



Fish Passage Center

Weekly Report #04 - 6

April 16, 2004

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Highlights:

- Water Supply Forecasts have been decreasing rapidly over the last month, at Lower Granite Dam, the April-July forecast has decreased five million acre-feet in the last month.
- The Spring Flow Objective Periods at McNary Dam and Priest Rapids Dam began on April 10th. On April 14, 2004, the Salmon Managers submitted SOR 2004-5 to the Action Agencies, which asked for flows at Priest Rapids to be increased to 110 Kcfs until further notice.
- Grand Coulee, Hungry Horse, and Libby did not reach their April 10th Biological Opinion target elevations.
- Dworshak and Brownlee did reach their April 10th Biological Opinion target elevations.
- Some water supply forecasts have been impacted by reservoirs being generally lower than normal for this time of year and having to assume much of the runoff volume to refill to ordinary levels. For example, the April Mid-Month inflow forecast for Owyhee Reservoir is 77% of average while the outflow forecast is only 10% of average.
- Spill Operations for the Snake River remain undecided at this time.

Summary of Events:

Precipitation throughout the Columbia Basin was very low over most of March and early April. Only one site in Table 1 contained greater than average precipitation over the first twelve days of April, six sites contained less than 10% of average precipitation over the same period. Over the entire water year, precipitation has been decreasing and is currently below average.

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

Location	Water Year 2004		Water Year 2004	
	April 1-12		October 1, 2003 to April 12, 2004	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	0.22	33	13.59	91
SNAKE RIVER ABOVE ICE HARBOR	0.22	38	9.26	85
Columbia Above The Dalles	0.16	25	13.60	91
Kootenai	0.06	8	13.97	91
Clark Fork	0.35	71	7.83	83
Flathead	0.64	102	11.37	89
Pend Oreille/Spokane	0.06	7	18.50	88
Central Washington	0.00	0	5.22	85
Snake River Plain	0.19	47	5.01	77
Salmon/Boise/Payette	0.08	13	10.93	81
Clearwater	0.09	8	18.19	92
SW Washington	0.02	1	48.34	87
Cascades/Cowlitz				
Willamette Valley	0.06	3	42.79	91

Snowpack within the Columbia Basin is also below average and has been decreasing (with respect to average). Average snowpack in the Columbia River for basins above the Snake River confluence is 66% of average (7% decrease from last week), for Snake River Basins the average snowpack is 57% of average (9% decrease from last week), and for lower Columbia Basins between McNary and Bonneville Dam average snowpack is 73% of average (8% decrease from last week).

Water Supply Forecasts have been decreasing rapidly over the last month. Most locations in Table 2 had significantly decreased runoff volumes in the April Final Forecast relative to the March Final forecast. At most locations, the April Mid-Month water supply forecasts have continued to decrease relative to the April Final Forecast. At Lower Granite Dam, the April-July forecasts have decreased five million acre-feet over the last month. The April-July forecast at Lower Granite Dam is pivotal for spring spill on the Lower Snake River.

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

Location	April Final		April Mid-Month	
	% Average (1971-2000)	Probable Runoff Volume (Kaf)	% Average (1971-2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	78	84200	77	82800
Grand Coulee (Jan-July)	85	53600	84	53000
Libby Res. Inflow, MT (Jan-July)	84	5290	82	5190
Hungry Horse Res. Inflow, MT (Jan-July)	76	1680	76	1700
Lower Granite Res. Inflow (Apr-July)	72	15600	70	15000
Brownlee Res. Inflow (Apr-July)	50	3130	48	3040
Dworshak Res. Inflow (Apr-July)	81	2150	78	2050

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 will be 85 Kcfs at Lower Granite through June 20th. Over the past week, flows at Lower Granite have ranged between 49.2 and 64.2 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 will be 220 Kcfs and 135 Kcfs, respectively. On April 14, 2004, the Salmon Managers submitted SOR 2004-5 to the Action Agencies, which asked for flows at Priest Rapids to be increased to 110 Kcfs until further notice. The Action Agencies agreed to ramp flows up to 110 Kcfs by Monday, April 19th, 2004. Although the flow objective is 135 Kcfs at Priest Rapids, due to rapidly decreasing water forecasts, the Salmon Managers decided to be conservative with water now so flows at Priest Rapids in June would not have to be decreased significantly to refill Grand Coulee Dam. Flows at McNary Dam have ranged between 128.4 Kcfs and 178.3 Kcfs over the last week.

Grand Coulee did not reach its April 10th BIOP elevation; on April 10th Grand Coulee was at an elevation of 1268.4 feet, which was 7.4 feet below its standard BIOP required April 10th elevation of 1275.8 feet. Grand Coulee is currently at an elevation of 1271.8 feet and has refilled approximately 3.9 feet in the last week.

The Libby Reservoir also did not reach its April 10th BIOP elevation; Libby ended April 10th at an elevation of 2400.8 feet, 42.2 feet below its estimated April 10th elevation of 2443 feet. Inflows to Libby over the last week have continued to increase and have ranged between 9.3 and 16.8 Kcfs; Libby has been able to refill nearly three feet in the last week while still maintaining minimum project outflow of 4.0 Kcfs.

Hungry Horse ended April 10th at an elevation of 3520.4 feet, 16.8 feet below its April 10th BIOP elevation. The Hungry Horse Reservoir is currently at an elevation of 3524.4 feet. Over the last week, inflows to Hungry Horse have ranged between 1.4 and 10.5 Kcfs, enabling Hungry Horse to refill 4.7 feet while still meeting its project minimum flows. The Dworshak reservoir is currently at an elevation of 1552.8 feet. Inflows to Dworshak have remained

relatively high over the past week ranging between 11.6 and 15.7 Kcfs, allowing Dworshak to refill approximately 9.5 feet in the last week. On April 10th Dworshak was at an elevation of 1544.7 feet, surpassing its April 10th system FC elevation of 1535.5 feet. The Brownlee Reservoir was at an elevation of 2060.4 feet on April 10th, also surpassing its April 10th of 2055.1 feet. Inflows to Brownlee have ranged between 14.5 and 17.5 Kcfs, enabling it to refill 3.0 feet in the last week.

Spill: Spill at the Snake River transportation collector projects has been a contentious issue this year. Spill at Lower Granite Dam was initiated on the evening of April 3, and at Little Goose Dam on April 7. Spill over this past week averaged 36% of average daily flow at Lower Granite and 38% at Little Goose. The low final April Runoff Volume forecast resulted in a discussion of the possibility of terminating spill at the Snake River collector projects. According to Bonneville Power Administration's interpretation of the 2000 Biological Opinion Action 40 calls for spill to be terminated, while the Salmon Managers see Action 51 as allowing for adaptive management based on the review of new information. The Salmon Managers submitted a System Operational Request (SOR) for spill to be continued at Lower Granite and Little Goose dams, and initiated at Lower Monumental Dam, through at least May 1 based on the results of recent transportation studies indicating that transportation provides less of a benefit than in-river survival for early migrating chinook. The data are less conclusive for steelhead (fewer years available) and, if conditions did not improve significantly, transport of steelhead would be favored. The Salmon Managers also requested that Snake River research spill and RSW studies be conducted.

The SOR was discussed at the Technical Management Team, where NOAA Fisheries stated their support for modifying the original SOR to have spill begin immediately at Lower Monumental Dam and continue at all three collector projects through April 23, and supporting the need for research to only be conducted this year at Lower Monumental Dam. The Bonneville Power Administration did not agree with this proposal and the issue was raised to the Implementation Team.

The Implementation Team met on April 15th and no resolution was achieved. The Columbia River Inter-tribal Fish Commission, the states of Oregon and Washington and the US Fish and Wildlife Service supported the implementation of the original SOR, while the State of Idaho (dependent on the juvenile steelhead numbers) and NOAA Fisheries were considering SOR spill implementation until the 23rd with a modified

research project conducted at Lower Monumental Dam. The modified research study at Lower Monumental Dam is being considered based on BPA's need for limitation of spill because of financial concerns. Apparently, BPA's modeling of revenue projections are based on terminating spill in a flow year that average flows dip below 85 Kcfs. The US Army Corps of Engineers has asked their Scientific Review Work Group to consider what and if a study could be conducted within the BPA constraints. That group is scheduled to meet early next week. For now, spill is continuing at Lower Granite and Little Goose dams and Lower Monumental will not be initiated. Spill at Ice Harbor Dam was initiated on the evening of April 13th. Spill has averaged between 20 and 90% of average daily flow over the past three days.

The Biological Opinion spill program started at the lower Columbia River Projects on the evening of April 12, 2004. Spill at Bonneville Dam was limited to 50 Kcfs because of concern regarding total dissolved gas levels over chum salmon redds located below the project. At the low flows and tailwaters these redds needed protection, however, as flows increased and tailwater elevations increased the need decreased. Consequently, we should expect spill levels to increase at this project beginning immediately.

Total dissolved gas levels remain below the waiver limits. Gas bubble trauma monitoring is occurring at all sites. Only one fish (at Little Goose Dam) with signs of GBT has been observed.

Smolt Monitoring: This past week saw large increases in either yearling chinook, steelhead or coho at various Smolt Monitoring Sites.

At Snake River Basin traps yearling chinook continue to predominate the catch, except at Imnaha Trap, where large numbers of steelhead were captured in the last few days. The White Bird Trap, on the Salmon River collected a season high of 2,176 yearling chinook on April 7 but numbers have declined over the past week as the hatchery origin fish numbers continue to drop. Steelhead numbers remained small but were relatively higher than last week, with an average daily collection of 60 this week compared to 20 per day last week. The Imnaha Trap continues to catch large numbers of yearling chinook, with the average daily catch for this week at 1400 compared to nearly 1200 per day last week. These yearling chinook are mostly of hatchery fish released volitionally from Imnaha Acclimation Pond beginning April 1. Steelhead collection went up substantially this past week with a one day collection of 4,800 on April 14th of mostly hatchery origin fish from two separate releases of over 230,000 at Little and Big Sheep Creeks. Numbers of yearling chinook captured at the Grande Ronde trap remained similar to the previous week with a daily average of 279 compared to 247 last week, however, there was a large one day capture of 544 on the 15th. Steelhead numbers remained low with a season high of 73 collected on the 15th. At the Lewiston Trap the numbers of yearling chinook increased this past week with an average daily catch of 75, while steelhead collection remains low but with 42 per day average this week the numbers did double last weeks' 22 fish per day average.

At Lower Granite Dam the numbers of yearling chinook and steelhead continued to increase rapidly over the past week. The average weekly passage index for yearling chinook increased this past week to 31,000 compared to 10,000 last week. The steelhead average daily passage index also increased from 2,400 last week to 7,700 this week. Coho indices were in the hundreds this past

week and small numbers of sockeye and subyearling chinook were also captured. At Little Goose Dam relatively smaller numbers of yearling chinook and steelhead were captured but the numbers represent relatively large increases over the past week with the average daily index of yearling chinook at 3,000 this week compared to 300 last week while steelhead averaged 2,300 per day this week compared to 300 per day last week. Lower Monumental Dam had a rapid increase in the yearling chinook indices with a high of 53,000 on April 15 as yearling fall chinook releases from Lyons Ferry Hatchery began on April 12 began to reach the dam. Steelhead indices have begun increase at the site with an average index of 1,300 this past week compared to 100 per day the week past.

In the Mid-Columbia River the Entiat Trap continues to capture small numbers of yearling chinook, subyearling chinook and steelhead.

Rock Island Dam has reported relatively small numbers of yearling chinook and subyearling chinook to date, with a collection of 150 subyearling chinook on April 13 the highest total to date, while 91 yearling chinook on April 7 is the highest collection for that run. Sockeye numbers began to increase this past week with an index of 260 on April 14. There have been a few steelhead collected, but no coho to date.

In the Lower Columbia, at McNary, where sampling is carried out every other day, in conjunction with NMF's transportation study that begins April 20, yearling chinook indices have steadily increased to 2,500 per day this week compared to 500 last week, while steelhead indices averaged 300 per day compared to 150 per day last week. Subyearling chinook, sockeye and coho indices remain relatively low, with average daily values still below 100 fish per day for the past week. At John Day Dam the numbers of yearling chinook have increased steadily since sampling began April 1, with the average daily index at 3,500 this week, compared to 1,500 last week. Steelhead indices also increased steadily over the past week with the

average daily value at 500 compared to 200 last week. Small numbers of subyearling chinook, coho and sockeye smolts have been reported this past week. At Bonneville Dam, the average daily index for yearling chinook was 6,200 compared to 850 last week. The steelhead index averaged 1,000 this week compared to 200 last week. The indices for coho were up sharply this week with an average index of 7,200 per day versus 260 per day last week and a daily high of 18,000 on April 15. Subyearling chinook numbers were up to 6,000 per day index this week compared to 3,000 last week. The site continues to capture small numbers of pink salmon fry, with one each being reported on April 9th through the 11th. Low numbers of sockeye were also reported in the sample this past week.

Hatchery Releases - The scheduled release of juvenile salmonids from Columbia River Basin hatcheries above Bonneville Dam for the 2004 migration season is estimated near 81.9 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 basin released greater than 20 million salmon during the past two weeks. Fish were released in all of the River Zones with most of the yearling spring, summer, and fall chinook planted in the Columbia River basin. For the upcoming two weeks, about 16 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

Friday 16-April-2004				
<u>Race/Species</u>	<u>Snake River</u>	<u>Mid Columbia</u>	<u>Lower Columbia</u>	<u>Total Release</u>
Fall Chinook	2,614,000	12,430,000	21,772,094	36,816,094
Spring Chinook	10,468,991	4,017,179	5,180,398	19,666,568
Summer Chinook	2,402,002	3,235,990		5,637,992
Coho	1,199,433	1,141,000	5,924,000	8,264,433
Sockeye	62,000	315,790		377,790
Summer Steelhead	9,276,500	1,302,231	476,330	11,055,061
Winter Steelhead			90,000	90,000
Total	26,022,926	22,442,190	33,442,822	81,907,938

Snake River - Release of yearling chinook from hatcheries in the Snake River basin is basically 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 on-going from most hatcheries here this week with trucking of steelhead from the Niagara Springs, Hagerman, and Magic Valley being released in the Salmon River basin during the week. Some releases were initiated in the Clearwater River basin, but will see major releases into the S. Fork and Main Clearwater this next week. The Grande Ronde, Imnaha, and Tucannon River basins will have direct and volitional releases during the next 2-3 weeks.

Mid-Columbia - Volitional releases of yearling spring chinook commenced mid-March in the Yakama River at Clark Flat, Easton, and Jack Creek ponds and volitional release of these fish will continue through late April or mid-May. Releases of upper Mid-Columbia spring chinook and steelhead began this week and will continue from Federal and State hatcheries in mid-April through mid-May. Most of the releases coincide with the spill program.

Lower Columbia - Yearling fall and spring chinook maturation ponds located in the Umatilla River basin in March and April. Yearling spring chinook have been released from Round Butte H, Warm Springs NFH, Klickitat H, Carson and Little White Salmon NFHs. The volitional release from Warm Springs and the Hood River Acclimation Ponds will continue until most have migrated 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 in May. The April release of subyearling tule fall chinook from Spring Creek NFH was also completed this week. The juvenile steelhead releases will be on-going from mid-April through early May.

Adult Fish Passage - At Bonneville Dam, counts of spring chinook began the week at near 1,000 per day and ended the week at 3,000-4,000 per day by April 15, taxes due date. The 2004 season is far below preseason expectations with only 17,068 adult spring chinook tallied past the project, and that compares to 81,301 in 2003 and 36,155 for the 10-year average. Adult spring chinook interrogated for presence of PIT tags at Bonneville have mainly been from the 2002 juvenile migration year with a small number from the 2001 migration season. PIT tagged hatchery adult fish have been tallied from Rapid River, Dworshak, Clearwater, and Catherine Cr. Hatcheries/ponds in the Snake River; Leavenworth, Entiat, Winthrop, and the 3 Acclimation ponds in the Mid-Columbia River; and Carson, Warm Springs, and 2 Umatilla sites in the lower Columbia River. Note that not all hatcheries released PIT tagged fish so that would preclude them from having these fish among the PIT tag returns. Wild adult spring chinook have been from the Snake, Umatilla, John Day and Yakima River basins to date. Of the spring chinook past Bonneville Dam, approximately 50% have been counted at The Dalles Dam with only 1,882 over McNary Dam through April 15.

Adult steelhead continue migrating through the upper Snake River projects to spawning areas in the upstream tributaries of the Clearwater, Salmon, Imnaha, Tucannon, and Grande Ronde basins. About 6,600 steelhead have been counted at Lower Granite Dam since March 1st. This total is well below the 2003 count, but exceeds the 10-year average to date.

4/16/04

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
04/02/04	62.8	0.0	73.7	0.0	80.4	0.0	81.8	0.0	87.1	0.0	94.4	0.0	94.6	0.0
04/03/04	65.0	0.0	58.3	0.0	54.7	0.0	54.6	0.0	58.0	0.0	81.3	0.0	82.7	0.0
04/04/04	36.3	0.0	34.9	0.0	37.2	0.0	37.7	0.0	41.0	0.0	74.5	0.0	71.7	0.0
04/05/04	64.6	0.0	73.0	0.0	75.3	0.0	78.9	0.0	82.4	0.0	72.9	0.0	71.4	0.0
04/06/04	67.2	0.0	67.6	0.0	75.1	0.0	73.4	0.0	77.3	0.0	66.2	0.0	71.7	0.0
04/07/04	54.5	0.0	57.0	0.0	65.5	0.0	65.2	0.0	70.6	0.0	76.0	0.0	71.9	0.0
04/08/04	67.2	0.0	67.0	0.0	64.5	0.0	62.3	0.0	68.7	0.0	68.0	0.0	71.2	0.0
04/09/04	56.9	0.0	61.8	0.0	68.6	0.0	73.0	0.0	79.3	0.0	77.5	0.0	71.6	0.0
04/10/04	57.9	0.0	53.2	0.0	62.0	0.0	63.2	0.0	68.5	0.0	73.0	0.0	72.9	0.0
04/11/04	26.4	0.0	34.2	0.0	33.1	0.0	38.7	0.0	45.5	0.0	72.4	0.0	71.9	0.0
04/12/04	68.3	0.0	63.0	0.0	78.9	8.4	80.4	0.0	87.7	0.0	76.7	0.0	73.6	0.0
04/13/04	74.9	0.0	77.8	0.0	90.4	9.0	92.5	0.0	100.6	0.0	83.9	0.0	78.0	0.0
04/14/04	73.2	0.0	77.9	0.0	87.8	9.1	84.7	0.0	92.7	0.0	105.4	0.0	106.0	0.0
04/15/04	76.4	0.0	70.7	0.0	92.9	9.8	91.9	0.0	99.6	0.0	100.7	0.0	101.8	0.0

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

Date	Dworshak		Hells Brownlee Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
04/02/04	1.6	0.0	14.8	11.8	48.2	0.0	48.5	0.0	50.6	0.0	47.2	0.0
04/03/04	1.6	0.0	16.8	17.5	39.3	4.6	39.3	0.0	41.0	0.0	39.4	0.0
04/04/04	1.6	0.0	15.2	10.8	44.9	18.2	43.8	0.0	48.9	0.0	46.0	0.0
04/05/04	1.6	0.0	18.4	20.1	44.8	19.3	44.4	0.0	45.0	0.0	41.6	0.0
04/06/04	1.6	0.0	15.7	10.3	54.4	24.1	55.1	0.0	60.9	0.0	59.9	0.0
04/07/04	1.6	0.0	17.9	9.2	48.8	18.8	49.3	9.4	51.6	0.0	50.3	0.0
04/08/04	1.6	0.0	18.3	10.8	52.8	15.3	53.3	19.0	53.4	0.0	49.5	0.0
04/09/04	1.6	0.0	17.2	9.0	54.7	24.3	56.2	20.8	58.7	0.0	54.2	0.0
04/10/04	1.7	0.0	16.8	8.9	49.5	18.7	52.1	21.7	54.9	0.0	53.4	0.0
04/11/04	1.6	0.0	15.9	8.9	49.2	18.7	49.8	21.0	50.1	0.0	47.8	0.0
04/12/04	1.6	0.0	16.8	15.9	46.8	18.5	46.6	21.7	46.4	0.0	43.6	0.0
04/13/04	1.6	0.0	14.5	14.6	54.6	18.3	57.0	20.6	58.9	0.0	55.0	10.7
04/14/04	1.6	0.0	15.0	19.4	58.0	18.2	58.7	20.0	59.8	0.0	62.4	44.9
04/15/04	1.6	0.0	---	---	64.2	18.4	67.5	19.9	69.8	0.0	73.5	66.2

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

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
04/02/04	139.1	0.4	132.8	0.0	137.0	0.0	155.4	2.4	45.5	101.0
04/03/04	145.6	0.0	139.5	0.0	146.3	0.0	147.4	2.5	39.0	99.0
04/04/04	135.7	0.0	116.1	0.0	124.1	0.0	138.2	2.5	32.1	96.9
04/05/04	119.7	0.0	120.2	0.0	127.9	0.0	137.7	2.5	32.9	95.9
04/06/04	119.0	0.0	128.9	0.0	138.0	0.0	141.6	2.4	35.0	97.7
04/07/04	144.4	0.0	144.1	0.0	146.6	0.0	148.9	2.4	37.1	103.0
04/08/04	120.0	0.0	140.9	0.0	151.3	0.0	158.5	2.6	47.7	101.8
04/09/04	129.3	0.0	142.3	0.0	150.0	0.0	151.3	2.4	49.0	93.4
04/10/04	128.4	0.0	141.1	0.0	143.8	0.0	150.9	2.4	43.9	98.1
04/11/04	128.8	0.0	112.1	0.0	117.1	0.0	140.8	2.4	33.7	98.3
04/12/04	152.4	29.5	161.9	22.7	167.2	19.2	154.5	14.9	34.7	98.5
04/13/04	131.2	40.3	134.2	42.7	140.7	53.2	176.6	50.5	14.9	103.0
04/14/04	148.2	47.0	146.9	41.4	148.1	58.3	182.6	50.5	18.3	102.6
04/15/04	201.8	63.8	182.8	45.2	185.9	73.0	201.3	51.3	26.6	111.9

HATCHERY RELEASE LAST TWO WEEKS

Hatchery Release Summary

From: 4/2/2004 to 4/15/2004

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Colville Tribe	Leavenworth NFH	CH1	SP	2004	95,000	04-09-04	04-09-04	Ellisford Pond	Okanogan River
Colville Tribe	Wells Hatchery	CH1	SU	2004	10,000	04-12-04	04-13-04	Bonaparte Acclimation Pond	Okanogan River
Colville Tribe Total					105,000				
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2004	56,000	04-08-04	04-08-04	Papoose Creek	Lochsa River
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2004	354,000	04-07-04	04-09-04	Red River Acclim Pond	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2004	376,000	04-06-04	04-08-04	Powell Acclim Pond	Lochsa River
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2004	750,000	04-07-04	04-09-04	Crooked R Acclim Pond	S Fk Clearwater River
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	130,000	04-05-04	05-07-04	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2004	130,000	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	180,000	04-05-04	05-07-04	Hammer Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2004	180,000	04-05-04	05-07-04	McNabb/Salmon 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	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	196,000	04-05-04	05-07-04	Little Salmon River	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	Magic Valley Hatchery	ST	SU	2004	228,000	04-05-04	05-07-04	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2004	445,000	04-03-04	05-04-04	Little Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2004	525,000	03-22-04	04-02-04	Hells Canyon Dam	Snake River
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2004	830,000	04-13-04	05-01-04	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Pahsimeroi Hatchery	CH1	SU	2004	127,780	04-15-04	04-15-04	Pahsimeroi Hatchery	Pahsimeroi River
Idaho Dept. of Fish and Game	Pahsimeroi Hatchery	CH1	SU	2004	1,008,200	04-15-04	04-15-04	Pahsimeroi Hatchery	Pahsimeroi River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2004	2,762,058	03-15-04	04-23-04	Rapid River Hatchery	Little Salmon River
Idaho Dept. of Fish and Game	Sawtooth Hatchery	CH1	SP	2004	188,000	04-13-04	04-13-04	Sawtooth Hatchery	Salmon River (ID)
Idaho Dept. of Fish and Game	Sawtooth Hatchery	CH1	SP	2004	633,000	04-13-04	04-13-04	Sawtooth Hatchery	Salmon River (ID)
Idaho Dept. of Fish and Game Total					9,867,538				
Nez Perce Tribe	Hagerman NFH	ST	SU	2004	42,000	04-07-04	04-07-04	Hazard Creek/Little Salmon R	Little Salmon River
Nez Perce Tribe	Hagerman NFH	ST	SU	2004	170,000	03-29-04	04-05-04	Little Salmon River	Salmon River (ID)
Nez Perce Tribe	Irrigon Hatchery Complex	ST	SU	2004	100,000	04-13-04	04-16-04	Big Sheep Creek	Imnaha River
Nez Perce Tribe	Lookingglass Hatchery	CH1	SP	2004	133,804	03-29-04	04-14-04	Lostine Accim Pond	Wallowa River
Nez Perce Tribe	Lyons Ferry Hatchery	CH1	FA	2004	150,000	04-05-04	04-05-04	Cpt John Acclim Pond	Snake River
Nez Perce Tribe	Lyons Ferry Hatchery	CH1	FA	2004	150,000	04-12-04	04-12-04	Big Canyon (Clearwater R)	Clearwater River M F
Nez Perce Tribe	Lyons Ferry Hatchery	CH1	FA	2004	150,000	04-12-04	04-12-04	Pittsburg Landing Acclim Pond	Snake River
Nez Perce Tribe Total					895,804				
Oregon Dept. of Fish and Wildlife	Cascade Hatchery	CO	UN	2004	562,500	04-07-04	04-23-04	Umatilla River	Umatilla River
Oregon Dept. of Fish and Wildlife	Imnaha Acclim. Pond	CH1	SP	2004	398,660	04-01-04	04-15-04	Imnaha Acclim Pond	Imnaha River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2004	137,000	04-12-04	04-13-04	L Sheep Acclim Pond	Imnaha River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2004	162,000	04-12-04	04-15-04	Big Canyon Acclim.Pd (Grande Ronde)	Grande Ronde River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2004	404,000	04-12-04	04-15-04	Wallowa Acclim Pond	Wallowa River
Oregon Dept. of Fish and Wildlife	Round Butte Hatchery	CH1	SP	2004	320,000	03-20-04	04-08-04	Bel. Pelton Ladder	Deschutes River
Oregon Dept. of Fish and Wildlife	Round Butte Hatchery	ST	SU	2004	162,000	04-05-04	04-06-04	Bel. Pelton Ladder	Deschutes River
Oregon Dept. of Fish and Wildlife Total					2,146,160				
U.S. Fish and Wildlife Service	Carson NFH	CH1	SP	2004	1,430,000	04-14-04	04-15-04	Carson Hatchery	Wind River
U.S. Fish and Wildlife Service	Dworshak NFH	ST	SU	2004	200,000	04-12-04	04-16-04	Clear Creek	Clearwater River M F
U.S. Fish and Wildlife Service	Dworshak NFH	ST	SU	2004	200,000	04-12-04	04-16-04	Redhouse (SFk ClearH20 R)	S Fk Clearwater River
U.S. Fish and Wildlife Service	Entiat Hatchery	CH1	SP	2004	390,000	04-14-04	04-14-04	Entiat Hatchery	Entiat River
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2004	105,000	04-05-04	04-14-04	Little Salmon River	Salmon River (ID)
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH1	SP	2004	1,037,000	04-15-04	04-15-04	Little White Salmon Hatchery	Little White Salmon River
U.S. Fish and Wildlife Service	Spring Creek NFH	CH0	FA	2004	3,942,000	04-14-04	04-14-04	Spring Creek Hatchery	L Col R (D/s McN Dam)
U.S. Fish and Wildlife Service	Warm Springs NFH	CH1	SP	2004	444,000	03-24-04	04-21-04	Warm Springs Hatchery	Deschutes River
U.S. Fish and Wildlife Service	Winthrop NFH	CH1	SP	2004	41,000	04-15-04	04-23-04	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	CH1	SP	2004	539,000	04-15-04	04-23-04	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	ST	SU	2004	117,000	04-15-04	04-30-04	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service Total					8,445,000				

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

HATCHERY RELEASE LAST TWO WEEKS Continued

Umatilla Tribe	Bonneville Hatchery	CH1	FA	2004	250,000	04-05-04	04-23-04	Thornhollow Acclim Pond	Umatilla River
Umatilla Tribe	Cascade Hatchery	CO	UN	2004	187,500	04-01-04	04-09-04	Pendelton Acclim Pond	Umatilla River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2004	53,334	03-19-04	04-08-04	Lookingglass Hatchery	Grande Ronde River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2004	70,977	04-01-04	04-14-04	Catherine Cr Acclim Pond	Grande Ronde River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2004	78,930	04-01-04	04-14-04	Grande Ronde Acclim Pond	Grande Ronde River
Umatilla Tribe Total					640,741				
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				
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	Lyons Ferry Hatchery	CH1	FA	2004	454,000	04-12-04	04-15-04	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH1	SP	2004	45,000	03-15-04	04-18-04	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH1	SP	2004	125,000	03-15-04	04-18-04	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2004	44,000	04-15-04	04-15-04	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2004	60,000	04-15-04	04-15-04	Baileysburg Bridge	Touchet 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	100,000	04-15-04	04-15-04	Tucannon River	Tucannon River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2004	100,000	04-15-04	04-15-04	Walla Walla River	Walla Walla 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	Ringold Springs Hatchery	ST	SU	2004	161,147	04-12-04	04-20-04	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	WI	2004	20,000	04-15-04	04-15-04	Salmon Creek (WA)	Columbia 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	Washougal Hatchery	CO	NO	2004	2,500,000	04-01-04	04-08-04	Klickitat River	Klickitat 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	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					5,204,327				
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	400,000	04-15-04	04-30-04	Prosser Acclim Pond	Yakama River
Yakama Tribe Total					2,173,400				
Grand Total					29,642,970				

HATCHERY RELEASE NEXT TWO WEEKS

Hatchery Release Summary

From: **4/16/2004** to **4/29/2004**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2004	102,000	04-22-04	04-23-04	Clear Creek	Clearwater River M F
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2004	255,000	04-16-04	04-26-04	Red River Acclim Pond	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2004	255,000	04-21-04	04-23-04	Crooked R Acclim Pond	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2004	315,000	04-20-04	04-21-04	Redhouse (SFk ClearH20 R)	S Fk Clearwater River
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	130,000	04-05-04	05-07-04	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2004	130,000	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	180,000	04-05-04	05-07-04	Hammer Creek	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2004	180,000	04-05-04	05-07-04	McNabb/Salmon 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	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	196,000	04-05-04	05-07-04	Little Salmon River	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	Magic Valley Hatchery	ST	SU	2004	228,000	04-05-04	05-07-04	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2004	445,000	04-03-04	05-04-04	Little Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2004	830,000	04-13-04	05-01-04	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2004	2,762,058	03-15-04	04-23-04	Rapid River Hatchery	Little Salmon River
Idaho Dept. of Fish and Game Total					6,776,558				
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2004	25,500	04-27-04	04-27-04	Meadow Creek - CLES	S Fk Clearwater River
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2004	25,500	04-27-04	04-27-04	Mill Cr Bridge	S Fk Clearwater River
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2004	51,000	04-27-04	04-28-04	Lolo Creek	Clearwater River M F
Nez Perce Tribe	Dworshak NFH	ST	SU	2004	100,000	04-19-04	04-23-04	American River	S Fk Clearwater River
Nez Perce Tribe	Dworshak NFH	ST	SU	2004	100,000	04-19-04	04-23-04	Newsome Creek	S Fk Clearwater River
Nez Perce Tribe	Irrigon Hatchery Complex	ST	SU	2004	100,000	04-13-04	04-16-04	Big Sheep Creek	Imnaha River
Nez Perce Tribe Total					402,000				
Oregon Dept. of Fish and Wildlife	Cascade Hatchery	CO	UN	2004	562,500	04-07-04	04-23-04	Umatilla River	Umatilla River
Oregon Dept. of Fish and Wildlife Total					562,500				
U.S. Fish and Wildlife Service	Dworshak NFH	ST	SU	2004	200,000	04-12-04	04-16-04	Clear Creek	Clearwater River M F
U.S. Fish and Wildlife Service	Dworshak NFH	ST	SU	2004	200,000	04-12-04	04-16-04	Redhouse (SFk ClearH20 R)	S Fk Clearwater River
U.S. Fish and Wildlife Service	Dworshak NFH	ST	SU	2004	1,200,000	04-19-04	04-23-04	Dworshak Hatchery	Clearwater River M F
U.S. Fish and Wildlife Service	Leavenworth NFH	CH1	SP	2004	1,450,000	04-19-04	04-19-04	Leavenworth Hatchery	Wenatchee River
U.S. Fish and Wildlife Service	Warm Springs NFH	CH1	SP	2004	444,000	03-24-04	04-21-04	Warm Springs Hatchery	Deschutes River
U.S. Fish and Wildlife Service	Winthrop NFH	CH1	SP	2004	41,000	04-15-04	04-23-04	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	CH1	SP	2004	539,000	04-15-04	04-23-04	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	CO	UN	2004	206,000	04-20-04	04-20-04	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	ST	SU	2004	117,000	04-15-04	04-30-04	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service Total					4,397,000				
Umatilla Tribe	Bonneville Hatchery	CH1	FA	2004	250,000	04-05-04	04-23-04	Thornhollow Acclim Pond	Umatilla River
Umatilla Tribe Total					250,000				

HATCHERY RELEASE NEXT TWO WEEKS Continued

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				
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	195,000	04-26-04	04-26-04	Turtle Rock Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH1	SP	2004	45,000	03-15-04	04-18-04	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH1	SP	2004	125,000	03-15-04	04-18-04	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2004	60,000	04-19-04	04-19-04	Lyons Ferry Hatchery	Snake 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	Ringold Springs Hatchery	ST	SU	2004	161,147	04-12-04	04-20-04	Ringold Springs Hatchery	Mid-Columbia 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	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	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					2,181,327				
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	400,000	04-15-04	04-30-04	Prosser Acclim Pond	Yakama River
Yakama Tribe Total					2,173,400				
Grand Total					16,907,785				

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											
	04/13/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Little Goose Dam											
	04/14/04	Chinook + Steelhead	100	1	1	1.00%	1.00%	0	0	1	0
Lower Monumental Dam											
	04/12/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	04/06/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	04/10/04	Chinook + Steelhead	101	0	0	0.00%	0.00%	0	0	0	0
	04/13/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
McNary Dam											
	04/08/04	Chinook + Steelhead	32	0	0	0.00%	0.00%	0	0	0	0
	04/12/04	Chinook + Steelhead	72	0	0	0.00%	0.00%	0	0	0	0

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	Hungry H. Dnst			Boundary				Grand Coulee				Grand C. Tlwr				Chief Joseph				#	
	24 h		12 h	#	24 h		12 h	#	24 h		12 h	#	24 h		12 h	#	24 h		12 h		#
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		
4/2	---	---	---	0	105	105	106	16	104	105	105	24	102	103	104	16	104	105	105	24	
4/3	---	---	---	0	105	106	108	24	105	106	106	24	103	103	104	23	105	106	106	22	
4/4	---	---	---	0	105	106	107	23	106	107	107	24	104	105	107	23	105	106	106	22	
4/5	---	---	---	0	105	106	107	24	106	106	107	24	103	104	106	24	105	106	106	23	
4/6	---	---	---	0	106	107	108	24	106	106	107	24	103	103	105	24	105	106	106	23	
4/7	---	---	---	0	106	107	108	24	107	108	110	24	104	104	105	24	105	106	106	23	
4/8	---	---	---	0	107	107	108	24	106	106	107	24	103	104	105	24	106	106	107	23	
4/9	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	
4/10	---	---	---	0	106	107	108	24	105	105	106	24	103	103	105	24	105	106	106	23	
4/11	---	---	---	0	107	108	109	24	108	110	111	24	105	107	109	24	106	107	107	23	
4/12	---	---	---	0	107	108	109	24	110	111	112	18	106	106	108	24	108	108	109	16	
4/13	---	---	---	0	108	109	109	24	110	111	112	24	105	106	108	24	107	107	108	23	
4/14	---	---	---	0	109	109	110	24	109	110	111	24	105	105	106	20	107	107	107	23	
4/15	---	---	---	0	109	110	111	24	109	110	110	24	105	105	106	24	107	108	108	23	

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	Chief J. Dnst			Wells				Wells Dwnstrm				Rocky Reach				Rocky R. Tlwr				#	
	24 h		12 h	#	24 h		12 h	#	24 h		12 h	#	24 h		12 h	#	24 h		12 h		#
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		
4/2	105	105	106	24	104	105	106	24	104	105	106	24	---	---	---	0	---	---	---	0	
4/3	105	106	107	22	106	107	107	24	106	107	107	24	---	---	---	0	---	---	---	0	
4/4	105	106	107	22	107	108	108	22	108	108	109	22	---	---	---	0	---	---	---	0	
4/5	106	107	108	23	107	107	108	24	107	107	108	24	---	---	---	0	---	---	---	0	
4/6	105	106	107	23	107	107	109	24	106	107	108	24	---	---	---	0	---	---	---	0	
4/7	106	107	108	22	107	107	107	24	106	107	107	24	---	---	---	0	---	---	---	0	
4/8	105	106	106	23	106	107	107	24	106	107	107	24	---	---	---	0	---	---	---	0	
4/9	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	
4/10	106	107	108	23	107	108	109	24	106	108	110	24	---	---	---	0	---	---	---	0	
4/11	106	108	109	23	109	111	113	24	108	110	111	24	---	---	---	0	---	---	---	0	
4/12	107	107	108	16	109	109	110	24	111	112	114	24	---	---	---	0	---	---	---	0	
4/13	108	109	109	23	108	109	109	24	110	111	111	24	116	116	117	14	116	116	116	14	
4/14	108	108	109	23	108	108	108	24	110	110	111	24	117	117	117	24	117	117	117	24	
4/15	108	109	110	23	107	107	108	24	109	109	110	24	116	116	117	24	116	116	116	24	

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	Rock Island			Rock I. Tlwr				Wanapum				Wanapum Tlwr				Priest Rapids				#	
	24 h		12 h	#	24 h		12 h	#	24 h		12 h	#	24 h		12 h	#	24 h		12 h		#
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		
4/2	---	---	---	0	---	---	---	0	104	104	105	23	103	104	104	23	104	104	105	23	
4/3	---	---	---	0	---	---	---	0	105	106	106	23	105	105	105	23	105	106	106	23	
4/4	103	103	104	20	106	107	108	20	---	---	---	0	---	---	---	0	---	---	---	0	
4/5	104	104	105	23	107	108	109	22	107	107	108	20	106	106	106	23	106	107	107	23	
4/6	103	104	105	24	107	107	108	24	108	109	112	23	106	106	107	23	106	106	107	23	
4/7	103	103	104	24	107	108	108	24	106	106	108	23	106	106	107	23	106	107	107	23	
4/8	103	104	104	24	107	108	108	24	---	---	---	0	---	---	---	0	---	---	---	0	
4/9	---	---	---	0	---	---	---	0	107	109	110	23	106	106	106	23	106	106	108	23	
4/10	107	107	107	24	107	107	108	24	---	---	---	0	---	---	---	0	---	---	---	0	
4/11	108	108	109	24	108	108	109	24	109	110	111	23	108	108	109	23	108	109	109	23	
4/12	108	109	109	24	108	109	109	24	111	112	114	23	109	109	110	23	109	110	111	23	
4/13	109	109	110	24	109	109	110	24	109	109	110	23	109	109	109	23	109	110	110	23	
4/14	109	109	110	24	109	110	110	24	---	---	---	0	---	---	---	0	---	---	---	0	
4/15	109	109	110	24	109	110	110	24	108	108	108	23	107	108	108	23	107	108	108	23	

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

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

Date	<u>Priest R. Dnst</u>			<u>Pasco</u>			<u>Dworshak</u>			<u>Clrwtr-Peck</u>			<u>Anatone</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>					
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High					
4/2	103	104	104	23	103	104	105	24	104	105	106	24	101	102	103	24	102	104	105	24
4/3	104	105	105	23	104	104	105	24	105	106	107	24	101	102	103	24	102	103	104	24
4/4	---	---	---	0	104	105	105	22	104	105	105	22	101	102	103	22	103	104	105	23
4/5	105	106	106	23	104	105	105	24	104	105	106	24	100	101	101	24	102	102	102	24
4/6	105	106	106	23	104	104	105	24	105	106	106	24	101	102	102	24	102	103	104	24
4/7	106	106	106	23	104	105	106	24	103	104	105	24	101	102	102	24	102	103	104	24
4/8	---	---	---	0	105	105	106	24	103	103	105	24	101	102	103	24	102	102	103	24
4/9	105	105	106	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/10	---	---	---	0	104	105	106	24	104	106	106	24	102	103	104	24	102	103	104	24
4/11	107	108	108	23	105	106	107	24	104	105	106	24	102	103	104	24	103	104	105	24
4/12	108	109	109	23	107	107	108	18	105	106	107	18	102	103	104	18	103	104	104	18
4/13	108	108	109	23	106	107	107	24	105	106	107	24	102	102	103	24	103	103	104	24
4/14	---	---	---	0	104	105	105	24	104	105	106	24	101	102	102	24	102	103	104	24
4/15	107	107	107	23	102	103	104	24	103	104	104	24	101	101	102	24	102	103	103	23

Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clrwtr-Lewiston</u>			<u>Lower Granite</u>			<u>L. Granite Tlwr</u>			<u>Little Goose</u>			<u>L. Goose Tlwr</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>					
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High					
4/2	102	104	106	24	103	103	105	24	102	103	103	24	102	104	104	24	101	102	102	24
4/3	102	104	105	24	103	104	105	24	104	107	111	24	102	103	103	24	102	102	103	24
4/4	103	104	106	22	103	104	107	22	111	111	112	22	102	102	103	22	102	102	103	22
4/5	101	102	103	24	103	104	105	24	110	115	120	24	103	103	104	24	102	102	104	24
4/6	102	103	105	24	105	106	107	24	112	114	116	24	104	104	105	24	103	104	104	24
4/7	101	103	104	24	105	105	106	20	110	112	115	20	104	105	106	24	106	109	116	24
4/8	101	102	104	24	104	105	107	24	109	114	117	24	106	107	108	24	111	116	117	24
4/9	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/10	102	104	105	24	105	106	108	24	111	111	112	24	113	115	118	24	115	119	119	24
4/11	102	104	105	24	105	106	108	24	111	111	112	24	112	113	114	24	115	118	119	24
4/12	103	104	105	18	106	106	108	18	111	111	113	18	112	112	113	18	114	116	119	18
4/13	102	103	104	24	104	105	105	24	111	111	112	24	112	112	113	24	115	118	119	24
4/14	101	103	104	24	104	105	106	23	111	111	113	23	112	112	112	24	114	117	117	24
4/15	100	100	101	24	104	104	105	22	110	110	112	22	110	111	111	24	114	117	118	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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>					
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High					
4/2	102	103	104	24	102	103	103	24	102	103	103	24	102	102	103	24	103	104	105	24
4/3	102	103	104	24	103	103	103	24	103	103	103	24	103	103	103	24	104	105	106	24
4/4	102	103	105	23	102	102	103	23	104	105	107	22	103	104	104	22	106	108	111	22
4/5	103	104	105	24	102	102	102	22	104	105	106	24	103	104	104	24	106	108	109	24
4/6	103	103	104	24	102	102	102	22	104	105	106	24	103	103	104	24	107	108	110	24
4/7	102	103	104	24	101	102	102	24	103	103	104	24	102	103	103	24	106	108	108	24
4/8	103	103	103	24	101	101	102	23	103	103	104	24	102	103	103	24	106	108	112	24
4/9	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/10	106	108	110	24	102	102	103	23	103	104	105	24	102	103	103	24	105	107	108	24
4/11	111	113	115	24	104	105	106	23	104	105	106	24	103	104	104	24	106	107	109	24
4/12	115	116	118	18	108	110	112	17	104	105	106	18	104	105	105	18	109	110	112	18
4/13	115	115	116	24	110	111	112	24	106	107	108	24	106	108	112	24	108	110	112	24
4/14	114	115	115	24	111	112	114	24	109	110	110	24	113	113	115	24	108	109	110	24
4/15	113	114	115	24	111	112	112	24	111	111	111	24	117	119	119	24	106	106	108	24

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>McNary-Wash</u>			#	<u>McNary Tlwr</u>			#	<u>John Day</u>			#	<u>John Day Tlwr</u>			#	<u>The Dalles</u>			#
	<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>	
4/2	105	105	106	24	104	104	105	24	104	105	105	24	103	103	103	24	103	104	104	24
4/3	105	106	106	24	104	105	105	24	105	105	106	22	104	104	104	24	104	104	105	22
4/4	106	106	107	22	105	105	106	22	105	105	105	22	104	104	105	23	104	105	105	22
4/5	107	107	108	24	105	105	106	24	104	104	105	23	103	104	104	24	104	104	104	23
4/6	106	106	107	24	105	105	106	24	104	104	104	23	104	104	105	24	103	103	104	23
4/7	106	106	107	24	105	105	105	24	104	104	104	23	103	103	104	24	104	104	105	23
4/8	106	106	109	24	105	105	105	24	104	105	105	23	104	104	104	24	104	104	104	23
4/9	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/10	107	108	109	24	105	106	106	24	107	107	109	23	105	105	106	23	105	106	106	23
4/11	108	109	110	24	106	107	107	24	108	109	110	24	107	108	109	24	106	107	107	24
4/12	109	109	110	18	110	111	116	18	107	108	108	16	110	112	119	18	107	107	108	16
4/13	108	108	109	24	111	114	116	24	107	107	107	23	113	118	119	24	107	108	110	23
4/14	107	107	107	24	111	114	116	24	106	107	107	23	112	118	119	24	111	112	113	23
4/15	106	106	107	24	111	116	117	24	106	107	107	23	112	118	119	24	110	112	113	23

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			#	<u>Bonneville</u>			#	<u>Warrendale</u>			#	<u>Camas\Washugal</u>			#
	<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>		<u>24h</u>	<u>12h</u>	<u>High</u>	
4/2	103	104	104	23	103	104	104	24	104	105	105	24	105	106	107	23
4/3	104	104	105	23	104	104	105	22	105	105	106	22	105	106	107	23
4/4	104	104	105	23	105	105	106	22	105	106	107	22	105	107	108	22
4/5	103	103	104	24	104	104	105	23	105	105	105	23	106	107	107	24
4/6	103	103	103	24	103	104	104	23	104	104	105	23	105	106	107	24
4/7	103	104	104	24	103	103	104	23	104	104	104	23	105	106	107	24
4/8	103	104	105	24	103	104	104	23	104	105	106	23	105	106	107	24
4/9	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/10	105	106	107	24	104	105	105	23	105	106	106	23	105	106	107	24
4/11	106	107	108	24	105	106	106	24	106	107	107	24	105	107	107	24
4/12	108	109	112	17	106	106	107	16	107	107	107	16	107	108	109	17
4/13	113	113	114	24	106	106	106	23	108	108	109	23	107	109	110	24
4/14	114	115	116	24	106	107	108	23	109	110	110	23	107	108	109	24
4/15	114	115	115	24	109	109	110	23	110	110	110	23	107	107	109	20

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)	
04/02/2004	*	0	1,306	7,822	678	15	1,682	349	420	5	---	590	338
04/03/2004	*	---	---	1,880	---	---	6,250	281	280	1	322	990	405
04/04/2004	*	---	---	670	---	---	7,312	200	140	1	---	1,840	514
04/05/2004	*	27	1,015	719	132	18	5,127	160	90	13	500	1,130	550
04/06/2004	*	35	1,033	633	166	45	7,475	310	150	67	---	1,080	800
04/07/2004	*	4	2,176	1,161	339	17	12,773	520	230	91	526	1,300	916
04/08/2004	*	0	1,669	1,195	355	18	19,860	452	48	51	---	2,060	1,044
04/09/2004	*	18	2,194	2,083	404	33	12,319	321	350	20	648	1,650	1,734
04/10/2004	*	6	---	1,815	---	---	14,650	774	540	7	---	2,720	1,944
04/11/2004		---	---	1,455	---	---	18,774	2,323	950	10	1,085	4,440	2,690
04/12/2004	*	9	535	1,037	163	130	28,265	939	864	0	---	4,443	2,542
04/13/2004	*	8	345	933	124	99	35,062	2,524	1,540	6	2,931	3,890	5,569
04/14/2004	*	---	480	1,066	157	37	35,793	6,729	3,740	4	---	3,159	10,099
04/15/2004	*	---	203	2,041	544	32	51,991	4,785	53,340	21	3,356	2,539	14,851

Total:		107	10,956	24,510	3,062	444	257,333	20,667	62,682	297	9,368	31,831	43,996
# Days:		9	10	14	10	10	14	14	14	14	7	14	14
Average:		12	1,096	1,751	306	44	18,381	1,476	4,477	21	1,338	2,274	3,143
YTD		718	25,115	54,396	5,631	615	260,483	20,667	62,682	297	9,368	31,831	53,211

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)	
04/02/2004	*	17	0	0	0	2	0	0	0	116	---	0	5,678
04/03/2004	*	---	---	0	---	---	0	0	0	47	60	0	6,311
04/04/2004	*	---	---	0	---	---	0	0	0	16	---	0	2,694
04/05/2004	*	0	0	0	0	3	18	0	0	45	15	0	2,032
04/06/2004	*	0	0	0	0	10	0	0	0	16	---	0	1,322
04/07/2004	*	0	0	0	0	7	0	0	10	36	45	10	2,256
04/08/2004	*	0	0	0	0	4	143	0	0	118	---	0	1,871
04/09/2004	*	6	0	0	0	1	32	0	0	26	30	0	3,155
04/10/2004	*	2	---	0	---	---	0	0	0	56	---	0	6,655
04/11/2004		---	---	0	---	---	0	0	10	18	10	0	9,246
04/12/2004	*	0	0	0	0	0	99	0	0	75	---	0	7,770
04/13/2004	*	0	0	0	1	6	0	0	40	151	30	0	4,152
04/14/2004	*	---	0	0	0	3	0	31	20	32	---	0	5,944
04/15/2004	*	---	0	0	0	3	710	0	20	113	62	0	2,272

Total:		25	0	0	1	39	1,002	31	100	865	252	10	61,358
# Days:		9	10	14	10	10	14	14	14	14	7	14	14
Average:		3	0	0	0	4	72	2	7	62	36	1	4,383
YTD		85	0	18	1	52	1,032	31	100	940	252	10	935,850

* 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)
04/02/2004	*	0	0	0	0	0	10	0	0	0	---	0	88
04/03/2004	*	---	---	0	---	---	30	0	0	0	0	10	109
04/04/2004	*	---	---	0	---	---	13	0	0	0	---	30	130
04/05/2004	*	0	0	0	0	0	36	0	0	0	0	10	88
04/06/2004	*	0	0	0	0	0	0	0	0	0	---	0	164
04/07/2004	*	0	0	0	0	0	16	0	0	0	5	0	196
04/08/2004	*	0	0	0	0	1	48	0	0	0	---	0	342
04/09/2004	*	0	0	0	0	0	0	0	0	0	0	0	787
04/10/2004	*	0	---	0	---	---	97	0	0	0	---	20	1,390
04/11/2004	*	---	---	0	---	---	32	0	10	0	15	50	3,769
04/12/2004	*	0	0	0	0	0	99	0	0	0	---	0	3,321
04/13/2004	*	0	0	0	0	0	160	0	0	0	30	19	6,719
04/14/2004	*	---	0	0	0	0	302	0	0	0	---	0	9,955
04/15/2004	*	---	0	0	0	0	284	0	20	0	39	14	18,111

Total:		0	0	0	0	1	1,127	0	30	0	89	153	45,169
# Days:		9	10	14	10	10	14	14	14	14	7	14	14
Average:		0	0	0	0	0	81	0	2	0	13	11	3,226
YTD		0	0	0	0	9	1,237	0	30	0	89	153	46,985

		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)
04/02/2004	*	1	3	25	1	4	1,412	44	60	0	---	70	147
04/03/2004	*	---	---	1	---	---	2,850	83	70	0	170	190	138
04/04/2004	*	---	---	2	---	---	2,664	76	190	0	---	170	123
04/05/2004	*	4	22	5	1	10	2,141	140	20	0	145	100	211
04/06/2004	*	3	19	6	0	6	1,811	125	90	0	---	100	308
04/07/2004	*	0	27	19	2	14	2,262	435	110	1	80	140	305
04/08/2004	*	0	25	52	1	9	2,762	691	66	5	---	300	314
04/09/2004	*	19	16	35	3	69	2,316	596	210	1	170	270	272
04/10/2004	*	13	---	32	---	---	2,241	1,174	366	1	---	440	311
04/11/2004	*	---	---	28	---	---	2,705	1,722	770	8	115	690	473
04/12/2004	*	27	52	38	0	39	6,135	677	816	4	---	529	724
04/13/2004	*	30	75	703	0	53	7,061	878	920	6	372	754	1,817
04/14/2004	*	---	40	4,795	6	43	11,547	4,621	1,580	3	---	353	1,470
04/15/2004	*	---	64	1,672	73	32	16,620	4,302	3,660	41	496	268	1,120

Total:		97	343	7,413	87	279	64,527	15,564	8,928	70	1,548	4,374	7,733
# Days:		9	10	14	10	10	14	14	14	14	7	14	14
Average:		11	34	530	9	28	4,609	1,112	638	5	221	312	552
YTD		105	356	7,676	101	362	68,377	15,564	8,928	70	1,548	4,374	8,701

* See sampling comments

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

Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE											
	ENT (Coll)	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
04/02/2004 *	0	0	0	0	0	10	1	0	3	---	0	7
04/03/2004 *	---	---	0	---	---	10	0	0	2	40	0	0
04/04/2004 *	---	---	0	---	---	13	1	0	0	---	0	0
04/05/2004 *	0	0	0	0	0	18	0	0	0	65	0	0
04/06/2004 *	0	0	0	0	0	53	0	0	2	---	0	18
04/07/2004 *	0	0	0	0	0	111	0	0	1	30	0	0
04/08/2004 *	0	0	0	0	0	16	0	0	11	---	0	17
04/09/2004 *	0	0	0	0	1	0	6	5	16	25	10	6
04/10/2004 *	0	---	0	---	---	0	7	6	16	---	0	0
04/11/2004	---	---	0	---	---	32	0	10	39	10	10	6
04/12/2004 *	0	0	0	0	1	0	0	0	0	---	0	26
04/13/2004 *	0	0	0	0	0	0	9	0	152	15	0	0
04/14/2004 *	---	0	0	0	0	0	0	20	260	---	0	0
04/15/2004 *	---	0	0	0	0	142	0	40	105	8	0	33

Total:	0	0	0	0	2	405	24	81	607	193	20	113
# Days:	9	10	14	10	10	14	14	14	14	7	14	14
Average:	0	0	0	0	0	29	2	6	43	28	1	8
YTD	0	0	0	0	2	445	24	81	607	193	20	139

* 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:

4/16/04 9:20 AM

04/03/04 TO 04/16/04

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	680	168,791	750	270	43,649	214,140
	Sum of NumberBarged	77	90,577	440	20	19,694	110,808
	Sum of NumberBypassed	0	664	0	0	1,083	1,747
	Sum of Numbertrucked	109	41,959	140	143	12,673	55,024
	Sum of TotalProjectMortalities	4	389	0	7	9	409
LGS	Sum of NumberCollected	20	13,612		15	10,181	23,828
	Sum of NumberBarged	19	8,293		13	5,903	14,228
	Sum of NumberBypassed	0	0		0	0	0
	Sum of Numbertrucked	0	2,096		2	1,333	3,431
	Sum of TotalProjectMortalities	1	19		0	2	22
LMN	Sum of NumberCollected	100	62,682	30	81	8,928	71,821
	Sum of NumberBarged	70	7,936	10	41	4,595	12,652
	Sum of NumberBypassed	0	44	0	0	56	100
	Sum of Numbertrucked	10	1,352	0	0	604	1,966
	Sum of TotalProjectMortalities	0	29	0	0	14	43
MCN	Sum of NumberCollected	220	7,167	65	185	1,244	8,881
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	220	7,147	65	185	1,242	8,859
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	0	20	0	0	2	22
Total Sum of NumberCollected		1,020	252,252	845	551	64,002	318,670
Total Sum of NumberBarged		166	106,806	450	74	30,192	137,688
Total Sum of NumberBypassed		220	7,855	65	185	2,381	10,706
Total Sum of Numbertrucked		119	45,407	140	145	14,610	60,421
Total Sum of TotalProjectMortalities		5	457	0	7	27	496

YTD Transportation Summary

Source: Fish Passage Center

Updated:

4/16/04 9:20 AM

TO: 04/16/04

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	710	171,941	860	310	47,499	221,320
	Sum of NumberBarged	77	90,577	440	20	19,694	110,808
	Sum of NumberBypassed	0	664	0	0	1,083	1,747
	Sum of NumberTrucked	129	43,991	220	181	15,496	60,017
	Sum of TotalProjectMortalities	4	428	0	9	26	467
LGS	Sum of NumberCollected	20	13,612		15	10,181	23,828
	Sum of NumberBarged	19	8,293		13	5,903	14,228
	Sum of NumberBypassed	0	0		0	0	0
	Sum of NumberTrucked	0	2,096		2	1,333	3,431
	Sum of TotalProjectMortalities	1	19		0	2	22
LMN	Sum of NumberCollected	100	62,682	30	81	8,928	71,821
	Sum of NumberBarged	70	7,936	10	41	4,595	12,652
	Sum of NumberBypassed	0	44	0	0	56	100
	Sum of NumberTrucked	10	1,352	0	0	604	1,966
	Sum of TotalProjectMortalities	0	29	0	0	14	43
MCN	Sum of NumberCollected	220	7,167	65	185	1,244	8,881
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	220	7,147	65	185	1,242	8,859
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	0	20	0	0	2	22
Total Sum of NumberCollected		1,050	255,402	955	591	67,852	325,850
Total Sum of NumberBarged		166	106,806	450	74	30,192	137,688
Total Sum of NumberBypassed		220	7,855	65	185	2,381	10,706
Total Sum of NumberTrucked		139	47,439	220	183	17,433	65,414
Total Sum of TotalProjectMortalities		5	496	0	9	44	554

Cumulative Adult Passage at Mainstem Dams Through: 04/15

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	17,068	14	81,301	342	36,155	110	0	0	0	0	0	0	0	0	0	0	0	0
TDA	8,230	6	43,910	75	16,679	31	0	0	0	0	0	0	0	0	0	0	0	0
JDA	3,632	2	30,955	37	10,312	11	0	0	0	0	0	0	0	0	0	0	0	0
MCN	1,882	11	23,489	85	6,070	13	0	0	0	0	0	0	0	0	0	0	0	0
IHR	716	5	14,533	17	3,072	1	0	0	0	0	0	0	0	0	0	0	0	0
LMN	395	0	8,050	9	1,786	0	0	0	0	0	0	0	0	0	0	0	0	0
LGS	168	0	5,086	1	1,063	5	0	0	0	0	0	0	0	0	0	0	0	0
LVG	129	0	1,552	0	598	0	0	0	0	0	0	0	0	0	0	0	0	0
PRD	0	0	1,108	0	64	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	0	0	174	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0
RRH	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2004		2003		10-Yr Avg.		2004	2003	10-Yr Avg.	2004	2003	10-Yr Avg.	Wild 2004
	Adult	Jack	Adult	Jack	Adult	Jack							
BON	0	0	0	0	0	0	0	0	0	2,166	2,169	1,628	478
TDA	0	0	0	0	0	0	0	0	0	709	668	605	327
JDA	0	0	0	0	0	0	0	0	0	1,038	1,101	1,914	535
MCN	0	0	0	0	0	0	0	0	0	799	1,109	1,119	344
IHR	0	0	0	0	0	0	0	0	0	1,427	1,301	1,265	566
LMN	0	0	0	0	0	0	0	0	0	1,181	1,607	1,342	594
LGS	0	0	0	0	0	0	0	0	0	1,245	1,574	1,265	578
LVG	0	0	0	0	0	0	0	0	0	6,632	15,114	5,234	2,124
PRD	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	0	0	0	0	0	0	0	0	0	0	0	2	0
RRH	0	0	0	0	0	0	0	0	0	0	13	5	0
WEL	0	0	0	0	0	0	0	0	0	0	0	0	0

LGS is missing 04/09, 04/13 and 04/14.

MCN is missing 04/11

**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.

Page last updated on: 04/16/04

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

Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
156	0	1,489	238