



Fish Passage Center Weekly Report #08 - 3

March 21, 2008

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

Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 53% and 123% of average at individual sub-basins over March. Precipitation above The Dalles has been 76% of average over March. Over the entire water year, precipitation has generally been near or above 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 2008 March 1-17		Water Year 2008 October 1, 2007 to March 17, 2008	
	Observed (inches)	% Average	Observed (inches)	% Average
	Columbia Above Coulee	0.65	66	14.24
Snake River Above Ice Harbor	0.73	81	10.54	110
Columbia Above The Dalles	0.80	76	14.26	106
Kootenai	0.55	57	13.72	100
Clark Fork	0.52	79	9.69	115
Flathead	0.75	84	11.35	99
Pend Oreille/Spokane	1.24	82	20.52	108
Central Washington	0.24	53	4.32	78
Snake River Plain	0.37	60	5.27	94
Salmon/Boise/Payette	0.76	71	13.62	115
Clearwater	1.88	123	18.51	107
SW Washington	3.43	88	47.10	94
Cascades/Cowlitz				
Willamette Valley	3.48	99	44.95	106

Snowpack within the Columbia Basin is above average. Average snowpack in the Columbia River for basins above the Snake River confluence is 106% of average, for Snake River Basins the average snowpack is 104% of average, and for lower Columbia Basins between McNary and Bonneville Dam average snowpack is 152% of average.

Table 2 displays the March Final and March Mid-Month runoff volume forecasts for multiple reservoirs. Water Supply Forecasts generally decreased somewhat between the March Final and March Mid-Month forecasts. The current forecast (March Mid-Month) at The Dalles between January and July is 101000 Kaf (94% of average).

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

Location	March Final		March Mid-Month	
	% Average (1971- 2000)	Probable Runoff Volume (Kaf)	% Average (1971- 2000)	Probable Runoff Volume (Kaf)
The Dalles (Jan-July)	96	103000	94	101000
Grand Coulee (Jan-July)	99	62300	97	61100
Libby Res. Inflow, MT (Jan-July)	98	6190	96	6080
Hungry Horse Res. Inflow, MT (Jan-July)	94	2100	94	2090
Lower Granite Res. Inflow (Apr-July)	107	23000	104	22500
Brownlee Res. Inflow (Apr-July)	87	5500	84	5280
Dworshak Res. Inflow (Apr-July)	110	2920	111	2940

Grand Coulee Reservoir is at 1252.8 feet (3-20-08) and has drafted 1.0 foot in the last week. At the March 12, 2008 TMT Meeting the Salmon Managers and the Action Agencies agreed to a DWR/GCL shift. This shift will effectively reduce Dworshak Dams flood control (FC) liability (reservoir will be operated higher than normal FC) and increase Grand Coulees FC liability (reservoir will be operated lower than normal FC). The end of March shifted FC elevation is 1256.7 feet at Grand Coulee and the estimated shifted April 10th (interpolated between the March 31st and April 15th shifted flood control elevations) elevation is 1244.2 feet at Grand Coulee. Outflows at Grand Coulee have ranged between 51.2 and 89.6 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2397.2 feet (3-20-08) and drafted 0.5 feet last week. The end of March VarQ FC elevation at Libby is 2399.8 feet, the estimated April 10th elevation is also 2399.8 feet at Libby. Outflows at Libby have been 4.0 Kcfs.

Hungry Horse is currently at an elevation of 3509.1 ft (3-20-08) and has drafted 1.3 feet last week. Outflows at Hungry Horse have been 2.7 Kcfs last week; Hungry Horse has been operating to Columbia Falls Minimum outflows. Hungry Horse's end of March VarQ FC elevation is 3530.5 feet, the estimated April 10th elevation is 3528.3 feet at Hungry Horse.

Dworshak is currently at an elevation of 1518.3 feet (3-20-08) and drafted 1.5 feet last week; outflows at Dworshak are 7.6 Kcfs. There will be a DWR/GCL shift in 2008. The end of March Shifted FC elevation is 1519.1 feet; the estimated April 10th Shifted FC elevation is 1510.6 feet at Dworshak.

The Brownlee Reservoir was at an elevation of 2033.1 feet on March 20th, 2008, refilling 2.2 feet last week. The end of March FC elevation is 2039.8 feet, the estimated April 10th elevation is 2037.3 feet at Brownlee Dam. Outflows at Brownlee Dam have been 10.1 to 17.7 Kcfs over the last week.

Spill: Spill occurred at Lower Monumental Dam on March 18, between 1200 and 1400 hours as part of RSW testing. The second Powerhouse corner collector is operating at Bonneville Dam.

Smolt Monitoring: Smolt Monitoring traps continued sampling this past week as did Bonneville Dam. The Grande Ronde Trap, operated by the Oregon Department of Fish and Wildlife, located at river mile two in the Grande Ronde River, began sampling March 4. The Lewiston and Salmon River traps began sampling March 10. The Salmon River Trap, operated by Idaho Department of Fish and Game, is located at river mile 103 on the Salmon River near White Bird. While the Lewiston Trap, also operated by IDFG, is located on the Snake River, at the head of Lower Granite Reservoir, at river mile 225. The Imnaha Trap, located at river mile seven on the Imnaha River, operated by the Nez Perce Tribe, has been sampling since late February.

A relatively large number of hatchery yearling chinook were captured at the Salmon River Trap on March 20. These fish were likely releases from McCall hatchery into the Little Salmon River that occurred on March 17. Small numbers of juvenile salmonids have been captured at the Grande Ronde Trap, Imnaha Trap and the Lewiston Trap on the Snake River in the past few weeks of sampling.

At Bonneville Dam the subyearling Chinook catch has continued to decrease as the large releases from Spring Creek hatchery in early March have mostly passed the project.

Hatchery Release:

Snake River Zone: The Snake River Zone encompasses the Snake River and its tributaries from its confluence with the Columbia River to Hells Canyon Dam. There were several releases of yearling spring Chinook scheduled to begin over the past week in this zone. In all, these releases total approximately 4.43 million juvenile spring Chinook. Of these, approximately 56% were scheduled for release into the Little Salmon River from Rapid River Hatchery, while 22% were scheduled for release into the Clearwater River from Dworshak National Fish Hatchery. The remaining 22% of this release was split between the Imnaha River (8%), Grande Ronde River (3%), Lochsa River (9%), and the Wallowa River (2%). A volitional release of about 1.06 million summer Chinook juveniles from McCall Hatchery to the Salmon River was scheduled to begin on March 17th. Finally, approximately 525,000 summer steelhead from Niagara Springs Hatchery were scheduled for release into the Snake River, below Hells Canyon Dam, beginning March 17th.

There are several scheduled releases of yearling spring Chinook to this zone scheduled to begin over the next two weeks. In all, these releases will total about 3.1 million spring Chinook juveniles. Of these, approximately 84% will be released to the Clearwater River or its tributaries. The remaining 16% will be split between the Grande Ronde River (9%), and the Tucannon River (7%). Approximately 1.04 million yearling summer Chinook from Pahsimeroi Hatchery are scheduled for release into the Pahsimeroi River, beginning March 31st. Beginning the first week of April, about 450,000 yearling fall Chinook are scheduled for release from Lyons Ferry Hatchery into the Snake River. Finally, about 1.5 million summer steelhead are scheduled for release into the Snake River Zone over the next two weeks. Of these, 55% are scheduled for release into the Pahsimeroi River, 41% are scheduled for release into the Salmon River or Little Salmon River, and 4% are scheduled for release into the Tucannon River.

Mid-Columbia Zone: The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam. Volitional releases of approximately 650,000 spring Chinook juveniles from Cle Elem Hatchery were scheduled to begin on March 15th. These releases are expected to run through mid-May. There were no other releases of juvenile salmonids scheduled to begin over the past week to the Mid-Columbia River Zone.

Approximately 340,000 yearling spring Chinook from Willard National Fish Hatchery are scheduled for release into the Walla Walla River, beginning March 24th. In addition, about 345,000 yearling spring Chinook are scheduled for release from Ringold Hatchery into the Mid-Columbia River.

This release is currently scheduled to occur sometime in early to mid-April. Also scheduled for release in early to mid-April are approximately 32,000 coho to the Wenatchee River. This release is part of the Yakama Tribal Program to re-establish Coho runs in the Yakima, Methow, and Wenatchee basins. In all, approximately 2.5 million coho are scheduled for release as part of this program.

These releases are scheduled to run from early April to mid-May. Finally, approximately 180,000 summer steelhead are scheduled for release from Ringold Hatchery, beginning April 1st. This is a volitional release and is expected to run through mid-May. At this time, about 240,500 summer steelhead from Turtle Rock Hatchery are scheduled for release into the Wenatchee River, beginning April 1st. However, this date is preliminary and it is unclear as to when these releases will begin. The hatchery database will be updated as soon as we receive verification from the hatchery as to when these releases will begin.

Lower Columbia Zone: The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. There were no releases of juvenile salmonids scheduled to begin over the past week to the Lower Columbia River Zone. However, approximately 376,000 yearling spring Chinook are scheduled for release into the Deschutes River from the

Warm Spring National Fish Hatchery, beginning March 23rd. This is a volitional release that is expected to run through mid-April. Also scheduled for release into the Deschutes River are 4,000 summer steelhead from Oak Springs Hatchery. These steelhead will be released into Lake Billy Chinook as part of a PGE passage study. Finally, a release of approximately 2.55 million coho to the Klickitat River is scheduled to begin on March 31st.

Adult Fish Passage

Counts at Bonneville began March 15th and continue through November 15th. Counts allow for comparison of current year counts with historical data. Traditional counts began on March 1st at Lower Granite Dam. Lower Granite Dam uses video counts from March 1st through March 31st. Bonneville Dam uses video counts from January 1st through March 31st. Video counts are used during the winter months for counting adults. Video counts can cause a delay in posting the data to the web, because the COE staff at the projects have to review the tapes. Willamette Falls Dam counts adults year round. They also use video counts which, at times, causes a delay in the posting of their data. The following paragraph describes the winter month counts (Jan 1st through March 14th) for 2008 and compares them with 2007 counts at Bonneville Dam.

Many steelhead and a few spring Chinook have been counted at Bonneville Dam this year. In the winter months steelhead begin to move through the hydro system to reach their tributaries and spawning sites. The majority of steelhead over-winter in pools and will complete their spawning trip in March through early May. At Bonneville Dam, the total steelhead count from Jan 1st through March 14th was 578. In 2007, for the same date range, the Bonneville steelhead count was 1,677. This year's winter counts at Bonneville Dam for steelhead was only about 34.4% of the 2007 (includes hatchery and wild fish). The 2008 wild steelhead count of 278 was about 53.7% of the 2007 count of 517.

The total count of spring Chinook at Bonneville Dam from Jan 1st through March 14th was 42 which is about 2 times the 2007 count of 22 salmon.

The following paragraphs describe the counts at Bonneville Dam, Willamette Falls Dam, and Lower Granite Dam using traditional counting dates. Between March 15th and March 18th, 26 spring Chinook have been counted at Bonneville Dam. The Bonneville steelhead count for the same date range this year was 107 fish. The 2008 wild steelhead count at Bonneville Dam was 52 fish as of March 18th. At Willamette Falls Dam, the 2008 count for steelhead was 1,240, as of March 17th. This year's steelhead count is about 31.6% of the 2007 count of 3,922 at Willamette Falls Dam.

Daily counts at Lower Granite ranged from 52 to 216 adult steelhead last week. The total steelhead count passing at Lower Granite Dam as of March 17th was 1,908. The 2008 count was about 74% of the 2007 count of 2,575 and about 76.4% of the 10-year average count of 2,497 at Lower Granite Dam. The 2008 wild steelhead at Lower Granite Dam as of March 17th was 367.

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
03/07/2008	90.4	0.0	84.8	0.0	87.6	0.0	89.8	0.0	90.9	0.0	105.5	0.0	101.4	0.0
03/08/2008	53.5	0.0	57.4	0.0	61.1	0.0	61.3	0.0	62.6	0.0	72.5	0.0	63.3	0.0
03/09/2008	64.3	0.0	65.2	0.0	62.6	0.0	63.2	0.0	65.5	0.0	67.5	0.0	71.2	0.0
03/10/2008	90.6	0.0	90.6	0.0	92.1	0.0	90.8	0.0	91.6	0.0	84.6	0.0	85.0	0.0
03/11/2008	57.4	0.0	59.6	0.0	66.1	0.0	68.8	0.0	68.7	0.0	81.9	0.0	81.6	0.0
03/12/2008	78.3	0.0	80.6	0.0	82.5	0.0	81.6	0.0	81.9	0.0	85.4	0.0	78.1	0.0
03/13/2008	87.1	0.0	85.5	0.0	84.2	0.0	82.7	0.0	85.4	0.0	95.6	0.0	90.9	0.0
03/14/2008	83.1	0.0	91.6	0.0	94.1	0.0	89.3	0.0	86.6	0.0	86.2	0.0	85.6	0.0
03/15/2008	89.6	0.0	85.6	0.0	85.6	0.0	87.5	0.0	91.2	0.0	94.9	0.0	90.6	0.0
03/16/2008	51.2	0.0	47.3	0.0	53.0	0.0	50.9	0.0	52.0	0.0	75.3	0.0	81.2	0.0
03/17/2008	87.2	0.0	93.9	0.0	96.8	0.0	92.9	0.0	94.3	0.0	86.5	0.0	76.2	0.0
03/18/2008	85.8	0.0	85.9	0.0	89.1	0.0	87.0	0.0	87.5	0.0	97.0	0.0	95.2	0.0
03/19/2008	84.8	0.0	81.0	0.0	83.8	0.0	82.3	0.0	84.6	0.0	86.7	0.0	83.9	0.0
03/20/2008	81.7	0.0	84.4	0.0	90.7	0.0	88.6	0.0	87.7	0.0	95.1	0.0	92.0	0.0

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

Date	Dworshak		Hells Brownlee Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
03/07/2008	1.3	0.0	13.0	16.0	35.3	0.0	32.4	0.0	33.4	0.0	32.4	0.0
03/08/2008	1.3	0.0	13.1	15.1	27.6	0.0	28.4	0.0	31.0	0.0	29.2	0.0
03/09/2008	1.3	0.0	13.4	14.3	30.3	0.0	29.3	0.0	31.5	0.0	30.6	0.0
03/10/2008	3.1	0.0	13.4	15.9	31.1	0.0	31.3	0.0	33.7	0.0	35.6	0.0
03/11/2008	6.5	0.0	14.0	14.4	36.1	0.0	33.5	0.0	35.9	0.0	35.1	0.0
03/12/2008	6.5	0.0	15.0	15.3	37.9	0.0	37.6	0.0	41.9	0.0	41.0	0.0
03/13/2008	6.5	0.0	16.1	16.2	40.3	0.0	40.5	0.0	44.9	0.0	43.0	0.0
03/14/2008	1.4	0.0	17.3	16.3	40.9	0.0	40.2	0.0	44.7	0.0	44.7	0.0
03/15/2008	1.3	0.0	17.4	17.7	33.6	0.0	32.5	0.0	33.3	0.0	32.7	0.0
03/16/2008	1.3	0.0	17.1	17.9	37.4	0.0	36.2	0.0	41.2	0.0	38.3	0.0
03/17/2008	7.3	0.0	16.6	18.3	43.8	0.0	42.0	0.0	44.2	0.0	43.7	0.0
03/18/2008	7.6	0.0	15.2	12.7	39.5	0.0	39.4	0.0	43.1	1.5	44.0	0.0
03/19/2008	7.6	0.0	16.7	12.4	37.3	0.0	37.3	0.0	40.8	0.0	41.1	0.0
03/20/2008	7.6	0.0	17.4	16.7	43.3	0.0	40.7	0.0	43.9	0.0	42.0	0.0

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		
03/07/2008	137.8	0.0	141.3	0.0	139.2	0.0	154.6	37.0	41.4	64.3
03/08/2008	122.2	0.0	131.0	0.0	133.2	0.0	143.8	36.9	31.1	64.0
03/09/2008	99.5	0.0	107.0	0.0	108.4	0.0	145.6	35.1	33.8	64.2
03/10/2008	118.6	0.0	115.9	0.0	119.5	0.0	127.7	10.2	42.8	63.7
03/11/2008	116.8	0.0	117.6	0.0	116.3	0.0	135.6	1.4	58.4	64.9
03/12/2008	131.1	0.0	137.4	0.0	140.0	0.0	144.5	1.4	67.5	64.6
03/13/2008	131.9	0.0	141.0	0.0	141.5	0.0	157.1	1.4	75.5	69.6
03/14/2008	151.0	0.0	155.1	0.0	158.7	0.0	172.5	1.4	76.1	84.0
03/15/2008	114.4	0.0	130.7	0.0	133.3	0.0	151.2	1.4	66.1	72.7
03/16/2008	126.0	0.0	112.1	0.0	115.3	0.0	133.7	1.3	48.7	72.5
03/17/2008	122.7	0.0	133.5	0.0	135.0	0.0	163.2	1.5	70.4	80.4
03/18/2008	139.2	0.0	129.2	0.0	131.2	0.0	145.3	1.4	75.4	59.8
03/19/2008	137.8	0.0	154.3	0.0	158.1	0.0	164.4	1.3	89.6	64.5
03/20/2008	140.1	0.0	142.2	0.0	142.8	0.0	163.9	1.4	91.3	62.7

HATCHERY RELEASE LAST TWO WEEKS

Hatchery Release Summary

From: **3/7/2008** to **03/20/08**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2008	415,900	03-19-08	04-03-08	Powell Acclim Pond	Lochsa River
Idaho Dept. of Fish and Game	McCall Hatchery	CH1	SU	2008	1,061,000	03-17-08	03-20-08	S Fk Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2008	525,000	03-17-08	03-27-08	Hells Canyon Dam	Snake River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2008	200,000	03-13-08	03-13-08	Pine Bar/Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2008	489,000	03-10-08	03-12-08	Hells Canyon Dam	Snake River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2008	2,500,000	03-17-08	04-25-08	Rapid River Hatchery	Little Salmon River
Idaho Dept. of Fish and Game					5,190,900				
Total									
Nez Perce Tribe	Lookingglass Hatchery	CH1	SP	2008	74,400	03-19-08	04-01-08	Lostine Accim Pond	Wallowa River South Fork Salmon River
Nez Perce Tribe	McCall Hatchery	CH1	SU	2008	88,085	03-10-08	03-12-08	Johnson Cr Idaho	River
Nez Perce Tribe Total					162,485				
Oregon Dept. of Fish and Wildlife	Lookingglass Hatchery	CH1	SP	2008	360,000	03-20-08	03-20-08	Imnaha Acclim Pond	Imnaha River
Oregon Dept. of Fish and Wildlife Total					360,000				
Umatilla Tribe	Bonneville Hatchery	CH1	FA	2008	237,952	03-04-08	03-12-08	Thornhollow Acclim Pond	Umatilla River
Umatilla Tribe	Bonneville Hatchery	CH1	FA	2008	258,486	03-04-08	03-11-08	Pendelton Acclim Pond Grande Ronde Acclim	Umatilla River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2008	127,492	03-17-08	03-24-08	Pond	Grande Ronde River
Umatilla Tribe	Lower Herman Cr	CO	UN	2008	487,204	03-04-08	03-11-08	Pendelton Acclim Pond	Umatilla River
Umatilla Tribe Total					1,111,134				
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2008	211,004	03-15-08	05-15-08	Clark Flat Acclim Pond Jack Creek Acclim	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2008	217,146	03-15-08	05-15-08	Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2008	219,470	03-15-08	05-15-08	Easton Pond	Yakima River
Yakama Tribe Total					647,620				
Grand Total					7,472,139				

HATCHERY RELEASE NEXT TWO WEEKS

Hatchery Release Summary

From: **3/21/2008** to **4/3/2008**

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
								Crooked R Acclim	
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2008	141,700	03-26-08	03-31-08	Pond	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2008	415,900	03-19-08	04-03-08	Powell Acclim Pond	Lochsa River
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2008	424,700	03-24-08	04-04-08	Red River	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2008	566,800	03-26-08	03-31-08	Crooked River	S Fk Clearwater River
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2008	55,000	04-01-08	04-24-08	Little Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2008	260,000	03-27-08	04-01-08	Little Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2008	525,000	03-17-08	03-27-08	Hells Canyon Dam	Snake River
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2008	830,000	04-03-08	04-21-08	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Pahsimeroi Hatchery	CH1	SU	2008	1,038,000	03-31-08	04-15-08	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2008	2,500,000	03-17-08	04-25-08	Rapid River Hatchery	Little Salmon River
Idaho Dept. of Fish and Game Total					6,757,100				
Nez Perce Tribe	Clearwater Hatchery	CH1	SP	2008	309,300	04-01-08	04-08-08	Meadow Creek - SELW Hazard Creek/Little	Selway River
Nez Perce Tribe	Hagerman NFH	ST	SU	2008	40,000	03-26-08	04-02-08	Salmon R	Little Salmon River
Nez Perce Tribe	Hagerman NFH	ST	SU	2008	158,000	03-26-08	04-02-08	Little Salmon River	Salmon River (ID)
Nez Perce Tribe	Lookingglass Hatchery	CH1	SP	2008	74,400	03-19-08	04-01-08	Lostine Accim Pond	Wallowa River
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH1	SP	2008	126,000	04-01-08	04-08-08	Nez Perce Tribal Hatchery	Clearwater River M F
Nez Perce Tribe	Nez Perce Tribal Hatchery	CO	UN	2009	30,000	04-01-08	04-15-08	Orofino Creek	Clearwater River M F
Nez Perce Tribe Total					737,700				
Oregon Dept. of Fish and Wildlife	Oak Springs Hatchery	ST	SU	2008	4,000	03-31-08	03-31-08	Deschutes River	Deschutes River
Oregon Dept. of Fish and Wildlife	Willard Hatchery	CH1	SP	2008	239,652	03-24-08	03-31-08	Walla Walla River	Walla Walla River
Oregon Dept. of Fish and Wildlife Total					243,652				
U.S. Fish and Wildlife Service	Dworshak NFH	CH1	SP	2008	950,000	03-21-08	04-09-08	Dworshak Hatchery	Clearwater River M F
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2008	100,000	04-02-08	04-04-08	Little Salmon River	Salmon River (ID)
U.S. Fish and Wildlife Service	Kooskia NFH	CH1	SP	2008	653,000	03-24-08	04-04-08	Kooskia Hatchery Warm Springs	Clearwater River M F
U.S. Fish and Wildlife Service	Warm Springs NFH	CH1	SP	2008	376,000	03-23-08	04-23-08	Hatchery	Deschutes River
U.S. Fish and Wildlife Service Total					2,079,000				
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2008	116,902	03-24-08	04-12-08	Catherine Creek Grande Ronde Acclim	Grande Ronde River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2008	125,000	03-27-08	04-12-08	Pond Grande Ronde Acclim	Grande Ronde River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2008	127,492	03-17-08	03-24-08	Pond	Grande Ronde River
Umatilla Tribe Total					369,394				
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	CH1	FA	2008	450,000	04-01-08	04-07-08	Lyons Ferry Hatchery Ringold Springs	Snake River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	CH1	SP	2008	345,000	04-01-08	04-15-08	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	ST	SU	2008	180,000	04-01-08	05-05-08	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2008	78,000	04-01-08	04-18-08	Tucannon River	Tucannon River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2008	106,000	04-01-08	04-18-08	Tucannon River	Tucannon River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	ST	SU	2008	57,000	04-01-08	04-18-08	Tucannon River	Tucannon River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	7,500	04-01-08	04-30-08	Chiwawa River	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	48,000	04-01-08	04-30-08	Chiwawa River	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	87,000	04-01-08	04-30-08	Wenatchee River	Wenatchee River
Washington Dept. of Fish and Wildlife	Turtle Rock Hatchery	ST	SU	2008	98,000	04-01-08	04-30-08	Nason Creek	Wenatchee River
Washington Dept. of Fish and Wildlife	Washougal Hatchery	CO	NO	2008	2,550,000	03-31-08	03-31-08	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife Total					4,006,500				
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2008	211,004	03-15-08	05-15-08	Clark Flat Acclim Pond Jack Creek Acclim	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2008	217,146	03-15-08	05-15-08	Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2008	219,470	03-15-08	05-15-08	Easton Pond	Yakima River
Yakama Tribe	Willard Hatchery	CO	UN	2008	32,271	04-01-08	04-10-08	Nason Creek	Wenatchee River
Yakama Tribe Total					679,891				
Grand Total					14,873,237				

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>#</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>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>				
3/7	---	---	---	0	108	109	110	24	100	100	100	24	101	101	102	24	---	---	---	0
3/8	---	---	---	0	106	109	110	23	100	100	100	24	101	101	102	23	---	---	---	0
3/9	---	---	---	0	102	103	103	22	100	100	100	22	101	101	102	22	---	---	---	0
3/10	---	---	---	0	102	103	104	24	102	102	103	24	102	102	104	24	---	---	---	0
3/11	100	100	125	11	103	104	105	22	100	101	101	24	102	102	103	22	---	---	---	0
3/12	97	98	98	24	103	104	105	24	101	101	101	24	102	102	105	24	---	---	---	0
3/13	98	98	99	24	104	105	105	21	102	102	102	24	103	103	106	21	---	---	---	0
3/14	98	98	98	24	104	104	104	23	102	102	102	24	103	103	106	23	---	---	---	0
3/15	98	98	98	24	103	104	104	22	102	102	102	24	103	103	105	22	---	---	---	0
3/16	97	98	98	24	103	103	104	22	101	101	102	24	103	103	105	22	---	---	---	0
3/17	97	98	98	24	103	104	105	24	102	102	102	24	103	103	104	24	---	---	---	0
3/18	97	98	98	24	103	104	105	24	102	102	102	24	103	104	105	24	---	---	---	0
3/19	97	98	98	24	103	104	104	23	102	102	103	24	103	104	105	23	---	---	---	0
3/20	97	97	98	24	103	103	103	22	102	102	102	24	103	103	105	22	---	---	---	0

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>#</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>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>				
3/7	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/8	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/9	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/10	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/11	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/12	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/13	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/15	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/16	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/17	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/18	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/19	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/20	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	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>#</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>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>				
3/7	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/8	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/9	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/10	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/11	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/12	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/13	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/15	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/16	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/17	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/18	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/19	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
3/20	---	---	---	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>	#	<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
3/7	---	---	---	0	---	---	---	0	103	104	104	24	---	---	---	0	---	---	---	0
3/8	---	---	---	0	---	---	---	0	103	103	104	24	---	---	---	0	---	---	---	0
3/9	---	---	---	0	---	---	---	0	103	104	104	22	---	---	---	0	---	---	---	0
3/10	---	---	---	0	---	---	---	0	103	104	104	24	---	---	---	0	---	---	---	0
3/11	---	---	---	0	---	---	---	0	97	98	103	24	---	---	---	0	---	---	---	0
3/12	---	---	---	0	---	---	---	0	97	98	102	24	---	---	---	0	---	---	---	0
3/13	---	---	---	0	---	---	---	0	98	99	104	24	---	---	---	0	---	---	---	0
3/14	---	---	---	0	---	---	---	0	105	107	107	24	---	---	---	0	---	---	---	0
3/15	---	---	---	0	---	---	---	0	107	108	109	24	---	---	---	0	---	---	---	0
3/16	---	---	---	0	---	---	---	0	106	107	107	24	---	---	---	0	---	---	---	0
3/17	---	---	---	0	---	---	---	0	101	101	106	10	---	---	---	0	---	---	---	0
3/18	---	---	---	0	---	---	---	0	97	99	104	21	---	---	---	0	---	---	---	0
3/19	---	---	---	0	---	---	---	0	97	99	103	24	99	99	100	9	102	102	103	14
3/20	---	---	---	0	---	---	---	0	99	99	105	13	99	99	101	24	102	102	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>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
3/7	---	---	---	0	---	---	---	0	101	101	101	24	---	---	---	0	102	102	102	24
3/8	---	---	---	0	---	---	---	0	101	101	101	24	---	---	---	0	101	101	102	24
3/9	---	---	---	0	---	---	---	0	101	101	101	22	---	---	---	0	101	101	102	22
3/10	---	---	---	0	---	---	---	0	104	104	105	24	---	---	---	0	106	112	118	24
3/11	---	---	---	0	---	---	---	0	101	101	102	22	---	---	---	0	101	102	102	24
3/12	---	---	---	0	---	---	---	0	102	103	103	24	---	---	---	0	102	102	102	24
3/13	---	---	---	0	---	---	---	0	103	103	104	24	---	---	---	0	103	103	103	24
3/14	---	---	---	0	---	---	---	0	104	104	104	24	---	---	---	0	102	103	103	24
3/15	---	---	---	0	---	---	---	0	103	103	104	24	---	---	---	0	102	103	105	24
3/16	---	---	---	0	---	---	---	0	102	102	103	24	---	---	---	0	101	101	102	24
3/17	---	---	---	0	---	---	---	0	102	102	102	24	---	---	---	0	101	102	102	24
3/18	---	---	---	0	103	103	115	10	102	102	102	24	---	---	---	0	102	102	103	24
3/19	102	102	103	11	101	101	101	24	101	101	101	24	---	---	---	0	102	102	102	24
3/20	101	102	103	24	101	101	101	24	101	101	101	24	---	---	---	0	102	102	103	24

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

Date	<u>Lower Mon.</u>			<u>L. Mon. Tlwr</u>			<u>Ice Harbor</u>			<u>Ice Harbor Tlwr</u>			<u>McNary-Oregon</u>							
	<u>24 h</u>	<u>12 h</u>	#	<u>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
3/7	---	---	---	0	102	102	103	24	---	---	---	0	103	104	104	24	---	---	---	0
3/8	---	---	---	0	102	102	102	24	---	---	---	0	103	104	104	24	---	---	---	0
3/9	---	---	---	0	102	102	102	22	---	---	---	0	103	103	104	22	---	---	---	0
3/10	---	---	---	0	110	112	113	24	---	---	---	0	102	102	102	24	---	---	---	0
3/11	---	---	---	0	102	102	103	23	---	---	---	0	103	103	103	24	---	---	---	0
3/12	---	---	---	0	102	103	103	24	---	---	---	0	103	103	103	24	---	---	---	0
3/13	---	---	---	0	103	103	104	24	---	---	---	0	104	104	104	24	---	---	---	0
3/14	---	---	---	0	103	103	104	24	---	---	---	0	104	104	105	24	---	---	---	0
3/15	---	---	---	0	103	103	103	24	---	---	---	0	103	103	105	24	---	---	---	0
3/16	---	---	---	0	102	102	102	24	---	---	---	0	102	102	103	24	---	---	---	0
3/17	---	---	---	0	102	102	102	24	---	---	---	0	102	103	103	24	---	---	---	0
3/18	---	---	---	0	103	104	109	24	---	---	---	0	102	103	103	24	---	---	---	0
3/19	---	---	---	0	102	102	102	24	---	---	---	0	102	103	103	24	---	---	---	0
3/20	---	---	---	0	102	102	102	24	---	---	---	0	102	102	103	24	---	---	---	0

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

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>McNary-Wash</u>			<u>McNary Tlwr</u>			<u>John Day</u>			<u>John Day Tlwr</u>			<u>The Dalles</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>					
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	AVG	High	hr				
3/7	---	---	---	0	102	102	103	24	---	---	---	0	103	103	103	24	---	---	---	0
3/8	---	---	---	0	103	103	103	24	---	---	---	0	102	103	103	24	---	---	---	0
3/9	---	---	---	0	103	103	103	22	---	---	---	0	102	103	103	22	---	---	---	0
3/10	---	---	---	0	103	103	103	24	---	---	---	0	102	102	102	24	---	---	---	0
3/11	---	---	---	0	103	103	103	23	---	---	---	0	103	103	103	24	---	---	---	0
3/12	---	---	---	0	104	105	105	24	---	---	---	0	104	104	104	24	---	---	---	0
3/13	---	---	---	0	105	106	106	24	---	---	---	0	105	105	106	24	---	---	---	0
3/14	---	---	---	0	105	105	105	24	---	---	---	0	104	105	105	24	---	---	---	0
3/15	---	---	---	0	104	105	105	24	---	---	---	0	104	104	104	24	---	---	---	0
3/16	---	---	---	0	103	103	104	24	---	---	---	0	103	103	103	24	---	---	---	0
3/17	---	---	---	0	103	103	103	24	---	---	---	0	103	103	104	24	---	---	---	0
3/18	---	---	---	0	103	103	104	24	---	---	---	0	103	104	104	24	---	---	---	0
3/19	---	---	---	0	103	103	104	24	105	105	111	10	103	103	104	24	104	104	104	12
3/20	---	---	---	0	103	103	103	24	104	104	104	24	103	103	103	24	103	103	104	24

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>Camas/Washougal</u>			<u>Cascade Island</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>					
	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	Avg	High	Avg	AVG	High	hr				
3/7	103	103	104	24	103	103	104	24	108	109	109	24	106	107	108	24	114	114	115	24
3/8	103	103	103	24	103	104	104	24	109	109	110	24	108	108	109	24	114	114	115	24
3/9	103	103	104	23	103	104	104	22	109	109	110	22	107	108	109	22	114	114	114	22
3/10	101	102	102	24	102	102	102	24	104	105	105	24	103	103	104	24	106	106	107	24
3/11	103	103	103	24	103	103	103	24	105	106	106	24	106	107	108	24	112	113	115	24
3/12	103	104	104	23	104	104	104	24	106	106	107	24	106	108	108	24	112	113	114	24
3/13	104	105	105	24	104	104	105	24	106	106	107	24	106	107	108	24	112	113	115	24
3/14	104	104	105	24	104	104	105	24	106	106	107	24	106	106	107	24	112	113	114	24
3/15	104	104	104	24	104	104	104	24	106	106	107	24	105	106	106	24	112	113	114	24
3/16	102	102	103	24	102	103	103	24	106	106	107	24	105	106	106	24	112	113	114	24
3/17	103	103	104	24	102	103	103	24	105	105	106	24	105	106	106	24	113	114	116	24
3/18	103	104	104	24	103	103	103	24	104	104	105	24	105	105	105	24	111	113	114	24
3/19	103	104	104	24	103	103	104	24	104	104	105	24	104	105	106	24	112	113	115	24
3/20	103	103	104	24	103	103	104	24	104	104	105	24	104	105	106	24	112	113	114	24

Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE										
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
03/07/2008	---	0	0	---	---	---	---	---	---	---	0
03/08/2008	---	0	0	---	---	---	---	---	---	---	0
03/09/2008	---	0	0	---	---	---	---	---	---	---	0
03/10/2008	0	0	0	0	---	---	---	---	---	---	0
03/11/2008	0	0	0	0	---	---	---	---	---	---	0
03/12/2008	0	0	0	0	---	---	---	---	---	---	0
03/13/2008	0	0	0	0	---	---	---	---	---	---	0
03/14/2008	0	0	0	0	---	---	---	---	---	---	0
03/15/2008	0	0	0	0	---	---	---	---	---	---	0
03/16/2008	0	0	0	0	---	---	---	---	---	---	0
03/17/2008	0	0	0	0	---	---	---	---	---	---	0
03/18/2008	0	0	0	0	---	---	---	---	---	---	0
03/19/2008	*	0	0	0	---	---	---	---	---	---	0
03/20/2008	*	0	0	0	---	---	---	---	---	---	0
03/21/2008	---	---	---	---	---	---	---	---	---	---	---
<hr/>											
Total:	0	0	0	0	0	0	0	0	0	0	0
# Days:	11	14	14	11	0	0	0	0	0	0	14
Average:	0	0	0	0	0	0	0	0	0	0	0
YTD	0	0	0	0	0	0	0	0	0	0	0

* See sampling comments <http://www.fpc.org/currentDaily/smpcomments.htm>

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

Definitions for Smolt Index Counts

- WTB (Collection) = Salmon River Trap at Whitebird : Collection Counts
- IMN (Collection) = Imnaha River Trap : Collection Counts
- GRN (Collection) = Grande Ronde River Trap : Collection Counts
- LEW (Collection) = Snake River Trap at Lewiston : Collection Counts
- LGR (Index) = Lower Granite Dam Bypass Collection System : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse 2 Flow} / (\text{Powerhouse 1 \& 2 Flow} + \text{Spill}) \}$
- MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse Flow} / (\text{Powerhouse Flow} + \text{Spill}) \}$
- BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts
 $\text{Passage Index} = \text{Collection Counts} / \{ \text{Powerhouse 2 Flow} / (\text{Powerhouse 1 \& 2 Flow} + \text{Spill}) \}$

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.

Cumulative Adult Passage at Mainstem Dams Through: 03/20

DAM	EndDate	Spring Chinook						Summer Chinook						Fall Chinook					
		2008		2007		10-Yr Avg.		2008		2007		10-Yr Avg.		2008		2007		10-Yr Avg.	
		Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	03/18	26	0	6	0	318	0	0	0	0	0	0	0	0	0	0	0	0	0
TDA	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JDA	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCN	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IHR	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LMN	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGS	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGR	03/17	0	0	0	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
WFA	03/18	0	0	6	0	-	-	0	0	0	0	-	-	0	0	0	0	-	-

DAM	Coho						Sockeye			Steelhead			
	2008		2007		10-Yr Avg.		10-Yr Avg.			10-Yr Avg.			Wild
	Adult	Jack	Adult	Jack	Adult	Jack	2008	2007	Avg.	2008	2007	Avg.	2008
BON	0	0	0	0	0	0	0	0	0	107	116	129	52
TDA	0	0	0	0	0	0	0	0	0	0	0	0	0
JDA	0	0	0	0	0	0	0	0	0	0	0	0	0
MCN	0	0	0	0	0	0	0	0	0	0	0	0	0
IHR	0	0	0	0	0	0	0	0	0	0	0	0	0
LMN	0	0	0	0	0	0	0	0	0	0	0	0	0
LGS	0	0	0	0	0	0	0	0	0	0	0	0	0
LGR	0	0	0	0	0	0	0	0	0	1908	2575	2497	367
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
WFA	0	0	2	0	-	-	0	0	-	1240	3922	-	-

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

*PRD is not posting wild steelhead numbers.

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

Wild steelhead numbers are included in the total. Wild Steelhead are defined as unclipped fish.

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

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

Page last updated on: 03/21/08

BON counts from January 1, 2008 to March 14, 2008 (our traditional counts begin March 15):

Year	Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
2008	42	0	578	278
2007	22	0	1,677	517