



Fish Passage Center

Weekly Report #04 - 17

July 02, 2004

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Highlights:

- **Precipitation has generally been below average over June.**
- **Water Supply forecasts have decreased in the July Early-Bird Forecast relative to the June Final Forecast.**
- **Most major storage reservoirs are very near full or will be full in the next several days.**
- **Dworshak outflows have been increased to near 7.0 Kcfs with a temperature of 45°F to help mitigate temperatures at Lower Granite that are approaching 68°F.**
- **Spill at The Dalles was reduced on June 21 to 30% per day for 24 hours per day.**
- **Limited involuntary spill has occurred at McNary Dam from June 28 through July 7, with a day average of approximately 9%**

Summary of Events:

Water Supply: Columbia Basin precipitation throughout the first twenty-eight days of June has generally been below average in most basins. Over the entire water year, precipitation remains slightly below average in most basins.

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

Location	Water Year 2004 June 1-28		Water Year 2004 October 1, 2003 to June 28, 2004	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	1.74	78	19.10	94
Snowy River Above Ice Harbor	1.20	88	13.98	93
Columbia Above The Dalles	1.48	88	18.85	96
Kootenai	1.91	83	19.13	92
Clark Fork	1.40	78	13.02	92
Flathead	1.82	74	16.97	91
Pend Oreille/Spokane	1.65	81	25.90	96
Central Washington	0.58	98	7.31	92
Snowy River Plain	0.62	70	7.84	82
Salmon/Boise/Payette	0.89	65	15.91	91
Clearwater	1.71	74	27.61	104
SW Washington Cascades/Cowlitz	2.47	89	58.36	89
Willamette Valley	2.04	97	52.36	94

The July Early-Bird Water Supply Forecasts have decreased slightly with respect to the June Final forecasts. All locations in Table 2 remain below average in terms of Water Supply.

Table 2. June Final and July Early-Bird Runoff Volume Forecasts for various reservoirs within the Columbia and Snake River Basins.

Location	June Final		July Early-Bird	
	% Average (1971-2000)	Probable Runoff Volume (Kaf)	% Average (1971-2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	79	85100	78	84000
Grand Coulee (Jan-July)	84	53000	83	52300
Libby Res. Inflow, MT (Jan-July)	76	4820	73	4630
Hungry Horse Res. Inflow, MT (Jan-July)	91	2020	87	1930
Lower Granite Res. Inflow (Apr- July)	71	15400	71	15200
Brownlee Res. Inflow (Apr-July)	44	2790	43	2740
Dworshak Res. Inflow (Apr-July)	91	2400	91	2400

The Spring Flow Objective period started in the Lower Snake River on April 3rd, 2004 and ended on June 20th, 2004. Over the spring period, flows at Lower Granite averaged 70.1 Kcfs. The summer Flow Objective period started in the Lower Snake River on June 21st, 2004 and will end on August 31st, 2004. Because the June final April-July forecast at Lower Granite is less than 16 Maf, the summer flow objective will be 50 Kcfs. Over the summer flow period, flows have averaged 45.8 Kcfs

The Spring Flow Objective Periods at McNary Dam and Priest Rapids Dam began on April 10th and ended on June 30th, 2004. Over the Spring Flow period, flows at McNary and Priest

Rapids averaged 203.2 Kcfs and 126.7 Kcfs, respectively, both below their flow objectives. The summer flow period began at McNary on July 1st with a flow objective of 200 Kcfs. Flows are currently 189.8 Kcfs at McNary.

Grand Coulee is currently at an elevation of 1287.0 feet (7-1-04) and has held steady over the last week. The BOR plans on reaching full pool at Grand Coulee on July 5th, 2004; Grand Coulee is currently 3.0 feet from full.

The Libby Reservoir is currently at an elevation of 2446.5 feet (7-1-04). Libby has refilled 2.7 feet in the last week and has decreased outflows from 16.0 Kcfs to 12.5 Kcfs.

The Hungry Horse Reservoir is currently at an elevation of 3559.7 feet (7-1-04), and is 0.3 feet from full.

The Dworshak Reservoir is currently at an elevation of 1599.4 feet (7-1-04). On June 29th, 2004 SOR 2004-16 was submitted to the action agencies that asked for outflows to be increased from Dworshak to between 6.8 and 7.2 Kcfs with a temperature of 45°F. Outflows are currently 7.0 Kcfs with temperatures near 45°F

The Brownlee Reservoir is currently at an elevation of 2076.3 feet (7-1-04), 0.7 feet from full. Outflows to Brownlee have ranged between 5.9 and 10.2 Kcfs.

Spill

The summer spill program is continuing at the mid-Columbia projects. Summer spill is being adjusted at Grant County projects by the mid-Columbia parties according to the Washington Department of Ecology dissolved gas waiver establishing criteria of 115% in the forebay and 120% in the tailrace. On July 2, the spill level at Wanapum Dam will be changed from 28% to 30% 24 hours a day, and at Priest Rapids from 56% to 54% 24 hours per day. There has been no spill at Lower Granite, Little Goose or Lower Monumental dams on the Snake River to facilitate the present policy of maximization of fall chinook juvenile transportation. Summer spill for fish passage is continuing at Ice Harbor Dam, with daily average spill of 74% from June 25 through July 1. During the same time period, summer spill continued at

the Lower Columbia projects with 29.7% daily average John Day, 39.6% daily average at The Dalles and 36% daily average at Bonneville dam. At 0600 on June 21, spill for fish passage at The Dalles was changed to the summer program of 30% spill 24 hours per day. Spill for fish passage at McNary Dam was modified on the basis of the occurrence of "summer conditions" with flows decreasing below the spring target. No spill occurred at McNary Dam from June 24 through June 27. The summer program at McNary focuses on the maximization of transportation of fall chinook juveniles. McNary is operating within its 1% peak efficiency range which results in an involuntary spill condition when flows exceed 174 kcfs. Involuntary spill occurred at McNary dam from June 28 through July 1, with a day average of 9%.

Gas bubble trauma monitoring is continuing at Mid-Columbia sites, and at Bonneville Dam, no symptoms of gas bubble trauma have been observed.

Smolt Monitoring:

Spring Migrants

Passage indices of yearling chinook, steelhead, coho, and sockeye are now fluctuating at low levels throughout the hydrosystem, sometimes averaging higher than last week, but mostly averaging lower than last week. For the spring migrants currently in the river, the species with the largest weekly average passage index continued to be steelhead at Lower Granite Dam (1,245 fish/day), coho at Rock Island Dam (61 fish/day), yearling chinook and sockeye at McNary Dam (701 and 649 fish/day, respectively), and coho and sockeye at Bonneville Dam (197 and 223 fish/day, respectively).

Summer Migrants

At Snake River monitoring sites, weekly average subyearling chinook passage indices were slightly lower at Lower Granite Dam (down 6%), moderately higher at Little Goose Dam (up 42%), and much higher at Lower Monumental Dam (up 238%) this week compared to last week. This week's average subyearling chinook passage

index at Lower Granite Dam was 24,346 fish/day. PIT tagged hatchery subyearling fall chinook released with production at Nez Perce Hatchery and Big Canyon Creek acclimation pond were more prevalent in the detections at Lower Granite Dam this week compared to those PIT tagged hatchery fall chinook released from Captain John Rapids and Pittsburg Landing acclimation ponds. PIT tagged wild fall chinook from the mainstem Snake River appear to have peaked on June 27 with 121 detections that day based on the drop in detections seen over the last four days. As of July 1, the cumulative detection of PIT tagged wild fall chinook at Lower Granite Dam is 26.8% of the release number, a level equal to what was seen last year over the entire 2003 season and double the level detected in the 2002 season.

The Mid-Columbia weekly average passage index for subyearling chinook at Rock Island Dam was 18% higher than last week's level, averaging 305 fish/day.

The lower Columbia River monitoring sites continued to see the largest surge in subyearling chinook passage this week. The weekly average subyearling chinook passage index at McNary Dam was 54% higher this week, averaging 522,662 fish/day. At 10 AM on June 23, the COE began collecting fish for transportation at McNary Dam, with the first barge leaving the morning of June 24. Passage indices for McNary Dam will be obtained on a daily basis starting June 24 through the remainder of the season. The weekly average subyearling chinook passage indices at John Day and Bonneville dams were up 29% and 259%, respectively, from last week's average. This week's average passage index for subyearling chinook was 62,255 fish/day at John Day Dam and 155,141 fish/day at Bonneville Dam.

Hatchery Releases - The scheduled release of juvenile salmonids from Columbia River Basin hatcheries above Bonneville Dam for the 2004 migration season will be about 83.2 million for the season with all yearling chinook, coho, and steelhead in river to date. Subyearling summer and fall chinook releases began in mid-May and will be completed by early July. Supplemental and planned releases made during fall 2003 are considered to be 2004 migrants. The 2004 Hatchery Zone Report gives the latest numbers received for this year's report.

Juvenile sockeye were released from net pens into Lake Wenatchee last summer and fall (2003); the majority of these fish resides in the lake during the winter and migrates from the lake and to the ocean the next spring (2004 in this case). In the Snake River basin, juvenile sockeye were released in Redfish, Alturas, and Pettit lakes last fall with near 100 smolts released this spring. Most begin their migration in May from the lakes.

Hatcheries in the Snake and Columbia River basins released about 12 million juvenile salmon during the past two weeks. About 5.4 million fish are scheduled for release during the next two weeks. See the Hatchery Release Summary Tables for details of individual release groups.

2004 Hatchery Zone Report

Race/Species	Friday 2-July-2004			
	Snake River	Mid-Columbia	Lower Columbia	Total Release
Fall Chinook	2,580,499	12,511,808	21,958,796	37,051,103
Spring Chinook	10,492,087	3,975,400	5,175,531	19,643,018
Summer Chinook	2,374,050	3,125,983		5,500,033
Coho	1,367,111	2,387,178	5,959,828	9,714,117
Sockeye	76,927	315,790		392,717
Summer Steelhead	9,214,209	1,184,775	454,392	10,853,376
Winter Steelhead			70,000	70,000
Total	26,104,883	23,500,934	33,618,547	83,224,364

Snake River - Release of yearling chinook from hatcheries in the Snake River basin is completed for the 2004 migration season. About 12.9 million yearling spring/summer chinook and an additional 1-million yearling fall chinook were released for the 2004 migration. Juvenile steelhead releases are completed for the year with approximately 9.2 million released in this Basin. About 1.4 million subyearling and yearling coho were also released in the Snake River. The last release of subyearling fall chinook was completed from Lyons Ferry Hatchery on 6/21 with about 1.5 million subyearling fall chinook planted in the Snake and Clearwater River basins in 2004.

Mid-Columbia - About 4 million yearling spring chinook were released from hatcheries and acclimation ponds in the Mid-Columbia River basin for the 2004 migration season. About 1.2 million juvenile steelhead were released from State hatcheries into the Wenatchee, Methow, Okanogan, and Walla Walla rivers, and the mainstem Columbia River from Ringold H. Yearling summer chinook releases were completed from Dryden, Similkameen, and Carlton ponds as well as Wells H by early May. The first group of subyearling chinook was released from Wells H (on-site) in mid-May. Subyearling fall chinook were also released in the Yakima River in Mid-April through late May. Approximately 2.4 million yearling coho were released in the Wenatchee, Methow and Yakima River basins this spring. The large releases of subyearling fall chinook from Priest Rapids and Ringold hatcheries (about 10-million) were completed by June 23. The last hatchery subyearling summer chinook to be planted will be in river next week and will complete the hatchery releases for the 2004 migration.

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 and Hood River Acclimation Ponds mainly in April with Klickitat H releasing their fish in early March. 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. completed by May 28. Juvenile steelhead releases were completed from mid-April through early May in most of the rivers in this Reach. Upriver bright fall chinook (subyearlings) were released in the Umatilla River in late May. About 2 million fall chinook were released from Little White Salmon H on June 17 with the final release of subyearling fall chinook from Klickitat Hatchery to be completed by July 2.

Adult Fish Passage - At Bonneville Dam, summer chinook passage ranged from 1,700 to 2,500 per day for the week ending July 1. To date, 63,431 adult summer chinook have been counted, and this total compares to 76,426 in 2003 and 29,027 for the 10-year average at Bonneville Dam. The passage through McNary Dam totaled 37,704 through July 1 with the turnoff into the Snake River at 9,200 (Ice Harbor count), and the count at Priest Rapids near 26,500 through June 30. Daily counts of adult summer chinook at Ice Harbor Dam reduced from near 400 per day to only 40 per day by the end of the count week while daily counts at Priest Rapids Dam range between 2,300 and 3,100 for the week. For the season, chinook passage into the Snake River is reduced from 2003 while the Mid-Columbia passage in 2004 is so far running slightly above the 2003 counts at Priest Rapids Dam.

Steelhead passage at Bonneville Dam continued to increase with daily passage counts that averaged 974 for the week ending July 1; greater than one half of these fish are now passing upstream at The Dalles Dam (ave = 505 per day). At present, the steelhead run is about 1.3 and 1.5 times greater than the respective 2003 and 10-year average through July 1 at Bonneville Dam. Steelhead passage is beginning to increase in the Snake River as well as in the Mid-Columbia with counts at Ice Harbor Dam near 100 per day and at Priest Rapids Dam near 50 per day through the count week.

Sockeye numbers at Bonneville Dam fell from near 4,500 early in the week to 3,000 by the end of the week with the total count through July 1 at 103,891. This total compares to only 28,006

and 31,318 for the respective 2003 and 10-year average. The majority of sockeye are destined for the Wenatchee and Okanogan River basins. The sockeye peaked at Priest Rapids this week with daily counts that ranged between 6,400 and 10,800 and cumulatively the count was 67,031 through June 30. As a note, 29 sockeye have been counted at Lower Granite Dam and should be destined for the upper Salmon River basin.

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
06/18/04	134.4	0.1	133.7	0.0	141.2	8.4	137.8	11.3	144.5	28.7	148.4	20.8	149.9	90.4
06/19/04	124.0	0.2	120.5	0.0	130.0	8.5	127.6	9.6	133.5	24.0	138.6	21.3	140.2	84.4
06/20/04	127.6	0.2	126.2	0.0	135.1	9.0	130.7	8.9	137.2	22.0	137.5	21.5	139.1	83.7
06/21/04	148.8	0.1	149.6	3.8	156.6	9.4	152.1	13.3	157.7	30.1	167.2	33.4	166.1	96.6
06/22/04	128.9	0.2	134.0	0.0	149.5	9.1	149.1	12.4	155.3	30.6	163.0	45.4	157.1	88.0
06/23/04	93.9	0.2	94.6	0.0	104.5	7.8	105.0	13.3	112.3	29.2	124.8	35.4	123.6	69.2
06/24/04	92.1	0.1	99.4	0.0	108.8	7.6	107.4	12.3	112.7	27.4	123.0	34.7	114.8	64.4
06/25/04	121.4	0.2	117.3	0.0	121.5	7.9	117.4	11.8	122.7	27.2	130.3	36.8	122.2	68.4
06/26/04	114.8	0.1	113.7	0.0	121.7	7.8	119.0	11.2	123.6	24.7	134.4	38.4	129.8	72.6
06/27/04	93.0	0.2	92.0	0.0	101.3	7.6	102.0	10.3	108.1	20.4	117.5	32.8	113.0	63.0
06/28/04	147.4	0.2	141.3	0.0	149.9	8.6	141.4	12.9	144.0	30.7	154.5	43.2	147.9	83.3
06/29/04	146.1	0.2	154.4	0.0	168.6	10.0	167.3	13.0	169.2	32.3	181.7	51.0	176.4	98.2
06/30/04	143.6	0.2	139.3	0.0	148.3	10.0	146.8	13.1	147.0	30.8	161.8	45.4	159.7	90.1
07/01/04	93.3	0.2	100.2	0.0	109.7	7.5	113.2	12.1	118.8	29.2	141.1	39.4	132.3	73.7

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

Date	Dworshak		Brownlee Canyon		Hells Granite		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
06/18/04	1.9	0.0	10.0	9.2	53.5	0.0	54.2	0.0	56.7	0.0	58.6	46.6		
06/19/04	1.9	0.0	10.0	7.0	49.3	0.0	49.5	0.0	52.2	0.0	54.1	46.5		
06/20/04	1.9	0.0	9.5	6.8	48.7	0.0	49.5	0.0	51.1	0.0	52.7	38.9		
06/21/04	4.4	0.0	11.8	11.1	46.2	0.0	46.7	0.0	50.6	0.0	52.0	37.8		
06/22/04	5.2	0.0	11.8	11.1	52.1	0.0	52.3	0.0	55.1	0.0	54.4	44.6		
06/23/04	5.2	0.0	9.2	11.0	48.4	0.0	46.8	0.0	46.4	0.0	50.1	42.9		
06/24/04	5.2	0.0	10.7	17.7	54.4	0.0	56.2	0.0	60.2	0.0	60.8	45.1		
06/25/04	5.2	0.0	10.2	9.8	52.9	0.0	53.1	0.0	53.9	0.0	56.8	41.2		
06/26/04	5.2	0.0	8.8	8.4	43.6	0.0	45.0	0.0	46.5	0.0	48.2	39.5		
06/27/04	5.2	0.0	10.2	8.6	44.3	0.0	43.6	0.0	44.2	0.0	46.2	37.9		
06/28/04	3.4	0.0	10.1	8.1	43.4	0.0	43.8	0.0	45.9	0.0	50.0	39.1		
06/29/04	2.2	0.0	9.2	7.7	38.4	0.0	38.7	0.0	38.6	0.0	38.3	23.2		
06/30/04	4.4	0.1	10.1	7.5	38.2	0.0	39.1	0.0	39.8	0.0	41.3	33.9		
07/01/04	6.9	0.0	---	---	42.1	0.0	41.9	0.0	42.9	0.0	45.6	29.9		

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
06/18/04	209.1	74.5	202.8	56.5	208.6	83.2	239.9	94.5	23.7	110.4
06/19/04	194.0	71.7	205.2	53.2	208.4	82.5	240.7	96.8	26.0	106.5
06/20/04	184.9	66.1	168.3	48.8	169.9	67.2	195.0	96.4	0.0	87.1
06/21/04	211.3	72.2	207.8	78.2	208.5	81.8	245.5	99.2	34.4	100.4
06/22/04	204.1	67.2	197.1	58.5	193.5	72.8	222.2	68.7	33.8	108.2
06/23/04	189.9	31.9	204.0	62.0	211.6	72.9	221.6	50.7	44.6	115.0
06/24/04	174.2	0.0	166.4	49.6	165.3	53.7	192.4	50.3	18.2	112.5
06/25/04	174.7	0.0	172.3	51.5	169.3	65.8	193.6	50.4	27.6	104.2
06/26/04	168.3	0.0	171.9	51.2	176.2	70.6	203.4	77.5	14.8	99.7
06/27/04	166.6	0.0	174.0	52.2	171.8	68.5	199.2	94.9	0.0	92.9
06/28/04	174.7	7.7	180.3	53.7	180.5	72.0	211.2	67.9	28.2	103.7
06/29/04	187.6	15.2	170.5	50.4	177.0	66.6	192.9	50.9	24.5	106.1
06/30/04	198.7	26.7	205.2	60.8	195.5	78.2	216.6	77.6	16.6	111.0
07/01/04	189.8	19.7	176.3	51.7	178.7	70.3	201.5	94.1	8.0	87.9

HATCHERY RELEASE LAST TWO WEEKS

Hatchery Release Summary								
From:	6/18/2004		to	7/1/2004				
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite
Nez Perce Tribe	Clearwater Hatchery	CH0	SP	2004	390,303	06-30-04	07-03-04	Meadow Creek - SELW
Nez Perce Tribe Total					390,303			
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH0	SU	2004	298,014	06-28-04	07-08-04	Turtle Rock Hatchery
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH0	SU	2004	493,178	06-28-04	07-08-04	Turtle Rock Hatchery
Washington Dept. of Fish and Wildlife	Klickitat Hatchery	CH0	FA	2004	4,220,000	06-14-04	07-02-04	Klickitat Hatchery
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH0	FA	2004	201,534	06-21-04	06-21-04	Lyons Ferry Hatchery
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CH0	FA	2004	6,700,000	06-14-04	06-23-04	Priest Rapids Hatchery
Washington Dept. of Fish and Wildlife Total					11,912,726			
Grand Total					12,303,029			

HATCHERY RELEASE NEXT TWO WEEKS

Hatchery Release Summary								
From:	7/2/2004		to	7/15/2004				
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite
Nez Perce Tribe	Clearwater Hatchery	CH0	SP	2004	390,303	06-30-04	07-03-04	Meadow Creek - SELW
Nez Perce Tribe Total					390,303			
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH0	SU	2004	298,014	06-28-04	07-08-04	Turtle Rock Hatchery
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH0	SU	2004	493,178	06-28-04	07-08-04	Turtle Rock Hatchery
Washington Dept. of Fish and Wildlife	Klickitat Hatchery	CH0	FA	2004	4,220,000	06-14-04	07-02-04	Klickitat Hatchery
Washington Dept. of Fish and Wildlife Total					5,011,192			
Grand Total					5,401,495			

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											
	06/25/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/28/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	06/22/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/27/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	06/29/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Rock Island Dam											
	07/01/04	Chinook + Steelhead	99	0	0	0.00%	0.00%	0	0	0	0

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	<u>Hungry H. Dnst</u>			<u>Boundary</u>			<u>Grand Coulee</u>			<u>Grand C. Tlwr</u>			<u>Chief Joseph</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
6/18	---	---	---	0	117	119	121	24	109	109	110	24	107	108	108	24	108	108	109	23
6/19	---	---	---	0	119	122	124	24	108	108	109	24	107	107	109	24	108	108	108	23
6/20	---	---	---	0	117	119	121	24	107	108	108	24	106	107	108	24	108	108	109	23
6/21	---	---	---	0	118	120	121	24	108	108	108	24	107	108	109	24	108	109	110	23
6/22	---	---	---	0	118	119	120	24	108	109	110	24	108	108	110	24	109	109	109	24
6/23	---	---	---	0	117	119	122	24	108	108	109	24	108	109	110	24	109	109	109	23
6/24	---	---	---	0	118	119	120	24	109	109	109	24	107	108	109	24	109	109	110	23
6/25	---	---	---	0	118	119	121	24	108	109	109	24	108	108	110	24	109	110	110	23
6/26	---	---	---	0	118	119	121	21	109	110	111	24	108	109	110	24	110	110	110	23
6/27	---	---	---	0	117	118	119	24	109	109	110	24	108	109	111	24	109	109	110	23
6/28	---	---	---	0	118	119	124	21	109	110	110	24	108	109	111	24	109	110	110	23
6/29	---	---	---	0	---	---	---	0	110	110	111	24	109	109	111	24	110	110	111	23
6/30	---	---	---	0	---	---	---	0	110	111	112	24	109	109	111	24	109	110	110	23
7/1	---	---	---	0	122	122	123	8	111	111	111	21	108	109	110	24	110	110	110	23

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	<u>Chief J. Dnst</u>			<u>Wells</u>			<u>Wells Dwnstrm</u>			<u>Rocky Reach</u>			<u>Rocky R. Tlwr</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
6/18	108	108	109	23	108	108	108	22	109	110	110	22	109	110	110	24	110	111	111	24
6/19	108	109	110	23	108	108	109	24	110	111	111	24	109	110	110	24	110	110	111	24
6/20	108	109	110	23	109	109	109	24	110	110	111	24	110	111	112	24	111	112	112	24
6/21	110	111	119	23	109	109	110	24	110	111	111	24	111	112	113	24	112	113	113	24
6/22	109	110	111	24	109	110	110	24	111	111	112	24	111	112	112	24	112	113	113	24
6/23	109	110	111	23	110	110	111	24	111	111	112	24	111	112	112	24	112	113	113	24
6/24	109	109	111	23	109	110	110	24	110	111	111	24	112	112	112	24	112	113	113	24
6/25	110	110	111	23	109	109	110	24	110	111	111	24	111	112	112	24	112	113	113	24
6/26	110	110	112	23	109	110	110	24	111	111	112	24	111	111	111	24	112	112	112	24
6/27	110	110	111	23	109	110	111	24	111	111	112	24	110	111	111	24	111	112	112	24
6/28	110	110	110	23	110	110	110	24	111	111	112	24	111	112	112	24	112	113	113	24
6/29	110	110	111	23	110	110	110	24	111	112	112	24	112	112	113	24	113	113	114	24
6/30	110	111	112	22	110	110	111	24	111	112	112	24	111	112	112	24	112	113	113	24
7/1	110	110	112	23	110	110	111	14	111	111	112	14	111	112	112	24	112	113	113	24

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	<u>Rock Island</u>			<u>Rock I. Tlwr</u>			<u>Wanapum</u>			<u>Wanapum Tlwr</u>			<u>Priest Rapids</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
6/18	110	110	111	24	115	116	117	24	112	112	113	23	115	115	116	23	113	114	115	23
6/19	110	110	110	24	115	115	116	24	112	113	115	23	115	116	117	23	113	114	115	23
6/20	110	111	111	24	115	115	116	24	113	114	115	23	116	117	118	23	115	116	117	23
6/21	111	112	113	24	116	117	117	24	114	115	116	20	116	117	119	23	116	116	117	23
6/22	112	112	113	24	116	117	117	24	116	117	119	23	114	115	115	23	115	115	117	23
6/23	112	112	112	24	116	117	117	24	117	118	120	23	114	115	115	23	114	114	116	23
6/24	112	112	112	24	117	117	117	24	116	117	120	21	114	115	115	23	114	114	116	23
6/25	112	112	113	24	117	117	118	24	115	116	118	23	114	115	115	23	114	115	116	23
6/26	111	111	112	24	117	117	119	24	112	112	114	23	113	114	114	23	111	112	113	23
6/27	110	111	112	24	116	117	118	24	112	113	115	23	113	113	114	23	111	112	114	23
6/28	111	112	113	24	117	118	119	24	113	114	116	23	113	114	115	23	112	113	114	23
6/29	112	112	113	24	117	118	118	24	114	115	117	23	114	115	115	23	113	113	114	23
6/30	111	112	112	24	117	118	119	24	114	115	115	23	114	114	115	23	113	113	114	23
7/1	111	112	112	24	118	118	119	24	---	---	---	0	---	---	---	0	---	---	---	0

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

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

Date	<u>Priest R. Dnst</u>			<u>Pasco</u>			<u>Dworshak</u>			<u>Clrwtr-Peck</u>			<u>Anatone</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>#</u>			
6/18	119	120	120	23	113	113	114	21	104	105	106	24	101	102	103	24	103	103	104	24
6/19	119	119	120	23	113	114	114	24	105	105	106	24	102	103	104	24	103	104	105	24
6/20	119	120	121	23	114	114	115	21	105	105	106	24	102	103	104	24	103	104	105	24
6/21	120	121	122	23	114	115	116	24	103	104	105	24	102	103	104	24	103	105	106	24
6/22	119	120	121	23	115	116	117	24	103	104	104	24	102	103	104	24	103	104	105	24
6/23	118	119	120	23	115	115	115	24	103	104	104	24	102	103	104	24	103	104	105	24
6/24	116	118	119	23	113	114	115	24	103	104	106	24	102	103	104	24	103	104	105	24
6/25	117	119	119	23	112	113	113	24	103	103	104	24	102	103	104	24	103	104	104	24
6/26	116	118	119	23	112	112	113	24	103	104	104	24	102	103	104	24	103	104	105	24
6/27	115	117	118	23	111	112	112	24	103	103	104	24	102	103	104	24	102	104	105	24
6/28	117	118	119	23	112	112	113	24	102	103	104	24	101	102	103	24	102	103	104	24
6/29	119	119	120	23	113	113	114	24	103	104	108	21	101	103	104	24	102	103	104	24
6/30	119	119	120	23	113	114	114	24	103	104	109	24	102	104	106	24	103	104	105	24
7/1	---	---	---	0	113	114	114	24	103	103	104	24	103	104	105	24	102	103	104	24

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>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>#</u>			
6/18	101	102	103	24	105	106	108	24	103	104	104	24	105	106	107	24	103	104	104	24
6/19	101	103	104	24	105	106	107	24	103	103	104	24	105	107	111	24	103	103	103	24
6/20	102	104	105	24	107	109	111	24	103	104	104	24	107	109	110	24	104	104	104	24
6/21	102	104	105	24	109	110	111	24	104	104	105	24	111	114	119	24	105	105	106	24
6/22	102	104	105	24	107	108	111	24	104	104	105	24	113	116	119	24	106	106	107	24
6/23	102	104	105	24	107	108	109	24	104	104	104	24	114	116	118	24	105	106	106	24
6/24	102	104	105	24	106	108	110	24	103	104	104	23	111	113	115	24	106	106	107	24
6/25	102	104	105	24	105	106	109	24	103	103	103	24	108	109	111	24	105	106	106	24
6/26	102	103	105	23	105	105	108	24	103	103	103	24	104	105	106	24	104	104	104	24
6/27	102	104	105	24	104	104	107	24	102	102	102	24	104	104	105	24	103	103	104	24
6/28	102	103	104	24	105	107	112	24	102	102	103	24	106	107	112	24	104	104	105	24
6/29	101	103	104	24	111	112	116	24	103	104	105	24	111	112	113	24	105	105	106	24
6/30	102	104	106	24	107	109	111	24	103	104	104	24	108	110	111	24	104	105	105	24
7/1	102	104	104	24	110	113	115	24	102	103	104	24	103	104	105	24	103	103	104	24

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

Date	<u>Lower Mon.</u>			<u>L. Mon. Tlwr</u>			<u>Ice Harbor</u>			<u>Ice Harbor Tlwr</u>			<u>McNary-Oregon</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>		<u>#</u>			
6/18	103	104	105	24	103	103	104	24	104	105	106	24	115	115	116	24	114	115	116	24
6/19	105	106	110	24	103	104	104	24	103	103	104	24	115	116	116	24	113	114	116	24
6/20	106	106	108	24	104	105	105	24	104	105	106	24	113	114	115	24	114	117	120	24
6/21	107	109	112	24	105	106	107	24	105	106	108	24	112	113	113	24	115	117	120	24
6/22	108	109	111	24	106	107	107	24	106	107	109	24	115	118	119	24	115	116	118	24
6/23	111	113	115	24	107	108	113	24	106	107	108	24	116	117	118	24	116	118	120	24
6/24	109	111	112	24	107	108	110	24	106	107	107	24	114	114	115	24	118	121	123	24
6/25	108	108	110	24	107	107	110	24	107	107	109	24	112	113	114	24	117	120	123	24
6/26	107	108	109	24	106	106	107	24	106	107	107	24	114	116	117	24	114	114	116	24
6/27	106	107	107	24	105	106	107	24	106	106	107	24	114	116	116	24	112	113	118	24
6/28	107	109	112	24	106	106	107	24	107	108	109	24	113	114	116	24	113	116	118	24
6/29	110	112	112	24	105	105	106	24	108	109	111	24	110	112	115	24	112	113	116	23
6/30	106	107	109	24	104	105	105	24	108	108	109	24	114	116	117	24	114	115	118	24
7/1	106	107	109	24	104	105	106	24	107	108	110	24	115	117	117	24	114	116	117	24

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>McNary-Wash</u>				<u>McNary Tlwr</u>				<u>John Day</u>				<u>John Day Tlwr</u>				<u>The Dalles</u>			
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>hr</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>hr</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>hr</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>hr</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>hr</u>
6/18	114	115	115	24	116	118	119	24	108	109	110	23	111	114	118	21	111	114	115	23
6/19	114	115	117	24	115	118	119	24	110	111	111	23	113	117	119	24	111	115	117	23
6/20	114	115	117	24	115	117	119	24	111	111	112	23	113	117	118	24	112	113	116	23
6/21	116	116	118	24	116	119	121	24	113	113	114	22	117	118	120	24	114	117	118	23
6/22	117	118	119	24	117	119	120	24	114	114	115	23	116	117	118	23	113	115	118	24
6/23	115	115	116	24	115	117	119	24	113	114	114	23	116	117	118	24	111	111	112	23
6/24	116	116	118	24	114	115	115	24	112	113	113	23	115	115	116	24	109	109	110	23
6/25	115	116	116	24	114	114	114	24	111	111	112	23	115	115	116	24	108	108	108	23
6/26	113	113	114	24	112	112	113	24	109	109	110	23	115	115	115	24	107	108	108	23
6/27	111	112	115	24	110	110	111	24	107	107	108	23	115	115	116	24	107	107	108	23
6/28	113	114	117	24	111	112	112	24	107	107	107	23	115	116	117	24	108	109	109	23
6/29	114	115	116	24	112	113	113	24	107	107	108	23	115	115	116	24	109	109	109	23
6/30	113	113	114	24	113	113	113	24	107	107	107	23	116	117	118	23	108	108	109	23
7/1	112	113	113	24	112	113	114	24	106	107	107	23	115	116	118	24	108	108	109	23

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>				<u>Bonneville</u>				<u>Warrendale</u>				<u>CamasWashugal</u>			
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>hr</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>hr</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>hr</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>hr</u>
6/18	115	117	118	24	113	115	115	23	115	116	119	23	112	113	115	24
6/19	115	116	118	24	114	114	115	23	115	116	119	23	113	115	117	24
6/20	116	117	118	24	114	115	115	23	115	116	119	23	114	116	118	24
6/21	117	118	118	24	115	116	117	23	116	117	120	23	115	117	120	24
6/22	117	118	119	24	113	114	116	24	114	116	119	24	113	114	116	24
6/23	115	115	115	24	109	110	111	23	109	110	111	23	109	110	111	24
6/24	113	114	115	24	106	107	108	23	108	109	109	23	107	108	108	24
6/25	113	113	114	24	105	105	106	23	108	108	109	23	107	108	109	24
6/26	113	113	114	24	105	106	106	23	109	110	111	23	107	108	109	24
6/27	113	113	113	24	106	107	107	23	112	114	116	23	108	111	113	24
6/28	113	114	114	24	107	108	108	23	112	115	118	23	110	112	115	24
6/29	113	114	114	24	108	108	109	23	109	109	110	23	108	109	110	24
6/30	114	115	115	24	108	108	108	23	110	110	111	19	108	109	110	24
7/1	114	115	115	24	107	107	108	23	113	114	117	23	109	112	114	24

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)	(INDEX)
06/18/2004	0	---	26	---	---	600	120	80	15	2,297	559	1,134	
06/19/2004 *	0	---	17	---	---	200	105	80	8	---	497	961	
06/20/2004 *	3	---	41	---	---	450	215	90	5	154	447	681	
06/21/2004 *	0	---	21	---	---	700	170	20	4	---	440	312	
06/22/2004 *	0	---	28	---	---	600	50	40	0	160	265	273	
06/23/2004 *	0	---	---	---	---	800	75	40	0	---	245	279	
06/24/2004 *	2	---	---	---	---	600	75	30	4	300	282	297	
06/25/2004	0	---	---	---	---	1,750	200	7	0	900	87	307	
06/26/2004 *	0	---	---	---	---	1,150	74	14	0	400	29	164	
06/27/2004 *	0	---	---	---	---	450	350	12	0	400	31	186	
06/28/2004	0	---	---	---	---	1,360	725	75	0	800	1	41	
06/29/2004	0	---	---	---	---	200	50	0	1	1,181	50	35	
06/30/2004	2	---	---	---	---	340	200	21	6	781	37	34	
07/01/2004 *	---	---	---	---	---	425	75	0	8	443	21	43	

Total:	7	0	133	0	0	9,625	2,484	509	51	7,816	2,991	4,747	
# Days:	13	0	5	0	0	14	14	14	14	11	14	14	
Average:	1	0	27	0	0	688	177	36	4	711	214	339	
YTD	835	29,063	73,379	9,904	4,053	5,171,674	2,655,335	913,217	12,548	1,082,667	1,005,145	1,465,867	

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)	(INDEX)
06/18/2004	95	---	0	---	---	25,200	5,735	1,370	176	50,544	4,915	31,546	
06/19/2004 *	79	---	0	---	---	19,500	7,270	1,080	256	---	11,289	35,157	
06/20/2004 *	26	---	0	---	---	31,450	14,120	1,410	440	459,709	30,110	27,773	
06/21/2004 *	44	---	0	---	---	29,250	15,600	920	292	---	17,901	33,079	
06/22/2004 *	17	---	0	---	---	26,400	9,550	2,180	218	607,684	35,630	50,954	
06/23/2004 *	28	---	---	---	---	29,050	7,900	1,420	218	---	110,922	48,910	
06/24/2004 *	36	---	---	---	---	20,100	4,628	1,014	205	244,200	127,075	75,148	
06/25/2004	30	---	---	---	---	29,550	7,051	2,170	157	595,000	102,988	116,918	
06/26/2004 *	17	---	---	---	---	20,900	9,309	1,923	181	483,300	89,998	220,647	
06/27/2004 *	30	---	---	---	---	22,400	23,325	3,109	183	424,800	81,404	217,554	
06/28/2004	14	---	---	---	---	33,460	21,975	5,886	149	660,500	40,283	221,696	
06/29/2004	4	---	---	---	---	23,900	9,100	2,720	198	427,286	42,214	129,143	
06/30/2004	4	---	---	---	---	26,460	11,778	8,894	315	547,549	47,492	84,996	
07/01/2004 *	---	---	---	---	---	13,750	9,725	7,077	954	520,202	31,408	95,031	

Total:	424	0	0	0	0	351,370	157,066	41,173	3,942	5,020,774	773,629	1,388,552	
# Days:	13	0	5	0	0	14	14	14	14	11	14	14	
Average:	33	0	0	0	0	25,098	11,219	2,941	282	456,434	55,259	99,182	
YTD	1,579	0	29	80	935	782,552	375,526	128,514	12,348	5,483,252	1,015,037	3,839,324	

* 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)
06/18/2004	0	---	0	---	---	300	580	160	106	488	1,064	1,891
06/19/2004	*	0	---	0	---	200	870	70	115	---	556	1,337
06/20/2004	*	0	---	0	---	150	530	70	67	154	204	1,005
06/21/2004	*	0	---	0	---	300	1,040	40	35	---	110	592
06/22/2004	*	0	---	0	---	200	800	20	58	160	215	364
06/23/2004	*	0	---	---	---	150	650	0	30	---	147	297
06/24/2004	*	0	---	---	---	450	425	4	14	700	16	540
06/25/2004		0	---	---	---	250	275	7	18	400	14	694
06/26/2004	*	0	---	---	---	450	256	10	35	100	44	192
06/27/2004	*	0	---	---	---	100	1,225	2	16	100	31	145
06/28/2004		0	---	---	---	60	475	11	9	200	16	102
06/29/2004		0	---	---	---	80	200	40	9	1,718	9	122
06/30/2004		0	---	---	---	260	600	0	18	223	3	102
07/01/2004	*	---	---	---	---	50	650	0	95	221	0	21

Total:	0	0	0	0	0	3,000	8,576	434	625	4,464	2,429	7,404
# Days:	13	0	5	0	0	14	14	14	14	11	14	14
Average:	0	0	0	0	0	214	613	31	45	406	174	529
YTD	0	0	0	0	45	258,583	123,092	15,784	28,475	88,904	175,109	937,667

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)
06/18/2004	0	---	15	---	---	4,200	1,237	1,240	20	2	235	324
06/19/2004	*	0	---	11	---	1,900	681	330	12	---	215	345
06/20/2004	*	0	---	21	---	900	361	130	10	0	72	97
06/21/2004	*	0	---	11	---	1,400	1,302	80	7	---	161	172
06/22/2004	*	0	---	6	---	1,150	1,476	320	8	0	92	34
06/23/2004	*	0	---	---	---	900	2,303	100	5	---	132	157
06/24/2004	*	0	---	---	---	1,150	1,977	71	4	0	16	63
06/25/2004		0	---	---	---	2,050	1,402	537	5	100	14	65
06/26/2004	*	0	---	---	---	2,350	2,355	142	4	100	29	46
06/27/2004	*	0	---	---	---	1,550	525	140	1	100	34	21
06/28/2004		0	---	---	---	660	500	151	3	200	11	20
06/29/2004		0	---	---	---	600	150	60	6	537	40	35
06/30/2004		0	---	---	---	1,080	276	40	10	0	0	34
07/01/2004	*	---	---	---	---	425	501	75	17	0	11	43

Total:	0	0	64	0	0	20,315	15,046	3,416	112	1,039	1,062	1,456
# Days:	13	0	5	0	0	14	14	14	14	11	14	14
Average:	0	0	13	0	0	1,451	1,075	244	8	94	76	104
YTD	195	2,106	36,084	1,857	8,418	5,815,823	1,909,917	342,348	10,685	124,840	257,044	155,584

* See sampling comments

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)
06/18/2004	0	---	0	---	---	0	20	10	7	1,627	895	1,458
06/19/2004 *	0	---	0	---	---	100	0	0	12	---	1,023	1,243
06/20/2004 *	0	---	0	---	---	0	0	0	3	769	986	800
06/21/2004 *	0	---	0	---	---	50	0	0	5	---	221	646
06/22/2004 *	0	---	0	---	---	0	51	0	3	962	514	398
06/23/2004 *	0	---	---	---	---	0	0	0	4	---	215	523
06/24/2004 *	0	---	---	---	---	50	0	0	0	500	111	540
06/25/2004	0	---	---	---	---	50	0	0	5	400	87	484
06/26/2004 *	0	---	---	---	---	50	0	1	6	600	76	484
06/27/2004 *	0	---	---	---	---	0	50	0	1	400	34	197
06/28/2004	2	---	---	---	---	0	0	1	1	100	4	163
06/29/2004	0	---	---	---	---	0	0	0	11	1,932	26	139
06/30/2004	0	---	---	---	---	0	0	0	30	781	16	51
07/01/2004 *	---	---	---	---	---	0	0	0	32	332	20	43

Total:	2	0	0	0	0	300	121	12	120	8,403	4,228	7,169
# Days:	13	0	5	0	0	14	14	14	14	11	14	14
Average:	0	0	0	0	0	21	9	1	9	764	302	512
YTD	6	9	0	0	25	7,494	4,688	951	6,994	302,792	235,587	189,286

* 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:

7/2/04 8:26 AM

		06/19/04 TO 07/02/04					
		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	351,370	9,625	3,000	300	20,315	384,610
	Sum of NumberBarged	329,901	9,593	2,984	297	20,249	363,024
	Sum of NumberBypassed	19,558	3	0	0	0	19,561
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	1,911	29	16	3	66	2,025
LGS	Sum of NumberCollected	157,066	2,484	8,576	121	15,046	183,293
	Sum of NumberBarged	156,933	2,474	8,572	120	14,929	183,028
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	133	10	4	1	117	265
LMN	Sum of NumberCollected	41,173	509	434	12	3,416	45,544
	Sum of NumberBarged	39,473	494	434	12	3,362	43,775
	Sum of NumberBypassed	1,526	0	0	0	0	1,526
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	174	15	0	0	54	243
MCN	Sum of NumberCollected	4,475,652	6,613	4,000	6,902	1,001	4,494,168
	Sum of NumberBarged	3,230,039	4,485	3,149	4,214	987	3,242,874
	Sum of NumberBypassed	750,287	1,662	617	2,182	1	754,749
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	21,589	79	34	206	13	21,921
Total Sum of NumberCollected		5,025,261	19,231	16,010	7,335	39,778	5,107,615
Total Sum of NumberBarged		3,756,346	17,046	15,139	4,643	39,527	3,832,701
Total Sum of NumberBypassed		771,371	1,665	617	2,182	1	775,836
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of TotalProjectMortalities		23,807	133	54	210	250	24,454

YTD Transportation Summary

Source: Fish Passage Center

Updated:

7/2/04 8:26 AM

TO: 07/02/04

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	752,336	4,842,151	251,964	7,183	5,664,657	11,518,291
	Sum of NumberBarged	707,567	4,623,666	238,095	6,673	5,356,441	10,932,442
	Sum of NumberBypassed	40,974	151,332	13,352	285	289,607	495,550
	Sum of NumberTrucked	129	43,991	220	181	15,496	60,017
	Sum of TotalProjectMortalities	3,666	23,162	297	44	3,113	30,282
LGS	Sum of NumberCollected	375,259	2,569,809	119,835	4,636	1,863,867	4,933,406
	Sum of NumberBarged	375,161	2,566,021	119,720	4,632	1,860,618	4,926,152
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of NumberTrucked	0	2,096	0	2	1,333	3,431
	Sum of TotalProjectMortalities	262	1,484	18	2	1,912	3,678
LMN	Sum of NumberCollected	120,551	842,750	14,749	897	287,192	1,266,139
	Sum of NumberBarged	118,767	833,612	14,745	897	283,786	1,251,807
	Sum of NumberBypassed	1,526	6,321	0	0	2,125	9,972
	Sum of NumberTrucked	10	1,352	0	0	604	1,966
	Sum of TotalProjectMortalities	248	1,465	4	0	677	2,394
MCN	Sum of NumberCollected	4,769,740	664,262	55,159	184,536	76,265	5,749,962
	Sum of NumberBarged	3,230,039	4,485	3,149	4,214	987	3,242,874
	Sum of NumberBypassed	1,044,032	646,944	51,742	179,173	74,612	1,996,503
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	21,933	2,834	68	849	270	25,954
Total Sum of NumberCollected		6,017,886	8,918,972	441,707	197,252	7,891,981	23,467,798
Total Sum of NumberBarged		4,431,534	8,027,784	375,709	16,416	7,501,832	20,353,275
Total Sum of NumberBypassed		1,086,532	804,597	65,094	179,458	366,344	2,502,025
Total Sum of NumberTrucked		139	47,439	220	183	17,433	65,414
Total Sum of TotalProjectMortalities		26,109	28,945	387	895	5,972	62,308

Cumulative Adult Passage at Mainstem Dams Through: 07/01

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	170,188	8,885	192,010	14,258	130,296	7,371	63,431	8,286	76,426	7,987	29,027	3,388	0	0	0	0	0	0
TDA	130,226	7,717	131,207	11,522	87,249	5,199	52,295	5,098	63,604	5,466	23,161	2,233	0	0	0	0	0	0
JDA	110,304	6,353	101,436	10,206	72,403	4,083	46,442	5,917	57,810	4,723	20,621	1,718	0	0	0	0	0	0
MCN	107,497	7,675	95,550	11,123	66,222	4,195	37,704	4,013	49,437	4,983	17,931	1,701	0	0	0	0	0	0
IHR	77,106	4,658	78,170	8,020	44,313	2,700	9,251	1,820	16,735	3,048	7,023	955	0	0	0	0	0	0
LMN	71,673	3,786	70,603	7,344	42,703	2,607	7,955	1,493	14,292	2,252	6,289	763	0	0	0	0	0	0
LGS	62,458	3,404	69,017	7,079	41,666	2,708	6,400	1,417	10,474	1,857	5,190	805	0	0	0	0	0	0
LWG	70,778	4,482	70,609	8,295	40,647	2,828	5,841	1,473	11,267	1,961	4,956	760	0	0	0	0	0	0
PRD	13,521	1,020	18,136	656	14,413	382	26,558	821	22,812	453	6,647	175	0	0	0	0	0	0
RIS	10,917	958	16,881	753	11,256	609	14,305	1,484	14,269	453	3,425	257	0	0	0	0	0	0
RRH	4,365	734	4,216	450	4,023	171	5,970	519	7,287	218	1,349	69	0	0	0	0	0	0
WEL	4,615	178	4,504	198	2,563	172	1,329	10	1,163	22	114	4	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2004		2003		10-Yr Avg.		10-Yr		10-Yr			Wild	
	Adult	Jack	Adult	Jack	Adult	Jack	2004	2003	Avg.	2004	2003	Avg.	2004
BON	0	0	0	0	0	0	103,891	28,006	31,318	23,332	16,467	15,105	8,855
TDA	0	0	0	0	0	0	86,576	22,825	24,146	9,399	6,758	5,635	4,040
JDA	0	0	0	0	0	0	87,695	21,158	24,627	9,269	7,225	7,165	4,006
MCN	0	0	0	0	0	0	65,040	15,457	17,491	5,858	4,071	3,899	2,181
IHR	0	0	0	0	0	0	42	26	5	3,137	2,830	2,533	1,152
LMN	0	0	0	0	0	0	32	7	5	2,760	2,936	2,364	1,080
LGS	0	0	0	0	0	0	23	10	5	2,496	2,799	2,206	1,189
LWG	0	0	0	0	0	0	29	3	1	8,064	16,257	6,150	2,745
PRD	0	0	0	0	0	0	67,031	6,185	9,606	603	104	75	n/a
RIS	0	0	0	0	0	0	21,785	2,968	3,402	478	85	61	423
RRH	0	0	0	0	1	0	11,574	1,903	1,602	527	81	66	482
WEL	0	0	0	0	0	0	5,452	732	763	129	31	13	101

PRD, WEL, RIS, RRH are through 06/30.

RIS/RRH are missing 06/29. IHR is missing 06/18.

**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: 07/02/04

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

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

