



Fish Passage Center

Weekly Report #04 - 4

April 2, 2004

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Summary of Events:

Highlights:

- **Precipitation, snowpack and water supply forecasts have been decreasing over the winter months, the April Early-Bird Forecast at The Dalles is 78% of average.**
- **Most storage projects will likely fall below their April 10th Biological Opinion Flood Control Elevations, reaching these elevations ensures a high probability of both meeting spring flow objectives and refill by June 30.**
- **Adult spring chinook counts at Bonneville Dam through April 1, are lower than 2003 and lower than the 10 year average.**

Water Supply: Precipitation throughout the Columbia Basin has been generally below average over most of March. Of the sites in Table 1, none recorded precipitation that was greater than average. Over the entire water year, precipitation has been slightly below average.

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

Location	Water Year 2004 March 1-22		Water Year 2004 October 1, 2003 to March 22, 2004	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	1.08	85	12.96	94
Snake River Above Ice Harbor	0.43	36	8.81	90
Columbia Above The Dalles	0.87	64	13.03	95
Kootenai	0.92	73	13.46	96
Clark Fork	0.54	64	7.27	84
Flathead	0.99	86	10.73	92
Pend Oreille/Spokane	0.83	42	17.49	90
Central Washington	0.23	38	4.98	88
Snake River Plain	0.13	16	4.59	79
Salmon/Boise/Payette	0.38	28	10.49	86
Clearwater	1.40	70	17.68	99
SW Washington Cascades/Cowlitz	2.41	48	46.08	90
Willamette Valley	1.33	29	40.79	94

Snowpack within the Columbia Basin is also slightly below average and has been decreasing (with respect to average) over the last several weeks. Average snowpack in the Columbia River for basins above the Snake River confluence is 80% of average, for Snake River Basins the average snowpack is 80% of average, and for lower Columbia Basins between McNary and Bonneville Dam average snowpack is 95% of average.

Water Supply Forecasts have been decreasing over the winter months. The April Early-Bird Forecast has been issued by the River Forecast Center; all locations presented in the table below have decreased relative to the March Final forecast. Most significant are decreases at Brownlee, Lower Granite and Dworshak, which decreased 22%, 18%, and 16% of average, respectively. The April Final Forecast is scheduled to be issued on April 8th, 2004.

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

Location	March Final		April Early-Bird	
	% Average (1971-2000)	Probable Runoff Volume (Kaf)	% Average (1971-2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	87	92900	78	83600
Grand Coulee (Jan-July)	88	55600	84	52800
Libby Res. Inflow, MT (Jan-July)	90	5700	84	5280
Hungry Horse Res. Inflow, MT (Jan-July)	87	1930	82	1830
Lower Granite Res. Inflow (Apr- July)	93	20000	75	16100
Brownlee Res. Inflow (Apr-July)	72	4530	50	3180
Dworshak Res. Inflow (Apr-July)	100	2640	84	2230

Grand Coulee Reservoir is currently drafted well below its flood control elevations. Grand Coulee ended March 31st at an elevation of 1264.4 feet, this elevation is 11.4 feet below standard BIOP required April 10th elevation (1275.8 feet) and 7.8 feet below the April 10th elevation (1272.2 feet) if a flood control swap occurs between Grand Coulee and Dworshak. Although Grand Coulee has managed to refill 4.0 feet in the last week, it appears unlikely that Grand Coulee will reach its standard April 10th BIOP elevation in 2004. Reaching the April 10th elevation will be especially difficult considering the April Final Water Supply forecast at Grand Coulee will surely decrease and, as a result, flood control elevations will increase. Reaching the April 10 flood control elevations ensures a high probability of both meeting spring flow objectives and refill by June 30.

The Libby Reservoir is also currently well below its flood control elevations. Libby ended March 31st at an elevation of 2398.7 feet, 44.3 feet below its estimated April 10th elevation of 2443 feet. Inflows to Libby over the last week have been slightly above 4.0 Kcfs; therefore Libby has been able to refill approximately 0.2 feet while still maintaining minimum project outflow of 4.0 Kcfs.

The Hungry Horse Reservoir is currently at an elevation of 3514.7 feet, which is 22.5 feet below its estimated April 10th BIOP elevation. Over the last week, inflows to Hungry Horse have increased, enabling Hungry Horse to refill slightly while still meeting the Columbia Falls minimum flows.

The Dworshak reservoir is currently at an elevation of 1530.1 feet. Inflows to Dworshak have remained relatively high over the past week ranging between 8.6 and 11.3 Kcfs, allowing Dworshak to refill approximately seven feet in the last week. If increased inflows persist, Dworshak should meet its April 10th system FC elevation (based on the March Final WSF) of 1535.5 feet; however with the Water Supply Forecast expected to decrease significantly, its flood control elevations would be expected to increase significantly.

The Brownlee Reservoir was at an elevation of 2051.6 on March 31st. Brownlee is only 3.9 feet below its April 10th elevation (2055.1 feet).

Spill: A Systems Operational Request was submitted to begin Biological Opinion Spill at Lower Granite Dam beginning on the evening of April 3. Based on fish numbers it is anticipated that spill will be phased in at the downstream Snake River projects at two-day intervals beginning with Little Goose on April 5 and followed by Lower Monumental on April 7 and Ice Harbor Dam on April 9.

Smolt Monitoring: Sampling began April 1 at Little Goose, Lower Monumental, McNary, John Day and Rock Island dams, while sampling is ongoing at the Snake River basin SMP traps, Lower Granite, and Bonneville dams. At the White Bird Trap a weekly high of 1,558 yearling chinook was collected March 30. The average daily collection was slightly lower this week compared to last week. Numbers of yearling chinook captured at the Grande Ronde trap this past week had a daily maximum of 529 on April 1. At the Imnaha Trap a total of 4,278 yearling chinook were captured on March 28. At the Lewiston Trap small numbers of yearling chinook were captured this past week with a daily average of 20 compared to 17 last week. At all four traps low numbers of steelhead were reported. The Entiat Trap had slightly lower catches of yearling chinook this week (15 fish) compared to last week (41 fish). At Lower Granite Dam the passage index has steadily increased since the first day of sampling, March 26 when it was 70 yearling chinook smolts to 1,080 on April 1. The steelhead passage index at Lower Granite has also increased steadily since the start of sampling from 110 March 26 to 1,010 on April 1. At Lower Monumental dam 420 yearling chinook and 60 steelhead were reported the first day of sampling. Rock Island Dam reported no yearling chinook and steelhead on the first day of sampling and 75 subyearling chinook. At Bonneville Dam, the average daily index for yearling chinook was 338 compared to 227 last week. Subyearling chinook numbers remained high and were mostly fry, likely from nearby tributaries. Low numbers of steelhead, coho, and sockeye were also reported in the collection at Bonneville Dam.

Hatchery Releases - The scheduled release of juvenile salmonids from Columbia River Basin hatcheries above Bonneville Dam for the 2004 migration season is estimated near 81.9 million. Supplemental and planned releases completed during the fall 2003 season are considered to be 2004 migrants. The Zone Release Report below summarizes "planned" hatchery releases from State, federal or Tribal hatcheries or acclimation ponds for the 2004 Migration Season. These totals will be updated after release from the hatcheries and finalized through the year.

Juvenile sockeye were released from net pens into Lake Wenatchee last summer and fall (2003); the majority of these fish reside in the lake and migrate from the lake and to the ocean the next spring (2004). In the Snake River basin, juvenile sockeye were released in Redfish, Alturas, and Pettit lakes last fall and most begin their migration in late April and May from the lakes.

Hatcheries in the Snake and Columbia basin released about 12.7 million salmon during the past two weeks. Most of the juvenile fish released were yearling chinook planted in the Snake River basin. For the upcoming two weeks, about 16 million fish will be released from hatcheries in the basin. See the Hatchery Release Summary Tables for details of individual release groups.

2004 Hatchery Zone Report

Race/Species	Friday 2 April 2004			
	Snake River	Mid-Columbia	Lower Columbia	Total Release
Fall Chinook	2,610,000	12,430,000	21,730,094	36,770,094
Spring Chinook	10,467,630	4,010,579	5,250,398	19,728,607
Summer Chinook	2,402,002	3,273,500		5,675,502
Coho	1,199,433	1,141,000	5,924,000	8,264,433
Sockeye	62,000	315,790		377,790
Summer Steelhead	9,276,500	1,260,000	476,330	11,012,830
Winter Steelhead			90,000	9,0000
Total	26,017,565	22,430,869	33,470,822	81,919,256

Snake River: Release of yearling chinook from McCall Hatchery at the Knox Bridge site on the S. Fork Salmon and at Johnson Creek have been completed for the season. Rapid River H completed specific site releases at Hells Canyon and the Little Salmon River with the on-site volitional release from the hatchery about 75% already out of the ponds. In the Grande Ronde basin, yearling chinook were released from the acclimation ponds located in the upper Grande Ronde and Catherine Creek with the second volitional releases on-going through the middle of April. Dworshak and Kooskia NFHs released their yearling spring chinook during this week. Volitional release of the Tucannon R yearling chinook began on 3/15 and should continue for about a month. The Clearwater releases will be completed over the upcoming two weeks.

Trucking of steelhead from Niagara Springs H. to Hells Canyon began on March 22 and be completed today, April 2nd. Another 8.5 million steelhead will be released between April through mid-May in the Snake River. Volitional releases will be ongoing from some of the acclimation ponds.

Mid-Columbia - Volitional releases of yearling spring chinook commenced mid-March in the Yakama River at Clark Flat, Easton, and Jack Creek ponds and volitional release of these fish will continue through mid-May. The upper Mid-Columbia spring chinook and steelhead will be released from Federal and State hatcheries in mid-April through mid-May, normally coinciding with the spill program.

Lower Columbia - Yearling fall and spring chinook and coho salmon have been released from acclimation ponds located in the Umatilla River basin during March. Yearling chinook releases from Round Butte H and Warm Springs NFH in to Deschutes River basin are ongoing through this week with the completion from these hatcheries by early April. Yearling spring chinook were released from Klickitat H the first week in March. About 2.5 million yearling coho from Washougal H will be trucked and released during this week and the upcoming week in the Klickitat River.

Adult Fish Passage - All COE projects are now counting adult fish as of April 1 with the PUD dams in the Mid-Columbia River normally initiating adult fish counting near April 15 and starting on May 1st at Wells Dam. The Bonneville Dam counts from January through March 14 are listed in a small table below the Adult Table.

At Bonneville Dam, counts of spring chinook remained at low levels through the end of the count week, April 1. Only 504 adult spring chinook have been tallied past the project and that compares to 19,807 in 2003 and 3,824 for the 10-year average. Adult spring chinook interrogated for presence of PIT tags at Bonneville have to date, been from the 2001 and 2002 juvenile migration years with adult fish from Rapid River Hatchery, Catherine Creek Pond, Dworshak NFH in the Snake River; Leavenworth NFH in the Mid-Columbia River, and Carson NFH in the lower Columbia River. Note that not all hatcheries released PIT tagged fish so that would preclude them from having these fish among the PIT tag returns. Numbers of adult chinook should start increasing rapidly as the 4-year old component of the Run begins dominating the passage at Bonneville Dam. Based on pre-season projections for spring chinook destined for areas above Bonneville Dam, there should be another 359,000 on the way.

Adult steelhead continue migrating through the upper Snake River projects to spawning areas in the upstream tributaries of the Clearwater, Salmon, Imnaha, Tucannon, and Grande Ronde basins. About 4,500 steelhead have been counted at Lower Granite Dam since March 1st. This total is well below the 2003 count, but exceeds the 10-year average to date.

HATCHERY RELEASE LAST TWO WEEKS

Hatchery Release Summary

From: **3/19/2004** to **4/1/2004**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2003	350,665	04-01-03	04-01-03	Powell Acclim Pond	Lochsa River
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2003	351,066	04-02-03	04-02-03	Red River Acclim Pond	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2003	629,687	04-02-03	04-02-03	Crooked R Acclim Pond	S Fk Clearwater River
Idaho Dept. of Fish and Game	McCall Hatchery	CH1	SU	2003	1,053,660	03-31-03	04-03-03	Knox Bridge	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2003	525,884	03-24-03	04-04-03	Hells Canyon Dam	Snake River
Idaho Dept. of Fish and Game	Pahsimeroi Hatchery	CH1	SU	2003	295,992	03-29-03	04-06-03	Pahsimeroi Hatchery	Pahsimeroi River
Idaho Dept. of Fish and Game	Pahsimeroi Hatchery	CH1	SU	2003	909,926	03-29-03	04-06-03	Pahsimeroi Hatchery	Pahsimeroi River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2003	299,854	03-19-03	03-20-03	Hells Canyon Dam	Snake River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2003	2,330,557	03-17-03	04-28-03	Rapid River Hatchery	Little Salmon River
Idaho Dept. of Fish and Game Total					6,747,291				
Nez Perce Tribe	Cherry Lane Hatchery	CO	UN	2003	29,030	03-25-03	03-25-03	Orofino Creek	Clearwater River M F
Nez Perce Tribe	Clearwater Hatchery	CH1	SP	2003	74,066	03-21-03	03-21-03	Newsome Creek	S Fk Clearwater River
Nez Perce Tribe	Clearwater Hatchery	CH1	SP	2003	101,513	03-20-03	03-20-03	Boulder Creek	Lochsa River
Nez Perce Tribe	Lookingglass Hatchery	CH1	SP	2003	109,781	03-17-03	03-23-03	Lostine Accim Pond	Wallowa River
Nez Perce Tribe	Lookingglass Hatchery	CH1	SP	2003	132,968	04-01-03	04-14-03	Lostine Accim Pond	Wallowa River
Nez Perce Tribe	Lyons Ferry Hatchery	CH1	FA	2003	151,919	03-30-03	04-08-03	Cpt John Acclim Pond	Snake River
Nez Perce Tribe	McCall Hatchery	CH1	SU	2003	73,000	03-20-03	03-21-03	Johnson Cr Idaho	South Fork Salmon River
Nez Perce Tribe Total					672,277				
Oregon Dept. of Fish and Wildlife	Lookingglass Hatchery	CH1	SP	2003	268,426	04-01-03	04-15-03	Imnaha Acclim Pond	Imnaha River
Oregon Dept. of Fish and Wildlife	Wallowa Acclim. Pond	CH1	SP	2003	66	03-31-03	03-31-03	Wallowa River	Grande Ronde River
Oregon Dept. of Fish and Wildlife Total					268,492				
U.S. Fish and Wildlife Service	Dworshak NFH	CH1	SP	2003	1,033,982	03-19-03	03-20-03	Dworshak Hatchery	Clearwater River M F
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2003	160,176	03-31-03	04-04-03	Little Salmon River	Salmon River (ID)
U.S. Fish and Wildlife Service	Kooskia NFH	CH1	SP	2003	597,063	03-26-03	03-26-03	Kooskia Hatchery	Clearwater River M F
U.S. Fish and Wildlife Service	Warm Springs NFH	CH1	SP	2003	619,345	03-26-03	04-16-03	Warm Springs Hatchery	Deschutes River
U.S. Fish and Wildlife Service Total					2,410,566				
Umatilla Tribe	Cascade Hatchery	CO	UN	2003	188,971	03-28-03	03-28-03	Pendelton Acclim Pond	Umatilla River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2003	24,392	03-28-03	04-14-03	Catherine Cr Acclim Pond	Grande Ronde River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2003	105,292	03-17-03	03-23-03	Catherine Cr Acclim Pond	Grande Ronde River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2003	110,049	03-17-03	03-23-03	Grande Ronde Acclim Pond	Grande Ronde River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2003	126,987	03-28-03	04-14-03	Grande Ronde Acclim Pond	Grande Ronde River
Umatilla Tribe Total					555,691				
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH1	FA	2003	518,436	04-01-03	04-09-03	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Skamania Hatchery	ST	WI	2003	19,950	04-01-03	04-01-03	Salmon Creek (WA)	Columbia River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2003	140,396	04-01-03	04-21-03	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2003	146,922	03-15-03	04-21-03	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Washougal Hatchery	CO	NO	2003	2,554,300	03-31-03	04-09-03	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife Total					3,380,004				
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2003	39,319	03-14-03	03-28-03	Easton Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2003	81,113	03-14-03	05-15-03	Clark Flat Acclim Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2003	250,852	03-14-03	05-15-03	Jack Creek Acclim Pond	Yakama River
Yakama Tribe Total					371,284				
Grand Total					14,405,605				

HATCHERY RELEASE NEXT TWO WEEKS

Umatilla Tribe Total					1,313,604				
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2003	30,661	04-06-03	04-06-03	Parkdale Acclim Pond	Hood River
Warm Springs Tribe Total					30,661				
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH1	FA	2003	518,436	04-01-03	04-09-03	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2003	43,688	04-15-03	04-16-03	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2003	60,001	04-15-03	04-16-03	Lyons Ferry Hatchery	Snake River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2003	140,396	04-01-03	04-21-03	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2003	146,922	03-15-03	04-21-03	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Washougal Hatchery	CO	NO	2003	2,554,300	03-31-03	04-09-03	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife Total					3,463,743				
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2003	81,113	03-14-03	05-15-03	Clark Flat Acclim Pond	Yakama River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2003	250,852	03-14-03	05-15-03	Jack Creek Acclim Pond	Yakama River
Yakama Tribe Total					331,965				
Grand Total					19,111,263				

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

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	<u>Hungry H. Dnst</u>			#	<u>Boundary</u>			#	<u>Grand Coulee</u>			#	<u>Grand C. Tlwr</u>			#	<u>Chief Joseph</u>			#
	<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
3/19	---	---	---	0	---	---	---	0	101	101	102	24	---	---	---	0	---	---	---	0
3/20	---	---	---	0	101	102	103	20	100	100	101	24	100	100	102	16	---	---	---	0
3/21	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/22	---	---	---	0	104	105	106	24	102	103	103	24	101	102	104	23	---	---	---	0
3/23	---	---	---	0	105	106	106	24	103	103	103	24	102	103	106	23	---	---	---	0
3/24	---	---	---	0	104	105	106	24	103	103	103	24	101	102	105	23	---	---	---	0
3/25	---	---	---	0	105	106	106	24	103	103	104	24	102	103	105	23	---	---	---	0
3/26	---	---	---	0	105	105	105	24	103	103	104	24	102	102	105	23	---	---	---	0
3/27	---	---	---	0	104	104	105	24	102	103	103	24	102	102	106	23	---	---	---	0
3/28	---	---	---	0	103	104	105	24	102	102	102	24	101	102	103	23	---	---	---	0
3/29	---	---	---	0	105	107	109	24	103	104	105	24	102	103	105	23	---	---	---	0
3/30	---	---	---	0	106	107	108	24	104	104	105	24	103	103	107	23	105	105	105	15
3/31	---	---	---	0	105	105	106	24	103	104	104	24	102	103	104	23	104	105	105	24
4/1	---	---	---	0	104	104	105	16	103	103	104	20	101	102	104	19	104	104	105	18

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	<u>Chief J. Dnst</u>			#	<u>Wells</u>			#	<u>Wells Dwnstrm</u>			#	<u>Rocky Reach</u>			#	<u>Rocky R. Tlwr</u>			#
	<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
3/19	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/20	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/21	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/22	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/23	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/24	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/25	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/26	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/27	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/28	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/29	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/30	105	105	108	14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/31	105	106	107	24	105	105	105	14	105	105	105	14	---	---	---	0	---	---	---	0
4/1	105	105	106	18	104	104	104	19	104	105	105	19	---	---	---	0	---	---	---	0

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	<u>Rock Island</u>			#	<u>Rock I. Tlwr</u>			#	<u>Wanapum</u>			#	<u>Wanapum Tlwr</u>			#	<u>Priest Rapids</u>			#
	<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>			<u>24 h</u>	<u>12 h</u>		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
3/19	---	---	---	0	---	---	---	0	103	104	104	23	104	104	104	23	103	104	104	23
3/20	---	---	---	0	---	---	---	0	103	104	104	23	104	104	104	23	103	103	104	23
3/21	---	---	---	0	---	---	---	0	105	106	107	23	105	105	105	23	104	106	108	23
3/22	---	---	---	0	---	---	---	0	107	108	110	23	106	106	107	23	106	107	109	23
3/23	---	---	---	0	---	---	---	0	106	106	106	23	106	107	107	23	107	107	109	23
3/24	---	---	---	0	---	---	---	0	106	106	106	23	106	106	106	23	106	107	107	23
3/25	---	---	---	0	---	---	---	0	106	106	107	23	106	107	107	23	106	106	107	23
3/26	---	---	---	0	---	---	---	0	105	105	106	23	105	106	106	23	105	105	106	23
3/27	---	---	---	0	---	---	---	0	104	104	105	23	104	105	105	23	104	104	105	23
3/28	---	---	---	0	---	---	---	0	103	103	105	23	103	104	104	23	104	105	108	23
3/29	---	---	---	0	---	---	---	0	105	107	110	23	104	105	105	23	105	106	107	23
3/30	---	---	---	0	---	---	---	0	106	106	107	23	105	105	106	23	106	106	107	23
3/31	---	---	---	0	---	---	---	0	104	104	104	23	104	104	104	23	104	104	104	23
4/1	---	---	---	0	---	---	---	0	---	---	---	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>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
3/19	---	---	---	0	---	---	---	0	103	104	104	24	---	---	---	0	---	---	---	0
3/20	---	---	---	0	---	---	---	0	103	104	105	24	---	---	---	0	---	---	---	0
3/21	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/22	---	---	---	0	---	---	---	0	104	105	107	24	---	---	---	0	107	107	107	1
3/23	---	---	---	0	---	---	---	0	103	105	107	24	101	101	103	13	102	103	103	24
3/24	105	105	106	13	---	---	---	0	104	105	108	24	100	100	101	24	102	102	103	24
3/25	105	106	106	23	---	---	---	0	107	108	109	24	101	102	102	24	102	103	103	24
3/26	104	105	105	23	---	---	---	0	106	106	107	24	100	101	101	24	102	102	102	24
3/27	103	104	104	23	---	---	---	0	105	105	106	24	100	100	101	24	101	102	103	24
3/28	103	103	104	23	---	---	---	0	104	105	106	24	100	101	102	24	102	103	104	24
3/29	104	105	105	23	---	---	---	0	107	108	110	24	101	102	104	24	103	104	105	24
3/30	105	105	105	23	---	---	---	0	106	107	109	24	101	102	103	24	103	103	104	24
3/31	104	104	104	23	---	---	---	0	102	105	105	24	100	100	101	24	101	102	102	24
4/1	---	---	---	0	102	102	102	1	103	104	107	20	100	101	101	20	102	102	103	20

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>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
3/19	---	---	---	0	102	102	102	24	102	102	103	24	102	102	103	24	102	103	103	24
3/20	---	---	---	0	101	102	103	24	101	101	101	24	102	102	103	24	102	102	102	24
3/21	---	---	---	0	102	102	102	11	102	102	102	11	---	---	---	0	---	---	---	0
3/22	---	---	---	0	103	104	105	24	102	102	103	24	104	105	106	24	104	104	105	24
3/23	102	103	105	15	103	103	104	24	102	102	103	24	103	104	105	24	103	104	104	24
3/24	100	101	101	24	103	103	103	24	103	103	104	24	103	103	103	24	103	103	104	24
3/25	101	102	103	24	104	104	105	24	104	104	105	24	103	104	105	24	103	104	105	24
3/26	100	101	102	24	102	102	103	24	102	103	104	24	102	102	103	24	102	103	103	24
3/27	100	101	102	24	100	101	101	24	101	101	102	24	101	101	102	24	101	102	103	24
3/28	101	103	105	24	100	101	103	24	99	100	100	24	101	102	103	24	100	101	101	24
3/29	103	105	107	24	102	103	104	24	101	102	102	24	104	105	106	24	102	103	103	24
3/30	102	104	106	24	102	102	103	24	102	102	102	24	103	104	106	24	102	103	103	24
3/31	101	102	103	24	101	101	101	24	101	101	102	24	101	101	101	24	101	101	102	24
4/1	101	102	103	20	101	102	102	16	101	101	102	16	100	100	101	16	101	101	104	16

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>	High	#	<u>24 h</u>	<u>12 h</u>	High	#	<u>24 h</u>	<u>12 h</u>	High		#			
	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg		hr	Avg	Avg			hr	Avg	Avg	hr
3/19	102	102	103	14	102	102	102	13	102	102	103	24	103	103	104	24	104	104	104	24
3/20	102	102	103	24	101	101	102	24	102	102	104	24	103	104	105	24	104	105	106	24
3/21	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/22	104	105	107	24	103	104	104	24	104	105	106	24	104	106	107	24	105	107	109	24
3/23	105	105	106	24	104	104	104	24	105	105	105	24	105	105	105	24	104	105	106	24
3/24	104	104	105	24	104	104	104	24	104	104	105	24	105	106	107	24	105	105	106	24
3/25	104	105	106	24	104	104	105	24	105	106	107	24	106	107	108	24	106	106	107	24
3/26	103	103	104	24	103	103	104	24	104	104	105	24	104	104	105	24	105	105	105	24
3/27	102	103	103	24	102	102	103	24	103	103	104	24	103	103	105	24	103	104	104	24
3/28	102	103	105	24	101	101	102	24	103	104	106	24	102	102	103	24	104	106	108	24
3/29	103	104	107	24	102	103	103	24	104	105	106	24	103	103	104	24	104	105	105	24
3/30	103	104	105	24	102	102	103	24	103	104	104	24	103	104	104	24	103	104	104	24
3/31	102	102	103	24	103	105	121	24	103	103	103	24	102	103	103	24	104	105	105	24
4/1	102	102	102	16	101	101	102	15	102	102	104	16	102	102	102	16	104	104	107	16

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>					
	<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>	<u>AVG</u>	<u>High</u>	<u>hr</u>	
3/19	103	104	104	24	103	103	104	24	---	---	---	0	103	103	103	24	102	103	103	24
3/20	104	105	105	24	102	103	103	24	---	---	---	0	103	103	104	24	103	103	103	24
3/21	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/22	107	108	108	24	105	106	106	24	---	---	---	0	105	106	106	24	105	106	106	24
3/23	105	106	106	24	106	106	106	24	---	---	---	0	105	105	105	24	105	106	106	23
3/24	105	105	105	24	105	105	106	24	---	---	---	0	105	105	105	24	105	105	105	24
3/25	106	107	108	24	106	107	107	24	---	---	---	0	105	105	106	24	105	106	106	24
3/26	105	105	106	24	105	105	106	24	106	106	106	24	105	105	106	24	105	105	105	24
3/27	104	104	104	24	104	104	105	24	105	105	106	24	104	105	105	24	104	104	105	24
3/28	103	104	105	24	104	104	104	24	105	106	106	24	104	104	105	24	103	104	104	24
3/29	105	106	107	24	105	106	106	24	106	107	108	24	105	105	106	24	105	106	106	24
3/30	104	105	108	24	104	105	105	24	105	105	106	24	104	105	105	24	104	105	105	24
3/31	103	104	105	24	104	104	105	24	103	104	104	24	103	103	103	24	103	103	103	24
4/1	104	104	105	16	104	105	105	20	103	103	103	18	102	102	103	16	103	103	103	18

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>CamasWashugal</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>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>
3/19	102	103	103	23	102	102	103	24	102	102	103	24	102	103	104	23
3/20	102	103	103	23	102	102	103	24	102	102	103	24	102	103	103	23
3/21	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/22	105	106	106	23	105	106	106	24	104	105	106	24	105	107	108	23
3/23	105	105	106	23	106	106	106	24	105	105	106	24	105	105	105	11
3/24	105	105	105	23	105	105	106	24	105	105	105	24	106	106	107	23
3/25	105	105	105	23	105	105	106	24	105	106	106	24	104	104	105	23
3/26	104	104	105	23	105	105	105	24	105	105	105	24	104	105	106	23
3/27	103	103	104	23	103	104	105	24	104	104	105	24	103	104	105	23
3/28	102	103	103	23	103	104	104	24	104	104	105	24	104	105	106	23
3/29	104	105	106	23	104	105	105	24	104	105	106	24	104	105	106	23
3/30	104	104	104	23	104	105	105	24	104	105	105	24	104	105	106	23
3/31	102	102	103	23	103	104	104	24	104	104	104	24	105	106	107	23
4/1	102	103	103	19	103	103	104	18	103	104	104	18	104	105	107	19

Two-Week Summary of Passage Indices

Date	COMBINED YEARLING CHINOOK											
	ENT (Coll)	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
03/19/2004	37	1,294	214	40	1	---	---	---	---	---	---	121
03/20/2004	---	---	290	---	---	---	---	---	---	---	---	190
03/21/2004	---	---	271	---	---	---	---	---	---	---	---	290
03/22/2004	52	1,333	265	353	3	---	---	---	---	---	---	187
03/23/2004	47	1,499	240	182	11	---	---	---	---	---	---	171
03/24/2004	53	1,706	184	325	19	---	---	---	---	---	---	248
03/25/2004 *	13	1,417	217	263	31	---	---	---	---	---	---	238
03/26/2004	42	1,193	477	381	23	70	---	---	---	---	---	268
03/27/2004	---	---	402	---	---	230	---	---	---	---	---	276
03/28/2004 *	---	---	4,278	---	---	240	---	---	---	---	---	226
03/29/2004	30	1,393	---	164	21	330	---	---	---	---	---	193
03/30/2004	12	1,558	---	179	28	430	---	---	---	---	---	316
03/31/2004 *	36	1,173	---	86	15	770	---	---	---	---	---	351
04/01/2004	21	882	---	529	14	1,080	---	---	0	---	---	665
04/02/2004 *	---	---	---	---	---	---	---	420	---	---	590	338
Total:	343	13,448	6,838	2,502	166	3,150	0	420	0	0	590	4,078
# Days:	10	10	10	10	10	7	0	1	1	0	1	15
Average:	34	1,345	684	250	17	450	0	420	0	0	590	272
YTD	611	14,159	7,796	2,569	171	3,150	0	420	0	0	590	9,551

Date	COMBINED SUBYEARLING CHINOOK											
	ENT (Coll)	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
03/19/2004	0	0	0	0	2	---	---	---	---	---	---	3,829
03/20/2004	---	---	0	---	---	---	---	---	---	---	---	6,186
03/21/2004	---	---	0	---	---	---	---	---	---	---	---	5,976
03/22/2004	1	0	0	0	0	---	---	---	---	---	---	7,240
03/23/2004	7	0	0	0	0	---	---	---	---	---	---	6,490
03/24/2004	1	0	0	0	1	---	---	---	---	---	---	6,011
03/25/2004 *	0	0	0	0	1	---	---	---	---	---	---	7,558
03/26/2004	0	0	0	0	1	0	---	---	---	---	---	11,284
03/27/2004	---	---	0	---	---	10	---	---	---	---	---	17,070
03/28/2004 *	---	---	0	---	---	0	---	---	---	---	---	15,265
03/29/2004	0	0	---	0	0	10	---	---	---	---	---	16,509
03/30/2004	10	0	---	0	1	0	---	---	---	---	---	10,628
03/31/2004 *	2	0	---	0	3	0	---	---	---	---	---	7,643
04/01/2004	0	0	---	0	3	10	---	---	75	---	---	7,072
04/02/2004 *	---	---	---	---	---	---	---	0	---	---	0	5,678
Total:	21	0	0	0	12	30	0	0	75	0	0	134,439
# Days:	10	10	10	10	10	7	0	1	1	0	1	15
Average:	2	0	0	0	1	4	0	0	75	0	0	8,963
YTD	60	0	18	0	13	30	0	0	75	0	0	885,205

* See sampling comments <http://www.fpc.org/currentDaily/smpcomments.htm>
this means that one or more of the sites on this date had an incomplete or biased sample.

For clip information see: [Daily Catch Report](#)

For sockeye and yearling chinook (Snake only) race information see: [Current Passage Index Query](#)

If the text appears garbled, please hit the refresh button on your browser

NOTE for 2002 Lower Monumental Data: Due to the non-standard operation of Lower Monumental this year, the passage index reliability is in question and is being looked into.

Fall (post SMP season) trapping at the Imnaha River Fish Trap (IMN) is funded by the Lower Snake River Compensation Program (LSRCP)

Two-Week Summary of Passage Indices

		COMBINED COHO										
Date	ENT (Coll)	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
03/19/2004	0	0	0	0	0	---	---	---	---	---	---	35
03/20/2004	---	---	0	---	---	---	---	---	---	---	---	81
03/21/2004	---	---	0	---	---	---	---	---	---	---	---	108
03/22/2004	0	0	0	0	0	---	---	---	---	---	---	39
03/23/2004	0	0	0	0	0	---	---	---	---	---	---	45
03/24/2004	0	0	0	0	2	---	---	---	---	---	---	48
03/25/2004	*	0	0	0	0	---	---	---	---	---	---	79
03/26/2004	0	0	0	0	0	10	---	---	---	---	---	48
03/27/2004	---	---	0	---	---	0	---	---	---	---	---	59
03/28/2004	*	---	0	---	---	20	---	---	---	---	---	49
03/29/2004	0	0	---	0	1	20	---	---	---	---	---	116
03/30/2004	0	0	---	0	2	20	---	---	---	---	---	59
03/31/2004	*	0	0	---	0	2	10	---	---	---	---	43
04/01/2004	0	0	---	0	0	30	---	---	0	---	---	69
04/02/2004	*	---	---	---	---	---	---	0	---	---	0	---
Total:	0	0	0	0	7	110	0	0	0	0	0	878
# Days:	10	10	10	10	10	7	0	1	1	0	1	14
Average:	0	0	0	0	1	16	0	0	0	0	0	63
YTD	0	0	0	0	8	110	0	0	0	0	0	1,907

		COMBINED STEELHEAD										
Date	ENT (Coll)	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
03/19/2004	1	1	9	2	2	---	---	---	---	---	---	52
03/20/2004	---	---	13	---	---	---	---	---	---	---	---	36
03/21/2004	---	---	7	---	---	---	---	---	---	---	---	41
03/22/2004	0	0	16	2	1	---	---	---	---	---	---	47
03/23/2004	0	0	14	1	2	---	---	---	---	---	---	36
03/24/2004	1	3	29	3	3	---	---	---	---	---	---	48
03/25/2004	*	0	1	39	2	4	---	---	---	---	---	62
03/26/2004	0	1	27	0	2	110	---	---	---	---	---	76
03/27/2004	---	---	26	---	---	160	---	---	---	---	---	49
03/28/2004	*	---	14	---	---	190	---	---	---	---	---	39
03/29/2004	1	0	---	1	9	620	---	---	---	---	---	58
03/30/2004	0	0	---	0	21	930	---	---	---	---	---	89
03/31/2004	*	1	0	---	0	20	830	---	---	---	---	86
04/01/2004	0	6	---	0	16	1,010	---	---	0	---	---	233
04/02/2004	*	---	---	---	---	---	---	60	---	---	70	147
Total:	4	12	194	11	80	3,850	0	60	0	0	70	1,099
# Days:	10	10	10	10	10	7	0	1	1	0	1	15
Average:	0	1	19	1	8	550	0	60	0	0	70	73
YTD	8	13	220	14	83	3,850	0	60	0	0	70	1,115

* See sampling comments

Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE											
	ENT (Coll)	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
03/19/2004	0	0	0	0	0	---	---	---	---	---	---	0
03/20/2004	---	---	0	---	---	---	---	---	---	---	---	0
03/21/2004	---	---	0	---	---	---	---	---	---	---	---	0
03/22/2004	0	0	0	0	0	---	---	---	---	---	---	8
03/23/2004	0	0	0	0	0	---	---	---	---	---	---	0
03/24/2004	0	0	0	0	0	---	---	---	---	---	---	0
03/25/2004 *	0	0	0	0	0	---	---	---	---	---	---	9
03/26/2004	0	0	0	0	0	0	---	---	---	---	---	0
03/27/2004	---	---	0	---	---	20	---	---	---	---	---	0
03/28/2004 *	---	---	0	---	---	0	---	---	---	---	---	0
03/29/2004	0	0	---	0	0	0	---	---	---	---	---	0
03/30/2004	0	0	---	0	0	0	---	---	---	---	---	0
03/31/2004 *	0	0	---	0	0	20	---	---	---	---	---	0
04/01/2004	0	0	---	0	0	0	---	---	0	---	---	9
04/02/2004 *	---	---	---	---	---	---	---	0	---	---	0	7
Total:	0	0	0	0	0	40	0	0	0	0	0	33
# Days:	10	10	10	10	10	7	0	1	1	0	1	15
Average:	0	0	0	0	0	6	0	0	0	0	0	2
YTD	0	0	0	0	0	40	0	0	0	0	0	33

* See sampling comments

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

Smolt indices, clipped & unclipped or combined, are presented in the following order: yearling chinook (chinook 1's,) subyearling chinook (chinook 0's), steelhead, coho, and sockeye. Two classes of fish counts are shown in these tables: collection counts, which account for sample rates but are not adjusted for flow; and passage indices, which are collection counts divided by the proportion of water passing through the sampled powerhouse. Passage indices are not population estimates, but are used to adjust collection counts for daily fluctuations in the site's or project's operations. The classes of counts presented in the report are defined below for each site. Most samples occur over a 24-hr period that spans two calendar days. In this report, the date shown corresponds with the sample end date.

Definitions for Smolt Index Counts

WTB (Collection) = Salmon River Trap at Whitebird : Collection Counts

IMN (Collection) = Imnaha River Trap : Collection Counts

GRN (Collection) = Grande Ronde River Trap : Collection Counts

LEW (Collection) = Snake River Trap at Lewiston : Collection Counts

ENT (Collection) = Entiat River Trap : Collection Counts

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Two Week Transportation Summary

Source: Fish Passage Center

Updated:

4/2/04 12:06 PM

		03/20/04		TO		04/02/04			
Site	Data	Species					Grand Total		
		CH0	CH1	CO	SO	ST			
LGR	Sum of NumberCollected	30	3,150	110	40	3,850	7,180		
	Sum of NumberBarged	0	0	0	0	0	0		
	Sum of NumberBypassed	0	0	0	0	0	0		
	Sum of NumberTrucked	20	2,032	80	38	2,823	4,993		
	Sum of TotalProjectMortalities	0	39	0	2	17	58		
LMN	Sum of NumberCollected		420			60	480		
	Sum of NumberBarged		0			0	0		
	Sum of NumberBypassed		0			0	0		
	Sum of NumberTrucked		419			60	479		
	Sum of TotalProjectMortalities		1			0	1		
Total Sum of NumberCollected		30	3,570	110	40	3,910	7,660		
Total Sum of NumberBarged		0	0	0	0	0	0		
Total Sum of NumberBypassed		0	0	0	0	0	0		
Total Sum of NumberTrucked		20	2,451	80	38	2,883	5,472		
Total Sum of TotalProjectMortalities		0	40	0	2	17	59		

YTD Transportation Summary

Source: Fish Passage Center

Updated:

4/2/04 12:06 PM

		TO:		04/02/04					
Site	Data	Species					Grand Total		
		CH0	CH1	CO	SO	ST			
LGR	Sum of NumberCollected	30	3,150	110	40	3,850	7,180		
	Sum of NumberBarged	0	0	0	0	0	0		
	Sum of NumberBypassed	0	0	0	0	0	0		
	Sum of NumberTrucked	20	2,032	80	38	2,823	4,993		
	Sum of TotalProjectMortalities	0	39	0	2	17	58		
LMN	Sum of NumberCollected		420			60	480		
	Sum of NumberBarged		0			0	0		
	Sum of NumberBypassed		0			0	0		
	Sum of NumberTrucked		419			60	479		
	Sum of TotalProjectMortalities		1			0	1		
Total Sum of NumberCollected		30	3,570	110	40	3,910	7,660		
Total Sum of NumberBarged		0	0	0	0	0	0		
Total Sum of NumberBypassed		0	0	0	0	0	0		
Total Sum of NumberTrucked		20	2,451	80	38	2,883	5,472		
Total Sum of TotalProjectMortalities		0	40	0	2	17	59		

Cumulative Adult Passage at Mainstem Dams Through: 04/01

DAM	Spring Chinook						Summer Chinook						Fall Chinook					
	2004		2003		10-Yr Avg.		2004		2003		10-Yr Avg.		2004		2003		10-Yr Avg.	
	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	504	0	19,807	76	3,824	6	0	0	0	0	0	0	0	0	0	0	0	0
TDA	0	0	3,337	9	323	1	0	0	0	0	0	0	0	0	0	0	0	0
JDA	0	0	964	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
MCN	0	0	826	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0
IHR	11	0	31	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0
LMN	0	0	19	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
LGS	0	0	12	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
LWG	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PRD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RRH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2004		2003		10-Yr Avg.		10-Yr Avg.			10-Yr Avg.			Wild
	Adult	Jack	Adult	Jack	Adult	Jack	2004	2003	Avg.	2004	2003	Avg.	2004
BON	0	0	0	0	0	0	0	0	0	1,239	1,279	785	145
TDA	0	0	0	0	0	0	0	0	0	0	108	53	0
JDA	0	0	0	0	0	0	0	0	0	0	249	136	0
MCN	0	0	0	0	0	0	0	0	0	0	289	98	0
IHR	0	0	0	0	0	0	0	0	0	202	259	94	91
LMN	0	0	0	0	0	0	0	0	0	0	367	100	0
LGS	0	0	0	0	0	0	0	0	0	0	249	116	0
LWG	0	0	0	0	0	0	0	0	0	4,478	13,038	3,396	1,052
PRD	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS	0	0	0	0	0	0	0	0	0	0	0	0	0
RRH	0	0	0	0	0	0	0	0	0	0	0	0	0
WEL	0	0	0	0	0	0	0	0	0	0	0	0	0

LGR is missing 03/28; IHR is missing 03/29 to 03/31.

LGR is through 03/30.

**PRD is not reporting Wild Steelhead numbers.

These numbers were collected from the COE's Running Sums text files, except where otherwise noted.

Wild steelhead numbers are included in the total.

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

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

Page last updated on: 04/02/04

BON counts from January 1, 2004 to March 14, 2004 (our traditional counts begin March 15)

Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
156	0	1,489	238

