0	115	116	117	24
4/21	117	117	118	20	111	112	113	23	114	116	118	23	---	---	---	0	113	114	115	20
4/22	116	116	116	24	111	112	113	23	118	118	119	20	---	---	---	0	113	115	115	24
4/23	115	116	117	24	109	110	110	23	118	118	119	16	---	---	---	0	114	115	116	24
4/24	117	119	120	24	111	112	114	23	115	117	119	22	---	---	---	0	113	114	114	24
4/25	118	118	119	24	115	116	116	23	116	117	119	23	---	---	---	0	114	117	119	24
4/26	117	117	118	24	115	116	116	23	116	118	120	23	---	---	---	0	115	117	119	24
4/27	116	116	117	24	112	113	113	24	114	117	118	24	---	---	---	0	114	115	117	24
4/28	116	116	117	16	112	112	113	23	118	119	119	23	---	---	---	0	113	116	118	24
4/29	118	119	120	24	113	114	116	23	119	119	120	23	---	---	---	0	118	119	120	24
4/30	119	120	120	24	115	116	116	23	116	117	118	23	---	---	---	0	116	117	118	24
5/1	118	118	119	24	112	112	113	23	114	115	117	23	---	---	---	0	114	115	116	24
5/2	117	117	118	24	111	111	112	23	115	115	116	23	---	---	---	0	112	112	113	24

## HATCHERY RELEASE SUMMARY LAST 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 ClearH2O 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	40,265	04-19-02	04-19-02	Salmon R Idaho
IDFG	Magic Valley	ST	SU	2002	84,608	04-18-02	04-19-02	Lemhi 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	119,020	04-22-02	04-24-02	Salmon R Idaho
IDFG	Magic Valley	ST	SU	2002	120,390	04-22-02	04-23-02	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	448,484	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	Pahsimeroi	CH1	SU	2002	89,923	04-15-02	04-22-02	Pahsimeroi H
IDFG	Pahsimeroi	CH1	SU	2002	418,417	04-15-02	04-22-02	Pahsimeroi H
IDFG	Rapid River	CH1	SP	2002	2,669,476	03-11-02	04-22-02	Rapid River H
IDFG	Sawtooth	CH1	SP	2002	390,000	04-09-02	04-22-02	Sawtooth H
IDFG	Sawtooth	SO	UN	2002	37,000	05-02-02	05-02-02	Salmon R Idaho
<b>IDFG Total</b>					6,304,883			
Nez Perce Tribe	Clearwater	ST	SU	2002	29,700	04-22-02	04-26-02	Lolo Cr
Nez Perce Tribe	Clearwater	ST	SU	2002	50,000	04-22-02	04-26-02	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	100,000	05-01-02	05-06-02	American R
<b>Nez Perce Tribe Total</b>					459,700			
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
<b>ODFW Total</b>					537,500			
Umatilla Tribe	Cascade	CO	UN	2002	750,000	04-08-02	04-19-02	Pendelton Acclim Pd
Umatilla Tribe	Umatilla	ST	SU	2002	48,211	04-29-02	04-30-02	Minthorn Acclim Pd
Umatilla Tribe	Umatilla	ST	SU	2002	54,400	04-29-02	04-30-02	Pendelton Acclim Pd
<b>Umatilla Tribe Total</b>					852,611			
USFWS	Dworshak	ST	SU	2002	580,000	04-15-02	04-19-02	Redhouse (SFk ClearH2O R)
USFWS	Dworshak	ST	SU	2002	1,360,000	04-22-02	04-24-02	Dworshak H
USFWS	Hagerman	ST	SU	2002	750,000	04-03-02	04-30-02	Sawtooth H
USFWS	Kooskia	ST	SU	2002	260,000	04-15-02	04-19-02	Kooskia H
USFWS	Leavenworth	CH1	SP	2002	1,554,362	04-22-02	04-22-02	Leavenworth H
USFWS	Spring Creek	CH0	FA	2002	3,500,000	04-30-02	04-30-02	Spring Creek H
USFWS	Warm Springs	CH1	SP	2002	560,847	03-26-02	04-24-02	Warm Springs 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
<b>USFWS Total</b>					8,901,209			
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
<b>Warm Spgs Tribe Total</b>					189,000			

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

## HATCHERY RELEASE SUMMARY LAST TWO WEEKS

		Hatchery Release Summary						
From:		4/19/02	to	5/2/02				
WDFW	East Bank	CH1	SP	2002	47,154	04-22-02	04-29-02	Chiwawa H
WDFW	East Bank	CH1	SU	2002	127,926	04-08-02	05-10-02	Bel. Rocky Reach Dam
WDFW	East Bank	CH1	SU	2002	310,812	04-30-02	05-01-02	Carlton Acclim Pd
WDFW	East Bank	CH1	SU	2002	807,820	04-06-02	05-06-02	Dryden Acclim Pd
WDFW	East Bank	ST	SU	2002	48,152	04-29-02	05-03-02	Nason Cr
WDFW	East Bank	ST	SU	2002	75,318	04-29-02	05-03-02	Nason Cr
WDFW	East Bank	ST	SU	2002	92,757	04-29-02	05-15-02	Chiwawa H
WDFW	East Bank	ST	SU	2002	120,567	04-29-02	05-15-02	Chiwawa H
WDFW	Klickitat	CO	SO	2002	1,025,000	05-01-02	05-10-02	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	77,000	04-15-02	04-23-02	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	343,423	04-15-02	05-02-02	Wells H
WDFW	Wells	ST	SU	2002	88,000	04-29-02	05-10-02	Chewuch R
WDFW	Wells	ST	SU	2002	88,000	04-29-02	05-10-02	Methow R
WDFW	Wells	ST	SU	2002	88,000	04-29-02	05-10-02	Twisp R
WDFW	Wells	ST	SU	2002	118,890	04-29-02	05-10-02	Okanogan R
<b>WDFW Total</b>					4,627,819			
Yakima Tribe	Cle Elum	CH1	SP	2002	264,708	03-15-02	06-07-02	Easton Pd
Yakima Tribe	Cle Elum	CH1	SP	2002	286,384	03-15-02	06-07-02	Jack Creek Acclim Pd
Yakima Tribe	Cle Elum	CH1	SP	2002	287,082	03-15-02	06-07-02	Clark Flat Acclim Pd
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
<b>Yakima Tribe Total</b>					2,071,274			
<b>Grand Total</b>					23,943,996			

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

## HATCHERY RELEASE SUMMARY NEXT TWO WEEKS

### Hatchery Release Summary

From: **5/3/02** to **5/16/02**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
IDFG	Niagara Springs	ST	SU	2002	448,484	04-06-02	05-05-02	Little Salmon R	Salmon River
<b>IDFG Total</b>					448,484				
Nez Perce Tribe	Dworshak	CO	UN	2002	280,000	05-01-02	05-31-02	Kooskia H	Clearwater Rvr M F
Nez Perce Tribe	Hagerman	ST	SU	2002	100,000	05-01-02	05-06-02	American R	S Fk Clearwater River
Nez Perce Tribe	Hagerman	ST	SU	2002	100,000	05-06-02	05-13-02	Newsome Cr	S Fk Clearwater River
Nez Perce Tribe	Hagerman	ST	SU	2002	140,000	05-14-02	05-17-02	Yankee Fk (Salmon R)	Salmon River
<b>Nez Perce Tribe Total</b>					620,000				
ODFW	Irrigon	ST	SU	2002	1,150	05-03-02	05-03-02	Deer Cr	Grande Ronde River
ODFW	Irrigon	ST	SU	2002	76,500	05-09-02	05-10-02	L Sheep Acclim Pd	Imnaha River
ODFW	Irrigon	ST	SU	2002	125,000	05-08-02	05-23-02	Big Canyon Acclim.Pd	Grande Ronde River
ODFW	Wallowa	ST	SU	2002	217,500	05-01-02	05-16-02	Wallowa Acclim Pd	Wallowa River
<b>ODFW Total</b>					420,150				
Warm Spgs Tribe	Oak Springs	ST	SU	2002	42,000	04-26-02	05-10-02	Blackberry Acclim Pd	Hood River
Warm Spgs Tribe	Oak Springs	ST	WI	2002	30,000	05-01-02	05-17-02	E Fk Irrig Dist Sand Trap	Hood River
Warm Spgs Tribe	Oak Springs	ST	WI	2002	30,000	05-01-02	05-17-02	Parkdale Acclim Pd	Hood River
<b>Warm Spgs Tribe Total</b>					102,000				
WDFW	East Bank	CH1	SU	2002	127,926	04-08-02	05-10-02	Bel. Rocky Reach Dam	Mid-Columbia River
WDFW	East Bank	CH1	SU	2002	807,820	04-06-02	05-06-02	Dryden Acclim Pd	Wenatchee River
WDFW	East Bank	ST	SU	2002	48,152	04-29-02	05-03-02	Nason Cr	Wenatchee River
WDFW	East Bank	ST	SU	2002	75,318	04-29-02	05-03-02	Nason Cr	Wenatchee River
WDFW	East Bank	ST	SU	2002	92,757	04-29-02	05-15-02	Chiwawa H	Wenatchee River
WDFW	East Bank	ST	SU	2002	120,567	04-29-02	05-15-02	Chiwawa H	Wenatchee River
WDFW	Klickitat	CO	SO	2002	1,025,000	05-01-02	05-10-02	Klickitat H	Klickitat River
WDFW	Skamania	ST	SU	2002	20,000	05-01-02	05-10-02	Drano L	Little White Salmon River
WDFW	Skamania	ST	SU	2002	100,000	05-01-02	05-10-02	Klickitat R	Klickitat River
WDFW	Wells	ST	SU	2002	88,000	04-29-02	05-10-02	Chewuch R	Methow River
WDFW	Wells	ST	SU	2002	88,000	04-29-02	05-10-02	Methow R	Methow River
WDFW	Wells	ST	SU	2002	88,000	04-29-02	05-10-02	Twisp R	Methow River
WDFW	Wells	ST	SU	2002	118,890	04-29-02	05-10-02	Okanogan R	Okanogan River
<b>WDFW Total</b>					2,800,430				
Yakima Tribe	Cle Elum	CH1	SP	2002	264,708	03-15-02	06-07-02	Easton Pd	Yakama River
Yakima Tribe	Cle Elum	CH1	SP	2002	286,384	03-15-02	06-07-02	Jack Creek Acclim Pd	Yakama River
Yakima Tribe	Cle Elum	CH1	SP	2002	287,082	03-15-02	06-07-02	Clark Flat Acclim Pd	Yakama River
Yakima Tribe	Cle Elum	CO	UN	2002	185,000	05-06-02	05-20-02	Cle Elem Slough	Yakama River
Yakima Tribe	Easton Pond	CO	UN	2002	209,000	05-06-02	05-20-02	Easton Pd	Yakama River
Yakima Tribe	Klickitat	CH0	SP	2002	230,000	05-07-02	05-07-02	Upper Klickitat R	Klickitat River
Yakima Tribe	Leavenworth	CO	UN	2002	298,500	04-25-02	05-06-02	Nason Cr	Wenatchee River
Yakima Tribe	Lost Creek	CO	UN	2002	185,000	05-06-02	05-20-02	Lost Creek Acclim Pd	Yakama River
Yakima Tribe	Prosser	CH0	FA	2002	80,000	04-22-02	05-22-02	Prosser Acclim Pd	Yakama River
Yakima Tribe	Stiles Pond	CO	UN	2002	209,000	05-06-02	05-20-02	Naches R	Yakama River
Yakima Tribe	Winthrop	CO	UN	2002	150,000	04-25-02	05-10-02	Winthrop H	Methow River
<b>Yakima Tribe Total</b>					2,384,674				
<b>Grand Total</b>					6,775,738				

## 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)
04/19/2002	379	1,340	489	463	46,137	20,021	---	151	13,668	6,782	51,856
04/20/2002 *	---	375	---	---	42,770	13,782	---	77	25,682	6,141	63,935
04/21/2002	---	301	---	---	36,720	21,854	---	109	22,176	8,433	41,946
04/22/2002 *	645	219	243	7	23,039	68,352	---	215	22,213	10,485	30,462
04/23/2002	372	144	397	7	17,563	8,656	---	157	25,269	10,983	41,020
04/24/2002 *	708	282	578	12	26,443	20,652	---	477	23,193	17,999	44,910
04/25/2002 *	262	179	440	5	25,013	17,767	---	315	27,781	23,859	32,111
04/26/2002 *	147	100	333	3	33,705	20,792	---	206	38,825	20,425	29,184
04/27/2002	---	100	---	---	39,496	44,342	---	143	24,827	18,258	29,970
04/28/2002 *	---	271	---	---	40,815	45,946	---	231	22,394	20,111	43,956
04/29/2002 *	179	124	133	72	22,944	24,321	---	264	25,677	18,186	19,163
04/30/2002 *	263	267	424	20	39,018	29,993	---	363	26,221	18,237	49,563
05/01/2002 *	233	309	454	45	41,695	51,454	104,544	338	26,408	22,892	56,348
05/02/2002 *	90	---	516	16	57,266	55,377	146,746	371	32,682	20,467	68,094
<b>Total:</b>	<b>3,278</b>	<b>4,011</b>	<b>4,007</b>	<b>650</b>	<b>492,624</b>	<b>443,309</b>	<b>251,290</b>	<b>3,417</b>	<b>357,016</b>	<b>223,258</b>	<b>602,518</b>
<b># Days:</b>	<b>10</b>	<b>13</b>	<b>10</b>	<b>10</b>	<b>14</b>	<b>14</b>	<b>2</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>328</b>	<b>309</b>	<b>401</b>	<b>65</b>	<b>35,187</b>	<b>31,665</b>	<b>125,645</b>	<b>244</b>	<b>25,501</b>	<b>15,947</b>	<b>43,037</b>
<b>YTD</b>	<b>37,835</b>	<b>28,202</b>	<b>6,520</b>	<b>6,684</b>	<b>773,555</b>	<b>491,595</b>	<b>307,541</b>	<b>4,236</b>	<b>404,945</b>	<b>245,329</b>	<b>661,188</b>

### 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)
04/19/2002	0	0	2	2	160	0	---	31	12,413	247	6,024
04/20/2002 *	---	0	---	---	0	0	---	42	7,397	175	4,565
04/21/2002	---	0	---	---	152	0	---	32	11,275	142	4,894
04/22/2002 *	0	0	0	1	1,557	0	---	11	2,962	394	4,841
04/23/2002	0	0	0	1	0	0	---	14	2,929	295	6,534
04/24/2002 *	0	0	0	0	0	0	---	3	2,826	464	1,334
04/25/2002 *	0	0	0	0	0	0	---	1	1,555	448	1,387
04/26/2002 *	0	0	0	0	75	0	---	0	3,786	144	1,519
04/27/2002	---	0	---	---	0	0	---	4	1,034	212	557
04/28/2002 *	---	0	---	---	0	0	---	0	749	239	918
04/29/2002 *	0	0	0	0	0	0	---	1	297	319	1,448
04/30/2002 *	0	0	0	0	0	0	---	5	298	214	694
05/01/2002 *	0	0	0	0	0	0	0	2	393	299	10,152
05/02/2002 *	0	---	0	0	0	0	0	0	294	78	111,400
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>1,944</b>	<b>0</b>	<b>0</b>	<b>146</b>	<b>48,208</b>	<b>3,670</b>	<b>156,267</b>
<b># Days:</b>	<b>10</b>	<b>13</b>	<b>10</b>	<b>10</b>	<b>14</b>	<b>14</b>	<b>2</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>139</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>3,443</b>	<b>262</b>	<b>11,162</b>
<b>YTD</b>	<b>0</b>	<b>4</b>	<b>7</b>	<b>26</b>	<b>2,199</b>	<b>0</b>	<b>0</b>	<b>431</b>	<b>60,387</b>	<b>4,329</b>	<b>1,250,280</b>

\*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 (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
04/19/2002	0	0	0	0	0	0	---	0	432	421	7,962
04/20/2002 *	---	0	---	---	0	0	---	0	301	138	6,371
04/21/2002	---	0	---	---	152	0	---	0	466	199	4,078
04/22/2002 *	0	0	0	0	0	0	---	0	555	759	4,251
04/23/2002	0	0	0	0	0	0	---	0	275	641	7,260
04/24/2002 *	0	0	0	0	0	92	---	3	292	497	6,559
04/25/2002 *	0	0	0	0	64	0	---	3	726	1,893	5,014
04/26/2002 *	0	0	0	0	75	0	---	2	462	1,295	3,580
04/27/2002	---	0	---	---	0	0	---	0	564	495	2,228
04/28/2002 *	---	0	---	---	299	0	---	3	283	1,096	5,164
04/29/2002 *	0	0	0	0	0	0	---	4	594	463	2,451
04/30/2002 *	0	0	0	0	0	0	---	5	347	1,489	4,779
05/01/2002 *	0	0	0	0	0	0	180	5	630	1,424	10,380
05/02/2002 *	0	---	0	0	0	0	152	13	512	2,084	15,385
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>590</b>	<b>92</b>	<b>332</b>	<b>38</b>	<b>6,439</b>	<b>12,894</b>	<b>85,462</b>
<b># Days:</b>	<b>10</b>	<b>13</b>	<b>10</b>	<b>10</b>	<b>14</b>	<b>14</b>	<b>2</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42</b>	<b>7</b>	<b>166</b>	<b>3</b>	<b>460</b>	<b>921</b>	<b>6,104</b>
<b>YTD</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>610</b>	<b>96</b>	<b>333</b>	<b>43</b>	<b>8,119</b>	<b>13,804</b>	<b>114,694</b>

### COMBINED STEELHEAD

Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
04/19/2002	24	1,002	105	253	33,802	25,536	---	58	8,218	9,284	4,767
04/20/2002 *	---	1,505	---	---	31,306	20,915	---	36	19,007	5,766	5,042
04/21/2002	---	1,318	---	---	33,381	23,194	---	48	26,648	7,977	8,040
04/22/2002 *	32	638	16	33	32,379	57,132	---	44	20,640	9,726	7,202
04/23/2002	34	156	20	49	43,675	24,316	---	35	16,931	9,367	6,655
04/24/2002 *	69	260	60	94	46,067	49,024	---	25	11,695	9,580	6,781
04/25/2002 *	39	162	43	75	22,142	37,297	---	57	10,883	13,671	9,174
04/26/2002 *	59	64	33	44	31,393	29,600	---	29	12,880	12,442	16,274
04/27/2002	---	201	---	---	84,401	27,614	---	24	8,934	9,978	14,038
04/28/2002 *	---	302	---	---	96,281	17,847	---	36	6,744	7,715	14,690
04/29/2002 *	66	160	38	150	58,944	24,629	---	39	6,332	6,183	2,451
04/30/2002 *	91	367	623	572	42,257	35,881	---	86	9,079	6,688	4,085
05/01/2002 *	95	866	175	456	33,235	49,011	37,480	80	8,253	7,407	20,361
05/02/2002 *	102	---	59	385	26,929	33,113	40,588	60	7,896	8,786	30,486
<b>Total:</b>	<b>611</b>	<b>7,001</b>	<b>1,172</b>	<b>2,111</b>	<b>616,192</b>	<b>455,109</b>	<b>78,068</b>	<b>657</b>	<b>174,140</b>	<b>124,570</b>	<b>150,046</b>
<b># Days:</b>	<b>10</b>	<b>13</b>	<b>10</b>	<b>10</b>	<b>14</b>	<b>14</b>	<b>2</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>61</b>	<b>539</b>	<b>117</b>	<b>211</b>	<b>44,014</b>	<b>32,508</b>	<b>39,034</b>	<b>47</b>	<b>12,439</b>	<b>8,898</b>	<b>10,718</b>
<b>YTD</b>	<b>1,092</b>	<b>7,873</b>	<b>2,153</b>	<b>3,673</b>	<b>837,321</b>	<b>530,532</b>	<b>81,497</b>	<b>854</b>	<b>200,515</b>	<b>148,907</b>	<b>164,958</b>

# 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)
04/19/2002	0	0	0	0	160	360	---	122	236	16	105
04/20/2002 *	---	0	---	---	147	255	---	276	2,225	25	0
04/21/2002	---	0	---	---	303	670	---	268	4,752	85	117
04/22/2002 *	0	0	0	0	311	0	---	329	2,962	169	0
04/23/2002	0	0	0	0	311	230	---	270	6,133	164	0
04/24/2002 *	0	0	0	0	514	539	---	353	10,432	796	0
04/25/2002 *	0	0	0	0	191	362	---	324	11,090	1,676	320
04/26/2002 *	0	0	0	0	149	180	---	142	9,791	2,877	108
04/27/2002	---	0	---	---	213	614	---	194	6,865	1,769	668
04/28/2002 *	---	0	---	---	0	1,384	---	246	7,128	2,839	1,148
04/29/2002 *	0	0	0	0	302	617	---	293	8,214	2,273	0
04/30/2002 *	0	0	0	0	141	316	---	531	6,800	2,970	540
05/01/2002 *	0	0	0	0	235	753	519	580	6,057	4,003	1,369
05/02/2002 *	0	---	0	0	0	393	3,172	681	10,311	4,043	1,425
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,977</b>	<b>6,673</b>	<b>3,691</b>	<b>4,609</b>	<b>92,996</b>	<b>23,705</b>	<b>5,800</b>
<b># Days:</b>	<b>10</b>	<b>13</b>	<b>10</b>	<b>10</b>	<b>14</b>	<b>14</b>	<b>2</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>213</b>	<b>477</b>	<b>1,846</b>	<b>329</b>	<b>6,643</b>	<b>1,693</b>	<b>414</b>
<b>YTD</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>8,696</b>	<b>7,707</b>	<b>3,800</b>	<b>5,894</b>	<b>93,575</b>	<b>23,992</b>	<b>6,889</b>

\* 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: 05/02**

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	176,748	1,603	314,405	2,547	76,460	1,457	0	0	0	0	0	0	0	0	0	0	0	0
TDA	85,063	342	234,344	1,374	45,974	699	0	0	0	0	0	0	0	0	0	0	0	0
JDA	51,042	164	194,806	1,073	34,962	476	0	0	0	0	0	0	0	0	0	0	0	0
MCN	25,303	295	175,369	817	28,257	311	0	0	0	0	0	0	0	0	0	0	0	0
IHR	8,940	24	110,903	548	15,738	163	0	0	0	0	0	0	0	0	0	0	0	0
LMN	4,788	44	107,536	132	14,313	108	0	0	0	0	0	0	0	0	0	0	0	0
LGS	4,080	26	100,293	493	12,557	122	0	0	0	0	0	0	0	0	0	0	0	0
LWG	1,898	10	96,077	186	11,571	64	0	0	0	0	0	0	0	0	0	0	0	0
PRD	2,183	1	29,994	10	4,711	3	0	0	0	0	0	0	0	0	0	0	0	0
RIS	168	3	9,410	34	1,291	4	0	0	0	0	0	0	0	0	0	0	0	0
RRH	43	0	3,463	12	393	1	0	0	0	0	0	0	0	0	0	0	0	0
WEL	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

DAM	Coho						Sockeye			Steelhead			
	2002		2001		10-Yr Avg.		10-Yr		10-Yr			Wild	
	Adult	Jack	Adult	Jack	Adult	Jack	2002	2001	Avg.	2002	2001	Avg.	2002
BON	0	0	0	0	0	0	0	0	0	3,892	3,053	2,214	1,175
TDA	0	0	0	0	0	0	11	0	0	2,315	806	883	893
JDA	0	0	0	0	0	0	0	0	0	7,433	1,957	2,420	2,643
MCN	0	0	0	0	0	0	0	0	0	4,563	1,388	1,550	1,789
IHR	0	0	0	0	0	0	0	0	0	4,417	1,345	1,934	1,226
LMN	0	0	0	0	0	0	0	0	0	4,934	1,641	1,974	1,987
LGS	0	0	0	0	0	0	0	0	0	5,964	1,867	1,165	2,365
LWG	0	0	0	0	0	0	0	0	0	11,335	5,603	4,639	3,037
PRD	0	0	0	0	0	0	0	0	0	22	14	14	**
RIS	0	0	0	0	0	0	0	0	0	53	38	35	33
RRH	0	0	0	0	0	0	0	0	0	141	65	42	59
WEL	---	---	---	---	---	---	---	---	---	---	---	---	---

WEL numbers have not yet been posted, PRD is through 05/01; RIS/RRH are through 04/30.

MCN is missing counts for 04/27; LGR is missing counts for 05/01.

\*\*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

04/20/02 TO 05/03/02

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	1,250	303,487	400	2,000	402,363	709,500
	Sum of NumberBarged	1,236	294,974	400	1,913	390,120	688,643
	Sum of NumberBypassed	1	7,956	0	1	12,117	20,075
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	13	557	0	86	126	782
<b>LGS</b>	Sum of NumberCollected		223,479	51	3,360	223,879	450,769
	Sum of NumberBarged		223,325	50	3,056	223,827	450,258
	Sum of NumberBypassed		0	0	0	0	0
	Sum of Numbertrucked		0	0	0	0	0
	Sum of TotalProjectMortalities		154	1	46	52	253
<b>LMN</b>	Sum of NumberCollected		252,360	332	3,724	79,351	335,767
	Sum of NumberBarged		248,261	332	3,680	298,054	550,327
	Sum of NumberBypassed		4,025	0	32	1,281	5,338
	Sum of Numbertrucked		0	0	0	0	0
	Sum of TotalProjectMortalities		74	0	12	16	102
<b>MCN</b>	Sum of NumberCollected	25,272	199,535	3,592	52,188	94,921	375,508
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	25,260	199,467	3,590	52,146	94,903	375,366
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	12	68	2	42	18	142
Total Sum of NumberCollected		26,522	978,861	4,375	61,272	800,514	1,871,544
Total Sum of NumberBarged		1,236	766,560	782	8,649	912,001	1,689,228
Total Sum of NumberBypassed		25,261	211,448	3,590	52,179	108,301	400,779
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of TotalProjectMortalities		25	853	3	186	212	1,279

## YTD Transportation Summary

TO: 05/03/02

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	1,433	498,479	420	5,925	555,585	1,061,842
	Sum of NumberBarged	1,377	474,249	400	5,334	534,543	1,015,903
	Sum of NumberBypassed	1	13,474	0	2	17,497	30,974
	Sum of NumberTrucked	29	9,847	20	343	3,383	13,622
	Sum of TotalProjectMortalities	26	909	0	246	162	1,343
<b>LGS</b>	Sum of NumberCollected		252,817	55	3,984	270,048	526,904
	Sum of NumberBarged		251,566	50	3,593	268,956	524,165
	Sum of NumberBypassed		0	0	0	0	0
	Sum of NumberTrucked		1,034	4	74	1,024	2,136
	Sum of TotalProjectMortalities		217	1	59	68	345
<b>LMN</b>	Sum of NumberCollected		307,541	333	3,800	81,497	393,171
	Sum of NumberBarged		248,261	332	3,680	298,054	550,327
	Sum of NumberBypassed		38,981	1	95	3,064	42,141
	Sum of NumberTrucked		20,104	0	13	356	20,473
	Sum of TotalProjectMortalities		195	0	12	23	230
<b>MCN</b>	Sum of NumberCollected	31,994	228,958	4,610	52,534	110,602	428,698
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	31,968	228,840	4,608	52,490	110,578	428,484
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	26	118	2	44	24	214
Total Sum of NumberCollected		33,427	1,287,795	5,418	66,243	1,017,732	2,410,615
Total Sum of NumberBarged		1,377	974,076	782	12,607	1,101,553	2,090,395
Total Sum of NumberBypassed		31,969	281,295	4,609	52,587	131,139	501,599
Total Sum of NumberTrucked		29	30,985	24	430	4,763	36,231
Total Sum of TotalProjectMortalities		52	1,439	3	361	277	2,132

