



Fish Passage Center

Weekly Report #09 - 30

October 16, 2009

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin varied between 79% and 112% of average at individual sub-basins over Water Year 2009. Precipitation above The Dalles was 97% of average over Water Year 2009. Water Year 2010 began on October 1, 2009; over the first twelve days of October, precipitation has ranged between 16% and 189% of average.

Table 1. Summary of Water Year 2009 and 2010 precipitation with respect to average (1971-2000), at select locations within the Columbia and Snake River Basins.

Location	Water Year 2009 October 1, 2008 to September 30, 2009		Water Year 2010 October 1-12, 2009	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	22.59	88	0.47	65
SNAKE RIVER Above Ice Harbor	19.64	109	0.62	135
Columbia Above The Dalles	22.70	97	0.49	76
Kootenai	22.25	85	0.62	87
Clark Fork	18.08	101	0.19	42
Flathead	20.49	87	0.31	47
Pend Oreille/ Spokane	28.81	92	0.34	41
Central Washington	7.27	79	0.14	60
SNAKE RIVER Plain	13.05	112	0.63	189
Salmon/Boise/ Payette	19.09	95	0.68	142
Clearwater	32.29	104	0.13	16
SW Washington Cascades/Cowlitz	62.74	88	0.36	17
Willamette Valley	49.98	83	0.35	21

Grand Coulee was at 1286.9 feet on October 15, 2009, refilling 0.5 feet last week. Outflows at Grand Coulee have ranged between 47.2 and 72.0 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2440.8 feet (10-15-09) and drafted 0.2 feet last week. Outflows at Libby are currently 4.5 Kcfs.

Hungry Horse is currently at an elevation of 3546.8 (10-15-09) and has drafted 1.2 feet last week. Outflows at Hungry Horse have been approximately 2.5-2.8 Kcfs last week.

Dworshak is currently at an elevation of 1516.6 feet (10-15-09) and has drafted 0.5 feet last week. Outflows at Dworshak have been 1.6 Kcfs.

The Brownlee Reservoir was at an elevation of 2033.7 feet on October 15, 2009 drafting 4.2 feet last week. Outflows at Brownlee Dam have been 7.3 to 20.0 Kcfs over the last week.

Smolt Monitoring:

Sampling continued at Lower Granite, Little Goose and Bonneville dams over the past two weeks. Subyearling Chinook smolts increased in numbers at all three sites in the past week. Unclipped subyearlings continue to predominate at all the sites at this time suggesting that many of the late season out-migrant fish may be of wild origin. It should be noted however, that a portion of hatchery origin fish were unmarked as well. Small numbers of coho, sockeye and steelhead have been collected at the sites over the past few weeks as well.

At Lower Granite Dam subyearling Chinook predominated with coho smolt numbers second in prevalence but at very low numbers. Average daily passage index for subyearling Chinook was at 300 per day this week compared to 100 per day last week. A peak passage of over 400 per day occurred on October 14. Almost all PIT-tag detects (920 of just over 1000) since October 1 were of surrogate releases from Big Canyon Creek in the Clearwater River during late June to early July. Fall Chinook fall-backs continue to be

detected at the bypass at Lower Granite Dam that were originally released at Lyons Ferry Hatchery in 2006, 2008 and 2009 (76 detected in the bypass). Those fish migrated past the hatchery and are likely heading back down river after passing above Lower Granite Dam. Five wild fall Chinook smolts PIT-tagged in the Clearwater River have been detected at Lower Granite since October 1.

In the lower Columbia River, at Bonneville Dam, subyearling Chinook weekly average passage index rose this week with the passage index averaging 220 this week compared to 160 daily average index last week.

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. Two releases totaling about 225,000 spring Chinook pre-smolts to the Clearwater River were scheduled to end this week. Of these spring Chinook pre-smolts, 67% were scheduled for release into the middle fork and 33% were scheduled for release into the south fork. Given that these releases are of spring Chinook pre-smolts, these juveniles are not expected to out-migrate until spring of 2010. There are no planned releases of juvenile salmonids to this zone over the next two weeks.

Mid-Columbia Zone: The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam. Approximately 180,000 sockeye pre-smolts were scheduled for release into the Wenatchee River this week. The preliminary release schedule indicates that this release is expected to run into mid-November. Although this release is occurring in 2009, these pre-smolts are not expected to out-migrate until the spring of 2010. There are no planned releases of juvenile salmonids to this zone over the next two weeks.

Lower Columbia Zone: The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. No releases of juvenile salmonids were scheduled for this zone over the past week. However, on October 6th, 29,622 summer steelhead smolts were released into the Umatilla River. This was an unplanned early release of Umatilla Hatchery summer steelhead. These steelhead juveniles are not expected to out-migrate until spring 2010. Finally, there are no releases scheduled for this zone over the next two weeks.

Adult Passage:

Daily counts of adult fall Chinook ranged from 335 to 591. The 2009 adult fall Chinook count of 279930 was about 89.8% of the 2008 count and about 77.0% of the 10 year average. The fall Chinook jack count of 113659 was about 2.92 times greater than the 2008 count and about 2.78 times greater than the 10 year average. The adult fall Chinook count total at The Dalles Dam of 172764 is about 61.7% of the Bonneville passage to date. The 2009 Lower Granite Dam adult fall Chinook count of 14356 is about 89.1% of the 2008 count and about 1.50 times greater than the 10 year average count. The 2009 Lower Granite fall Chinook jack count of 39209 is about 4.29 times greater than the 2008 count and about 6.37 times greater than the 10 year average.

Daily steelhead counts at Bonneville Dam for the past week ranged between 420 and 943. The Bonneville Dam 2009 steelhead count of 596996 is about 1.67 times greater than the 2008 count and 1.69 times greater than the 10 year average. During this time of year, there are times when there are higher steelhead counts at upstream projects compared to downstream projects. The higher counts of steelhead at upstream sites compared to downstream sites in any particular year is because some steelhead spend the winter between sites, for instance between Ice Harbor and Lower Granite, and then start their migration upstream the following year. The summer steelhead run is delineated according to dates of passage past Bonneville Dam and is made up of two components. A-run steelhead pass Bonneville Dam from the first of June through August 25th and B-run steelhead pass Bonneville from August 26th through October. The 2009 B-run steelhead began on August 26th at Bonneville Dam and was 153010 as of October 15th. The 2009 B-run steelhead count is about 1.17 times greater than the 2008 count of 130552 and is about 1.23 times greater than the 10 year average count of 123968.

In the Snake River, this year's Lower Granite total steelhead count of 263417 is about 1.75 times greater than the 2008 count of 150783 and 1.97 times greater than the 10 year average of 133928. The 2009 wild steelhead count as of October 15th was 61269. At Rock Island Dam, as of October 13th, 36489 adult steelhead had been counted and at Rocky Reach Dam, 28072 adult steelhead had been counted so far this season.

The 2009 adult coho count at Bonneville Dam is 187274 adults and 8509 jacks. The Bonneville 2009 adult coho count is about 1.51 times greater than the 2008 count of 124296 and is about 1.87 times greater than the 10 year average count of 100336. The 2009 coho jack count of 8509 is about 85.2% of the 2008 count of 9981 and is about 1.35 times greater than the 10 year average count of 6314 at Bonneville Dam.

Hatchery Releases Last Two Weeks

Hatchery Release Summary									
From:	10/2/2009		to	10/15/09					
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2010	75,000	09-30-09	10-14-09	Newsome Creek	S Fk Clearwater River
Nez Perce Tribe	Nez Perce Tribal Hatchery	CH0	SP	2010	150,000	10-01-09	10-15-09	Lolo Creek	Clearwater River M F
Nez Perce Tribe Total					225,000				
Oregon Dept. of Fish and Wildlife	Umatilla Hatchery	ST	SU	2010	29,622	10-06-09	10-06-09	Umatilla River	Umatilla River
Oregon Dept. of Fish and Wildlife Total					29,622				
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	SO	UN	2010	180,000	10-15-09	11-15-09	Lake Wenatchee	Wenatchee River
Washington Dept. of Fish and Wildlife Total					180,000				
Grand Total					434,622				

Hatchery Releases Next Two Weeks

Hatchery Release Summary									
From:		10/16/2009		to		10/29/2009			
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	SO	UN	2010	180,000	10-15-09	11-15-09	Lake Wenatchee	Wenatchee River
Washington Dept. of Fish and Wildlife Total					180,000				
Grand Total					180,000				

CH = Chinook, ST = Steelhead, CO = Coho, SO = Sockeye, CT = Cutthroat Trout, CM = Chum

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
10/02/2009	58.8	0.0	60.1	0.0	58.1	0.0	56.2	0.0	56.5	0.0	54.0	1.1	48.9	0.7
10/03/2009	47.8	0.0	47.3	0.0	49.7	0.0	47.8	0.0	47.6	0.0	58.8	1.3	55.1	0.8
10/04/2009	37.2	0.0	37.3	0.0	35.3	0.0	32.9	0.0	33.2	0.0	42.2	1.1	39.7	0.5
10/05/2009	58.3	0.0	55.0	0.0	57.0	0.0	57.6	0.0	55.9	0.0	55.6	1.2	50.0	0.7
10/06/2009	61.0	0.0	67.7	0.0	63.6	0.0	58.1	0.0	58.1	0.0	47.7	1.5	40.1	0.6
10/07/2009	68.0	0.0	69.8	0.0	73.0	0.0	70.9	0.0	69.8	0.0	75.7	1.8	71.3	1.0
10/08/2009	66.5	0.0	64.8	0.0	64.9	0.0	65.8	0.0	67.0	0.0	75.3	1.7	73.4	1.7
10/09/2009	52.5	0.0	48.9	0.0	55.1	0.0	53.6	0.0	52.6	0.0	59.8	1.5	57.4	0.9
10/10/2009	48.2	0.0	51.6	0.0	52.5	0.0	51.4	0.0	50.5	0.0	49.7	1.5	42.6	0.9
10/11/2009	56.8	0.0	54.7	0.0	51.2	0.0	50.8	0.0	49.5	0.0	51.9	1.7	51.3	0.9
10/12/2009	72.0	0.0	75.5	0.0	75.6	0.0	75.5	0.0	75.1	0.0	74.1	1.9	66.0	1.0
10/13/2009	67.5	0.0	64.4	0.0	64.6	0.0	64.1	0.0	64.0	0.0	72.8	1.9	74.1	1.0
10/14/2009	49.2	0.0	53.5	0.0	56.4	0.0	55.8	0.0	55.7	0.0	70.8	1.8	72.4	0.7
10/15/2009	47.2	0.0	45.8	0.0	48.8	0.0	50.9	0.0	51.0	0.0	52.9	1.3	50.0	0.3

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
10/02/2009	1.7	0.0	11.4	17.4	22.1	0.0	18.3	0.0	18.7	0.0	18.5	0.0
10/03/2009	1.7	0.0	11.8	15.4	26.5	0.0	26.7	0.0	28.5	0.0	30.0	0.0
10/04/2009	1.7	0.0	12.5	12.3	23.4	0.0	21.4	0.0	20.4	0.0	16.7	0.0
10/05/2009	1.7	0.0	13.1	12.7	22.5	0.0	22.7	0.0	23.1	0.0	23.2	0.0
10/06/2009	1.7	0.0	13.8	14.9	20.0	0.0	18.2	0.0	18.5	0.0	21.3	0.0
10/07/2009	1.7	0.0	14.8	15.9	25.6	0.0	28.0	0.0	28.4	0.0	27.0	0.0
10/08/2009	1.6	0.0	14.4	18.0	25.9	0.0	24.1	0.0	25.2	0.0	22.2	0.0
10/09/2009	1.6	0.0	13.3	17.7	31.1	0.0	30.0	0.0	30.8	0.0	31.4	0.0
10/10/2009	1.6	0.0	13.1	18.2	22.8	0.0	20.1	0.0	20.9	0.0	20.8	0.0
10/11/2009	1.6	0.0	13.5	18.7	24.1	0.0	23.3	0.0	23.8	0.0	22.9	0.0
10/12/2009	1.6	0.0	14.5	19.8	29.3	0.0	26.2	0.0	26.9	0.0	27.3	0.0
10/13/2009	1.6	0.0	13.7	19.4	27.0	0.0	26.7	0.0	27.8	0.0	27.4	0.0
10/14/2009	1.6	0.0	13.5	17.7	28.2	0.0	26.1	0.0	25.1	0.0	23.8	0.0
10/15/2009	1.6	0.0	12.3	8.9	29.0	0.0	28.1	0.0	30.3	0.0	29.7	0.0

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

Date	McNary		John Day		The Dalles		Bonneville			
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
10/02/2009	87.3	0.0	73.9	0.8	76.0	0.0	84.6	1.5	0.0	75.8
10/03/2009	78.2	0.0	70.4	0.8	72.5	0.0	78.9	1.5	0.0	70.0
10/04/2009	69.7	0.0	70.8	0.8	71.6	0.0	79.2	1.5	2.2	68.1
10/05/2009	71.7	0.0	73.6	0.9	74.5	0.0	84.8	1.3	0.0	76.1
10/06/2009	77.3	0.0	75.0	0.8	77.1	0.0	83.8	1.4	0.0	75.0
10/07/2009	83.4	0.0	81.6	0.7	82.2	0.0	87.0	1.3	4.7	73.6
10/08/2009	95.9	0.0	89.3	0.7	91.6	0.0	106.9	1.3	16.3	81.9
10/09/2009	98.3	0.0	94.8	0.7	96.0	0.0	97.6	1.3	11.8	77.1
10/10/2009	73.3	0.0	79.9	0.7	81.1	0.0	89.1	1.4	6.2	74.2
10/11/2009	78.6	0.0	76.9	0.8	79.6	0.0	89.0	1.3	4.3	75.9
10/12/2009	86.6	0.0	86.5	0.7	88.9	0.0	98.3	1.4	10.4	79.1
10/13/2009	103.3	0.0	100.3	0.7	100.7	0.0	101.8	1.4	15.2	77.8
10/14/2009	94.8	0.0	85.7	0.7	86.0	0.0	93.1	1.3	7.5	76.9
10/15/2009	101.4	0.0	103.5	0.7	105.6	0.0	113.5	1.3	23.1	81.7

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			
10/2	---	---	---	0	107.3	110.1	114.2	21	100.3	100.4	100.6	24	98.2	98.8	100.4	21	99.1	99.4	99.6	24
10/3	---	---	---	0	103.0	103.3	103.9	23	100.3	100.5	100.7	24	97.4	98.5	100.4	23	98.8	99.1	99.4	24
10/4	---	---	---	0	103.1	103.5	103.9	24	100.1	100.2	100.3	24	98.1	99.0	100.7	24	98.6	98.8	99.2	24
10/5	---	---	---	0	102.5	102.7	103.7	18	99.3	99.4	99.6	24	97.3	97.9	99.3	18	98.2	98.4	98.9	24
10/6	---	---	---	0	102.7	103.3	104.0	22	99.3	99.8	100.0	24	97.3	97.9	99.0	22	97.8	98.1	98.3	24
10/7	---	---	---	0	102.6	102.9	103.7	20	99.2	99.3	99.4	24	97.7	98.5	100.0	20	97.7	97.8	97.9	24
10/8	---	---	---	0	101.4	101.8	102.5	24	98.8	99.0	99.2	24	97.5	98.2	99.0	24	97.4	97.8	98.0	24
10/9	---	---	---	0	100.4	100.8	101.6	24	98.2	98.4	98.8	24	97.2	98.0	99.2	24	97.4	97.6	97.6	24
10/10	---	---	---	0	100.5	101.2	102.1	22	98.2	98.4	98.5	24	96.0	96.5	97.4	22	97.2	97.5	97.7	24
10/11	---	---	---	0	101.4	102.2	103.3	22	98.8	99.0	99.2	24	96.9	97.4	98.1	22	97.7	98.0	98.1	24
10/12	---	---	---	0	101.9	102.8	103.5	23	99.2	99.5	99.6	24	97.9	98.4	99.2	23	98.1	98.3	98.5	24
10/13	---	---	---	0	102.3	102.9	103.8	24	100.1	100.3	100.4	24	98.5	99.0	100.0	24	98.2	98.2	98.4	11
10/14	---	---	---	0	101.5	101.9	102.5	22	99.6	100.2	100.4	24	97.5	97.9	98.6	22	---	---	---	0
10/15	---	---	---	0	100.5	100.9	101.9	23	97.7	97.9	98.5	24	95.9	96.3	97.7	23	---	---	---	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>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			
10/2	100.6	101.3	102.2	24	99.4	99.7	100.4	24	101.5	101.8	102.6	24	---	---	---	0	---	---	---	0
10/3	99.7	100.8	102.8	24	99.4	99.8	100.1	24	101.6	101.9	102.3	24	---	---	---	0	---	---	---	0
10/4	98.2	99.1	99.9	24	99.6	99.8	100.1	24	101.7	102.0	102.3	24	---	---	---	0	---	---	---	0
10/5	98.7	100.8	102.8	24	98.9	99.2	99.5	24	101.0	101.3	101.6	24	---	---	---	0	---	---	---	0
10/6	97.7	98.4	99.1	24	99.2	99.7	100.0	24	101.3	101.9	102.2	24	---	---	---	0	---	---	---	0
10/7	98.3	99.6	100.5	24	99.2	99.5	100.1	24	101.3	101.7	102.3	24	---	---	---	0	---	---	---	0
10/8	98.5	99.8	100.7	24	98.9	99.4	99.6	24	101.0	101.5	101.8	24	---	---	---	0	---	---	---	0
10/9	98.6	99.4	100.6	24	98.2	98.5	98.8	24	100.4	100.6	100.9	24	---	---	---	0	---	---	---	0
10/10	97.2	98.0	99.2	24	98.2	98.6	98.9	24	100.3	100.7	101.1	24	---	---	---	0	---	---	---	0
10/11	97.6	98.5	99.9	24	98.9	99.3	99.6	24	101.0	101.5	101.8	24	---	---	---	0	---	---	---	0
10/12	98.3	99.4	100.5	24	99.3	99.6	99.9	24	101.5	101.8	102.0	24	---	---	---	0	---	---	---	0
10/13	98.8	98.8	99.0	11	100.1	100.4	100.4	24	102.3	102.6	102.6	24	---	---	---	0	---	---	---	0
10/14	---	---	---	0	99.7	100.1	100.4	24	101.9	102.3	102.6	24	---	---	---	0	---	---	---	0
10/15	---	---	---	0	98.3	98.4	98.7	24	100.4	100.6	100.8	24	---	---	---	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			
10/2	---	---	---	0	---	---	---	0	99.8	100.1	100.3	24	100.2	100.6	101.1	24	99.3	99.5	99.6	24
10/3	---	---	---	0	---	---	---	0	99.8	100.2	100.4	24	100.2	100.5	100.7	24	99.8	100.3	100.7	24
10/4	---	---	---	0	---	---	---	0	99.1	99.3	99.8	24	99.7	100.2	100.6	24	99.4	99.6	100.2	24
10/5	---	---	---	0	---	---	---	0	97.8	98.1	98.4	24	98.7	99.0	99.8	24	98.3	98.5	98.7	24
10/6	---	---	---	0	---	---	---	0	97.8	98.4	99.0	24	99.2	100.0	100.5	24	98.9	99.5	100.1	24
10/7	---	---	---	0	---	---	---	0	98.6	98.9	99.3	24	99.5	100.0	101.0	24	99.3	99.6	100.1	24
10/8	---	---	---	0	---	---	---	0	98.4	98.6	98.8	24	99.0	99.4	100.3	24	99.0	99.6	100.2	24
10/9	---	---	---	0	---	---	---	0	97.4	97.6	98.2	24	98.1	98.3	98.7	24	97.7	98.3	98.6	24
10/10	---	---	---	0	---	---	---	0	97.2	97.5	97.7	24	98.3	98.7	99.4	24	97.7	97.9	98.2	24
10/11	---	---	---	0	---	---	---	0	97.6	97.8	98.0	24	98.9	99.4	100.2	24	97.9	98.2	98.6	24
10/12	---	---	---	0	---	---	---	0	98.0	98.2	98.4	24	99.0	99.4	100.7	24	98.5	98.6	98.8	24
10/13	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
10/14	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0	---	---	---	0
10/15	---	---	---	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	Priest R. Dnst			#	Pasco			#	Dworshak			#	Clrwrtr-Peck			#	Anatone			#
	24 h	12 h			24 h	12 h			24 h	12 h			24 h	12 h			24 h	12 h		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
10/2	101.2	101.5	101.9	24	99.3	99.4	100.0	15	106.5	107.1	107.8	24	102.7	104.5	105.9	24	101.1	101.6	102.6	24
10/3	101.5	102.0	102.5	24	---	---	---	0	107.2	108.0	108.8	24	102.9	104.7	106.0	24	100.6	100.8	101.1	24
10/4	101.1	101.4	101.6	24	---	---	---	0	107.3	107.9	108.4	24	102.1	103.5	104.5	23	100.4	100.8	101.4	24
10/5	100.2	100.8	101.4	24	---	---	---	0	106.3	107.2	108.2	24	101.3	102.9	104.5	24	99.9	100.3	101.7	17
10/6	100.5	101.2	101.7	24	---	---	---	0	106.8	108.1	109.2	24	98.8	98.8	100.2	10	---	---	---	0
10/7	100.8	101.2	101.9	24	---	---	---	0	105.6	106.3	107.0	24	---	---	---	0	---	---	---	0
10/8	100.6	101.1	102.0	24	---	---	---	0	105.6	106.3	107.2	24	---	---	---	0	---	---	---	0
10/9	100.0	100.2	100.4	24	---	---	---	0	105.1	105.7	106.4	24	---	---	---	0	---	---	---	0
10/10	99.9	100.3	100.9	24	---	---	---	0	103.7	104.5	105.7	24	---	---	---	0	---	---	---	0
10/11	100.4	100.9	101.7	24	---	---	---	0	104.1	104.9	106.0	24	---	---	---	0	---	---	---	0
10/12	100.5	100.9	101.5	24	---	---	---	0	104.6	105.4	106.0	24	---	---	---	0	---	---	---	0
10/13	---	---	---	0	---	---	---	0	105.3	105.9	106.8	24	---	---	---	0	---	---	---	0
10/14	---	---	---	0	---	---	---	0	104.8	105.2	105.5	24	---	---	---	0	---	---	---	0
10/15	---	---	---	0	---	---	---	0	103.9	104.6	105.3	24	---	---	---	0	---	---	---	0

Total Dissolved Gas Saturation Data at Snake River Sites

Date	Clrwrtr-Lewiston			#	Lower Granite			#	L. Granite Tlwr			#	Little Goose			#	L. Goose Tlwr			#
	24 h	12 h			24 h	12 h			24 h	12 h			24 h	12 h			24 h	12 h		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
10/2	101.1	102.2	103.7	23	96.0	96.1	96.2	24	95.9	96.0	96.3	24	---	---	---	0	97.2	97.4	97.6	24
10/3	100.9	101.8	102.9	21	96.2	96.4	96.5	24	96.2	96.3	96.5	24	---	---	---	0	97.3	97.5	97.7	24
10/4	100.6	101.6	103.2	22	96.0	96.2	96.3	24	96.0	96.2	96.5	24	---	---	---	0	97.0	97.3	97.7	24
10/5	100.4	102.3	104.1	23	95.2	95.2	95.6	12	94.7	95.0	95.4	24	---	---	---	0	95.6	95.9	96.0	24
10/6	98.5	98.5	100.8	12	---	---	---	0	94.8	95.3	95.5	24	---	---	---	0	95.1	95.5	95.7	24
10/7	---	---	---	0	---	---	---	0	95.3	95.5	95.7	24	---	---	---	0	94.5	94.8	95.0	24
10/8	---	---	---	0	---	---	---	0	95.5	95.7	95.9	24	---	---	---	0	94.1	94.4	94.6	24
10/9	---	---	---	0	---	---	---	0	95.3	95.5	95.8	24	---	---	---	0	93.7	94.0	94.2	24
10/10	---	---	---	0	---	---	---	0	95.1	95.4	95.6	24	---	---	---	0	93.5	93.9	94.1	24
10/11	---	---	---	0	---	---	---	0	95.9	96.2	96.2	24	---	---	---	0	94.1	94.3	94.5	24
10/12	---	---	---	0	---	---	---	0	96.7	97.1	97.3	24	---	---	---	0	94.3	94.5	94.7	24
10/13	---	---	---	0	---	---	---	0	97.5	97.8	98.0	24	---	---	---	0	94.8	95.0	95.2	24
10/14	---	---	---	0	---	---	---	0	96.9	97.4	98.0	24	---	---	---	0	94.3	94.8	95.1	24
10/15	---	---	---	0	---	---	---	0	95.5	95.5	95.8	24	---	---	---	0	92.9	93.0	93.2	24

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

Date	Lower Mon.			#	L. Mon. Tlwr			#	Ice Harbor			#	Ice Harbor Tlwr			#	McNary-Oregon			#
	24 h	12 h			24 h	12 h			24 h	12 h			24 h	12 h			24 h	12 h		
	Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High		Avg	Avg	High	
10/2	---	---	---	0	96.8	97.1	97.8	24	---	---	---	0	98.3	98.8	100.1	24	---	---	---	0
10/3	---	---	---	0	96.8	97.1	98.1	24	---	---	---	0	98.0	98.3	99.0	24	---	---	---	0
10/4	---	---	---	0	97.2	97.5	98.7	24	---	---	---	0	98.4	99.0	100.1	24	---	---	---	0
10/5	---	---	---	0	96.4	96.8	98.2	24	---	---	---	0	97.2	97.5	98.0	24	---	---	---	0
10/6	---	---	---	0	96.1	96.5	97.1	24	---	---	---	0	97.3	97.8	98.1	24	---	---	---	0
10/7	---	---	---	0	96.0	96.2	97.2	24	---	---	---	0	97.3	97.6	98.0	24	---	---	---	0
10/8	---	---	---	0	95.7	95.9	96.3	24	---	---	---	0	97.1	97.6	98.3	24	---	---	---	0
10/9	---	---	---	0	95.0	95.3	96.5	24	---	---	---	0	96.3	96.6	97.8	24	---	---	---	0
10/10	---	---	---	0	95.0	95.3	95.4	24	---	---	---	0	96.5	96.9	97.2	24	---	---	---	0
10/11	---	---	---	0	95.3	95.5	95.8	24	---	---	---	0	97.0	97.3	97.7	24	---	---	---	0
10/12	---	---	---	0	95.1	95.4	95.5	24	---	---	---	0	97.2	97.5	97.7	24	---	---	---	0
10/13	---	---	---	0	95.5	95.8	96.7	24	---	---	---	0	97.7	97.9	98.4	24	---	---	---	0
10/14	---	---	---	0	94.9	95.5	96.3	24	---	---	---	0	96.9	97.4	97.7	24	---	---	---	0
10/15	---	---	---	0	93.9	94.2	94.6	24	---	---	---	0	95.5	95.8	96.3	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	McNary-Wash			#	McNary Tlwr			#	John Day			#	John Day Tlwr			#	The Dalles			#
	24 h	12 h	High		24 h	12 h	High		24h	12h	High		24h	12h	High		24h	12h	High	
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg		
10/2	98.6	98.6	98.8	9	98.1	98.7	99.5	24	---	---	---	0	99.9	100.4	100.8	24	---	---	---	0
10/3	---	---	---	0	98.9	99.3	99.4	24	---	---	---	0	100.3	100.8	101.1	24	---	---	---	0
10/4	---	---	---	0	99.0	99.2	99.5	24	---	---	---	0	100.3	100.5	100.7	24	---	---	---	0
10/5	---	---	---	0	97.8	98.0	98.2	24	---	---	---	0	99.1	99.3	99.7	24	---	---	---	0
10/6	---	---	---	0	97.8	98.4	98.9	24	---	---	---	0	98.7	99.2	99.9	24	---	---	---	0
10/7	---	---	---	0	98.3	98.6	98.9	24	---	---	---	0	98.4	98.7	98.9	24	---	---	---	0
10/8	---	---	---	0	97.8	98.0	98.3	24	---	---	---	0	98.1	98.7	99.3	24	---	---	---	0
10/9	---	---	---	0	96.9	97.1	97.3	24	---	---	---	0	97.6	98.1	98.4	24	---	---	---	0
10/10	---	---	---	0	97.3	97.7	98.0	24	---	---	---	0	98.6	98.8	99.3	24	---	---	---	0
10/11	---	---	---	0	97.9	98.3	98.6	24	---	---	---	0	99.6	99.9	100.4	24	---	---	---	0
10/12	---	---	---	0	98.7	98.9	99.4	24	---	---	---	0	99.7	100.0	100.1	24	---	---	---	0
10/13	---	---	---	0	99.0	99.3	99.5	24	---	---	---	0	100.0	100.3	100.8	24	---	---	---	0
10/14	---	---	---	0	98.2	98.7	99.0	24	---	---	---	0	99.1	99.6	100.5	24	---	---	---	0
10/15	---	---	---	0	96.6	96.7	97.0	24	---	---	---	0	97.7	98.3	98.8	24	---	---	---	0

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	The Dalles Dnst			#	Bonneville			#	Warrendale			#	Camas\Washougal			#	Cascade Island			#
	24 h	12 h	High		24 h	12 h	High		24h	12h	High		24h	12h	High		24h	12h	High	
	Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg			Avg	Avg		
10/2	100.2	100.4	100.5	24	---	---	---	0	100.9	101.2	102.1	24	---	---	---	0	---	---	---	0
10/3	101.0	101.2	101.3	24	---	---	---	0	101.6	102.1	102.5	24	---	---	---	0	---	---	---	0
10/4	101.0	101.2	101.3	24	---	---	---	0	102.1	102.8	103.4	24	---	---	---	0	---	---	---	0
10/5	99.9	100.1	100.4	24	---	---	---	0	101.1	101.7	102.6	24	---	---	---	0	---	---	---	0
10/6	99.6	100.0	100.1	24	---	---	---	0	100.9	101.8	102.5	24	---	---	---	0	---	---	---	0
10/7	100.1	100.4	100.5	24	---	---	---	0	101.5	102.4	102.9	24	---	---	---	0	---	---	---	0
10/8	99.6	99.8	99.9	24	---	---	---	0	102.0	102.6	103.4	24	---	---	---	0	---	---	---	0
10/9	99.4	99.6	99.7	24	---	---	---	0	101.4	102.0	102.7	24	---	---	---	0	---	---	---	0
10/10	99.1	99.4	99.6	24	---	---	---	0	100.8	101.2	101.7	24	---	---	---	0	---	---	---	0
10/11	99.6	99.9	100.0	24	---	---	---	0	100.6	101.0	101.3	24	---	---	---	0	---	---	---	0
10/12	100.1	100.3	100.4	24	---	---	---	0	100.8	101.3	102.0	24	---	---	---	0	---	---	---	0
10/13	100.5	100.8	101.1	24	---	---	---	0	100.7	101.3	101.7	24	---	---	---	0	---	---	---	0
10/14	99.5	99.9	100.5	24	---	---	---	0	100.6	101.0	101.3	24	---	---	---	0	---	---	---	0
10/15	98.8	98.9	99.5	24	---	---	---	0	100.5	101.0	101.8	24	---	---	---	0	---	---	---	0

Two-Week Summary of Passage Indices

COMBINED YEARLING CHINOOK											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
10/02/2009	---	---	---	---	0	0	---	---	---	---	0
10/03/2009	---	---	---	---	0	0	---	---	---	---	0
10/04/2009	---	---	---	---	0	0	---	---	---	---	0
10/05/2009	---	---	---	---	1	0	---	---	---	---	0
10/06/2009	---	---	---	---	0	0	---	---	---	---	0
10/07/2009	---	---	---	---	0	0	---	---	---	---	0
10/08/2009	---	---	---	---	0	0	---	---	---	---	0
10/09/2009	---	---	---	---	0	0	---	---	---	---	0
10/10/2009	---	---	---	---	0	0	---	---	---	---	0
10/11/2009	---	---	---	---	0	0	---	---	---	---	0
10/12/2009	---	---	---	---	0	0	---	---	---	---	0
10/13/2009	---	---	---	---	0	0	---	---	---	---	0
10/14/2009	---	---	---	---	1	0	---	---	---	---	0
10/15/2009	---	---	---	---	1	0	---	---	---	---	0
10/16/2009	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	3	0	0	0	0	0	0
# Days:	0	0	0	0	14	14	0	0	0	0	14
Average:	0	0	0	0	0	0	0	0	0	0	0
YTD	37,667	44,693	20,207	29,713	3,081,418	2,433,092	449,043	9,225	2,251,664	1,032,260	1,717,102

COMBINED SUBYEARLING CHINOOK											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
10/02/2009	---	---	---	---	52	3	---	---	---	---	185
10/03/2009	---	---	---	---	122	4	---	---	---	---	133
10/04/2009	---	---	---	---	137	5	---	---	---	---	92
10/05/2009	---	---	---	---	76	7	---	---	---	---	132
10/06/2009	---	---	---	---	58	12	---	---	---	---	153
10/07/2009	---	---	---	---	97	11	---	---	---	---	209
10/08/2009	---	---	---	---	226	30	---	---	---	---	251
10/09/2009	---	---	---	---	322	33	---	---	---	---	366
10/10/2009	---	---	---	---	230	50	---	---	---	---	225
10/11/2009	---	---	---	---	181	62	---	---	---	---	302
10/12/2009	---	---	---	---	190	34	---	---	---	---	194
10/13/2009	---	---	---	---	385	85	---	---	---	---	149
10/14/2009	---	---	---	---	426	79	---	---	---	---	246
10/15/2009	---	---	---	---	346	59	---	---	---	---	77
10/16/2009	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	2,848	474	0	0	0	0	2,714
# Days:	0	0	0	0	14	14	0	0	0	0	14
Average:	0	0	0	0	203	34	0	0	0	0	194
YTD	0	18	15	545	1,000,476	1,181,582	433,572	8,189	3,657,510	1,507,261	4,309,950

Two-Week Summary of Passage Indices

COMBINED COHO											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
10/02/2009	---	---	---	---	0	0	---	---	---	---	0
10/03/2009	---	---	---	---	0	0	---	---	---	---	0
10/04/2009	---	---	---	---	0	1	---	---	---	---	0
10/05/2009	---	---	---	---	0	2	---	---	---	---	0
10/06/2009	---	---	---	---	1	1	---	---	---	---	0
10/07/2009	---	---	---	---	1	0	---	---	---	---	0
10/08/2009	---	---	---	---	1	2	---	---	---	---	0
10/09/2009	---	---	---	---	0	1	---	---	---	---	0
10/10/2009	---	---	---	---	0	1	---	---	---	---	0
10/11/2009	---	---	---	---	1	3	---	---	---	---	0
10/12/2009	---	---	---	---	0	4	---	---	---	---	0
10/13/2009	---	---	---	---	1	5	---	---	---	---	0
10/14/2009	---	---	---	---	0	0	---	---	---	---	0
10/15/2009	---	---	---	---	1	1	---	---	---	---	0
10/16/2009	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	6	21	0	0	0	0	0
# Days:	0	0	0	0	14	14	0	0	0	0	14
Average:	0	0	0	0	0	2	0	0	0	0	0
YTD	0	0	0	332	92,357	81,337	19,011	37,588	127,125	240,419	503,270

COMBINED STEELHEAD											
Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
10/02/2009	---	---	---	---	0	0	---	---	---	---	0
10/03/2009	---	---	---	---	0	0	---	---	---	---	0
10/04/2009	---	---	---	---	0	0	---	---	---	---	0
10/05/2009	---	---	---	---	0	2	---	---	---	---	0
10/06/2009	---	---	---	---	1	0	---	---	---	---	0
10/07/2009	---	---	---	---	0	0	---	---	---	---	0
10/08/2009	---	---	---	---	0	0	---	---	---	---	0
10/09/2009	---	---	---	---	0	0	---	---	---	---	0
10/10/2009	---	---	---	---	0	0	---	---	---	---	0
10/11/2009	---	---	---	---	0	0	---	---	---	---	0
10/12/2009	---	---	---	---	0	0	---	---	---	---	0
10/13/2009	---	---	---	---	0	0	---	---	---	---	0
10/14/2009	---	---	---	---	0	0	---	---	---	---	0
10/15/2009	---	---	---	---	0	0	---	---	---	---	0
10/16/2009	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	1	2	0	0	0	0	0
# Days:	0	0	0	0	14	14	0	0	0	0	14
Average:	0	0	0	0	0	0	0	0	0	0	0
YTD	1,833	24,360	9,611	8,297	4,510,916	3,563,517	727,835	17,612	803,737	940,639	677,051

Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE										
	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
10/02/2009	---	---	---	---	0	0	---	---	---	---	0
10/03/2009	---	---	---	---	0	0	---	---	---	---	0
10/04/2009	---	---	---	---	0	0	---	---	---	---	0
10/05/2009	---	---	---	---	1	0	---	---	---	---	0
10/06/2009	---	---	---	---	0	0	---	---	---	---	0
10/07/2009	---	---	---	---	0	0	---	---	---	---	0
10/08/2009	---	---	---	---	0	0	---	---	---	---	0
10/09/2009	---	---	---	---	0	1	---	---	---	---	0
10/10/2009	---	---	---	---	1	1	---	---	---	---	0
10/11/2009	---	---	---	---	0	2	---	---	---	---	0
10/12/2009	---	---	---	---	1	1	---	---	---	---	0
10/13/2009	---	---	---	---	1	3	---	---	---	---	0
10/14/2009	---	---	---	---	0	0	---	---	---	---	0
10/15/2009	---	---	---	---	5	2	---	---	---	---	0
10/16/2009	---	---	---	---	---	---	---	---	---	---	---
Total:	0	0	0	0	9	10	0	0	0	0	0
# Days:	0	0	0	0	14	14	0	0	0	0	14
Average:	0	0	0	0	1	1	0	0	0	0	0
YTD	170	0	0	177	46,516	46,374	21,692	4,926	190,857	111,959	74,969

* 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.

Two Week Transportation Summary

Source: Fish Passage Center

Updated:

10/16/09 9:14 AM

10/02/09 TO 10/16/09

Site	Data	Species					Grand Total	
		CH0	CH1	CO	ST	SO		
LGR	Sum of NumberCollected	2,848		3	6	1	9	2,867
	Sum of NumberBarged	0		0	0	0	0	0
	Sum of NumberBypassed	1,190		0	0	0	0	1,190
	Sum of Numbertrucked	1,527		3	6	1	9	1,546
	Sum of SampleMorts	24		0	0	0	0	24
	Sum of FacilityMorts	1		0	0	0	0	1
	Sum of ResearchMorts	8		0	0	0	0	8
	Sum of TotalProjectMorts	33		0	0	0	0	33
LGS	Sum of NumberCollected	474			21	2	10	507
	Sum of NumberBarged	0			0	0	0	0
	Sum of NumberBypassed	0			0	0	0	0
	Sum of Numbertrucked	471			20	2	10	503
	Sum of SampleMorts	3			0	0	0	3
	Sum of FacilityMorts	0			1	0	0	1
	Sum of ResearchMorts	0			0	0	0	0
	Sum of TotalProjectMorts	3			1	0	0	4
Total Sum of NumberCollected		3,322		3	27	3	19	3,374
Total Sum of NumberBarged		0		0	0	0	0	0
Total Sum of NumberBypassed		1,190		0	0	0	0	1,190
Total Sum of Numbertrucked		1,998		3	26	3	19	2,049
Total Sum of SampleMorts		27		0	0	0	0	27
Total Sum of FacilityMorts		1		0	1	0	0	2
Total Sum of ResearchMorts		8		0	0	0	0	8
Total Sum of TotalProjectMorts		36		0	1	0	0	37

YTD Transportation Summary

Source: Fish Passage Center

Updated:

10/16/09 9:15 AM

TO: 10/16/09

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	706,162	2,352,642	65,929	33,465	3,430,199	6,588,397
	Sum of NumberBarged	680,280	1,500,926	63,607	26,169	1,841,961	4,112,943
	Sum of NumberBypassed	17,776	847,954	1,951	7,068	1,587,774	2,462,523
	Sum of NumberTrucked	3,604	5	229	13	3	3,854
	Sum of SampleMorts	314	118	10	23	33	498
	Sum of FacilityMorts	4,058	2,734	132	192	409	7,525
	Sum of ResearchMorts	32	1,035	0	0	19	1,086
	Sum of TotalProjectMorts	4,404	3,887	142	215	461	9,109
LGS	Sum of NumberCollected	851,761	1,720,261	59,533	33,664	2,517,676	5,182,895
	Sum of NumberBarged	833,735	966,562	56,372	27,768	1,057,254	2,941,691
	Sum of NumberBypassed	9,301	752,024	2,825	5,826	1,460,071	2,230,047
	Sum of NumberTrucked	2,203	0	289	13	7	2,512
	Sum of SampleMorts	452	49	40	10	21	572
	Sum of FacilityMorts	6,058	1,622	7	47	323	8,057
	Sum of ResearchMorts	12	4	0	0	0	16
	Sum of TotalProjectMorts	6,522	1,675	47	57	344	8,645
LMN	Sum of NumberCollected	325,681	321,118	14,019	16,048	518,664	1,195,530
	Sum of NumberBarged	318,442	312,082	13,950	15,870	506,287	1,166,631
	Sum of NumberBypassed	5,826	8,790	9	114	12,089	26,828
	Sum of NumberTrucked	681	7	49	0	3	740
	Sum of SampleMorts	147	15	2	3	10	177
	Sum of FacilityMorts	583	237	8	7	258	1,093
	Sum of ResearchMorts	0	0	0	0	0	0
	Sum of TotalProjectMorts	730	252	10	10	268	1,270
MCN	Sum of NumberCollected	1,836,921	1,303,737	69,886	106,375	467,741	3,784,660
	Sum of NumberBarged	414,822	196	448	425	74	415,965
	Sum of NumberBypassed	1,353,698	1,301,926	69,356	105,852	467,487	3,298,319
	Sum of NumberTrucked	32,815	0	15	34	4	32,868
	Sum of SampleMorts	808	149	1	2	14	974
	Sum of FacilityMorts	34,259	1,441	65	60	158	35,983
	Sum of ResearchMorts	518	25	0	1	3	547
	Sum of TotalProjectMorts	35,585	1,615	66	63	175	37,504
Total Sum of NumberCollected		3,720,525	5,697,758	209,367	189,552	6,934,280	16,751,482
Total Sum of NumberBarged		2,247,279	2,779,766	134,377	70,232	3,405,576	8,637,230
Total Sum of NumberBypassed		1,386,601	2,910,694	74,141	118,860	3,527,421	8,017,717
Total Sum of NumberTrucked		39,303	12	582	60	17	39,974
Total Sum of SampleMorts		1,721	331	53	38	78	2,221
Total Sum of FacilityMorts		44,958	6,034	212	306	1,148	52,658
Total Sum of ResearchMorts		562	1,064	0	1	22	1,649
Total Sum of TotalProjectMorts		47,241	7,429	265	345	1,248	56,528

Cumulative Adult Passage at Mainstem Dams Through: 10/15

DAM	EndDate	Spring Chinook						Summer Chinook						Fall Chinook					
		2009		2008		10-Yr Avg.		2009		2008		10-Yr Avg.		2009		2008		10-Yr Avg.	
		Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	10/15	114525	66631	125543	17554	160243	11507	81936	37416	78271	11621	76947	10024	279930	113659	311829	38859	363492	40872
TDA	10/14	93908	53646	95438	15801	113852	9048	79916	27878	65073	12206	66821	7950	172764	92456	167607	37688	192275	32056
JDA	10/15	76806	49733	81772	14925	95147	7579	65989	33147	63649	13680	61980	8146	141880	80124	134648	31818	142434	28206
MCN	10/15	70413	43328	68080	12133	86998	7409	57137	21182	54735	11239	59015	7256	101361	60744	99463	19594	109120	20987
IHR	10/15	55435	28223	53142	7757	59050	4663	23856	9400	23693	4964	13243	2568	24484	38342	21654	11293	14009	7968
LMN	10/15	66931	20009	54512	6885	57079	4270	23353	11733	27343	2890	13719	1912	21975	38695	20604	10167	13022	6872
LGS	10/15	52642	24331	50396	7805	54016	4453	20340	11207	21748	4811	11241	2521	22385	31180	17810	5432	10783	4837
LGR	10/15	49667	31064	50146	10946	54673	5280	14482	16367	22612	5072	11171	2757	14356	39209	16118	9130	9546	6154
PRD	10/13	13469	2910	12178	620	18164	621	49417	2117	39174	3442	53065	2394	31412	4623	29413	13705	27910	4411
RIS	10/13	12634	6003	12490	1119	14914	1069	44295	7727	38171	3096	50031	5515	9715	3262	6986	3428	9044	2219
RRH	10/13	6090	1086	4065	371	5734	430	34961	5231	29675	2127	37679	3897	6376	2230	6207	3418	5860	1949
WEL	10/14	6307	1867	2708	426	4250	321	25724	3800	21060	1375	27632	2013	3084	1921	3151	2237	3161	1157
WFA	10/09	25067	2670	14151	521	-	-	-	-	-	-	-	-	891	183	2066	1031	-	-

DAM	Coho						Sockeye			Steelhead			
	2009		2008		10-Yr Avg.		2009	2008	10-Yr Avg.	2009	2008	10-Yr Avg.	Wild 2009
	Adult	Jack	Adult	Jack	Adult	Jack							
BON	187274	8509	124296	9981	100336	6314	177823	213607	78590	596996	353902	354238	169699
TDA	45786	6600	34263	4547	26992	2585	155591	177984	66379	495371	271448	265996	136606
JDA	43014	5700	36725	4848	24273	3220	157400	193409	72416	546597	268036	253964	151451
MCN	23025	3322	16820	2942	12307	1285	121672	146924	58760	379523	211045	201054	99459
IHR	2490	304	2571	112	1121	54	867	539	90	298009	163334	149106	68548
LMN	2421	645	3654	356	1175	78	1162	722	103	280021	174184	144990	67199
LGS	2701	431	3031	338	1008	65	1061	594	96	265736	156162	131886	53829
LGR	1912	197	2796	1101	1114	184	1219	909	126	263417	150783	133928	61269
PRD	6108	347	3765	378	2679	334	153466	196835	74878	38709	16290	15068	0
RIS	10997	1709	3713	1344	3429	152	162830	193737	71011	36489	15878	14295	11661
RRH	2156	264	1217	594	636	48	133104	161342	52426	28072	12850	10898	8916
WEL	813	11	212	0	108	0	134936	165332	52892	23996	8725	7949	8272
WFA	17457	1775	3073	2566	-	-	-	-	-	17520	18913	-	-

PRD does not post 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: 10/16/09

BON counts from January 1, 2009 to March 14, 2009 (historical counts begin March 15):

Year	Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
2009	19	-1	321	109
2008	42	0	561	270