



Fish Passage Center

Weekly Report #04 - 10

May 14, 2004

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Highlights:

- ? Both precipitation and snowpack within the Columbia Basin are below average and Water Supply Forecasts continue to decrease.
- ? Flows have been the highest for spring migration over the last ten days, yet have not met the Biological Opinion Flow Objectives on a weekly average at McNary, Lower Granite, or Priest Rapids.
- ? At McNary Dam tests of turbine operations outside 1% are to continue May 15. The COE has not yet isolated the cause of high descaling rates in sampled fish and the Agencies and Tribes did not lend support to continuing the tests at this time.
- ? Discussions around operations at Little Goose Dam led to the regional conclusion that revenue neutrality for BPA should not be a constraint for fish protection measures.
- ? In 2001, flows averaged 35.1 Kcfs in April and 53.7 Kcfs in May (1-13) at Lower Granite, this year flows have averaged 48.8 Kcfs in April and 70.2 Kcfs from May 1-13.

Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin remains quite low through the first ten days of May. Only one site in Table 1, the Clearwater, contained greater than average precipitation over the first ten days of May. Over the entire water year,

precipitation has been decreasing and is currently slightly below average.

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

Location	Water Year 2004 May 1-10		Water Year 2004 October 1, 2003 to May 10, 2004	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	0.47	66	15.08	91
SNAKE RIVER Above Ice Harbor	0.31	50	10.35	84
Columbia Above The Dalles	0.38	59	14.97	90
Kootenai	0.38	54	15.51	91
Clark Fork	0.40	61	8.80	81
Flathead	0.45	57	12.96	89
Pend Oreille/Spokane	0.43	51	20.35	87
Central Washington	0.10	41	5.71	84
SNAKE RIVER PLAIN	0.15	31	5.86	77
Salmon/Boise/ Payette	0.47	81	12.01	80
Clearwater	1.00	102	20.83	94
SW Washington Cascades/Cowlitz	0.86	70	51.22	86
Willamette Valley	1.10	96	46.99	92

Snowpack within the Columbia Basin is below average for this time of year. Average snowpack in the Columbia River for basins above the Snake River confluence is 47% of average, for Snake River Basins the average snowpack is 30% of average, and for lower Columbia Basins between McNary and Bonneville Dam average snowpack is 52% of average.

Water Supply Forecasts continue to decrease throughout the Columbia Basin. At most locations in Table 2, the May Final water supply forecasts continued to decrease relative to the April Final Forecast.

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

Location	April Final		May Final	
	% Average (1971-2000)	Probable Runoff Volume (Kaf)	% Average (1971-2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	78	84200	74	79500
Grand Coulee (Jan-July)	85	53600	83	52200
Libby Res. Inflow, MT (Jan-July)	84	5290	79	4960
Hungry Horse Res. Inflow, MT (Jan-July)	76	1680	81	1810
Lower Granite Res. Inflow (Apr- July)	72	15600	61	13100
Brownlee Res. Inflow (Apr-July)	50	3130	40	2500
Dworshak Res. Inflow (Apr-July)	81	2150	76	2010

The spring flow objective period started in the Lower Snake River on April 3rd, 2004. Based on the April Final Forecast at Lower Granite (Apr-July), the flow objective is 85 Kcfs at Lower Granite through June 20th. Over the spring flow objective period, flows have averaged 55.7 Kcfs at Lower Granite. Over the last week, flows have increased and have averaged 73.7 Kcfs; flows are currently 64.1 Kcfs.

The Spring Flow Objective Periods at McNary Dam and Priest Rapids Dam began on April 10th. The flow objectives at McNary and Priest Rapids are 220 Kcfs and 135 Kcfs, respectively. Over the spring flow objective period, flows have averaged 178.3 Kcfs at McNary Dam and 111.8 Kcfs at Priest Rapids Dam. Flows at McNary have averaged 212.7 Kcfs over the last week. SOR 2004-7 was submitted to the Action Agencies on May 4, 2004 and asked for flows at Priest Rapids to

be increased to a day average of 120 Kcfs on May 7, 2004 and begin meeting a week average of 135 Kcfs on May 10, 2004. From May 7th through May 9th flows at Priest Rapids averaged 116.3 Kcfs, slightly below the requested flow. From May 10th to May 13th, flows have average 139.4 Kcfs and will likely decrease somewhat in the upcoming days to meet the week average flow of 135 Kcfs. Over the last month, several conflicting runoff forecasts have been issued for the Mid-Columbia using differing models (SLTP, ESP, QADJ). At the May 12, 2004 TMT meeting the COE downgraded their runoff forecast model considerably (QADJ) for the Mid-Columbia. Presently according to models, flows at Priest Rapids will either have to be drastically decreased in June to refill Grand Coulee, or the weekly flow average at Priest Rapids will have to be decreased sooner than expected.

Grand Coulee is currently at an elevation of 1273.9 feet (5-13-04) and has refilled approximately 1.8 feet over the last week.

The Libby Reservoir is currently at an elevation of 2420.4 feet (5-13-04). Inflows to Libby over the last week have ranged between 15.8 and 20.6 Kcfs; Libby has been able to refill 4.3 feet in the last week while still maintaining minimum project outflow of 4.0 Kcfs.

The Hungry Horse Reservoir is currently at an elevation of 3543.2 feet (5-13-04). Over the last week, inflows to Hungry Horse have ranged between 6.6 and 15.1 Kcfs, enabling Hungry Horse to refill 4.1 feet. Outflows over the last week have ranged between 2.2 and 4.8 Kcfs.

The Dworshak Reservoir is currently at an elevation of 1576.7 feet (5-13-04). Inflows to Dworshak have remained relatively high over the past week ranging between 10.7 and 15.1 Kcfs; outflows have been ranging between 2.2 and 3.9 Kcfs. Dworshak has refilled 7.5 feet in the last week, and needs to refill slightly more than 23 feet to refill.

The Brownlee Reservoir is currently at an elevation of 2076.2 feet (5-13-04). Inflows to Brownlee have ranged between 13.0 and 14.7 Kcfs; outflows have ranged between 7.0 and 12.0 Kcfs. Brownlee has refilled 3.3 feet in the last week and is currently 0.8 feet from full.

Spill: No spill at Lower Granite or Little Goose dams has occurred over the past week. Transportation is being maximized at these projects. Fish that were bypassed at Lower Granite Dam last week were anticipated to approach Little Goose Dam last weekend. A TMT conference call was held on Friday, May 7th, to discuss operations for the upcoming weekend to accommodate the high number of migrating fish approaching Little Goose Dam. At the end of the conference call there was no consensus about the best operation due to a BPA's contingency of revenue-neutrality. The Salmon Managers did not agree that fish protection measures required revenue-neutrality for BPA. The issue was raised to the Implementation Team. IT members met on Tuesday, May 11th, to discuss this issue. The outcome of that discussion was that for the future, revenue-neutrality should not be a constraint, but that in unique situations such as the one described above, operations should be managed to benefit fish and be 'cost effective'. TMT should not make trade-offs for fish protection measures, since this occurs in other plans and processes.

Spill at Lower Monumental Dam continued for the conduct of the salvaged study design. Spill averaged 37% of average daily flow over the past week, as compared to 41% last week. Spill at Ice Harbor Dam was initiated on the evening of April 13th. Spill has averaged 68% of average daily flow over the past week.

The Biological Opinion spill program started at the lower Columbia River Projects on the evening of April 12, 2004. Over the past week spill averaged 42%, 30%, 39% and 39% of daily flow at McNary, John Day, The Dalles and Bonneville dams, respectively. The Dalles Dam consistently spills less than the Biological Opinion 40% spill program. Over a whole season this can add up to a substantial amount of water.

Total dissolved gas levels remain below the waiver limits. Gas bubble trauma monitoring is occurring at the Mid and Lower Columbia sites. Only one fish (at Rock Island Dam) with signs of GBT has been observed this past week.

Smolt Monitoring: The yearling chinook migration in the Snake River has probably past its peak at Lower Granite Dam in the Snake River but we could still see higher numbers at Columbia River sites. Steelhead indices reached a peak at Lower Granite too, but we are likely to see more high indices for steelhead at Lower Granite if flows increase again in the Snake River, while in the Columbia River steelhead numbers are still likely to increase at Lower River SMP sites.

At Snake River Basin traps yearling chinook and steelhead numbers were down at all sites. At the White Bird Trap the collection for yearling chinook averaged 20 per day this week compared to 27 last week, while steelhead numbers were 26 per day this week versus 97 per day last week. The collection of yearling chinook was 191 this week (although we do not have data for May 12 and 13) at the Imnaha Trap compared to 774 per day last week. Steelhead collection was down this past week with daily collection averaging about 1,100 per day this week compared to 1,300 per day last week. Numbers of yearling chinook captured at the Grande Ronde trap were down compared to the previous week with a daily average of 40 compared to 260 last week. Steelhead numbers decreased to 50 per day after collecting 120 per day last week. At the Lewiston Trap the numbers of yearling chinook declined rapidly this past week with an average daily catch of 42, but with collection at or below ten fish since May 10. Steelhead collection also declined but the collection was higher at 380 per day average this week compared to 770 per day average last week.

At Lower Granite Dam the numbers of yearling chinook and steelhead decreased rapidly over the past week as did average daily discharge. The average passage index for yearling chinook averaged 111,000 this past week compared to 337,000 last week, with numbers dropping to 30,000 on May 13. The steelhead average daily passage index was up to 278,000 this week but the daily index dropped from 480,000 on May 8 to 76,000 on May 13. The drop in steelhead indices follows closely the drop in flows as average daily

discharge at Lower Granite went from 85 kcfs on May 6 to 64 kcfs on May 13.

Coho indices increased from 900 per day last week to 10,000 per day this past week and small numbers of subyearling chinook were also captured.

Little Goose Dam continued to show large numbers of yearling chinook and steelhead over the past week with the average daily index of yearling chinook at 110,000 this week compared to 75,000 last week while steelhead averaged 68,000 per day this week compared to 40,000 per day last week. Little Goose had an index of 243,000 for yearling chinook on May 6 and numbers have declined steadily this past week while steelhead indices peaked at 157,000 on May 7. Lower Monumental Dam also had an increase in the yearling chinook indices with an average daily index of 9,800 compared to 6,800 per day last week. Steelhead indices were 6,700 per day this week compared to 7,700 per day the week past.

In the Mid-Columbia River the Entiat Trap appears to be capturing mainly subyearling chinook at this time.

At Rock Island Dam the numbers of yearling chinook increased with an average yearling chinook index of 420 this week compared to 180 last week, while steelhead averaged 600 per day compared to 120 last week, and sockeye averaged 220 per day this week compared to 70 per day last week. Subyearling chinook numbers remained steady at about 20 per day this week while coho indices reached 700 per day with a peak of 1,465 on May 11.

In the Lower Columbia, at McNary, based on full samples taken every other day, yearling chinook indices averaged 53,000 per day this week compared to 66,000 last week, while steelhead indices averaged 8,300 per day compared to 3,200 per day last week. Coho indices from 400 per day last week to 1,200 this week. Sockeye indices also increased from 1,700 per day last week to 4,300 this week. Subyearling chinook

indices continued to increase rapidly this past week, with the average daily index at 2,200 per day this week compared to 1,250 last week. Testing of the high velocity vertical barrier screens will resume May 15.

At John Day Dam the numbers of yearling chinook have increased rapidly with the average daily index at 23,000 this week, compared to 17,600 last week. Steelhead indices increased over the past week with the average daily value at 3,500 compared to 1,700 last week. Coho indices jumped to 2,200 per day this past week compared to 200 last week, while small numbers of sockeye, and subyearling chinook smolts were reported this past week.

At Bonneville Dam, the average daily index for yearling chinook was 27,000 compared to 31,000 last week. The steelhead index averaged 3,400 this week compared to 1,900 last week. The indices for coho dropped substantially this week with an average index of 10,000 per day versus 30,000 per day last week. Sockeye indices reached a season high of 734 on May 9. The subyearling chinook index jumped to 194,000 on May 8 as the last Spring Creek Hatchery release for the season, of 3.4 million fish on May 6, reached the dam in large numbers that date.

Hatchery Releases - The scheduled release of juvenile salmonids from Columbia River Basin hatcheries above Bonneville Dam for the 2004 migration season is estimated near 82.1 million. Supplemental and planned releases completed during the fall 2003 season are considered to be 2004 migrants. The Zone Release Report below summarizes "planned" hatchery releases from State, federal or Tribal hatcheries or acclimation ponds for the 2004 Migration Season. These totals will be updated after release from the hatcheries and finalized through the year.

Juvenile sockeye were released from net pens into Lake Wenatchee last summer and fall (2003); the majority of these fish reside in the lake and migrate from the lake and to the ocean the next spring (2004). In the Snake River basin, juvenile sockeye were released in Redfish, Alturas, and

Pettit lakes last fall and most begin their migration in late April and May from the lakes.

Hatcheries in the Snake and Columbia River basins released greater than 14 million juvenile salmon during the past two weeks. Fish were released in all of the River Zones with yearling spring, summer, and fall chinook completed for the year in the Columbia River basin. For the upcoming two weeks, about 1.9 million fish will be released from hatcheries in the basin. See the Hatchery Release Summary Tables for details of individual release groups.

2004 Hatchery Zone Report

Race/Species	Friday 14-May-2004			
	Snake River	Mid-Columbia	Lower Columbia	Total Release
Fall Chinook	2,606,355	12,430,000	21,738,594	36,774,949
Spring Chinook	10,471,291	4,015,312	5,186,534	19,673,137
Summer Chinook	2,374,050	3,235,990		5,610,040
Coho	1,367,111	1,240,000	5,924,000	8,531,111
Sockeye	62,000	315,790		377,790
Summer Steelhead	9,237,843	1,302,231	476,912	11,016,986
Winter Steelhead			90,000	90,000
Total	26,118,650	22,539,323	33,416,040	82,074,013

Snake River -Release of yearling chinook from hatcheries in the Snake River basin is completed for the 2004 migration season. About 12.8 million yearling spring/summer chinook and another 1-million yearling fall chinook were released for this year's migration.

Juvenile steelhead releases were completed from most hatcheries the past two weeks from Niagara Springs, Hagerman, and Magic Valley hatcheries in the Salmon River basin. Juvenile steelhead releases are completed in the Clearwater River basin with the major releases from Dworshak NFH and Clearwater H in-river for about three to four weeks. The final release groups from Grande Ronde River were completed during this week from Big Canyon and Wallowa Ponds.

Mid-Columbia - Volitional releases of yearling spring chinook commenced mid-March in the Yakama River at Clark Flat, Easton, and Jack Creek ponds with the final fish out of the ponds by May 14. Most of these fish emigrated from the ponds by May 1st. Releases of upper Mid-Columbia spring chinook are in-river. Steelhead releases should be completed or nearly completed from Wells Hatchery this week with the juvenile steelhead released in the Wenatchee River by mid-late April. The large yearling summer chinook releases from Dryden, Similkameen, and Carlton ponds as well as Wells H should be in-river and migrating downstream. The first group of subyearling chinook will be released from Wells H in mid-May. A small release of subyearling fall chinook into the Yakima River was scheduled for mid-May.

Lower Columbia - Yearling fall and spring chinook and coho salmon were released from acclimation ponds located in the Umatilla River basin in March and April. Yearling spring chinook were released from Round Butte H, Warm Springs NFH, Carson, Warm Springs, and Little White Salmon NFHs mainly in April with Klickitat H releasing their fish in early March. The volitional release from the Hood River Acclimation Ponds should be completed and in-river from the pond/raceway system. About 2.5 million yearling coho from Washougal H were trucked and released by the first week of April with the on-site volitional release of coho from Klickitat H. to begin this week. Juvenile steelhead releases were completed from mid-April through early May in most of the rivers in this Reach. The final release of subyearling fall chinook from Spring Creek NFH was completed on 5/6 with the next subyearling bright fall chinook scheduled for release in the Umatilla River in late May.

Adult Fish Passage - At Bonneville Dam, counts of spring chinook ranged from 1,164 to 2,481 per day through the report week, ending May 13. The total count of adult spring chinook through May 13 was 142,795, and that compares to 165,713 in 2003 and 114,783 for the 10-year average. The majority of chinook salmon returning to Bonneville Dam this season have been comprised of 4-year

old fish that migrated to the ocean in 2002 and spent two years at sea. Of the spring chinook past Bonneville Dam, approximately 73.5% were counted at The Dalles Dam with 81,812 past McNary Dam through May 13. The majority of chinook salmon passing McNary Dam this year are migrating up the Snake River with 57,175 counted at Ice Harbor Dam. The count at Priest Rapids Dam (Mid-upper Columbia River) totaled 8,700 with a missing count date on May 9. Through May 9, about 5,900 adult chinook have been counted at Prosser Dam on the Yakima River.

Based on PIT tagged adult returns to Bonneville Dam, spring chinook salmon from most of the river systems began decreasing at the projects. In contrast, chinook salmon from McCall Hatchery began to pass in larger numbers during the week; as a point of interest, most of the "summer" chinook salmon from McCall H were comprised of 2-ocean age or 4-year old fish. The majority of passage at Bonneville is comprised of chinook destined to Snake River basin, with the Mid-Columbia and Yakima River basins and lower rivers such as Wind and Deschutes R basins still seeing PIT tag detections almost on a daily basis.

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
04/30/04	85.8	0.0	87.4	0.0	97.9	10.9	96.3	0.0	103.9	20.9	101.2	19.3	95.3	58.8
05/01/04	82.9	0.0	82.8	0.0	95.3	10.8	97.5	0.0	107.8	21.1	106.9	9.7	106.4	66.2
05/02/04	80.7	0.0	81.2	0.0	91.9	10.3	82.5	0.0	91.5	20.1	102.2	0.0	108.2	67.2
05/03/04	108.2	0.0	108.8	0.0	123.6	11.9	125.9	0.0	136.9	26.1	133.5	12.0	127.9	79.7
05/04/04	88.5	0.0	92.5	0.0	111.9	11.8	114.5	0.0	126.4	25.1	133.5	20.7	137.2	85.0
05/05/04	74.5	0.0	77.5	0.0	93.9	10.7	92.7	0.0	103.5	23.0	118.7	19.7	125.3	77.4
05/06/04	83.5	0.0	86.7	0.0	103.1	8.9	102.7	11.6	112.7	25.3	112.5	19.8	108.5	67.0
05/07/04	105.3	0.0	103.3	0.0	117.7	7.9	114.2	28.3	119.6	23.2	120.9	19.1	123.9	76.5
05/08/04	80.5	0.2	84.4	0.0	99.0	7.6	100.6	24.5	110.6	20.9	112.2	6.5	117.9	73.1
05/09/04	89.4	0.0	86.5	0.0	99.6	7.0	99.1	23.3	106.0	18.9	108.0	1.2	107.0	66.4
05/10/04	120.8	0.0	126.2	0.0	142.1	9.0	142.7	34.1	149.1	26.6	151.5	11.9	145.9	90.5
05/11/04	104.9	0.0	106.9	0.0	121.2	8.2	123.2	32.9	129.9	28.0	147.3	19.1	157.0	98.2
05/12/04	109.0	0.0	107.0	0.0	119.9	8.0	120.9	34.1	128.2	28.3	126.3	18.8	126.2	77.5
05/13/04	116.3	0.0	119.9	0.0	129.8	8.4	125.2	31.6	129.6	25.2	127.4	19.5	128.4	80.1

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

Date	Dworshak		Hells Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
04/30/04	6.1	0.0	12.6	8.8	54.7	0.0	54.0	0.0	53.4	25.4	57.5	45.0
05/01/04	2.3	0.0	10.8	8.8	50.1	0.0	48.9	0.0	51.9	24.8	52.9	39.6
05/02/04	2.3	0.0	12.7	10.5	50.3	0.0	50.5	0.0	53.3	25.5	54.6	44.8
05/03/04	4.2	0.0	12.2	12.5	60.9	0.0	61.7	0.0	65.4	30.9	66.8	44.7
05/04/04	4.0	0.0	13.3	14.8	70.4	0.0	70.7	0.0	76.6	27.4	75.7	44.5
05/05/04	4.0	0.0	14.5	15.1	79.1	3.7	77.8	0.0	82.3	25.7	81.3	60.1
05/06/04	3.9	0.0	13.4	12.7	85.3	2.6	85.4	0.0	94.2	30.4	93.4	80.1
05/07/04	3.9	0.0	13.9	10.3	80.5	0.0	81.1	0.0	88.3	30.7	87.5	51.4
05/08/04	2.2	0.0	14.3	9.1	78.7	0.0	78.3	0.0	85.9	29.3	83.3	43.0
05/09/04	2.2	0.0	12.5	9.1	75.2	0.0	73.5	0.0	74.1	28.7	77.5	65.1
05/10/04	4.1	0.0	14.6	11.9	73.1	0.0	73.8	0.0	75.9	29.0	77.3	70.0
05/11/04	3.5	0.0	13.0	10.6	72.2	0.0	71.4	0.0	72.4	26.7	75.6	37.9
05/12/04	3.8	0.0	14.4	12.0	72.1	0.0	72.0	0.0	73.7	26.7	76.5	44.6
05/13/04	3.1	0.0	---	---	64.1	0.0	65.2	0.0	69.1	27.7	70.5	59.0

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
04/30/04	166.5	55.1	165.7	52.5	167.7	65.3	199.1	92.9	8.5	86.3
05/01/04	164.7	52.1	170.6	49.3	174.7	69.0	204.6	93.4	11.1	88.7
05/02/04	164.5	52.9	156.5	44.6	159.4	62.6	185.4	94.2	7.9	71.9
05/03/04	170.2	57.4	165.6	50.2	167.9	65.7	191.3	92.6	7.7	79.7
05/04/04	206.9	87.2	203.4	57.4	201.0	78.5	222.4	90.2	23.2	97.6
05/05/04	226.0	98.7	211.6	63.0	218.0	84.3	250.2	87.2	48.7	102.9
05/06/04	219.7	91.6	215.2	71.8	221.3	87.1	245.7	89.4	41.7	101.8
05/07/04	211.6	81.8	211.6	69.9	212.3	83.1	238.5	95.2	36.5	95.4
05/08/04	202.2	87.3	200.5	60.7	207.8	81.5	233.3	94.1	26.0	101.9
05/09/04	201.5	82.3	198.4	63.6	201.3	79.3	225.1	94.2	28.3	91.2
05/10/04	216.8	97.0	201.4	60.3	204.9	80.8	228.8	93.3	28.6	95.4
05/11/04	224.8	95.4	222.4	63.5	225.5	89.0	248.9	89.1	43.5	104.9
05/12/04	221.6	98.1	219.6	59.1	228.9	89.9	257.0	90.7	55.2	99.7
05/13/04	201.8	85.8	207.0	64.2	214.4	83.3	246.3	93.4	48.0	93.5

HATCHERY RELEASE LAST TWO WEEKS

Hatchery Release Summary

From: 4/30/2004 to 5/13/2004

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Colville Tribe	Wells Hatchery	ST	SU	2004	9,000	04-26-04	04-30-04	Omak Creek	Okanogan River
Colville Tribe Total					9,000				
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2004	29,000	04-05-04	05-07-04	Valley Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2004	33,500	04-05-04	05-07-04	Lemhi River	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2004	50,000	04-05-04	05-07-04	East Fk Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2004	82,000	04-05-04	05-07-04	Lemhi River	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2004	180,000	04-05-04	05-07-04	Yankee Fk (Salmon R)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2004	180,000	04-19-04	05-07-04	McNabb/Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2004	190,000	04-05-04	05-07-04	Squaw Cr Acclim Pond	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2004	204,000	04-05-04	05-07-04	East Fk Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2004	445,000	04-10-04	05-04-04	Little Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2004	840,177	04-13-04	05-01-04	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game Total					2,233,677				
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2004	3,000	05-06-04	05-07-04	Deer Creek	Grande Ronde River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2004	80,000	04-29-04	05-06-04	L Sheep Acclim Pond	Imnaha River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2004	81,000	05-06-04	05-13-04	Big Canyon Acclim.Pd (Grande Ronde)	Grande Ronde River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2004	161,000	05-05-04	05-13-04	Wallowa Acclim Pond	Wallowa River
Oregon Dept. of Fish and Wildlife Total					325,000				
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2004	105,000	05-10-04	05-11-04	East Fk Salmon River	Salmon River (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2004	149,000	05-12-04	05-14-04	Yankee Fk (Salmon R)	Salmon River (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2004	772,000	04-16-04	05-07-04	Sawtooth Hatchery	Salmon River (ID)
U.S. Fish and Wildlife Service	Spring Creek NFH	CH0	FA	2004	3,381,797	05-06-04	05-06-04	Spring Creek Hatchery	L Col R (D/s McN Dam)
U.S. Fish and Wildlife Service Total					4,407,797				
Warm Springs Tribe	Oak Springs Hatchery	ST	SU	2004	40,000	04-09-04	05-06-04	Blackberry Acclim Pond	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2004	25,000	04-08-04	05-07-04	Parkdale Acclim Pond	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2004	25,000	04-12-04	05-07-04	E Fk Irrig Dist Sand Trap	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2004	22,500	04-07-04	05-03-04	Jones Creek Acclim Pond	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2004	22,500	04-07-04	05-05-04	Blackberry Acclim Pond	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2004	30,000	04-02-04	04-30-04	Parkdale Acclim Pond	Hood River
Warm Springs Tribe Total					165,000				

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

HATCHERY RELEASE LAST TWO WEEKS Continued

		Hatchery Release Summary							
From:		4/30/2004	to	5/13/2004					
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SP	2004	2,600	04-19-04	04-30-04	White River	Wenatchee River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SP	2004	9,000	04-19-04	04-30-04	Nason Creek	Wenatchee River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SP	2004	150,179	04-15-04	05-07-04	Chiwawa Hatchery	Wenatchee River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2004	860,000	04-19-04	05-03-04	Dryden Acclim Pond	Wenatchee River
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	ST	SU	2004	192,000	04-19-04	05-14-04	Chiwawa Hatchery	Wenatchee River
Washington Dept. of Fish and Wildlife	Klickitat Hatchery	CH0	SP	2004	315,000	05-10-04	05-15-04	Upper Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife	Klickitat Hatchery	CO	UN	2004	950,000	05-10-04	05-22-04	Klickitat Hatchery	Klickitat River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2004	85,000	04-01-04	04-30-04	Dayton Acclim Pond	Touchet River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2004	160,000	04-01-04	04-30-04	Cottonwood Acclim Pond	Grande Ronde River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2004	62,000	04-12-04	04-30-04	Twisp Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2004	186,000	04-12-04	04-30-04	Methow Hatchery	Methow River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2004	254,000	04-12-04	04-30-04	Chewuch Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SU	2004	312,000	04-19-04	05-07-04	Carlton Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2004	20,000	05-03-04	05-10-04	Drano Lake	Little White Salmon Ri
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	SU	2004	100,000	04-30-04	05-07-04	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	WI	2004	20,000	04-15-04	04-30-04	White Salmon River	White Salmon River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2004	65,000	04-19-04	04-30-04	Nason Creek	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2004	121,000	04-19-04	04-30-04	Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH1	SU	2004	249,000	04-19-04	04-30-04	Similkameen Acclim Pd	Okanogan River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CH1	SU	2004	340,917	04-15-04	04-30-04	Wells Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2004	45,000	04-15-04	05-07-04	Similkameen Acclim Pd	Okanogan River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2004	55,000	04-19-04	05-14-04	Okanogan River	Okanogan River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2004	76,042	04-15-04	04-30-04	Chewuch Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2004	76,042	04-15-04	05-14-04	Methow River	Methow River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2004	140,000	04-15-04	04-30-04	Twisp River	Methow River
Washington Dept. of Fish and Wildlife Total					4,845,780				
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2004	267,000	03-15-04	04-30-04	Clark Flat Acclim Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2004	280,000	03-15-04	04-30-04	Jack Creek Acclim Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2004	291,400	03-15-04	04-30-04	Easton Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CO	UN	2004	233,750	04-12-04	04-30-04	Easton Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CO	UN	2004	233,750	04-12-04	04-30-04	Lost Creek Acclim Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CO	UN	2004	233,750	04-12-04	04-30-04	Stiles Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CO	UN	2004	233,750	04-12-04	04-30-04	Yakama River	Yakama River
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2004	180,000	05-12-04	05-31-04	Prosser Acclim Pond	Yakama River
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2004	400,000	04-15-04	04-30-04	Prosser Acclim Pond	Yakama River
Yakama Tribe Total					2,353,400				
Grand Total					14,339,654				

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

HATCHERY RELEASE NEXT TWO WEEKS

Hatchery Release Summary

From: **5/14/2004** to **5/27/2004**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2004	149,000	05-12-04	05-14-04	Yankee Fk (Salmon R)	Salmon River (ID)
U.S. Fish and Wildlife Service Total					149,000				
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	ST	SU	2004	192,000	04-19-04	05-14-04	Chiwawa Hatchery	Wenatchee River
Washington Dept. of Fish and Wildlife	Klickitat Hatchery	CH0	SP	2004	315,000	05-10-04	05-15-04	Upper Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife	Klickitat Hatchery	CO	UN	2004	950,000	05-10-04	05-22-04	Klickitat Hatchery	Klickitat River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2004	55,000	04-19-04	05-14-04	Okanogan River	Okanogan River
Washington Dept. of Fish and Wildlife	Wells Hatchery	ST	SU	2004	76,042	04-15-04	05-14-04	Methow River	Methow River
Washington Dept. of Fish and Wildlife Total					1,588,042				
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2004	180,000	05-12-04	05-31-04	Prosser Acclim Pond	Yakama River
Yakama Tribe Total					180,000				
Grand Total					1,917,042				

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

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
McNary Dam											
	05/06/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/10/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	05/08/04	Chinook + Steelhead	101	0	0	0.00%	0.00%	0	0	0	0
	05/11/04	Chinook + Steelhead	104	0	0	0.00%	0.00%	0	0	0	0
Rock Island Dam											
	05/06/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/10/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/13/04	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	<u>Hungry H. Dnst</u>			<u>Boundary</u>			<u>Grand Coulee</u>			<u>Grand C. Tlwr</u>			<u>Chief Joseph</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg	Avg		
5/1	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
5/2	---	---	---	0	110	111	112	24	108	108	108	24	107	108	108	24	106	107	107	23
5/3	---	---	---	0	112	115	119	24	106	107	107	24	106	107	107	24	107	108	109	23
5/4	---	---	---	0	112	114	117	24	108	108	108	24	107	108	109	24	108	108	109	23
5/5	---	---	---	0	112	112	113	24	107	107	108	24	107	107	109	24	108	108	109	23
5/6	---	---	---	0	113	117	117	24	107	107	108	24	106	107	108	24	107	107	108	23
5/7	---	---	---	0	114	117	119	24	108	109	109	24	107	108	108	24	106	107	107	23
5/8	---	---	---	0	113	114	116	24	109	109	109	24	107	107	108	24	107	107	107	23
5/9	---	---	---	0	114	116	116	24	108	109	109	24	107	107	108	24	106	107	107	23
5/10	---	---	---	0	116	118	118	24	109	110	110	24	107	108	109	24	107	107	108	23
5/11	---	---	---	0	115	117	118	24	109	109	110	24	107	108	109	24	107	107	107	23
5/12	---	---	---	0	115	117	118	24	108	108	108	24	107	107	109	24	105	106	106	23
5/13	---	---	---	0	116	118	119	24	108	108	109	24	106	107	108	24	105	106	106	23
5/14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	<u>Chief J. Dnst</u>			<u>Wells</u>			<u>Wells Dwnstrm</u>			<u>Rocky Reach</u>			<u>Rocky R. Tlwr</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg	Avg		
5/1	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
5/2	107	107	107	23	106	107	107	24	109	110	110	24	110	110	111	23	111	111	111	23
5/3	107	108	109	23	107	108	108	24	110	111	112	24	110	110	111	24	110	110	111	24
5/4	108	109	110	23	108	108	109	24	111	112	112	24	111	111	111	24	111	111	111	24
5/5	108	108	109	23	107	107	108	19	111	111	111	19	111	111	111	24	111	111	111	24
5/6	107	108	109	23	107	107	108	24	109	109	110	24	110	110	110	24	110	111	112	24
5/7	106	107	107	23	107	108	108	23	109	109	110	23	110	110	110	24	112	112	113	24
5/8	107	108	109	23	107	107	107	24	108	108	109	24	109	109	109	24	110	111	112	24
5/9	107	107	108	23	106	107	108	24	108	109	109	24	108	108	109	24	110	110	111	24
5/10	107	107	108	23	107	108	108	24	109	109	110	24	109	109	110	24	111	112	113	24
5/11	107	108	109	23	106	107	108	23	108	109	109	23	109	109	110	24	111	112	113	23
5/12	106	107	107	23	105	106	106	24	107	108	108	24	107	108	108	24	110	111	112	24
5/13	106	106	107	23	106	107	107	24	108	108	109	24	107	107	108	24	110	111	112	24
5/14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	<u>Rock Island</u>			<u>Rock I. Tlwr</u>			<u>Wanapum</u>			<u>Wanapum Tlwr</u>			<u>Priest Rapids</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High	<u>24 h</u>	<u>12 h</u>	High					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg	Avg		
5/1	---	---	---	0	---	---	---	0	112	113	114	23	114	116	117	23	114	115	116	23
5/2	109	109	110	23	115	116	119	23	111	112	112	23	112	112	112	23	113	114	116	23
5/3	109	110	110	24	115	116	116	24	112	113	114	23	114	116	117	23	111	111	113	23
5/4	109	110	110	24	115	116	118	24	112	113	113	23	117	117	118	23	115	116	117	23
5/5	109	109	110	24	115	116	120	24	110	111	111	23	115	116	117	23	113	114	116	23
5/6	109	109	111	24	115	116	118	24	111	112	114	23	115	116	117	23	112	113	113	23
5/7	111	111	112	24	115	117	119	24	111	112	112	23	115	116	116	23	114	115	115	23
5/8	111	112	112	24	115	116	118	24	110	110	111	23	112	113	115	23	112	113	114	23
5/9	110	111	111	24	115	115	116	24	---	---	---	0	---	---	---	0	---	---	---	0
5/10	110	111	111	24	115	116	117	24	111	112	112	23	112	114	115	23	109	109	110	23
5/11	111	111	112	24	115	116	118	24	109	110	111	22	113	114	114	23	110	110	111	23
5/12	111	111	112	24	116	116	118	24	109	109	109	23	113	114	115	23	110	111	113	23
5/13	111	111	112	24	115	116	118	24	---	---	---	0	---	---	---	0	---	---	---	0
5/14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0

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

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

Date	Priest R. Dnst			#	Pasco			#	Dworshak			#	Clrwtr-Peck			#	Anatone			#
	24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High	
5/1	116	116	117	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
5/2	115	116	117	23	113	114	115	24	100	101	102	24	101	103	103	24	103	104	105	24
5/3	117	119	120	23	114	115	115	24	100	102	107	24	101	102	102	24	103	104	105	24
5/4	119	120	120	23	113	114	115	24	100	102	106	24	102	103	103	24	103	104	105	24
5/5	119	120	120	23	112	112	113	24	99	100	102	24	102	103	103	24	103	103	104	24
5/6	117	117	118	23	113	114	114	24	99	101	104	24	102	103	103	24	103	104	104	24
5/7	119	119	119	23	112	113	114	24	100	101	105	24	102	103	104	24	103	104	105	24
5/8	118	119	119	23	112	112	113	24	100	100	101	24	102	103	103	24	103	103	104	24
5/9	---	---	---	0	112	113	113	24	100	101	101	24	102	103	104	24	103	104	105	24
5/10	117	118	119	23	112	112	113	24	100	100	101	24	102	102	103	24	103	103	104	24
5/11	118	118	119	23	110	111	111	24	102	104	106	24	101	101	102	24	102	103	103	24
5/12	118	118	118	23	111	112	113	24	101	102	105	24	101	102	102	24	103	103	104	24
5/13	---	---	---	0	112	113	113	24	100	102	103	24	101	102	103	24	103	104	105	22
5/14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0

Total Dissolved Gas Saturation Data at Snake River Sites

Date	Clrwtr-Lewiston			#	Lower Granite			#	L. Granite Tlwr			#	Little Goose			#	L. Goose Tlwr			#
	24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High	
5/1	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
5/2	102	104	105	24	102	103	103	24	101	101	102	24	103	105	107	24	102	103	103	24
5/3	102	103	104	24	103	104	104	24	102	103	104	24	103	103	104	24	102	103	103	24
5/4	102	103	104	24	105	105	105	24	104	104	105	24	103	103	104	24	103	103	103	24
5/5	102	102	103	24	103	103	104	24	104	105	108	22	102	102	103	24	102	103	103	24
5/6	101	102	103	24	103	103	103	24	103	105	108	24	103	103	104	24	103	103	103	24
5/7	102	103	104	24	102	102	102	24	102	102	103	24	103	104	104	24	103	103	104	24
5/8	101	101	102	24	102	102	102	24	102	102	102	24	104	104	104	24	104	104	105	24
5/9	102	103	104	24	102	103	103	24	102	102	103	24	102	102	103	24	102	102	103	24
5/10	101	101	102	24	103	103	103	24	103	103	103	24	102	103	103	24	102	102	103	24
5/11	100	101	101	24	102	103	103	24	102	103	103	24	102	102	103	24	102	102	103	24
5/12	101	101	102	24	102	102	103	24	102	102	103	24	101	101	101	24	101	101	101	24
5/13	101	103	104	24	101	102	104	24	101	101	102	24	102	103	105	24	101	101	102	24
5/14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0

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

Date	Lower Mon.			#	L. Mon. Tlwr			#	Ice Harbor			#	Ice Harbor Tlwr			#	McNary-Oregon			#
	24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High		24 h Avg	12 h Avg	High	
5/1	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
5/2	105	105	106	24	118	119	120	24	111	112	113	24	115	116	117	24	114	116	116	24
5/3	106	106	107	24	119	120	121	23	115	116	118	24	114	114	115	24	116	118	120	24
5/4	105	106	106	24	119	120	121	21	117	118	118	24	114	114	114	24	115	116	118	24
5/5	104	104	105	24	117	118	119	21	115	116	117	24	117	119	120	24	113	113	114	24
5/6	103	104	105	24	119	119	120	23	113	114	115	24	118	119	120	24	112	113	115	24
5/7	103	103	103	24	119	120	120	24	112	113	114	24	115	116	120	24	113	115	116	24
5/8	103	103	103	24	119	120	120	24	112	112	113	24	113	114	114	24	113	114	115	24
5/9	103	103	103	24	119	120	120	24	111	111	112	24	116	118	119	24	113	114	114	24
5/10	104	104	104	24	119	120	120	23	112	112	113	24	118	119	119	24	111	112	113	24
5/11	103	103	104	24	117	118	118	24	112	112	113	24	114	116	118	24	110	111	112	24
5/12	101	101	102	24	117	118	118	24	112	112	112	24	113	113	114	24	110	110	111	24
5/13	101	102	103	24	118	119	119	24	112	113	114	24	116	117	119	24	111	113	117	24
5/14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0

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

Total Dissolved Gas Saturation Data at 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>	<u>24h</u>	<u>12h</u>	<u>#</u>		
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	AVG	High	hr	
5/1	---	---	---	0	---	---	---	---	---	---	---	0	---	---	---	0	---	---	---	0
5/2	114	114	115	24	115	117	117	24	109	109	109	23	113	117	118	24	111	113	115	23
5/3	114	115	115	24	115	117	117	24	108	108	109	23	112	117	118	24	111	113	114	23
5/4	114	115	115	24	116	118	118	24	109	110	111	23	113	117	118	24	112	113	115	23
5/5	112	113	113	24	116	118	119	24	110	110	111	23	114	117	118	23	110	112	113	23
5/6	112	113	114	24	115	119	119	24	110	110	110	23	114	119	119	24	113	115	116	23
5/7	112	112	113	24	115	118	119	24	110	110	110	23	114	118	118	24	113	115	116	23
5/8	113	113	114	24	116	117	118	24	109	109	110	23	113	117	118	24	111	113	114	23
5/9	112	112	113	24	115	118	119	24	108	108	109	23	113	118	118	24	112	114	116	23
5/10	112	112	112	24	116	119	119	24	109	109	109	23	114	118	119	24	110	112	116	23
5/11	110	110	111	24	115	119	119	24	108	108	109	18	113	118	118	24	108	110	111	23
5/12	110	110	110	24	115	118	119	24	106	107	107	23	112	117	118	24	109	112	114	23
5/13	110	110	112	24	114	118	119	24	107	108	109	23	112	118	118	24	111	114	116	23
5/14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0

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>	<u>24h</u>	<u>12h</u>	<u>#</u>	
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	hr
5/1	---	---	---	0	---	---	---	---	---	---	---	0	---	---	---	0
5/2	114	115	116	24	113	114	114	23	115	116	117	23	114	117	118	24
5/3	114	114	115	24	113	113	114	23	115	116	117	23	115	117	119	24
5/4	114	114	115	24	112	112	113	23	114	115	116	23	113	114	115	24
5/5	113	114	115	24	111	112	112	23	113	114	116	23	112	114	115	24
5/6	115	117	118	24	112	112	112	23	113	113	114	23	112	113	114	24
5/7	116	117	118	24	113	113	114	23	114	115	116	23	112	113	114	24
5/8	115	116	117	24	113	113	113	23	115	116	116	23	113	114	115	24
5/9	115	117	118	24	112	113	114	23	114	115	116	23	113	115	117	24
5/10	115	117	118	24	111	112	112	23	114	115	117	23	112	113	114	24
5/11	114	114	115	24	109	109	109	23	112	113	115	23	110	111	113	24
5/12	114	116	117	24	108	108	108	23	111	112	113	23	110	111	112	24
5/13	115	116	117	24	110	111	111	23	113	113	115	23	111	113	114	24
5/14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0

Two-Week Summary of Passage Indices

COMBINED YEARLING CHINOOK												
	ENT	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/30/2004 *	1	72	603	212	58	200,746	41,603	17,230	139	3,425	8,301	40,003
05/01/2004 *	---	---	414	---	---	185,798	55,000	5,576	113	68,205	5,317	29,230
05/02/2004 *	---	---	464	---	---	127,331	45,405	3,540	176	2,386	5,924	33,887
05/03/2004 *	0	19	2,995	144	17	206,233	172,005	1,748	188	67,677	9,590	19,403
05/04/2004 *	1	18	111	426	15	297,714	59,201	637	303	2,490	14,926	29,336
05/05/2004 *	0	15	54	390	61	613,583	82,213	9,921	184	63,782	28,275	33,176
05/06/2004 *	0	10	---	131	135	729,649	70,416	9,384	181	1,927	50,784	34,315
05/07/2004 *	0	55	32	110	183	229,552	174,807	15,789	440	43,707	27,723	37,765
05/08/2004 *	---	---	169	---	---	172,089	243,410	2,430	342	1,614	36,697	46,126
05/09/2004 *	---	---	161	---	---	108,508	132,014	4,191	623	41,384	23,685	31,571
05/10/2004 *	0	7	341	34	10	78,955	55,609	1,764	479	2,056	20,043	19,801
05/11/2004 *	0	10	252	32	4	97,164	69,417	19,929	452	57,885	18,721	19,324
05/12/2004 *	0	1	---	23	4	67,612	54,803	12,764	324	3,226	29,874	18,951
05/13/2004 *	---	28	---	13	7	29,701	36,615	12,021	309	70,412	4,192	18,893

Total:	2	235	5,596	1,515	494	3,144,635	1,292,518	116,924	4,253	430,176	284,052	411,781
# Days:	9	10	11	10	10	14	14	14	14	14	14	14
Average:	0	24	509	152	49	224,617	92,323	8,352	304	30,727	20,289	29,413
YTD	741	29,008	72,350	9,466	1,485	4,752,929	2,217,827	760,889	9,146	616,365	397,448	994,874

COMBINED SUBYEARLING CHINOOK												
	ENT	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/30/2004 *	1	0	0	0	0	0	200	0	1	3	6	653
05/01/2004 *	---	---	1	---	---	0	201	0	1	874	12	268
05/02/2004 *	---	---	3	---	---	0	0	57	1	6	7	739
05/03/2004 *	36	0	0	0	4	0	0	0	6	587	16	906
05/04/2004 *	15	0	0	0	21	0	0	17	3	13	6	1,014
05/05/2004 *	5	0	0	0	60	149	0	563	4	2,289	11	2,384
05/06/2004 *	15	0	---	0	77	808	0	925	140	12	7	3,147
05/07/2004 *	3	0	1	0	42	149	200	1,858	12	1,259	0	6,591
05/08/2004 *	---	---	1	---	---	0	0	14	9	20	32	194,020
05/09/2004 *	---	---	0	---	---	149	0	146	41	1,293	10	177,978
05/10/2004 *	16	0	0	3	15	0	0	238	21	42	0	46,415
05/11/2004 *	10	0	0	1	13	149	0	4,382	27	1,423	32	16,477
05/12/2004 *	7	0	---	2	17	0	0	5,798	9	49	68	11,704
05/13/2004 *	---	0	---	3	30	0	401	5,281	19	4,804	422	6,859

Total:	108	0	6	9	279	1,404	1,002	19,279	294	12,674	629	469,155
# Days:	9	10	11	10	10	14	14	14	14	14	14	14
Average:	12	0	1	1	28	100	72	1,377	21	905	45	33,511
YTD	208	0	25	13	391	4,312	1,601	20,120	1,406	14,745	669	1,906,701

* See sampling comments

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

this means that one or more of the sites on this date had an incomplete or biased sample.

For clip information see:

[Daily Catch Report](#)

For sockeye and yearling chinook (Snake only) race information see:

[Current Passage Index Query](#)

If the text appears garbled, please hit the refresh button on your browser

NOTE for 2002 Lower Monumental Data: Due to the non-standard operation of Lower Monumental this year, the passage index reliability is in question and is being looked into.

Fall (post SMP season) trapping at the Imnaha River Fish Trap (IMN) is funded by the Lower Snake River Compensation Program (LSRCP)

Two-Week Summary of Passage Indices

COMBINED COHO													
	ENT	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
4/30/2004	*	0	0	0	0	597	0	0	1	27	303	37,545	
5/01/2004	*	---	---	0	---	299	200	0	11	437	104	34,216	
5/02/2004	*	---	---	0	---	0	0	0	10	11	69	32,771	
5/03/2004	*	0	0	0	0	0	200	0	14	587	78	22,448	
5/04/2004	*	0	0	0	0	448	0	0	23	18	67	25,987	
5/05/2004	*	0	0	0	0	1,344	200	4	34	178	307	30,070	
5/06/2004	*	0	0	---	0	4	3,559	0	2	18	39	26,067	
5/07/2004	*	0	0	0	0	6	8,806	400	0	296	360	16,891	
5/08/2004	*	---	---	0	---	10,299	1,200	2	303	84	979	13,058	
5/09/2004	*	---	---	0	---	10,150	200	51	668	1,624	4,218	6,315	
5/10/2004	*	0	0	0	0	3	11,194	400	2	802	152	1,832	11,214
5/11/2004	*	0	0	0	0	2	11,791	1,000	5	1,465	1,868	3,854	3,997
5/12/2004	*	0	0	---	0	1	9,702	0	37	776	160	3,372	10,627
5/13/2004	*	---	0	---	0	1	8,507	1,600	8	771	1,070	82	6,732
<hr/>													
Total:		0	0	0	0	17	76,696	5,400	111	5,192	6,615	16,326	277,938
Days:		9	10	11	10	10	14	14	14	14	14	14	14
Average:		0	0	0	0	2	5,478	386	8	371	473	1,166	19,853
TD		0	0	0	0	27	84,293	5,600	901	5,246	7,813	17,827	585,158

COMBINED STEELHEAD													
	ENT	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
4/30/2004	*	14	115	811	67	598	195,671	112,402	12,276	58	365	1,689	1,474
5/01/2004	*	---	---	1,033	---	---	142,089	63,405	18,223	42	2,491	1,945	1,426
5/02/2004	*	---	---	1,801	---	---	107,165	20,802	9,315	65	347	1,466	2,555
5/03/2004	*	2	75	2,441	71	135	78,060	17,203	4,260	86	3,534	628	1,939
5/04/2004	*	2	203	548	276	174	80,597	22,201	1,756	137	375	950	1,874
5/05/2004	*	2	62	1,303	176	1,269	190,447	13,410	2,880	137	3,710	2,034	2,318
5/06/2004	*	0	29	---	52	1,650	157,542	32,209	5,328	306	753	3,202	1,667
5/07/2004	*	1	78	1,113	184	635	364,925	157,409	15,727	378	6,145	4,350	2,313
5/08/2004	*	---	---	1,425	---	---	480,447	99,604	7,127	422	847	4,615	4,598
5/09/2004	*	---	---	989	---	---	343,582	33,605	4,150	612	7,165	3,999	4,698
5/10/2004	*	0	11	898	24	467	202,986	50,406	2,618	723	726	3,440	4,148
5/11/2004	*	0	2	1,122	13	385	251,791	28,808	5,316	973	8,570	3,138	4,786
5/12/2004	*	0	11	---	13	312	228,955	59,403	6,960	629	1,139	3,796	1,725
5/13/2004	*	---	28	---	8	99	76,716	46,405	5,258	545	11,561	1,114	1,374
<hr/>													
Total:		21	614	13,484	884	5,724	2,900,973	757,272	101,194	5,113	47,728	36,366	36,895
Days:		9	10	11	10	10	14	14	14	14	14	14	14
Average:		2	61	1,226	88	572	207,212	54,091	7,228	365	3,409	2,598	2,635
TD		185	1,787	27,590	1,410	7,088	3,768,460	1,122,515	184,460	5,983	72,921	56,434	61,691

* See sampling comments

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

Two-Week Summary of Passage Indices

COMBINED SOCKEYE													
	ENT	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
04/30/2004	*	0	0	0	0	0	0	0	28	143	67		
05/01/2004	*	---	---	0	---	---	0	200	141	1,020	91	11	
05/02/2004	*	---	---	0	---	---	0	0	110	176	28	17	
05/03/2004	*	0	0	0	0	0	400	0	68	1,032	65	14	
05/04/2004	*	2	0	0	0	0	0	0	23	55	167	7	
05/05/2004	*	3	0	0	0	2	0	0	23	2,997	492	6	
05/06/2004	*	0	0	---	0	2	0	2	70	141	519	7	
05/07/2004	*	0	0	0	0	2	149	200	0	253	1,980	222	18
05/08/2004	*	---	---	0	---	---	0	0	34	120	359		
05/09/2004	*	---	---	0	---	---	0	0	5	68	2,809	607	73
05/10/2004	*	0	1	0	0	0	0	0	139	274	302	19	
05/11/2004	*	0	0	0	0	1	149	200	0	478	5,336	347	56
05/12/2004	*	0	0	---	0	1	448	0	0	262	386	673	57
05/13/2004	*	---	4	---	0	3	0	200	0	335	7,296	10	51
<hr/>													
Total:		5	5	0	0	11	746	1,200	7	2,032	23,765	3,949	3,42
# Days:		9	10	11	10	10	14	14	14	14	14	14	1
Average:		1	1	0	0	1	53	86	1	145	1,698	282	24
YTD		5	5	0	0	13	1,191	1,224	88	5,348	27,750	4,106	3,62

* See sampling comments

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

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

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

ENT (Collection) = Entiat River Trap : 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. ENT data collected for the FPC by USFWS.

Two Week Transportation Summary

Source: Fish Passage Center

Updated:

5/14/04 9:32 AM

		05/01/04 TO 05/14/04					
		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	1,342	3,088,270	76,421	746	2,888,803	6,055,582
	Sum of NumberBarged	1,243	2,952,088	72,697	730	2,750,141	5,776,899
	Sum of NumberBypassed	94	125,287	3,697	7	136,860	265,945
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	5	10,895	27	9	1,802	12,738
LGS	Sum of NumberCollected	1,002	1,292,518	5,400	1,200	757,272	2,057,392
	Sum of NumberBarged	997	1,291,902	5,400	1,200	756,868	2,056,367
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	5	613	0	0	402	1,020
LMN	Sum of NumberCollected	12,250	73,327	71	4	60,568	146,220
	Sum of NumberBarged	13,494	80,837	71	4	69,988	164,394
	Sum of NumberBypassed	0	2,729	0	0	901	3,630
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	1	162	0	0	116	279
MCN	Sum of NumberCollected	7,305	258,906	3,837	13,634	27,617	311,299
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	7,272	257,544	3,830	13,579	27,461	309,686
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	33	1,362	7	55	156	1,613
Total Sum of NumberCollected		21,899	4,713,021	85,729	15,584	3,734,260	8,570,493
Total Sum of NumberBarged		15,734	4,324,827	78,168	1,934	3,576,997	7,997,660
Total Sum of NumberBypassed		7,366	385,560	7,527	13,586	165,222	579,261
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of TotalProjectMortalities		44	13,032	34	64	2,476	15,650

YTD Transportation Summary

Source: Fish Passage Center

Updated:

5/14/04 9:32 AM

TO: 05/14/04

Site	Data	Species					Grand Total
		CH0	CH1	CO	SO	ST	
LGR	Sum of NumberCollected	3,345	4,436,723	82,854	1,056	3,671,254	8,195,232
	Sum of NumberBarged	3,099	4,241,289	78,902	850	3,510,532	7,834,672
	Sum of NumberBypassed	94	129,511	3,697	7	143,190	276,499
	Sum of NumberTrucked	129	43,991	220	181	15,496	60,017
	Sum of TotalProjectMortalities	23	21,932	35	18	2,036	24,044
LGS	Sum of NumberCollected	1,392	2,135,425	5,600	1,215	1,094,347	3,237,979
	Sum of NumberBarged	1,380	2,132,584	5,600	1,213	1,092,558	3,233,335
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of NumberTrucked	0	2,096	0	2	1,333	3,431
	Sum of TotalProjectMortalities	12	809	0	0	455	1,276
LMN	Sum of NumberCollected	13,047	695,437	801	85	137,466	846,836
	Sum of NumberBarged	14,281	699,925	801	85	146,031	861,123
	Sum of NumberBypassed	0	3,399	0	0	1,016	4,415
	Sum of NumberTrucked	10	1,352	0	0	604	1,966
	Sum of TotalProjectMortalities	1	1,162	0	0	252	1,415
MCN	Sum of NumberCollected	8,811	391,487	4,655	16,544	45,492	466,989
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	8,770	389,611	4,648	16,475	45,313	464,817
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	42	1,867	7	69	179	2,164
Total Sum of NumberCollected		26,595	7,659,072	93,910	18,900	4,948,559	12,747,036
Total Sum of NumberBarged		18,760	7,073,798	85,303	2,148	4,749,121	11,929,130
Total Sum of NumberBypassed		8,864	522,521	8,345	16,482	189,519	745,731
Total Sum of NumberTrucked		139	47,439	220	183	17,433	65,414
Total Sum of TotalProjectMortalities		78	25,770	42	87	2,922	28,899

Cumulative Adult Passage at Mainstem Dams Through: 05/13

DAM	Spring Chinook						Summer Chinook						Fall Chinook					
	2004		2003		10-Yr Avg.		2004		2003		10-Yr Avg.		2004		2003		10-Yr Avg.	
	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	142,639	4,554	165,713	8,739	114,783	4,881	0	0	0	0	0	0	0	0	0	0	0	0
TDA	104,815	3,558	107,340	5,777	71,979	2,759	0	0	0	0	0	0	0	0	0	0	0	0
JDA	88,277	2,868	79,672	4,705	56,804	1,884	0	0	0	0	0	0	0	0	0	0	0	0
MCN	81,812	2,511	73,380	3,929	48,555	1,514	0	0	0	0	0	0	0	0	0	0	0	0
IHR	57,175	1,401	56,587	2,337	30,018	848	0	0	0	0	0	0	0	0	0	0	0	0
LMN	50,605	985	47,103	1,707	27,519	721	0	0	0	0	0	0	0	0	0	0	0	0
LGS	35,624	535	45,034	1,315	24,641	600	0	0	0	0	0	0	0	0	0	0	0	0
LWG	44,505	632	42,978	1,020	22,635	469	0	0	0	0	0	0	0	0	0	0	0	0
PRD	8,700	51	15,161	75	10,305	39	0	0	0	0	0	0	0	0	0	0	0	0
RIS	3,528	8	11,124	110	4,764	40	0	0	0	0	0	0	0	0	0	0	0	0
RRH	1,679	15	2,306	5	1,697	2	0	0	0	0	0	0	0	0	0	0	0	0
WEL	713	1	758	0	685	2	0	0	0	0	0	0	0	0	0	0	0	0

DAM	Coho					Sockeye			Steelhead				
	2004		2003		10-Yr Avg.		10-Yr Avg.			10-Yr Avg.			Wild
	Adult	Jack	Adult	Jack	Adult	Jack	2004	2003	Avg.	2004	2003	Avg.	2004
BON	0	0	0	0	0	0	0	0	0	3,894	3,115	2,956	956
TDA	0	0	0	0	0	0	0	0	0	1,274	878	938	601
JDA	0	0	0	0	0	0	0	0	0	1,589	1,417	3,061	878
MCN	0	0	0	0	0	0	0	0	0	1,316	1,382	1,569	579
IHR	0	0	0	0	0	0	0	0	0	1,748	1,596	1,697	771
LMN	2	0	0	0	0	0	0	0	0	1,543	1,903	1,770	844
LGS	0	0	0	0	0	0	0	0	0	1,521	2,088	1,822	840
LWG	0	0	0	0	0	0	0	0	0	7,546	15,759	5,889	2,602
PRD	0	0	0	0	0	0	0	0	0	22	8	1	0
RIS	0	0	0	0	0	0	0	1	0	60	23	21	0
RRH	0	0	0	0	0	0	0	0	0	218	45	50	0
WEL	0	0	0	0	0	0	0	0	0	55	20	6	32

RIS is through 5/10; RRH, WEL, LGS, LGR are through 5/12. PRD is missing 5/9. RIS is missing 4/18, 4/30.
 LMN is missing one ladder on 5/13. MCN is missing 4/11; LGS is missing 4/9, 4/13, 4/14, 4/16, 4/28, 4/30.
 **PRD is not reporting Wild Steelhead numbers.
 These numbers were collected from the COE's Running Sums text files, except where otherwise noted.
 Wild steelhead numbers are included in the total.
 Historic counts (pre-1996) were obtained from CRITFC and compiled by the FPC.
 Historic counts 1997 to present were obtained from the Corps of Engineers.

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BON counts from January 1, 2004 to March 14, 2004 (our traditional counts begin March 15)

Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
156	1	1,489	238

