



Fish Passage Center Weekly Report #06 - 7

April 21, 2006

1827 NE 44th Ave., Suite 240
Portland, OR 97213
phone: 503/230-4099
fax: 503/230-7559

Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 107% and 362% of average at individual sub-basins over the first seventeen days of April. Precipitation above The Dalles over the first seventeen days of April has been 215% of average. Over the entire water year, precipitation has been above average at all list locations.

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

Location	Water Year 2006 Apr 1-17		Water Year 2006 October 1, 2005 to April 17	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	2.07	221	17.61	116
Snake River Above Ice Harbor	2.17	262	15.54	140
Columbia Above The Dalles	1.99	215	18.08	119
Kootenai	1.85	186	18.67	120
Clark Fork	2.54	362	13.36	138
Flathead	2.16	241	16.95	130
Pend Oreille/Spokane	2.46	192	25.24	118
Central Washington	1.08	297	8.73	139
Snake River Plain	1.60	271	9.56	143
Salmon/Boise/Payette	2.42	267	20.60	151
Clearwater	3.25	216	23.46	117
SW Washington Cascades/Cowlitz	3.23	107	60.02	106
Willamette Valley	3.13	114	55.19	115

Snowpack within the Columbia Basin is above average. Average snowpack in the Columbia River for basins above the Snake River confluence is 114% of average, for Snake River Basins the average snowpack is 144% of average, and for lower Columbia Basins between McNary and Bonneville Dam average snowpack 130% of average.

Table 2 displays the March Final, April Final, and April Mid-month runoff volume forecasts for multiple reservoirs. The April Mid-month forecast at The Dalles between January and July is 114000 Kaf (106% of average). Water supply forecasts at all locations in Table 2 have increased between the April Final and April Mid-month forecasts.

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

Location	March Final		April Final		April Mid-Month	
	% Average (1971- 2000)	Probable Runoff Volume (Kaf)	% Average (1971- 2000)	Probable Runoff Volume (Kaf)	% Average (1971- 2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	100	107000	100	107000	106	114000
Grand Coulee (Jan-July)	98	61900	96	60600	103	64500
Libby Res. Inflow, MT (Jan-July)	98	6200	96	6030	105	6600
Hungry Horse Res. Inflow, MT (Jan-July)	106	2360	99	2210	104	2320
Lower Granite Res. Inflow (Apr-July)	109	23400	118	25500	132	28500
Brownlee Res. Inflow (Apr-July)	110	6940	133	8380	149	9410
Dworshak Res. Inflow (Apr-July)	99	2620	96	2540	104	2750

Grand Coulee Reservoir is at 1239.7 feet (4-20-06) and has drafted 5.3 feet over the last week. The end of April Flood Control Elevation at Grand Coulee is 1229.0 feet.

The Libby Reservoir is currently at elevation 2408.1 feet (4-20-06) and filled 2.2 feet last week. Outflows have been 4 Kcfs over the last week. The end of April Flood Control Elevation at Libby is 2417.0 feet.

Hungry Horse is currently at an elevation of 3519.4 feet (4-20-06) and drafted 2.7 feet last week. Outflows at Hungry Horse have ranged between 10-11 Kcfs over the last week. The end of April Flood Control Elevation at Hungry Horse is 3521.3 feet.

Dworshak is currently at an elevation of 1537.1 feet (4-20-06) and refilled 0.2 feet last week; outflows at Dworshak have been increased to 15 Kcfs. The end of April Flood Control Elevation at Dworshak is 1535.4 feet.

The Brownlee Reservoir was at an elevation of 2020.2 feet on April 20th, 2006 (drafting 8.6 feet last week). Outflows at Brownlee have been as high as 80.0 Kcfs over the last week. The end of April Flood Control Elevation at Brownlee is 2026.6 feet.

The Biological Opinion flow period began on April 3rd in the lower Snake River (Lower Granite) and on April 10th in the mid (Priest Rapids) and lower (McNary) Columbia River. According to the last Water Supply Forecast (April Final), the flow objectives this spring will be 100 Kcfs at Lower Granite, 260 Kcfs at McNary, and 135 Kcfs at Priest Rapids. Flows at Lower Granite are currently (4-20-06) 134.3 Kcfs; flows at McNary are currently 341.7 Kcfs.

Spill: Significant involuntary spill is occurring in the system due to recent high flows and at some projects spill is exceeding the voluntary levels set for fish passage. Spill in excess of turbine capacity at Dworshak Dam is occurring as the project attempts to reach its end of April flood control elevation. Spill operations for fish passage at the Lower Snake River projects began on April 3, 2006 in accordance with the December 29, 2005 District Court Order and Opinion. Spill at Lower Granite,

Little Goose, Lower Monumental and Ice Harbor dams averaged 40%, 24%, 22% and 48% of average daily flow over the past week, respectively. Spill at Lower Granite is meeting the objective of the Court Order of 20 Kcfs for 24 hours. Spill at Little Goose Dam is less than the Court's Order of 30% of instantaneous flow for 24 hours, and is being limited because total dissolved gas in the Lower Monumental forebay is exceeding the waiver criteria. Spill at Lower Monumental Dam is also less than the 40 Kcfs for 24 hours specified in the order and is being restricted for TDG exceedences in Ice Harbor forebay. Ice Harbor Dam spill has been meeting, or exceeding, the Court Order.

Spill for fish passage began on April 10 at Lower Columbia River projects. Spill for fish passage at McNary, John Day, The Dalles and Bonneville dams was 50%, 43%, 33% and 38% of average daily flow, respectively. McNary Dam has been exceeding the requirements of the Court's Order. John Day Dam is being operated to address TDG levels in The Dalles forebay, and in a way to address the fishery agencies concerns over tailrace flows at this project with the T1 line outage. Spill at The Dalles Dam is significantly less than called for in the Court's Order and is being limited to decrease TDG in the Bonneville Dam forebay. Spill at Bonneville Dam has met, or exceeded the Court Order over the past week.

Total dissolved gas levels have exceeded the TDG waiver limits at several locations. Biological monitoring has not shown that criteria levels have been exceeded. However, 2 to 6% of fish sampled through the SMP have been showing minor (Rank 1, or less than 5% of an unpaired fin affected) signs of GBT.

Smolt Monitoring: Relatively large numbers of migrant yearling chinook and steelhead are being collected at Smolt Monitoring Traps in the Snake River Basin tributaries as high early season flows continue. With the high flows there has been increased debris, especially in the Salmon River, where the trap had to be pulled for a few days during the highest flows. The numbers of juvenile migrants have peaked and declined again as the

flow event passed through the system. The passage indices at Lower Granite also increased during the freshet, and then declined in recent days as flows at the project have decreased. Of course much of the increased collection at SMP dams in the Lower Snake River and Lower Columbia River reflect hatchery releases that have occurred over the past several weeks.

At the Salmon River Trap daily collection of yearling chinook averaged around 1,400 per day the past week, and otherwise captured very few steelhead. But the trap did not operate April 16 to 18 when flows rose above 20,000 cfs (about double the historic average). During the high flows the trap was inundated with debris and also captured a cow elk (dead) which was washed down by the high water. Similarly, at the Grande Ronde Trap recent increases in catch coincided with higher than average flows in that river. High collections of yearling Chinook on April 12 and 13 coincided with high early season flows, while increasing steelhead numbers in the past few days represent recent hatchery releases that have now entered the lower Grande Ronde River. Clipped steelhead outnumber unclipped steelhead about 10 to 1 in recent collections at the trap. At the Imnaha Trap a similar pattern of peak, drop, and then subsequent increase in collection of yearling Chinook and steelhead has occurred over the past 10 days following closely the run-off pattern and passage of hatchery releases. In the past few days, hatchery origin steelhead numbers have declined to zero and wild origin fish now make up the small number collected at the trap. Sampling at the Lewiston Trap has been intermittent over the past week, but operations should return to normal soon, when flows go below 75 Kcfs in the Snake River above Lewiston. As of today, flows were still 90 Kcfs as measured at the Anatone gage, which is more than double the historic average.

At Lower Granite Dam, yearling chinook indices averaged roughly 30,000 per day over the past week compared to 19,000 per day the previous week. Steelhead indices jumped from 9,000 per day average last week to nearly 48,000 per day this week. Hatchery origin fish make up about 80% of the steelhead passing the project in the

past few days. Passage indices at Lower Monumental and Little Goose dams should be used with caution as those data represent a combination of condition samples and research samples taken over either a small portion of each day, or in some cases over a 24 hour period. Not all the samples, especially at Lower Monumental dam, are based on 24 hour samples and so are of limited value in terms of portraying the magnitude of the run passing those dams. However, in recent days sampling for research fish collection at Little Goose Dam has been conducted over 24 hours so that high indices represent 24 hour samples. The number of fish collected at Little Goose may decrease compared to Lower Granite after April 20 as transportation begins at Lower Granite on April 20.

Yearling Chinook indices have begun to increase rapidly at Rock Island Dam and McNary Dam, as well as at other Lower Columbia SMP sites. Steelhead indices are increasing more slowly. At Bonneville Dam the Corner Collector was operating in full PIT-tag detection mode as of April 13, with PIT-tag data expected to be made available near-realtime in the next week or so. Bonneville Dam showed a rapid increase in subyearling chinook indices on April 18, the day after over 4 million fall chinook were released from Spring Creek NFH. indices for all species increased over the past week at Bonneville SMP facility.

Hatchery Releases: Snake River- Releases of summer steelhead into the Salmon River Basin, from Hagerman NFH, Magic Valley, Niagara Springs and other hatcheries are ongoing, while releases of spring chinook from Rapid River and Sawtooth hatcheries are scheduled to end today. In the Imnaha River Basin a release of 162,000 summer steelhead from Irrigon Hatchery Complex is ongoing at Little Sheep Creek Acclimation Pond. Irrigon Hatchery releases of just over half a million steelhead were completed in the Grande Ronde basin this last week. Releases occurred at acclimation ponds on the Grande Ronde as well as at the Wallowa Acclimation Pond on the Wallowa River. Large steelhead release from Clearwater and Dworshak hatcheries were scheduled this past week. Dworshak has a release of 1.2 million

steelhead directly into the Clearwater River scheduled for today, while releases into tributary acclimation ponds, and direct releases from Clearwater Hatchery are either completed or scheduled to be completed by April 24. Lower Snake River hatcheries are also releasing summer steelhead. Lyons Ferry Hatchery is scheduled to release fish into the Tucannon, Walla Walla, Touchet Rivers, as well as direct releases into the Lower Snake River. Tucannon Hatchery will also be releasing steelhead into the Tucannon River.

Mid-Columbia - In the Mettlow River, volitional releases began today (4/20) at Winthrop Hatchery of approximately 300,000 coho and 102,000 steelhead. Both releases are scheduled to end April 29. A direct release of 490,000 spring chinook also took place on April 20 at the site. The Entiat Hatchery released 330,000 spring chinook on April 10. While in the Wenatchee River Basin, the Leavenworth NFH released 1.0 million spring chinook in Icicle Creek on April 17. In addition the Leavenworth Hatchery released 725,000 coho smolts on April 15. In the Yakima River Basin; Cle Elem Hatchery has ongoing volitional releases of spring Chinook and Prosser Acclimation Ponds completed releases of approximately 2 million subyearling fall Chinook. In the mid-Columbia River, Wells Hatchery released 150,000 coho, while releases of 480,000 subyearling chinook and 280,000 steelhead are ongoing at the Ringold Springs Hatchery.

Lower Columbia - In the Lower Columbia River, Spring Creek NFH released 4.2 million subyearling fall chinook on April 17 and Little White Salmon NFH released 750,000 yearling chinook on April 18. A release of 180,000 spring chinook is ongoing in the Umatilla River at Imeques Acclimation Pond, as well as a volitional release of 240,000 yearling fall chinook at Thorn Hollow Acclimation Pond.

Adult Fish Passage - Currently, adult counts at Bonneville Dam are updated through April 20, 2006. Between March 15 and April 20, a total of 314 spring chinook adults had passed Bonneville Dam; this compares to 2,988 spring Chinook adults over the same period last year and 58,546 over the same period on a ten-year average. Daily steelhead passage numbers at Bonneville Dam have ranged between 24 and 48 over the last week.

At upriver sites, adult steelhead continue to move through the hydro system to reach their tributaries and spawning sites. The majority of these fish have over-wintered in the pools and will complete their trip to the spawning grounds in March through early May. Counts at Lower Granite have ranged between 78 and 176 adult steelhead last week. The total of 6,841 adult steelhead have passed Lower Granite Dam since January 1. This compares to 4,449 steelhead over the same period last year and 5,821 steelhead over a ten-year average at that site.

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

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
04/07/06	123.6	0.0	133.1	0.0	124.0	0.0	120.7	0.0	124.6	0.0	126.3	0.0	125.3	0.0
04/08/06	128.6	0.0	127.8	0.0	131.4	13.1	126.0	1.5	124.9	0.0	120.6	9.0	113.9	0.0
04/09/06	94.8	0.0	86.3	0.0	99.0	0.4	104.9	0.1	112.2	0.0	144.4	6.3	151.9	12.1
04/10/06	134.3	0.5	137.7	0.0	133.6	0.0	129.1	0.0	135.9	0.0	136.6	0.0	138.8	0.0
04/11/06	150.3	0.0	149.3	0.0	152.6	23.9	147.6	0.0	148.1	0.0	138.1	0.0	135.4	0.0
04/12/06	150.5	0.0	151.9	0.0	152.2	16.1	151.3	0.0	154.1	0.0	159.8	1.4	152.9	0.0
04/13/06	157.7	0.0	162.3	0.0	169.7	33.2	165.2	4.5	165.4	0.0	170.8	22.0	165.5	8.6
04/14/06	166.3	0.0	169.0	0.0	172.9	36.3	168.2	10.4	168.3	0.0	182.3	32.2	175.2	4.4
04/15/06	166.9	0.0	163.7	0.0	167.5	34.9	166.3	8.4	165.6	0.0	180.5	32.4	181.8	7.7
04/16/06	157.1	0.0	167.0	0.0	176.7	67.2	174.0	24.9	168.6	0.0	191.3	62.1	173.0	0.0
04/17/06	158.7	0.0	160.8	0.0	168.7	43.0	164.5	12.8	165.8	34.9	181.7	60.2	180.0	31.3
04/18/06	153.7	0.0	163.3	0.0	168.3	41.8	166.8	13.1	167.6	36.1	184.9	66.2	175.7	55.6
04/19/06	156.5	0.0	150.8	0.0	155.0	20.3	156.4	2.3	160.2	35.7	185.0	59.3	198.0	121.4
04/20/06	168.5	0.0	173.8	0.0	174.7	35.5	167.4	14.8	170.2	35.1	176.0	55.5	174.7	107.1

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

Date	Dworshak		Hells Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
04/07/06	10.5	0.0	69.7	70.6	137.2	54.6	134.5	39.0	141.4	40.4	142.9	76.8
04/08/06	10.5	0.0	69.9	70.6	128.3	42.6	123.0	36.9	125.0	40.2	125.5	62.9
04/09/06	10.4	0.0	67.3	70.7	129.1	42.9	128.6	38.4	133.0	40.1	134.5	70.1
04/10/06	10.4	0.0	64.5	71.8	129.4	46.8	127.2	38.2	131.5	40.0	136.1	74.0
04/11/06	10.7	0.3	63.2	74.1	126.9	41.1	125.2	41.7	127.4	38.0	128.7	65.9
04/12/06	12.0	1.6	60.6	75.3	128.6	45.6	125.5	38.3	128.5	32.1	129.4	68.4
04/13/06	12.5	2.1	60.0	72.7	126.9	42.8	124.7	35.7	126.1	27.9	129.5	65.2
04/14/06	14.8	4.4	62.9	74.3	132.6	46.5	130.7	30.8	132.4	26.6	134.9	62.5
04/15/06	14.6	4.2	64.9	77.7	143.7	57.6	140.2	31.5	140.6	27.7	144.7	73.7
04/16/06	14.9	4.5	70.0	77.9	151.5	65.6	151.9	41.4	155.4	41.1	155.9	82.1
04/17/06	14.9	4.5	72.4	80.0	151.7	66.1	149.2	40.4	153.5	39.3	156.5	81.8
04/18/06	14.9	4.5	73.2	81.1	146.2	60.5	145.1	35.7	146.3	33.3	148.4	67.0
04/19/06	14.9	4.5	71.2	81.2	138.1	53.3	136.5	28.7	139.8	29.8	141.9	61.7
04/20/06	14.9	4.5	---	---	134.3	48.9	136.5	27.5	138.3	24.8	141.2	61.6

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

Date	McNary		John Day		The Dalles		Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill		
04/07/06	270.9	145.8	316.1	67.6	316.1	85.5	328.5	125.7	83.8	112.5
04/08/06	264.6	138.3	248.0	12.6	255.2	21.4	297.2	90.7	83.9	115.2
04/09/06	265.8	134.3	280.7	42.5	277.3	41.7	268.6	63.5	84.6	114.3
04/10/06	302.0	161.9	317.4	100.9	317.8	123.2	322.4	113.6	83.9	115.5
04/11/06	303.3	149.5	327.6	115.1	326.1	119.3	348.6	143.2	85.0	111.9
04/12/06	292.0	138.4	303.2	115.5	296.3	115.1	329.1	127.9	83.1	111.6
04/13/06	300.0	139.8	300.8	110.5	298.8	113.4	319.7	115.3	84.6	110.1
04/14/06	307.7	141.7	300.8	130.3	293.6	110.3	323.1	114.8	85.0	111.8
04/15/06	333.4	157.7	330.9	151.1	325.6	105.1	332.7	123.6	84.9	112.6
04/16/06	343.9	168.5	361.4	187.5	355.7	115.1	358.5	149.4	84.7	112.9
04/17/06	339.4	165.1	342.5	150.7	345.8	105.8	359.6	156.1	82.9	109.1
04/18/06	354.9	185.5	364.4	139.0	360.2	120.9	369.6	150.8	83.4	123.9
04/19/06	337.7	173.7	335.6	128.1	329.9	98.5	362.2	122.6	83.1	145.1
04/20/06	341.7	179.4	352.0	143.0	350.2	110.0	366.8	129.4	81.9	144.5

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

Site	Date	Species	Number of Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank			
								Rank 1	Rank 2	Rank 3	Rank 4
Lower Granite Dam											
	04/11/06	Chinook + Steelhead	99	0	0	0.00%	0.00%	0	0	0	0
	04/18/06	Chinook + Steelhead	97	0	0	0.00%	0.00%	0	0	0	0
Little Goose Dam											
	04/14/06	Chinook + Steelhead	100	2	2	2.00%	0.00%	2	0	0	0
	04/18/06	Chinook + Steelhead	99	5	5	5.05%	0.00%	5	0	0	0
Lower Monumental Dam											
	04/10/06	Chinook + Steelhead	99	4	4	4.04%	0.00%	4	0	0	0
	04/17/06	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
McNary Dam											
	04/10/06	Chinook + Steelhead	60	0	0	0.00%	0.00%	0	0	0	0
	04/14/06	Chinook + Steelhead	100	1	0	0.00%	0.00%	0	0	0	0
	04/16/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	04/11/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	04/14/06	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	04/18/06	Chinook + Steelhead	100	2	2	2.00%	0.00%	2	0	0	0
Rock Island Dam											
	04/13/06	Chinook + Steelhead	100	1	1	1.00%	0.00%	1	0	0	0
	04/17/06	Chinook + Steelhead	39	1	1	2.56%	0.00%	1	0	0	0
	04/20/06	Chinook + Steelhead	100	6	6	6.00%	0.00%	6	0	0	0

HATCHERY RELEASE LAST TWO WEEKS

Hatchery Release Summary

From: 4/7/2006 to 04/20/06

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2006	20,000	04-12-06	04-21-06	Crooked R Acclim Pond	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2006	51,000	04-14-06	04-24-06	Red River	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2006	57,000	04-12-06	04-21-06	Crooked R Acclim Pond	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2006	63,000	04-12-06	04-21-06	Crooked R Acclim Pond	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2006	64,000	04-17-06	04-21-06	S Fk Clearwater River	Clearwater River M F
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2006	84,000	04-12-06	04-21-06	Crooked R Acclim Pond	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2006	99,700	04-14-06	04-24-06	Red River	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2006	226,000	04-17-06	04-21-06	S Fk Clearwater River	Clearwater River M F
Idaho Dept. of Fish and Game	Dworshak NFH	ST	SU	2006	1,200,000	04-17-06	04-21-06	Clearwater River	Snake River
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	10,000	04-17-06	04-18-06	Hayden Creek Hatchery	Lemhi River
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	10,000	04-17-06	04-18-06	Hayden Creek Hatchery	Lemhi River
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	20,000	04-17-06	04-18-06	Lemhi River	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	30,000	04-19-06	04-19-06	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	31,000	04-10-06	04-11-06	Squaw Cr Acclim Pond	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	40,000	04-17-06	04-18-06	Hayden Creek Hatchery	Lemhi River
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	40,000	04-17-06	04-18-06	Lemhi River	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	60,000	04-10-06	04-11-06	Squaw Cr Acclim Pond	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	80,000	04-17-06	04-17-06	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	102,000	04-12-06	04-14-06	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	110,000	04-12-06	04-14-06	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	122,000	04-19-06	04-20-06	McNabb/Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2006	248,000	04-11-06	04-14-06	Little Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2006	170,000	03-31-06	04-24-06	Little Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2006	830,000	04-05-06	04-21-06	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2006	2,535,000	03-13-06	04-21-06	Rapid River	Little Salmon River
Idaho Dept. of Fish and Game	Sawtooth Hatchery	CH1	SP	2006	1,554,000	04-03-06	04-21-06	Sawtooth Hatchery	Salmon River (ID)
Idaho Dept. of Fish and Game Total					7,856,700				
Nez Perce Tribe	Clearwater Hatchery	CO	UN	2006	30,000	04-15-06	04-15-06	Orofino Creek	Clearwater River M F
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2006	44,000	04-14-06	04-24-06	Red River	S Fk Clearwater River
Nez Perce Tribe	Clearwater Hatchery	ST	SU	2006	46,000	04-14-06	04-24-06	Red River	S Fk Clearwater River
Nez Perce Tribe	Dworshak NFH	ST	SU	2006	100,000	04-10-06	04-14-06	American River	S Fk Clearwater River
Nez Perce Tribe	Dworshak NFH	ST	SU	2006	100,000	04-10-06	04-14-06	Newsome Creek	S Fk Clearwater River
Nez Perce Tribe	Irrigon Hatchery Complex	ST	SU	2006	162,000	04-11-06	04-13-06	Big Sheep Creek	Imnaha River
Nez Perce Tribe	Irrigon Hatchery Complex	ST	SU	2006	162,000	04-11-06	05-02-06	L Sheep Acclim Pond	Imnaha River
Nez Perce Tribe	Lookingglass Hatchery	CH1	SP	2006	135,800	03-28-06	04-17-06	Lostine Accim Pond	Wallowa River
Nez Perce Tribe	Lyons Ferry Hatchery	CH1	FA	2006	130,000	04-13-06	04-14-06	Big Canyon (Clearwater River)	Clearwater River M F
Nez Perce Tribe	Lyons Ferry Hatchery	CH1	FA	2006	150,000	04-10-06	04-10-06	Cpt John Acclim Pond	Snake River
Nez Perce Tribe Total					1,059,800				
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2006	95,000	04-12-06	04-13-06	Big Canyon Acclim.Pd (Grande Ronde)	Grande Ronde River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2006	95,000	04-13-06	04-14-06	Big Canyon Acclim.Pd (Grande Ronde)	Grande Ronde River
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2006	421,000	04-09-06	04-11-06	Wallowa Acclim Pond	Wallowa River
Oregon Dept. of Fish and Wildlife	Lookingglass Hatchery	CH1	SP	2006	300	03-27-06	04-12-06	Grande Ronde Acclim Pond	Grande Ronde River
Oregon Dept. of Fish and Wildlife	Lookingglass Hatchery	CH1	SP	2006	63,864	03-21-06	04-14-06	Imnaha Acclim Pond	Imnaha River
Oregon Dept. of Fish and Wildlife	Lookingglass Hatchery	CH1	SP	2006	64,105	03-21-06	04-14-06	Imnaha Acclim Pond	Imnaha River
Oregon Dept. of Fish and Wildlife	Lookingglass Hatchery	CH1	SP	2006	64,167	03-21-06	04-14-06	Imnaha Acclim Pond	Imnaha River
Oregon Dept. of Fish and Wildlife	Lookingglass Hatchery	CH1	SP	2006	64,357	03-21-06	04-14-06	Imnaha Acclim Pond	Imnaha River
Oregon Dept. of Fish and Wildlife	Lookingglass Hatchery	CH1	SP	2006	64,404	03-21-06	04-14-06	Imnaha Acclim Pond	Imnaha River
Oregon Dept. of Fish and Wildlife Total					932,197				
U.S. Fish and Wildlife Service	Carson NFH	CH1	SP	2006	1,200,000	04-10-06	04-10-06	Carson Hatchery	Wind River
U.S. Fish and Wildlife Service	Dworshak NFH	CH1	SP	2006	1,010,000	03-21-06	04-09-06	Dworshak Hatchery	Clearwater River M F
U.S. Fish and Wildlife Service	Dworshak NFH	ST	SU	2006	300,000	04-10-06	04-14-06	Clear Creek	Clearwater River M F
U.S. Fish and Wildlife Service	Dworshak NFH	ST	SU	2006	300,000	04-10-06	04-14-06	S Fk Clearwater River	Clearwater River M F
U.S. Fish and Wildlife Service	Entiat Hatchery	CH1	SP	2006	330,000	04-10-06	04-10-06	Entiat Hatchery	Entiat River
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2006	98,000	04-07-06	04-12-06	Little Salmon River	Salmon River (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2006	850,000	04-14-06	05-05-06	Salmon River (ID)	Salmon River (ID)
U.S. Fish and Wildlife Service	Leavenworth NFH	CH1	SP	2006	1,006,000	04-17-06	04-17-06	Icicle Creek	Wenatchee River
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH1	SP	2006	250,000	04-20-06	04-20-06	Little White Salmon River	Little White Salmon River
U.S. Fish and Wildlife Service	Little White Salmon NFH	CH1	SP	2006	750,000	04-13-06	04-13-06	Little White Salmon River	Little White Salmon River
U.S. Fish and Wildlife Service	Spring Creek NFH	CH0	FA	2006	4,227,017	04-17-06	04-17-06	Spring Creek Hatchery	L Col R (D/s McN Dam)
U.S. Fish and Wildlife Service	Warm Springs NFH	CH1	SP	2006	568,250	03-30-06	04-26-06	Warm Springs Hatchery	Deschutes River
U.S. Fish and Wildlife Service	Winthrop NFH	CH1	SP	2006	485,000	04-17-06	04-21-06	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	CO	UN	2006	42,000	04-20-06	04-30-06	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	CO	UN	2006	75,000	04-20-06	04-30-06	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	CO	UN	2006	194,000	04-20-06	04-30-06	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service	Winthrop NFH	ST	SU	2006	102,000	04-14-06	04-30-06	Winthrop Hatchery	Methow River
U.S. Fish and Wildlife Service Total					11,787,267				

HATCHERY RELEASE LAST TWO WEEKS (con't)

Agency	From: Hatchery	4/7/2006 Species	to Race	04/20/06 MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Umatilla Tribe	Bonneville Hatchery	CH1	FA	2006	244,295	04-15-06	04-30-06	Thornhollow Pond Acclim	Umatilla River
Umatilla Tribe	Little White Salmon NFH	CH1	SP	2006	182,284	04-15-06	04-30-06	Imeques Pond Acclim	Umatilla River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2006	18,700	03-27-06	04-12-06	Grande Ronde Pond Acclim	Grande Ronde River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2006	23,300	03-27-06	04-12-06	Catherine Cr Pond Acclim	Grande Ronde River
Umatilla Tribe Total					468,579				
Warm Springs Tribe	Oak Springs Hatchery	ST	SU	2006	12,000	04-13-06	04-18-06	W Fk Hood River	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	SU	2006	17,049	04-19-06	04-19-06	Blackberry Pond Acclim	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2006	11,000	04-06-06	04-28-06	Parkdale Pond Acclim	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2006	17,500	03-27-06	04-27-06	E Fk Hood River	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2006	15,000	04-11-06	04-17-06	W Fk Hood River	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2006	15,000	04-11-06	04-17-06	W Fk Hood River	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2006	19,950	04-18-06	04-18-06	Blackberry Pond Acclim	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2006	33,000	03-21-06	05-04-06	Parkdale Pond Acclim	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SU	2006	19,950	04-18-06	04-18-06	Jones Creek Pond Acclim	Hood River
Warm Springs Tribe Total					160,449				
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2006	401,000	04-15-06	05-01-06	Carlton Pond Acclim	Methow River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH1	FA	2006	224,853	04-05-06	04-10-06	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH1	FA	2006	225,147	04-05-06	04-10-06	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH1	SP	2006	65,000	03-15-06	04-18-06	Curl Lake Pond Acclim	Tucannon River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2006	50,000	04-15-06	04-30-06	Baileysburg Bridge	Touchet River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2006	60,000	04-15-06	04-30-06	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2006	85,000	04-15-06	04-30-06	Dayton Pond Acclim	Touchet River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2006	100,000	04-15-06	04-30-06	Tucannon River	Tucannon River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2006	100,000	04-15-06	04-30-06	Walla Walla River	Walla Walla River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2006	160,000	04-15-06	04-30-06	Cottonwood Pond Acclim	Grande Ronde River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2006	65,000	04-15-06	05-01-06	Methow River	Methow River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2006	99,500	04-15-06	05-01-06	Twisp River	Methow River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2006	206,000	04-15-06	05-01-06	Chewuch Pond Acclim	Methow River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	CH0	SP	2006	480,000	04-10-06	04-30-06	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	ST	SU	2006	280,000	04-10-06	04-30-06	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	WI	2006	4,500	04-17-06	04-17-06	Salmon Creek (WA)	Columbia River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2006	199,800	04-03-06	04-23-06	Curl Lake Pond Acclim	Tucannon River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	ST	SU	2006	65,000	04-03-06	04-30-06	Tucannon River	Tucannon River
Washington Dept. of Fish and Wildlife Total					2,870,800				
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2006	231,551	03-15-06	05-14-06	Jack Creek Pond Acclim	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2006	273,636	03-15-06	05-14-06	Easton Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2006	280,667	03-15-06	05-14-06	Clark Flat Pond Acclim	Yakima River
Yakama Tribe	Leavenworth NFH	CO	UN	2006	115,088	04-15-06	04-15-06	Leavenworth Hatchery	Wenatchee River
Yakama Tribe	Leavenworth NFH	CO	UN	2006	610,951	04-15-06	04-15-06	Leavenworth Hatchery	Wenatchee River
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2006	125,000	04-15-06	04-15-06	Prosser Pond Acclim	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2006	125,000	04-15-06	04-15-06	Stiles Pond	Yakima River
Yakama Tribe	Prosser Acclim. Pond	CH0	FA	2006	1,700,000	04-15-06	04-15-06	Prosser Pond Acclim	Yakima River
Yakama Tribe	Wells Hatchery	CO	UN	2006	149,804	04-19-06	04-30-06	Wells Hatchery	Mid-Columbia River
Yakama Tribe	Winthrop NFH	CO	UN	2006	74,800	04-19-06	04-30-06	Winthrop Hatchery	Methow River
Yakama Tribe	Winthrop NFH	CO	UN	2006	245,241	03-19-06	04-30-06	Winthrop Hatchery	Methow River
Yakama Tribe	Yakama Hatchery	CH0	FA	2006	2,000	04-15-06	04-15-06	Marion Drain	Yakima River
Yakama Tribe Total					3,933,738				
Grand Total					29,069,530				

HATCHERY RELEASE NEXT TWO WEEKS (con't)

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Warm Springs Tribe	Oak Springs Hatchery	ST	SU	2006	20,000	04-28-06	05-10-06	W Fk Hood River	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2006	500	04-27-06	04-27-06	Hood River	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2006	875	04-28-06	04-28-06	Hood River	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2006	11,000	04-06-06	04-28-06	Parkdale Acclim Pond	Hood River
Warm Springs Tribe	Oak Springs Hatchery	ST	WI	2006	17,500	03-27-06	04-27-06	E Fk Hood River	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2006	160	04-22-06	04-22-06	Hood River	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2006	23,000	04-25-06	05-08-06	W Fk Hood River	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2006	23,000	04-25-06	05-08-06	W Fk Hood River	Hood River
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2006	33,000	03-21-06	05-04-06	Parkdale Acclim Pond	Hood River
Warm Springs Tribe Total					129,035				
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	CH1	SU	2006	401,000	04-15-06	05-01-06	Carlton Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2006	50,000	04-15-06	04-30-06	Baileysburg Bridge	Touchet River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2006	60,000	04-15-06	04-30-06	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2006	85,000	04-15-06	04-30-06	Dayton Acclim Pond	Touchet River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2006	100,000	04-15-06	04-30-06	Tucannon River	Tucannon River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2006	100,000	04-15-06	04-30-06	Walla Walla River	Walla Walla River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2006	160,000	04-15-06	04-30-06	Cottonwood Acclim Pond	Grande Ronde River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2006	65,000	04-15-06	05-01-06	Methow River	Methow River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2006	99,500	04-15-06	05-01-06	Twisp River	Methow River
Washington Dept. of Fish and Wildlife	Methow Hatchery	CH1	SP	2006	206,000	04-15-06	05-01-06	Chewuch Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	CH0	SP	2006	480,000	04-10-06	04-30-06	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	ST	SU	2006	280,000	04-10-06	04-30-06	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2006	199,800	04-03-06	04-23-06	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	ST	SU	2006	65,000	04-03-06	04-30-06	Tucannon River	Tucannon River
Washington Dept. of Fish and Wildlife Total					2,351,300				
Wildlife Total									
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2006	231,551	03-15-06	05-14-06	Jack Creek Acclim Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2006	273,636	03-15-06	05-14-06	Easton Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2006	280,667	03-15-06	05-14-06	Clark Flat Acclim Pond	Yakima River
Yakama Tribe	Leavenworth NFH	CO	UN	2006	34,112	04-26-06	05-15-06	Nason Creek	Wenatchee River
Yakama Tribe	Leavenworth NFH	CO	UN	2006	108,064	04-26-06	05-15-06	Maher Creek Acclim. Pond	Wenatchee River
Yakama Tribe	Leavenworth NFH	CO	UN	2006	108,574	04-26-06	05-15-06	Coulter Creek	Wenatchee River
Yakama Tribe	Wells Hatchery	CO	UN	2006	149,804	04-19-06	04-30-06	Wells Hatchery	Mid-Columbia River
Yakama Tribe	Winthrop NFH	CO	UN	2006	74,800	04-19-06	04-30-06	Winthrop Hatchery	Methow River
Yakama Tribe	Winthrop NFH	CO	UN	2006	245,241	03-19-06	04-30-06	Winthrop Hatchery	Methow River
Yakama Tribe Total					1,506,449				
Grand Total					15,739,813				

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		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg	Avg		
4/7	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/8	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/9	---	---	---	0	110	112	112	24	106	106	106	24	104	105	106	24	104	104	105	24
4/10	---	---	---	0	109	111	113	24	106	106	107	24	105	105	106	24	105	105	105	24
4/11	---	---	---	0	111	113	115	24	106	106	106	24	104	105	105	23	104	104	105	24
4/12	---	---	---	0	113	115	118	24	106	106	107	24	104	105	105	24	104	104	104	7
4/13	---	---	---	0	116	117	118	22	106	107	108	24	104	105	106	22	---	---	---	0
4/14	---	---	---	0	115	118	119	24	108	108	108	24	106	106	106	24	---	---	---	0
4/15	---	---	---	0	116	117	118	24	107	108	108	24	106	106	106	24	---	---	---	0
4/16	---	---	---	0	117	119	120	24	107	107	108	23	105	105	105	24	---	---	---	0
4/17	---	---	---	0	117	118	118	24	106	107	108	24	104	104	105	24	---	---	---	0
4/18	---	---	---	0	116	118	122	24	105	106	107	24	104	104	104	24	103	103	103	24
4/19	---	---	---	0	119	120	120	24	106	107	107	24	104	105	105	24	104	104	104	24
4/20	---	---	---	0	120	121	123	24	108	108	109	24	106	106	107	24	105	105	106	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		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
4/7	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/8	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/9	105	105	106	24	104	104	104	24	105	107	111	24	98	98	98	24	98	98	98	24
4/10	105	105	106	23	105	105	105	20	105	105	105	20	103	109	110	24	98	98	98	24
4/11	105	105	106	24	104	104	105	15	109	110	116	15	106	106	108	24	98	98	98	24
4/12	105	105	106	7	104	104	104	16	107	107	111	16	106	107	111	24	103	107	112	24
4/13	---	---	---	0	104	104	104	17	109	110	115	17	110	112	113	24	111	113	114	24
4/14	---	---	---	0	104	104	105	16	110	112	123	16	110	111	112	24	110	111	112	24
4/15	---	---	---	0	104	104	104	11	110	110	118	11	110	112	115	24	111	113	117	24
4/16	---	---	---	0	103	103	103	17	120	122	126	17	111	113	115	24	112	114	117	24
4/17	---	---	---	0	103	103	103	11	111	111	123	11	114	115	118	24	115	117	119	24
4/18	103	103	104	23	102	102	103	17	113	115	120	17	114	116	118	23	114	117	119	23
4/19	104	104	105	22	103	104	104	21	109	111	117	21	113	114	116	24	113	115	116	24
4/20	105	105	106	24	104	105	105	24	111	114	122	24	113	115	116	24	113	115	117	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		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
4/7	---	---	---	0	---	---	---	0	104	105	105	23	105	105	106	23	104	104	105	23
4/8	---	---	---	0	---	---	---	0	105	105	105	23	107	108	118	23	105	105	105	23
4/9	98	98	98	24	99	99	99	24	105	106	107	23	107	109	122	23	108	111	119	23
4/10	102	106	109	24	99	99	99	24	106	106	106	23	107	107	107	23	107	108	109	23
4/11	107	108	109	24	103	106	106	24	106	106	108	23	106	107	107	23	106	106	107	23
4/12	105	105	106	24	105	105	106	24	106	107	108	23	107	108	109	23	106	106	107	23
4/13	110	112	113	24	110	112	113	24	106	107	107	23	110	113	119	23	106	106	107	13
4/14	109	110	110	24	110	110	111	24	---	---	---	0	---	---	---	0	---	---	---	0
4/15	111	113	114	24	111	113	114	24	110	110	111	23	113	115	121	23	112	115	117	23
4/16	112	113	115	24	112	114	115	24	108	109	110	23	116	122	127	23	111	112	115	23
4/17	113	114	115	24	116	117	118	24	---	---	---	0	---	---	---	0	---	---	---	0
4/18	115	117	117	23	118	119	120	23	109	110	114	23	117	119	121	23	118	120	121	23
4/19	113	114	114	24	116	117	118	24	---	---	---	0	---	---	---	0	---	---	---	0
4/20	114	115	116	24	118	118	119	24	---	---	---	0	---	---	---	0	---	---	---	0

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

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

Date	<u>Priest R. Dnst</u>			<u>Pasco</u>			<u>Dworshak</u>			<u>Clrwrtr-Peck</u>			<u>Anatone</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	#	<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		hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg		hr			
4/7	104	104	104	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/8	104	105	105	23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/9	108	112	118	23	102	104	104	24	96	96	96	24	100	100	101	24	107	108	109	21
4/10	106	106	107	23	105	107	109	24	96	96	97	24	99	100	100	24	108	108	108	23
4/11	105	105	106	23	103	104	105	24	97	97	99	24	99	100	100	24	108	108	109	24
4/12	106	106	106	23	104	106	109	24	99	100	100	23	100	101	101	23	108	109	109	24
4/13	106	106	107	13	104	104	105	24	101	102	109	24	100	101	104	23	108	109	109	24
4/14	---	---	---	0	100	102	103	24	109	110	110	24	104	104	105	24	108	109	109	24
4/15	112	115	119	23	---	---	---	0	108	109	109	24	102	103	103	24	107	108	108	24
4/16	111	114	119	23	---	---	---	0	108	109	109	24	102	103	104	24	108	108	109	24
4/17	---	---	---	0	109	109	110	15	108	109	109	24	102	103	103	24	108	108	109	24
4/18	116	119	122	23	110	112	113	24	107	108	109	24	103	104	104	24	109	110	110	24
4/19	---	---	---	0	114	116	117	24	108	109	109	24	104	105	105	24	110	110	111	24
4/20	---	---	---	0	117	117	118	24	108	110	115	20	105	106	106	24	110	110	111	24

Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clrwrtr-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>	High	#	<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		hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg		hr			
4/7	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/8	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/9	101	102	103	24	106	106	106	24	117	118	119	24	114	114	114	24	118	118	118	24
4/10	100	101	102	24	107	107	107	24	118	119	121	24	114	114	114	24	118	118	118	24
4/11	100	101	102	24	106	107	107	24	117	117	119	24	113	114	115	24	118	119	124	24
4/12	100	101	102	23	106	106	106	24	118	118	120	24	112	113	113	24	117	118	123	24
4/13	101	101	102	24	106	107	108	24	117	118	119	24	112	112	113	24	117	119	128	24
4/14	103	104	104	24	108	108	109	24	118	119	120	24	114	114	114	24	115	116	116	24
4/15	102	102	102	24	107	107	108	24	121	121	122	24	112	112	113	24	116	116	117	24
4/16	102	102	103	24	105	105	106	24	122	123	123	24	111	111	112	24	117	118	118	24
4/17	102	103	103	24	105	105	105	24	122	123	123	24	112	112	113	24	117	117	117	24
4/18	102	104	105	24	105	106	106	24	120	121	121	24	112	113	114	24	116	117	117	24
4/19	103	104	105	24	107	108	109	24	120	121	121	24	115	115	116	24	117	117	118	24
4/20	103	105	106	24	109	109	110	24	120	120	120	24	116	116	116	24	117	118	118	24

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

Date	<u>Lower Mon.</u>			<u>L. Mon. Tlwr</u>			<u>Ice Harbor</u>			<u>Ice Harbor Tlwr</u>			<u>McNary-Oregon</u>			#				
	<u>24 h</u>	<u>12 h</u>	High	#	<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		hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg	hr	Avg	Avg		hr			
4/7	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/8	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/9	114	115	116	24	118	118	118	24	113	114	115	24	119	119	120	24	111	111	112	24
4/10	117	118	118	24	118	118	119	24	115	115	115	24	119	119	120	24	110	110	111	13
4/11	117	117	117	24	117	118	119	24	115	115	116	24	118	119	119	24	---	---	---	0
4/12	117	118	119	24	116	117	118	24	116	116	116	24	118	119	120	24	---	---	---	0
4/13	116	117	119	24	116	117	122	24	115	116	116	24	119	120	121	24	---	---	---	0
4/14	118	119	120	24	116	117	118	24	116	117	117	24	119	120	121	24	---	---	---	0
4/15	116	116	116	9	117	117	118	24	115	115	116	24	120	120	121	24	---	---	---	0
4/16	---	---	---	0	118	119	119	24	113	113	113	24	121	121	121	24	---	---	---	0
4/17	115	115	116	12	117	117	117	24	113	113	113	24	121	121	121	24	---	---	---	0
4/18	115	116	117	24	117	117	118	24	113	114	115	24	119	120	121	24	---	---	---	0
4/19	117	118	118	24	118	118	119	24	116	116	117	24	119	119	120	24	---	---	---	0
4/20	118	119	119	24	118	118	119	24	117	118	118	24	119	120	120	24	---	---	---	0

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>McNary-Wash</u>			<u>McNary Tlwr</u>			<u>John Day</u>			<u>John Day Tlwr</u>			<u>The Dalles</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>					
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr				
4/7	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/8	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/9	108	109	110	24	119	119	120	24	106	108	108	24	112	119	121	24	105	106	107	24
4/10	108	109	109	24	119	120	120	24	109	110	111	24	119	120	120	24	110	111	112	24
4/11	109	110	111	24	120	122	124	24	111	112	112	24	119	120	121	24	112	113	114	24
4/12	110	111	111	24	118	119	119	24	112	113	113	24	119	119	120	24	113	114	115	24
4/13	110	110	111	24	118	119	119	24	112	113	115	25	119	120	120	25	113	114	114	25
4/14	110	111	111	24	119	120	120	24	114	115	115	24	120	120	121	24	114	115	116	24
4/15	109	110	110	24	120	120	121	24	114	115	115	24	120	121	123	24	115	115	116	24
4/16	108	109	109	24	120	120	120	24	113	113	113	24	122	123	123	24	117	118	119	24
4/17	108	109	110	24	119	120	120	24	110	111	112	24	120	121	123	24	115	116	117	24
4/18	109	111	112	24	120	120	120	24	109	109	110	24	119	120	121	24	112	114	115	24
4/19	112	113	114	24	120	120	120	24	111	112	113	24	119	120	122	24	113	115	117	24
4/20	115	117	117	24	120	120	121	24	114	115	115	24	120	121	123	24	114	115	117	24

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>CamasWashougal</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				
4/7	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/8	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
4/9	107	110	112	24	110	111	112	24	112	113	114	23	112	112	113	24	118	119	120	15
4/10	116	117	118	24	107	109	110	24	111	112	114	23	111	112	112	24	121	121	122	17
4/11	116	117	118	24	114	115	115	24	116	117	118	23	113	115	116	24	124	124	124	17
4/12	117	118	118	24	115	116	116	24	117	117	118	23	117	118	119	24	120	121	124	17
4/13	117	118	118	25	115	115	116	25	116	116	116	23	115	116	116	25	119	119	121	17
4/14	118	118	119	24	116	116	117	24	117	117	117	23	116	116	116	24	120	120	120	17
4/15	117	118	119	24	115	115	115	24	116	116	117	23	114	115	115	24	122	123	124	17
4/16	119	120	121	24	115	115	115	24	118	118	118	19	116	117	117	24	124	124	125	17
4/17	118	118	119	24	115	116	116	24	118	118	119	23	116	116	116	24	124	124	124	17
4/18	116	117	118	24	115	116	117	24	118	119	119	23	118	119	119	24	123	123	125	17
4/19	117	118	118	24	116	117	118	24	118	118	118	23	117	118	119	24	123	123	127	17
4/20	118	118	119	23	117	117	118	24	118	118	118	23	117	118	119	24	122	122	123	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/currentsmppsubmitdata.asp>

COMBINED YEARLING CHINOOK												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/07/2006	*	2,548	---	---	389	7,964	0	417	4	267	1,257	2,465
04/08/2006	*	1,947	---	20	185	17,132	78	0	10	---	3,072	3,024
04/09/2006	*	2,694	---	19	185	24,961	0	0	8	321	1,677	3,011
04/10/2006	*	1,197	1,086	42	148	24,147	0	1,720	7	---	2,240	2,902
04/11/2006	*	781	1,875	179	---	19,093	393	0	5	4,012	2,821	4,902
04/12/2006	*	731	682	399	---	20,432	0	0	60	---	3,941	30,899
04/13/2006	*	490	418	373	410	17,806	3	726	440	6,747	1,840	41,295
04/14/2006	*	1,792	465	108	355	13,763	13,850	0	165	---	3,371	45,900
04/15/2006	*	1,372	86	202	446	22,326	91	0	22	14,686	4,042	41,343
04/16/2006	*	---	176	169	---	35,087	22,439	746	14	---	9,560	45,479
04/17/2006	*	---	446	69	---	48,180	52,536	72	53	26,813	11,267	49,720
04/18/2006	*	---	535	109	---	27,127	46,258	0	27	---	10,419	39,950
04/19/2006	*	1,056	96	195	---	31,429	69,018	1,070	411	20,513	14,001	42,378
04/20/2006	*	1,363	---	193	488	33,789	87,681	0	662	0	14,857	21,898
04/21/2006	*	---	---	213	---	40,376	60,571	---	---	158,719	14,555	33,594
<hr/>												
Total:		15,971	5,865	2,290	2,606	383,612	352,918	4,751	1,888	232,078	98,920	408,760
# Days:		11	10	14	8	15	15	14	14	9	15	15
Average:		1,452	587	164	326	25,574	23,528	339	135	25,786	6,595	27,251
YTD		22,089	23,760	7,544	3,255	420,054	352,941	4,751	1,914	232,326	101,400	440,437

COMBINED SUBYEARLING CHINOOK												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
04/07/2006	*	0	---	---	0	329	0	6	47	847	0	1,033
04/08/2006	*	0	---	0	0	1,802	0	0	34	---	0	1,107
04/09/2006	*	0	---	0	0	2,118	0	0	32	1,614	0	263
04/10/2006	*	0	0	0	0	0	0	29	27	---	0	446
04/11/2006	*	0	0	0	---	1,262	3	0	13	1,597	72	598
04/12/2006	*	0	0	0	---	0	0	0	37	---	104	1,070
04/13/2006	*	0	0	0	0	471	0	26	35	871	33	1,645
04/14/2006	*	0	0	0	0	150	0	0	21	---	95	1,113
04/15/2006	*	0	0	0	0	0	0	0	74	728	84	1,264
04/16/2006	*	---	0	0	---	0	523	0	23	---	39	596
04/17/2006	*	---	0	0	---	0	0	0	105	2,110	0	1,731
04/18/2006	*	---	1	0	---	0	0	0	87	---	280	360,198
04/19/2006	*	0	2	0	---	0	0	25	37	5,438	160	93,307
04/20/2006	*	0	---	0	0	975	0	0	85	0	405	10,622
04/21/2006	*	---	---	0	---	0	0	---	---	2,491	386	4,152
<hr/>												
Total:		0	3	0	0	7,107	526	86	657	15,696	1,658	479,145
# Days:		11	10	14	8	15	15	14	14	9	15	15
Average:		0	0	0	0	474	35	6	47	1,744	111	31,943
YTD		3	33	5	15	7,345	527	98	926	16,335	1,658	1,244,020

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)
04/07/2006	*	0	---	---	3	60	0	0	0	0	0	2,277
04/08/2006	*	0	---	0	0	33	0	0	0	---	6	2,499
04/09/2006	*	0	---	0	1	0	0	0	1	10	0	1,553
04/10/2006	*	0	0	0	1	0	0	0	2	---	0	2,661
04/11/2006	*	0	0	0	---	0	0	0	1	0	11	3,135
04/12/2006	*	0	0	0	---	0	0	0	0	---	11	3,252
04/13/2006	*	0	0	0	7	0	0	0	0	19	11	2,562
04/14/2006	*	0	0	0	3	75	0	0	0	---	0	5,390
04/15/2006	*	0	0	0	5	78	0	0	0	75	0	4,353
04/16/2006	*	---	0	0	---	341	392	0	1	---	39	4,473
04/17/2006	*	---	0	0	---	0	521	0	9	0	41	3,147
04/18/2006	*	---	0	0	---	702	615	0	7	---	0	3,086
04/19/2006	*	0	0	0	---	505	0	13	7	0	241	2,332
04/20/2006	*	0	---	0	2	650	0	0	10	0	81	2,380
04/21/2006		---	---	0	---	457	506	---	---	0	172	1,384
<hr/>												
Total:		0	0	0	22	2,901	2,034	13	38	104	613	44,484
# Days:		11	10	14	8	15	15	14	14	9	15	15
Average:		0	0	0	3	193	136	1	3	12	41	2,966
YTD		0	0	0	27	2,929	2,034	13	40	111	613	47,549

		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)
04/07/2006	*	2	---	---	14	4,790	0	517	0	438	302	321
04/08/2006	*	24	---	1	9	7,731	734	0	4	---	614	85
04/09/2006	*	23	---	1	11	12,934	0	0	0	724	288	502
04/10/2006	*	14	11	0	16	8,296	0	1,005	6	---	1,136	843
04/11/2006	*	13	802	12	---	11,677	1,067	0	4	1,278	1,451	1,083
04/12/2006	*	9	1,806	102	---	8,713	0	0	10	---	2,135	502
04/13/2006	*	10	3,374	368	30	7,217	0	674	15	2,125	1,740	1,589
04/14/2006	*	24	1,377	510	43	11,883	19,943	0	6	---	2,750	996
04/15/2006	*	12	358	836	53	29,847	51	0	4	3,959	2,581	702
04/16/2006	*	---	1,061	1,733	---	21,598	23,928	946	6	---	3,321	596
04/17/2006	*	---	718	1,024	---	79,230	62,209	61	20	5,409	4,726	944
04/18/2006	*	---	803	567	---	96,219	112,401	0	12	---	8,658	1,299
04/19/2006	*	44	48	162	---	36,470	119,233	1,987	16	3,347	7,943	1,167
04/20/2006	*	47	---	58	38	58,156	117,176	0	14	0	7,773	1,448
04/21/2006		---	---	36	---	73,743	70,322	---	---	16,997	8,329	1,132
<hr/>												
Total:		222	10,358	5,410	214	468,504	527,064	5,190	117	34,277	53,747	13,209
# Days:		11	10	14	8	15	15	14	14	9	15	15
Average:		20	1,036	386	27	31,234	35,138	371	8	3,809	3,583	881
YTD		244	10,514	5,439	292	503,091	527,268	5,288	120	34,698	54,041	13,984

Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE										
	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
04/07/2006 *	0	---	---	0	509	0	3	0	21	6	100
04/08/2006 *	0	---	0	0	590	6	0	0	---	6	0
04/09/2006 *	0	---	0	0	832	0	0	0	10	10	0
04/10/2006 *	0	0	0	0	444	0	29	1	---	0	0
04/11/2006 *	0	0	0	---	316	10	0	1	22	0	28
04/12/2006 *	0	0	0	---	517	0	0	1	---	0	22
04/13/2006 *	0	0	0	0	392	3	0	0	0	0	56
04/14/2006 *	0	0	0	0	226	277	0	0	---	11	0
04/15/2006 *	0	0	0	0	313	0	0	3	95	48	0
04/16/2006 *	---	0	0	---	256	785	67	1	---	20	0
04/17/2006 *	---	0	0	---	446	1,440	0	22	198	41	0
04/18/2006 *	---	0	0	---	176	1,041	0	24	---	198	162
04/19/2006 *	0	0	0	---	168	1,753	25	46	418	80	0
04/20/2006 *	0	---	0	0	162	1,011	0	74	0	243	0
04/21/2006	---	---	0	---	152	1,528	---	---	207	43	0
Total:	0	0	0	0	5,499	7,854	124	173	971	706	368
# Days:	11	10	14	8	15	15	14	14	9	15	15
Average:	0	0	0	0	367	524	9	12	108	47	25
YTD	0	0	0	0	7,489	7,863	124	173	971	706	485

* 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)}

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:

4/21/06 3:08 PM

		04/08/06	TO	04/21/06			
		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	4,520	238,229	1,760	3,500	284,620	532,629
	Sum of NumberBarged	0	26,129	300	94	47,529	74,052
	Sum of NumberBypassed	4,517	212,017	1,459	3,395	237,073	458,461
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	3	49	1	5	10	68
	Sum of FacilityMorts	0	28	0	6	1	35
	Sum of ResearchMorts	0	6	0	0	7	13
	Sum of TotalProjectMorts	3	83	1	11	18	116
LGS	Sum of NumberCollected	402	269,424	1,524	5,962	400,579	677,891
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	402	268,419	1,524	5,940	400,194	676,479
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	31	0	0	1	32
	Sum of FacilityMorts	0	982	0	30	88	1,100
	Sum of ResearchMorts	0	1	0	0	0	1
	Sum of TotalProjectMorts	0	1,014	0	30	89	1,133
LMN	Sum of NumberCollected	64	3,505	10	92	3,899	7,570
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	63	3,497	10	90	3,893	7,553
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	1	1	0	0	0	2
	Sum of FacilityMorts	0	7	0	2	6	15
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	1	8	0	2	6	17
MCN	Sum of NumberCollected	7,635	113,617	55	476	16,935	138,718
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	7,613	113,559	55	476	16,927	138,630
	Sum of Numbertrucked	0	0	0	0	0	0
	Sum of SampleMorts	12	25	0	0	0	37
	Sum of FacilityMorts	10	33	0	0	8	51
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	22	58	0	0	8	88
Total Sum of NumberCollected		12,621	624,775	3,349	10,030	706,033	1,356,808
Total Sum of NumberBarged		0	26,129	300	94	47,529	74,052
Total Sum of NumberBypassed		12,595	597,492	3,048	9,901	658,087	1,281,123
Total Sum of Numbertrucked		0	0	0	0	0	0
Total Sum of SampleMorts		16	106	1	5	11	139
Total Sum of FacilityMorts		10	1,050	0	38	103	1,201
Total Sum of ResearchMorts		0	7	0	0	7	14
Total Sum of TotalProjectMorts		26	1,163	1	43	121	1,354

YTD Transportation Summary

Source: Fish Passage Center

Updated:

4/21/06 3:08 PM

TO: 04/21/06

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	4,740	266,649	1,780	5,040	315,120	593,329
	Sum of NumberBarged	0	26,129	300	94	47,529	74,052
	Sum of NumberBypassed	4,736	240,419	1,479	4,930	267,566	519,130
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	4	66	1	10	17	98
	Sum of FacilityMorts	0	29	0	6	1	36
	Sum of ResearchMorts	0	6	0	0	7	13
	Sum of TotalProjectMorts	4	101	1	16	25	147
LGS	Sum of NumberCollected	403	269,441	1,524	5,968	400,726	678,062
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	403	268,436	1,524	5,946	400,340	676,649
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	0	31	0	0	2	33
	Sum of FacilityMorts	0	984	0	30	88	1,102
	Sum of ResearchMorts	0	1	0	0	0	1
	Sum of TotalProjectMorts	0	1,016	0	30	90	1,136
LMN	Sum of NumberCollected	70	3,505	10	92	3,946	7,623
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	69	3,497	10	90	3,940	7,606
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	1	1	0	0	0	2
	Sum of FacilityMorts	0	7	0	2	6	15
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	1	8	0	2	6	17
MCN	Sum of NumberCollected	8,101	113,818	60	476	17,275	139,730
	Sum of NumberBarged	0	0	0	0	0	0
	Sum of NumberBypassed	8,066	113,759	60	476	17,267	139,628
	Sum of NumberTrucked	0	0	0	0	0	0
	Sum of SampleMorts	24	25	0	0	0	49
	Sum of FacilityMorts	11	34	0	0	8	53
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	35	59	0	0	8	102
Total Sum of NumberCollected		13,314	653,413	3,374	11,576	737,067	1,418,744
Total Sum of NumberBarged		0	26,129	300	94	47,529	74,052
Total Sum of NumberBypassed		13,274	626,111	3,073	11,442	689,113	1,343,013
Total Sum of NumberTrucked		0	0	0	0	0	0
Total Sum of SampleMorts		29	123	1	10	19	182
Total Sum of FacilityMorts		11	1,054	0	38	103	1,206
Total Sum of ResearchMorts		0	7	0	0	7	14
Total Sum of TotalProjectMorts		40	1,184	1	48	129	1,402

Cumulative Adult Passage at Mainstem Dams Through: 04/20

DAM	EndDate	Spring Chinook						Summer Chinook						Fall Chinook					
		2006		2005		10-Yr Avg.		2006		2005		10-Yr Avg.		2006		2005		10-Yr Avg.	
		Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	04/20	314	-1	2,988	1	58,546	295	0	0	0	0	0	0	0	0	0	0	0	0
TDA	04/20	122	-1	1,021	1	31,021	105	0	0	0	0	0	0	0	0	0	0	0	0
JDA	04/20	53	-2	612	-5	19,949	40	0	0	0	0	0	0	0	0	0	0	0	0
MCN	04/20	10	0	150	0	13,341	35	0	0	0	0	0	0	0	0	0	0	0	0
IHR	04/20	0	0	51	0	7,955	11	0	0	0	0	0	0	0	0	0	0	0	0
LMN	04/20	0	0	9	0	5,836	6	0	0	0	0	0	0	0	0	0	0	0	0
LGS	04/20	1	0	6	0	4,067	29	0	0	0	0	0	0	0	0	0	0	0	0
LGR	04/20	0	0	3	0	3,124	2	0	0	0	0	0	0	0	0	0	0	0	0
RIS	04/19	0	0	0	0	130	0	0	0	0	0	0	0	0	0	0	0	0	0
RRH	04/19	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
WFA	04/19	184	0	877	1	n/a	n/a	---	---	---	---	---	---	0	0	0	0	0	n/a

DAM	Coho						Sockeye			Steelhead			
	2006		2005		10-Yr Avg.		2006		2005	10-Yr Avg.	10-Yr Avg.		Wild
	Adult	Jack	Adult	Jack	Adult	Jack	2006	2005	Avg.	2006	2005	Avg.	2006
BON	0	0	0	0	0	0	0	0	0	1,351	615	1903	389
TDA	0	0	0	0	0	0	0	0	0	898	386	675	280
JDA	0	0	3	0	0	0	0	0	0	1,941	648	2155	845
MCN	0	0	0	0	0	0	0	0	0	1,827	711	1146	646
IHR	0	0	0	0	0	0	0	0	0	2,396	1,002	1359	830
LMN	0	0	0	0	0	0	0	0	0	2,176	597	1390	799
LGS	0	0	0	0	0	0	0	0	0	2,133	702	1581	657
LGR	0	0	0	0	0	0	0	0	0	6,841	4,449	5821	1,898
RIS	0	0	0	0	0	0	0	0	0	8	9	7	0
RRH	0	0	0	0	0	0	0	0	0	22	89	36	0
WFA	0	0	0	0	n/a	n/a	0	0	n/a	5,248	5,502	n/a	n/a

BON and LGR have switched to video counts so the data is delayed.

*PRD is not posting wild steelhead numbers.

These numbers were collected from USACE, Grant PUD, Douglas PUD, Chelan PUD, ODFW and DART.

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: 04/21/06

BON counts from January 1, 2006 to March 14, 2006 (our traditional counts begin March 15):

Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
1	0	2,516	238

Run Year counts (June 1, 2005 to May 31, 2006) for Lower Granite:

Steelhead
0