



Fish Passage Center

Weekly Report #02 - 7

April 26, 2002

2501 SW First Ave., Suite 230
 Portland, OR 97201-4752
 phone: 503/230-4582
 fax: 503/230-7559

SUMMARY OF EVENTS:

- **Precipitation over the beginning of April has averaged between 50% and 131% of that recorded over the same period between 1971 and 2000.**
- **Many Columbia River tributaries are average or better in terms of snow-water equivalents.**
- **Grand Coulee has generally been drafting reservoir water since April 10th, 2002.**
- **Libby will likely end April above its April 30th flood control target, storing additional water in anticipation of future flows needed for bull trout and sturgeon and to increase the probability of refill.**
- **Dworshak will likely end April above its April 30th flood control target, however, will pass the maximum volume of water allowable through its powerhouse and spill the maximum amount of reservoir water within the 110% TDG cap.**

Water Supply: Precipitation has ranged from 50% to 131% of average over the period from April 1-23, 2002. Eleven of the twelve locations displayed in Table 1 recorded precipitation above the average precipitation over the years 1971-2000 from April 1-23. WY 2002 remains approximately 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 (see next column).

Location	April 1-23, 2002		Cumulative 10/1/01 – 4/23/02	
	Observed (inches)	% Avg	Observed (inches)	% Avg
Columbia Above Coulee	1.51	120	15.64	101
Snake R. Above Ice Harbor	1.36	122	11.12	97
Columbia Above The Dalles	1.46	116	15.65	101
Kootenai	1.34	100	13.82	87
Clark Fork	1.05	111	10.94	110
Flathead	1.58	131	14.37	107
Pend Oreille/Spokane	1.95	112	26.22	120
Central Washington	0.25	50	5.88	92
Snake R. Plain	0.83	104	5.55	80
Clearwater	2.08	102	23.04	112
SW Washington Cascades/Cowlitz	4.88	119	65.08	113
Willamette Valley	3.99	108	51.97	106

From Table 2, many Columbia River tributaries are average or better in terms of snow-water equivalents. In particular, the Lower Columbia, Hood River Basin contains a snow-water equivalent that is 159% of average, as of April 24, 2002.

Table 2. Natural Resources Conservation Service (NRCS) snow reports for various Columbia River tributaries, updated on April 24, 2002. Based on mountain data from NRCS SNOTEL sites.

Basin	Basin Wide Snow-Water Equivalent (% Average)
Grand Ronde, Powder, Burnt, Imnaha	97
Umatilla, Walla Walla, Willow	95
John Day	46
Deschutes, Crooked	114
Lower Columbia, Hood River	159
Willamette	139

Generally, storage reservoirs have been operating to meet their end of April flood control operations. Table 3 displays the 4-24-2002 elevations and the end of April targets 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 4/24/02 (ft. Above MSL)	USACE Determined 4/30/02 Flood Control Target (ft. Above MSL)
Libby	2377.3	2362.6
Hungry Horse	3514.5	3516.2
Grand Coulee	1249.9	1244.9
Brownlee	2058.1	2064.4
Dworshak	1515.8	1486.5

After meeting its April 10th BiOp target, the Grand Coulee Reservoir began to continuously draft reservoir water. Currently (4-24-2002), Grand Coulee is at an elevation of 1249.9 feet AMSL and the end of April flood control target is 1244.9 feet AMSL; therefore, Grand Coulee appears to be on target to reach its end of April elevation. The increased draft at Grand Coulee (up to 44 Kcfs) coupled with a storm event that initiated some snowmelt, was primarily responsible for the el-

evated flows seen in the lower Columbia River over the past week and a half.

The Libby reservoir is currently (4-24-2002) well above its end of April flood control target. On 4-24-2002, Libby was at an elevation of 2377.3 feet AMSL; the end of April flood control elevation is 2362.6 feet AMSL. Libby has been refilling over the past 2 ½ weeks, operating to a minimum outflow of 4.0 Kcfs. According to USACE, Libby will likely be above the end of April target in anticipation of future flows needed for bull trout and sturgeon.

Current refill estimations by USACE are promising for the Libby reservoir. Increasing water supply forecasts have led USACE personnel to believe that the Libby reservoir has a "good" chance of refill by June 30th, 2002.

Dworshak is currently (4-24-2002) well above its end of April system flood control target of 1486.5 feet AMSL. On 4-24-2002, Dworshak was at an elevation of 1515.8 feet AMSL, 29.3 feet above the end of April target. According to USACE, operations at Dworshak will include maximizing draft to approach the end of April target 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 is currently (4-24-2002) on target to be below its end of April flood control elevation. On 4-24-2002, the Brownlee reservoir was at an elevation of 2058.1 feet AMSL, the end of April target is 2064.4 feet AMSL. Over the past several days, Brownlee has been drafting, dropping approximately 1.7 feet from April 22nd to April 24th, 2002.

The Hungry Horse reservoir appears to be on target to reach its end of April flood control target. On 4-24-2002, the Hungry Horse reservoir was at an elevation of 3514.5 feet AMSL, its end of April flood control target is 3516.2 feet AMSL. Hungry Horse is currently refilling at a rate of approximately 2/10 of a foot a day.

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 3-25, 2002, outflows at Lower Granite have averaged 77.3 Kcfs; from April 10-25, 2002, outflows at McNary have averaged 249.9 Kcfs; from April 10-25, 2002, outflows at Priest Rapids have averaged 161.5 Kcfs. On a weekly basis, flows have averaged 72.7 Kcfs at Lower Granite, 268.4 Kcfs at McNary, and 185.6 Kcfs at Priest Rapids from April 19th to April 25th, 2002. Therefore, to date, flow objectives are being met at McNary and Priest Rapids.

Over the beginning of WY 2002, reservoirs on the Upper Snake River have been consistently refilling, yet several remain behind where they are ordinarily in terms refill. Currently, as of April 24th, 2002, the entire Upper Snake River System is at 60% of capacity. Individually, American Falls is at 87% of capacity, Palisades is at 43% of capacity, Jackson Lake is at 24% of capacity, Island Park is at 92% of capacity, Lake Walcott is at 102% of capacity, Milner is at 92% of capacity, and Grassy Lake is at 67% 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 previously. Twenty-four hour spill is scheduled to end at Little Goose Dam on May 1, 2002. The project will return to a 12-hour spill schedule.

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 is being adjusted to meet the water quality waiver standards. A few fish with minor signs of GBT were observed at Rock Island and Lower Monumental dams this past week.

Smolt Monitoring: System-wide the yearling chinook migration appears to be at least a week or more behind the historic run timing, while steelhead numbers appear to be at or ahead of historic run timing at index sites in the Lower Snake and Columbia.

The yearling chinook numbers collected at Snake River basin traps were down this week with a total of 7,800 collected at all SMP traps versus over 13,000 last week. Steelhead numbers increased over the previous week with 5,900 being collected this week versus 2,500 the previous week. The largest increase in collection occurred at the Imnaha Trap where an average of 720 steelhead per day were collected this week versus 312 per day the previous week. Of course part of the difference may be due to improved trapping conditions in the Imnaha River. The Imnaha Trap did not fish over some of the previous week due to high flows. 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 continued to decrease with an average this week of 473 fish per day versus 1,105 last week, for an overall decrease of about 60%.

The numbers of migrant yearling chinook passing Lower Granite decreased over the past week. An early peak of 83,000 yearling chinook occurred on 4/16 while passage peaked on 4/22 at Little Goose with a 68,000 index. Numbers have declined at both locations since those early peaks in passage. Steelhead numbers have remained relatively steady at Lower Granite after a similar early peak of 57,000 on 4/18. Steelhead numbers have continued to increase at Little Goose Dam with an average daily index of 34,000 this week versus 14,000 last.

Rock Island Dam yearling chinook index were still relatively low over the past week averaging 214 per day, but higher compared to last week's average of 96 fish per day. In the lower Columbia McNary saw an increase in juvenile migrants this past week, with an average index of 23,000 yearling chinook this week versus 6,800 last week. Similarly, steelhead numbers also

increased with an average daily index of 16,000 this week compared to 4,000 last week. Also Sockeye indices were up dramatically this week with an average daily index of 5,000 compared to 100 per day last week. Similarly subyearling chinook numbers were up at McNary, with an average of 5,900 this week compared to 3,300 the previous week. At John Day Dam passage index for yearling chinook averaged 12,000 per day this week compared to 3,000 per day last. Steelhead indices averaged 9,000 this week versus 4,000 last. Coho numbers increased to a season high of 1,800 on 4/25 at John Day while subyearling chinook and sockeye were captured in relatively low numbers this past week.

At Bonneville Dam yearling chinook, and steelhead numbers increased this past week with an average daily index this week of 43,000 chinook and 6,800 steelhead versus 7,300 and 2,500 for last week respectively. An estimated 4,200 subyearling chinook passed the project each day this week versus 6,600 per day last week. Coho indices increased slightly over the last week with an average index of 5,900 versus 5,000 last week for an 18% increase. Low numbers of sockeye continued to pass this week with daily average index of 77 versus 119 last week.

Adult Fish Passage: At Bonneville Dam, passage of adult spring chinook ranged between 3,722 and 12,303 per day through the past 7-days, with a total count of 76,579 through April 25. The peak day occurred on April 25. The total count of 76,579 for 2002 compares to 280,033 in 2001 and 60,590 for the 10-year average to-date. This year's total is about 27% of the 2001 count and now exceeds the 10-year average (126%) at this date in the chinook run. As a side note, the jack chinook count at Bonneville Dam is about ½ the 10-year average and ¼ of the 2001 count to date. Through April 25, about 27,000 adult spring chinook have been counted at The Dalles Dam, about 13.5% and 77% of the 2001 count and the ten-year average, respectively. A total of 5,349 adult spring chinook have been counted at McNary Dam, with 2,111 of those counted at Ice Harbor Dam. At Lower Granite Dam, about 302 adult

spring chinook have passed the project. The adult spring chinook count at Priest Rapids Dam ranged from near 20 to 60 per day through the week with the count through April 23 being 232, a total well below the 2001 count as well as the 10-year average.

During the past week, flows reduced in the Columbia and Snake rivers and water clarity and other environmental factors improved adult passage conditions at the mainstem dams. Water temperatures were near 50°F in the lower Columbia as well as Snake River. Fish passage facilities were also operating near normal criteria levels at most projects.

Winter steelhead continue to pass Bonneville Dam; the upstream migration of these winter-run steelhead is considered 15-Mile Creek, located just below The Dalles Dam. A small number of summer steelhead continue moving upstream to spawning sites. At Lower Granite Dam, summer steelhead passage ranged between 60 and 200 fish per day with the season total through April 25 of 11,041. The 2002 winter/spring migration is about double the 2001 and 10-year average at the project.

Hatchery Releases: For the past two weeks, approximately 26.4 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 14.2 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. Year-

ling 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 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 and Leavenworth Hatchery completed their release of 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 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 will again be released in the Yakama, Wenatchee, and Methow River basins in 2002. These coho release groups are normally initiated in mid- to late-April and will be completed by late May.

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. Yearling coho salmon were released in the Umatilla and Klickitat River basins with coho released into the Little White Salmon this River week. The final release of coho will be completed in the Klickitat River during the next 3 weeks. 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.

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
04/12/02	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
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	152.2	20.8	153.6	32.9	167.4	63.9	173.2	106.2

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

Date	Dworshak		Brownlee Canyon		Hells Granite		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
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	21.2	24.2	91.1	28.0	85.6	48.3	90.8	0.0	93.8	67.0		
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	15.9	19.5	71.8	15.1	70.3	33.5	73.3	0.0	77.2	56.6		
04/25/02	15.0	4.2	---	---	62.4	14.4	62.0	32.1	65.9	0.0	69.0	52.4		

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		
04/12/02	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	319.7	74.2	315.7	123.9	324.0	159.8	38.4	119.6
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

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											
	04/16/02	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
	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
Little Goose Dam											
	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
	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
Lower Monumental Dam											
	04/22/02	Yearling Chinook	46	0	0	0.00%	0.00%	0	0	0	0
	04/22/02	Steelhead	54	1	1	1.85%	0.00%	1	0	0	0
McNary Dam											
	04/22/02	Yearling Chinook	52	0	0	0.00%	0.00%	0	0	0	0
	04/22/02	Steelhead	48	0	0	0.00%	0.00%	0	0	0	0
	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
Bonneville Dam											
	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
	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
Rock Island Dam											
	04/18/02	Yearling Chinook	57	1	1	1.75%	0.00%	1	0	0	0
	04/18/02	Steelhead	14	0	0	0.00%	0.00%	0	0	0	0
	04/22/02	Yearling Chinook	77	3	2	2.59%	0.00%	1	1	0	0
	04/22/02	Steelhead	23	2	2	8.69%	0.00%	2	0	0	0
	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

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	<u>Hungry H. Dnst</u>			<u>Boundary</u>			<u>Grand Coulee</u>				<u>Grand C. Tlwr</u>				<u>Chief Joseph</u>				#		
	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>		High	#
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr
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	
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	

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	<u>Chief J. Dnst</u>			<u>Wells</u>			<u>Wells Dwnstrm</u>				<u>Rocky Reach</u>				<u>Rocky R. Tlwr</u>				#		
	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>		High	#
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr
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	
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	

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	<u>Rock Island</u>			<u>Rock I. Tlwr</u>			<u>Wanapum</u>				<u>Wanapum Tlwr</u>				<u>Priest Rapids</u>				#		
	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>		High	#
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr
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	111	112	113	24	120	123	125	24	118	121	123	24	
4/18	114	115	118	24	118	120	124	23	112	113	114	24	119	120	122	24	118	118	120	24	
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	

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>Clrwrtr-Peck</u>			<u>Anatone</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
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	120	121	122	24	110	112	112	24	108	109	109	24	103	103	103	24	102	102	102	22
4/18	122	122	122	24	114	115	116	21	108	108	108	24	103	103	103	24	101	102	102	24
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

Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clrwrtr-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>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
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
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

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>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
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
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

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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>					
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr				
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
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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>Camas\Washugal</u>						
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>				
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr				
4/12	116	118	120	24	106	107	110	23	107	108	111	23	105	106	106	24
4/13	116	118	118	24	113	115	117	24	113	113	115	24	109	111	112	24
4/14	115	116	118	24	112	112	115	23	112	112	114	23	110	111	111	24
4/15	115	116	118	24	110	111	111	23	111	112	113	23	109	109	110	24
4/16	115	116	117	24	113	114	116	23	115	117	118	23	111	112	114	24
4/17	115	116	117	24	114	114	114	23	117	118	119	23	115	115	116	24
4/18	115	116	116	24	113	113	114	23	119	120	120	23	116	117	118	24
4/19	115	116	117	24	112	113	113	23	117	118	118	23	115	115	116	24
4/20	116	117	118	24	112	112	113	23	114	117	118	23	115	116	117	24
4/21	117	117	118	20	111	112	113	23	114	116	118	23	113	114	115	20
4/22	116	116	116	24	111	112	113	23	118	118	119	20	113	115	115	24
4/23	115	116	117	24	109	110	110	23	118	118	119	16	114	115	116	24
4/24	117	119	120	24	111	112	114	23	115	117	119	22	113	114	114	24
4/25	118	118	119	24	115	116	116	23	116	117	119	23	114	117	119	24

HATCHERY RELEASE SUMMARY LAST TWO WEEKS

Hatchery Release Summary

From: **4/12/02** to **4/25/02**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Colville Tribe	Winthrop	CH1	SP	2002	265,000	03-18-02	04-18-02	Okanogan R	Okanogan River
Colville Tribe Total					265,000				
IDFG	Clearwater	CH1	SP	2002	350,318	04-10-02	04-12-02	Red River Acclim Pd	S Fk Clearwater River
IDFG	Clearwater	CH1	SP	2002	726,489	04-10-02	04-12-02	Crooked R Acclim Pd	S Fk Clearwater River
IDFG	Clearwater	ST	SU	2002	40,000	04-14-02	04-14-02	Clear Cr	Clearwater Rvr M F
IDFG	Clearwater	ST	SU	2002	135,000	04-18-02	04-18-02	Crooked R Acclim Pd	S Fk Clearwater River
IDFG	Clearwater	ST	SU	2002	138,500	04-22-02	04-22-02	Redhouse (SFk ClearH20 R)	S Fk Clearwater River
IDFG	Clearwater	ST	SU	2002	180,000	04-17-02	04-17-02	Red River Acclim Pd	S Fk Clearwater River
IDFG	Magic Valley	ST	SU	2002	3,800	04-22-02	04-22-02	E Fk Salmon R	Salmon River
IDFG	Magic Valley	ST	SU	2002	40,265	04-19-02	04-19-02	Salmon R Idaho	Salmon River
IDFG	Magic Valley	ST	SU	2002	43,000	04-15-02	04-15-02	Salmon R Idaho	Salmon River
IDFG	Magic Valley	ST	SU	2002	44,770	04-15-02	04-15-02	Salmon R Idaho	Salmon River
IDFG	Magic Valley	ST	SU	2002	54,000	04-12-02	04-12-02	Little Salmon R	Salmon River
IDFG	Magic Valley	ST	SU	2002	84,608	04-18-02	04-19-02	Lemhi R	Salmon River
IDFG	Magic Valley	ST	SU	2002	119,020	04-22-02	04-24-02	Salmon R Idaho	Salmon River
IDFG	Magic Valley	ST	SU	2002	120,390	04-22-02	04-23-02	Salmon R Idaho	Salmon River
IDFG	Magic Valley	ST	SU	2002	145,700	04-12-02	04-18-02	Shoup Br (Salmon R)	Salmon River
IDFG	Magic Valley	ST	SU	2002	179,558	04-10-02	04-12-02	Hammer Cr	Salmon River
IDFG	Magic Valley	ST	SU	2002	225,000	04-25-02	04-26-02	E Fk Salmon R	Salmon River
IDFG	Magic Valley	ST	SU	2002	280,000	04-23-02	04-24-02	Squaw Cr	Salmon River
IDFG	Niagara Springs	ST	SU	2002	448,484	04-06-02	05-05-02	Little Salmon R	Salmon River
IDFG	Niagara Springs	ST	SU	2002	830,000	04-13-02	05-01-02	Pahsimeroi H	Pahsimeroi River
IDFG	Pahsimeroi	CH1	SU	2002	89,923	04-15-02	04-22-02	Pahsimeroi H	Pahsimeroi River
IDFG	Pahsimeroi	CH1	SU	2002	418,417	04-15-02	04-22-02	Pahsimeroi H	Pahsimeroi River
IDFG	Rapid River	CH1	SP	2002	2,669,476	03-11-02	04-22-02	Rapid River H	Little Salmon River
IDFG	Sawtooth	CH1	SP	2002	390,000	04-09-02	04-22-02	Sawtooth H	Salmon River
IDFG Total					7,756,718				
Nez Perce Tribe	Clearwater	ST	SU	2002	29,700	04-22-02	04-26-02	Lolo Cr	Clearwater Rvr M F
Nez Perce Tribe	Clearwater	ST	SU	2002	50,000	04-22-02	04-26-02	Meadow Cr	S Fk Clearwater River
Nez Perce Tribe	Lookingglass	CH1	SP	2002	31,000	04-01-02	04-14-02	Lostine Accim Pd	Wallowa River
Nez Perce Tribe	Lookingglass	CH1	SP	2002	77,500	04-01-02	04-14-02	Lostine Accim Pd	Wallowa River
Nez Perce Tribe	Lyons Ferry	CH1	FA	2002	150,000	04-09-02	04-17-02	Big Canyon (Clearwater R)	Clearwater Rvr M F
Nez Perce Tribe	Lyons Ferry	CH1	FA	2002	150,000	04-09-02	04-17-02	Cpt John Acclim Pd	Snake River
Nez Perce Tribe	Lyons Ferry	CH1	FA	2002	150,000	04-09-02	04-17-02	Pittsburg Landing	Snake River
Nez Perce Tribe Total					638,200				
ODFW	Irrigon	ST	SU	2002	100,000	04-17-02	04-18-02	Big Sheep Cr	Imnaha River
ODFW	Irrigon	ST	SU	2002	128,500	04-11-02	04-12-02	L Sheep Acclim Pd	Imnaha River
ODFW	Irrigon	ST	SU	2002	174,000	04-10-02	04-12-02	Big Canyon Acclim.Pd	Grande Ronde River
ODFW	Lookingglass	CH1	SP	2002	303,800	03-21-02	04-17-02	Imnaha Acclim Pd	Imnaha River
ODFW	Round Butte	CH1	SP	2002	320,000	04-22-02	04-23-02	Bel. Pelton Dam	Deschutes River
ODFW Total					1,026,300				
Umatilla Tribe	Bonneville	CH1	FA	2002	260,000	04-10-02	04-19-02	Thornhollow Acclim Pd	Umatilla River
Umatilla Tribe	Cascade	CO	UN	2002	750,000	04-08-02	04-19-02	Pendelton Acclim Pd	Umatilla River
Umatilla Tribe	Lookingglass	CH1	SP	2002	151,388	04-01-02	04-15-02	Grande Ronde Acclim Pd	Grande Ronde River
Umatilla Tribe	Lookingglass	CH1	SP	2002	180,500	04-01-02	04-15-02	Catherine Cr Acclim Pd	Grande Ronde River
Umatilla Tribe	Umatilla	ST	SU	2002	54,000	04-22-02	04-30-02	Minthorn Acclim Pd	Umatilla River
Umatilla Tribe	Umatilla	ST	SU	2002	54,000	04-22-02	04-30-02	Pendelton Acclim Pd	Umatilla River
Umatilla Tribe	Willard	CH1	SP	2002	255,000	04-12-02	04-22-02	Imeques Acclim Pd	Umatilla River
Umatilla Tribe Total					1,704,888				
USFWS	Carson	CH1	SP	2002	1,449,361	04-16-02	04-17-02	Carson H	Wind River

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

HATCHERY RELEASE SUMMARY NEXT TWO WEEKS

4/12/02	to	4/25/02					
Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
ST	SU	2002	580,000	04-15-02	04-19-02	Redhouse (SFk ClearH20 R)	S Fk Clearwater River
ST	SU	2002	1,360,000	04-22-02	04-24-02	Dworshak H	Clearwater Rvr M F
ST	SU	2002	750,000	04-03-02	04-30-02	Sawtooth H	Salmon River
ST	SU	2002	260,000	04-15-02	04-19-02	Kooskia H	Clearwater Rvr M F
CH1	SP	2002	1,037,000	04-18-02	04-18-02	Little White Salmon H	Little White Salmon River
CH1	SP	2002	1,554,362	04-23-02	04-23-02	Leavenworth H	Wenatchee River
CH1	SP	2002	560,847	03-26-02	04-24-02	Warm Springs H	Deschutes River
CO	UN	2002	974,000	04-18-02	04-18-02	Little White Salmon R	Little White Salmon River
CH1	SP	2002	201,604	04-15-02	04-15-02	Winthrop H	Methow River
CO	SO	2002	186,000	04-19-02	04-30-02	Winthrop H	Methow River
ST	SU	2002	150,000	04-14-02	04-30-02	Winthrop H	Methow River
			9,063,174				
CH1	SP	2002	47,000	04-01-02	04-26-02	Blackberry Acclim Pd	Hood River
CH1	SP	2002	33,000	04-01-02	04-26-02	Jones Creek Acclim Pd	Hood River
CH1	SP	2002	7,000	04-10-02	04-22-02	Parkdale Acclim Pd	Hood River
CH1	SP	2002	31,000	04-01-02	04-15-02	Parkdale Acclim Pd	Hood River
			118,000				
CH1	SU	2002	120,000	04-08-02	05-10-02	Bel. Rocky Reach Dam	Mid-Columbia River
CH1	SU	2002	124,995	04-16-02	04-16-02	Wenatchee R	Wenatchee River
CH1	SU	2002	165,935	04-12-02	04-12-02	Turtle Rock H	Mid-Columbia River
CH1	SU	2002	360,000	04-18-02	04-18-02	Carlton Acclim Pd	Methow River
ST	SU	2002	54,000	04-24-02	05-03-02	Chiwawa H	Wenatchee River
ST	SU	2002	75,000	04-24-02	05-03-02	Wenatchee R	Wenatchee River
ST	SU	2002	93,000	04-24-02	05-03-02	Chiwawa H	Wenatchee River
ST	SU	2002	120,500	04-24-02	05-03-02	Chiwawa H	Wenatchee River
CH1	FA	2002	600,000	04-01-02	04-15-02	Lyons Ferry H	Snake River
ST	SU	2002	45,000	04-01-02	04-30-02	Dayton Acclim Pd	Touchet River
ST	SU	2002	50,000	04-15-02	04-30-02	Lyons Ferry H	Snake River
ST	SU	2002	60,000	04-10-02	04-30-02	Tucannon H	Tucannon River
ST	SU	2002	100,000	04-01-02	04-30-02	Dayton Acclim Pd	Touchet River
ST	SU	2002	100,000	04-10-02	04-30-02	Tucannon R	Tucannon River
ST	SU	2002	100,000	04-15-02	04-30-02	Walla Walla R	Walla Walla River
ST	SU	2002	200,000	04-01-02	04-30-02	Cottonwood Acclim Pd	Grande Ronde River
CH1	SP	2002	75,000	04-17-02	04-20-02	Twisp Acclim Pd	Methow River
CH1	SP	2002	266,000	04-17-02	04-20-02	Methow H	Methow River
ST	SU	2002	160,000	04-01-02	04-15-02	Ringold Springs H	Mid-Columbia River
ST	WI	2002	20,000	04-25-02	04-30-02	White Salmon R	White Salmon River
CH1	SP	2002	3,000	04-01-02	04-30-02	Curl Lake	Tucannon River
CH1	SP	2002	105,000	04-01-02	04-30-02	Curl Lake	Tucannon River
CH1	SU	2002	343,000	04-16-02	04-30-02	Wells H	Mid-Columbia River
ST	SU	2002	88,000	04-16-02	05-10-02	Chewuch R	Methow River
ST	SU	2002	88,000	04-16-02	05-10-02	Methow R	Methow River
ST	SU	2002	88,000	04-25-02	05-10-02	Twisp R	Methow River
ST	SU	2002	113,000	04-25-02	05-10-02	Okanogan R	Okanogan River
			3,717,430				
CH1	SP	2002	265,500	03-18-02	06-07-02	Easton Pd	Yakama River
CH1	SP	2002	288,000	03-18-02	06-07-02	Clark Flat Acclim Pd	Yakama River
CH1	SP	2002	288,000	03-18-02	06-07-02	Jack Creek Acclim Pd	Yakama River
CO	UN	2002	298,500	04-25-02	05-06-02	Nason Cr	Wenatchee River
CO	UN	2002	701,500	04-25-02	04-25-02	Icicle Cr	Wenatchee River
CH0	FA	2002	3,100	04-25-02	04-26-02	Prosser Acclim Pd	Yakama River
CH0	FA	2002	80,000	04-22-02	05-22-02	Prosser Acclim Pd	Yakama River
CO	UN	2002	150,000	04-25-02	05-10-02	Winthrop H	Methow River
			2,074,600				
			26,364,310				

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

HATCHERY RELEASE SUMMARY LAST TWO WEEKS

Hatchery Release Summary

Agency	From: Hatchery	4/26/02 Species	to Race	5/9/02 MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
IDFG	Bonneville	SO	UN	2002	70,000	05-02-02	05-02-02	Redfish Lake Cr	Salmon River
IDFG	Magic Valley	ST	SU	2002	100,000	04-29-02	04-29-02	Yankee Fk (Salmon R)	Salmon River
IDFG	Magic Valley	ST	SU	2002	100,000	05-01-02	05-01-02	Lemhi R	Salmon River
IDFG	Magic Valley	ST	SU	2002	140,000	04-30-02	04-30-02	Lemhi R	Salmon River
IDFG	Magic Valley	ST	SU	2002	225,000	04-25-02	04-26-02	E Fk Salmon R	Salmon River
IDFG	Niagara Springs	ST	SU	2002	448,484	04-06-02	05-05-02	Little Salmon R	Salmon River
IDFG	Niagara Springs	ST	SU	2002	830,000	04-13-02	05-01-02	Pahsimeroi H	Pahsimeroi River
IDFG	Sawtooth	SO	UN	2002	37,000	05-02-02	05-02-02	Salmon R Idaho	Salmon River
IDFG Total					1,950,484				
Nez Perce Tribe	Clearwater	ST	SU	2002	29,700	04-22-02	04-26-02	Lolo Cr	Clearwater Rvr M F
Nez Perce Tribe	Clearwater	ST	SU	2002	50,000	04-22-02	04-26-02	Meadow Cr	S Fk Clearwater River
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 Total					559,700				
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
ODFW Total					420,150				
Umatilla Tribe	Umatilla	ST	SU	2002	54,000	04-22-02	04-30-02	Minthorn Acclim Pd	Umatilla River
Umatilla Tribe	Umatilla	ST	SU	2002	54,000	04-22-02	04-30-02	Pendelton Acclim Pd	Umatilla River
Umatilla Tribe Total					108,000				
USFWS	Hagerman	ST	SU	2002	750,000	04-03-02	04-30-02	Sawtooth H	Salmon River
USFWS	Spring Creek	CH0	FA	2002	3,500,000	05-09-02	05-09-02	Spring Creek H	L Col R (D/s McN Dam)
USFWS	Winthrop	CO	SO	2002	186,000	04-19-02	04-30-02	Winthrop H	Methow River
USFWS	Winthrop	ST	SU	2002	150,000	04-14-02	04-30-02	Winthrop H	Methow River
USFWS Total					4,586,000				
Warm Spgs Tribe	Blackberry Pond	CH1	SP	2002	47,000	04-01-02	04-26-02	Blackberry Acclim Pd	Hood River
Warm Spgs Tribe	Jones Cr Pond	CH1	SP	2002	33,000	04-01-02	04-26-02	Jones Creek Acclim Pd	Hood River
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
Warm Spgs Tribe Total					182,000				
WDFW	East Bank	CH1	SP	2002	47,000	04-29-02	05-06-02	Chiwawa H	Wenatchee River
WDFW	East Bank	CH1	SU	2002	120,000	04-08-02	05-10-02	Bel. Rocky Reach Dam	Mid-Columbia River
WDFW	East Bank	CH1	SU	2002	807,000	05-03-02	05-06-02	Dryden Acclim Pd	Wenatchee River
WDFW	East Bank	ST	SU	2002	54,000	04-24-02	05-03-02	Chiwawa H	Wenatchee River
WDFW	East Bank	ST	SU	2002	75,000	04-24-02	05-03-02	Wenatchee R	Wenatchee River
WDFW	East Bank	ST	SU	2002	93,000	04-24-02	05-03-02	Chiwawa H	Wenatchee River
WDFW	East Bank	ST	SU	2002	120,500	04-24-02	05-03-02	Chiwawa H	Wenatchee River
WDFW	Klickitat	CO	SO	2002	1,000,000	05-01-02	05-31-02	Klickitat H	Klickitat River
WDFW	Lyons Ferry	ST	SU	2002	45,000	04-01-02	04-30-02	Dayton Acclim Pd	Touchet River
WDFW	Lyons Ferry	ST	SU	2002	50,000	04-15-02	04-30-02	Lyons Ferry H	Snake River
WDFW	Lyons Ferry	ST	SU	2002	60,000	04-10-02	04-30-02	Tucannon H	Tucannon River
WDFW	Lyons Ferry	ST	SU	2002	100,000	04-01-02	04-30-02	Dayton Acclim Pd	Touchet River
WDFW	Lyons Ferry	ST	SU	2002	100,000	04-10-02	04-30-02	Tucannon R	Tucannon River
WDFW	Lyons Ferry	ST	SU	2002	100,000	04-15-02	04-30-02	Walla Walla R	Walla Walla River
WDFW	Lyons Ferry	ST	SU	2002	200,000	04-01-02	04-30-02	Cottonwood Acclim Pd	Grande Ronde 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	Skamania	ST	WI	2002	20,000	04-25-02	04-30-02	White Salmon R	White Salmon River
WDFW	Tucannon	CH1	SP	2002	3,000	04-01-02	04-30-02	Curl Lake	Tucannon River
WDFW	Tucannon	CH1	SP	2002	105,000	04-01-02	04-30-02	Curl Lake	Tucannon River
WDFW	Wells	CH1	SU	2002	343,000	04-16-02	04-30-02	Wells H	Mid-Columbia River
WDFW	Wells	ST	SU	2002	88,000	04-16-02	05-10-02	Chewuch R	Methow River
WDFW	Wells	ST	SU	2002	88,000	04-16-02	05-10-02	Methow R	Methow River
WDFW	Wells	ST	SU	2002	88,000	04-25-02	05-10-02	Twisp R	Methow River
WDFW	Wells	ST	SU	2002	113,000	04-25-02	05-10-02	Okanogan R	Okanogan River
WDFW Total					3,939,500				

HATCHERY RELEASE SUMMARY NEXT TWO WEEKS

Agency	From: Hatchery	4/26/02 Species	to Race	5/9/02 MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Yakima Tribe	Cle Elum	CH1	SP	2002	265,500	03-18-02	06-07-02	Easton Pd	Yakama River
Yakima Tribe	Cle Elum	CH1	SP	2002	288,000	03-18-02	06-07-02	Clark Flat Acclim Pd	Yakama River
Yakima Tribe	Cle Elum	CH1	SP	2002	288,000	03-18-02	06-07-02	Jack Creek 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	210,000	05-02-02	05-10-02	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	3,100	04-25-02	04-26-02	Prosser 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
Yakima Tribe Total					2,371,100				
Grand Total					14,116,934				

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)
04/12/2002	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	457	140	2,108	60,804	11,385	---	77	8,839	5,514	6,028
04/18/2002 *	408	507	455	1,090	43,012	17,796	---	149	11,467	4,478	13,176
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
Total:	7,507	4,352	2,970	6,329	469,827	216,899	0	2,158	199,561	101,490	348,469
# Days:	10	12	8	10	14	14	0	14	14	14	14
Average:	751	363	371	633	33,559	15,493	0	154	14,254	7,249	24,891
YTD	36,923	27,031	4,660	6,528	498,616	219,370	55,918	2,320	207,911	106,753	364,910

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)
04/12/2002	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	2	0	0	138	0	---	13	3,447	24	8,322
04/18/2002 *	0	1	2	1	0	0	---	52	5,784	126	10,023
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
Total:	0	3	4	11	2,042	0	0	386	52,379	2,549	73,989
# Days:	10	12	8	10	14	14	0	14	14	14	14
Average:	0	0	1	1	146	0	0	28	3,741	182	5,285
YTD	0	4	7	26	2,124	0	0	419	53,536	2,824	1,123,592

*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)
04/12/2002	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	0	1	0	0	---	5	308	319	8,375
04/18/2002 *	0	0	0	2	0	0	---	0	645	251	11,712
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
Total:	0	0	0	10	216	92	0	11	4,389	5,399	69,426
# Days:	10	12	8	10	14	14	0	14	14	14	14
Average:	0	0	0	1	15	7	0	1	314	386	4,959
YTD	0	0	0	16	236	96	1	11	4,727	5,458	70,727

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)
04/12/2002	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	108	21	256	37,766	14,792	---	33	6,528	5,038	1,440
04/18/2002 *	36	357	145	291	57,349	19,314	---	46	9,673	8,468	3,097
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
Total:	596	5,703	638	1,623	441,543	309,155	0	483	135,819	85,818	61,147
# Days:	10	12	8	10	14	14	0	14	14	14	14
Average:	60	475	80	162	31,539	22,083	0	35	9,701	6,130	4,368
YTD	679	5,913	1,225	2,066	463,881	312,837	3,191	500	140,397	89,708	62,573

Two-Week Summary of Passage Indices

COMBINED SOCKEYE

Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
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	650	30	---	464	40	0	155
04/16/2002 *	0	---	---	0	1,238	155	---	272	23	61	89
04/17/2002	0	0	0	0	1,104	204	---	202	193	9	0
04/18/2002 *	0	0	0	0	414	382	---	143	181	0	56
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
Total:	0	0	0	0	6,204	3,303	0	3,202	38,317	3,014	1,408
# Days:	10	12	8	10	14	14	0	14	14	14	14
Average:	0	0	0	0	443	236	0	229	2,737	215	101
YTD	0	0	0	5	7,656	3,450	100	3,227	38,409	3,218	1,631

* 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.

Two Week Transportation Summary

04/13/02 TO 04/26/02

		Species						
Site	Data	CH0	CH1	CO	SO	ST	Grand Total	
LGR	Sum of NumberCollected	1,323	323,734		150	4,315	305,720	635,242
	Sum of NumberBarged	1,309	317,894		150	4,305	297,702	621,360
	Sum of NumberBypassed	0	9,142		0	2	11,363	20,507
	Sum of NumberTrucked	0	0		0	0	0	0
	Sum of TotalProjectMortalities	24	452		0	186	60	722
LGS	Sum of NumberCollected		98,660		51	1,633	149,078	249,422
	Sum of NumberBarged		98,762		50	1,335	149,701	249,848
	Sum of NumberBypassed		0		0	0	0	0
	Sum of NumberTrucked		0		0	0	0	0
	Sum of TotalProjectMortalities		128		1	50	23	202
LMN	Sum of NumberCollected		1,159		1	30	1,663	2,853
	Sum of NumberBarged		0		0	0	0	0
	Sum of NumberBypassed		1,155		1	30	1,663	2,849
	Sum of NumberTrucked		0		0	0	0	0
	Sum of TotalProjectMortalities		4		0	0	0	4
MCN	Sum of NumberCollected	27,197	104,441		2,280	19,691	70,995	224,604
	Sum of NumberBarged	0	0		0	0	0	0
	Sum of NumberBypassed	27,176	104,380		2,280	19,680	70,982	224,498
	Sum of NumberTrucked	0	0		0	0	0	0
	Sum of TotalProjectMortalities	21	61		0	11	13	106
Total Sum of NumberCollected		28,520	527,994		2,482	25,669	527,456	1,112,121
Total Sum of NumberBarged		1,309	416,656		200	5,640	447,403	871,208
Total Sum of NumberBypassed		27,176	114,677		2,281	19,712	84,008	247,854
Total Sum of NumberTrucked		0	0		0	0	0	0
Total Sum of TotalProjectMortalities		45	645		1	247	96	1,034

YTD Transportation Summary

TO: 04/26/02

		Species						
Site	Data	CH0	CH1	CO	SO	ST	Grand Total	
LGR	Sum of NumberCollected	1,383	343,378		170	5,275	319,736	669,942
	Sum of NumberBarged	1,328	323,098		150	4,708	304,088	633,372
	Sum of NumberBypassed	0	9,840		0	2	12,197	22,039
	Sum of NumberTrucked	29	9,847		20	343	3,383	13,622
	Sum of TotalProjectMortalities	26	544		0	222	68	860
LGS	Sum of NumberCollected		100,232		55	1,732	151,190	253,209
	Sum of NumberBarged		99,056		50	1,345	150,137	250,588
	Sum of NumberBypassed		0		0	0	0	0
	Sum of NumberTrucked		1,034		4	74	1,024	2,136
	Sum of TotalProjectMortalities		142		1	55	29	227
LMN	Sum of NumberCollected		55,918		1	100	3,191	59,210
	Sum of NumberBarged		0		0	0	0	0
	Sum of NumberBypassed		35,693		1	87	2,828	38,609
	Sum of NumberTrucked		20,104		0	13	356	20,473
	Sum of TotalProjectMortalities		121		0	0	7	128
MCN	Sum of NumberCollected	28,183	112,200		2,588	19,779	75,297	238,047
	Sum of NumberBarged	0	0		0	0	0	0
	Sum of NumberBypassed	28,159	112,123		2,588	19,768	75,279	237,917
	Sum of NumberTrucked	0	0		0	0	0	0
	Sum of TotalProjectMortalities	24	77		0	11	18	130
Total Sum of NumberCollected		29,566	611,728		2,814	26,886	549,414	1,220,408
Total Sum of NumberBarged		1,328	422,154		200	6,053	454,225	883,960
Total Sum of NumberBypassed		28,159	157,656		2,589	19,857	90,304	298,565
Total Sum of NumberTrucked		29	30,985		24	430	4,763	36,231
Total Sum of TotalProjectMortalities		50	884		1	288	122	1,345

Cumulative Adult Passage at Mainstem Dams Through: 04/25

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	76,579	296	280,033	1,108	60,590	574	0	0	0	0	0	0	0	0	0	0	0	0
TDA	26,967	47	199,169	570	35,067	245	0	0	0	0	0	0	0	0	0	0	0	0
JDA	14,347	14	163,355	416	25,186	161	0	0	0	0	0	0	0	0	0	0	0	0
MCN	5,349	37	140,926	450	18,917	104	0	0	0	0	0	0	0	0	0	0	0	0
IHR	2,111	1	81,349	240	9,963	40	0	0	0	0	0	0	0	0	0	0	0	0
LMN	1,519	29	75,330	82	8,824	24	0	0	0	0	0	0	0	0	0	0	0	0
LGS	583	3	53,210	339	5,976	46	0	0	0	0	0	0	0	0	0	0	0	0
LWG	302	1	46,482	32	5,242	6	0	0	0	0	0	0	0	0	0	0	0	0
PRD	232	0	9,016	0	1,223	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	82	2	2,162	2	281	0	0	0	0	0	0	0	0	0	0	0	0	0
RRH	9	0	221	1	27	0	0	0	0	0	0	0	0	0	0	0	0	0
WEL	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

DAM	Coho						Sockeye			Steelhead			Wild 2002
	2002		2001		10-Yr Avg.		10-Yr			10-Yr			
	Adult	Jack	Adult	Jack	Adult	Jack	2002	2001	Avg.	2002	2001	Avg.	
BON	0	0	0	0	0	0	0	0	0	3,438	2,679	1,944	1,047
TDA	0	0	0	0	0	0	0	0	0	2,199	707	798	821
JDA	0	0	0	0	0	0	0	0	0	6,914	1,708	2,198	2,411
MCN	0	0	0	0	0	0	0	0	0	4,457	1,250	1,443	1,721
IHR	0	0	0	0	0	0	0	0	0	4,287	1,248	1,815	1,172
LMN	0	0	0	0	0	0	0	0	0	4,794	1,541	1,873	1,896
LGS	0	0	0	0	0	0	0	0	0	5,590	1,665	1,026	2,096
LWG	0	0	0	0	0	0	0	0	0	11,041	5,435	4,508	2,827
PRD	0	0	0	0	0	0	0	0	0	19	9	8	**
RIS	0	0	0	0	0	0	0	0	0	40	26	20	0
RRH	0	0	0	0	0	0	0	0	0	114	48	28	0
WEL	---	---	---	---	---	---	---	---	---	---	---	---	---

RIS & RRH 2002 counts from Chelan Co. PUD's site. LGS through 04/24; PRD through 04/23.

**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.

