



Fish Passage Center

Weekly Report #09 - 17

July 2, 2009

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 37% and 337% of average at individual sub-basins over June. Precipitation above The Dalles has been 120% of average over June. Over the entire water year, precipitation has generally been near average.

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

| Location | Water Year 2009 June 1-29 | | Water Year 2009 October 1, 2008 to June 29, 2009 | |
|-----------------------------------|------------------------------|--------------|--|--------------|
| | Observed (inches) | % Average | Observed (inches) | % Average |
| Columbia Above Coulee | 1.61 | 70 | 18.10 | 89 |
| Snake River Above Ice Harbor | 3.24 | 229 | 17.24 | 115 |
| Columbia Above The Dalles | 2.08 | 120 | 19.41 | 99 |
| Kootenai | 1.51 | 63 | 17.50 | 84 |
| Clark Fork | 1.50 | 80 | 14.33 | 101 |
| Flathead | 1.62 | 63 | 16.42 | 88 |
| Pend Oreille/ Spokane | 1.65 | 78 | 25.18 | 93 |
| Central Washington | 0.32 | 51 | 6.70 | 84 |
| Snake River Plain | 3.12 | 337 | 11.11 | 116 |
| Salmon/Boise/ Payette | 2.53 | 178 | 16.69 | 95 |
| Clearwater | 2.24 | 93 | 28.63 | 107 |
| SW Washington Cascades/Cowlitz | 1.06 | 37 | 58.72 | 90 |
| Willamette Valley | 1.83 | 84 | 47.98 | 86 |

Table 2 displays the June Final and June Mid-month runoff volume forecasts for multiple reservoirs. The most notable differences between the June Final and June Mid-Month forecasts came at Libby Dam and Lower Granite Dam. At Libby, the June Mid-Month forecast decreased 6% relative to the June Final Forecast. At Lower Granite Dam, the June Mid-Month forecast increased 6% relative to the June Final Forecast, it appears most of the increase at Lower Granite was due to an increase in water supply above Brownlee Dam (increased 5%). The Water Supply Forecast at The Dalles between January and July is 92000 Kaf (86% of average).

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

| Location | June Final | | June Mid-Month | |
|---|---------------------------------|---------------------------------------|---------------------------------|---------------------------------------|
| | % Average (1971- 2000) | Probable Runoff Volume (Kaf) | % Average (1971- 2000) | Probable Runoff Volume (Kaf) |
| The Dalles (Jan-July) | 86 | 92000 | 86 | 92000 |
| Grand Coulee (Jan-July) | 85 | 53700 | 83 | 52300 |
| Libby Res. Inflow, MT (Apr-Aug) | 80 | 5000 5062* | 74 | 4610 |
| Hungry Horse Res. Inflow, MT (Jan-July) | 93 | 2060 | 92 | 2050 |
| Lower Granite Res. Inflow (Apr- July) | 102 | 21900 | 108 | 23200 |
| Brownlee Res. Inflow (Apr-July) | 76 | 4780 | 81 | 5100 |
| Dworshak Res. Inflow (Apr-July) | 98 | 2590 2597* | 99 | 2610 |

* Denotes COE Forecast

The Spring Biological Opinion flow period began on April 3rd in the lower Snake River (Lower Granite) and ended on June 20th, 2009. The spring flow objective at Lower Granite this year was 100 Kcfs; average flow at Lower Granite over the spring period was 110.3 Kcfs. The summer flow period began on 6-21-09; the summer flow objective is 52.5 Kcfs in 2009 at Lower Granite. Flows at Lower Granite have averaged 85.8 Kcfs at Lower Granite over the first portion of the summer period.

The spring flow objective period began on April 10th at Priest Rapids and McNary and ended on June 30th, 2009. The flow objectives this spring were 228 Kcfs at McNary and 135 Kcfs at Priest Rapids. Flows at Priest Rapids averaged 140.8 Kcfs over the spring season and flows at McNary averaged 268.1 Kcfs over the spring. The summer flow period began on July 1 at McNary and the objective is 200 Kcfs. On July 1, flows at McNary Dam were 193.4 Kcfs.

Grand Coulee Reservoir is at 1285.4 feet (7-1-09) and held steady over the last week. Outflows at Grand Coulee have ranged between 80.5 and 144.8 Kcfs over the last week. Grand Coulee is slightly lower than expected due to an outage at the Columbia Generating Station that required some draft of Grand Coulee. Grand Coulee is expected to refill several feet over the weekend.

The Libby Reservoir is currently at elevation 2432.3 feet (7-1-09) and has refilled 2.0 feet last week. Outflows at Libby are currently 12 Kcfs.

Hungry Horse is currently at an elevation of 3557.4 ft (7-1-09) and has refilled 2.5 feet last week. Outflows at Hungry Horse have been 2.3 Kcfs last week.

Dworshak is currently at an elevation of 1600 feet (7-1-09) and has refilled 0.3 feet last week. Outflows at Dworshak were increased to 7.4 Kcfs at 0600 on July 2, 2009 for temperature regulation in the Lower Snake river. Dworshak will maintain this discharge over the weekend unless temperatures at the Lower Granite tailrace exceed 19°C on a rolling 12-hr average, if this occurs outflows at Dworshak will be increased to full powerhouse. Outflows at Dworshak will be increased on Monday morning to full powerhouse regardless of Lower Granite temperatures.

The Brownlee Reservoir was at an elevation of 2076.6 feet on July 1st, 2009, refilling 1.3 feet last week. Outflows at Brownlee Dam have been 24.4 to 28.7 Kcfs over the last week.

Spill:

The 2009 planned summer spill program at the lower Snake River Projects began at 0001 hours on June 20, 2009. The following table shows the planned operations for 2009.

| Project | Day/Night Spill |
|------------------|---------------------------------|
| Lower Granite | 18Kcfs/18Kcfs |
| Little Goose | 30%/30% |
| Lower Monumental | 17Kcfs/17Kcfs |
| Ice Harbor | 30%/30% vs 45Kcfs/Gas Cap Study |

All of the lower Snake River hydro projects met the court order over the past week.

The 2009 spring spill program began at the lower Columbia River projects ended on June 30th. The following table shows the planned operations for summer spill levels in 2009.

| Project | Day/Night Spill |
|------------|---|
| McNary | 50%/50%* (beginning June 20) |
| John Day | 30%/30% on pre-test days; 30%/30% vs. 40%/40% on test days |
| The Dalles | 40%/40% |
| Bonneville | 85 Kcfs/gas cap*(beginning June 21) |

McNary Dam spill has met the Court Order over the past week. The COE implemented the summer spill of 50% beginning on June 20th, which will extend through August 31st. At John Day Dam the testing of 30% versus 40% continued. The 40% spill level was not consistently achieved since spill was limited based on the spill cap set to reduce TDG at The Dalles forebay. The Dalles Dam met the court ordered 40% level over the past week. Bonneville Dam spill levels met the summer spill test of 85 Kcfs/Gas cap. This spill will continue until July 21, when the daytime spill level will decrease to 75 Kcfs.

Total Dissolved Gas levels were generally below the waiver standards throughout the Snake and Columbia rivers as flows receded except for The Dalles forebay on the 27th of June and on July 1st. The Camas/Washougal monitor slightly exceeded the 115% on June 29th, June 30th and July 1st. There is no requirement to manage spill to this gage.

Gas bubble trauma (GBT) monitoring occurred at Little Goose and Lower Monumental dams in the Snake River and at McNary and Bonneville dams in the lower Columbia. One fish was observed with minor signs of GBT in the sample at Bonneville Dam this past week.

Smolt Monitoring:

Collection of Spring migrants continued to decline at all SMP sites in the Snake River and Lower Columbia this past week. Subyearling Chinook indices also decreased in the Snake River and at McNary Dam, but increased at John Day and Bonneville dams.

At Lower Granite Dam subyearling Chinook predominated with steelhead numbers continuing to decline rapidly over the past week. Average daily passage index for subyearling Chinook was just over 8,000 per day this week, compared to an average of nearly 23,000 per day the previous week.

At Rock Island dam the daily passage indices for subyearling Chinook continue to predominate the sample. Subyearling Chinook numbers averaged just under 100 per day this week. Coho numbers continue to decrease, with a daily average of 15 fish per day this week.

In the lower Columbia River subyearling Chinook smolt numbers decreased at McNary dam but continued to rise at John Day and Bonneville dams. The daily average subyearling passage at McNary Dam decreased to about 175,500 per day, compared to just over 201,000 per day last week. At John Day Dam, the subyearling average daily index rose from about 25,500 per day last week to over 53,500 per day this week. Bonneville Dam also had an increase in subyearling numbers. Last week's daily average for subyearling Chinook was just over 66,600 per day, where as this week the daily average was about 95,250 per day.

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. Releases of subyearling fall Chinook surrogates to the Clearwater River were scheduled to begin this week. These releases are expected to total just over 117,000 subyearlings and are scheduled to run through mid-July. In addition, approximately 300,000 spring Chinook parr were scheduled for release into the Selway River on or around July 1st. These parr are unmarked and are not expected to out-migrate until spring of 2010. There were no other releases of

salmonid juveniles to this zone for this week. No other releases of juvenile salmonids to this zone are scheduled to begin 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. The volitional release of approximately 6.7 million subyearling fall Chinook from Priest Rapids Hatchery that began on or around June 15th was scheduled to end this week. About 72% of these subyearlings are unmarked. In addition, two releases totaling nearly 750,000 subyearling summer Chinook from Turtle Rock Hatchery into the Mid-Columbia River were scheduled to end this week. There were no other scheduled releases of juvenile salmonids to this zone this week. There are no releases of juvenile salmonids to this zone that are expected to begin 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. Furthermore, there are no releases scheduled for this zone over the next two weeks.

Adult Passage:

The summer Chinook count began June 1st at Bonneville Dam. Daily passage numbers at Bonneville Dam ranged between 635 and 781 adult summer Chinook in the last week. The 2009 summer Chinook count of 61957 is about 1.05 times greater than the 2008 count and 1.19 times greater than the 10 year average. The summer Chinook jack count of 28619 is about 3.10 times greater than the 2008 of 9212 and about 4.66 times greater than the 10 year average. The adult summer Chinook count at The Dalles Dam was 56955, about 91.9% of the Bonneville passage to date. A total of 38581 adult summer Chinook have passed McNary Dam. The 2009 McNary Dam adult summer Chinook count was about 1.12 times greater than the 2008 count and 1.21 times greater than the 10 year average. The 2009 McNary summer Chinook jack count of 13821 was 1.67 times greater than the 2008 count and 3.94 times greater than the 10 year average. The adult summer Chinook count at Lower Granite Dam in the Snake River of 9861 was 65.8% of the 2008 count and 1.38 times greater than the 10 year average. The Lower Granite summer Chinook jack count of 8548 was 2.59 times greater than the 2008 count and 5.97 times greater than the 10 year average.

The Bonneville Dam 2009 steelhead count of 15291 is about 88.1% of the 2008 count and 86.6% of the 10 year average. In the Snake River, this year's Lower Granite steelhead count of 11297 is 1.43 times greater than the 2008 count of 7898 and 1.39 times greater than the 10 year average of 8125. The 2009 wild steelhead count as of July 1st was 3445. At Rock Island Dam, as of June 29th, 138 adult steelhead have been counted and at Rocky Reach Dam, 468 adult steelhead have been counted so far this season. At Willamette Falls Dam, the 2009 count for steelhead was 12619, as of June 19th. This year's steelhead count is only about 80.5% of the 2008 count of 15674 at Willamette Falls Dam for the same date range.

Daily adult sockeye passage numbers at Bonneville Dam ranged between 6630 and 11404 last week. The 2009 adult sockeye count at Bonneville Dam of 148463 is about 76.6% of the 2008 count of 193707 and about 2.28 times greater than the 10 year average of 64918. In the upper Columbia River at Priest Rapids Dam, the 2009 adult sockeye count of 37856 was about 77.4% of the 2008 count and 1.70 times greater than the 10 year average. Two of the major spawning sites for sockeye in the upper Columbia River zone are Lake Wenatchee and Lake Osoyoos (Okanogan basin). In the Snake River at Ice Harbor Dam, the 2009 adult sockeye count of 286 is about 1.96 times greater than the 2008 count of 146 and about 10.21 times greater than the 10 year average count of 28. The Lower Granite Dam 2009 adult sockeye count of 129 was about 2.26 times greater than the 2008 count of 57 and 10.75 times greater than the 10 year average count of 12.

As of July 1st at Bonneville Dam, the adult Shad count was 1346660 which was about 69% of the 2008 count of 1949723 and only about 44.8% of the 10 year average count of 3004264.

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

| Date | Grand Coulee | | Chief Joseph | | Wells | | Rocky Reach | | Rock Island | | Wanapum | | Priest Rapids | |
|------------|--------------|-------|--------------|-------|-------|-------|-------------|-------|-------------|-------|---------|-------|---------------|-------|
| | Flow | Spill | Flow | Spill | Flow | Spill | Flow | Spill | Flow | Spill | Flow | Spill | Flow | Spill |
| 06/18/2009 | 138.2 | 0.1 | 139.6 | 0.0 | 152.3 | 9.5 | 150.2 | 13.0 | 157.3 | 30.7 | 164.5 | 27.9 | 155.1 | 21.7 |
| 06/19/2009 | 131.9 | 0.2 | 137.3 | 0.0 | 148.9 | 10.0 | 149.2 | 12.7 | 156.5 | 29.8 | 164.7 | 24.3 | 167.6 | 20.3 |
| 06/20/2009 | 134.5 | 0.2 | 128.9 | 0.0 | 141.3 | 9.4 | 140.5 | 12.6 | 147.7 | 30.8 | 157.1 | 21.0 | 151.4 | 20.8 |
| 06/21/2009 | 134.9 | 0.2 | 137.7 | 0.0 | 147.1 | 9.3 | 143.4 | 10.3 | 147.4 | 23.9 | 146.5 | 21.5 | 142.1 | 18.9 |
| 06/22/2009 | 155.7 | 0.2 | 160.6 | 0.0 | 169.2 | 14.9 | 161.6 | 34.2 | 164.3 | 30.0 | 169.4 | 29.8 | 158.6 | 28.6 |
| 06/23/2009 | 142.0 | 0.2 | 141.8 | 0.0 | 156.7 | 10.6 | 159.4 | 15.2 | 163.8 | 31.0 | 180.6 | 48.3 | 183.4 | 26.6 |
| 06/24/2009 | 146.8 | 0.3 | 145.8 | 0.0 | 161.2 | 10.0 | 153.7 | 13.6 | 156.1 | 32.0 | 170.4 | 35.7 | 171.2 | 20.3 |
| 06/25/2009 | 144.8 | 0.1 | 143.1 | 0.0 | 153.1 | 10.0 | 146.6 | 14.0 | 148.3 | 31.3 | 150.9 | 17.5 | 142.0 | 21.6 |
| 06/26/2009 | 136.7 | 0.2 | 139.8 | 0.0 | 149.9 | 9.1 | 146.2 | 12.5 | 147.9 | 28.7 | 152.9 | 27.1 | 151.3 | 28.1 |
| 06/27/2009 | 140.2 | 0.2 | 137.8 | 0.0 | 145.5 | 7.5 | 141.4 | 11.2 | 145.7 | 25.7 | 153.5 | 24.1 | 150.6 | 26.5 |
| 06/28/2009 | 144.1 | 0.2 | 140.9 | 0.0 | 147.4 | 8.6 | 144.8 | 10.0 | 148.2 | 22.9 | 147.6 | 19.7 | 143.2 | 21.9 |
| 06/29/2009 | 135.5 | 0.1 | 149.3 | 0.0 | 161.6 | 9.9 | 157.8 | 19.9 | 160.1 | 28.9 | 167.9 | 30.8 | 162.8 | 25.4 |
| 06/30/2009 | 82.5 | 0.2 | 73.6 | 0.0 | 98.1 | 7.6 | 108.4 | 12.5 | 115.2 | 23.3 | 142.0 | 21.6 | 141.3 | 22.4 |
| 07/01/2009 | 80.5 | 0.2 | 84.6 | 0.0 | 77.1 | 6.9 | 73.2 | 8.5 | 78.5 | 22.7 | 83.5 | 17.6 | 90.8 | 19.4 |

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 |
| 06/18/2009 | 7.4 | 0.0 | 24.3 | 24.8 | 101.5 | 20.7 | 96.8 | 29.0 | 100.5 | 23.0 | 101.3 | 30.3 |
| 06/19/2009 | 5.7 | 0.0 | 23.4 | 24.6 | 102.8 | 20.7 | 97.4 | 29.4 | 99.3 | 24.4 | 100.6 | 53.5 |
| 06/20/2009 | 4.3 | 0.0 | 23.2 | 22.7 | 92.8 | 20.7 | 86.4 | 26.0 | 87.7 | 25.8 | 89.3 | 62.0 |
| 06/21/2009 | 4.3 | 0.0 | 23.2 | 19.7 | 88.5 | 18.8 | 83.9 | 25.2 | 85.0 | 17.2 | 86.1 | 36.0 |
| 06/22/2009 | 6.4 | 0.0 | 25.9 | 32.4 | 89.0 | 18.7 | 83.7 | 25.1 | 83.8 | 17.5 | 85.9 | 25.9 |
| 06/23/2009 | 8.6 | 0.0 | 26.4 | 34.5 | 108.2 | 18.8 | 103.7 | 31.0 | 106.8 | 17.0 | 109.8 | 39.7 |
| 06/24/2009 | 8.0 | 0.0 | 27.1 | 31.1 | 97.8 | 18.8 | 94.9 | 28.7 | 94.6 | 17.5 | 94.0 | 28.2 |
| 06/25/2009 | 6.4 | 0.0 | 29.1 | 25.6 | 85.2 | 18.7 | 78.6 | 23.3 | 80.0 | 17.3 | 82.9 | 46.0 |
| 06/26/2009 | 4.3 | 0.0 | 32.2 | 28.0 | 85.2 | 18.8 | 82.5 | 24.8 | 81.8 | 17.5 | 85.0 | 56.7 |
| 06/27/2009 | 5.5 | 0.0 | 30.9 | 27.2 | 80.7 | 18.8 | 76.7 | 23.1 | 77.2 | 17.2 | 79.5 | 54.8 |
| 06/28/2009 | 6.4 | 0.0 | 29.8 | 28.9 | 84.1 | 18.7 | 80.0 | 23.8 | 77.8 | 17.5 | 80.3 | 55.0 |
| 06/29/2009 | 4.3 | 0.0 | 29.5 | 29.0 | 77.8 | 18.8 | 75.3 | 22.4 | 74.7 | 17.2 | 76.2 | 32.4 |
| 06/30/2009 | 4.3 | 0.0 | 27.3 | 29.2 | 75.1 | 18.7 | 70.6 | 21.0 | 71.6 | 17.5 | 74.7 | 22.2 |
| 07/01/2009 | 5.3 | 0.0 | --- | --- | 71.9 | 18.6 | 67.2 | 20.1 | 67.8 | 17.2 | 69.7 | 44.8 |

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 |
| 06/18/2009 | 256.5 | 102.7 | 246.6 | 70.3 | 241.6 | 96.5 | 248.9 | 99.6 | 43.7 | 93.5 |
| 06/19/2009 | 271.8 | 109.1 | 268.2 | 77.2 | 261.8 | 104.7 | 276.8 | 99.8 | 69.4 | 95.5 |
| 06/20/2009 | 275.8 | 137.9 | 254.9 | 74.7 | 250.6 | 100.2 | 277.0 | 99.8 | 70.7 | 94.4 |
| 06/21/2009 | 251.4 | 125.7 | 250.7 | 75.4 | 242.3 | 97.1 | 247.9 | 91.2 | 55.3 | 89.3 |
| 06/22/2009 | 239.0 | 119.5 | 225.3 | 67.6 | 221.7 | 88.5 | 233.3 | 94.8 | 40.5 | 85.9 |
| 06/23/2009 | 290.0 | 145.1 | 282.4 | 82.0 | 269.8 | 107.8 | 272.1 | 99.3 | 63.1 | 97.6 |
| 06/24/2009 | 284.0 | 142.2 | 276.4 | 82.0 | 273.1 | 109.2 | 282.5 | 98.8 | 67.1 | 104.5 |
| 06/25/2009 | 253.7 | 127.0 | 247.3 | 82.2 | 242.8 | 96.8 | 261.1 | 97.6 | 55.0 | 96.4 |
| 06/26/2009 | 229.6 | 114.8 | 218.9 | 85.9 | 213.2 | 85.2 | 232.7 | 97.8 | 38.3 | 84.4 |
| 06/27/2009 | 255.7 | 127.9 | 242.5 | 89.4 | 236.2 | 95.5 | 243.6 | 100.2 | 41.9 | 89.4 |
| 06/28/2009 | 243.5 | 121.6 | 237.1 | 76.7 | 232.0 | 92.3 | 253.2 | 99.8 | 53.7 | 87.5 |
| 06/29/2009 | 224.2 | 112.5 | 222.8 | 66.8 | 213.2 | 85.5 | 221.0 | 99.3 | 28.9 | 80.7 |
| 06/30/2009 | 245.1 | 123.1 | 219.8 | 77.6 | 210.4 | 84.2 | 215.9 | 99.5 | 28.9 | 75.9 |
| 07/01/2009 | 193.4 | 96.9 | 195.3 | 77.8 | 193.4 | 77.4 | 215.1 | 96.3 | 26.3 | 80.3 |

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

| Site | Date | Species | Number of Fish | Number w GBT signs | Number w Fin Signs | % Fin GBT | % Severe Fin GBT | Number of Fish with Fin GBT Listed by Highest Rank | | | |
|-----------------------------|----------|---------------------|----------------|--------------------|--------------------|-----------|------------------|--|--------|--------|--------|
| | | | | | | | | Rank 1 | Rank 2 | Rank 3 | Rank 4 |
| Little Goose Dam | | | | | | | | | | | |
| | 06/22/09 | Chinook + Steelhead | 78 | 0 | 0 | 0.00% | 0.00% | 0 | 0 | 0 | 0 |
| | 06/29/09 | Chinook + Steelhead | 31 | 0 | 0 | 0.00% | 0.00% | 0 | 0 | 0 | 0 |
| Lower Monumental Dam | | | | | | | | | | | |
| | 06/23/09 | Chinook + Steelhead | 100 | 0 | 0 | 0.00% | 0.00% | 0 | 0 | 0 | 0 |
| | 06/30/09 | Chinook + Steelhead | 51 | 0 | 0 | 0.00% | 0.00% | 0 | 0 | 0 | 0 |
| McNary Dam | | | | | | | | | | | |
| | 06/23/09 | Chinook + Steelhead | 101 | 0 | 0 | 0.00% | 0.00% | 0 | 0 | 0 | 0 |
| | 06/29/09 | Chinook + Steelhead | 101 | 0 | 0 | 0.00% | 0.00% | 0 | 0 | 0 | 0 |
| Bonneville Dam | | | | | | | | | | | |
| | 06/23/09 | Chinook + Steelhead | 100 | 0 | 0 | 0.00% | 0.00% | 0 | 0 | 0 | 0 |
| | 06/27/09 | Chinook + Steelhead | 100 | 1 | 1 | 1.00% | 0.00% | 1 | 0 | 0 | 0 |
| | 06/30/09 | Chinook + Steelhead | 100 | 0 | 0 | 0.00% | 0.00% | 0 | 0 | 0 | 0 |

Hatchery Releases Last Two Weeks

| Hatchery Release Summary | | | | | | | | | |
|---|---------------------------|---------|------|-------|-------------------|----------|----------|--|-----------------------|
| From: | 6/18/2009 | | to | | 07/01/09 | | | | |
| Agency | Hatchery | Species | Race | MigYr | NumRel | RelStart | RelEnd | RelSite | RelRiver |
| National Marine Fisheries Service National Marine Fisheries Service Total | Lyons Ferry Hatchery | CH0 | FA | 2009 | 117,362 | 06-29-09 | 07-20-09 | Big Canyon (Clearwater River) | Clearwater River M F |
| Nez Perce Tribe | Clearwater Hatchery | CH0 | SP | 2010 | 300,000 | 07-01-09 | 07-15-09 | Selway River | Clearwater River M F |
| Nez Perce Tribe Nez Perce Tribe Total | Nez Perce Tribal Hatchery | CH0 | SP | 2010 | 305,000 | 06-22-09 | 06-26-09 | Meadow Creek - CLES | S Fk Clearwater River |
| Washington Dept. of Fish and Wildlife | Priest Rapids Hatchery | CH0 | FA | 2009 | 6,700,000 | 06-15-09 | 06-30-09 | Priest Rapids Hatchery Ringold Springs | Mid-Columbia River |
| Washington Dept. of Fish and Wildlife | Ringold Springs Hatchery | CH0 | FA | 2009 | 3,450,000 | 06-08-09 | 06-23-09 | Hatchery | Mid-Columbia River |
| Washington Dept. of Fish and Wildlife | Turtle Rock Hatchery | CH0 | SU | 2009 | 325,000 | 06-15-09 | 06-30-09 | Turtle Rock Hatchery | Mid-Columbia River |
| Washington Dept. of Fish and Wildlife Washington Dept. of Fish and Wildlife Total | Turtle Rock Hatchery | CH0 | SU | 2009 | 418,000 | 06-15-09 | 06-30-09 | Turtle Rock Hatchery | Mid-Columbia River |
| Wildlife Total | | | | | 10,893,000 | | | | |
| Grand Total | | | | | 11,615,362 | | | | |

Hatchery Releases Next Two Weeks

| Hatchery Release Summary | | | | | | | | | |
|---|----------------------|---------|------|-------|----------------|----------|----------|-------------------------------|----------------------|
| From: | 7/2/2009 | | to | | 7/15/2009 | | | | |
| Agency | Hatchery | Species | Race | MigYr | NumRel | RelStart | RelEnd | RelSite | RelRiver |
| National Marine Fisheries Service National Marine Fisheries Service Total | Lyons Ferry Hatchery | CH0 | FA | 2009 | 117,362 | 06-29-09 | 07-20-09 | Big Canyon (Clearwater River) | Clearwater River M F |
| Nez Perce Tribe Nez Perce Tribe Total | Clearwater Hatchery | CH0 | SP | 2010 | 300,000 | 07-01-09 | 07-15-09 | Selway River | Clearwater River M F |
| Grand Total | | | | | 417,362 | | | | |

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

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>High</u> | | <u>24 h</u> | <u>12 h</u> | <u>High</u> | | <u>24 h</u> | <u>12 h</u> | <u>High</u> | | <u>24 h</u> | <u>12 h</u> | <u>High</u> | | <u>24 h</u> | <u>12 h</u> | <u>High</u> | |
| | Avg | Avg | High | | Avg | Avg | High | | Avg | Avg | High | | Avg | Avg | High | | Avg | Avg | High | |
| 6/18 | 105.5 | 105.9 | 106.3 | 24 | --- | --- | --- | 0 | 117.2 | 117.6 | 117.9 | 24 | 111.4 | 112.6 | 114.2 | 22 | 112.8 | 113.3 | 113.6 | 24 |
| 6/19 | 105.8 | 105.9 | 106.2 | 24 | 120.3 | 120.3 | 121.9 | 12 | 117.7 | 117.9 | 118.2 | 24 | 112.3 | 113.0 | 113.9 | 22 | 113.2 | 113.5 | 113.9 | 24 |
| 6/20 | 105.9 | 106.4 | 106.8 | 24 | 122.1 | 123.1 | 124.3 | 24 | 117.8 | 118.4 | 118.6 | 24 | 112.2 | 113.8 | 114.6 | 24 | 113.4 | 113.7 | 114.1 | 24 |
| 6/21 | 105.9 | 106.0 | 106.5 | 24 | 121.1 | 122.2 | 122.8 | 24 | 118.3 | 118.4 | 118.9 | 24 | 111.7 | 113.0 | 113.7 | 24 | 112.8 | 113.1 | 113.4 | 24 |
| 6/22 | 105.0 | 105.3 | 105.8 | 24 | 121.0 | 121.4 | 121.7 | 21 | 117.4 | 117.7 | 118.0 | 24 | 111.0 | 112.2 | 114.1 | 21 | 112.2 | 112.4 | 112.6 | 24 |
| 6/23 | 104.8 | 105.1 | 105.4 | 24 | 120.1 | 120.9 | 122.0 | 22 | 117.6 | 118.0 | 118.4 | 24 | 111.8 | 113.1 | 114.2 | 22 | 112.3 | 112.5 | 112.9 | 24 |
| 6/24 | 105.1 | 105.6 | 105.8 | 24 | 118.5 | 120.7 | 122.0 | 22 | 118.6 | 119.0 | 119.2 | 24 | 112.2 | 113.4 | 114.3 | 22 | 113.4 | 113.7 | 113.9 | 24 |
| 6/25 | 105.4 | 105.8 | 106.3 | 24 | 116.4 | 117.9 | 120.6 | 22 | 118.2 | 118.3 | 118.5 | 23 | 112.4 | 113.8 | 115.1 | 22 | 113.0 | 113.3 | 113.7 | 24 |
| 6/26 | 104.9 | 105.2 | 105.5 | 24 | 115.5 | 116.8 | 119.9 | 19 | 117.8 | 118.0 | 118.0 | 24 | 111.4 | 112.4 | 113.3 | 19 | 112.2 | 112.4 | 112.6 | 24 |
| 6/27 | 104.4 | 104.7 | 105.0 | 24 | 115.5 | 117.4 | 118.7 | 22 | 117.3 | 117.6 | 117.9 | 24 | 111.3 | 112.8 | 114.3 | 22 | 112.8 | 113.4 | 113.9 | 24 |
| 6/28 | 104.8 | 105.1 | 105.5 | 24 | 113.3 | 113.6 | 114.1 | 21 | 117.5 | 117.9 | 118.2 | 24 | 113.1 | 114.3 | 115.6 | 21 | 114.2 | 114.6 | 114.9 | 24 |
| 6/29 | 105.0 | 105.4 | 105.7 | 24 | 113.1 | 113.6 | 114.3 | 23 | 117.6 | 117.7 | 118.1 | 24 | 112.5 | 113.5 | 116.0 | 23 | 114.3 | 114.4 | 114.6 | 24 |
| 6/30 | 105.3 | 105.7 | 106.2 | 24 | 111.7 | 112.4 | 112.9 | 21 | 116.8 | 116.9 | 117.3 | 24 | 112.8 | 113.6 | 115.0 | 21 | 114.2 | 114.5 | 114.7 | 24 |
| 7/1 | 104.9 | 105.4 | 105.7 | 24 | 111.2 | 111.9 | 112.2 | 21 | 115.7 | 116.2 | 116.5 | 24 | 111.5 | 112.3 | 113.1 | 21 | 113.6 | 114.1 | 114.7 | 24 |

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>High</u> | | <u>24 h</u> | <u>12 h</u> | <u>High</u> | | <u>24 h</u> | <u>12 h</u> | <u>High</u> | | <u>24 h</u> | <u>12 h</u> | <u>High</u> | | <u>24 h</u> | <u>12 h</u> | <u>High</u> | |
| | Avg | Avg | High | | Avg | Avg | High | | Avg | Avg | High | | Avg | Avg | High | | Avg | Avg | High | |
| 6/18 | 112.2 | 112.7 | 113.0 | 24 | 111.7 | 112.5 | 112.7 | 24 | 113.4 | 114.4 | 114.8 | 24 | 111.6 | 112.1 | 112.5 | 24 | 112.5 | 113.2 | 113.9 | 24 |
| 6/19 | 112.6 | 112.9 | 113.1 | 24 | 112.4 | 112.6 | 112.7 | 24 | 114.0 | 114.3 | 114.7 | 24 | 112.3 | 112.5 | 112.7 | 24 | 112.2 | 112.7 | 113.6 | 24 |
| 6/20 | 112.8 | 113.1 | 113.4 | 24 | 112.9 | 113.5 | 114.0 | 24 | 114.3 | 115.0 | 115.7 | 24 | 112.3 | 112.6 | 112.8 | 24 | 112.1 | 113.1 | 113.9 | 24 |
| 6/21 | 112.2 | 113.0 | 113.7 | 24 | 111.9 | 112.6 | 113.3 | 24 | 113.6 | 114.2 | 115.0 | 24 | 111.8 | 111.9 | 112.2 | 24 | 112.3 | 113.1 | 113.7 | 24 |
| 6/22 | 111.3 | 111.7 | 112.1 | 24 | 110.8 | 111.0 | 111.4 | 24 | 113.2 | 113.8 | 114.8 | 24 | 110.7 | 111.0 | 111.5 | 24 | 112.4 | 114.3 | 117.1 | 24 |
| 6/23 | 111.3 | 111.5 | 112.1 | 24 | 111.4 | 111.9 | 112.4 | 24 | 113.5 | 114.1 | 114.6 | 24 | 111.1 | 111.9 | 112.2 | 24 | 113.2 | 114.0 | 115.7 | 24 |
| 6/24 | 112.8 | 113.0 | 113.1 | 24 | 112.9 | 113.1 | 113.6 | 23 | 114.6 | 115.1 | 115.8 | 23 | 113.2 | 114.0 | 114.5 | 24 | 114.1 | 114.7 | 115.5 | 24 |
| 6/25 | 111.8 | 112.1 | 112.5 | 24 | 111.6 | 112.0 | 112.9 | 24 | 113.2 | 113.7 | 114.3 | 24 | 112.1 | 112.4 | 112.9 | 24 | 113.3 | 114.1 | 114.7 | 24 |
| 6/26 | 111.1 | 111.4 | 112.0 | 24 | 111.9 | 112.2 | 112.6 | 23 | 113.2 | 113.8 | 114.7 | 23 | 110.7 | 111.0 | 111.2 | 24 | 112.3 | 113.1 | 113.5 | 24 |
| 6/27 | 112.2 | 112.6 | 113.8 | 24 | 111.8 | 112.1 | 112.5 | 24 | 113.2 | 113.9 | 114.5 | 24 | 111.3 | 112.2 | 112.7 | 24 | 112.1 | 113.3 | 113.8 | 24 |
| 6/28 | 113.4 | 113.8 | 114.3 | 24 | 112.5 | 112.5 | 113.2 | 12 | 113.5 | 113.5 | 114.8 | 12 | 112.1 | 112.6 | 113.0 | 24 | 112.8 | 113.6 | 114.2 | 24 |
| 6/29 | 113.3 | 113.4 | 113.6 | 24 | 114.2 | 114.2 | 114.6 | 9 | 115.7 | 115.7 | 116.5 | 9 | 112.2 | 112.9 | 113.3 | 24 | 113.1 | 113.8 | 116.4 | 24 |
| 6/30 | 113.4 | 114.1 | 114.6 | 24 | 114.4 | 115.1 | 116.0 | 24 | 115.5 | 116.4 | 116.9 | 24 | 113.3 | 114.0 | 114.5 | 24 | 112.3 | 113.2 | 115.5 | 24 |
| 7/1 | 113.1 | 113.8 | 114.1 | 24 | 113.6 | 114.7 | 115.2 | 23 | 114.4 | 115.4 | 116.1 | 23 | 114.6 | 115.3 | 116.0 | 24 | 110.8 | 112.0 | 113.1 | 24 |

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>High</u> | | <u>24 h</u> | <u>12 h</u> | <u>High</u> | | <u>24 h</u> | <u>12 h</u> | <u>High</u> | | <u>24 h</u> | <u>12 h</u> | <u>High</u> | | <u>24 h</u> | <u>12 h</u> | <u>High</u> | |
| | Avg | Avg | High | | Avg | Avg | High | | Avg | Avg | High | | Avg | Avg | High | | Avg | Avg | High | |
| 6/18 | 111.2 | 112.1 | 112.6 | 24 | 115.6 | 116.9 | 117.8 | 24 | 111.3 | 112.2 | 112.5 | 24 | 113.0 | 113.6 | 114.1 | 24 | 110.8 | 112.2 | 113.2 | 24 |
| 6/19 | 112.0 | 112.2 | 112.6 | 24 | 115.9 | 116.6 | 117.3 | 24 | 111.9 | 112.1 | 112.7 | 24 | 113.5 | 113.6 | 114.1 | 24 | 112.4 | 112.8 | 113.7 | 24 |
| 6/20 | 111.9 | 112.4 | 113.1 | 24 | 116.3 | 116.7 | 117.4 | 24 | 111.4 | 111.9 | 112.9 | 24 | 112.9 | 113.2 | 113.9 | 24 | 111.3 | 111.9 | 112.9 | 24 |
| 6/21 | 110.7 | 111.1 | 111.5 | 24 | 114.2 | 114.8 | 116.0 | 24 | 110.0 | 110.4 | 111.1 | 24 | 112.5 | 112.9 | 113.6 | 24 | 109.6 | 109.9 | 110.9 | 24 |
| 6/22 | 110.4 | 110.8 | 112.5 | 24 | 114.5 | 114.8 | 115.4 | 24 | 109.0 | 109.3 | 109.9 | 24 | 111.5 | 111.7 | 112.3 | 24 | 108.7 | 109.6 | 110.1 | 24 |
| 6/23 | 113.0 | 113.9 | 115.3 | 24 | 116.2 | 116.8 | 117.6 | 24 | 110.6 | 112.4 | 112.7 | 24 | 112.4 | 113.0 | 113.7 | 24 | 111.1 | 112.3 | 113.3 | 24 |
| 6/24 | 113.1 | 114.1 | 114.6 | 24 | 116.2 | 117.3 | 117.8 | 24 | 113.8 | 114.7 | 115.2 | 24 | 114.3 | 114.8 | 115.1 | 24 | 112.5 | 112.9 | 113.2 | 24 |
| 6/25 | 112.0 | 112.4 | 113.3 | 24 | 115.6 | 116.0 | 116.9 | 24 | 112.9 | 113.3 | 114.4 | 24 | 113.4 | 113.8 | 114.8 | 24 | 111.7 | 111.9 | 112.4 | 24 |
| 6/26 | 110.8 | 111.0 | 111.6 | 24 | 115.0 | 115.3 | 116.2 | 24 | 111.2 | 111.6 | 113.2 | 24 | 112.4 | 112.9 | 114.4 | 24 | 111.0 | 111.3 | 111.6 | 24 |
| 6/27 | 110.7 | 111.5 | 112.1 | 24 | 114.3 | 115.3 | 115.9 | 24 | 112.1 | 113.3 | 114.1 | 24 | 112.7 | 113.3 | 113.7 | 24 | 110.6 | 111.3 | 111.9 | 24 |
| 6/28 | 111.7 | 112.2 | 112.7 | 24 | 114.9 | 115.4 | 115.9 | 24 | 112.3 | 112.8 | 113.3 | 24 | 113.5 | 113.8 | 114.6 | 24 | 111.6 | 112.0 | 112.5 | 24 |
| 6/29 | 110.8 | 112.5 | 113.2 | 24 | 115.0 | 116.4 | 117.0 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 6/30 | 111.3 | 113.9 | 115.8 | 24 | 114.8 | 117.1 | 118.5 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 7/1 | 112.7 | 113.5 | 114.2 | 24 | 116.4 | 116.8 | 117.4 | 24 | --- | --- | --- | 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>Clwrtr-Peck</u> | | | <u>Anatone</u> | | | # | | | | |
|------|-----------------------|-------------|-------------|--------------|-------------|-------------|-----------------|-----------|-------------|--------------------|-------------|-----------|----------------|-------------|-------------|----|-----------|------------|------------|-----------|
| | <u>24 h</u> | <u>12 h</u> | <u>High</u> | # | <u>24 h</u> | <u>12 h</u> | <u>High</u> | # | <u>24 h</u> | <u>12 h</u> | <u>High</u> | # | <u>24 h</u> | <u>12 h</u> | <u>High</u> | | # | | | |
| | <u>Avg</u> | <u>Avg</u> | | <u>hr</u> | <u>Avg</u> | <u>Avg</u> | | <u>hr</u> | <u>Avg</u> | <u>Avg</u> | | <u>hr</u> | <u>Avg</u> | <u>Avg</u> | | | <u>hr</u> | <u>Avg</u> | <u>Avg</u> | <u>hr</u> |
| 6/18 | 112.2 | 113.2 | 113.9 | 24 | 108.6 | 109.7 | 110.5 | 24 | 101.7 | 102.0 | 102.2 | 23 | 102.1 | 103.1 | 103.7 | 24 | 105.0 | 106.0 | 106.6 | 24 |
| 6/19 | 113.7 | 113.9 | 114.3 | 24 | 109.2 | 109.9 | 110.7 | 24 | 101.9 | 102.1 | 102.6 | 24 | 101.5 | 101.8 | 102.5 | 24 | 104.5 | 104.8 | 104.9 | 24 |
| 6/20 | 112.7 | 113.0 | 113.3 | 24 | 108.8 | 109.4 | 109.9 | 24 | 102.2 | 102.6 | 103.0 | 24 | 101.8 | 102.5 | 103.1 | 24 | 104.5 | 105.0 | 105.7 | 24 |
| 6/21 | 111.0 | 111.4 | 112.4 | 24 | 106.5 | 106.9 | 107.8 | 24 | 101.6 | 101.8 | 102.0 | 24 | 100.9 | 101.1 | 101.7 | 24 | 103.6 | 103.7 | 103.9 | 24 |
| 6/22 | 111.1 | 112.1 | 113.9 | 24 | 104.3 | 105.2 | 105.8 | 24 | 101.1 | 101.4 | 102.3 | 24 | 100.8 | 101.3 | 101.6 | 24 | 104.1 | 104.9 | 105.5 | 24 |
| 6/23 | 113.2 | 113.5 | 113.9 | 24 | 107.0 | 108.8 | 110.0 | 24 | 101.1 | 101.5 | 101.7 | 24 | 101.7 | 102.7 | 103.2 | 24 | 105.8 | 106.8 | 107.4 | 24 |
| 6/24 | 114.3 | 114.6 | 115.1 | 24 | 109.7 | 110.5 | 111.1 | 24 | 101.9 | 102.4 | 102.6 | 24 | 102.7 | 103.4 | 104.0 | 24 | 105.9 | 106.7 | 107.4 | 24 |
| 6/25 | 113.4 | 113.7 | 114.0 | 24 | 108.9 | 110.1 | 110.9 | 24 | 101.5 | 101.8 | 102.0 | 24 | 101.8 | 102.5 | 103.1 | 24 | 104.2 | 104.8 | 105.3 | 24 |
| 6/26 | 112.8 | 113.2 | 114.1 | 24 | 109.7 | 110.5 | 111.0 | 24 | 101.3 | 101.8 | 102.2 | 24 | 101.6 | 102.4 | 103.1 | 24 | 103.8 | 104.5 | 105.0 | 24 |
| 6/27 | 112.9 | 113.7 | 114.2 | 24 | 109.9 | 110.9 | 111.5 | 24 | 104.0 | 106.4 | 107.2 | 24 | 102.6 | 104.1 | 104.8 | 22 | 104.1 | 105.0 | 105.6 | 24 |
| 6/28 | 113.3 | 113.7 | 113.9 | 24 | 110.7 | 111.4 | 111.8 | 24 | 106.5 | 107.0 | 107.4 | 24 | 103.5 | 104.4 | 105.2 | 24 | 104.1 | 104.8 | 105.4 | 24 |
| 6/29 | --- | --- | --- | 0 | 110.5 | 111.6 | 112.2 | 24 | 102.4 | 103.1 | 105.6 | 24 | 102.3 | 103.3 | 104.1 | 24 | 103.8 | 104.4 | 105.0 | 24 |
| 6/30 | --- | --- | --- | 0 | 110.5 | 111.4 | 111.9 | 24 | 101.9 | 102.5 | 102.9 | 23 | 102.0 | 103.0 | 103.8 | 24 | 103.3 | 103.9 | 104.5 | 24 |
| 7/1 | --- | --- | --- | 0 | 110.0 | 110.7 | 111.2 | 24 | 102.0 | 102.5 | 102.9 | 24 | 102.1 | 103.2 | 104.0 | 24 | 103.1 | 103.9 | 104.5 | 24 |

Total Dissolved Gas Saturation Data at Snake River Sites

| Date | <u>Clwrtr-Lewiston</u> | | | <u>Lower Granite</u> | | | <u>L. Granite Tlwr</u> | | | <u>Little Goose</u> | | | <u>L. Goose Tlwr</u> | | | # | | | | |
|------|------------------------|-------------|-------------|----------------------|-------------|-------------|------------------------|-----------|-------------|---------------------|-------------|-----------|----------------------|-------------|-------------|----|-----------|------------|------------|-----------|
| | <u>24 h</u> | <u>12 h</u> | <u>High</u> | # | <u>24 h</u> | <u>12 h</u> | <u>High</u> | # | <u>24 h</u> | <u>12 h</u> | <u>High</u> | # | <u>24 h</u> | <u>12 h</u> | <u>High</u> | | # | | | |
| | <u>Avg</u> | <u>Avg</u> | | <u>hr</u> | <u>Avg</u> | <u>Avg</u> | | <u>hr</u> | <u>Avg</u> | <u>Avg</u> | | <u>hr</u> | <u>Avg</u> | <u>Avg</u> | | | <u>hr</u> | <u>Avg</u> | <u>Avg</u> | <u>hr</u> |
| 6/18 | 102.2 | 103.3 | 104.3 | 22 | 104.5 | 104.7 | 104.8 | 24 | 109.9 | 110.1 | 110.5 | 24 | 107.6 | 108.0 | 108.4 | 24 | 113.3 | 113.7 | 114.0 | 24 |
| 6/19 | 101.2 | 101.6 | 102.2 | 24 | 104.4 | 104.6 | 104.8 | 24 | 109.8 | 109.9 | 110.3 | 24 | 107.2 | 107.3 | 107.9 | 24 | 113.3 | 113.6 | 113.8 | 24 |
| 6/20 | 101.7 | 102.6 | 103.3 | 22 | 104.2 | 104.5 | 104.7 | 24 | 109.7 | 110.0 | 110.1 | 24 | 107.4 | 108.0 | 108.5 | 24 | 113.0 | 113.3 | 113.5 | 24 |
| 6/21 | 100.5 | 100.8 | 101.1 | 20 | 103.3 | 103.7 | 104.3 | 24 | 108.8 | 108.9 | 109.1 | 24 | 106.4 | 106.7 | 107.6 | 24 | 112.3 | 112.7 | 112.8 | 24 |
| 6/22 | 100.7 | 101.7 | 102.5 | 23 | 101.9 | 102.1 | 102.5 | 24 | 108.5 | 108.7 | 109.2 | 24 | 105.0 | 105.2 | 105.4 | 24 | 111.5 | 112.0 | 112.7 | 24 |
| 6/23 | 101.9 | 103.4 | 104.4 | 23 | 102.1 | 102.5 | 102.9 | 24 | 108.0 | 108.2 | 108.6 | 24 | 105.3 | 105.7 | 106.3 | 24 | 113.6 | 114.4 | 114.8 | 24 |
| 6/24 | 102.8 | 104.5 | 105.7 | 24 | 104.0 | 104.5 | 104.8 | 24 | 108.9 | 109.2 | 109.5 | 24 | 106.6 | 107.4 | 108.4 | 24 | 113.5 | 114.1 | 114.3 | 24 |
| 6/25 | 102.3 | 103.5 | 104.6 | 24 | 104.5 | 104.8 | 104.9 | 24 | 108.7 | 108.8 | 109.1 | 24 | 106.2 | 106.6 | 107.1 | 24 | 112.2 | 112.6 | 113.1 | 24 |
| 6/26 | 102.1 | 103.3 | 104.2 | 22 | 104.1 | 104.3 | 104.7 | 24 | 108.8 | 109.1 | 109.4 | 24 | 105.8 | 106.1 | 106.3 | 24 | 112.4 | 113.1 | 113.5 | 24 |
| 6/27 | 102.3 | 104.0 | 105.0 | 23 | 103.1 | 103.3 | 103.5 | 24 | 108.4 | 108.7 | 109.0 | 24 | 105.9 | 106.4 | 107.2 | 24 | 112.2 | 112.9 | 113.1 | 24 |
| 6/28 | 103.3 | 105.0 | 106.1 | 24 | 103.2 | 103.4 | 103.6 | 24 | 108.6 | 108.8 | 109.1 | 24 | 107.4 | 107.6 | 108.4 | 24 | 113.0 | 113.1 | 113.2 | 24 |
| 6/29 | 103.0 | 104.5 | 105.5 | 24 | 103.5 | 103.9 | 104.2 | 24 | 108.6 | 108.8 | 109.1 | 24 | 108.8 | 109.1 | 109.7 | 24 | 114.0 | 114.5 | 114.8 | 24 |
| 6/30 | 102.5 | 104.0 | 105.2 | 23 | 103.6 | 103.8 | 104.0 | 24 | 108.4 | 108.6 | 109.1 | 24 | 109.3 | 109.5 | 109.7 | 24 | 113.6 | 114.2 | 114.4 | 24 |
| 7/1 | 102.5 | 104.2 | 105.3 | 23 | 103.4 | 103.8 | 104.1 | 24 | 108.6 | 108.9 | 109.2 | 24 | 109.1 | 109.4 | 109.9 | 24 | 114.4 | 114.6 | 114.9 | 24 |

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

| Date | <u>Lower Mon.</u> | | | <u>L. Mon. Tlwr</u> | | | <u>Ice Harbor</u> | | | <u>Ice Harbor Tlwr</u> | | | <u>McNary-Oregon</u> | | | # | | | | |
|------|-------------------|-------------|-------------|---------------------|-------------|-------------|-------------------|-----------|-------------|------------------------|-------------|-----------|----------------------|-------------|-------------|----|-----------|------------|------------|-----------|
| | <u>24 h</u> | <u>12 h</u> | <u>High</u> | # | <u>24 h</u> | <u>12 h</u> | <u>High</u> | # | <u>24 h</u> | <u>12 h</u> | <u>High</u> | # | <u>24 h</u> | <u>12 h</u> | <u>High</u> | | # | | | |
| | <u>Avg</u> | <u>Avg</u> | | <u>hr</u> | <u>Avg</u> | <u>Avg</u> | | <u>hr</u> | <u>Avg</u> | <u>Avg</u> | | <u>hr</u> | <u>Avg</u> | <u>Avg</u> | | | <u>hr</u> | <u>Avg</u> | <u>Avg</u> | <u>hr</u> |
| 6/18 | 112.4 | 112.6 | 112.9 | 24 | 115.5 | 116.1 | 117.3 | 24 | 113.9 | 114.2 | 114.5 | 24 | 116.8 | 117.1 | 117.4 | 24 | --- | --- | --- | 0 |
| 6/19 | 112.6 | 112.8 | 113.1 | 24 | 116.6 | 118.6 | 118.9 | 24 | 113.8 | 114.0 | 114.2 | 24 | 117.6 | 118.1 | 118.9 | 24 | --- | --- | --- | 0 |
| 6/20 | 112.1 | 112.3 | 112.6 | 24 | 118.4 | 118.6 | 118.8 | 24 | 113.0 | 113.2 | 113.5 | 24 | 118.6 | 118.9 | 119.3 | 24 | --- | --- | --- | 0 |
| 6/21 | 111.6 | 111.9 | 112.3 | 24 | 114.4 | 114.9 | 116.7 | 24 | 112.2 | 112.5 | 113.2 | 24 | 117.4 | 117.7 | 118.1 | 24 | --- | --- | --- | 0 |
| 6/22 | 110.0 | 110.2 | 110.6 | 24 | 114.1 | 114.5 | 115.1 | 24 | 110.9 | 111.1 | 111.8 | 24 | 117.0 | 117.4 | 117.8 | 24 | --- | --- | --- | 0 |
| 6/23 | 110.3 | 110.9 | 111.2 | 24 | 115.3 | 116.3 | 117.1 | 24 | 111.0 | 111.7 | 112.6 | 24 | 119.1 | 119.9 | 120.4 | 24 | --- | --- | --- | 0 |
| 6/24 | 112.8 | 113.7 | 114.1 | 24 | 115.1 | 116.4 | 117.5 | 24 | 113.0 | 113.4 | 113.6 | 24 | 121.5 | 122.1 | 122.3 | 24 | --- | --- | --- | 0 |
| 6/25 | 112.6 | 112.9 | 113.6 | 24 | 115.1 | 115.8 | 117.0 | 24 | 112.2 | 112.5 | 113.4 | 24 | 118.1 | 120.4 | 121.9 | 24 | --- | --- | --- | 0 |
| 6/26 | 111.8 | 112.1 | 112.3 | 24 | 116.5 | 116.9 | 117.2 | 24 | 112.0 | 112.2 | 112.7 | 24 | 116.2 | 116.5 | 116.8 | 24 | --- | --- | --- | 0 |
| 6/27 | 111.5 | 111.8 | 112.2 | 24 | 115.6 | 116.1 | 116.5 | 24 | 112.6 | 113.0 | 113.7 | 24 | 116.1 | 116.3 | 116.4 | 24 | --- | --- | --- | 0 |
| 6/28 | 112.5 | 112.8 | 113.0 | 24 | 115.4 | 116.2 | 117.0 | 24 | 113.6 | 114.0 | 114.3 | 24 | 115.9 | 116.1 | 116.6 | 24 | --- | --- | --- | 0 |
| 6/29 | 113.2 | 113.5 | 113.8 | 24 | 114.8 | 115.2 | 116.2 | 24 | 114.2 | 114.4 | 114.9 | 24 | 115.6 | 115.9 | 116.5 | 24 | --- | --- | --- | 0 |
| 6/30 | 113.2 | 113.3 | 113.5 | 24 | 115.3 | 115.9 | 116.6 | 24 | 114.3 | 114.4 | 114.4 | 24 | 115.5 | 116.0 | 116.4 | 24 | --- | --- | --- | 0 |
| 7/1 | 113.4 | 113.6 | 113.8 | 24 | 115.2 | 116.1 | 116.7 | 24 | 114.1 | 114.2 | 114.3 | 24 | 115.5 | 116.2 | 116.3 | 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 | <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>24 h</u> | <u>12 h</u> | # | <u>24h</u> | <u>12h</u> | # | <u>24h</u> | <u>12h</u> | # | <u>24h</u> | <u>12h</u> | # | | | | | |
| | Avg | Avg | | High | Avg | | Avg | High | | Avg | Avg | | High | Avg | | AVG | High | | | |
| 6/18 | 111.7 | 112.2 | 113.1 | 24 | 114.8 | 115.2 | 115.5 | 24 | 107.3 | 107.5 | 107.8 | 24 | 118.5 | 120.0 | 120.5 | 24 | 109.3 | 109.7 | 110.9 | 24 |
| 6/19 | 110.8 | 111.6 | 112.9 | 24 | 115.0 | 115.1 | 115.2 | 24 | 106.9 | 107.1 | 107.2 | 24 | 119.3 | 119.8 | 120.1 | 24 | 109.7 | 110.1 | 110.9 | 24 |
| 6/20 | 108.4 | 108.7 | 109.3 | 24 | 117.0 | 117.3 | 117.9 | 24 | 106.5 | 106.7 | 107.0 | 24 | 118.6 | 119.4 | 119.6 | 24 | 108.7 | 109.0 | 109.3 | 24 |
| 6/21 | 108.0 | 108.2 | 108.8 | 24 | 116.2 | 116.6 | 117.0 | 24 | 105.2 | 105.5 | 106.3 | 24 | 118.6 | 118.9 | 119.1 | 24 | 107.6 | 108.0 | 109.0 | 24 |
| 6/22 | 106.5 | 107.1 | 108.0 | 24 | 115.4 | 116.3 | 116.8 | 24 | 103.9 | 104.1 | 104.5 | 24 | 116.8 | 117.7 | 118.1 | 24 | 107.7 | 107.9 | 108.3 | 24 |
| 6/23 | 107.3 | 108.2 | 110.2 | 24 | 117.4 | 117.9 | 118.0 | 24 | 104.2 | 104.8 | 105.5 | 24 | 118.8 | 119.6 | 119.8 | 24 | 109.8 | 111.0 | 112.3 | 24 |
| 6/24 | 109.8 | 110.7 | 111.3 | 24 | 118.0 | 119.0 | 122.4 | 24 | 105.6 | 106.0 | 106.6 | 24 | 119.1 | 119.4 | 119.7 | 24 | 111.1 | 111.6 | 112.2 | 24 |
| 6/25 | 110.6 | 110.8 | 111.1 | 24 | 116.5 | 117.1 | 117.4 | 24 | 104.9 | 105.3 | 105.4 | 24 | 118.0 | 119.0 | 119.2 | 24 | 108.6 | 109.4 | 110.4 | 24 |
| 6/26 | 110.2 | 110.5 | 110.8 | 24 | 115.2 | 116.0 | 116.4 | 24 | 106.1 | 107.0 | 107.4 | 24 | 118.7 | 118.8 | 119.1 | 24 | 110.0 | 110.5 | 111.3 | 24 |
| 6/27 | 111.2 | 112.1 | 113.9 | 24 | 116.6 | 117.3 | 117.9 | 24 | 107.8 | 108.7 | 109.4 | 24 | 119.1 | 119.6 | 120.0 | 24 | 113.6 | 115.3 | 116.8 | 24 |
| 6/28 | 112.2 | 112.8 | 113.2 | 24 | 115.9 | 116.7 | 117.1 | 24 | 108.5 | 108.8 | 109.2 | 24 | 118.9 | 119.3 | 119.6 | 24 | 113.6 | 114.7 | 116.5 | 24 |
| 6/29 | 113.0 | 113.6 | 114.1 | 24 | 115.4 | 116.3 | 116.6 | 24 | 108.7 | 109.4 | 109.7 | 24 | 118.0 | 119.2 | 119.8 | 24 | 110.7 | 111.2 | 111.7 | 24 |
| 6/30 | 113.5 | 114.1 | 114.2 | 24 | 115.8 | 117.1 | 117.4 | 24 | 109.8 | 110.6 | 110.9 | 24 | 117.9 | 119.5 | 119.9 | 24 | 110.8 | 111.7 | 113.9 | 24 |
| 7/1 | 112.0 | 112.9 | 113.9 | 24 | 113.5 | 113.8 | 114.1 | 24 | 111.2 | 112.2 | 113.0 | 24 | 118.4 | 118.9 | 119.3 | 24 | 115.1 | 115.8 | 116.6 | 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>24 h</u> | <u>12 h</u> | # | <u>24h</u> | <u>12h</u> | # | <u>24h</u> | <u>12h</u> | # | <u>24h</u> | <u>12h</u> | # | | | | | |
| | Avg | Avg | | High | Avg | | Avg | High | | Avg | Avg | | High | Avg | | AVG | High | | | |
| 6/18 | 115.2 | 115.7 | 116.6 | 24 | 110.9 | 111.3 | 111.5 | 24 | --- | --- | --- | 0 | 113.2 | 114.3 | 115.1 | 24 | 117.9 | 118.6 | 119.2 | 24 |
| 6/19 | 115.8 | 116.1 | 116.6 | 24 | 110.7 | 110.9 | 111.1 | 24 | --- | --- | --- | 0 | 111.7 | 112.2 | 113.2 | 24 | 118.7 | 118.9 | 119.0 | 24 |
| 6/20 | 115.4 | 115.9 | 116.6 | 24 | 110.6 | 110.8 | 111.1 | 24 | --- | --- | --- | 0 | 111.2 | 111.9 | 112.5 | 24 | 118.8 | 118.9 | 119.1 | 24 |
| 6/21 | 114.3 | 114.6 | 115.1 | 24 | 108.5 | 108.9 | 109.8 | 24 | --- | --- | --- | 0 | 110.4 | 110.9 | 111.7 | 24 | 116.4 | 117.4 | 118.7 | 24 |
| 6/22 | 113.8 | 114.3 | 114.7 | 24 | 108.1 | 108.6 | 109.1 | 24 | --- | --- | --- | 0 | 110.3 | 112.1 | 113.6 | 24 | 116.0 | 117.4 | 120.1 | 24 |
| 6/23 | 115.8 | 117.2 | 117.7 | 24 | 110.7 | 111.9 | 112.9 | 24 | --- | --- | --- | 0 | 112.5 | 114.6 | 116.3 | 24 | 117.2 | 118.6 | 121.2 | 24 |
| 6/24 | 116.7 | 117.3 | 117.7 | 24 | 114.3 | 115.0 | 115.5 | 24 | --- | --- | --- | 0 | 113.7 | 115.7 | 117.7 | 24 | 117.8 | 119.1 | 121.0 | 24 |
| 6/25 | 114.6 | 114.8 | 115.2 | 24 | 110.9 | 111.7 | 113.2 | 24 | --- | --- | --- | 0 | 112.7 | 113.9 | 115.3 | 24 | 116.8 | 118.3 | 120.4 | 24 |
| 6/26 | 114.7 | 115.0 | 115.3 | 24 | 109.0 | 109.3 | 109.7 | 24 | --- | --- | --- | 0 | 111.8 | 113.6 | 115.0 | 24 | 116.4 | 118.0 | 120.2 | 24 |
| 6/27 | 116.9 | 118.0 | 118.4 | 24 | 109.7 | 111.1 | 111.6 | 24 | --- | --- | --- | 0 | 112.7 | 115.0 | 117.1 | 24 | 116.7 | 118.2 | 120.2 | 24 |
| 6/28 | 117.2 | 117.5 | 117.7 | 24 | 111.8 | 112.3 | 112.6 | 24 | --- | --- | --- | 0 | 112.7 | 114.8 | 116.6 | 24 | 117.1 | 118.4 | 120.2 | 24 |
| 6/29 | 115.8 | 116.6 | 117.3 | 24 | 111.9 | 112.2 | 112.8 | 24 | --- | --- | --- | 0 | 113.7 | 115.8 | 117.7 | 24 | 116.3 | 117.8 | 119.9 | 24 |
| 6/30 | 115.3 | 115.7 | 116.2 | 24 | 110.0 | 110.3 | 110.7 | 24 | --- | --- | --- | 0 | 113.3 | 115.7 | 117.7 | 24 | 116.5 | 118.0 | 120.3 | 24 |
| 7/1 | 117.0 | 117.5 | 118.0 | 24 | 110.0 | 110.0 | 110.4 | 9 | --- | --- | --- | 0 | 113.8 | 116.3 | 117.7 | 24 | 116.5 | 118.1 | 123.0 | 24 |

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) |
| 06/18/2009 | --- | --- | --- | --- | 281 | 428 | 128 | 3 | 1,191 | 995 | 864 |
| 06/19/2009 * | --- | --- | --- | --- | 564 | 322 | 53 | 2 | --- | 599 | 379 |
| 06/20/2009 | --- | --- | --- | --- | 505 | 215 | 124 | 5 | 1,882 | 539 | 309 |
| 06/21/2009 * | --- | --- | --- | --- | 0 | 143 | 90 | 3 | --- | 879 | 594 |
| 06/22/2009 | --- | --- | --- | --- | 0 | 144 | 46 | 3 | 1,429 | 192 | 523 |
| 06/23/2009 * | --- | --- | --- | --- | 310 | 36 | 49 | 5 | --- | 286 | 345 |
| 06/24/2009 | --- | --- | --- | --- | 61 | 72 | 0 | 0 | 1,123 | 250 | 109 |
| 06/25/2009 * | --- | --- | --- | --- | 248 | 0 | 62 | 2 | --- | 476 | 259 |
| 06/26/2009 | --- | --- | --- | --- | 130 | 43 | 26 | 0 | 823 | 905 | 201 |
| 06/27/2009 * | --- | --- | --- | --- | 96 | 36 | 15 | 5 | --- | 473 | 264 |
| 06/28/2009 | --- | --- | --- | --- | 33 | 14 | 12 | 2 | 1,536 | 896 | 557 |
| 06/29/2009 * | --- | --- | --- | --- | 0 | 20 | 26 | 2 | --- | 159 | 365 |
| 06/30/2009 * | --- | --- | --- | --- | 33 | 1 | 17 | 2 | 621 | 1,357 | 276 |
| 07/01/2009 * | --- | --- | --- | --- | 0 | 0 | 25 | 0 | --- | 296 | 543 |
| 07/02/2009 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Total: | 0 | 0 | 0 | 0 | 2,261 | 1,474 | 673 | 34 | 8,605 | 8,302 | 5,588 |
| # Days: | 0 | 0 | 0 | 0 | 14 | 14 | 14 | 14 | 7 | 14 | 14 |
| Average: | 0 | 0 | 0 | 0 | 162 | 105 | 48 | 2 | 1,229 | 593 | 399 |
| YTD | 37,667 | 44,616 | 20,207 | 29,713 | 3,081,308 | 2,432,882 | 448,501 | 9,214 | 2,248,958 | 1,029,923 | 1,716,151 |

| 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) |
| 06/18/2009 | --- | --- | --- | --- | 38,830 | 15,510 | 10,932 | 121 | 86,011 | 17,106 | 22,776 |
| 06/19/2009 * | --- | --- | --- | --- | 31,837 | 21,381 | 6,402 | 132 | --- | 21,878 | 36,107 |
| 06/20/2009 | --- | --- | --- | --- | 39,912 | 30,804 | 7,268 | 159 | 277,251 | 26,911 | 49,699 |
| 06/21/2009 * | --- | --- | --- | --- | 18,798 | 39,180 | 5,045 | 110 | --- | 42,572 | 67,953 |
| 06/22/2009 | --- | --- | --- | --- | 23,337 | 28,879 | 11,990 | 135 | 129,985 | 50,457 | 54,100 |
| 06/23/2009 * | --- | --- | --- | --- | 13,721 | 24,939 | 14,921 | 190 | --- | 33,501 | 65,691 |
| 06/24/2009 | --- | --- | --- | --- | 10,506 | 15,363 | 8,465 | 70 | 311,561 | 41,412 | 101,763 |
| 06/25/2009 * | --- | --- | --- | --- | 5,263 | 7,284 | 5,325 | 67 | --- | 50,364 | 135,039 |
| 06/26/2009 | --- | --- | --- | --- | 4,827 | 3,274 | 4,831 | 84 | 146,712 | 83,522 | 111,517 |
| 06/27/2009 * | --- | --- | --- | --- | 7,777 | 5,557 | 2,070 | 88 | --- | 42,124 | 102,096 |
| 06/28/2009 | --- | --- | --- | --- | 12,875 | 19,912 | 1,459 | 56 | 240,939 | 62,545 | 124,062 |
| 06/29/2009 * | --- | --- | --- | --- | 9,055 | 9,883 | 820 | 104 | --- | 46,039 | 85,749 |
| 06/30/2009 * | --- | --- | --- | --- | 8,669 | 8,049 | 6,732 | 169 | 138,752 | 38,507 | 78,967 |
| 07/01/2009 * | --- | --- | --- | --- | 5,336 | 6,217 | 3,728 | 63 | --- | 48,415 | 69,122 |
| 07/02/2009 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Total: | 0 | 0 | 0 | 0 | 230,743 | 236,232 | 89,988 | 1,548 | 1,331,211 | 605,353 | 1,104,641 |
| # Days: | 0 | 0 | 0 | 0 | 14 | 14 | 14 | 14 | 7 | 14 | 14 |
| Average: | 0 | 0 | 0 | 0 | 16,482 | 16,874 | 6,428 | 111 | 190,173 | 43,240 | 78,903 |
| YTD | 0 | 15 | 15 | 545 | 896,715 | 1,073,161 | 366,177 | 2,920 | 1,597,837 | 772,409 | 3,267,271 |

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) |
| 06/18/2009 | --- | --- | --- | --- | 406 | 143 | 77 | 288 | 1,103 | 1,181 | 1,100 |
| 06/19/2009 * | --- | --- | --- | --- | 251 | 287 | 26 | 237 | --- | 1,558 | 1,136 |
| 06/20/2009 | --- | --- | --- | --- | 505 | 143 | 28 | 119 | 898 | 1,255 | 946 |
| 06/21/2009 * | --- | --- | --- | --- | 388 | 681 | 116 | 117 | --- | 1,914 | 485 |
| 06/22/2009 | --- | --- | --- | --- | 827 | 108 | 283 | 116 | 412 | 2,007 | 358 |
| 06/23/2009 * | --- | --- | --- | --- | 559 | 537 | 124 | 44 | --- | 669 | 414 |
| 06/24/2009 | --- | --- | --- | --- | 244 | 573 | 73 | 13 | 307 | 1,200 | 163 |
| 06/25/2009 * | --- | --- | --- | --- | 248 | 359 | 223 | 18 | --- | 1,334 | 1,347 |
| 06/26/2009 | --- | --- | --- | --- | 292 | 429 | 155 | 24 | 204 | 645 | 803 |
| 06/27/2009 * | --- | --- | --- | --- | 771 | 422 | 33 | 14 | --- | 710 | 908 |
| 06/28/2009 | --- | --- | --- | --- | 1,108 | 309 | 44 | 12 | 616 | 422 | 284 |
| 06/29/2009 * | --- | --- | --- | --- | 358 | 514 | 50 | 8 | --- | 477 | 823 |
| 06/30/2009 * | --- | --- | --- | --- | 231 | 343 | 540 | 10 | 411 | 115 | 276 |
| 07/01/2009 * | --- | --- | --- | --- | 268 | 300 | 268 | 19 | --- | 148 | 361 |
| 07/02/2009 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Total: | 0 | 0 | 0 | 0 | 6,456 | 5,148 | 2,040 | 1,039 | 3,951 | 13,635 | 9,404 |
| # Days: | 0 | 0 | 0 | 0 | 14 | 14 | 14 | 14 | 7 | 14 | 14 |
| Average: | 0 | 0 | 0 | 0 | 461 | 368 | 146 | 74 | 564 | 974 | 672 |
| YTD | 0 | 0 | 0 | 332 | 86,592 | 77,393 | 16,929 | 37,473 | 125,095 | 238,319 | 501,430 |

| 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) |
| 06/18/2009 | --- | --- | --- | --- | 2,870 | 1,785 | 1,022 | 39 | 762 | 530 | 393 |
| 06/19/2009 * | --- | --- | --- | --- | 2,131 | 1,792 | 688 | 45 | --- | 748 | 435 |
| 06/20/2009 | --- | --- | --- | --- | 2,084 | 1,471 | 510 | 23 | 1,157 | 774 | 577 |
| 06/21/2009 * | --- | --- | --- | --- | 1,163 | 1,183 | 339 | 10 | --- | 482 | 365 |
| 06/22/2009 | --- | --- | --- | --- | 1,208 | 698 | 364 | 10 | 408 | 1,241 | 554 |
| 06/23/2009 * | --- | --- | --- | --- | 1,304 | 1,039 | 407 | 5 | --- | 621 | 138 |
| 06/24/2009 | --- | --- | --- | --- | 1,161 | 787 | 267 | 4 | 203 | 847 | 131 |
| 06/25/2009 * | --- | --- | --- | --- | 1,610 | 538 | 186 | 0 | --- | 381 | 453 |
| 06/26/2009 | --- | --- | --- | --- | 778 | 243 | 155 | 3 | 106 | 906 | 669 |
| 06/27/2009 * | --- | --- | --- | --- | 321 | 394 | 128 | 5 | --- | 237 | 401 |
| 06/28/2009 | --- | --- | --- | --- | 163 | 459 | 104 | 5 | 155 | 158 | 557 |
| 06/29/2009 * | --- | --- | --- | --- | 195 | 276 | 90 | 2 | --- | 159 | 184 |
| 06/30/2009 * | --- | --- | --- | --- | 428 | 203 | 86 | 5 | 206 | 58 | 367 |
| 07/01/2009 * | --- | --- | --- | --- | 235 | 157 | 68 | 1 | --- | 0 | 361 |
| 07/02/2009 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Total: | 0 | 0 | 0 | 0 | 15,651 | 11,025 | 4,414 | 157 | 2,997 | 7,142 | 5,585 |
| # Days: | 0 | 0 | 0 | 0 | 14 | 14 | 14 | 14 | 7 | 14 | 14 |
| Average: | 0 | 0 | 0 | 0 | 1,118 | 788 | 315 | 11 | 428 | 510 | 399 |
| YTD | 1,833 | 24,102 | 9,611 | 8,297 | 4,509,128 | 3,562,234 | 727,393 | 17,598 | 803,446 | 939,913 | 676,549 |

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) |
| 06/18/2009 | --- | --- | --- | --- | 63 | 0 | 51 | 19 | 339 | 57 | 59 |
| 06/19/2009 * | --- | --- | --- | --- | 63 | 0 | 0 | 33 | --- | 84 | 59 |
| 06/20/2009 | --- | --- | --- | --- | 63 | 0 | 14 | 16 | 267 | 35 | 144 |
| 06/21/2009 * | --- | --- | --- | --- | 0 | 0 | 5 | 6 | --- | 355 | 106 |
| 06/22/2009 | --- | --- | --- | --- | 0 | 0 | 10 | 5 | 206 | 191 | 31 |
| 06/23/2009 * | --- | --- | --- | --- | 0 | 36 | 12 | 9 | --- | 0 | 207 |
| 06/24/2009 | --- | --- | --- | --- | 0 | 36 | 0 | 4 | 102 | 141 | 54 |
| 06/25/2009 * | --- | --- | --- | --- | 0 | 0 | 12 | 4 | --- | 191 | 194 |
| 06/26/2009 | --- | --- | --- | --- | 0 | 0 | 13 | 3 | 102 | 0 | 0 |
| 06/27/2009 * | --- | --- | --- | --- | 32 | 0 | 5 | 4 | --- | 0 | 254 |
| 06/28/2009 | --- | --- | --- | --- | 0 | 22 | 1 | 2 | 0 | 106 | 90 |
| 06/29/2009 * | --- | --- | --- | --- | 33 | 0 | 1 | 2 | --- | 0 | 91 |
| 06/30/2009 * | --- | --- | --- | --- | 0 | 14 | 21 | 2 | 0 | 0 | 0 |
| 07/01/2009 * | --- | --- | --- | --- | 0 | 14 | 33 | 3 | --- | 0 | 11 |
| 07/02/2009 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Total: | 0 | 0 | 0 | 0 | 254 | 122 | 178 | 112 | 1,016 | 1,160 | 1,300 |
| # Days: | 0 | 0 | 0 | 0 | 14 | 14 | 14 | 14 | 7 | 14 | 14 |
| Average: | 0 | 0 | 0 | 0 | 18 | 9 | 13 | 8 | 145 | 83 | 93 |
| YTD | 170 | 0 | 0 | 177 | 46,261 | 46,280 | 21,616 | 4,628 | 189,459 | 111,478 | 74,768 |

* 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
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)}

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:

7/2/09 10:11 AM

| | | 06/18/09 TO 07/02/09 | | | | | | |
|--------------------------------|--------------------------|----------------------|-------|--------|--------|-----|-------------|--|
| Site | Data | Species | | | | | Grand Total | |
| | | CH0 | CH1 | CO | ST | SO | | |
| LGR | Sum of NumberCollected | 182,000 | 1,800 | 5,050 | 12,420 | 200 | 201,470 | |
| | Sum of NumberBarged | 180,860 | 1,794 | 5,044 | 12,406 | 192 | 200,296 | |
| | Sum of NumberBypassed | 432 | 0 | 0 | 0 | 0 | 432 | |
| | Sum of Numbertrucked | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Sum of SampleMorts | 28 | 1 | 0 | 1 | 1 | 31 | |
| | Sum of FacilityMorts | 667 | 5 | 6 | 13 | 7 | 698 | |
| | Sum of ResearchMorts | 13 | 0 | 0 | 0 | 0 | 13 | |
| | Sum of TotalProjectMorts | 708 | 6 | 6 | 14 | 8 | 742 | |
| LGS | Sum of NumberCollected | 164,832 | 1,030 | 3,594 | 7,696 | 85 | 177,237 | |
| | Sum of NumberBarged | 161,711 | 1,030 | 3,774 | 7,675 | 85 | 174,275 | |
| | Sum of NumberBypassed | 2,599 | 0 | 0 | 0 | 0 | 2,599 | |
| | Sum of Numbertrucked | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Sum of SampleMorts | 47 | 0 | 0 | 2 | 0 | 49 | |
| | Sum of FacilityMorts | 469 | 0 | 0 | 19 | 0 | 488 | |
| | Sum of ResearchMorts | 6 | 0 | 0 | 0 | 0 | 6 | |
| | Sum of TotalProjectMorts | 522 | 0 | 0 | 21 | 0 | 543 | |
| LMN | Sum of NumberCollected | 67,777 | 498 | 1,385 | 3,373 | 114 | 73,147 | |
| | Sum of NumberBarged | 59,780 | 482 | 972 | 2,759 | 98 | 64,091 | |
| | Sum of NumberBypassed | 2,922 | 2 | 0 | 596 | 0 | 3,520 | |
| | Sum of Numbertrucked | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Sum of SampleMorts | 22 | 1 | 0 | 2 | 0 | 25 | |
| | Sum of FacilityMorts | 105 | 0 | 0 | 9 | 0 | 114 | |
| | Sum of ResearchMorts | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Sum of TotalProjectMorts | 127 | 1 | 0 | 11 | 0 | 139 | |
| MCN | Sum of NumberCollected | 681,169 | 4,473 | 2,111 | 1,629 | 551 | 689,933 | |
| | Sum of NumberBarged | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Sum of NumberBypassed | 680,402 | 4,451 | 2,101 | 1,625 | 550 | 689,129 | |
| | Sum of Numbertrucked | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Sum of SampleMorts | 46 | 2 | 0 | 0 | 0 | 48 | |
| | Sum of FacilityMorts | 691 | 19 | 10 | 4 | 1 | 725 | |
| | Sum of ResearchMorts | 30 | 1 | 0 | 0 | 0 | 31 | |
| | Sum of TotalProjectMorts | 767 | 22 | 10 | 4 | 1 | 804 | |
| Total Sum of NumberCollected | | 1,095,778 | 7,801 | 12,140 | 25,118 | 950 | 1,141,787 | |
| Total Sum of NumberBarged | | 402,351 | 3,306 | 9,790 | 22,840 | 375 | 438,662 | |
| Total Sum of NumberBypassed | | 686,355 | 4,453 | 2,101 | 2,221 | 550 | 695,680 | |
| Total Sum of Numbertrucked | | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total Sum of SampleMorts | | 143 | 4 | 0 | 5 | 1 | 153 | |
| Total Sum of FacilityMorts | | 1,932 | 24 | 16 | 45 | 8 | 2,025 | |
| Total Sum of ResearchMorts | | 49 | 1 | 0 | 0 | 0 | 50 | |
| Total Sum of TotalProjectMorts | | 2,124 | 29 | 16 | 50 | 9 | 2,228 | |

YTD Transportation Summary

Source: Fish Passage Center

Updated:

7/2/09 10:11 AM

TO: 07/02/09

| | | Species | | | | | |
|--------------------------------|--------------------------|-----------|-----------|---------|---------|-----------|-------------|
| Site | Data | CH0 | CH1 | CO | SO | ST | Grand Total |
| LGR | Sum of NumberCollected | 636,632 | 2,352,562 | 62,108 | 33,301 | 3,428,945 | 6,513,548 |
| | Sum of NumberBarged | 617,098 | 1,500,852 | 60,035 | 26,021 | 1,840,721 | 4,044,727 |
| | Sum of NumberBypassed | 15,615 | 847,954 | 1,951 | 7,068 | 1,587,772 | 2,460,360 |
| | Sum of NumberTrucked | 0 | 0 | 0 | 0 | 0 | 0 |
| | Sum of SampleMorts | 149 | 118 | 2 | 22 | 31 | 322 |
| | Sum of FacilityMorts | 3,756 | 2,733 | 120 | 190 | 402 | 7,201 |
| | Sum of ResearchMorts | 14 | 1,035 | 0 | 0 | 19 | 1,068 |
| | Sum of TotalProjectMorts | 3,919 | 3,886 | 122 | 212 | 452 | 8,591 |
| LGS | Sum of NumberCollected | 775,830 | 1,720,113 | 56,757 | 33,592 | 2,516,779 | 5,103,071 |
| | Sum of NumberBarged | 756,704 | 903,147 | 50,110 | 25,719 | 992,578 | 2,728,258 |
| | Sum of NumberBypassed | 8,658 | 751,922 | 2,825 | 5,826 | 1,460,070 | 2,229,301 |
| | Sum of NumberTrucked | 0 | 0 | 0 | 0 | 0 | 0 |
| | Sum of SampleMorts | 104 | 49 | 0 | 4 | 17 | 174 |
| | Sum of FacilityMorts | 5,552 | 1,621 | 2 | 43 | 318 | 7,536 |
| | Sum of ResearchMorts | 12 | 4 | 0 | 0 | 0 | 16 |
| | Sum of TotalProjectMorts | 5,668 | 1,674 | 2 | 47 | 335 | 7,726 |
| LMN | Sum of NumberCollected | 280,988 | 320,765 | 12,623 | 15,999 | 518,351 | 1,148,726 |
| | Sum of NumberBarged | 270,063 | 311,725 | 12,195 | 15,807 | 506,015 | 1,115,805 |
| | Sum of NumberBypassed | 5,473 | 8,788 | 9 | 114 | 12,051 | 26,435 |
| | Sum of NumberTrucked | 0 | 0 | 0 | 0 | 0 | 0 |
| | Sum of SampleMorts | 38 | 15 | 0 | 2 | 9 | 64 |
| | Sum of FacilityMorts | 364 | 237 | 5 | 6 | 253 | 865 |
| | Sum of ResearchMorts | 0 | 0 | 0 | 0 | 0 | 0 |
| | Sum of TotalProjectMorts | 402 | 252 | 5 | 8 | 262 | 929 |
| MCN | Sum of NumberCollected | 830,174 | 1,302,420 | 68,901 | 105,688 | 467,601 | 2,774,784 |
| | Sum of NumberBarged | 0 | 0 | 0 | 0 | 0 | 0 |
| | Sum of NumberBypassed | 829,174 | 1,300,829 | 68,835 | 105,631 | 467,430 | 2,771,899 |
| | Sum of NumberTrucked | 0 | 0 | 0 | 0 | 0 | 0 |
| | Sum of SampleMorts | 77 | 147 | 1 | 2 | 14 | 241 |
| | Sum of FacilityMorts | 892 | 1,420 | 65 | 54 | 154 | 2,585 |
| | Sum of ResearchMorts | 31 | 24 | 0 | 1 | 3 | 59 |
| | Sum of TotalProjectMorts | 1,000 | 1,591 | 66 | 57 | 171 | 2,885 |
| Total Sum of NumberCollected | | 2,523,624 | 5,695,860 | 200,389 | 188,580 | 6,931,676 | 15,540,129 |
| Total Sum of NumberBarged | | 1,643,865 | 2,715,724 | 122,340 | 67,547 | 3,339,314 | 7,888,790 |
| Total Sum of NumberBypassed | | 858,920 | 2,909,493 | 73,620 | 118,639 | 3,527,323 | 7,487,995 |
| Total Sum of NumberTrucked | | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Sum of SampleMorts | | 368 | 329 | 3 | 30 | 71 | 801 |
| Total Sum of FacilityMorts | | 10,564 | 6,011 | 192 | 293 | 1,127 | 18,187 |
| Total Sum of ResearchMorts | | 57 | 1,063 | 0 | 1 | 22 | 1,143 |
| Total Sum of TotalProjectMorts | | 10,989 | 7,403 | 195 | 324 | 1,220 | 20,131 |

Cumulative Adult Passage at Mainstem Dams Through: 07/01

| 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 | 07/01 | 114525 | 66631 | 125543 | 17554 | 160243 | 11507 | 61957 | 28619 | 59162 | 9212 | 51842 | 6136 | 0 | 0 | 0 | 0 | 0 | 0 |
| TDA | 06/30 | 93908 | 53646 | 95438 | 15801 | 113852 | 9048 | 56955 | 20317 | 46420 | 8892 | 41033 | 4384 | 0 | 0 | 0 | 0 | 0 | 0 |
| JDA | 07/01 | 76806 | 49733 | 81772 | 14925 | 95147 | 7579 | 45647 | 22647 | 44915 | 10001 | 37794 | 4111 | 0 | 0 | 0 | 0 | 0 | 0 |
| MCN | 07/01 | 70413 | 43328 | 68080 | 12133 | 86998 | 7409 | 38581 | 13821 | 34376 | 8238 | 31813 | 3507 | 0 | 0 | 0 | 0 | 0 | 0 |
| IHR | 07/01 | 55435 | 28223 | 53142 | 7757 | 59050 | 4663 | 16402 | 7721 | 19460 | 4440 | 10550 | 1782 | 0 | 0 | 0 | 0 | 0 | 0 |
| LMN | 07/01 | 66931 | 20009 | 54512 | 6885 | 57079 | 4270 | 17909 | 6739 | 20529 | 2312 | 9951 | 1244 | 0 | 0 | 0 | 0 | 0 | 0 |
| LGS | 07/01 | 52642 | 24331 | 50396 | 7805 | 54016 | 4453 | 12693 | 7101 | 15201 | 3822 | 7600 | 1518 | 0 | 0 | 0 | 0 | 0 | 0 |
| LGR | 07/01 | 49667 | 31064 | 50146 | 10946 | 54673 | 5280 | 9861 | 8548 | 14983 | 3294 | 7119 | 1431 | 0 | 0 | 0 | 0 | 0 | 0 |
| PRD | 06/29 | 13469 | 2910 | 12178 | 620 | 18164 | 621 | 18985 | 613 | 8365 | 513 | 13491 | 376 | 0 | 0 | 0 | 0 | 0 | 0 |
| RIS | 06/29 | 12634 | 6003 | 12490 | 1119 | 14914 | 1069 | 12469 | 1889 | 4377 | 246 | 7581 | 567 | 0 | 0 | 0 | 0 | 0 | 0 |
| RRH | 06/29 | 6090 | 1086 | 4065 | 371 | 5734 | 430 | 6291 | 598 | 1096 | 55 | 3188 | 154 | 0 | 0 | 0 | 0 | 0 | 0 |
| WEL | 06/30 | 6313 | 1857 | 2708 | 426 | 4250 | 321 | 1095 | 53 | 312 | 2 | 632 | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
| WFA | 06/19 | 20713 | 1937 | 9208 | 181 | - | - | 0 | 0 | 0 | 0 | - | - | 0 | 0 | 0 | 0 | - | - |

| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 148463 | 193707 | 64918 | 15291 | 17344 | 17651 | 4060 |
| TDA | 0 | 0 | 0 | 0 | 0 | 0 | 114189 | 152261 | 50643 | 5559 | 6314 | 6698 | 1553 |
| JDA | 0 | 0 | 0 | 0 | 0 | 0 | 107852 | 160102 | 53909 | 8664 | 10168 | 8438 | 3017 |
| MCN | 0 | 0 | 0 | 0 | 0 | 0 | 69099 | 105639 | 38468 | 4742 | 5024 | 4883 | 1508 |
| IHR | 0 | 0 | 0 | 0 | 0 | 0 | 286 | 146 | 28 | 4396 | 4015 | 3349 | 1239 |
| LMN | 0 | 0 | 0 | 0 | 0 | 0 | 294 | 138 | 25 | 6190 | 4662 | 3185 | 2425 |
| LGS | 0 | 0 | 0 | 0 | 0 | 0 | 196 | 70 | 17 | 6038 | 2822 | 2759 | 2269 |
| LGR | 0 | 0 | 0 | 0 | 0 | 0 | 129 | 57 | 12 | 11297 | 7898 | 8125 | 3445 |
| PRD | 0 | 0 | 0 | 0 | 0 | 0 | 37856 | 48863 | 22209 | 127 | 527 | 188 | 0 |
| RIS | 0 | 0 | 0 | 0 | 0 | 0 | 18097 | 17053 | 7974 | 138 | 524 | 159 | 76 |
| RRH | 0 | 0 | 0 | 0 | 0 | 0 | 10638 | 9065 | 3960 | 468 | 765 | 240 | 240 |
| WEL | 0 | 0 | 0 | 0 | 0 | 0 | 7160 | 3632 | 2272 | 106 | 312 | 62 | 75 |
| WFA | 0 | 0 | 0 | 0 | - | - | 0 | 0 | - | 12619 | 15674 | - | - |

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: 07/02/09

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

| Year | Chinook Adult | Chinook Jack | Steelhead | Wild Steelhead |
|------|---------------|--------------|-----------|----------------|
| 2009 | 19 | -1 | 321 | 109 |
| 2008 | 42 | 0 | 568 | 273 |