



Fish Passage Center

Weekly Report #00 - 15

June 16, 2000

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SUMMARY OF EVENTS:

Water Supply: Precipitation for the Columbia above Coulee was 89% of average, at Snake River above Ice Harbor was 75% of average and for the Columbia above The Dalles it was 100% of average, for the period of June 1-13. The highest precipitation 268% was recorded at Southeast Washington, 235% of SW WA Cascades/Cowlitz, and of 222% of normal at NW Slope Washington Cascades. The lowest precipitation of 20% of average was recorded at Snake River Plain and of 48% of average at Upper Deschutes/ Crooked and of 54% of normal at Owyhee/Malheur.

Reservoir Operations: Reservoirs continued refilling toward full pool elevations during the week of June 9 through 15. A summary of actual elevations on June 15, and full pool elevations is shown in the following Table:

Project	Actual June 15 Elevation in [ft]	Full Pool Elevation in [ft]
<i>Libby</i>	2412.9	2459.0
<i>Hungry Horse</i>	3551.45	3560.0
<i>Grand Coulee</i>	1267.9	1290.0
<i>Brownlee</i>	2075.99*	2077.0
<i>Dworshak</i>	1595.92	1600.0

* elevation as of June 14

Libby reservoir continued increasing outflows from 8.3 kcfs on June 9 to 25 kcfs on June 13. Inflows to the project were fluctuating from 27.2 kcfs on June 14 to 38 kcfs on June 9.

Hungry Horse continued refill during June 9-15. Inflows fluctuated from 8.47 kcfs on June 11 to 16.16 kcfs on June 9. The project continued to be operated with minimum outflows in the range of 0.50 kcfs to 2.8 kcfs during June 9-15.

Grand Coulee continued to refill through the week of June 9-15 from 1259.2 ft to 1267.9 ft. Inflows were increasing from 142.8 kcfs on June 9 to 181.6 kcfs on June 15 and outflows were in the range of 77.1 kcfs-121.7 kcfs.

Brownlee continued refill operations during June 9-15. The outflows at Hells Canyon Dam were fluctuating between 8.64 kcfs on June 9 and 18.03 kcfs on June 13. Inflows at Brownlee reservoir were fluctuating between 14.07 kcfs on June 11 and 17.4 kcfs on June 14.

Dworshak continued refill operations during June 9-15, but at slower refill rate than previously anticipated by the COE model run in order to reach full pool by June 30. The outflow increased from 1.6 kcfs on June 12 to 4.8 kcfs on June 15. Inflows were in the range of 11.1 kcfs to 13.7 kcfs.

Upper Snake reservoirs: As of June 15, the Upper Snake system was drafted to 95% of capacity, compared with the previous week. American Falls was drafted to 89% of capacity, while Palisades and Jackson Lake slightly refilled to 99% and 100% of capacity. The irrigation demands in the system continued to increase. Flow below American Falls was 12.1 kcfs on June 15 and flow at Milner, which is the lowest point in the Upper Snake system, continued to be in the range of 0.24-0.26 kcfs similar to previous weeks.

Boise and Payette River Basins: Both systems continued with operations during June 9-15. As of June 15, the Boise River system was at 100% of capacity. As of June 15, the Payette River system was at 101% of capacity.

Streamflow: 1995 Biological Opinion spring flow targets based on May Final Runoff Volume forecast are: at Lower Granite 96.25 kcfs and at McNary 260 kcfs. The 1998 Biological Opinion flow target at Priest Rapids is 135 kcfs beginning on April 10. Weekly average flows for McNary, Priest Rapids and Lower Granite remained below the BiOp required flow target for the period of June 9-15 and were decreasing, compared with the previous week due to continuation of the system refill, delayed snowmelt from the Upper Columbia basin and average and below average precipitation in the basin. The average flow for the major run-of-river projects for the June 2-15 period are given in the following table:

Project	Average discharge [kcfs]	
	June 2-8	June 9-15
Priest Rapids	132.2	128.1
McNary	218.3	205.5
Lower Granite	78.1	70.8
Bonneville	225.8	216.3

Spill: Dworshak Dam was operated without spill for the past week. Spill for fish passage continues at the Lower Snake projects as described by the NMFS and Action Agencies' Spill Plan. Spill will likely continue through the Biological Opinion end date of June 20.

Spill for fish passage continues at the lower Columbia River projects. The NMFS and Action Agencies' Spill Plan modifies spill at the lower Columbia Projects as described in past weekly reports.

The COE continues to adjust spill levels at the upstream projects based on the forebay dissolved gas readings of the next project downstream

Levels of total dissolved gas were at, 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. As yearling chinook numbers decrease sites will stop sampling these fish. Snake River samples are comprised of steelhead, while the Columbia River sites have switched to subyearling chinook for the duration of the program. Rock Island Dam

is the only site continuing to sample yearling chinook. Only a few fish were detected with signs of GBT in fins during sampling conducted this past week. Those few fish with fin bubbles were sampled at Little Goose and Rock Island dams.

Smolt Monitoring Program. Snake River basin: This week's smolt collections at the Snake River dams were predominately a mix of subyearling chinook, yearling chinook, and steelhead. The declining passage indices of spring migrants have been replaced by rising passage indices of subyearling chinook from the June hatchery releases. Mid-Columbia River: About half the smolts collected at Rock Island Dam this week were coho, while at this time only a few subyearling chinook are present. Lower Columbia River: This week's smolt collections at the lower Columbia River dams were predominately a mix of subyearling chinook, yearling chinook, coho, and steelhead. Passage indices of these fish have dropped from the start to end of this weekly reporting period at McNary and John Day dams, while the last two days has seen increased passage indices at Bonneville Dam.

Adult fish passage: During the week of June 9-15, numbers of adult summer chinook passing Bonneville Dam remained fairly consistent, averaging 534 per day. The cumulative count for summer chinook through June 15 was 8,038. This total was 184% and 147% of the respective 1999 and 10-year average. At present, the majority of the summer chinook at Bonneville should be Mid-Columbia River fish as the Snake River fish appeared to have arrived early this year based on recovery of PIT tagged adult chinook at the WA shore trapping facility (Bonneville Dam) and the PIT tagged adult summer chinook already passing Lower Granite Dam. The summer chinook counts at The Dalles averaged near 400 per day through the week with the cumulative count 5,040 through June 15. At McNary Dam, daily counts of adult summer chinook were near 330 per day for the week with the cumulative count through June 15 of 2,304. The Snake River count of adult summer chinook at Ice Harbor Dam was 926 with the Mid-Columbia River count at Priest Rapids of 276 (1-day count).

The number of jack, summer chinook salmon counted at Bonneville Dam totals 3,104 through June 15, and this compares to 1,117 in 1999 and 417 for the 10-year average.

The pre-season forecast for sockeye passage made by the TAC was estimated to give the following: 5,500 to the Wenatchee R drainage; 25,500 to the Okanogan River drainage; and 168 to the Snake River drainage. Through June 15, sockeye counts at Bonneville Dam have been very encouraging with 12,045 counted. The year 2000 count is about 14 times greater than the 1999 and 7.7 times greater than the 10-year average. This year's run of sockeye may be early but that remains to be seen. No adult sockeye have been counted at any of the Snake River dams to date.

At Bonneville Dam, the steelhead counts increased through the week with daily counts averaging 228 per day. The cumulative count for the project is 6,700. The number of steelhead passing The Dalles and upriver sites is now increasing, with the June 15 count day at The Dalles and John Day exceeding 100. The projected Upriver A-run Index and B-run Index for adult steelhead was pegged at 254,000. Of this total, 188,400 are estimated hatchery origin and 65,600 estimated wild origin steelhead (TAC estimate). It is still early in the steelhead run to ascertain just how well the steelhead will return this Migration Year.

Hatchery Releases: The beginning of subyearling fall chinook releases in the Mid-Columbia River from Priest Rapids and Ringold hatcheries was the main activity for the week. Priest Rapids fall chinook will be released between June 14 and June 23 while Ringold H fall chinook will be released between June 13 and June 19. Subyearling summer chinook will be released from Wells H beginning early next week and be completed by the end of the week. Turtle Rock H is tentatively scheduled to release their subyearling summer chinook the last week of June or the 1st week of July.

In the Lower Columbia Reach (McNary to Bonneville Dam), about 1.5 million subyearling fall chinook were released into the Klickitat River this

week with an additional 1 million scheduled for the 1st week of July. At Little White Salmon Hatchery, 2 million subyearling fall chinook are scheduled for release into Drano Lake/Little White Salmon River on June 22.

In the Snake River, the second group of subyearling fall chinook will be released from the Acclimation ponds tentatively June 26-30.

The Snake River Zone Report for spring, summer, and fall chinook releases from hatcheries between 1979 and 2000. The Zone Reports for the Snake, Mid-Columbia and Lower Columbia rivers will be included in the next two Weekly Reports as we get more of the numbers finalized.

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

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
06/02/00	115.3	0.0	101.0	0.0	112.4	7.8	112.4	0.0	116.6	30.9	114.7	44.0	105.5	59.3
06/03/00	99.6	0.0	106.7	0.0	120.4	8.6	124.4	0.0	131.1	30.9	137.8	54.0	132.4	75.3
06/04/00	107.1	0.0	106.5	0.0	118.9	8.3	115.6	0.0	126.6	30.9	132.6	51.4	126.9	70.6
06/05/00	124.8	0.0	124.6	0.0	137.0	8.5	136.0	0.0	143.9	30.9	154.2	60.5	150.1	85.7
06/06/00	98.4	0.0	104.7	0.0	124.9	8.4	129.2	0.0	139.8	30.9	151.5	59.4	145.8	82.4
06/07/00	91.5	0.0	96.6	0.0	118.0	7.8	122.5	0.0	133.5	30.9	141.7	54.7	142.1	78.9
06/08/00	95.3	0.0	94.3	0.0	101.5	7.3	96.2	0.0	106.7	30.8	121.5	47.7	122.3	67.7
06/09/00	77.1	0.0	82.9	0.0	97.0	6.9	99.1	0.0	109.0	30.9	104.9	40.8	89.2	49.6
06/10/00	82.5	0.0	77.9	0.0	93.9	6.1	97.5	0.0	107.8	30.9	117.4	44.4	111.9	63.2
06/11/00	103.9	0.0	103.3	0.0	112.9	6.8	110.6	0.0	115.9	31.0	113.6	44.5	107.9	61.8
06/12/00	121.7	0.0	124.1	0.0	136.4	15.8	139.1	9.6	141.1	31.0	144.3	58.8	137.8	78.5
06/13/00	110.5	0.0	122.2	0.0	133.8	18.0	134.7	20.8	145.8	15.9	153.6	53.7	147.4	90.3
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	---	---	---	---	138.7	13.0	154.3	9.3

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

Date	Dworshak		Brownlee Canyon		Hells Granite		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
06/02/00	1.6	0.0	17.8	11.5	76.0	32.4	75.8	25.9	77.7	41.9	80.9	61.5		
06/03/00	1.6	0.0	16.0	11.4	72.7	33.0	67.5	24.1	70.0	35.1	75.0	60.9		
06/04/00	1.5	0.0	15.7	18.3	69.0	30.9	66.5	21.3	68.4	30.6	73.1	58.9		
06/05/00	1.6	0.0	16.5	18.4	74.2	30.0	67.8	19.3	69.4	26.0	75.4	57.8		
06/06/00	1.6	0.0	15.9	19.7	85.9	31.8	84.3	18.3	85.2	23.8	89.3	56.1		
06/07/00	1.6	0.0	14.9	11.3	86.0	31.7	83.0	17.5	83.7	23.5	88.2	58.2		
06/08/00	1.7	0.0	15.3	7.4	83.1	31.7	79.7	16.6	80.6	23.7	85.1	59.3		
06/09/00	1.6	0.0	15.8	11.7	73.8	32.3	68.7	15.8	69.9	23.9	77.1	59.7		
06/10/00	1.6	0.0	14.1	16.8	68.9	32.5	67.5	18.5	68.5	35.1	71.6	55.6		
06/11/00	1.6	0.0	15.4	13.5	65.9	32.4	62.5	22.3	62.8	42.7	67.6	56.4		
06/12/00	1.6	0.0	16.3	18.0	62.8	30.4	59.3	23.6	60.9	46.9	65.5	53.3		
06/13/00	1.9	0.0	17.4	17.8	70.1	30.2	67.2	23.6	68.2	48.2	72.5	58.7		
06/14/00	4.4	0.0	---	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	---	---	78.2	30.9	74.0	25.2	75.9	41.5	79.1	58.0		

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		
06/02/00	202.3	79.9	210.1	88.6	213.4	84.2	230.4	84.4	90.2	45.4
06/03/00	200.7	79.8	190.2	79.1	184.3	73.1	195.0	84.5	85.4	14.7
06/04/00	195.8	75.6	200.4	66.7	194.2	77.6	206.4	102.3	88.9	4.8
06/05/00	232.2	79.9	217.4	63.7	210.5	83.7	216.0	93.5	85.3	26.8
06/06/00	241.4	84.8	247.5	71.8	245.2	97.1	258.3	88.3	93.4	66.2
06/07/00	224.7	79.5	231.2	70.9	228.3	83.8	251.0	87.7	96.0	56.9
06/08/00	231.3	84.9	211.0	58.9	214.6	85.8	223.3	86.5	95.8	30.6
06/09/00	182.3	69.2	210.3	55.9	207.1	83.4	217.4	91.3	90.2	25.5
06/10/00	185.6	66.0	181.2	75.5	175.7	70.5	199.4	79.5	88.8	20.8
06/11/00	183.9	81.4	179.3	79.8	178.0	71.9	188.5	81.0	82.3	14.8
06/12/00	197.7	83.6	184.4	78.8	181.7	71.8	199.1	83.1	81.7	24.0
06/13/00	233.7	102.8	239.4	100.9	229.6	91.5	225.9	82.7	88.0	44.8
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

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				Fish with L. Line GBT	
								Rank 1	Rank 2	Rank 3	Rank 4	Num Fish	Avg. Rank
Lower Granite Dam													
	06/12/00	Steelhead	100	5	0	0.00%	0.00%	0	0	0	0	5	1
Little Goose Dam													
	06/07/00	Steelhead	100	1	1	1.00%	0.00%	1	0	0	0	0	0
	06/14/00	Steelhead	23	1	1	4.34%	0.00%	1	0	0	0	0	0
Lower Monumental Dam													
	06/12/00	Steelhead	100	4	0	0.00%	0.00%	0	0	0	0	4	1
Ice Harbor Dam													
	06/06/00	Steelhead	27	0	0	0.00%	0.00%	0	0	0	0	0	0
McNary Dam													
	06/08/00	Subyearling Chinook	88	0	0	0.00%	0.00%	0	0	0	0	0	0
	06/08/00	Yearling Chinook	12	1	0	0.00%	0.00%	0	0	0	0	1	1
	06/08/00	Steelhead	100	1	0	0.00%	0.00%	0	0	0	0	1	1
	06/12/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	06/12/00	Steelhead	18	0	0	0.00%	0.00%	0	0	0	0	0	0
	06/15/00	Subyearling Chinook	100	1	0	0.00%	0.00%	0	0	0	0	1	1
Bonneville Dam													
	06/08/00	Yearling Chinook	100	1	0	0.00%	0.00%	0	0	0	0	1	1
	06/08/00	Steelhead	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	06/12/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	06/12/00	Steelhead	100	2	1	1.00%	0.00%	0	1	0	0	2	1
	06/15/00	Subyearling Chinook	100	0	0	0.00%	0.00%	0	0	0	0	0	0
	06/15/00	Steelhead	17	0	0	0.00%	0.00%	0	0	0	0	0	0
Rock Island Dam													
	06/08/00	Yearling Chinook	24	0	0	0.00%	0.00%	0	0	0	0	0	0
	06/08/00	Steelhead	32	2	1	3.12%	0.00%	1	0	0	0	1	1
	06/12/00	Yearling Chinook	43	6	4	9.30%	0.00%	4	0	0	0	2	1
	06/15/00	Yearling Chinook	51	4	3	5.88%	0.00%	1	2	0	0	2	1

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	Hungry H. Dnst			Boundary			Grand Coulee			Grand C. Tlwr			Chief Joseph			#				
	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
6/2	101	102	104	24	119	120	122	24	113	113	114	24	113	113	114	24	112	113	113	23
6/3	100	100	100	24	118	120	122	24	113	113	113	24	112	112	112	24	112	113	113	23
6/4	100	100	100	24	117	119	121	24	113	114	114	24	113	113	114	24	113	114	115	23
6/5	100	100	100	24	118	119	122	24	114	115	115	24	113	113	114	24	114	114	114	23
6/6	100	100	100	24	117	117	118	24	113	114	114	24	112	112	113	24	113	113	113	23
6/7	100	100	100	24	117	118	119	24	114	114	115	24	112	113	114	24	112	113	113	23
6/8	100	100	100	24	115	115	116	24	115	115	115	24	113	113	114	24	113	113	113	23
6/9	100	100	100	24	115	117	118	24	114	115	115	24	113	113	114	24	113	113	114	23
6/10	100	100	100	24	116	117	118	24	113	114	114	24	111	112	112	24	112	113	113	23
6/11	102	104	107	21	115	118	119	24	113	114	114	24	111	111	113	24	111	112	112	23
6/12	107	107	107	24	117	118	120	24	113	114	114	24	111	112	113	24	112	112	113	23
6/13	107	107	107	24	119	121	122	24	113	113	113	24	111	111	112	24	110	110	111	23
6/14	102	106	107	24	119	120	121	24	113	113	114	24	111	111	113	24	110	111	111	23
6/15	98	100	102	24	119	121	122	24	112	113	113	24	111	111	113	24	110	111	112	23

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	Chief J. Dnst			Wells			Wells Dwnstrm			Rocky Reach			Rocky R. Tlwr			#				
	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
6/2	107	112	113	23	111	112	112	24	112	113	113	24	111	111	111	22	111	111	111	21
6/3	112	112	113	23	110	111	112	24	111	112	112	24	111	111	111	23	111	111	111	22
6/4	113	113	114	23	111	113	113	24	112	113	113	24	112	112	113	24	112	112	113	24
6/5	113	114	114	23	113	113	114	24	113	114	115	24	112	113	113	23	112	113	113	20
6/6	112	112	113	23	111	111	111	11	112	112	113	11	111	111	111	23	111	111	112	23
6/7	112	112	113	23	110	111	111	24	111	112	112	24	110	111	111	23	111	112	112	20
6/8	112	113	114	23	111	111	112	23	112	112	113	23	110	110	111	22	112	112	112	20
6/9	112	113	113	23	110	111	111	24	111	112	112	24	110	111	111	24	111	111	111	22
6/10	111	112	112	23	110	110	110	24	111	111	112	24	110	110	110	23	110	110	110	21
6/11	110	111	111	23	109	110	110	24	110	111	111	24	108	108	108	20	109	109	109	20
6/12	110	111	112	23	110	110	111	24	113	114	120	24	105	106	107	22	109	110	114	21
6/13	109	109	109	23	108	108	109	24	111	113	119	24	102	103	103	22	110	112	117	19
6/14	109	109	110	23	109	109	110	14	112	113	119	14	103	104	104	21	111	112	113	21
6/15	109	110	112	23	108	108	108	2	110	110	110	2	104	104	107	12	113	113	114	10

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	Rock Island			Rock I. Tlwr			Wanapum			Wanapum Tlwr			Priest Rapids			#				
	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High	#	24 h	12 h	High		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
6/2	106	106	107	23	117	117	118	21	113	114	116	24	114	115	117	24	112	113	114	24
6/3	107	107	107	24	117	117	118	23	114	116	118	24	115	116	117	24	112	112	112	24
6/4	107	107	108	23	117	117	118	22	116	117	119	24	115	116	118	24	112	112	114	24
6/5	109	109	109	24	117	118	118	24	114	115	115	23	116	117	118	24	113	113	114	24
6/6	108	108	108	24	116	116	117	23	---	---	---	0	---	---	---	0	---	---	---	0
6/7	107	107	108	24	116	117	118	22	114	115	116	24	116	117	118	24	112	112	113	24
6/8	107	108	108	24	117	118	118	23	114	114	114	24	115	117	118	24	113	114	115	24
6/9	107	107	108	22	116	117	117	21	111	111	112	24	113	113	115	24	112	113	113	24
6/10	106	107	107	23	116	117	118	21	110	111	111	24	113	114	116	24	111	112	112	24
6/11	105	106	106	22	116	116	117	22	110	111	111	24	113	115	116	24	111	112	113	24
6/12	106	106	106	23	115	116	116	23	111	112	112	24	115	116	117	24	113	114	115	24
6/13	105	105	106	23	113	116	117	21	110	110	111	24	115	120	128	24	114	116	121	24
6/14	107	107	108	18	113	114	116	17	110	110	110	24	113	114	127	24	113	116	120	24
6/15	107	107	108	13	112	112	114	13	---	---	---	0	---	---	---	0	---	---	---	0

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

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

Date	<u>Priest R. Dnst</u>			<u>Pasco</u>			<u>Dworshak</u>			<u>Clrwtr-Peck</u>			<u>Anatone</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>hr</u>	<u>Avg</u>		<u>Avg</u>	<u>hr</u>		<u>Avg</u>	<u>Avg</u>		<u>hr</u>	<u>Avg</u>			<u>Avg</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>
6/2	117	118	119	24	112	112	113	24	108	109	110	24	103	103	104	24	104	105	106	24
6/3	118	118	118	24	110	111	111	24	109	110	112	24	102	103	104	24	104	105	106	24
6/4	119	119	120	24	112	113	114	24	110	111	112	24	103	104	105	24	104	106	106	24
6/5	120	120	120	24	113	114	114	24	110	110	112	24	102	103	104	24	104	105	105	24
6/6	---	---	---	0	110	111	112	24	109	110	111	24	102	103	104	24	104	104	105	24
6/7	119	120	120	24	112	113	113	24	109	110	112	24	103	104	105	24	104	105	105	24
6/8	119	119	120	24	112	113	114	24	107	108	109	24	102	102	103	24	103	103	104	24
6/9	115	116	118	24	109	109	110	24	108	109	110	24	102	102	103	24	103	104	104	24
6/10	115	115	116	24	105	106	106	24	107	109	109	24	101	101	102	24	102	103	103	24
6/11	115	116	116	24	105	105	106	24	108	109	112	24	102	103	103	24	103	104	104	24
6/12	117	117	118	24	107	108	108	24	108	111	113	24	102	102	102	24	103	103	104	24
6/13	117	117	118	24	107	109	111	24	106	109	110	24	101	102	103	21	103	104	104	21
6/14	113	116	128	24	111	112	112	24	103	105	106	24	102	103	103	24	103	104	105	24
6/15	---	---	---	0	109	110	111	24	105	106	106	24	102	103	103	24	102	103	103	24

Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clrwtr-Lewiston</u>			<u>Lower Granite</u>			<u>L. Granite Tlwr</u>			<u>Little Goose</u>			<u>L. Goose Tlwr</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>hr</u>	<u>Avg</u>		<u>Avg</u>	<u>hr</u>		<u>Avg</u>	<u>Avg</u>		<u>hr</u>	<u>Avg</u>			<u>Avg</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>
6/2	103	104	105	24	104	104	105	24	113	120	122	24	110	111	113	24	115	120	121	24
6/3	102	104	105	24	105	106	108	24	113	120	122	24	111	113	115	24	116	119	120	24
6/4	103	105	106	24	107	108	109	24	113	119	120	24	114	116	117	24	115	119	119	24
6/5	102	104	105	24	106	106	106	24	113	118	121	24	113	114	115	24	115	118	119	24
6/6	102	103	105	22	104	105	106	24	113	119	120	24	112	113	114	24	114	115	116	23
6/7	103	104	106	24	104	104	104	24	113	119	121	24	112	113	114	24	114	115	116	24
6/8	101	101	102	24	103	104	104	24	112	119	121	24	112	113	114	24	114	115	116	24
6/9	101	103	104	24	103	103	104	24	112	119	120	24	110	111	112	24	112	114	115	24
6/10	101	101	102	24	101	102	103	24	112	118	120	24	107	108	110	24	112	116	118	24
6/11	102	103	104	24	100	100	100	24	111	118	119	24	105	106	107	24	112	118	120	24
6/12	102	102	103	24	101	101	101	24	111	118	119	24	107	107	108	24	113	119	120	24
6/13	102	103	105	21	100	100	101	21	110	115	119	21	106	106	106	21	112	116	119	21
6/14	102	103	104	24	102	102	103	24	112	119	120	24	107	108	108	23	113	118	119	23
6/15	102	103	104	24	102	102	103	24	112	119	121	24	108	109	110	24	114	119	120	24

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

Date	<u>Lower Mon.</u>			<u>L. Mon. Tlwr</u>			<u>Ice Harbor</u>			<u>Ice Harbor Tlwr</u>			<u>McNary-Oregon</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	<u>Avg</u>	<u>Avg</u>		<u>hr</u>	<u>Avg</u>		<u>Avg</u>	<u>hr</u>		<u>Avg</u>	<u>Avg</u>		<u>hr</u>	<u>Avg</u>			<u>Avg</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>
6/2	114	116	119	24	118	119	120	24	118	119	119	24	113	114	115	24	111	113	116	24
6/3	115	116	118	24	117	118	118	24	119	119	121	24	113	114	116	24	112	113	115	24
6/4	116	117	118	24	117	117	118	24	120	121	123	24	113	115	116	24	114	115	116	24
6/5	116	117	118	24	115	116	117	24	118	119	120	24	113	115	116	24	113	113	114	24
6/6	114	115	116	24	115	116	117	24	114	115	116	24	114	115	116	24	114	115	118	24
6/7	114	115	116	24	115	116	117	24	113	114	115	24	114	114	116	24	114	116	118	24
6/8	114	115	116	24	115	115	116	24	114	114	114	24	114	114	115	24	112	113	115	24
6/9	112	113	115	24	114	115	116	24	112	113	114	24	113	115	117	24	112	112	112	24
6/10	110	110	112	24	116	117	118	24	110	110	111	24	112	113	114	21	110	110	111	21
6/11	109	109	110	24	118	120	121	24	109	109	109	24	113	113	114	24	108	109	109	24
6/12	109	110	111	24	119	120	121	24	110	110	111	24	112	113	114	24	107	107	107	24
6/13	109	110	111	21	120	121	122	21	111	112	114	24	113	114	116	24	107	109	111	24
6/14	110	112	112	24	119	120	121	24	113	114	114	24	114	115	118	24	108	108	109	24
6/15	111	112	114	24	118	119	120	24	115	116	117	24	113	115	118	24	109	112	113	24

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>McNary-Wash</u>			<u>McNary Tlwr</u>			<u>John Day</u>			<u>John Day Tlwr</u>			<u>The Dalles</u>							
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>AVG</u>	<u>High</u>	<u>#</u>
	<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>	<u>Avg</u>	
6/2	111	113	114	24	114	117	120	21	105	105	105	23	118	118	119	24	111	113	114	23
6/3	113	114	116	24	116	119	120	24	105	107	109	23	116	117	118	23	109	111	113	23
6/4	114	115	116	24	116	119	120	24	108	110	111	23	113	117	119	24	112	114	116	23
6/5	113	113	114	24	116	120	120	24	108	108	109	23	113	117	120	24	110	112	116	23
6/6	112	113	114	24	116	120	121	24	109	109	110	23	114	118	119	23	110	114	116	23
6/7	112	113	115	24	115	120	120	24	110	112	112	23	115	118	120	24	112	116	117	23
6/8	113	114	114	24	117	120	121	24	112	112	112	23	114	117	119	24	111	112	114	23
6/9	111	112	113	24	115	119	121	24	109	110	110	23	114	117	119	24	109	112	114	23
6/10	109	109	110	23	113	117	119	24	107	108	108	23	117	117	118	24	108	109	112	23
6/11	107	108	108	24	113	118	119	24	108	108	109	23	117	118	119	22	110	112	115	23
6/12	107	107	107	24	113	119	119	24	107	107	108	23	117	118	119	24	112	113	115	23
6/13	106	107	109	24	115	119	121	24	105	105	105	23	118	119	119	24	109	111	113	23
6/14	108	108	108	24	114	119	121	24	105	105	105	23	117	118	119	24	110	112	114	23
6/15	109	110	111	24	115	120	121	24	105	105	106	23	118	119	120	24	109	111	112	23

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>Skamania</u>			<u>Camas/Washugal</u>							
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>High</u>	<u>#</u>
	<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>			<u>Avg</u>	<u>Avg</u>		
6/2	117	118	118	24	114	114	115	23	115	115	116	23	116	118	120	23	114	117	119	24
6/3	116	116	117	24	114	115	115	23	115	116	118	23	117	118	120	23	115	117	118	24
6/4	117	117	119	24	113	114	115	23	116	116	117	23	121	121	122	23	116	118	119	24
6/5	116	117	119	24	112	112	113	23	115	115	116	23	118	120	120	23	117	118	118	24
6/6	117	118	119	24	110	111	111	23	113	114	114	23	113	114	116	23	115	116	117	24
6/7	117	118	119	24	112	113	113	23	114	115	116	23	114	115	116	23	115	115	116	24
6/8	116	117	119	24	113	114	115	23	114	115	115	23	115	116	116	23	114	114	115	24
6/9	115	116	116	24	110	111	111	23	116	117	118	23	115	115	116	23	113	113	114	24
6/10	114	115	116	24	109	110	110	23	116	117	117	23	114	116	117	23	112	112	113	24
6/11	114	115	116	24	110	111	112	23	117	117	118	23	115	116	118	22	110	111	111	24
6/12	116	117	117	24	110	111	112	23	117	118	120	23	114	117	120	23	110	111	112	24
6/13	115	116	117	24	108	109	109	23	116	116	118	23	114	115	118	23	111	113	116	24
6/14	115	116	117	24	110	111	111	23	117	117	118	23	113	114	115	23	111	113	115	24
6/15	115	115	116	24	109	110	110	23	115	115	115	23	113	115	117	23	110	112	114	24

Hatchery Release Summary

From 6/2/00 to 6/15/00

Hatchery	Species...	Migration Year	Number Released	...Release Dates... Begin... ..End	Release Site	River Name
IDFG						
Magic Valley	SU Steelhead	2000	106,135	04/10/00 06/08/00	Squaw Cr Acclim Pd	Salmon River
	Agency Totals:		106,135		
WDFW						
Klickitat	FA Chinook	2000	2,500,000	06/12/00 07/07/00	Klickitat H	Klickitat River
Priest Rapids	FA Chinook	2000	6,700,000	06/14/00 06/23/00	Priest Rapids H	Mid-Columbia River
Ringold Springs	FA Chinook	2000	3,500,000	06/13/00 06/19/00	Ringold Springs H	Mid-Columbia River
Wells	SU Chinook	2000	378,000	06/05/00 06/20/00	Wells H	Mid-Columbia River
	Agency Totals:		13,078,000		
	Total Release..		13,184,135			

Hatchery Release Summary

From 6/16/00 to 6/29/00

Hatchery	Species...	Migration Year	Number Released	...Release Dates... Begin... ..End	Release Site	River Name
Nez Perce Tribe						
Lyons Ferry	FA Chinook	2000	370,000	06/26/00 06/30/00	Cpt John Acclim Pd	Snake River
	FA Chinook	2000	370,000	06/26/00 06/30/00	Big Canyon (Clearwater)	Clearwater Rvr M F
	Agency Totals:		740,000		
USFWS						
L White Salmon	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		
WDFW						
Turtle Rock	FA Chinook	2000	354,000	06/26/00 07/07/00	Turtle Rock H	Mid-Columbia River
	FA Chinook	2000	360,000	06/26/00 07/07/00	Turtle Rock H	Mid-Columbia River
	Agency Totals:		714,000		
	Total Release..		3,454,000			

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)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
06/02/00	---	14	6	45	4,774	6,073	1,075	147	33,954	3,124	69,287
06/03/00	---	---	---	---	3,530	4,562	424	117	28,065	1,650	50,771
06/04/00	---	---	---	---	1,196	2,265	716	226	12,079	4,868	25,036
06/05/00	---	30	---	55	3,103	1,944	595	137	13,012	4,040	3,469
06/06/00	---	12	---	28	4,117	1,843	1,408	159	12,724	4,889	10,593
06/07/00	---	8	---	61	11,670	6,101	1,498	117	14,828	5,082	18,554
06/08/00	---	5	---	61	3,651	5,657	2,046	37	11,065	5,318	15,947
06/09/00	---	4	---	23	5,510	10,267	3,407	121	7,302	6,377	5,683
06/10/00	---	---	---	---	2,862	22,088	1,155	27	13,572	3,746	3,767
06/11/00	---	---	---	---	2,408	21,456	788	88	10,530	1,500	10,133
06/12/00	---	11	---	23	1,747	9,238	586	60	7,813	1,697	1,409
06/13/00	---	12	---	7	685	1,290	98	102	5,601	899	877
06/14/00	---	12	---	24	2,675	1,001	102	108	920	583	2,867
06/15/00	---	7	---	28	2,821	281	82	69	2,040	1,654	6,153
Total:	0	115	6	355	50,749	94,066	13,980	1,515	173,505	45,427	224,546
# Days:	0	10	1	10	14	14	14	14	14	14	14
Average:	0	12	6	36	3,625	6,719	999	108	12,393	3,245	16,039

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)
06/02/00	---	0	0	3	670	0	490	29	14,625	15,357	22,514
06/03/00	---	---	---	---	634	0	530	29	17,321	6,480	16,659
06/04/00	---	---	---	---	1,334	0	495	41	12,978	20,861	11,045
06/05/00	---	0	---	17	1,101	0	304	48	10,036	34,680	4,162
06/06/00	---	0	---	15	556	13	252	34	14,976	80,845	13,834
06/07/00	---	0	---	20	4,434	0	728	23	22,330	59,716	28,952
06/08/00	---	0	---	20	11,597	307	1,151	14	32,723	33,398	36,203
06/09/00	---	0	---	6	10,804	1,703	1,693	22	75,616	63,338	18,283
06/10/00	---	---	---	---	10,979	12,386	4,970	41	36,112	50,117	11,839
06/11/00	---	---	---	---	10,526	16,073	7,546	40	14,675	10,080	28,265
06/12/00	---	0	---	4	6,120	8,914	4,792	24	17,987	7,342	13,037
06/13/00	---	0	---	1	3,079	2,837	1,050	27	49,949	10,239	14,757
06/14/00	---	0	---	12	10,019	35,433	7,185	51	13,158	13,002	30,798
06/15/00	---	0	---	2	6,652	4,721	9,638	61	21,625	11,766	21,766
Total:	0	0	0	100	78,505	82,387	40,824	484	354,111	417,221	272,114
# Days:	0	10	1	10	14	14	14	14	14	14	14
Average:	0	0	0	10	5,608	5,885	2,916	35	25,294	29,802	19,437

* 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)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
06/02/00	---	0	0	0	2,010	3,776	1,580	1,787	9,057	5,518	37,349
06/03/00	---	---	---	---	905	1,052	353	1,349	6,310	1,220	32,261
06/04/00	---	---	---	---	966	408	991	1,217	5,503	7,823	18,409
06/05/00	---	0	---	0	2,254	1,254	736	685	5,460	5,836	29,136
06/06/00	---	0	---	0	2,389	790	841	857	9,972	4,524	8,850
06/07/00	---	0	---	0	2,483	1,663	936	1,024	29,558	4,870	20,250
06/08/00	---	0	---	1	1,287	1,868	810	697	18,919	2,340	21,262
06/09/00	---	0	---	0	501	2,278	958	584	7,524	6,973	8,895
06/10/00	---	---	---	---	326	1,481	725	320	9,913	2,022	2,422
06/11/00	---	---	---	---	272	221	415	253	8,706	510	12,799
06/12/00	---	0	---	0	98	245	1,384	280	6,408	2,537	2,819
06/13/00	---	0	---	0	70	344	61	239	4,111	515	2,484
06/14/00	---	0	---	0	203	91	401	281	920	1,776	12,041
06/15/00	---	0	---	0	51	31	171	316	1,635	1,294	10,194
Total:	0	0	0	1	13,815	15,502	10,362	9,889	123,996	47,758	219,171
# Days:	0	10	1	10	14	14	14	14	14	14	14
Average:	0	0	0	0	987	1,107	740	706	8,857	3,411	15,655

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)
06/02/00	---	182	3	1	7,287	4,876	10,446	157	11,176	6,611	7,330
06/03/00	---	---	---	---	5,974	2,695	5,760	79	7,259	1,510	6,082
06/04/00	---	---	---	---	6,717	1,523	2,394	88	5,428	6,084	8,100
06/05/00	---	514	---	5	3,795	4,024	5,344	56	4,819	3,367	694
06/06/00	---	814	---	4	5,359	1,989	1,303	51	8,836	1,824	2,533
06/07/00	---	411	---	5	9,062	6,255	2,809	57	9,998	2,329	11,439
06/08/00	---	594	---	7	8,879	2,917	2,984	56	6,553	425	8,476
06/09/00	---	603	---	1	6,112	4,810	3,697	40	3,562	2,148	5,683
06/10/00	---	---	---	---	5,037	2,690	1,719	35	1,536	493	1,614
06/11/00	---	---	---	---	3,146	1,550	2,280	49	497	90	3,466
06/12/00	---	155	---	2	2,309	2,454	2,325	24	1,237	371	1,409
06/13/00	---	347	---	4	658	1,723	953	20	1,047	599	438
06/14/00	---	246	---	8	2,635	610	2,130	25	216	127	6,225
06/15/00	---	189	---	7	793	413	1,339	24	1,387	367	2,939
Total:	0	4,055	3	44	67,763	38,529	45,483	761	63,551	26,345	66,428
# Days:	0	10	1	10	14	14	14	14	14	14	14
Average:	0	406	3	4	4,840	2,752	3,249	54	4,539	1,882	4,745

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)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
06/02/00	---	0	0	0	0	311	119	8	3,104	156	4,538
06/03/00	---	---	---	---	91	195	106	3	940	300	2,380
06/04/00	---	---	---	---	46	68	110	4	904	1,217	736
06/05/00	---	0	---	0	31	118	76	6	642	337	694
06/06/00	---	0	---	0	49	118	42	4	1,298	657	408
06/07/00	---	0	---	0	242	77	42	0	1,796	847	1,423
06/08/00	---	0	---	0	64	51	64	0	1,190	213	1,006
06/09/00	---	0	---	0	33	300	200	3	364	860	0
06/10/00	---	---	---	---	72	39	54	3	354	773	0
06/11/00	---	---	---	---	39	0	207	1	249	0	800
06/12/00	---	0	---	0	12	0	0	0	562	77	0
06/13/00	---	0	---	0	23	0	6	4	375	94	0
06/14/00	---	0	---	0	31	30	36	3	54	257	573
06/15/00	---	0	---	0	62	0	30	3	82	238	92
Total:	0	0	0	0	795	1,307	1,092	42	11,914	6,026	12,650
# Days:	0	10	1	10	14	14	14	14	14	14	14
Average:	0	0	0	0	57	93	78	3	851	430	904

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 06/15

DAM	Spring Chinook						Summer Chinook						Fall Chinook					
	2000		1999		10-Yr Avg.		2000		1999		10-Yr Avg.		2000		1999		10-Yr Avg.	
	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	8,038	3,104	4,354	1,117	5,471	417	0	0	0	0	0	0
TDA	102,900	14,680	17,563	6,180	36,497	1,828	5,040	2,028	2,337	639	3,189	230	0	0	0	0	0	0
JDA	86,447	12,181	15,409	5,089	29,402	1,505	4,074	1,383	1,906	407	2,307	164	0	0	0	0	0	0
MCN	64,647	10,839	9,260	3,972	28,536	1,577	2,304	856	821	269	1,664	129	0	0	0	0	0	0
IHR	38,234	9,106	5,351	2,657	15,091	720	926	475	793	192	774	45	0	0	0	0	0	0
LMN	34,631	9,952	3,924	2,726	14,041	753	137	123	146	50	161	10	0	0	0	0	0	0
LGS	33,294	9,586	3,148	2,605	**	**	0	0	0	0	**	**	0	0	0	0	**	**
LWG	33,395	10,047	2,965	2,413	11,798	646	0	0	0	0	0	0	0	0	0	0	0	0
PRD	19,030	1,084	4,139	761	9,052	194	276	8	41	10	54	2	0	0	0	0	0	0
RIS	13,720	1,289	3,252	869	209	0	0	0	0	0	0	0	0	0	0	0	0	0
RRH	5,076	360	1,332	216	49	0	0	0	0	0	0	0	0	0	0	0	0	0
WEL	1,193	343	69	133	634	37	0	0	0	0	0	0	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2000		1999		10-Yr Avg.		10-Yr			10-Yr			Wild
	Adult	Jack	Adult	Jack	Adult	Jack	2000	1999	Avg.	2000	1999	Avg.	2000
BON	0	0	0	0	0	0	12,045	860	1,577	6,700	4,056	6,877	1,854
TDA	0	0	0	0	0	0	6,719	407	739	1,410	1,040	2,286	454
JDA	1	0	0	0	0	0	5,284	231	428	4,048	3,838	3,658	1,432
MCN	0	0	0	1	0	0	2,844	58	222	1,160	758	2,629	284
IHR	0	0	0	0	0	0	0	0	0	922	843	2,436	394
LMN	0	0	0	0	0	0	0	0	0	953	597	2,384	508
LGS	0	0	0	0	**	**	0	0	**	977	923	**	469
LWG	0	0	0	0	0	0	0	0	0	2,499	3,046	5,235	855
PRD	0	0	0	0	0	0	726	15	83	49	42	81	***
RIS	1	0	0	0	0	0	28	17	10	26	50	115	21
RRH	20	0	0	0	0	0	6	44	9	84	78	85	35
WEL	0	0	0	0	0	0	7	0	0	8	31	33	4

Note: RIS, RRH are through 6/11; LGS, WEL is through 06/13; LMN, PRD are through 06/14.

Note: LGS is missing 06/08, 06/09, 06/12.

Note: IHR 05/06 is missing the south ladder count. LMN 04/08 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.

**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.

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.

Two Week Transportation Summary
06/02/00 TO 06/15/00

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum Of NumberCollected	44,743	29,832	8,187	465	39,468	122,695
	Sum Of NumberBarged	44,465	24,720	8,181	464	38,788	116,618
	Sum Of NumberBypassed	0	5,068	0	0	658	5,726
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	278	44	6	1	22	351
LGS	Sum Of NumberCollected	55,536	67,247	11,122	930	27,417	162,252
	Sum Of NumberBarged	55,468	67,122	11,103	930	27,286	161,909
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	68	125	19	0	131	343
LMN	Sum Of NumberCollected	17,557	8,424	5,517	577	23,239	55,314
	Sum Of NumberBarged	15,968	8,343	5,515	577	22,983	53,386
	Sum Of NumberBypassed	1,553	7	0	0	200	1,760
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	136	74	2	0	57	269
MCN	Sum Of NumberCollected	213,952	104,263	76,610	7,226	38,901	440,952
	Sum Of NumberBarged	0	0	0	0	0	0
	Sum Of NumberBypassed	213,885	104,175	76,556	7,221	38,849	440,686
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	67	87	54	5	52	265
Total Sum Of NumberCollected		331,788	209,766	101,436	9,198	129,025	781,213
Total Sum Of NumberBarged		115,901	100,185	24,799	1,971	89,057	331,913
Total Sum Of NumberBypassed		215,438	109,250	76,556	7,221	39,707	448,172
Total Sum Of NumberTrucked		0	0	0	0	0	0
Total Sum Of TotalProjectMort		549	330	81	6	262	1,228

YTD Transportation Summary
TO: 06/15/00

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum Of NumberCollected	49,180	2,429,952	116,602	5,697	4,992,128	7,593,559
	Sum Of NumberBarged	48,707	2,305,512	116,147	5,466	4,754,125	7,229,957
	Sum Of NumberBypassed	46	115,107	400	16	226,235	341,804
	Sum Of NumberTrucked	117	6,084	16	187	11,238	17,642
	Sum Of TotalProjectMort	310	3,250	39	28	530	4,157
LGS	Sum Of NumberCollected	56,008	1,355,811	34,559	3,137	1,040,889	2,490,404
	Sum Of NumberBarged	55,935	1,346,247	34,515	3,033	1,032,899	2,472,629
	Sum Of NumberBypassed	0	0	0	0	0	0
	Sum Of NumberTrucked	0	4,308	5	76	6,791	11,180
	Sum Of TotalProjectMort	73	5,241	39	28	1,198	6,579
LMN	Sum Of NumberCollected	40,961	606,044	15,886	4,121	753,415	1,420,427
	Sum Of NumberBarged	38,614	553,975	15,873	4,109	751,231	1,363,802
	Sum Of NumberBypassed	2,255	24,873	0	0	901	28,029
	Sum Of NumberTrucked	0	25,741	10	10	810	26,571
	Sum Of TotalProjectMort	192	1,455	3	2	474	2,126
MCN	Sum Of NumberCollected	277,928	1,130,161	130,465	58,110	345,882	1,942,546
	Sum Of NumberBarged	0	0	0	0	0	0
	Sum Of NumberBypassed	277,835	1,129,533	130,400	58,096	345,675	1,941,539
	Sum Of NumberTrucked	0	0	0	0	0	0
	Sum Of TotalProjectMort	93	627	65	14	207	1,006
Total Sum Of NumberCollected		424,077	5,521,968	297,512	71,065	7,132,314	13,446,936
Total Sum Of NumberBarged		143,256	4,205,734	166,535	12,608	6,538,255	11,066,388
Total Sum Of NumberBypassed		280,136	1,269,513	130,800	58,112	572,811	2,311,372
Total Sum Of NumberTrucked		117	36,133	31	273	18,839	55,393
Total Sum Of TotalProjectMort		668	10,573	146	72	2,409	13,868

