



## Fish Passage Center

# Weekly Report #05 - 13

June 03, 2005

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### Highlights:

- **Precipitation has been well above average over the first twenty-three days of May at most Columbia Basin locations.**
- **Water Supply Forecasts have increased between 3% and 17% of average between the May Final and June Early-Bird Forecasts.**
- **Since April 3rd, 2005, flows at Lower Granite have averaged 68.5 Kcfs; over the last week flows have averaged 85.7 Kcfs.**
- **Flows at McNary Dam have averaged 196.5 Kcfs since April 10th and flows at Priest Rapids have averaged 115.9 Kcfs; over the last week flows have averaged 228.5 Kcfs at McNary and 133.2 at Priest Rapids.**
- **Spill at The Dalles Dam averaged only 32% of average daily flow as compared to the 40% specified in the Biological Opinion due to facility restrictions. Some daytime spill at John Day Dam was provided until May 30 to increase spillway passage at this project compensating for some of the loss at The Dalles.**

### Summary of Events:

**Water Supply:** Precipitation has been well above average over the first twenty-three days of May at most Columbia Basin locations. Of the sites in Table 1, twelve recorded precipitation that was greater than average over the first half of May and six sites had precipitation that was greater than 200% of average. Over the entire water year, precipitation remains below average at most locations.

**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 2005 May 1-23		Water Year 2005 October 1, 2004 to May 23, 2005	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	2.05	124	15.13	86
SNAKE RIVER Above Ice Harbor	3.44	245	13.25	101
Columbia Above The Dalles	2.70	185	15.14	87
Kootenai	2.12	129	14.51	81
Clark Fork	2.35	154	9.36	80
Flathead	1.57	87	14.0	90
Pend Oreille/Spokane	3.12	161	21.31	87
Central Washington	1.49	260	5.66	79
SNAKE RIVER Plain	3.28	299	10.38	126
Salmon/Boise/Payette	3.16	238	13.05	83
Clearwater	4.73	210	20.7	88
SW Washington Cascades/Cowlitz	5.43	193	45.2	73
Willamette Valley	5.47	209	35.9	68

Snowpack in the Columbia River for basins above the Snake River confluence is 22% of average, for Snake River Basins the average snowpack 28% of average, and for lower Columbia Basins between McNary and Bonneville Dam average snowpack 2% of average.

Water Supply Forecasts have increased between 3% and 17% of average between the May Final and June Early-Bird Forecasts. Table 2 displays the May Final and June Early-Bird Final runoff volume forecasts for multiple reservoirs along with runoff volumes that actually occurred in 2001 for comparison. All forecasts are currently above the actual runoff volumes recorded in 2001.

**Table 2. May Final and the June Early-Bird Final Runoff Volume Forecasts for various reservoirs within the Columbia and Snake River Basins along with 2001 actual runoff volumes over the same periods.**

Location	May Final		June Early-Bird		Actual 2001
	% Average (1971-2000)	Probable Runoff Volume (Kaf)	% Average (1971-2000)	Probable Runoff Volume (Kaf)	Actual Runoff Volume (Kaf)
The Dalles (Jan-July)	70	74700	75	80900	58200
Grand Coulee (Jan-July)	83	52200	86	54300	37400
Libby Res. Inflow, MT (Jan-July)	78	4910	85	5340	3341
Hungry Horse Res. Inflow, MT (Jan-July)	77	1720	80	1780	1300
Lower Granite Res. Inflow (Apr- July)	55	11800	69	14800	10300
Brownlee Res. Inflow (Apr-July)	39	2440	56	3550	1970*
Dworshak Res. Inflow (Apr-July)	60	1670	73	1940	1470

The Spring Flow Objective period started in the Lower Snake River on April 3rd, 2005. Based on the April Final Forecast at Lower Granite (Apr-July), the flow objective is 85 Kcfs at Lower Granite through June 20th. Since April 3rd, 2005, flows at Lower Granite have averaged 68.5 Kcfs; over the last week flows have averaged 85.7 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. Flows at McNary Dam have averaged 196.5 Kcfs since April 10th and flows at Priest Rapids have averaged 115.9 Kcfs; over the last week flows have averaged 228.5 Kcfs at McNary and 133.2 at Priest Rapids.

Grand Coulee Reservoir is currently at an elevation of 1269.2 feet (June 2nd, 2005 midnight) and has refilled 3.4 feet in the last week.

The Libby Reservoir is currently at elevation 2440.1 feet and refilled 3.4 feet over the last week. Outflows at Libby have been steadily decreasing over the last week and are currently 15 Kcfs.

The Hungry Horse Reservoir is currently at an elevation of 3556.3 feet and refilled approximately 3.3 feet last week. Outflows at Hungry Horse have ranged between 3.7 and 4.7 Kcfs.

The Dworshak reservoir is currently at an elevation of 1598.3 feet and refilled 2.3 feet last week. Outflows at Dworshak are currently 6.6 Kcfs and inflows are currently 9.4 Kcfs.

The Brownlee Reservoir was at an elevation of 2075.6 feet on June 2nd, 2005 with outflows ranging between 19.3 and 24.7 Kcfs over the last week.

**Spill:** Dworshak Dam outflow specifically for flow augmentation in the lower Snake River ended on May 18, 2005. The project is now operating for refill and power production. Spill at Lower Granite Dam occurred over the past week as excess to hydraulic capacity. There is one unit out at this project and some units were not available during certain times due to trash raking operations. Some limited spill occurred at Lower Monumental Dam as part of RSW placement testing. Spill at IHR was provided according to the protocol deter-

mined for RSW testing. Spill averaged 67% of daily average flows over the past 7 days, and ranged from 34% to 92%.

Biological Opinion spill in the lower Columbia River was initiated at McNary and John Day dams on April 10 and at The Dalles Dam on April 11, 2005. Spill at McNary Dam averaged 40% of daily average flow and spill at John Day Dam averaged 35% of daily average flow. Spill at both McNary and John Day dams are called for during nighttime hours. Spill at The Dalles Dam is being provided via fixed spill gate openings (dogged off) and variable gate operations of spillbays 1 and 2. This past week volumes have averaged much less (32%) than the 40% specified in the Biological Opinion. SOR # 2005-14 requested that daytime spill at John Day Dam continue through mid-June to increase spillway passage at this project to offset the decrease in spillway passage due to the fixed gate operations at The Dalles Dam. Daytime spill was provided through Monday, May 30, but was limited to 80 Kcfs due to the high dissolved gas levels observed when spill occurs between 80 and 120 Kcfs. Spill at Bonneville Dam averaged 40% of average daily flow over the past week.

A few fish with minor signs of gas bubble trauma were observed in the monitoring program over the past week.

**Smolt Monitoring:** Passage indices for subyearling Chinook increased rapidly this past week at Snake River SMP sites, while the number of summer migrants increased more slowly at Columbia River sites. At all SMP sites spring migrant indices declined again this week.

At Lower Granite Dam in the Lower Snake River the subyearling Chinook indices reached 290,000 on May 31 as early hatchery releases caused passage numbers to spike early at the project. Passage indices for yearling Chinook and steelhead decreased significantly this past week. The daily index for yearling Chinook averaged 10,000 this week compared to 13,000 last week while steelhead indices averaged 23,000 this week compared to 46,000 last week. Sockeye indices averaged 870 this past week, while coho

indices were at 800 this week down from 2,000 per day last week. Typically steelhead predominate the run into mid-June in the Lower Snake River. But, because spring migrants went out early and hatchery releases of subyearling Chinook were early as well, this is the first time we've seen subyearlings predominate in the run before June.

In the Mid-Columbia, at Rock Island Dam, indices for spring migrants were down as well compared to last week. yearling Chinook indices averaged 90 per day compared to 180 per day last week. Steelhead averaged 130 per day this week compared to 200 last week. Coho were down to 370 per day this week compared to 800 per day last week. Sockeye averaged 6 fish per day this week. Subyearling indices increased steadily all week climbing from 56 to 392 by the end of the week

At McNary Dam indices for subyearlings increased steadily this week with the index averaging 14,000 per day compared to 12,000 per day last week. As at other sites, the spring migrant indices declined again this week across the board. The yearling Chinook index was down to 5,400 on the last sampling date this week, while steelhead indices averaged 3,300 per day this week compared to 14,000 per day the previous week. The coho indices which were up to 7,700 per day last week, declined to 5,600 per day this week. Sockeye indices averaged 3,400 down from 8,400 last week.

John Day Dam and Bonneville Dam also saw decreasing indices for all spring migrants while subyearling indices rose to 3,700 per day at John Day on average and indices for subs at Bonneville averaged 12,400 this past week.

**Hatchery Releases** - Releases of juvenile salmonids from Columbia River Basin hatcheries above Bonneville Dam are estimated near 84.4 million for the 2005 migration season. The Zone Release Report below summarizes "planned" hatchery releases from State, Federal or Tribal hatcheries or acclimation ponds for this year's migration. These totals will be updated and finalized through the year.

**Hatchery Zone Release Report**

	Friday 03-Jun-2005			
	Snake River	Mid-Columbia	Lower Columbia	Total Release
Fall Chinook	4,915,386	12,656,000	21,574,276	39,145,662
Spring Chinook	9,438,991	4,695,625	5,174,243	19,308,859
Summer Chinook	2,348,012	3,454,509		5,802,521
Coho	810,338	2,464,348	5,149,446	8,424,132
Sockeye	209,046	592,459		801,505
Summer Steelhead	9,004,819	1,232,916	522,206	10,759,941
Winter Steelhead			118,300	118,300
<b>Total</b>	<b>26,726,592</b>	<b>25,095,857</b>	<b>32,538,471</b>	<b>84,360,920</b>

Hatcheries in the Columbia/Snake River basin released about 8.0 million fish during the past two weeks with approximately 14.6 million fish to be released during the upcoming two weeks. See the Hatchery Release Summary Tables for further details.

**Snake River** - Yearling Chinook, coho, sockeye and steelhead salmon releases from hatcheries in the Snake River basin are completed for the 2005 season. Subyearling Chinook have been released at Hells Canyon, Pittsburg Landing, CPT Johns, Nez Perce Tribal H, Lyons Ferry H and about 480,000 subyearling fall Chinook were released near the OR/WA border in the Grande Ronde River on 5/24 and 5/25. The NOAA Fisheries study will have releases of marked subyearling fall Chinook from Dworshak H (Lyons Ferry reared fish) that will be ongoing from mid-May through mid-June.

**Mid-Columbia** - All yearling spring and summer Chinook, coho, and steelhead juvenile migrants have been released from hatcheries for the 2005 season. The first group of subyearling Chinook from Wells Hatchery was released on May 18th with the remaining subyearling summer

Chinook scheduled for June and early July from Wells and Turtle Rock facilities. All subyearling fall Chinook in the Yakima River basin have been released to date. The Priest Rapids and Ringold Hatchery subyearling fall Chinook will be released in June with the released somewhat tied into marking wild fall Chinook in the Hanford Reach of the Columbia River.

**Lower Columbia** - Yearling fall and spring Chinook, coho salmon, and steelhead releases are completed for the season. All Tule fall Chinook have been released for the year with subyearling fall Chinook from the Umatilla River released in mid-May. Subyearling fall Chinook will be released in the Klickitat River and Drano Lake in June. Juvenile Sockeye were released mainly last summer and fall; the majority of these fish reside in the lake and then migrate from the lake and to the ocean the next spring (2005). In the Snake River basin, about 80,000 juvenile sockeye were released in the upper Salmon River in early May. A release of juvenile sockeye from the Canadian fisheries into Lake Skaha (located above Lake Osoyoos) was completed last summer with the 2006 migrant Sockeye released two weeks ago in Lake Skaha.

**Adult Fish Passage** -At Bonneville Dam, traditional count of adult spring Chinook ended on May 31 with traditional summer Chinook counts starting on June 1st. The daily counts averaged 1,435 fish/day through the week ending June 2nd. Adult spring Chinook totaled 75,148 through May 31, about 44.2% and 51.7% of the respective 2004 and 10-year average. The peak daily count was 1,789 on May 28, with the low count of 1,181 on June 2. The adult spring Chinook count at The Dalles Dam was 59,788, or 79.6% of the total past Bonneville Dam. Above McNary Dam, the split of adult Chinook into the Snake River is approaching 22,000 (Ice Harbor count) with about 10,500 into the upper Mid-Columbia (Priest Rapids count). In the Yakima River, about 4,700 adult spring Chinook were tallied at the Prosser site through May 26. The "jack" Chinook count at Bonneville Dam ended the spring season at 4,158 through May 31, about 46.8% and 50.6% of the respective 2004 and 10-

year average. Both percentages of the previous year and 10-year average were close to the adult percentage for the previous year (44%) and 10-year average (51.7%).

Numbers of new steelhead have been passing Bonneville Dam through the week with the final four days above 100 per day. A few of the steelhead with PIT tags indicated that a portion of the fish will be migrating to the mid-Columbia tributaries above Rock Island Dam. Some of these early migrating steelhead are still destined for the tributaries in the Bonneville pool area.

Adult sockeye salmon are just beginning to pass Bonneville with the first of these fish counted at McNary Dam on June 2nd. At present, the 79 counted at Bonneville are near the 10-year average of 81, but well below the 2004 count of 389.

Approximately 376,000 adult Shad have been counted at Bonneville Dam this season with daily counts between 20,000 to 66,000 for the week.

**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
05/20/05	111.2	0.0	110.4	0.0	120.8	8.7	122.1	31.1	127.5	25.1	126.5	9.5	133.5	82.2
05/21/05	88.2	0.0	88.6	0.0	97.0	7.8	98.5	25.6	102.8	22.4	126.8	9.4	124.1	75.2
05/22/05	74.3	0.0	89.3	6.6	101.2	7.9	104.9	23.0	107.7	20.0	123.7	9.2	124.4	73.4
05/23/05	116.6	0.0	106.2	0.0	114.7	16.3	112.5	0.0	115.0	26.8	108.3	8.8	114.4	71.0
05/24/05	120.5	0.0	120.9	0.0	128.8	11.5	125.5	0.0	130.9	26.1	117.4	9.4	118.1	72.7
05/25/05	120.5	0.0	120.9	0.0	128.8	11.5	125.5	0.0	130.9	26.1	117.4	9.4	118.1	72.7
05/26/05	161.7	0.0	163.3	1.0	168.9	24.4	164.2	5.4	170.5	28.1	160.0	19.0	162.3	99.2
05/27/05	161.7	0.0	163.3	1.0	168.9	24.4	164.2	5.4	170.5	28.1	160.0	19.0	162.3	99.2
05/28/05	140.4	0.1	155.1	0.0	177.1	26.8	179.6	37.9	181.1	27.5	190.3	26.9	188.2	115.2
05/29/05	103.1	0.1	101.3	0.0	112.2	10.9	111.3	21.4	115.2	21.7	117.0	10.0	128.8	78.1
05/30/05	72.4	0.1	74.9	0.0	80.1	8.3	79.3	14.8	85.6	17.4	91.6	10.1	96.7	57.7
05/31/05	96.1	0.1	101.6	0.0	106.0	9.4	106.0	25.2	109.3	22.6	103.8	9.3	98.7	59.4
06/01/05	145.2	0.1	138.5	0.0	147.4	11.4	140.6	0.3	145.7	29.4	145.2	9.2	144.9	88.8
06/02/05	102.2	0.2	105.4	0.0	122.0	16.6	121.3	0.0	132.4	30.4	138.3	9.3	153.7	94.1

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

Date	Dworshak		Hells Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
05/20/05	9.3	0.7	36.7	40.1	135.3	48.6	129.1	18.6	128.0	31.4	132.6	91.7
05/21/05	5.3	0.0	34.0	38.9	138.0	51.6	134.1	24.1	133.9	37.2	137.9	57.8
05/22/05	5.3	0.0	32.4	31.9	125.6	39.9	120.2	23.1	123.8	32.1	128.1	59.1
05/23/05	8.6	0.0	30.6	33.3	122.8	37.1	118.4	9.5	119.6	24.3	118.5	37.8
05/24/05	9.5	0.0	27.2	30.2	116.2	30.3	111.9	2.0	116.6	21.6	118.9	37.8
05/25/05	9.5	0.0	26.0	29.7	100.9	15.8	98.2	0.0	102.6	9.3	105.5	73.3
05/26/05	9.4	0.0	25.3	25.4	98.8	14.0	97.1	0.0	101.3	13.8	106.0	85.4
05/27/05	7.1	0.0	22.6	26.2	89.2	4.7	88.4	0.0	91.0	3.1	91.2	80.5
05/28/05	4.3	0.0	22.2	24.4	87.4	2.7	86.0	0.0	87.6	0.2	90.6	80.7
05/29/05	4.3	0.0	20.7	21.0	84.3	0.0	85.8	0.0	89.5	1.5	90.4	42.1
05/30/05	4.3	0.0	19.3	15.7	81.4	0.0	81.5	0.0	83.4	1.2	82.0	27.5
05/31/05	6.6	0.0	19.9	22.6	79.0	5.0	77.7	0.0	80.2	1.1	79.2	55.8
06/01/05	6.6	0.0	20.5	26.5	88.7	11.2	86.0	1.0	88.4	2.1	91.2	84.1
06/02/05	6.6	0.0	---	---	89.9	8.0	89.1	0.0	94.7	2.4	95.1	44.4

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

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
05/20/05	254.6	85.9	258.1	75.0	255.0	81.1	265.8	85.0	61.9	107.4
05/21/05	290.5	136.0	271.4	47.2	270.7	81.0	280.8	85.7	69.7	113.9
05/22/05	263.8	173.9	262.3	97.3	256.7	80.7	266.4	105.6	36.2	113.4
05/23/05	251.3	105.0	265.9	92.1	260.2	80.6	267.2	85.2	55.8	114.7
05/24/05	255.5	85.0	252.1	95.9	246.5	77.9	263.2	85.2	50.1	116.5
05/25/05	237.7	72.2	222.2	88.3	227.2	76.0	252.9	85.9	47.0	108.6
05/26/05	247.9	103.1	255.8	104.4	246.2	69.4	250.5	87.6	40.6	110.8
05/27/05	258.9	110.5	254.4	99.3	252.5	69.5	248.0	89.3	39.6	107.6
05/28/05	283.8	108.9	276.9	107.5	267.1	72.9	262.1	89.3	47.5	113.8
05/29/05	219.7	81.3	220.9	95.9	218.9	69.4	231.4	89.2	23.1	107.7
05/30/05	191.7	85.5	177.5	75.6	174.8	68.9	197.6	90.4	0.6	95.2
05/31/05	193.0	65.3	181.5	40.3	181.8	68.9	193.0	91.4	3.7	86.4
06/01/05	221.7	91.4	222.4	65.3	212.9	69.5	226.2	90.8	26.1	97.7
06/02/05	230.6	95.8	231.4	69.8	229.5	69.8	244.3	93.8	37.3	101.6

## 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
<b>McNary Dam</b>											
	05/26/05	Chinook + Steelhead	99	0	0	0.00%	0.00%	0	0	0	0
	05/30/05	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
<b>Bonneville Dam</b>											
	05/24/05	Chinook + Steelhead	102	0	0	0.00%	0.00%	0	0	0	0
	05/28/05	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	05/31/05	Chinook + Steelhead	99	0	0	0.00%	0.00%	0	0	0	0
<b>Rock Island Dam</b>											
	05/26/05	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	05/30/05	Chinook + Steelhead	100	4	4	4.00%	0.00%	4	0	0	0
	06/02/05	Chinook + Steelhead	50	2	2	4.00%	0.00%	2	0	0	0

## HATCHERY RELEASE LAST TWO WEEKS

### Hatchery Release Summary

From: **5/20/2005** to **06/02/05**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2005	500,300	05-23-05	05-30-05	Cpt John Acclim Pond	Snake River
Nez Perce Tribe	Lyons Ferry Hatchery	CH0	FA	2005	503,000	05-30-05	05-31-05	Big Canyon (Clearwater R)	Clearwater River M F
<b>Nez Perce Tribe Total</b>					<b>1,003,300</b>				
Oregon Dept. of Fish and Wildlife	Round Butte Hatchery	CH1	SP	2005	319,152	04-04-05	05-31-05	Bel. Pelton Ladder	Deschutes River
Oregon Dept. of Fish and Wildlife	Umatilla Hatchery	CH0	FA	2005	400,000	05-23-05	05-31-05	Pittsburg Landing Acclim Pond	Snake River
<b>Oregon Dept. of Fish and Wildlife Total</b>					<b>719,152</b>				
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH0	SP	2005	15,000	05-19-05	05-27-05	Chiwawa Hatchery	Wenatchee River
Washington Dept. of Fish and Wildlife	Klickitat Hatchery	CH0	FA	2005	4,000,000	06-01-05	06-30-05	Klickitat Hatchery	Klickitat River
Washington Dept. of Fish and Wildlife	Klickitat Hatchery	CO	NO	2005	1,000,000	05-12-05	05-27-05	Klickitat Hatchery	Klickitat River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH0	FA	2005	176,000	05-16-05	06-10-05	Dworshak Hatchery	Clearwater River M F
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH0	FA	2005	200,171	05-27-05	05-27-05	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH0	FA	2005	200,191	05-26-05	05-26-05	Cpt John Acclim Pond	Snake River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH0	FA	2005	234,030	05-23-05	05-23-05	Cpt John Acclim Pond	Snake River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH0	FA	2005	482,460	05-24-05	05-25-05	Grande Ronde River	Grande Ronde River
<b>Washington Dept. of Fish and Wildlife Total</b>					<b>6,307,852</b>				
<b>Grand Total</b>					<b>8,030,304</b>				



## HATCHERY RELEASE NEXT TWO WEEKS

### Hatchery Release Summary

From: **6/3/2005** to **6/16/2005**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Washington Dept. of Fish and Wildlife	<b>Klickitat Hatchery</b>	CHO	FA	2005	4,000,000	06-01-05	06-30-05	Klickitat Hatchery	Klickitat River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CHO	FA	2005	176,000	05-16-05	06-10-05	Dworshak Hatchery	Clearwater River M F
Washington Dept. of Fish and Wildlife	Priest Rapids Hatchery	CHO	FA	2005	6,700,000	06-06-05	06-27-05	Priest Rapids Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	CHO	FA	2005	3,500,000	06-13-05	06-20-05	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Wells Hatchery	CHO	SU	2005	240,000	06-15-05	06-15-05	Wells Hatchery	Mid-Columbia River
<b>Washington Dept. of Fish and Wildlife Total</b>					<b>14,616,000</b>				
<b>Grand Total</b>					<b>14,616,000</b>				

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	Hungry H. Dnst			Boundary			Grand Coulee			Grand C. Tlwr			Chief Joseph							
	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#					
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High					
5/20	---	---	---	0	120	121	121	24	110	110	110	24	107	107	108	24	107	107	107	23
5/21	---	---	---	0	121	121	123	24	109	109	110	24	106	107	108	24	106	106	107	24
5/22	---	---	---	0	121	121	122	24	109	110	110	24	107	107	108	24	106	107	107	24
5/23	---	---	---	0	121	122	122	24	109	109	109	24	107	107	109	24	106	107	107	24
5/24	---	---	---	0	121	122	123	24	108	109	109	24	107	107	108	24	107	107	108	24
5/25	---	---	---	0	120	121	122	24	108	108	109	24	107	107	108	24	107	107	107	24
5/26	---	---	---	0	121	121	122	24	108	109	109	24	107	108	108	24	107	107	108	24
5/27	---	---	---	0	120	121	122	24	109	110	110	24	108	108	109	19	108	108	108	24
5/28	---	---	---	0	118	119	120	24	110	111	111	24	108	108	110	15	109	109	110	24
5/29	---	---	---	0	119	122	123	24	111	111	111	24	107	107	108	10	109	110	110	24
5/30	---	---	---	0	117	119	125	24	111	111	111	24	107	107	109	10	109	109	110	21
5/31	---	---	---	0	116	117	119	24	111	111	111	24	109	110	111	24	109	109	110	17
6/1	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
6/2	---	---	---	0	116	118	119	24	111	111	111	24	108	109	113	24	109	109	109	24

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	Chief J. Dnst			Wells			Wells Dwnstrm			Rocky Reach			Rocky R. Tlwr							
	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#					
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High					
5/20	107	108	109	24	105	105	106	24	107	107	108	24	108	108	108	24	110	111	114	24
5/21	108	108	108	23	104	105	105	24	107	107	108	24	107	107	107	24	109	110	113	24
5/22	110	111	113	23	105	106	106	24	107	108	108	24	107	107	107	24	109	110	113	24
5/23	107	107	108	23	106	106	107	24	109	110	113	24	107	107	107	24	107	107	108	24
5/24	107	107	108	20	106	106	106	24	108	109	111	24	107	107	109	24	107	108	109	24
5/25	111	115	121	23	106	107	107	23	111	112	113	23	109	109	109	24	109	109	110	24
5/26	107	108	109	24	108	108	109	23	112	114	116	23	110	111	111	24	110	111	112	24
5/27	108	109	110	23	108	108	108	24	113	116	125	24	113	114	115	24	113	115	116	24
5/28	110	110	111	24	109	109	111	24	110	110	111	24	118	120	121	24	116	118	121	24
5/29	111	111	112	23	110	111	112	24	110	111	111	24	113	114	115	23	114	116	116	23
5/30	110	111	112	17	109	110	110	24	111	111	111	24	112	112	112	24	113	114	115	24
5/31	109	109	111	12	109	109	110	24	111	111	112	24	111	111	111	24	111	112	112	24
6/1	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
6/2	109	110	110	24	108	108	109	24	112	112	113	24	110	111	111	24	112	113	113	24

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	Rock Island			Rock I. Tlwr			Wanapum			Wanapum Tlwr			Priest Rapids							
	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#	24 h	12 h	#					
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High					
5/20	110	111	112	24	115	116	118	24	109	110	110	24	112	115	119	24	111	113	115	24
5/21	110	110	111	24	115	116	118	24	108	109	109	24	111	113	116	24	110	112	112	24
5/22	110	110	112	24	114	115	117	23	---	---	---	0	---	---	---	0	---	---	---	0
5/23	108	108	109	24	113	114	116	24	110	113	116	24	112	113	114	24	110	111	113	24
5/24	107	107	108	24	113	114	116	24	111	113	114	24	112	114	116	24	110	111	113	24
5/25	108	110	110	24	114	115	116	24	113	114	115	24	113	115	118	24	112	113	116	24
5/26	110	111	112	24	114	116	117	24	112	114	117	24	114	116	121	24	113	115	119	24
5/27	114	116	117	24	117	119	120	24	---	---	---	0	---	---	---	0	---	---	---	0
5/28	115	117	120	24	119	120	122	24	---	---	---	0	---	---	---	0	---	---	---	0
5/29	115	116	119	23	118	119	122	23	---	---	---	0	---	---	---	0	---	---	---	0
5/30	112	113	114	24	117	118	119	24	---	---	---	0	---	---	---	0	---	---	---	0
5/31	111	111	112	24	116	117	118	24	---	---	---	0	---	---	---	0	---	---	---	0
6/1	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
6/2	110	111	112	24	115	116	117	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>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
5/20	118	119	119	24	111	112	113	20	99	99	100	24	100	100	101	24	105	106	106	24
5/21	117	117	117	24	111	113	113	24	97	98	98	24	101	102	102	24	107	108	123	24
5/22	---	---	---	0	111	112	112	24	97	97	97	24	100	100	101	24	106	106	107	24
5/23	117	117	118	24	111	112	113	24	98	98	99	24	100	101	102	24	106	106	107	24
5/24	116	116	117	18	112	113	114	24	97	98	98	24	100	100	101	24	105	106	106	24
5/25	---	---	---	0	112	113	114	24	97	98	98	24	100	101	102	24	105	106	107	24
5/26	120	120	121	12	114	115	116	24	98	98	99	24	100	101	102	24	106	107	108	24
5/27	---	---	---	0	115	116	117	24	99	99	100	24	101	102	103	24	105	106	106	24
5/28	---	---	---	0	116	117	118	24	100	101	101	24	101	102	103	24	105	105	106	24
5/29	---	---	---	0	115	115	116	24	100	101	101	24	101	102	103	24	104	105	106	24
5/30	---	---	---	0	112	113	113	21	100	100	101	19	101	101	103	20	104	105	106	24
5/31	---	---	---	0	109	110	111	19	99	99	99	24	100	101	101	24	104	104	105	24
6/1	---	---	---	0	112	113	113	24	---	---	---	0	---	---	---	0	---	---	---	0
6/2	---	---	---	0	112	113	114	24	102	105	106	24	101	101	102	24	104	104	105	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>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
5/20	100	101	101	24	103	103	103	24	118	118	119	24	109	109	110	24	110	111	111	24
5/21	101	102	103	24	103	104	105	24	119	120	121	24	109	110	111	24	112	113	114	24
5/22	101	101	102	21	104	105	105	24	116	117	117	24	112	112	113	24	114	116	117	24
5/23	101	102	102	24	105	105	107	24	116	117	118	24	113	113	113	24	113	113	114	24
5/24	101	102	103	24	104	105	106	24	113	115	117	24	112	112	112	24	111	111	112	24
5/25	101	103	104	24	105	106	108	24	108	110	112	24	110	111	112	24	111	112	112	24
5/26	102	103	104	24	106	107	108	24	108	108	109	24	111	112	112	24	111	112	113	24
5/27	102	104	105	24	107	109	110	24	107	108	111	24	110	110	111	24	109	109	109	24
5/28	102	104	105	24	108	110	112	24	107	108	110	24	110	110	111	24	109	109	109	24
5/29	102	104	105	24	106	107	109	24	106	106	106	24	109	109	111	24	108	109	109	24
5/30	102	103	104	19	105	106	107	24	104	104	105	24	108	108	109	24	107	107	107	24
5/31	101	102	103	24	104	104	105	24	105	107	109	24	106	106	108	24	105	106	106	24
6/1	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
6/2	101	102	103	24	102	103	103	24	105	106	108	24	103	103	103	24	102	102	103	24

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

Date	<u>Lower Mon.</u>			<u>L. Mon. Tlwr</u>			<u>Ice Harbor</u>			<u>Ice Harbor Tlwr</u>			<u>McNary-Oregon</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
5/20	106	108	109	24	120	121	123	24	109	109	110	24	120	120	120	24	112	112	114	24
5/21	109	109	109	24	119	120	120	24	110	111	111	24	118	119	121	24	112	113	114	24
5/22	111	111	112	24	119	121	122	24	112	112	113	24	117	118	119	24	112	113	113	24
5/23	113	114	115	24	118	121	122	24	112	113	113	24	117	117	117	24	112	113	114	24
5/24	113	114	114	24	119	120	122	24	113	113	114	24	117	117	117	24	111	112	114	24
5/25	112	112	112	23	114	117	118	23	114	115	115	24	118	120	121	24	112	113	115	24
5/26	111	111	111	24	116	118	120	22	114	114	114	24	119	120	120	24	113	115	116	24
5/27	112	112	112	24	114	115	120	24	114	114	114	24	118	120	120	24	115	117	117	24
5/28	112	112	112	24	112	112	115	24	114	114	114	24	119	119	120	24	118	119	120	24
5/29	110	111	111	24	111	113	118	24	113	113	114	24	116	117	119	24	118	119	121	24
5/30	109	109	110	24	110	111	114	24	111	111	112	24	115	115	115	24	116	117	117	24
5/31	108	108	108	24	108	108	111	24	109	110	110	24	116	117	118	24	112	113	115	24
6/1	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	108	109	110	24
6/2	104	105	105	24	106	108	111	24	106	106	106	24	114	116	118	24	107	107	108	24

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

### Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>McNary-Wash</u>			<u>McNary Tlwr</u>			<u>John Day</u>			<u>John Day Tlwr</u>			<u>The Dalles</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>					
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr				
5/20	112	112	112	24	116	116	117	24	108	108	108	23	116	119	119	24	111	113	115	23
5/21	112	112	113	24	118	119	119	24	109	109	110	23	113	118	119	24	110	110	112	23
5/22	112	112	113	24	119	119	119	24	109	109	110	23	119	120	120	24	110	113	114	23
5/23	111	111	112	24	117	118	119	24	108	109	109	23	119	120	120	21	110	111	111	23
5/24	111	112	113	24	116	116	116	24	108	108	108	23	119	119	119	24	112	113	114	23
5/25	113	113	114	24	115	118	120	24	109	109	110	23	119	119	119	24	113	114	116	23
5/26	114	114	115	24	117	119	120	24	111	112	113	23	119	120	120	24	114	115	116	23
5/27	116	117	118	24	117	118	119	24	114	115	115	23	119	120	120	24	116	117	119	23
5/28	118	118	119	24	118	119	121	24	115	115	116	23	120	120	121	24	116	116	116	23
5/29	117	118	118	24	117	117	117	24	113	113	114	23	118	119	120	24	112	113	115	23
5/30	116	117	117	24	117	117	117	24	111	112	112	24	118	118	119	24	109	109	110	24
5/31	113	114	115	24	115	117	119	24	110	110	111	23	113	117	118	24	109	109	109	23
6/1	108	109	109	24	114	119	119	24	107	108	108	23	112	117	119	24	109	111	113	23
6/2	108	108	109	24	114	119	120	24	106	106	106	23	112	118	120	24	109	112	113	23

### Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>Camas\Washugal</u>			<u>Cascade Island</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>					
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr				
5/20	115	116	117	24	112	113	114	23	114	115	117	23	112	113	115	24	117	117	120	17
5/21	114	115	116	24	111	112	113	23	113	114	115	23	111	112	113	24	117	117	120	17
5/22	114	116	116	24	112	113	114	23	115	116	117	23	111	113	113	24	118	119	120	17
5/23	115	115	115	24	110	111	112	23	113	114	116	23	112	113	114	24	117	117	119	17
5/24	116	117	117	24	112	112	112	23	114	115	116	23	110	111	114	16	116	117	119	17
5/25	116	117	118	24	112	112	113	23	114	114	116	23	111	112	112	15	117	117	119	17
5/26	117	118	118	24	113	113	115	23	115	115	117	23	110	112	113	24	117	117	120	17
5/27	118	119	120	24	115	115	116	23	116	117	118	23	112	114	116	24	117	117	120	17
5/28	118	118	118	24	116	116	117	23	116	117	119	23	114	115	117	24	117	118	120	17
5/29	116	117	118	24	111	112	114	23	114	116	118	23	112	113	114	24	116	117	119	17
5/30	115	115	115	24	107	107	108	24	113	114	116	24	111	112	113	24	116	117	119	24
5/31	114	115	115	24	106	106	107	23	113	115	117	23	109	111	112	24	115	116	119	16
6/1	114	115	116	24	107	108	109	23	112	114	117	23	109	111	113	24	116	117	120	17
6/2	113	115	116	24	108	108	109	23	112	114	118	23	109	111	113	24	117	117	120	17

## Two-Week Summary of Passage Indices

\* One or more of the sites on this date had an incomplete or biased sample.

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

For clip information see: <http://www.fpc.org/CurrentDaily/catch.htm>

For sockeye and yearling chinook (Snake only) race information see: <http://www.fpc.org/smoltqueries/currentsmpsubmitdata.asp>

<b>COMBINED YEARLING CHINOOK</b>												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
05/20/2005	*	---	---	8	211	19,737	22,862	3,274	158	---	55,013	46,991
05/21/2005	*	---	---	15	---	15,993	29,817	6,734	230	73,303	27,118	41,567
05/22/2005	*	---	---	12	41	16,513	22,248	5,933	167	---	25,979	33,681
05/23/2005		---	36	8	---	10,842	19,560	4,710	96	54,990	12,839	25,486
05/24/2005	*	---	15	8	---	8,689	47,969	5,634	191	---	11,059	27,022
05/25/2005	*	---	19	---	---	8,333	15,015	3,285	236	43,703	11,465	23,013
05/26/2005	*	---	28	---	---	10,631	14,819	4,408	162	---	7,696	26,848
05/27/2005	*	---	48	---	---	6,292	15,002	2,634	162	24,773	5,797	23,835
05/28/2005	*	---	25	---	---	9,134	8,629	2,368	181	---	5,802	16,529
05/29/2005		---	36	---	---	10,214	6,456	3,254	1	28,059	6,649	13,455
05/30/2005	*	---	37	---	---	7,800	9,176	2,127	93	---	5,320	5,295
05/31/2005	*	---	35	---	---	18,700	4,900	764	109	15,122	5,261	5,774
06/01/2005	*	---	---	---	14	4,905	7,042	1,132	52	---	5,844	4,000
06/02/2005		---	---	---	19	12,410	5,132	2,040	35	5,433	5,432	5,292
06/03/2005		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>	<b>0</b>	<b>279</b>	<b>51</b>	<b>285</b>	<b>160,193</b>	<b>228,627</b>	<b>48,297</b>	<b>1,873</b>	<b>245,383</b>	<b>191,274</b>	<b>298,788</b>	
<b># Days:</b>	<b>0</b>	<b>9</b>	<b>5</b>	<b>4</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>7</b>	<b>14</b>	<b>14</b>	
<b>Average:</b>	<b>0</b>	<b>31</b>	<b>10</b>	<b>71</b>	<b>11,442</b>	<b>16,331</b>	<b>3,450</b>	<b>134</b>	<b>35,055</b>	<b>13,662</b>	<b>21,342</b>	
<b>YTD</b>	<b>43,641</b>	<b>42,314</b>	<b>5,793</b>	<b>1,719</b>	<b>5,615,378</b>	<b>2,454,920</b>	<b>697,464</b>	<b>13,930</b>	<b>1,136,261</b>	<b>1,358,532</b>	<b>1,483,047</b>	

<b>COMBINED SUBYEARLING CHINOOK</b>												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
05/20/2005	*	---	---	32	85	6,679	1,253	0	7	---	1,712	8,984
05/21/2005	*	---	---	26	---	7,108	1,078	69	8	11,645	1,796	7,642
05/22/2005	*	---	---	30	5	8,063	740	523	1	---	4,665	6,797
05/23/2005		---	0	41	---	7,865	1,393	55	14	16,122	3,921	6,759
05/24/2005	*	---	1	38	---	8,251	14,348	186	34	---	3,622	7,905
05/25/2005	*	---	0	---	---	3,944	5,202	269	41	10,539	5,087	9,885
05/26/2005	*	---	0	---	---	4,805	10,750	477	55	---	2,557	11,589
05/27/2005	*	---	0	---	---	5,663	8,700	357	56	10,979	3,216	8,937
05/28/2005	*	---	0	---	---	6,276	5,739	1,124	87	---	3,057	17,440
05/29/2005		---	0	---	---	21,305	11,150	5,249	138	9,649	2,112	14,221
05/30/2005	*	---	0	---	---	59,250	14,900	3,941	301	---	1,003	11,648
05/31/2005	*	---	0	---	---	289,800	8,310	1,297	843	11,037	1,418	9,995
06/01/2005	*	---	---	---	337	140,548	23,790	1,520	397	---	4,570	8,444
06/02/2005		---	---	---	99	126,857	48,431	3,363	392	28,052	9,764	16,259
06/03/2005		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>	<b>0</b>	<b>1</b>	<b>167</b>	<b>526</b>	<b>696,414</b>	<b>155,784</b>	<b>18,430</b>	<b>2,374</b>	<b>98,023</b>	<b>48,500</b>	<b>146,505</b>	
<b># Days:</b>	<b>0</b>	<b>9</b>	<b>5</b>	<b>4</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>7</b>	<b>14</b>	<b>14</b>	
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>132</b>	<b>49,744</b>	<b>11,127</b>	<b>1,316</b>	<b>170</b>	<b>14,003</b>	<b>3,464</b>	<b>10,465</b>	
<b>YTD</b>	<b>0</b>	<b>77</b>	<b>1,224</b>	<b>1,073</b>	<b>808,457</b>	<b>330,527</b>	<b>20,252</b>	<b>4,115</b>	<b>145,187</b>	<b>52,381</b>	<b>1,811,695</b>	

## Two-Week Summary of Passage Indices

COMBINED COHO												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
05/20/2005	*	---	---	0	4	3,644	5,809	786	868	---	6,451	18,004
05/21/2005	*	---	---	0	---	2,908	9,518	193	829	11,660	2,842	13,230
05/22/2005	*	---	---	0	4	2,481	7,727	805	593	---	7,334	12,567
05/23/2005		---	0	0	---	1,701	4,057	558	777	3,724	3,677	7,265
05/24/2005	*	---	0	0	---	876	6,197	770	1,128	---	2,606	19,464
05/25/2005	*	---	0	---	---	954	3,750	146	940	7,646	4,106	19,637
05/26/2005	*	---	0	---	---	1,502	3,850	454	432	---	2,735	16,837
05/27/2005	*	---	0	---	---	572	2,650	65	460	4,778	3,147	19,627
05/28/2005	*	---	0	---	---	663	1,443	160	782	---	2,862	12,505
05/29/2005		---	0	---	---	671	1,200	120	13	11,209	2,052	8,169
05/30/2005	*	---	0	---	---	1,450	800	43	355	---	1,761	4,692
05/31/2005	*	---	0	---	---	1,500	200	40	538	3,278	1,148	5,683
06/01/2005	*	---	---	---	0	640	440	31	275	---	2,587	3,866
06/02/2005		---	---	---	0	0	516	41	143	3,087	2,101	2,989
06/03/2005		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>19,562</b>	<b>48,157</b>	<b>4,212</b>	<b>8,133</b>	<b>45,382</b>	<b>45,409</b>	<b>164,535</b>
<b># Days:</b>		<b>0</b>	<b>9</b>	<b>5</b>	<b>4</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>7</b>	<b>14</b>	<b>14</b>
<b>Average:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1,397</b>	<b>3,440</b>	<b>301</b>	<b>581</b>	<b>6,483</b>	<b>3,244</b>	<b>11,753</b>
<b>YTD</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>110</b>	<b>296,876</b>	<b>187,798</b>	<b>23,916</b>	<b>36,282</b>	<b>89,655</b>	<b>173,142</b>	<b>737,930</b>

COMBINED STEELHEAD												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
05/20/2005	*	---	---	40	395	104,759	91,537	11,394	260	---	54,608	4,531
05/21/2005	*	---	---	32	---	51,857	93,405	14,129	230	21,090	25,111	4,404
05/22/2005	*	---	---	19	34	66,594	77,216	14,013	200	---	32,486	4,580
05/23/2005		---	225	46	---	35,642	71,340	17,046	201	11,470	20,812	4,373
05/24/2005	*	---	161	46	---	26,797	58,409	9,634	200	---	14,338	8,370
05/25/2005	*	---	303	---	---	27,035	33,414	6,391	178	9,031	8,861	2,890
05/26/2005	*	---	298	---	---	15,015	34,853	3,559	151	---	10,500	1,830
05/27/2005	*	---	339	---	---	12,584	15,804	2,439	178	5,598	4,276	2,035
05/28/2005	*	---	132	---	---	17,757	13,539	1,917	166	---	7,528	1,242
05/29/2005		---	225	---	---	23,420	13,126	1,839	3	3,951	6,373	2,471
05/30/2005	*	---	230	---	---	21,500	10,901	2,193	102	---	2,905	3,263
05/31/2005	*	---	201	---	---	44,800	5,921	1,056	219	2,379	2,197	2,660
06/01/2005	*	---	---	---	7	21,327	2,250	1,336	147	---	1,699	1,448
06/02/2005		---	---	---	2	17,925	2,780	1,261	71	1,296	1,766	1,050
06/03/2005		---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>		<b>0</b>	<b>2,114</b>	<b>183</b>	<b>438</b>	<b>487,012</b>	<b>524,495</b>	<b>88,207</b>	<b>2,306</b>	<b>54,815</b>	<b>193,460</b>	<b>45,147</b>
<b># Days:</b>		<b>0</b>	<b>9</b>	<b>5</b>	<b>4</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>7</b>	<b>14</b>	<b>14</b>
<b>Average:</b>		<b>0</b>	<b>235</b>	<b>37</b>	<b>110</b>	<b>34,787</b>	<b>37,464</b>	<b>6,301</b>	<b>165</b>	<b>7,831</b>	<b>13,819</b>	<b>3,225</b>
<b>YTD</b>		<b>3,754</b>	<b>35,452</b>	<b>2,453</b>	<b>7,258</b>	<b>5,856,946</b>	<b>2,870,920</b>	<b>666,901</b>	<b>15,407</b>	<b>184,958</b>	<b>515,348</b>	<b>175,969</b>

## Two-Week Summary of Passage Indices

COMBINED SOCKEYE												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	
05/20/2005	*	---	---	0	83	3,037	1,358	327	10	---	13,533	4,597
05/21/2005	*	---	---	0	---	2,908	4,347	165	17	12,469	6,892	2,409
05/22/2005	*	---	---	0	0	2,248	3,867	706	8	---	8,156	4,327
05/23/2005	*	---	0	0	---	1,275	2,209	552	16	6,537	5,736	2,834
05/24/2005	*	---	0	0	---	438	2,991	616	14	---	2,343	3,407
05/25/2005	*	---	0	---	---	891	1,500	538	9	6,291	3,134	2,537
05/26/2005	*	---	0	---	---	1,081	2,551	372	9	---	1,896	1,746
05/27/2005	*	---	0	---	---	572	1,750	292	19	4,838	1,456	2,220
05/28/2005	*	---	0	---	---	306	1,879	271	6	---	1,865	938
05/29/2005	*	---	0	---	---	567	2,500	518	0	4,291	2,241	1,631
05/30/2005	*	---	0	---	---	600	1,075	185	0	---	1,254	1,041
05/31/2005	*	---	0	---	---	2,500	1,280	60	8	2,466	740	586
06/01/2005	*	---	---	8	640	770	204	4	---	959	653	
06/02/2005	*	---	---	3	919	842	236	3	1,978	565	621	
06/03/2005	*	---	---	---	---	---	---	---	---	---	---	---
<hr/>												
<b>Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>94</b>	<b>17,982</b>	<b>28,919</b>	<b>5,042</b>	<b>123</b>	<b>38,870</b>	<b>50,770</b>	<b>29,547</b>
<b># Days:</b>		<b>0</b>	<b>9</b>	<b>5</b>	<b>4</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>7</b>	<b>14</b>	<b>14</b>
<b>Average:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>1,284</b>	<b>2,066</b>	<b>360</b>	<b>9</b>	<b>5,553</b>	<b>3,626</b>	<b>2,111</b>
<b>YTD</b>		<b>115</b>	<b>0</b>	<b>0</b>	<b>262</b>	<b>35,792</b>	<b>35,209</b>	<b>7,148</b>	<b>1,672</b>	<b>96,013</b>	<b>77,738</b>	<b>38,905</b>

\* 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

LGR (Index) = Lower Granite Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

BO1 (Index) = Bonneville Dam First Powerhouse Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 1 Flow / (Powerhouse 1 & 2 Flow + Spill)}

JDA and BO2 data collected for the FPC by Pacific States Marine Fisheries Commission.

RIS data collected for the FPC by Chelan Co. PUD/Washington Dept. of Fish and Wildlife.

LGR, LMN, and MCN data collected for the FPC by Washington Dept. of Fish and Wildlife.

LGS and GRN data collected for the FPC by Oregon Dept. of Fish and Wildlife.

IMN data collected for the FPC by the Nez Perce Tribe.

## Two Week Transportation Summary

Source: Fish Passage Center

Updated:

6/3/05 9:38 AM

**05/21/05 TO 06/03/05**

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	655,517	129,443	15,069	13,999	377,714	1,191,742
	Sum of NumberBarged	542,275	114,868	14,992	13,088	357,646	1,042,869
	Sum of NumberBypassed	0	3,184	0	0	4,463	7,647
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	148	19	5	4	12	188
	Sum of FacilityMorts	3,947	786	72	107	242	5,154
	Sum of ResearchMorts	0	17	0	0	0	17
	Sum of TotalProjectMorts	4,095	822	77	111	254	5,359
<b>LGS</b>	Sum of NumberCollected	153,240	210,472	43,550	26,786	472,133	906,181
	Sum of NumberBarged	105,211	203,012	43,038	25,940	468,417	845,618
	Sum of NumberBypassed	238	1,396	1	0	707	2,342
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	12	21	0	2	7	42
	Sum of FacilityMorts	204	1,027	1	16	280	1,528
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	216	1,048	1	18	287	1,570
<b>LMN</b>	Sum of NumberCollected	17,829	40,542	3,380	4,327	70,934	137,012
	Sum of NumberBarged	14,498	37,743	3,340	4,087	69,586	129,254
	Sum of NumberBypassed	57	776	0	0	47	880
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	2	7	0	0	4	13
	Sum of FacilityMorts	38	54	0	10	69	171
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	40	61	0	10	73	184
<b>MCN</b>	Sum of NumberCollected	54,197	135,826	26,852	22,032	30,629	269,536
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	54,053	134,649	26,746	21,872	30,523	267,843
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	18	39	3	8	1	69
	Sum of FacilityMorts	116	1,117	100	145	104	1,582
	Sum of ResearchMorts	10	21	3	7	1	42
	Sum of TotalProjectMorts	144	1,177	106	160	106	1,693
<b>Total Sum of NumberCollected</b>		<b>880,783</b>	<b>516,283</b>	<b>88,851</b>	<b>67,144</b>	<b>951,410</b>	<b>2,504,471</b>
<b>Total Sum of NumberBarged</b>		<b>661,984</b>	<b>355,623</b>	<b>61,370</b>	<b>43,115</b>	<b>895,649</b>	<b>2,017,741</b>
<b>Total Sum of NumberBypassed</b>		<b>54,348</b>	<b>140,005</b>	<b>26,747</b>	<b>21,872</b>	<b>35,740</b>	<b>278,712</b>
<b>Total Sum of Numbertrucked</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Sum of SampleMorts</b>		<b>180</b>	<b>86</b>	<b>8</b>	<b>14</b>	<b>24</b>	<b>312</b>
<b>Total Sum of FacilityMorts</b>		<b>4,305</b>	<b>2,984</b>	<b>173</b>	<b>278</b>	<b>695</b>	<b>8,435</b>
<b>Total Sum of ResearchMorts</b>		<b>10</b>	<b>38</b>	<b>3</b>	<b>7</b>	<b>1</b>	<b>59</b>
<b>Total Sum of TotalProjectMorts</b>		<b>4,495</b>	<b>3,108</b>	<b>184</b>	<b>299</b>	<b>720</b>	<b>8,806</b>



### YTD Transportation Summary

Source: Fish Passage Center

Updated:

6/3/05 9:38 AM

TO: 06/03/05

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
<b>LGR</b>	Sum of NumberCollected	758,716	5,483,992	278,414	29,415	5,519,101	12,069,638
	Sum of NumberBarged	633,619	5,172,894	250,054	27,303	5,008,930	11,092,800
	Sum of NumberBypassed	10,825	277,669	26,286	490	446,543	761,813
	Sum of NumberTrucked	404	8,883	871	487	43,015	53,660
	Sum of SampleMorts	170	448	16	15	63	712
	Sum of FacilityMorts	4,551	13,426	1,187	320	5,197	24,681
	Sum of ResearchMorts	0	103	0	0	2	105
	Sum of TotalProjectMorts	4,721	13,977	1,203	335	5,262	25,498
<b>LGS</b>	Sum of NumberCollected	327,736	2,431,822	182,267	33,009	2,808,504	5,783,338
	Sum of NumberBarged	230,753	1,995,851	147,415	31,368	2,230,845	4,636,232
	Sum of NumberBypassed	49,148	424,280	34,258	736	566,484	1,074,906
	Sum of NumberTrucked	4	223	0	27	291	545
	Sum of SampleMorts	12	123	10	4	61	210
	Sum of FacilityMorts	244	6,320	74	46	8,101	14,785
	Sum of ResearchMorts	0	9	0	0	0	9
	Sum of TotalProjectMorts	256	6,452	84	50	8,162	15,004
<b>LMN</b>	Sum of NumberCollected	19,572	662,786	21,165	6,335	606,279	1,316,137
	Sum of NumberBarged	15,546	502,024	16,602	5,924	447,641	987,737
	Sum of NumberBypassed	750	145,555	4,521	99	154,862	305,787
	Sum of NumberTrucked	0	12,712	0	60	2,235	15,007
	Sum of SampleMorts	2	39	0	3	25	69
	Sum of FacilityMorts	40	494	2	19	288	843
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	42	533	2	22	313	912
<b>MCN</b>	Sum of NumberCollected	81,100	668,675	53,021	55,445	111,853	970,094
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	80,782	666,084	52,855	55,143	111,606	966,470
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	32	103	5	14	6	160
	Sum of FacilityMorts	276	2,412	155	276	239	3,358
	Sum of ResearchMorts	10	76	6	12	2	106
	Sum of TotalProjectMorts	318	2,591	166	302	247	3,624
Total Sum of NumberCollected		1,187,124	9,247,275	534,867	124,204	9,045,737	20,139,207
Total Sum of NumberBarged		879,918	7,670,769	414,071	64,595	7,687,416	16,716,769
Total Sum of NumberBypassed		141,505	1,513,588	117,920	56,468	1,279,495	3,108,976
Total Sum of NumberTrucked		408	21,818	871	574	45,541	69,212
Total Sum of SampleMorts		216	713	31	36	155	1,151
Total Sum of FacilityMorts		5,111	22,652	1,418	661	13,825	43,667
Total Sum of ResearchMorts		10	188	6	12	4	220
Total Sum of TotalProjectMorts		5,337	23,553	1,455	709	13,984	45,038

**Cumulative Adult Passage at Mainstem Dams Through: 06/02**

DAM	Spring Chinook						Summer Chinook						Fall Chinook					
	2005		2004		10-Yr Avg.		2005		2004		10-Yr Avg.		2005		2004		10-Yr Avg.	
	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	75,148	4,158	170,152	8,885	145,297	8,221	2,613	109	3,026	420	1,840	207	0	0	0	0	0	0
TDA	59,788	3,045	128,858	7,547	98,302	5,855	0	0	0	0	0	0	0	0	0	0	0	0
JDA	48,339	2,300	108,647	6,080	80,730	4,534	0	0	0	0	0	0	0	0	0	0	0	0
MCN	50,860	2,798	101,811	6,822	72,509	4,526	0	0	0	0	0	0	0	0	0	0	0	0
IHR	21,530	755	71,063	3,780	47,254	2,672	0	0	0	0	0	0	0	0	0	0	0	0
LMN	20,323	736	64,310	2,892	43,653	2,395	0	0	0	0	0	0	0	0	0	0	0	0
LGS	18,226	602	54,728	2,358	40,814	2,326	0	0	0	0	0	0	0	0	0	0	0	0
LWG	18,287	762	61,019	2,993	39,270	2,310	0	0	0	0	0	0	0	0	0	0	0	0
PRD	10,272	365	11,174	854	14,382	395	0	0	0	0	0	0	0	0	0	0	0	0
RIS	7,544	301	8,578	637	10,857	492	0	0	0	0	0	0	0	0	0	0	0	0
RRH	2,882	228	3,468	507	3,807	152	0	0	0	0	0	0	0	0	0	0	0	0
WEL	1,586	47	2,225	41	1,982	76	0	0	0	0	0	0	0	0	0	0	0	0
WFA	27,002	905	82,114	832	n/a	n/a	---	---	---	---	---	---	0	0	0	0	n/a	n/a

DAM	Coho						Sockeye			Steelhead			Wild 2005
	2005		2004		10-Yr Avg.		2005	2004	10-Yr Avg.	2005	2004	10-Yr Avg.	
	Adult	Jack	Adult	Jack	Adult	Jack							
BON	0	0	0	0	0	0	79	389	81	2,962	6,300	4,726	835
TDA	-1	1	0	0	0	0	17	163	33	1,262	1,855	1,286	527
JDA	5	-13	0	0	0	0	4	135	24	1,306	2,092	3,392	537
MCN	0	0	0	0	0	0	1	27	3	1,171	1,661	1,650	423
IHR	0	45	0	0	0	0	3	0	0	1,321	1,808	1,594	657
LMN	0	0	2	0	0	0	0	0	0	1,045	1,605	1,660	489
LGS	0	0	0	0	0	0	0	0	0	1,021	1,902	1,962	486
LWG	0	0	0	0	0	0	0	0	0	4,793	7,624	6,207	1,567
PRD	0	0	0	0	0	0	14	0	13	14	90	4	n/a
RIS	2	0	0	0	0	0	27	0	0	59	158	31	53
RRH	0	0	0	0	0	0	2	1	0	352	319	76	343
WEL	0	0	0	0	0	0	0	0	0	63	75	17	52
WFA	0	0	0	0	n/a	n/a	0	0	n/a	10,543	27,516	n/a	n/a

RIS, RRH, and WFA are through 05/31. WEL is through 06/01.

TDA and JDA are missing data from 5/30. MCN for 5/26 and 5/27 has erroneous counts

IHR has chinook jack counts counted as coho for 5/23 and 5/24. IHR is missing adult chinook count for left bank on 05/18.

\*PRD is not posting 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. Wild Steelhead are defined as unclipped fish.

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: 06/03/05

BON counts from January 1, 2005 to March 14, 2005 (our traditional counts begin March 15):

Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
15	0	256	-74

