

Fish Passage Center

Weekly Report #00 - 17

June 30, 2000

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SUMMARY OF EVENTS:

Water Supply: The precipitation for the Columbia above Grand Coulee was 76% of average, for the Snake River above Ice Harbor 47% of average, and for the Columbia above The Dalles levels were 70% of average, during the period of June 1 through 27. The lowest precipitation was 14% of average for the Snake River Plain, 28% of average for the Upper Deschutes/ Crooked, and 38% of average for the Owyhee/Malheur.

The new July-Early Runoff Volume Forecast has been issued. Projected runoff volumes have decreased for the entire Columbia basin. The highest decrease is at Libby, which was 20% compared to June Final Runoff volume forecast, resulting in failure to refill the reservoir for summer flow augmentation. Lower Granite and The Dalles forecasts have decreased by 3% and 4% compared with the June Final forecast. The July-Final forecast compared with previous forecasts is presented in the following table:

Site	April-Fina Runoff Vo Forecast		May-Fi Runoff Vo Foreca	olume	June-Fin Volume f	al Runoff orecast	July Early Runoff volume Forecast			
Site	Runoff Volume [KAF]	% of avg	Runoff Volume [KAF]	olume % of		% of avg	Runoff Volume [KAF]	% of avg		
Mica (April-Sept.)	13.1	103	13.2	104	12.9	101	12.7	100		
Hungry Horse (April-Sept.)	2.09	96	2.08	95	2.13	98	2.06	94		
Libby (April-Sept.)	7.29	108	7.08	105	7.18	106	5.84	86		
Grand Coulee (JanJuly)	65.8 104		65.8	104	64.8	102	62.1	98		
The Dalles (JanJuly)	105.0	99	105.0	99	102.0	96	97.9	92		
Brownlee (April-July)	3.93	68	4.08	70	3.86	67	3.76	65		
Dworshak (April-July)	2.67	99	2.56	95	2.56	95	2.61	97		
Lower Granite (JanJuly)	26.7 90		26.4	89	25.7	86	24.7	83		
Heise NR-ID (April-July)	2.94 85		2.83 82		2.91 84		2.88	83		
Weiser –ID (April-July)	3.62	66	3.69	68	3.49	64	3.31	61		

Reservoir Operations: Reservoirs continued refilling toward full pool elevations during the week of June 23 through 29. A summary of actual elevations on June 29, and full pool elevations is shown in the following Table:

Project	Actual June 22 Elevation in [ft]	Full Pool Elevation in [ft]
Libby	2417.21	2459.0
Hungry Horse	3558.28	3560.0
Grand Coulee	1278.4	1290.0
Brownlee	2072.53	2077.0
Dworshak	1598.76	1600.0

Libby reservoir finished the 25 Kcfs for the sturgeon flow on June 28, and decreased outflows to 17.95 kcfs on June 29. Inflows to the project fluctuated between 26.9 Kcfs and 31.9 Kcfs.

Hungry Horse continued refilling over the past week. Outflows from the project were in the range of 3.9 kcfs-4.87 kcfs.

Grand Coulee was operated at elevations between 1278.3 ft and 1279.4 ft through the week of June 23-29 in order to maintain higher flows at McNary. Inflows were decreasing from 141.5 Kcfs on June 24 to 125 Kcfs on June 29 and outflows were in the range of 93.2 Kcfs-157.8 Kcfs.

Brownlee continued to be operated within a two foot operating range between elevation 2073-2075 feet. Outflow from Hells Canyon Dam for the past week ranged between 6.78 Kcfs on June 23 to 15.32 Kcfs on June 26.

Dworshak was operated in the range of 1598.28 ft to 1598.76 ft from June 23-29. The outflow was decreased from 6.8 kcfs on June 23 to 3.3 Kcfs on June 29. Inflows were in the range of 4.6 Kcfs to 6.6 Kcfs.

Upper Snake reservoirs: As of June 29, the Upper Snake system was drafted to 88% of capacity. American Falls was drafted to 76% of capacity, while Palisades and Jackson Lake were 93% and 99% of capacity, respectively. The irrigation demands in the system continued to increase. Salmon flow augmentation was initiated on June 22 with gradual increases to 1.5 kcfs on June 24 at Milner, which is the lowest point in the Upper Snake system.

Boise and Payette River Basins: As of June 29, the Boise River system was at 96% of capacity. Irrigation demands are also increasing in the system. Flow for salmon augmentation was initiated on June 18 with flows of 660 cfs. As of June 29, the Payette River system was at 98% of capacity. Flow for salmon augmentation was also initiated on June 18.

Streamflow: 1995 Biological Opinion spring flow targets based on the May Final Runoff Volume forecast are 96.3 Kcfs at Lower Granite and 260 Kcfs at McNary. The 1998 Biological Opinion flow target at Priest Rapids is 135 Kcfs beginning on April 10 through June 30. The Biological Opinion summer flow target of 51.3 Kcfs for Lower Granite is in place beginning June 21. Weekly average flows for McNary and Lower Granite remained below the BiOp required flow targets for the period of June 23-29, decreasing compared to the previous week due to below average precipitation in the basin and delay of the remaining snowmelt. The average flow for the major run-of-river projects for June 16-29 period are given in the following table:

	Average discharge [kcfs]										
Project	June 23-29	June 16-22									
Priest Rapids	146.2	130									
McNary	198.01	200.9									
Lower Granite	43.4	61.8									
Bonneville	203.3	212									

Spill: Outflow from Dworshak Dam continued with no spill. The Biological Opinion spill program at the Lower Snake projects ended on June 20. The Biological Opinion summer spill program in the Snake only calls for spill at Ice Harbor Dam.

Spill for fish passage ended at McNary Dam as transportation was implemented. Any spill presently occurring is in excess of hydraulic capacity. Biological Opinion spill as modified by the NMFS and Action Agencies' Spill Plan continues at the lower Columbia River projects through June 30.

Levels of total dissolved gas were below, or near, the allowable TDGS levels at all locations measured. Monitoring for signs of gas bubble trauma (GBT) on fish collected through the Smolt Monitoring Program was conducted this past week. Snake River sites have completed sampling for the season with the end of the spill program, while the Columbia River sites have switched to subyearling chinook for the duration of the program. Only a few fish were detected with signs of GBT in fins during sampling conducted this past week.

Smolt Monitoring Program.

Snake River basin: This week saw subyearling chinook passage indices at Lower Granite Dam change little from last week except that the daily fluctuations this week occurred over a wider range (from approximately 5,000 to 32,000 fish). Daily subyearling chinook passage indices at Little Goose and Lower Monumental dams remained more constant during this week — only a single 1-day spike in passage index was observed at each of these two sites.

Mid-Columbia River: Passage indices of subyearling chinook this week at Rock Island Dam remained mostly in the 100's (range of 104-218 fish).

Lower Columbia River. This week saw a period of peak subyearling chinook passage into the lower Columbia River. Passage indices of subyearling chinook at McNary Dam averaged approximately 500,000 fish daily (range between approximately 369,000 and 694,000 fish). By June 29, this large movement of subyearling

chinook in the lower Columbia River was observed at John Day Dam when the passage index jumped to over 100,000 fish for the first time this season.

Adult fish passage. During the week of June 23-29, numbers of adult summer chinook passing Bonneville Dam ranged between 542 and 707. The cumulative count for summer chinook through June 29 was 17,478. This total is 1.5 times the respective 1999 count and 10-year average. Summer chinook counts at The Dalles averaged 624 per day through the week with the cumulative count 13,115 through June 29. At McNary Dam, daily counts of adult summer chinook averaged about 490 per day for the week with the cumulative count through June 29 of 8,176. The cumulative Snake River count of adult summer chinook at Ice Harbor Dam was 3,011 through June 29.

The number of jack, summer chinook salmon counted at Bonneville Dam totals 6,903 through June 29, and this total is 3 times the 1999 count and 6 times the 10-year average. Through June 29, 77,967 sockeye were counted at Bonneville Dam. The year 2000 count is 10 times the 1999 count and 3.7 times the 10-year average. Sockeye counts appeared to peak between June 19 and 23. The high daily count on June 24 was 13,698 at John Day Dam. In addition, adult sockeye are now passing Ice Harbor (36 counted) and Lower Granite (15 counted) dams; these fish should be destined for the Redfish Lake and other upper Salmon River lakes. Sockeye counts are increasing rapidly at Priest Rapids and upper Mid-Columbia projects. Preseason estimates of numbers of sockeye to the Columbia River have already been exceeded (31,200 estimated) and numbers for the season should exceed 100,000 with the Okanogan system [Lake Osoyoos] expected to receive the majority of the upriver run.

At Bonneville Dam, the steelhead counts continued their upward trend with daily counts near 900 for the latter part of the week. The cumulative count for the project is 21,629. The steelhead count for 2000 is twice the 1999 count and 1.3 times the 10-year average to date. The number of steelhead passing The Dalles and upriver sites increased with the June 29 count at The Dalles

exceeding 6,931. Preliminary forecasts projected 254,000 upriver steelhead and that would be an increase from the previous year.

Hatchery Releases. Subyearling fall chinook releases in the Mid-Columbia River from Priest Rapids were completed during the week (June 26). Subyearling summer chinook releases were completed from Wells Hatchery with the Turtle Rock facility scheduled to release their subyearling summer chinook on July 5. This release will bring to end the releases in the mid-Columbia.

In the Lower Columbia Reach (McNary to Bonneville Dam), the final hatchery release of about 1.0 million subyearling fall chinook will be released into the Klickitat River during the first week of July.

In the Snake R iver, the final release of subyearling fallchinook was completed from Big Canyon Acclimation pond (Clearwater River) on June 26.

The Hatchery Zone Report Table gives the prelim in nary numbers from hatchery releases for the 2000 migration season. Numbers will be updated as they are finalized by the agencies. These hatchery release totals include the chinook and sockeye released in fall 1999.

	Snake River	Mid- Columbia	Lower Columbia	Total Release
Fall Chinook	3,232,953	12,047,000	25,556,219	40,836,172
Spring Chinook	5,952,930	3,940,605	5,260,452	15,153,987
Summer Chinook	1,147,487	2,855,216		4,002,703
Coho			1,425,000	1,425,000
Coho	797,474	1,564,705	6,963,500	9,325,679
Sockeye	40,419	142,901		183,320
Summer Steelhead	9,882,148	1,372,284	537,351	11,791,783
Winter Steelhead			79,655	79,655
Total	21,053,411	21,922,711	39,822,177	82,798,299

	Grand Coulee				Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
Date	Flow	Spill	Flow	Spill	Flow	Flow Spill		Spill	Flow	Spill	Flow	Spill	Flow	Spill
====== 06/14/00	===== 114.5	0.0	===== 111.3	0.0	===== : 129.3	===== = 14.7	:=====: 131.4	===== : 18.3	137.9	===== 0.0	====== 144.7	====== 27.8	 148.1	42.0
06/15/00	100.4	0.0	100.1	0.0	113.2	8.5	119.0	4.4	131.9	0.0	138.7	13.0	154.3	9.3
06/16/00	82.9	0.1	90.0	0.0	99.8	6.1	98.8	1.7	111.9	0.0	115.1	1.9	104.3	1.7
06/17/00	93.7	0.1	91.0	0.0	102.8	14.6	105.2	6.8	115.2	0.0	114.9	9.6	112.6	2.1
06/18/00	77.7	0.1	84.5	0.0	98.0	10.1	99.2	5.3	109.7	0.0	114.9	7.0	116.6	4.3
06/19/00	121.0	0.1	116.4	0.0	126.6	10.0	126.4	3.2	132.3	0.0	130.6	14.0	125.8	9.3
06/20/00	108.5	0.1	114.2	0.0	133.9	13.9	142.8	7.6	153.5	0.0	159.2	26.3	158.0	12.4
06/21/00	116.9	0.1	118.9	0.0	134.3	8.2	136.0	17.7	142.1	0.0	143.9	8.3	146.6	1.9
06/22/00	118.0	0.1	125.2	0.0	134.6	9.4	134.9	17.8	144.9	0.0	148.9	12.3	145.8	1.9
06/23/00	98.1	0.1	106.4	0.0	120.5	7.7	129.2	17.7	135.2	0.0	137.1	1.3	143.5	2.7
06/24/00	109.3	0.1	99.5	0.0	109.7	7.8	114.5	11.8	123.3	0.0	128.0	2.9	127.2	2.0
06/25/00	93.2	0.1	93.7	0.0	104.0	7.3	109.9	0.0	117.9	0.0	119.6	2.3	117.0	2.0
06/26/00	138.6	0.1	134.3	0.0	141.3	11.7	138.9	9.0	143.2	0.0	141.0	9.5	137.3	6.0

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

		Hells Lower Little				tle	Lo	wer	I	ce		
	Dwo	rshak	Brownlee	Brownlee Canyon		Granite		ose	Monur	nental	Harbor	
Date	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
06/14/00	====== 4.4	0.0	 16.8	16.6	75.8	30.3	72.3	===== : 24.2	73.7	45.0	78.6	64.2
06/15/00	4.8	0.0	16.7	12.9	78.2	30.9	74.0	25.2	75.9	41.5	79.1	58.0
06/16/00	4.8	0.0	14.7	7.2	77.7	30.3	74.8	26.0	76.7	41.7	83.4	59.8
06/17/00	4.8	0.0	13.0	16.7	66.8	28.8	65.0	24.0	67.7	36.7	73.5	57.7
06/18/00	4.8	0.0	13.5	16.5	57.3	27.6	53.4	23.6	54.3	33.3	59.9	50.4
06/19/00	4.8	0.0	12.7	17.3	62.4	30.4	59.4	21.9	58.8	28.4	59.6	50.4
06/20/00	5.3	0.0	12.7	14.6	59.7	15.1	58.3	10.4	59.9	6.3	66.7	52.3
06/21/00	5.3	0.0	10.5	11.3	55.4	0.0	56.5	0.0	57.5	0.0	60.0	52.1
06/22/00	6.9	0.0	9.5	6.8	53.4	0.0	53.8	0.0	56.6	0.0	60.4	45.0
06/23/00	6.8	0.0	10.4	6.8	50.4	0.0	51.3	0.0	52.5	0.0	56.2	40.3
06/24/00	6.8	0.0	10.1	14.0	44.3	0.0	45.0	0.0	46.0	0.0	47.3	39.0
06/25/00	6.8	0.0	11.5	13.7	40.2	0.0	42.3	0.0	43.8	0.0	47.3	37.9
06/26/00	6.8	0.0			41.7	0.0	41.5	0.0	42.6	0.0	45.5	36.2

Daily Average	Flow and Spill	(in kcfs) at Lower	Columbia Projects
MoNory	John Day	The Delles	Pannavill

	IVICI	nary	Jonn I	Jay	i ne Da	alles		Bonr	neville	
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
======	======	=======	=======================================			======	:=====:	======	=======	=====
06/14/00	217.1	84.7	215.1	94.8	208.6	84.8	252.3	82.9	97.7	61.3
06/15/00	238.1	92.9	231.0	100.4	231.0	91.0	231.7	81.9	95.0	44.4
06/16/00	196.2	73.7	245.7	71.4	236.6	96.2	259.4	102.4	95.8	50.9
06/17/00	203.6	83.3	182.4	49.8	186.2	74.3	197.0	108.7	72.4	5.5
06/18/00	190.1	76.2	182.5	51.7	181.3	73.0	188.2	105.5	66.9	5.4
06/19/00	183.0	69.6	185.5	50.8	182.9	72.5	190.1	102.3	69.1	8.3
06/20/00	200.3	63.5	210.6	56.4	210.9	83.8	210.9	101.8	87.4	11.3
06/21/00	227.2	59.4	213.3	58.5	205.1	81.3	223.9	100.4	90.4	22.7
06/22/00	206.0	38.5	203.3	85.7	204.2	81.0	214.5	80.3	96.0	27.8
06/23/00	202.5	39.4	202.5	86.8	198.5	78.7	211.8	81.7	93.1	26.6
06/24/00	192.9	28.9	185.2	80.8	178.5	70.3	192.4	84.7	84.3	13.0
06/25/00	171.4	0.0	194.3	82.8	200.3	81.2	207.1	87.2	88.3	21.2
06/26/00	173.7	0.0	178.9	75.1	172.6	63.9	194.2	86.6	78.4	18.8
		<u>'</u>		•				<u>'</u>		

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

								Numb	er of Fi	Fis	h with		
							_	Lis	Listed by Highest Rank				ne GBT
			Number of	Number w	Number w	% Fin	% Severe	Rank	Rank	Rank	Rank	Num	Avg.
Site	Date	Species	Fish	GBT signs	Fin Signs	GBT	Fin GBT	1	2	3	4	Fish	Rank
Bor	neville D	am											
	06/22/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	06/26/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	06/29/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
McN	lary Dam												
		Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
		Subyearling Chinook	100	1	0	0.00%	0.00%	0	0	0	0	1	1
	06/29/00	Subyearling Chinook	100	2	0	0.00%	0.00%	0	0	0	0	2	1
Roc	k Island I	Dam											
	06/22/00	Subyearling Chinook	49	3	3	6.12%	0.00%	2	1	0	0	0	0
	06/29/00	Subyearling Chinook	93	4	3	3.22%	0.00%	2	1	0	0	1	1

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

	Hung	lungry H. Dnst Boundary						Grand Coulee					Grane	d C. T	<u>lwr</u>		Chief Joseph			
	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
6/16	98	99	100	24	119	121	122	24	112	112	114	24	111	112	115	24	111	111	112	23
6/17	99	99	99	24	120	122	123	24	111	112	112	24	111	112	114	24	112	112	113	23
6/18	99	99	100	24	121	122	123	24	112	113	114	24	112	113	116	24	113	113	114	21
6/19	98	99	99	24	122	123	126	24	112	112	113	24	111	111	113	24	112	112	113	23
6/20	98	98	99	24	123	124	125	24	111	111	112	24	111	111	112	24	111	112	112	23
6/21	99	99	100	8	123	125	126	24	112	112	112	24	111	112	113	24	112	112	113	23
6/22	106	106	114	17	123	124	126	24	112	112	112	24	111	111	112	24	112	112	113	23
6/23	104	105	105	23	122	124	125	24	112	112	112	24	111	111	113	24	112	112	112	23
6/24	104	104	104	23	122	123	124	23	111	112	112	24	111	112	113	24	111	111	111	23
6/25	103	103	104	3	120	123	124	24	110	111	111	24	110	111	113	24	110	111	111	23
6/26	120	120	130	7	121	123	126	22	111	111	111	23	111	113	145	24	111	112	112	22
6/27	107	114	133	24	120	122	125	24	111	111	111	24	110	110	112	24	111	112	113	23
6/28	97	97	97	24	120	121	122	24	111	111	111	24	111	111	113	24	111	112	112	23
6/29	102	106	106	24	122	124	126	24	111	111	112	24	111	111	113	24	111	112	113	23

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

	Chief	J. Dn	<u>st</u>		Wells				Wells	Dwns	trm_		Rock	y Rea	<u>ch</u>		Rock	y R. T	<u>lwr</u>	
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		#	<u>24 h</u>	12 h		#	<u>24 h</u>	12 h		<u>#</u>
<u>Date</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>																
6/16	111	111	112	23	109	109	110	17	110	110	111	17	106	106	107	20	116	117	118	17
6/17	111	112	113	23	111	112	112	22	114	115	117	22	106	107	108	24	120	121	122	24
6/18	113	114	114	21	111	112	113	23	113	114	116	23	107	107	107	24	124	124	125	23
6/19	112	112	113	23	109	110	110	23	111	111	113	23	108	110	112	22	125	125	126	11
6/20	111	111	112	23	110	111	111	24	113	114	121	24	107	107	107	22				0
6/21	111	112	112	23	111	111	112	24	111	112	112	24	107	108	109	23				0
6/22	111	112	113	23	110	110	110	23	111	112	112	23	106	107	107	24				0
6/23	110	111	112	23	110	110	111	23	112	112	113	23	106	106	107	24				0
6/24	111	112	112	22	109	110	110	24	110	111	111	24	105	105	105	24	111	111	112	16
6/25	110	111	111	23	109	110	111	24	110	111	111	24	104	105	105	24	110	110	110	23
6/26	110	110	112	23	110	111	111	23	111	113	117	23	104	105	108	23	111	112	114	21
6/27	110	111	111	23	110	111	111	24	115	118	121	24	104	105	105	21	114	115	118	20
6/28	111	112	112	23	111	111	112	24	114	115	121	24	104	105	106	24	116	116	117	23
6/29	110	111	111	23	110	111	111	24	112	112	113	24	106	107	108	24	116	117	118	22

Total Dissolved Gas Saturation at Mid Columbia River Sites

	Rock	Island	<u>k</u>		Rock	I. Tlw	<u>r</u>		<u>Wana</u>	pum			<u>Wana</u>	pum ⁻	<u> Tlwr</u>		<u>Pries</u>	t Rapi	<u>ds</u>	
	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>
6/16	107	108	108	16	111	111	111	13	110	113	116	24	109	110	110	24	109	110	111	24
6/17	108	109	109	24	112	112	113	23	112	113	113	24	111	112	114	24	111	112	113	24
6/18	109	109	109	24	111	112	112	24	111	112	113	24	111	112	112	24	112	112	112	24
6/19	107	108	108	23	110	111	111	20	108	108	109	20	108	108	109	23	108	109	111	23
6/20	107	108	108	23	110	111	112	22	109	109	110	24	111	114	122	24	110	113	116	24
6/21	108	108	109	24	111	112	114	24	108	109	109	24	109	109	110	24	110	111	113	24
6/22	109	109	109	24	112	113	113	24	109	110	112	24	109	110	112	24	108	109	112	24
6/23	108	108	109	24	111	111	112	22	109	109	110	21	109	109	110	24	109	110	112	24
6/24	107	108	108	23	111	111	111	22	109	109	109	24	109	109	109	24	108	108	109	24
6/25	106	107	107	22	110	110	110	21	110	113	115	24	108	109	110	24	108	109	111	24
6/26	106	107	107	22	110	110	111	20	112	113	115	18	111	112	112	22	111	112	113	22
6/27	108	109	109	23	113	114	116	21	112	113	115	24	114	115	119	24	114	115	119	24
6/28	110	110	111	23	116	116	116	21	112	113	113	24	115	117	121	24	118	121	123	24
6/29	110	110	111	23	114	115	117	23				0				0				0

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

	<u>Pries</u>	t R. D	<u>nst</u>		<u>Pasc</u>	<u>0</u>			<u>Dwor</u>	<u>shak</u>			<u>Clrwt</u>	r-Pecl	<u> </u>		Anato	<u>one</u>		
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		#	<u>24 h</u>	12 h		#	<u>24 h</u>	12 h		#
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
6/16	116	116	117	24	107	107	109	24	105	106	107	24	103	104	105	24	102	103	104	24
6/17	115	116	116	24	107	107	108	24	106	107	107	24	103	104	105	24	103	104	105	24
6/18	116	116	117	24	107	107	108	24	107	107	108	24	103	104	104	24	102	103	104	24
6/19	111	113	115	22	105	106	106	24	106	106	107	24	102	102	103	24	101	102	102	24
6/20	112	114	117	24	105	105	106	24	102	103	104	24	102	103	104	24	102	103	104	24
6/21	110	111	112	24	107	108	109	24	103	104	104	24	103	104	105	24	103	105	106	24
6/22	109	110	111	24	107	108	109	24	103	104	104	24	102	103	104	24	103	104	106	24
6/23	109	110	110	24	105	105	106	24	103	103	104	20	102	103	104	24	103	104	107	24
6/24	109	109	109	24	105	105	105	24	103	103	103	21	102	103	103	24	102	103	104	24
6/25	109	110	110	24	104	104	104	24	102	103	104	24	102	103	104	24	102	103	104	24
6/26	110	110	111	8	105	106	106	24	103	103	104	13	103	103	105	21	103	104	106	24
6/27	119	119	121	8	106	107	108	24	105	105	107	12	103	104	106	24	103	104	107	24
6/28	119	123	124	24	108	109	109	24	104	106	107	24	103	104	105	24	103	104	104	24
6/29				0	109	110	111	24	106	107	107	17	103	104	105	24	103	104	105	24

Total Dissolved Gas Saturation Data at Snake River Sites

	Clrwt	r-Lew	<u>iston</u>		Lowe	r Gran	nite_		L. Gra	anite 1	Γlwr		Little	Goos	<u>e</u>		L. Go	ose T	<u>lwr</u>	
	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>
Date	Avg	Avg	High	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	High	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>
6/16	102	104	105	24	104	105	107	24	112	120	122	24	109	110	111	24	115	120	121	24
6/17	103	105	106	24	105	106	109	24	112	118	120	24	111	112	114	24	115	120	121	24
6/18	103	104	105	24	104	105	105	24	111	118	120	24	113	113	114	24	116	119	120	24
6/19	102	103	104	24	103	103	104	24	112	119	120	24	111	112	113	24	115	118	119	24
6/20	102	104	106	24	103	104	106	24	108	113	122	24	109	109	110	24	112	115	119	24
6/21	103	105	106	24	105	105	106	24	103	103	103	24	109	110	111	24	108	109	110	24
6/22	103	104	106	24	104	104	106	24	102	102	102	24	109	109	110	24	108	108	109	24
6/23	102	104	105	24	105	105	107	24	103	103	104	24	110	111	111	24	109	110	111	24
6/24	102	103	104	21	105	107	109	24	103	103	103	24	105	106	108	24	106	107	107	24
6/25	102	104	106	24	105	106	107	24	102	102	103	24	107	110	114	24	103	104	104	24
6/26	103	105	106	24	109	112	115	24	103	103	104	23	110	112	114	24	103	104	105	20
6/27	102	105	106	24	110	113	115	24	102	103	103	24	109	112	113	24	103	104	104	24
6/28	102	105	106	24	111	112	114	24	103	104	104	24	107	108	110	24	104	104	105	24
6/29	103	105	107	24	108	109	110	24	103	104	105	24	106	107	110	24	103	104	105	24

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

	Lowe	r Mon	<u>.</u>		<u>L. Mo</u>	n. Tlw	<u>/r</u>		Ice Ha	<u>arbor</u>			Ice H	<u>arbor</u>	<u>Tlwr</u>		<u>McNa</u>	ry-Or	egon	
	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>	<u>24 h</u>	<u>12 h</u>		<u>#</u>
Date	Avg	Avg	High	<u>hr</u>	Avg	Avg	<u>High</u>	<u>hr</u>	Avg	Avg	<u>High</u>	<u>hr</u>	Avg	Avg	<u>High</u>	<u>hr</u>	Avg	Avg	<u>High</u>	<u>hr</u>
6/16	112	114	117	24	118	119	120	24	116	116	117	23	114	115	118	23	111	112	114	24
6/17	114	115	118	24	117	118	119	24	118	119	120	24	113	114	115	24	114	115	120	24
6/18	116	118	120	24	116	117	118	24	119	119	120	24	112	113	114	24	111	112	113	24
6/19	114	116	118	24	115	116	118	24	116	117	118	24	112	113	114	24	109	110	111	24
6/20	112	112	112	24	113	113	114	24	114	114	115	24	112	113	114	24	110	112	115	24
6/21	113	114	114	24	113	114	115	24	114	114	115	24	112	113	113	24	109	111	113	24
6/22	114	115	115	24	113	114	115	24	114	114	115	24	112	113	113	24	110	113	116	24
6/23	111	112	113	24	110	111	111	24	113	113	114	24	111	112	113	24	111	113	116	24
6/24	109	109	109	24	107	108	109	24	112	112	112	24	111	112	112	24	111	112	113	24
6/25	109	111	113	24	107	108	108	24	111	112	113	24	110	112	112	24	108	109	111	24
6/26	110	111	113	24	108	109	110	23	110	111	113	23	110	111	113	24	109	111	113	24
6/27	109	111	113	24	107	108	109	24	110	110	112	24	111	112	113	24	108	109	110	24
6/28	107	108	109	24	106	107	108	24	109	110	111	24	111	112	113	24	110	111	116	24
6/29	105	105	106	24	105	106	106	24	110	110	112	24	111	112	113	24	112	114	119	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

	McNa	ry-Wa	<u>ish</u>		McNa	ry Tlv	<u>/r</u>		<u>John</u>	Day			<u>John</u>	Day T	lwr		The I	Dalles		
	<u>24 h</u>	<u>12 h</u>		#	<u>24 h</u>	<u>12 h</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>
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>AVG</u>	<u>High</u>	<u>hr</u>
6/16	111	112	114	24	116	120	121	20	106	107	109	23	112	118	120	24	111	114	115	23
6/17	113	114	116	24	116	120	121	24	109	111	114	23	113	117	118	24	110	112	115	23
6/18	112	113	115	24	115	119	120	24	109	109	112	21	112	115	118	21	109	111	115	21
6/19	108	109	110	24	113	118	118	24	107	107	108	23	112	117	118	24	105	106	109	23
6/20	108	109	111	24	112	115	118	24	107	108	108	23	112	117	118	24	107	109	113	23
6/21	108	109	110	24	113	114	117	24	109	109	109	23	113	116	118	24	109	111	113	23
6/22	109	110	111	24	112	113	113	24	108	109	109	23	117	118	119	24	108	109	111	23
6/23	110	111	112	24	112	113	113	24	107	107	108	23	117	118	118	24	108	109	110	23
6/24	109	110	111	24	112	113	113	23	106	106	107	23	116	117	118	23	107	108	109	23
6/25	108	109	110	24	106	106	108	23	107	108	109	23	116	117	118	24	108	111	114	23
6/26	109	111	113	23	106	107	107	21	108	109	110	21	116	117	124	20	111	112	114	23
6/27	110	112	112	24	109	111	113	24	109	111	112	23	117	118	119	24	111	113	114	23
6/28	110	111	113	24	113	116	119	24	108	109	110	23	112	117	118	24	111	112	113	23
6/29	111	112	114	24	113	115	115	24	107	108	109	23	112	116	118	24	108	111	113	23

	The D	alles	Dnst		Bonn	eville			Warre	endale	1		Skam	<u>ania</u>			Cama	as\Wa	shugal	<u> </u>
	<u>24 h</u>	12 h		<u>#</u>	<u>24 h</u>	12 h		#	<u>24h</u>	<u>12h</u>		<u>#</u>	<u>24h</u>	<u>12h</u>		#	<u>24h</u>	<u>12h</u>		<u>#</u>
<u>Date</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	Avg	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
6/16	116	117	117	24	109	110	111	23	116	117	118	23	114	115	116	23	111	113	114	24
6/17	115	116	118	24	114	115	115	23	121	122	122	23	121	122	122	23	115	118	119	24
6/18	115	116	117	21	114	115	115	23	120	121	122	23	120	120	121	23	116	117	117	24
6/19	112	113	114	24	107	108	110	23	117	118	118	23	118	119	120	23	115	116	117	24
6/20	113	114	116	24	106	107	108	23	116	116	117	23	118	119	119	23	115	116	117	24
6/21	115	116	117	24	109	109	110	23	117	117	118	23	118	118	119	23	115	116	117	24
6/22	115	116	117	24	108	108	109	23	113	115	116	23	114	115	116	23	113	114	115	24
6/23	115	116	117	24	107	107	107	23	110	111	112	23	113	114	116	23	111	113	115	24
6/24	114	115	116	24	106	107	107	23	111	111	112	23	115	116	118	23	112	113	115	24
6/25	115	116	118	24	108	109	110	23	112	113	114	23	115	116	119	23	113	115	117	23
6/26	117	117	127	23	112	113	115	23	115	116	116	21	118	118	119	21	115	118	120	20
6/27	116	117	117	24	114	115	117	23	117	118	120	23	119	120	121	23	117	119	121	24
6/28	117	117	118	24	115	115	116	23	119	119	120	23	121	121	122	23	118	120	122	24
6/29	115	116	117	24	112	113	114	23	117	117	118	23	120	120	121	23	120	124	130	24

Hatchery Release Summary

Hatchery	Spe	ecies	Migration Year	Number Released	Release Begin		Release Site	River Name
					Nez Pe	erce Trib	е	
Lyons Fe	rry							
-	FΑ	Chinook	2000	400,000	06/14/00	06/23/00	Cpt John Acclim Pd	Snake River
	FA	Chinook	2000 Agency Totals:	395,000 795,000	06/21/00	06/26/00	Big Canyon (Clearwater	Clearwater Rvr M F
					US	SFWS		
L White S	alm	on						
	FA	Chinook	2000	2,000,000	06/22/00	06/22/00	Little White Salmon H	Little White Salmon River
			Agency Totals:	2,000,000				
					W	DFW		
Klickitat								
	FΑ	Chinook	2000	2,500,000	06/12/00	07/07/00	Klickitat H	Klickitat River
Priest Rap	pids							
•	FA	Chinook	2000	6,700,000	06/14/00	06/26/00	Priest Rapids H	Mid-Columbia River
Ringold S	prin	gs					·	
J	FΑ	Chinook	2000	3,500,000	06/13/00	06/19/00	Ringold Springs H	Mid-Columbia River
Wells								
	SU	Chinook	2000	364,000	06/19/00	06/20/00	Wells H	Mid-Columbia River
			Agency Totals:	13,064,00				

Hatchery Release Summary From 6/30/00 to 7/13/00

Hatchery	Species	Migration Year	Number Released	Release D Begin		Release Site	River Name
				WDI	FW		

Turtle Rock

	Δαe	ncy Totals:	717 000			
SU	Chinook	2000	369,000 07/05/00	07/05/00	Turtle Rock H	Mid-Columbia River
SU	Chinook	2000	348,000 07/05/00	07/05/00	Turtle Rock H	Mid-Columbia River

Agency lotals: 717,000 Total Release.. 717,000

Total Release.. 15,859,000

Two-Week Summary of Passage Indices

The Total, # Days, and Average are calculated on the last two weeks of data and do not include the current day's passage index.

COMBINED YEARLING CHINOOK

	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)						
06/16/00				83	1,313	163	82	113	2,801	2,473	3,142
06/17/00					2,530	149	48	46	3,693	1,171	5,148
06/18/00					2,249	65	70	33	4,278	0	0
06/19/00					1,981	274	18	33	1,000	1,003	685
06/20/00					1,130	202	61	30	1,448	441	0
06/21/00					520	90	39	42	1,318	336	0
06/22/00					380	60	144	45	4,715	742	1,110
06/23/00					780	390	29	27	3,528	314	151
06/24/00					530	150	25	26	4,243	80	161
06/25/00					1,950	0	32	24	3,251	39	0
06/26/00					650	15	46	20	1,600	48	0
06/27/00					660	12	26	18	1,000	15	609
06/28/00					700	13	24	19	1,509	33	249
06/29/00					900	15	29	22	1,514	27	0
Total:	0	0	0	83	16,273	1,598	673	498	35,898	6,722	11,255
# Days:	0	0	0	1	14	14	14	14	14	14	14
Average:	0	0	0	83	1,162	114	48	36	2,564	480	804

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)
06/16/00				0	8,907	2,340	4,797	88	43,961	13,738	22,738
06/17/00					18,688	9,901	2,433	68	97,424	20,427	17,426
06/18/00					23,742	3,287	933	60	136,368	41,764	2,785
06/19/00					11,049	1,907	571	72	46,426	16,738	2,741
06/20/00					6,662	8,955	2,073	148	219,615	29,319	12,767
06/21/00					7,190	16,813	3,686	141	259,632	49,572	21,783
06/22/00					8,890	5,057	25,187	135	293,091	46,900	28,312
06/23/00					4,720	15,659	5,275	218	463,896	39,809	26,706
06/24/00					6,630	8,437	3,354	153	694,038	16,586	19,449
06/25/00					32,115	8,357	3,342	113	534,878	16,851	8,294
06/26/00					16,400	3,347	33,169	104	474,300	29,819	31,422
06/27/00					11,400	2,799	3,453	158	368,600	30,120	22,737
06/28/00					8,780	6,292	3,229	198	399,735	36,661	14,942
06/29/00					23,200	4,161	1,924	145	555,848	101,461	16,048
Total:	0	0	0	0	188,373	97,312	93,426	1,801	4,587,812	489,765	248,150
# Days:	0	0	0	1	14	14	14	14	14	14	14
Average:	0	0	0	0	13,455	6,951	6,673	129	327,701	34,983	17,725

^{*} See sampling comments http://www.fpc.org/2000Daily/smpcomments.htm

These data are preliminary and have been derived from various sources. For verification and/or origin of these data, contact the operators of the Fish Passage Data System at (503) 230-4099.

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)						
06/16/00				0	294	18	235	257	7,162	3,084	5,209
06/17/00					100	65	143	179	4,596	504	3,696
06/18/00					627	65	23	92	2,854	211	1,393
06/19/00					388	96	7	40	1,146	315	0
06/20/00					0	10	22	75	1,481	111	1,035
06/21/00					160	60	51	55	4,067	59	605
06/22/00					150	45	78	47	4,191	273	1,480
06/23/00					120	345	17	46	4,473	79	754
06/24/00					110	90	10	37	3,637	58	964
06/25/00					86	105	26	26	1,509	286	259
06/26/00					50	90	22	20	1,900	367	188
06/27/00					160	192	72	17	1,100	311	203
06/28/00					560	324	91	35	1,026	103	0
06/29/00					660	345	31	19	1,927	620	251
Total:	0	0	0	0	3,465	1,850	828	945	41,069	6,381	16,037
# Days:	0	0	0	1	14	14	14	14	14	14	14
Average:	0	0	0	0	248	132	59	68	2,934	456	1,146

COMBINED STEELHEAD

	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)						
06/16/00				23	1,675	443	855	17	6,209	466	992
06/17/00					1,913	428	2,505	11	4,105	111	132
06/18/00					3,318	263	630	9	2,856	0	0
06/19/00					2,660	193	196	6	550	30	0
06/20/00					2,042	125	212	11	908	252	1,380
06/21/00					570	242	270	6	1,582	19	0
06/22/00					930	420	455	16	1,702	14	185
06/23/00					1,380	617	247	12	1,134	19	453
06/24/00					1,380	452	318	6	1,091	17	161
06/25/00					1,950	605	493	6	232	0	0
06/26/00					1,000	452	247	4	900	19	0
06/27/00					1,100	1,193	700	1	600	15	0
06/28/00					2,440	1,836	754	6	845	24	0
06/29/00					4,560	1,561	381	9	688	221	251
Total:	0	0	0	23	26,918	8,830	8,263	120	23,402	1,207	3,554
# Days:	0	0	0	1	14	14	14	14	14	14	14
Average:	0	0	0	23	1,923	631	590	9	1,672	86	254

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.

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)						
06/16/00				0	108	0	18	1	659	191	83
06/17/00					40	9	0	0	903	47	132
06/18/00					0	0	0	1	357	0	0
06/19/00					39	14	2	2	100	91	0
06/20/00					0	0	11	3	16	59	0
06/21/00					10	30	7	1	113	23	0
06/22/00					0	0	21	0	393	28	370
06/23/00					0	15	3	0	315	11	604
06/24/00					0	15	3	1	364	14	482
06/25/00					21	0	2	2	116	11	0
06/26/00					0	0	3	2	100	52	376
06/27/00					20	24	3	4	0	72	0
06/28/00					40	0	4	0	0	26	0
06/29/00					0	30	2	12	0	1	251
Total:	0	0	0	0	278	137	79	29	3,436	626	2,298
# Days:	0	0	0	1	14	14	14	14	14	14	14
Average:	0	0	0	0	20	10	6	2	245	45	164

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)}

LEW and WTB data collected for the FPC by Idaho Dept. of Fish and Game.

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.

Cumulative Adult Passage at Mainstem Dams Through 06/29

		S	pring C	hinook	(Sı	ummer (Chinoo	k		Fall Chinook					
	200	2000 1999 10-Yr Avg.		2000 1999			99	10-Yr Avg.		2000		1999		10-Yr Avg.				
DAM	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	178,302	21,259	38,669	8,691	62,347	2,737	17,478	6,903	11,706	2,253	11,806	1,119	0	0	0	0	0	0
TDA	102,702	14,716	17,563	6,180	36,497	1,828	13,115	4,995	8,018	1,646	8,767	687	0	0	0	0	0	0
JDA	86,502	12,133	15,409	5,089	29,402	1,505	12,005	3,519	7,526	1,260	7,649	595	0	0	0	0	0	0
MCN	64,647	10,839	9,260	3,972	28,536	1,577	8,176	2,834	4,918	921	6,668	480	0	0	0	0	0	0
IHR	38,234	9,129	5,351	2,657	15,091	720	3,011	2,049	2,675	788	3,177	256	0	0	0	0	0	0
LMN	34,632	9,952	3,924	2,726	14,041	753	3,039	1,960	1,924	737	2,624	227	0	0	0	0	0	0
LGS	34,468	10,152	3,445	2,690	**	**	2,325	1,897	1,761	588	**	**	0	0	0	0	**	**
LWG	33,818	10,317	3,296	2,507	12,180	12,180	2,301	1,965	1,629	661	2,282	191	0	0	0	0	0	0
PRD	19,143	1,085	4,139	761	9,052	194	1,328	242	369	42	516	18	0	0	0	0	0	0
RIS	14,400	1,429	3,309	915	6,567	218	1,695	343	256	99	538	29	0	0	0	0	0	0
RRH	5,336	392	1,389	233	1,501	54	552	45	80	29	101	5	0	0	0	0	0	0
WEL	1,519	443	141	199	752	53	0	0	0	0	0	0	0	0	0	0	0	0

			Col	ho			Sockeye			Steelhead			
	20	00	199	99	10-Yr	Avg.		•	10-Yr			10-Yr	Wild
DAM	Adult	Jack	Adult	Jack	Adult	Jack	2000	1999	Avg.	2000	1999	Avg.	2000
BON	0	0	0	0	0	0	77,967	7,729	21,231	15,768	7,244	12,001	5,861
TDA	0	0	0	0	0	0	59,864	4,564	14,196	4,426	2,098	4,027	2,505
JDA	1	0	0	0	0	0	69,589	4,247	12,561	7,407	5,341	4,978	2,325
MCN	0	0	0	1	0	0	39,136	2,402	9,121	2,374	1,335	3,476	577
IHR	0	0	0	0	0	0	36	1	1	1,583	1,012	2,674	564
LMN	0	0	0	0	0	0	29	0	1	1,306	659	2,517	607
LGS	0	0	0	0	**	**	9	0	**	1,210	956	**	524
LWG	0	0	0	0	0	0	15	0	0	2,698	3,067	5,284	924
PRD	0	0	0	0	0	0	3,565	97	271	47	48	97	0
RIS	1	0	0	0	0	0	4,747	81	251	74	58	141	40
RRH	0	0	0	0	0	0	2,286	107	81	97	87	100	41
WEL	0	0	0	0	0	0	2,470	21	66	11	37	47	5

Note: BON, IHR, JDA, LGR, MCN, TDA are through 06/29; LMN and WEL are through 06/28; LGS is through 6/27; RIS and

Note: LGS is missing the right (WA) count for steelhead on 6/28.

Note: IHR 05/06 is missing the south ladder count.

These numbers were collected from the COE's Running Sums text files.

Wild steelhead numbers are included in the total.

Historic counts (pre-1996) were obtained from CRITFC and compiled by the FPC.

Historic counts 1997 to present were obtained from the Corps of Engineers.

^{**}Adult count records at Little Goose Dam have been maintained since 1991, visual counts were not conducted at Little Goose Dam between 1982 and 1990.

^{***}PRD is not reporting Wild Steelhead numbers.

Two Week Transportation Summary 06/16/00 TO 06/29/00

		Species					
Site	Data	CH0	CH1	CO	so	ST	Grand Total
LGR	Sum Of NumberCollected	157,965	12,208	2,836	201	21,688	194,898
	Sum Of NumberBarged	157,437	11,860	2,832	201	21,628	193,958
	Sum Of NumberBypassed	0	337	0	0	35	372
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	528	11	4	0	25	568
LGS	Sum Of NumberCollected	87,581	1,275	1,752	128	8,301	99,037
	Sum Of NumberBarged	87,203	1,255	1,737	127	8,185	98,507
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	378	20	15	1	116	530
LMN	Sum Of NumberCollected	87,997	534	593	65	5,816	95,005
	Sum Of NumberBarged	72,330	488	593	65	5,700	79,176
	Sum Of NumberBypassed	15,345	0	0	0	4	15,349
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	322	46	0	0	94	462
MCN	Sum Of NumberCollected	3,734,451	26,537	29,885	2,360	16,019	3,809,252
	Sum Of NumberBarged	2,971,558	17,245	17,699	1,130	6,532	3,014,164
	Sum Of NumberBypassed	349,873	7,882	10,536	1,226	8,826	378,343
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	9,651	322	256	4	167	10,400
Total Su	um Of NumberCollected	4,067,994	40,554	35,066	2,754	51,824	4,198,192
Total Su	ım Of NumberBarged	3,288,528	30,848	22,861	1,523	42,045	3,385,805
Total Su	ım Of NumberBypassed	365,218	8,219	10,536	1,226	8,865	394,064
	ım Of NumberTrucked	0	0	0	0	0	0
Total Su	um Of TotalProjectMort	10,879	399	275	5	402	11,960

YTD Transportation Summary TO: 06/29/00

		Species					
Site	Data	CH0	CH1	CO	so	ST	Grand Total
LGR	Sum Of NumberCollected	207,145	2,442,160	119,438	5,898	5,013,316	7,787,957
	Sum Of NumberBarged	206,144	2,317,372	118,979	5,667	4,775,753	7,423,915
	Sum Of NumberBypassed	46	115,444	400	16	226,270	342,176
	Sum Of NumberTrucked	117	6,084	16	187	11,238	17,642
	Sum Of TotalProjectMort	838	3,261	43	28	555	4,725
LGS	Sum Of NumberCollected	120,229	1,356,426	36,251	3,245	1,048,788	2,564,939
	Sum Of NumberBarged	143,138	1,347,502	36,252	3,160	1,041,084	2,571,136
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	0	4,308	5	76	6,791	11,180
	Sum Of TotalProjectMort	430	5,257	53	29	1,307	7,076
LMN	Sum Of NumberCollected	129,058	606,578	16,479	4,186	759,231	1,515,532
	Sum Of NumberBarged	110,944	554,463	16,466	4,174	756,931	1,442,978
	Sum Of NumberBypassed	17,600	24,873	0	0	905	43,378
	Sum Of NumberTrucked	0	25,741	10	10	810	26,571
	Sum Of TotalProjectMort	514	1,501	3	2	568	2,588
MCN	Sum Of NumberCollected	4,012,379	1,156,698	160,350	60,470	361,901	5,751,798
	Sum Of NumberBarged	2,971,558	17,245	17,699	1,130	6,532	3,014,164
	Sum Of NumberBypassed	627,708	1,137,415	140,936	59,322	354,501	2,319,882
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	9,744	949	321	18	374	11,406
Total Sun	of NumberCollected	4,468,811	5,561,862	332,518	73,799	7,183,236	17,620,226
Total Sun	n Of NumberBarged	3,431,784	4,236,582	189,396	14,131	6,580,300	14,452,193
Total Sun	n Of NumberBypassed	645,354	1,277,732	141,336	59,338	581,676	2,705,436
Total Sun	n Of NumberTrucked	117	36,133	31	273	18,839	55,393
Total Sun	n Of TotalProjectMort	11,526	10,968	420	77	2,804	25,795