



Fish Passage Center

Weekly Report #04 - 12

May 28, 2004

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Highlights:

- **Precipitation throughout the Columbia Basin has increased over the last several weeks, resulting in generally above average precipitation through the first twenty-four days of May.**
- **Over the last week, flows have averaged 85.6 Kcfs at Lower Granite; flows are currently the highest of the year at 92.8 Kcfs.**
- **Flows at McNary have averaged 219.1 Kcfs over the last week and are currently the highest of the spring season at 240 Kcfs.**
- **SOR 2004-12 was submitted to the Action Agencies on May 25, 2004 and asked for flows at Priest Rapids to be reduced to a minimum of 125 Kcfs (week average) on June 1, 2004 and gave the operators flexibility to provide up to 135 Kcfs if they felt more water was available than indicated by current modeling.**

Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has increased over the last several weeks, resulting in generally above average precipitation through the first twenty-four days of May. Over the entire water year, precipitation remains slightly below average.

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

Location	Water Year 2004		Water Year 2004	
	May 1-24		October 1, 2003 to	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	1.75	101	16.36	93
Snake River Above Ice Harbor	1.73	118	11.77	89
Columbia Above The Dalles	1.78	117	16.38	94
Kootenai	1.30	75	16.42	91
Clark Fork	2.27	143	10.67	90
Flathead	1.74	92	14.25	91
Pend Oreille/Spokane	2.77	137	22.68	93
Central Washington	1.01	169	6.61	93
Snake River Plain	0.78	68	6.49	78
Salmon/Boise/Payette	2.25	162	13.80	88
Clearwater	4.20	179	24.03	102
SW Washington Cascades/Cowlitz	1.85	63	52.52	85
Willamette Valley	2.55	93	48.45	92

Snowpack within the Columbia Basin is below average for this time of year. Average snowpack in the Columbia River for basins above the Snake River confluence is 42% of average, for Snake River Basins the average snowpack is 34% of average, and for lower Columbia Basins between McNary and Bonneville Dam average snowpack is 38% of average.

May Mid-Month Water Supply Forecasts have increased at some locations relative to the May Final Forecast, others have decreased. All locations in Table 2 remain below average in terms of Water Supply.

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

Location	May Final		May Mid-Month	
	% Average (1971-2000)	Probable Runoff Volume (Kaf)	% Average (1971-2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	74	79500	74	79700
Grand Coulee (Jan-July)	83	52200	82	51500
Libby Res. Inflow, MT (Jan-July)	79	4960	75	4760
Hungry Horse Res. Inflow, MT (Jan-July)	81	1810	77	1710
Lower Granite Res. Inflow (Apr- July)	61	13100	66	14200
Brownlee Res. Inflow (Apr-July)	40	2500	42	2640
Dworshak Res. Inflow (Apr-July)	76	2010	83	2190

The spring flow objective period started in the Lower Snake River on April 3rd, 2004. Based on the April Final Forecast at Lower Granite (Apr-July), the flow objective is 85 Kcfs at Lower Granite through June 20th. Over the spring flow objective period, flows have averaged 60.6 Kcfs at Lower Granite. Over the last week, flows have averaged 85.6 Kcfs; flows are currently the highest of the year at 92.8 Kcfs.

The Spring Flow Objective Periods at McNary Dam and Priest Rapids Dam began on April 10th. The flow objectives at McNary and Priest Rapids are 220 Kcfs and 135 Kcfs, respectively. Over the spring flow objective period, flows have averaged 188.5 Kcfs at McNary Dam and 117.8 Kcfs at Priest Rapids Dam. Flows at McNary have averaged 219.1 Kcfs over the last week and are currently the highest of the spring season at 240 Kcfs. SOR 2004-12 was submitted to the Action Agencies on May 25, 2004 and asked for flows at Priest Rapids to be reduced to a minimum of 125 Kcfs (week average) on June 1, 2004 and gave the operators flexibility to provide up to 135 Kcfs if they felt more water was available than indicated by current modeling. From May 17th to May 23rd, flows averaged 132.3 Kcfs at Priest Rapids.

Grand Coulee is currently at an elevation of 1276.6 feet (5-27-04) and has refilled approximately 3.6 feet over the last week.

The Libby Reservoir is currently at an elevation of 2429.1 feet (5-27-04). Inflows to Libby over the last week have ranged between 14.3 and 23.2 Kcfs; Libby has been able to refill 4.3 feet in the last week while still maintaining minimum project outflow of 4.0 Kcfs.

The Hungry Horse Reservoir is currently at an elevation of 3547.1 feet (5-27-04). Over the last week, inflows to Hungry Horse have ranged between 6.8 and 10.4 Kcfs, enabling Hungry Horse to refill 1.8 feet. Outflows over the last week have ranged between 4.5 and 6.1 Kcfs.

The Dworshak Reservoir is currently at an elevation of 1590.1 feet (5-27-04). Inflows to Dworshak have remained relatively high over the past week ranging between 13.5 and 23.1 Kcfs; outflows have been ranging between 2.2 and 11.8

Kcfs. Dworshak has refilled 7.1 feet in the last week, and needs to refill slightly less than 10 feet to refill.

The Brownlee Reservoir is currently at an elevation of 2075.4 feet (5-27-04). Inflows to Brownlee have ranged between 13.8 and 16.6 Kcfs; outflows have ranged between 14.5 and 17.8 Kcfs. Brownlee has remained relatively steady in the last week and is currently 1.6 feet from full.

Spill: Spill for fish passage has not occurred over the past week at Lower Granite, Little Goose or Lower Monumental dams to facilitate the maximization of transportation of smolts. Spill for fish passage at Ice Harbor averaged 72% over the past week. Spillway tests at Ice Harbor have concluded and Biop spill levels are being implemented at the project. At Ice Harbor Biop spill levels are 45 kcfs during the day and up to the gas cap or 100 kcfs during nighttime hours. Spill at McNary averaged 44% over the past week. Spill for fish passage at John Day, The Dalles and Bonneville dams averaged 58.8%, 39.3% and 39% respectively. Spill for fish passage continued over the past week at the Mid-Columbia projects in accord with the Mid-Columbia agreements.

Gas bubble trauma monitoring is continuing in the Mid and Lower Columbia Rivers. Only 2 fish at Rock Island Dam were found with minor GBT symptoms over the past week.

Smolt Monitoring: Steelhead indices appeared to reach another peak this past week at Lower Granite Dam as flows increased to over 90 Kcfs and yearling chinook numbers also increased slightly with the higher flows but overall appear to be continuing to decrease slowly in the Snake River. At most Lower Columbia River sites yearling chinook numbers are declining and steelhead indices appeared to pass their peak at McNary Dam and perhaps even at John Day Dam, while coho and sockeye passage is high at most sites.

At Snake River Basin traps yearling chinook and steelhead numbers were down at most sites. At the White Bird Trap the collection of yearling chinook and steelhead was fewer than 10 per day this week. The collection of yearling chinook aver-

aged 5 this week at the Imnaha Trap compared to 50 per day last week. Steelhead collection was down this past week with daily collection averaging about 100 per day this week compared to 700 per day last week. The trap was not operated for several days due to high flows and debris. Numbers of yearling chinook captured at the Grande Ronde Trap were similar to last week with a daily average of 33 compared to 36 last week. Steelhead numbers increased to 32 per day after collecting 25 per day last week. At the Lewiston Trap the numbers of yearling chinook averaged nearly 80 per day this past week, while steelhead collection declined to 90 per day average this week compared to 150 per day average last week. Increasing numbers of subyearling chinook are starting to be collected at the Lewiston Trap with the daily average collection just above 40 fish. All the traps are scheduled to end sampling this week but Lewiston Trap may continue sampling due to continued success collecting late season steelhead.

At Lower Granite Dam the numbers of yearling chinook, coho and steelhead increased between May 22 and May 24 to a late season peak. The average weekly passage index for yearling chinook was unchanged at 23,000 this past week. The steelhead average daily index was at 157,000 this week compared to 92,000 last week. Steelhead indices reached 350,000 on May 22, as increased flows appeared to cause more fish to move through the hydro-system. Coho passage may have also peaked at Lower Granite with a season high index of 21,000 on May 24. Little Goose Dam saw a drop in yearling chinook numbers over the past week with the average daily index of yearling chinook at 17,000 this week compared to 34,000 last week, while the steelhead index remained steady, averaging 29,000 for the past two weeks. Lower Monumental Dam had a decrease in the yearling chinook indices with an average daily value of 6,000 compared to 11,900 per day last week. Steelhead indices were up to 6,000 per day this week compared to 3,900 per day the week past.

In the Mid-Columbia River, the Entiat Trap continued to capture small numbers of yearling

chinook and steelhead this past week, as well as subyearling chinook. The Trap is scheduled to end sampling May 28.

At Rock Island Dam the numbers of yearling chinook decreased with an average yearling chinook index of 130 this week compared to 210 last week, while steelhead averaged 220 per day compared to 240 last week, and sockeye averaged 50 per day this week compared to 120 per day last week. Subyearling chinook numbers remained steady this week with the average daily index at 55 per day, while coho indices increased to 1,250 per day compared to over 800 per day average the previous week.

In the Lower Columbia, at McNary Dam, based on full samples taken every other day, yearling chinook indices averaged 28,000 per day this week compared to 53,000 last week, while steelhead indices averaged 1,800 per day compared to 8,200 per day last week. Coho indices were up to 4,500 per day, up from 3,300 last week. Sockeye indices also increased from 12,800 per day last week to 16,000 this week. Subyearling chinook indices also continued to increase this past week, with the average daily index at 9,900 per day this week compared to 3,500 last week. Testing of the vertical barrier screens and FGE of those units operated outside 1% was suspended again this week. The Salmon Managers (except for NOAA) submitted an SOR asking for tests to be halted because of concerns about increased descaling and mortality associated with the tests. Testing, on a limited basis (of a single unit), resumed May 26 and 27, with results on May 28 to be used to determine whether further testing is safe for fish.

At John Day Dam the numbers of yearling chinook continued to decline with the average daily index at 23,000 this week, compared to 40,000 last week. Steelhead indices increased over the past week with the average daily value at 13,000 compared to 8,000 last week. Coho indices were at 5,500 per day this past week compared to 3,900 last week, while sockeye indices rose to 7,900 and subyearling chinook indices reached beyond 1,000 per day for the first time this season on May 23.

At Bonneville Dam, the average daily index for yearling chinook was 20,000 compared to 17,000 last week. The steelhead index averaged 3,800 this week compared to 6,400 last week. The indices for coho were up with an average index of 25,000 per day versus 9,200 per day last week. Sockeye indices continued increasing with the average daily index at 6,200 this week. The subyearling chinook tapered off quickly after the May 8 as the Spring Creek Hatchery release of 3.4 million fish on May 6 passed, but the index inched up to 8,400, as other stocks began to dominate the run.

Hatchery Releases: Over the past two weeks hatchery releases have been primarily comprised of fall chinook releases, which will migrate in 2004. In the Snake River Lyons Ferry fall chinook have been released from Pittsburg Landing and Captain John acclimation ponds. Umatilla and Yakima facilities have also begun releases of fall chinook. Fall chinook releases are projected to continue from these facilities for the next two weeks. In addition fall chinook releases from the Idaho Power Oxbow facility will begin in the upcoming week. Smaller releases of summer steelhead and coho were completed from mid-Columbia facilities over the past week.

Adult fish passage: Spring chinook adult daily counts at Bonneville Dam have ranged from 1638 per day on May 21 to 1189 per day on May 27. The year-to-date total at Bonneville is 164,859 adults, which is lower than 2003 but above the ten year average for this date. At McNary Dam the daily adult spring chinook count ranged from 1408 on May 21 to 781 on May 27. The year to date total for McNary spring chinook is 97,247 which is above the 2003 and ten year averages for this date. Year to date totals for spring chinook for Lower Granite are higher than year-to-date totals for Little Goose Dam because of several missing count days in the database.

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
05/14/04	127.4	0.0	126.2	0.0	137.7	8.5	137.4	27.5	145.1	24.9	148.1	20.1	149.4	92.3
05/15/04	112.3	0.0	111.1	0.0	121.1	8.3	117.8	23.5	125.9	21.2	126.6	9.3	130.0	80.8
05/16/04	95.2	0.0	97.3	0.0	107.8	8.4	111.5	21.4	117.9	19.1	129.3	0.0	138.1	85.9
05/17/04	114.2	0.0	121.2	0.0	132.1	8.6	130.5	30.8	136.6	26.4	137.7	11.3	134.8	83.7
05/18/04	127.2	0.0	123.6	0.0	133.0	8.6	131.5	33.8	138.0	28.3	138.6	19.9	138.9	86.2
05/19/04	102.7	0.0	116.4	0.0	130.4	8.8	132.7	34.9	139.2	29.8	144.6	20.3	145.1	90.0
05/20/04	95.0	0.0	95.4	0.0	108.1	8.0	111.2	31.4	120.5	27.4	130.8	19.4	136.2	84.4
05/21/04	103.8	0.0	99.6	0.0	112.3	8.0	114.0	30.6	122.6	26.7	123.6	19.2	122.0	75.7
05/22/04	77.8	0.0	87.6	0.0	103.9	7.9	106.9	25.8	115.3	21.0	119.5	9.2	125.6	77.8
05/23/04	72.8	0.0	71.6	0.0	85.4	6.5	86.1	22.8	94.0	20.5	104.5	0.0	123.5	76.6
05/24/04	100.3	0.0	99.5	0.0	116.0	7.6	117.1	32.4	125.6	27.7	118.0	11.1	95.3	59.2
05/25/04	105.5	0.0	107.0	0.0	121.9	7.8	123.9	29.7	130.7	26.9	136.9	20.1	138.2	85.3
05/26/04	119.8	0.0	113.2	0.0	126.0	8.4	120.7	29.6	127.5	25.5	129.0	19.8	133.2	82.8
05/27/04	112.6	0.0	117.5	0.0	133.4	8.5	134.9	30.9	142.3	27.1	146.3	20.7	144.6	89.6

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
05/14/04	4.1	0.0	15.2	15.7	59.5	0.0	58.5	0.0	60.0	5.9	64.7	54.5		
05/15/04	2.2	0.0	15.0	16.8	57.9	0.0	58.4	0.0	62.3	0.0	64.4	42.4		
05/16/04	2.2	0.0	13.8	17.4	55.9	0.0	56.3	0.0	58.2	0.0	62.1	44.9		
05/17/04	4.2	0.0	15.5	18.9	68.2	0.0	68.7	0.0	72.8	0.0	74.1	65.6		
05/18/04	4.3	0.0	14.0	14.7	64.9	0.0	64.4	0.0	65.1	0.0	66.4	58.8		
05/19/04	4.2	0.0	14.8	13.1	67.7	0.0	67.2	0.0	71.7	0.0	75.0	43.6		
05/20/04	3.8	0.0	16.6	14.6	75.5	0.0	75.2	0.0	78.6	0.0	79.0	42.0		
05/21/04	4.1	0.0	16.5	17.0	77.6	0.0	78.2	0.0	83.1	0.0	84.5	75.6		
05/22/04	2.2	0.0	15.8	15.0	83.6	0.0	83.5	0.0	88.7	0.0	86.4	75.5		
05/23/04	2.2	0.0	17.3	17.0	84.6	0.0	83.0	0.0	86.4	0.0	88.8	53.9		
05/24/04	7.5	0.0	16.7	19.6	89.7	0.0	89.9	0.0	97.0	0.0	96.7	45.0		
05/25/04	9.6	0.0	17.8	19.6	86.7	0.0	87.4	0.0	94.0	0.0	95.9	73.6		
05/26/04	9.6	0.0	15.8	19.0	84.2	0.0	84.8	0.0	90.5	0.0	92.8	84.6		
05/27/04	11.8	2.2	---	---	92.8	4.4	93.7	0.0	99.9	0.0	101.3	51.2		

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		
05/14/04	209.2	86.1	206.0	63.6	201.9	79.6	225.9	94.6	15.4	104.5
05/15/04	200.6	86.2	188.4	46.9	197.3	77.7	232.0	92.5	17.5	110.6
05/16/04	188.9	80.4	181.4	49.3	182.6	72.0	208.3	93.8	8.2	94.9
05/17/04	204.1	88.4	207.6	56.5	212.5	84.5	240.7	94.7	22.5	112.1
05/18/04	208.7	89.6	196.1	52.4	199.9	77.3	230.2	95.1	10.6	113.1
05/19/04	207.1	90.0	213.6	58.7	216.4	85.5	232.9	96.2	19.2	106.1
05/20/04	234.3	99.8	220.6	62.8	224.9	88.3	255.8	95.9	27.9	120.6
05/21/04	215.3	92.2	210.5	55.6	218.8	87.4	253.4	95.8	32.0	114.2
05/22/04	214.9	90.1	217.4	59.8	215.7	85.2	232.2	96.7	12.5	111.5
05/23/04	212.6	91.9	211.9	65.8	215.4	83.5	252.4	99.1	28.5	113.4
05/24/04	209.0	91.9	223.7	63.2	230.6	90.8	261.9	101.3	35.9	113.2
05/25/04	207.3	91.4	215.0	56.7	221.7	87.0	244.4	101.0	20.9	111.1
05/26/04	234.3	106.6	231.2	58.5	237.3	92.9	249.6	99.5	21.1	117.7
05/27/04	201.8	91.4	244.6	62.6	257.7	100.4	286.0	98.4	49.4	126.7

HATCHERY RELEASE LAST TWO WEEKS

Hatchery Release Summary								
From:	5/14/2004		to	5/27/2004				
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2004	200,000	05-21-04	05-31-04	Pittsburg Landing Acclim P
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2004	500,000	05-21-04	05-31-04	Cpt John Acclim Pond
Nez Perce Tribe Total					700,000			
Umatilla Tribe	Umatilla Hatchery	CH0	FA	2004	304,000	05-20-04	05-31-04	Thornhollow Acclim Pond
Umatilla Tribe	Umatilla Hatchery	CH0	FA	2004	304,000	05-20-04	05-31-04	Umatilla River
Umatilla Tribe Total					608,000			
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	ST	SU	2004	192,000	04-19-04	05-14-04	Chiwawa Hatchery
Washington Dept. of Fish and Wildlife	Klickitat Hatchery	CO	UN	2004	943,000	05-17-04	05-28-04	Klickitat Hatchery
Washington Dept. of Fish and Wildlife Total					1,135,000			
Yakama Tribe	Little White Salmon NFH	CH0	FA	2004	1,700,000	05-17-04	05-31-04	Prosser Acclim Pond
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2004	180,000	05-12-04	05-31-04	Prosser Acclim Pond
Yakama Tribe Total					1,880,000			
Grand Total					4,323,000			

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

HATCHERY RELEASE NEXT TWO WEEKS

Hatchery Release Summary								
From:	5/28/2004		to	6/10/2004				
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite
Idaho Dept. of Fish and Game	Oxbow-Idaho	CH0	FA	2004	10,000	05-28-04	05-28-04	Hells Canyon Dam
Idaho Dept. of Fish and Game	Oxbow-Idaho	CH0	FA	2004	170,000	06-01-04	06-04-04	Pittsburg Landing Acclim P
Idaho Dept. of Fish and Game Total					180,000			
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2004	200,000	05-21-04	05-31-04	Pittsburg Landing Acclim P
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2004	500,000	05-21-04	05-31-04	Cpt John Acclim Pond
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2004	500,000	05-31-04	06-10-04	Big Canyon (Clearwater R)
Nez Perce Tribe Total					1,200,000			
Umatilla Tribe	Umatilla Hatchery	CH0	FA	2004	304,000	05-20-04	05-31-04	Thornhollow Acclim Pond
Umatilla Tribe	Umatilla Hatchery	CH0	FA	2004	304,000	05-20-04	05-31-04	Umatilla River
Umatilla Tribe Total					608,000			
Washington Dept. of Fish and Wildlife	Klickitat Hatchery	CO	UN	2004	943,000	05-17-04	05-28-04	Klickitat Hatchery
Washington Dept. of Fish and Wildlife Total					943,000			
Yakama Tribe	Little White Salmon NFH	CH0	FA	2004	1,700,000	05-17-04	05-31-04	Prosser Acclim Pond
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2004	180,000	05-12-04	05-31-04	Prosser Acclim Pond
Yakama Tribe Total					1,880,000			
Grand Total					4,811,000			

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

Gas Bubble Trauma Monitoring Results from Representative Sites on the Snake River and Columbia River

Site	Date	Species	Number of Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank			
								Rank 1	Rank 2	Rank 3	Rank 4
McNary Dam											
	05/20/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/24/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	05/18/04	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	05/23/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/25/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Rock Island Dam											
	05/20/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/24/04	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/27/04	Chinook + Steelhead	100	2	2	2.00%	0.00%	2	0	0	0

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	<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>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
5/14	---	---	---	0	114	115	118	24	108	109	109	21	107	107	108	24	106	106	107	23
5/15	---	---	---	0	114	116	117	24	109	109	110	24	107	108	109	24	107	107	108	23
5/16	---	---	---	0	116	117	120	24	109	109	110	24	107	108	109	24	107	107	109	23
5/17	---	---	---	0	117	120	121	24	109	109	110	24	107	108	109	23	106	107	107	23
5/18	---	---	---	0	115	118	119	24	109	110	110	24	108	108	110	24	107	107	108	23
5/19	---	---	---	0	115	118	119	24	109	109	110	24	107	108	109	24	107	107	108	23
5/20	---	---	---	0	115	117	118	24	108	109	109	24	107	108	108	24	107	107	108	23
5/21	---	---	---	0	115	118	121	24	109	109	109	24	108	108	109	24	107	108	108	23
5/22	---	---	---	0	115	118	122	24	109	109	110	24	108	108	109	24	108	108	108	23
5/23	---	---	---	0	113	114	116	24	108	108	109	24	107	108	108	24	107	107	108	23
5/24	---	---	---	0	116	119	121	21	108	108	108	24	107	107	108	24	106	107	107	23
5/25	---	---	---	0	116	118	120	24	108	109	109	24	107	108	109	24	107	108	108	23
5/26	---	---	---	0	117	118	119	24	109	109	110	24	108	108	110	24	108	108	109	23
5/27	---	---	---	0	118	121	121	24	109	109	109	24	108	108	110	24	107	108	108	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>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
5/14	106	107	108	23	106	106	106	24	108	108	108	24	107	108	109	24	110	110	111	24
5/15	107	108	109	23	106	107	107	24	108	108	109	24	108	109	109	24	110	110	111	24
5/16	108	108	109	23	106	107	107	24	108	109	110	24	108	108	108	24	109	110	111	24
5/17	107	108	108	23	106	107	107	24	108	108	109	24	108	108	109	24	110	111	112	24
5/18	107	108	108	23	107	107	108	24	109	109	110	24	109	109	109	24	111	112	112	24
5/19	107	107	109	23	107	107	107	24	109	109	109	24	109	109	109	22	111	112	113	22
5/20	108	109	110	23	107	108	108	24	109	109	110	24	109	109	109	24	111	112	112	24
5/21	108	108	109	23	107	108	108	24	109	110	110	24	110	110	110	24	112	113	113	24
5/22	109	109	110	23	107	108	108	23	109	109	110	23	110	110	110	24	111	112	113	24
5/23	108	108	109	23	106	107	110	24	108	108	109	24	108	108	109	24	110	110	111	24
5/24	107	107	108	23	107	107	108	24	108	109	109	24	107	108	108	23	111	111	112	23
5/25	107	108	109	23	107	107	108	24	109	109	109	24	109	109	110	24	111	112	113	24
5/26	108	108	109	23	108	108	108	24	109	109	110	24	110	110	110	24	112	113	113	24
5/27	108	109	110	23	107	107	108	22	109	109	109	22	109	109	109	24	111	112	114	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>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
5/14	110	111	111	24	115	116	117	24	112	113	114	23	116	116	118	23	113	114	115	23
5/15	111	111	112	24	115	116	117	24	113	113	114	23	115	117	118	23	115	115	115	23
5/16	110	110	112	24	114	115	116	24	111	112	112	23	111	112	112	23	111	113	116	23
5/17	110	110	111	24	115	116	117	24	111	112	113	23	113	114	117	23	110	110	111	23
5/18	111	112	112	24	116	117	118	24	---	---	---	0	---	---	---	0	---	---	---	0
5/19	111	111	112	22	116	117	117	22	111	112	114	23	114	115	117	23	113	114	114	23
5/20	112	112	113	24	116	117	118	24	113	113	114	23	116	117	117	23	114	115	116	23
5/21	111	112	113	24	116	117	118	24	113	114	115	23	117	117	118	23	115	115	116	23
5/22	111	111	112	24	116	116	117	24	112	112	113	23	114	116	117	23	113	114	115	23
5/23	110	110	111	24	115	116	118	24	111	112	112	23	111	111	112	23	111	112	113	23
5/24	110	110	111	23	115	116	118	23	---	---	---	0	---	---	---	0	---	---	---	0
5/25	111	112	112	24	116	117	119	24	113	113	114	23	117	117	118	23	115	117	119	23
5/26	112	112	112	24	116	117	119	23	112	112	113	23	116	116	117	23	115	115	117	23
5/27	111	111	112	24	116	117	118	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	Priest R. Dnst				Pasco				Dworshak				Clrwtr-Peck				Anatone			
	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr	
5/14	119	120	120	23	114	115	115	24	99	100	101	24	102	102	103	24	103	103	103	24
5/15	119	119	120	23	114	114	115	24	100	100	101	24	101	102	102	24	103	103	103	24
5/16	118	119	119	23	113	114	114	24	99	100	100	24	101	101	101	24	102	103	103	24
5/17	117	118	118	23	114	114	115	24	100	101	101	24	102	103	104	24	103	104	105	24
5/18	---	---	---	0	112	113	114	24	100	100	102	24	101	101	102	24	103	103	103	24
5/19	118	119	119	23	112	114	115	24	99	100	100	24	101	102	102	24	103	103	104	24
5/20	119	119	119	23	114	115	116	24	99	100	100	24	102	103	103	24	103	104	105	24
5/21	118	119	120	23	114	115	116	24	100	100	101	24	101	101	102	24	103	103	104	24
5/22	118	118	119	23	112	113	114	24	100	100	101	24	101	101	102	24	103	103	104	24
5/23	117	118	118	23	111	112	113	24	100	100	101	24	101	101	102	24	103	103	103	24
5/24	---	---	---	0	112	113	113	24	100	102	103	24	101	102	103	24	103	104	105	24
5/25	118	119	120	23	112	113	113	24	102	102	103	17	102	103	103	24	104	104	105	24
5/26	119	119	120	23	112	112	113	24	103	103	103	24	102	102	102	24	103	103	104	24
5/27	---	---	---	0	112	113	113	24	106	110	112	24	102	104	104	24	103	103	104	24

Total Dissolved Gas Saturation Data at Snake River Sites

Date	Clrwtr-Lewiston				Lower Granite				L. Granite Tlwr				Little Goose				L. Goose Tlwr			
	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr	
5/14	102	103	104	24	101	102	102	24	101	101	101	24	102	102	104	24	101	102	102	24
5/15	101	102	103	24	103	103	104	24	102	103	103	24	103	104	104	24	102	102	103	24
5/16	101	101	101	24	103	103	104	24	103	103	104	24	102	102	103	24	102	102	102	24
5/17	102	103	104	24	104	105	107	24	103	104	105	24	103	105	107	24	102	102	102	24
5/18	101	101	102	24	103	103	104	24	103	103	104	24	102	102	103	24	102	102	102	24
5/19	101	102	103	24	103	103	105	24	102	102	103	24	102	103	103	24	102	102	103	24
5/20	102	103	103	24	103	104	104	24	103	103	104	24	104	104	104	24	103	104	104	24
5/21	101	101	102	24	103	103	104	24	102	103	103	24	103	103	104	24	103	103	104	24
5/22	101	101	102	24	103	104	104	24	103	103	103	24	103	103	103	24	103	103	103	24
5/23	100	101	102	24	102	103	103	24	102	103	103	24	102	102	103	24	102	102	103	24
5/24	101	102	103	24	102	102	104	24	101	101	102	24	101	102	102	24	101	102	102	24
5/25	102	103	104	24	102	103	104	24	102	102	103	24	102	103	103	24	102	102	103	24
5/26	101	102	102	24	104	104	104	24	103	104	104	24	103	103	103	24	102	103	103	24
5/27	101	102	103	24	104	104	105	24	105	106	107	24	102	102	104	24	102	102	103	24

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

Date	Lower Mon.				L. Mon. Tlwr				Ice Harbor				Ice Harbor Tlwr				McNary-Oregon			
	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#	24 h		12 h		#
	Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr		Avg	Avg	High	hr	
5/14	101	102	102	24	106	110	118	24	113	114	115	24	117	117	117	24	112	114	116	24
5/15	102	102	103	24	102	102	102	24	115	115	116	24	113	114	117	24	112	113	115	24
5/16	102	102	102	24	102	102	102	24	113	114	115	24	112	113	113	24	114	116	117	24
5/17	103	103	106	24	102	102	103	24	106	107	108	24	116	118	120	24	115	116	118	24
5/18	103	103	104	24	102	103	103	24	103	103	103	24	117	118	119	24	112	112	113	24
5/19	102	102	103	24	102	102	103	24	102	102	103	24	113	114	116	24	112	113	115	24
5/20	103	103	103	24	103	103	104	22	102	103	103	24	113	113	114	24	112	114	116	24
5/21	104	104	104	24	104	104	105	24	103	103	104	24	117	119	120	24	112	114	115	24
5/22	104	104	105	24	104	104	104	24	103	104	104	24	119	119	120	24	111	111	112	24
5/23	103	104	104	24	103	103	103	24	104	104	105	24	115	116	120	24	110	111	112	24
5/24	102	103	105	24	102	102	102	22	103	103	104	24	113	113	114	24	111	113	115	24
5/25	102	102	103	24	102	102	103	24	103	103	104	24	118	119	120	24	112	114	116	24
5/26	103	103	103	24	103	103	103	24	103	103	104	24	119	120	121	24	111	111	111	24
5/27	102	103	103	24	102	103	103	24	102	102	102	24	115	116	118	24	110	110	111	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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>AVG</u>	<u>High</u>	<u>#</u>
	<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
5/14	113	114	115	24	115	118	119	24	108	108	109	23	113	117	118	24	111	114	116	23
5/15	113	114	115	24	116	118	119	24	108	109	109	23	112	117	118	24	111	113	114	23
5/16	114	114	114	24	116	118	119	24	108	109	109	23	112	117	118	24	108	110	112	23
5/17	114	115	116	24	116	119	119	24	110	111	112	23	113	117	118	24	111	114	116	23
5/18	112	112	112	24	115	118	119	24	112	112	112	23	114	117	118	24	111	112	114	23
5/19	112	112	113	24	115	119	120	24	111	111	111	23	114	117	118	24	109	111	112	23
5/20	112	113	114	24	116	119	119	24	110	110	110	23	113	117	118	24	112	114	116	23
5/21	111	112	112	24	115	119	119	24	110	110	110	23	113	117	118	24	111	112	113	23
5/22	111	111	112	24	115	119	120	24	109	109	110	23	113	117	119	24	109	111	113	23
5/23	110	110	110	24	114	119	119	24	107	107	108	23	112	117	118	24	110	112	114	23
5/24	111	111	113	24	115	119	120	24	108	108	109	23	113	117	119	24	111	115	116	23
5/25	112	113	114	24	116	119	121	21	109	109	109	23	113	116	118	24	111	114	116	23
5/26	112	112	113	24	117	120	121	24	109	109	109	23	113	117	119	24	110	112	113	23
5/27	110	110	111	24	116	120	121	24	108	109	110	23	113	117	119	23	110	112	115	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>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>
	<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
5/14	116	117	117	24	113	114	114	23	115	116	117	23	113	115	117	24
5/15	115	116	118	24	112	112	113	23	114	115	117	23	112	113	113	24
5/16	114	115	116	24	110	110	111	23	114	115	117	23	112	114	115	24
5/17	115	116	117	24	111	112	113	23	114	115	116	23	112	114	116	24
5/18	115	116	118	24	111	112	112	23	114	115	117	23	111	112	114	24
5/19	114	115	115	24	109	109	109	23	113	114	116	23	111	113	115	24
5/20	116	117	118	24	109	110	111	23	113	114	116	23	111	113	115	24
5/21	115	116	118	24	110	110	110	23	112	113	115	23	110	111	112	24
5/22	114	115	116	24	109	110	110	23	112	114	116	23	109	110	111	24
5/23	115	116	117	24	110	110	111	23	112	113	115	23	110	111	113	24
5/24	115	117	118	24	111	112	112	23	114	115	117	23	112	114	116	24
5/25	117	117	118	24	114	114	115	23	115	116	119	23	113	116	118	24
5/26	115	116	117	24	113	113	113	23	114	116	118	23	113	113	114	24
5/27	115	116	118	24	111	111	111	23	113	114	116	23	111	112	113	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)	
05/14/2004	*	0	15	91	12	4	24,030	47,018	11,691	281	1,794	25,564	14,857
05/15/2004		---	---	73	---	---	24,323	36,401	14,407	263	104,734	32,889	14,543
05/16/2004	*	---	---	73	---	---	22,521	27,411	27,406	211	5,025	29,568	18,184
05/17/2004	*	0	2	56	30	5	27,447	21,000	5,442	432	65,651	40,336	11,129
05/18/2004	*	0	6	23	17	9	17,116	55,713	8,967	56	1,830	39,988	13,032
05/19/2004	*	0	9	23	19	6	25,671	22,802	9,492	119	52,766	49,576	21,325
05/20/2004	*	0	0	12	102	37	25,075	27,303	6,039	138	1,466	59,996	26,065
05/21/2004	*	0	8	0	63	43	28,805	30,207	11,360	172	36,593	47,401	27,752
05/22/2004	*	---	---	---	---	---	31,792	18,503	6,441	102	---	43,582	29,123
05/23/2004	*	---	---	---	---	---	27,762	13,701	7,761	126	21,871	28,706	28,851
05/24/2004	*	1	5	---	29	35	38,656	11,301	5,419	155	---	10,118	21,835
05/25/2004	*	0	7	---	21	68	16,268	14,801	4,381	129	34,029	6,911	1,548
05/26/2004	*	1	2	6	36	139	15,424	20,600	3,150	125	---	7,595	15,656
05/27/2004	*	0	0	10	15	103	8,132	9,600	2,900	79	19,641	17,130	19,283
<hr/>													
Total:		2	54	367	344	449	333,022	356,361	124,856	2,388	345,400	439,360	263,183
# Days:		10	10	10	10	10	14	14	14	14	11	14	14
Average:		0	5	37	34	45	23,787	25,454	8,918	171	31,400	31,383	18,799
YTD		743	29,063	72,927	9,810	1,934	5,085,951	2,574,188	885,745	11,534	961,765	865,595	1,258,057

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)	
05/14/2004	*	9	0	0	2	11	0	201	1,232	26	79	75	5,278
05/15/2004		---	---	1	---	---	0	202	1,267	14	3,084	95	10,061
05/16/2004	*	---	---	0	---	---	0	200	3,515	15	80	71	7,437
05/17/2004	*	8	0	1	15	15	0	200	1,479	11	2,398	112	4,115
05/18/2004	*	2	0	0	21	11	0	100	2,844	101	96	256	4,492
05/19/2004	*	6	0	0	16	4	0	133	1,373	108	5,061	320	4,180
05/20/2004	*	37	0	0	9	101	149	0	959	109	101	393	5,677
05/21/2004	*	26	0	0	1	35	0	0	478	34	5,545	810	8,697
05/22/2004	*	---	---	---	---	---	0	0	628	58	---	892	6,472
05/23/2004	*	---	---	---	---	---	299	100	1,445	30	5,555	1,047	8,192
05/24/2004	*	8	0	---	0	73	149	200	2,162	30	---	1,189	10,190
05/25/2004	*	64	0	---	1	38	149	100	502	83	10,870	707	583
05/26/2004	*	55	0	0	0	33	448	100	100	57	---	446	12,351
05/27/2004	*	5	0	0	0	36	149	200	250	95	17,879	1,235	12,165
<hr/>													
Total:		220	0	2	65	357	1,343	1,736	18,234	771	50,748	7,648	99,890
# Days:		10	10	10	10	10	14	14	14	14	11	14	14
Average:		22	0	0	7	36	96	124	1,302	55	4,613	546	7,135
YTD		440	0	27	78	748	5,655	3,337	38,354	2,177	65,493	8,435	2,006,591

* 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)	
05/14/2004	*	0	0	0	0	9,403	3,001	348	975	165	4,967	5,40	
05/15/2004		---	---	0	---	4,776	1,000	624	1,268	2,387	6,244	9,99	
05/16/2004	*	---	---	0	---	3,433	200	463	1,059	112	3,144	10,14	
05/17/2004	*	0	0	0	0	9,403	400	207	1,045	1,476	623	8,08	
05/18/2004	*	0	0	0	0	2,686	1,200	356	292	130	4,487	4,57	
05/19/2004	*	0	0	0	1	5,821	1,333	153	1,000	6,141	4,387	10,76	
05/20/2004	*	0	0	0	6	7,015	500	101	144	331	3,427	15,60	
05/21/2004	*	0	0	0	5	13,582	1,800	263	1,208	5,681	5,635	23,68	
05/22/2004	*	---	---	---	---	21,791	1,000	32	1,254	---	3,714	28,82	
05/23/2004	*	---	---	---	---	12,687	1,300	238	1,512	2,907	9,616	53,72	
05/24/2004	*	0	0	---	0	20,747	4,700	45	1,337	---	9,439	27,50	
05/25/2004	*	0	0	---	0	9,552	10,400	364	1,353	4,012	3,426	2,87	
05/26/2004	*	0	0	0	0	14,179	6,000	450	1,259	---	3,120	18,71	
05/27/2004	*	0	0	0	0	6,568	4,400	350	820	5,375	3,731	22,06	
<hr/>													
Total:		0	0	0	0	16	141,643	37,234	3,994	14,526	28,717	65,960	241,97
# Days:		10	10	10	10	10	14	14	14	14	11	14	1
Average:		0	0	0	0	2	10,117	2,660	285	1,038	2,611	4,711	17,28
YTD		0	0	0	0	43	225,936	42,834	4,895	19,772	36,530	90,666	827,12

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)	
05/14/2004	*	0	46	574	3	176	60,000	72,203	4,251	404	1,301	7,607	2,91
05/15/2004		---	---	643	---	---	107,761	45,601	5,409	526	12,974	7,338	9,72
05/16/2004	*	---	---	789	---	---	41,344	10,202	4,190	358	713	4,985	8,32
05/17/2004	*	1	54	2,495	13	300	225,373	15,401	2,258	219	5,720	5,058	7,23
05/18/2004	*	1	96	587	7	106	83,880	14,802	3,794	116	890	10,613	2,97
05/19/2004	*	1	31	299	14	70	72,537	33,878	2,625	69	5,962	12,784	5,45
05/20/2004	*	0	65	152	90	107	51,791	13,400	4,704	20	228	8,148	8,13
05/21/2004	*	0	8	0	72	149	72,985	26,613	4,407	164	1,621	10,233	3,79
05/22/2004	*	---	---	---	---	---	349,702	6,302	2,769	208	---	8,592	4,65
05/23/2004	*	---	---	---	---	---	196,268	8,902	8,741	284	2,116	21,752	5,55
05/24/2004	*	1	2	---	21	125	294,925	28,605	5,128	259	---	26,979	3,46
05/25/2004	*	0	5	---	18	121	76,567	59,403	13,276	247	1,871	10,483	15
05/26/2004	*	0	0	102	28	27	50,896	37,805	3,500	241	---	5,493	4,90
05/27/2004	*	2	7	197	19	17	58,507	35,905	2,650	129	1,601	6,478	4,57
<hr/>													
Total:		6	314	5,838	285	1,198	1,742,536	409,022	67,702	3,244	34,997	146,543	71,87
# Days:		10	10	10	10	10	14	14	14	14	11	14	1
Average:		1	31	584	29	120	124,467	29,216	4,836	232	3,182	10,467	5,13
YTD		193	2,106	34,808	1,695	8,286	5,510,996	1,531,537	252,162	9,227	107,918	209,345	133,56

* See sampling comments

Two-Week Summary of Passage Indices

		COMBINED SOCKEYE											
		ENT	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
05/14/2004	*	0	4	0	0	0	597	0	0	246	362	626	450
05/15/2004		---	---	0	---	---	448	0	2	143	12,684	922	703
05/16/2004	*	---	---	0	---	---	298	0	100	81	990	1,106	1,180
05/17/2004	*	1	0	0	0	1	299	0	0	112	7,930	2,457	1,034
05/18/2004	*	0	0	0	0	0	0	0	101	182	416	2,211	890
05/19/2004	*	0	0	0	0	1	149	0	1	81	17,908	8,161	2,634
05/20/2004	*	0	0	0	0	2	0	300	3	14	2,575	7,485	3,653
05/21/2004	*	0	0	0	0	2	448	100	102	42	18,166	7,627	6,874
05/22/2004	*	---	---	---	---	---	747	200	30	53	---	6,677	7,151
05/23/2004	*	---	---	---	---	---	597	0	6	93	8,380	10,728	10,285
05/24/2004	*	0	0	---	0	1	298	100	3	46	---	13,235	7,000
05/25/2004	*	0	0	---	0	1	0	800	42	54	22,920	7,304	449
05/26/2004	*	0	0	0	0	0	299	400	0	44	---	4,194	4,690
05/27/2004	*	0	0	0	0	0	149	100	50	30	15,000	5,390	7,403

Total:		1	4	0	0	8	4,329	2,000	440	1,221	107,331	78,123	54,396
# Days:		10	10	10	10	10	14	14	14	14	11	14	14
Average:		0	0	0	0	1	309	143	31	87	9,757	5,580	3,885
YTD		1	9	0	0	21	5,520	3,224	528	6,569	135,081	83,118	58,017

* 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
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse 2 Flow} / (\text{Powerhouse 1 \& 2 Flow} + \text{Spill}) \}$
- MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse 2 Flow} / (\text{Powerhouse 1 \& 2 Flow} + \text{Spill}) \}$
- BO1 (Index) = Bonneville Dam First Powerhouse Bypass Collection System : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse 1 Flow} / (\text{Powerhouse 1 \& 2 Flow} + \text{Spill}) \}$

JDA and BO2 data collected for the FPC by Pacific States Marine Fisheries Commission.
 RIS data collected for the FPC by Chelan Co. PUD/Washington Dept. of Fish and Wildlife.
 LGR, LMN, and MCN data collected for the FPC by Washington Dept. of Fish and Wildlife.
 LGS and GRN data collected for the FPC by Oregon Dept. of Fish and Wildlife.
 IMN data collected for the FPC by the Nez Perce Tribe. ENT data collected for the FPC by USFWS.

Two Week Transportation Summary

Source: Fish Passage Center

Updated:

5/28/04 8:42 AM

		05/15/04 TO 05/28/04					
Site	Data	Species					Grand Total
		CH0	CH1	CO	SO	ST	
LGR	Sum of NumberCollected	1,343	333,022	141,643	4,329	1,742,536	2,222,873
	Sum of NumberBarged	1,169	310,985	131,817	4,039	1,600,086	2,048,096
	Sum of NumberBypassed	163	20,945	9,655	278	141,660	172,701
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	11	1,092	171	12	790	2,076
LGS	Sum of NumberCollected	1,736	356,361	37,234	2,000	409,022	806,353
	Sum of NumberBarged	1,729	356,039	37,227	1,999	408,817	805,811
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	7	324	7	1	205	544
LMN	Sum of NumberCollected	17,912	121,799	3,903	440	66,590	210,644
	Sum of NumberBarged	17,907	118,710	3,901	440	65,330	206,288
	Sum of NumberBypassed	0	2,922	0	0	1,109	4,031
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	5	167	2	0	151	325
MCN	Sum of NumberCollected	28,050	194,337	16,015	59,734	19,785	317,921
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	27,984	184,246	16,003	59,507	19,346	307,086
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	66	587	12	227	43	935
Total Sum of NumberCollected		49,041	1,005,519	198,795	66,503	2,237,933	3,557,791
Total Sum of NumberBarged		20,805	785,734	172,945	6,478	2,074,233	3,060,195
Total Sum of NumberBypassed		28,147	208,113	25,658	59,785	162,115	483,818
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of TotalProjectMortalities		89	2,170	192	240	1,189	3,880

YTD Transportation Summary

Source: Fish Passage Center

Updated:

5/28/04 8:42 AM

TO: 05/28/04

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	4,688	4,769,745	224,497	5,385	5,413,790	10,418,105
	Sum of NumberBarged	4,268	4,552,274	210,719	4,889	5,110,618	9,882,768
	Sum of NumberBypassed	257	150,456	13,352	285	284,850	449,200
	Sum of NumberTrucked	129	43,991	220	181	15,496	60,017
	Sum of TotalProjectMortalities	34	23,024	206	30	2,826	26,120
LGS	Sum of NumberCollected	3,128	2,491,786	42,834	3,215	1,503,369	4,044,332
	Sum of NumberBarged	3,109	2,488,623	42,827	3,212	1,501,375	4,039,146
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of NumberTrucked	0	2,096	0	2	1,333	3,431
	Sum of TotalProjectMortalities	19	1,133	7	1	660	1,820
LMN	Sum of NumberCollected	30,959	817,236	4,704	525	204,056	1,057,480
	Sum of NumberBarged	30,943	808,234	4,702	525	200,924	1,045,328
	Sum of NumberBypassed	0	6,321	0	0	2,125	8,446
	Sum of NumberTrucked	10	1,352	0	0	604	1,966
	Sum of TotalProjectMortalities	6	1,329	2	0	403	1,740
MCN	Sum of NumberCollected	36,861	585,824	20,670	76,278	65,277	784,910
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	36,754	573,857	20,651	75,982	64,659	771,903
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of TotalProjectMortalities	108	2,454	19	296	222	3,099
Total Sum of NumberCollected		75,636	8,664,591	292,705	85,403	7,186,492	16,304,827
Total Sum of NumberBarged		38,320	7,849,131	258,248	8,626	6,812,917	14,967,242
Total Sum of NumberBypassed		37,011	730,634	34,003	76,267	351,634	1,229,549
Total Sum of NumberTrucked		139	47,439	220	183	17,433	65,414
Total Sum of TotalProjectMortalities		167	27,940	234	327	4,111	32,779

Cumulative Adult Passage at Mainstem Dams Through: 05/27

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	164,859	8,226	187,717	13,815	127,115	7,037	0	0	0	0	0	0	0	0	0	0	0	0
TDA	122,213	6,747	124,606	10,608	82,784	4,701	0	0	0	0	0	0	0	0	0	0	0	0
JDA	102,939	5,446	95,658	9,336	67,156	3,606	0	0	0	0	0	0	0	0	0	0	0	0
MCN	97,247	5,575	87,444	9,415	59,519	3,395	0	0	0	0	0	0	0	0	0	0	0	0
IHR	68,588	3,368	68,167	6,210	37,913	2,014	0	0	0	0	0	0	0	0	0	0	0	0
LMN	61,250	2,549	58,697	5,381	34,941	1,857	0	0	0	0	0	0	0	0	0	0	0	0
LGS	52,049	2,004	55,723	4,798	32,687	1,776	0	0	0	0	0	0	0	0	0	0	0	0
LWG	57,994	2,558	53,671	4,875	30,978	1,688	0	0	0	0	0	0	0	0	0	0	0	0
PRD	10,385	668	16,609	463	13,207	255	0	0	0	0	0	0	0	0	0	0	0	0
RIS	7,968	93	14,836	389	9,092	294	0	0	0	0	0	0	0	0	0	0	0	0
RRH	3,192	50	3,155	155	3,159	61	0	0	0	0	0	0	0	0	0	0	0	0
WEL	1,911	19	1,338	31	1,633	42	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	23	1	0	5,355	4,094	3,996	1,287
TDA	0	0	0	0	0	0	8	3	0	1,601	1,007	1,133	693
JDA	0	0	0	0	0	0	4	0	0	1,885	1,464	3,325	936
MCN	0	0	0	0	0	0	0	3	0	1,627	1,439	1,704	663
IHR	0	0	0	0	0	0	0	0	0	1,810	1,617	1,721	775
LMN	2	0	0	0	0	0	0	0	0	1,598	1,914	1,784	860
LGS	0	0	0	0	0	0	0	0	0	1,891	2,107	1,856	1,050
LWG	0	0	0	0	0	0	0	0	0	7,607	15,804	5,920	2,628
PRD	0	0	0	0	0	0	0	0	10	67	9	2	n/a
RIS	0	0	0	0	0	0	0	3	0	118	30	21	0
RRH	0	0	0	0	0	0	0	0	0	267	46	50	0
WEL	0	0	0	0	0	0	0	0	0	66	21	8	48

PRD is missing 5/9.

RIS/RRH are through 5/25; WEL is through 5/26.

**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: 05/28/04

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

