



Fish Passage Center Weekly Report #07 - 2

March 16, 2007

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has varied between 16% and 199% of average at individual sub-basins over the first 12-days of March. Precipitation above The Dalles has been 117% of average over the first 12-days of March. Over the entire water year, precipitation has generally been near or above average.

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

| Location | Water Year 2007 | | Water Year 2007 October 1, 2006 to March 12, 2007 | |
|--------------------------------|----------------------|--------------|---|--------------|
| | March 1-12 | | Observed (inches) | % Average |
| | Observed (inches) | % Average | | |
| Columbia Above Coulee | 1.16 | 168 | 14.57 | 111 |
| Snake River Above Ice Harbor | 0.33 | 51 | 8.46 | 91 |
| Columbia Above The Dalles | 0.87 | 117 | 14.14 | 108 |
| Kootenai | 1.37 | 199 | 15.59 | 116 |
| Clark Fork | 0.38 | 81 | 9.11 | 110 |
| Flathead | 0.50 | 79 | 11.97 | 107 |
| Pend Oreille/Spokane | 1.16 | 108 | 18.08 | 98 |
| Central Washington | 0.05 | 16 | 5.44 | 101 |
| Snake River Plain | 0.23 | 52 | 4.74 | 87 |
| Salmon/Boise/Payette | 0.31 | 41 | 10.78 | 93 |
| Clearwater | 0.82 | 75 | 10.84 | 96 |
| SW Washington Cascades/Cowlitz | 3.22 | 117 | 53.33 | 109 |
| Willamette Valley | 1.95 | 79 | 47.74 | 115 |

Snowpack within the Columbia Basin is below average. Average snowpack in the Columbia River for basins above the Snake River confluence is 88% of average, for Snake River Basins the average snowpack is 70% of average, and for lower Columbia Basins between McNary and Bonneville Dam average snowpack is 75% of average.

Table 2 displays the February Final and March Final runoff volume forecasts for multiple reservoirs. Water Supply Forecasts dropped slightly between the February Final and March Final forecasts in Columbia Basins; however, increased several percent in Snake Basins. The current forecast at The Dalles between January and July is 100000 Kaf (93% of average).

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

| Location | February Final | | March Final | |
|---|---------------------------------|---------------------------------------|---------------------------------|---------------------------------------|
| | % Average (1971- 2000) | Probable Runoff Volume (Kaf) | % Average (1971- 2000) | Probable Runoff Volume (Kaf) |
| The Dalles (Jan-July) | 94 | 101000 | 93 | 100000 |
| Grand Coulee (Jan-July) | 102 | 63900 | 100 | 63000 |
| Libby Res. Inflow, MT (Jan-July) | 102 | 6420 | 100 | 6320 |
| Hungry Horse Res. Inflow, MT (Jan-July) | 93 | 2060 | 91 | 2030 |
| Lower Granite Res. Inflow (Apr-July) | 78 | 16800 | 80 | 17300 |
| Brownlee Res. Inflow (Apr-July) | 58 | 3630 | 60 | 3760 |
| Dworshak Res. Inflow (Apr-July) | 93 | 2460 | 96 | 2530 |

Grand Coulee Reservoir is at 1277.5 feet (3-15-07) and has drafted 0.9 feet in the last week. The COE is planning to implement a flood control shift between Grand Coulee and Dworshak Dam. This will provide more flood control space in Grand Coulee Dam and less space in Dworshak Dam. The end of March shifted FC elevation at Grand Coulee is 1272.5 feet and the estimated April 10th elevation is 1259.2 feet. The COE has stated that they intend to only provide as much extra flood control space in Grand Coulee as is taken away from Dworshak Dam (March 14th, 2007 TMT Meeting).

Dworshak is currently at an elevation of 1550.0 feet (3-15-07) and refilled 8.8 feet last week; outflows at Dworshak remain at the 1.5 Kcfs minimum. The end of March FC shifted FC elevation at Dworshak is 1560.3 feet and the estimated April 10th elevation is 1567.8 feet.

The Libby Reservoir is currently at elevation 2389.8 feet (3-15-07) and refilled 1.4 feet last week. The end of March VarQ FC elevation at Libby is 2395.5 feet, the estimated April 10th elevation is 2395.5 feet at Libby. Outflows remain at the 4.0 Kcfs minimum.

Hungry Horse is currently at an elevation of 3531.9 feet (3-15-07) and has refilled 1.6 feet last week. Outflows at Hungry Horse have been 1.0-2.0 Kcfs last week. Hungry Horse's end of March VarQ FC elevation is 3535.1 feet, the estimated April 10th elevation is 3533.4 feet at Hungry Horse.

The Brownlee Reservoir was at an elevation of 2056.3 feet on March 15th, 2007, refilling 0.6 feet last week. The end of March FC elevation is 2057.4 feet, the estimated April 10th elevation is 2059.5 feet at Brownlee Dam. Outflows at Brownlee Dam have been 13.3 to 17.9 Kcfs over the last week.

Smolt Monitoring: Sampling began at Bonneville Dam on March 1, in anticipation of arrival of subyearling chinook salmon released from Spring Creek Hatchery. Approximately 6.5 million subyearlings were released on March 5 and an additional 1.2 million were released on March 9. Based on the sampling data the fish began arriving on March 6, with the peak number passing on March 8, when the passage index reaching

429,000. The numbers declined quickly on March 9, to 300,000. The table below summarizes passage information at Bonneville Dam during the peak passage of Spring Creek migrants.

Smolt Monitoring personnel at the site reported unusually high mortality in the Spring Creek smolts collected at Bonneville Dam. They reported 4.5% mortality on March 8, and 8% mortality on the 9th. Typically the mortality rate is less than 1%. Based on the high mortality the Salmon Managers submitted an SOR on March 9. TMT met in the afternoon of the 9th to consider the SOR. The COE noted their concern for the fish mortalities, and suggested that if new information was presented that indicated the bypass system at Bonneville was causing the mortalities, the COE would change course to implement a spread the risk operation. With the current information, the COE believed the best operation would be to continue operating the B2 corner collector and not to provide spill at the project. In other words, the SOR was not implemented and no spill was provided. Mortality rates began to decrease after the sample collected on March 10th.

Summary of SMP sample data related to Spring Creek release mortalities at Bonneville Dam in 2007.

| Sample enddate | Passage Index | Collection Count | Sample Count | Facility Morts (in sample) | Percent Facility Morts | Estimated Collection Morts |
|----------------|---------------|------------------|--------------|----------------------------|------------------------|----------------------------|
| 03/03/07 | 9 | 5 | 1 | 0 | 0.0% | 0 |
| 03/04/07 | 26 | 15 | 3 | 0 | 0.0% | 0 |
| 03/05/07 | 8 | 5 | 1 | 0 | 0.0% | 0 |
| 03/07/07 | 106,076 | 63,400 | 318 | 5 | 1.6% | 997 |
| 03/08/07 | 429,248 | 258,400 | 1,292 | 55 | 4.3% | 11,000 |
| 03/09/07 | 298,932 | 175,600 | 878 | 72 | 8.2% | 14,400 |
| 03/10/07 | 37,238 | 20,600 | 103 | 12 | 11.7% | 2,400 |
| 03/11/07 | 80,973 | 50,333 | 755 | 17 | 2.3% | 1,133 |
| 03/12/07 | 71,001 | 42,067 | 373 | 11 | 2.9% | 1,241 |
| 03/13/07 | 32,204 | 17,733 | 246 | 11 | 4.5% | 793 |
| 03/14/07 | 7,633 | 4,200 | 63 | 2 | 3.2% | 133 |
| 03/15/07 | 1,855 | 1,000 | 179 | 3 | 1.7% | 17 |

Facility morts are those fish that were dead prior to entering sample tank, while sample morts died while in sample tank or during sampling. Estimated Collection morts are the number estimated based on morts in sample expanded by the sample rate

Smolt Monitoring at Snake River tributary traps continued this past week, with increasing numbers of yearling chinook being captured at the Grande Ronde, Imnaha, the Salmon River traps. At the Salmon River Trap, operated by IDFG, increasing numbers of wild yearling chinook were captured over the past week. The arrival of these fish at the trap is likely due to warming water temperatures and increased flows in the Salmon River. Flows have risen sharply over the past week, from near normal flows of 5000 cfs on March 9 to 14,000 cfs on March 14. And on March 15 the first pulse of hatchery fish were captured in addition to wild fish. These hatchery fish are likely from a release of 120,000 yearlings that were released in Johnson Creek on March 12. The small numbers of wild yearling chinook being captured at the Grande Ronde and Imnaha traps are likely wild origin fish since all are unclipped. No hatchery releases have occurred in the Imnaha Basin yet and the only release in the Grande Ronde was 100% ad-clipped. Like the Salmon River, both the Grande Ronde and Imnaha rivers are experiencing an early high flow event, with flows in both basins twice the median historic flows for this time of year.

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. Hatchery releases into the Snake River Zone have begun to pick up over the past week. A volitional release of approximately 108,000 spring Chinook yearlings began on March 10 and is expected to end in late March. These fish are being released from the Lostine Acclimation Facility into the Wallowa River. Furthermore, a release of approximately 120,000 summer Chinook was scheduled for March 12 into the south fork of the Salmon River. Finally, approximately 550,000 juvenile Coho were released into the middle fork of the Clearwater River this week. These Coho releases are part of a Nez Perce Tribal program to reintroduce Coho to the Clearwater River Basin. Other releases of Coho into the Clearwater River are currently scheduled for April.

Over the next two weeks a total of about 5.1 million yearling spring Chinook, 1.1 million yearling summer Chinook, and 945,000 summer steelhead are scheduled for release into the Snake River Zone. These releases are scheduled to occur on the Clearwater, Imnaha, Little Salmon, Salmon, Snake, and Wallowa Rivers.

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 Cle Elem Hatchery began volitional releases of yearling spring Chinook on March 15 from their three acclimation facilities: Easton Pond, Clark Flat, and Jack Creek. These volitional releases are expected to last about two months, until the remaining fish are pushed out of these facilities around May 15. In all, it is estimated that 860,812 yearling spring Chinook will be released in these releases. Of this release total, approximately 33-34% were tagged with green, yellow, or red elastomer tags, each. Finally, about 95% received coded wire tags and 5% were tagged with PIT-Tags. No releases are scheduled for the Mid-Columbia 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. Spring Creek NFH released approximately 1.17 million Tule sub-yearling fall Chinook on March 9. This was the second of four scheduled releases of Tule sub-yearling fall Chinook from this hatchery. The next release from this facility is scheduled for April. A volitional release of 236,781 yearling fall Chinook into the Umatilla River wrapped up on March 14. Also released into the Umatilla River this past week were 760,837 Coho from the Pendleton Acclimation Ponds. Finally, the Oregon Department of Fish and Wildlife released 31,212 summer steelhead juveniles into Hood River this past week.

A volitional release of approximately 32,000 yearling spring Chinook is scheduled to begin on March 20 into Hood River. Currently, this is the only release scheduled for the next two weeks in the Lower Columbia Zone.

Adult Fish Passage: Traditional counts at Bonneville Dam do not begin until March 15th. Traditional counts allow the comparison of current year counts with historical data. The Dalles and John Day began video counts Feb 20th, while McNary, Ice Harbor, and Lower Granite began video counts on March 1st. Traditional counts for these dams begin April 1st with the exception of Lower Granite Dam which begins traditional counts on March 1st. Lower Granite Dam uses video counts from March 1st through March 31st. Video counts can cause a delay in posting the data to the web, because the COE staff at the projects have to review the tapes. The PUD dams in the Mid-Columbia River traditionally count adult fish beginning April 15th except Wells Dam that starts counting on May 1st. Beginning in 2000, a few COE dams started counting fish during the winter months from January 1st through March 14th. The following paragraph describes these winter counts for 2007 and compares them with 2006 counts.

Many steelhead and a few Spring Chinook have been counted at Bonneville Dam this year. In the winter months steelhead begin to move through the hydro system to reach their tributaries and spawning sites. At Bonneville Dam, the total steelhead count from Jan 1st through March 10th was 1,212. For the same date range, this was about half of the 2006 steelhead count at Bonneville of 2,502 (includes hatchery and wild fish). However, the 2007 wild steelhead count of 371 was a 33% percent difference from 2006 count of 249. Steelhead have also been counted at The Dalles and John Day since February 20th. At both dams the count increased in 2007 when compared with the 2006 count. At The Dalles Dam, the steelhead count was 568 as of March 11th, while at John Day Dam, the 2007 steelhead count was 1,428 (as of 03/11). The larger up-river count at John Day illustrates that many of the winter counted steelhead over-winter in pools and are now beginning to complete their spawning trip. Steelhead spawning migration spans from March through early May. The 2007 John Day Dam Steelhead count was an 85% percent difference when compared to the 2006 count of 212. The counts at Lower Granite Dam have not been reported yet.

In 2007, the first Spring Chinook was counted at Bonneville Dam on Jan 18th. However, no other spring Chinook adults were counted at Bonneville Dam until Feb 28th. As of March 10th, 11 Spring Chinook adults have been counted at Bonneville Dam. In 2006, as of March 10th, only 2 Spring Chinook had crossed Bonneville dam. The Spring Chinook are beginning to migrate up-river, as shown by a count of 6 salmon at The Dalles dam as of March 11th.

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

| Date | Grand Coulee | | Chief Joseph | | Wells | | Rocky Reach | | Rock Island | | Wanapum | | Priest Rapids | |
|----------|--------------|-------|--------------|-------|-------|-------|-------------|-------|-------------|-------|---------|-------|---------------|-------|
| | Flow | Spill | Flow | Spill | Flow | Spill | Flow | Spill | Flow | Spill | Flow | Spill | Flow | Spill |
| 03/02/07 | 121.3 | 0.0 | 128.2 | 0.0 | 127.7 | 0.0 | 127.6 | 0.0 | 129.4 | 0.0 | 124.9 | 0.0 | 121.3 | 0.0 |
| 03/03/07 | 79.7 | 0.0 | 76.3 | 0.0 | 83.1 | 0.0 | 87.0 | 0.0 | 90.9 | 0.0 | 104.5 | 0.0 | 109.7 | 0.0 |
| 03/04/07 | 71.3 | 0.0 | 75.0 | 0.0 | 80.4 | 0.0 | 81.5 | 0.0 | 83.4 | 0.0 | 80.7 | 0.0 | 77.7 | 0.0 |
| 03/05/07 | 96.1 | 0.0 | 99.1 | 0.0 | 94.5 | 0.0 | 95.1 | 0.0 | 95.8 | 0.0 | 97.9 | 0.0 | 96.2 | 0.0 |
| 03/06/07 | 90.1 | 0.0 | 86.5 | 0.0 | 92.0 | 0.0 | 93.6 | 0.0 | 98.7 | 0.5 | 108.9 | 0.0 | 105.3 | 0.0 |
| 03/07/07 | 104.9 | 0.0 | 111.2 | 0.0 | 103.0 | 2.3 | 97.9 | 0.4 | 95.8 | 0.6 | 89.6 | 1.5 | 88.3 | 0.0 |
| 03/08/07 | 104.7 | 0.0 | 102.7 | 0.0 | 105.1 | 0.2 | 107.8 | 0.0 | 110.5 | 0.0 | 119.6 | 1.2 | 115.1 | 0.0 |
| 03/09/07 | 79.1 | 0.0 | 85.8 | 0.0 | 86.2 | 0.0 | 88.3 | 0.0 | 93.3 | 0.0 | 100.4 | 0.0 | 100.7 | 0.0 |
| 03/10/07 | 77.2 | 0.0 | 72.9 | 0.0 | 76.7 | 0.0 | 79.6 | 0.0 | 82.7 | 0.0 | 96.6 | 0.0 | 100.1 | 0.0 |
| 03/11/07 | 56.9 | 0.0 | 52.8 | 0.0 | 58.9 | 0.1 | 63.6 | 0.0 | 66.0 | 0.0 | 73.9 | 0.0 | 77.1 | 0.0 |
| 03/12/07 | 93.5 | 0.0 | 101.0 | 0.0 | 99.0 | 0.0 | 95.9 | 0.0 | 102.7 | 0.0 | 94.1 | 0.0 | 93.3 | 0.0 |
| 03/13/07 | 86.2 | 0.0 | 77.8 | 0.0 | 85.4 | 0.0 | 89.1 | 0.0 | 102.9 | 0.0 | 118.9 | 0.0 | 116.1 | 0.0 |
| 03/14/07 | 89.1 | 0.0 | 94.3 | 0.0 | 101.5 | 0.0 | 102.4 | 0.0 | 112.5 | 0.0 | 111.3 | 0.0 | 108.7 | 0.0 |
| 03/15/07 | 122.8 | 0.0 | 118.9 | 0.0 | 121.9 | 0.1 | 119.4 | 0.0 | 124.2 | 0.0 | 126.2 | 0.1 | 124.7 | 0.0 |

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

| Date | Dworshak | | Hells Canyon | | Lower Granite | | Little Goose | | Lower Monumental | | Ice Harbor | |
|----------|----------|-------|--------------|---------|---------------|-------|--------------|-------|------------------|-------|------------|-------|
| | Flow | Spill | Inflow | Outflow | Flow | Spill | Flow | Spill | Flow | Spill | Flow | Spill |
| 03/02/07 | 1.5 | 0.0 | 13.6 | 15.3 | 26.2 | 0.0 | 29.9 | 0.5 | 32.0 | 0.0 | 31.5 | 0.0 |
| 03/03/07 | 1.5 | 0.0 | 12.8 | 14.4 | 29.2 | 0.0 | 29.8 | 1.8 | 33.9 | 0.0 | 32.9 | 0.0 |
| 03/04/07 | 1.5 | 0.0 | 12.9 | 10.9 | 24.0 | 0.0 | 20.2 | 2.0 | 26.4 | 0.0 | 24.7 | 0.0 |
| 03/05/07 | 1.5 | 0.0 | 13.0 | 14.6 | 27.5 | 0.0 | 22.1 | 2.1 | 20.1 | 0.6 | 25.3 | 0.0 |
| 03/06/07 | 1.5 | 0.0 | 13.6 | 13.8 | 22.4 | 0.0 | 23.7 | 2.0 | 28.6 | 0.0 | 23.1 | 0.0 |
| 03/07/07 | 1.5 | 0.0 | 14.5 | 14.1 | 25.6 | 0.0 | 27.8 | 2.0 | 28.3 | 0.0 | 29.4 | 0.0 |
| 03/08/07 | 1.5 | 0.0 | 14.6 | 14.9 | 28.6 | 0.0 | 27.2 | 1.5 | 28.2 | 0.0 | 27.7 | 0.0 |
| 03/09/07 | 1.5 | 0.0 | 16.6 | 16.2 | 39.1 | 0.0 | 34.1 | 1.9 | 37.0 | 6.1 | 33.6 | 0.0 |
| 03/10/07 | 1.5 | 0.0 | 15.5 | 14.0 | 31.9 | 0.0 | 31.9 | 2.2 | 36.8 | 6.3 | 38.1 | 0.0 |
| 03/11/07 | 1.5 | 0.0 | 15.5 | 14.3 | 31.7 | 0.0 | 34.0 | 1.7 | 36.2 | 0.0 | 33.6 | 0.0 |
| 03/12/07 | 1.5 | 0.0 | 16.4 | 16.9 | 39.2 | 0.3 | 39.9 | 1.6 | 45.6 | 0.0 | 42.7 | 0.0 |
| 03/13/07 | 1.5 | 0.0 | 16.0 | 19.1 | 54.7 | 0.0 | 50.3 | 8.2 | 55.3 | 0.0 | 54.9 | 0.0 |
| 03/14/07 | 1.5 | 0.0 | 17.4 | 18.8 | 56.0 | 0.0 | 56.9 | 15.2 | 62.9 | 0.0 | 61.2 | 0.0 |
| 03/15/07 | 1.5 | 0.0 | --- | --- | 54.4 | 0.0 | 55.2 | 13.7 | 61.7 | 0.0 | 60.7 | 0.0 |

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

| Date | McNary | | John Day | | The Dalles | | Bonneville | | PH1 | PH2 |
|----------|--------|-------|----------|-------|------------|-------|------------|-------|------|-------|
| | Flow | Spill | Flow | Spill | Flow | Spill | Flow | Spill | | |
| 03/02/07 | 156.7 | 0.0 | 160.1 | 0.0 | 161.5 | 0.0 | 172.8 | 0.7 | 63.6 | 98.3 |
| 03/03/07 | 146.9 | 0.0 | 154.9 | 0.0 | 155.1 | 0.0 | 162.4 | 0.7 | 63.4 | 88.0 |
| 03/04/07 | 113.1 | 0.0 | 124.0 | 0.0 | 127.4 | 0.0 | 143.4 | 0.7 | 48.3 | 84.1 |
| 03/05/07 | 127.0 | 0.0 | 129.0 | 0.0 | 125.0 | 0.0 | 138.4 | 0.7 | 43.2 | 84.3 |
| 03/06/07 | 125.9 | 0.0 | 130.1 | 0.0 | 135.0 | 0.0 | 144.5 | 0.7 | 49.7 | 83.8 |
| 03/07/07 | 124.1 | 0.0 | 132.0 | 0.0 | 132.6 | 0.0 | 147.3 | 0.7 | 51.9 | 84.4 |
| 03/08/07 | 132.1 | 0.4 | 146.5 | 0.0 | 149.2 | 0.0 | 164.3 | 0.7 | 58.3 | 95.0 |
| 03/09/07 | 156.4 | 0.0 | 163.3 | 0.0 | 163.2 | 0.0 | 190.2 | 0.8 | 76.2 | 102.6 |
| 03/10/07 | 136.9 | 0.0 | 148.8 | 0.0 | 145.2 | 0.0 | 142.4 | 1.3 | 45.4 | 84.2 |
| 03/11/07 | 105.0 | 0.0 | 105.6 | 0.0 | 116.7 | 0.0 | 145.2 | 1.4 | 52.0 | 80.3 |
| 03/12/07 | 132.1 | 0.0 | 142.4 | 0.0 | 136.7 | 0.0 | 162.6 | 1.3 | 59.8 | 90.0 |
| 03/13/07 | 161.6 | 0.0 | 163.1 | 0.0 | 163.4 | 0.0 | 201.8 | 1.4 | 83.2 | 105.7 |
| 03/14/07 | 185.3 | 0.3 | 192.1 | 0.0 | 195.6 | 2.1 | 214.1 | 1.4 | 88.0 | 113.3 |
| 03/15/07 | 197.1 | 5.8 | 209.3 | 0.0 | 210.5 | 0.0 | 228.2 | 1.4 | 98.0 | 117.4 |

HATCHERY RELEASE LAST TWO WEEKS

Hatchery Release Summary

From: **3/2/2007** to **03/15/07**

| Agency | Hatchery | Species | Race | MigYr | NumRel | RelStart | RelEnd | RelSite | RelRiver |
|--|-----------------------|---------|------|-------|-------------------|----------|----------|-------------------------|-------------------------|
| Nez Perce Tribe | Eagle Creek NFH | CO | UN | 2007 | 275,000 | 03-12-07 | 03-12-07 | Lapwai Creek | Clearwater River M F |
| Nez Perce Tribe | Eagle Creek NFH | CO | UN | 2007 | 275,000 | 03-14-07 | 03-14-07 | Clear Creek | Clearwater River M F |
| Nez Perce Tribe | Lookingglass Hatchery | CH1 | SP | 2007 | 108,000 | 03-10-07 | 03-26-07 | Lostine Accim Pond | Wallowa River |
| | | | | | | | | | South Fork Salmon River |
| Nez Perce Tribe | McCall Hatchery | CH1 | SU | 2007 | 120,000 | 03-12-07 | 03-12-07 | Johnson Cr Idaho | River |
| Nez Perce Tribe Total | | | | | 778,000 | | | | |
| Oregon Dept. of Fish and Wildlife | Oak Springs Hatchery | ST | SU | 2007 | 31,212 | 03-14-07 | 03-15-07 | Hood River | Hood River |
| Oregon Dept. of Fish and Wildlife Total | | | | | 31,212 | | | | |
| U.S. Fish and Wildlife Service | Spring Creek NFH | CH0 | FA | 2007 | 1,168,812 | 03-09-07 | 03-09-07 | White Salmon River | White Salmon River |
| U.S. Fish and Wildlife Service | Spring Creek NFH | CH0 | FA | 2007 | 6,593,606 | 03-05-07 | 03-05-07 | White Salmon River | White Salmon River |
| U.S. Fish and Wildlife Service Total | | | | | 7,762,418 | | | | |
| | | | | | | | | Thornhollow Acclim Pond | |
| Umatilla Tribe | Bonneville Hatchery | CH1 | FA | 2007 | 236,781 | 03-09-07 | 03-14-07 | | Umatilla River |
| Umatilla Tribe | Cascade Hatchery | CO | UN | 2007 | 249,732 | 03-08-07 | 03-13-07 | Umatilla River | Umatilla River |
| Umatilla Tribe | Lower Herman Cr | CO | UN | 2007 | 511,105 | 03-08-07 | 03-13-07 | Umatilla River | Umatilla River |
| Umatilla Tribe | Umatilla Hatchery | CH1 | SP | 2007 | 498,128 | 03-02-07 | 03-07-07 | Imeques Acclim Pond | Umatilla River |
| Umatilla Tribe Total | | | | | 1,495,746 | | | | |
| Yakama Tribe | Cle Elem Hatchery | CH1 | SP | 2007 | 281,176 | 03-15-07 | 05-15-07 | Easton Pond | Yakima River |
| Yakama Tribe | Cle Elem Hatchery | CH1 | SP | 2007 | 287,645 | 03-15-07 | 05-15-07 | Clark Flat Acclim Pond | Yakima River |
| | | | | | | | | Jack Creek Acclim Pond | |
| Yakama Tribe | Cle Elem Hatchery | CH1 | SP | 2007 | 291,991 | 03-15-07 | 05-15-07 | | Yakima River |
| Yakama Tribe | Klickitat Hatchery | CH1 | SP | 2007 | 606,000 | 03-05-07 | 03-06-07 | Klickitat Hatchery | Klickitat River |
| Yakama Tribe Total | | | | | 1,466,812 | | | | |
| Grand Total | | | | | 11,534,188 | | | | |

HATCHERY RELEASE NEXT TWO WEEKS

Hatchery Release Summary

From: **3/16/2007** to **3/29/2007**

| Agency | Hatchery | Species | Race | MigYr | NumRel | RelStart | RelEnd | RelSite | RelRiver |
|--|-----------------------|---------|------|-------|------------------|----------|----------|---|----------------------|
| Idaho Dept. of Fish and Game | McCall Hatchery | CH1 | SU | 2007 | 1,086,600 | 03-19-07 | 03-19-07 | S Fk Salmon River | Salmon River (ID) |
| Idaho Dept. of Fish and Game | Niagara Springs | ST | SU | 2007 | 525,000 | 03-19-07 | 03-29-07 | Hells Canyon Dam | Snake River |
| Idaho Dept. of Fish and Game | Rapid River Hatchery | CH1 | SP | 2007 | 200,000 | 03-20-07 | 04-01-07 | Pine Bar/Salmon River | Salmon River (ID) |
| Idaho Dept. of Fish and Game | Rapid River Hatchery | CH1 | SP | 2007 | 300,000 | 03-20-07 | 04-01-07 | Hells Canyon Dam | Snake River |
| Idaho Dept. of Fish and Game | Rapid River Hatchery | CH1 | SP | 2007 | 2,485,000 | 03-20-07 | 04-01-07 | Rapid River | Little Salmon River |
| Idaho Dept. of Fish and Game | | | | | 4,596,600 | | | | |
| Nez Perce Tribe | Hagerman NFH | ST | SU | 2007 | 145,000 | 03-26-07 | 04-06-07 | Little Salmon River | Salmon River (ID) |
| Nez Perce Tribe | Lookingglass Hatchery | CH1 | SP | 2007 | 108,000 | 03-10-07 | 03-26-07 | Lostine Accim Pond | Wallowa River |
| Nez Perce Tribe | Lookingglass Hatchery | CH1 | SP | 2007 | 136,000 | 03-28-07 | 04-17-07 | Lostine Accim Pond | Wallowa River |
| Nez Perce Tribe Total | | | | | 389,000 | | | | |
| Oregon Dept. of Fish and Wildlife | Lookingglass Hatchery | CH1 | SP | 2007 | 360,000 | 03-21-07 | 03-21-07 | Imnaha Acclim Pond | Imnaha River |
| Oregon Dept. of Fish and Wildlife Total | | | | | 360,000 | | | | |
| U.S. Fish and Wildlife Service | Dworshak NFH | CH1 | SP | 2007 | 950,000 | 03-21-07 | 04-09-07 | Dworshak Hatchery | Clearwater River M F |
| U.S. Fish and Wildlife Service | Kooskia NFH | CH1 | SP | 2007 | 178,500 | 03-24-07 | 04-04-07 | Kooskia Hatchery | Clearwater River M F |
| U.S. Fish and Wildlife Service | Kooskia NFH | CH1 | SP | 2007 | 391,500 | 03-24-07 | 04-04-07 | Kooskia Hatchery | Clearwater River M F |
| U.S. Fish and Wildlife Service Total | | | | | 1,520,000 | | | | |
| Warm Springs Tribe | Round Butte Hatchery | CH1 | SP | 2007 | 32,000 | 03-20-07 | 05-04-07 | Parkdale Acclim Pond | Hood River |
| Warm Springs Tribe Total | | | | | 32,000 | | | | |
| Yakama Tribe | Cle Elem Hatchery | CH1 | SP | 2007 | 281,176 | 03-15-07 | 05-15-07 | Easton Pond | Yakima River |
| Yakama Tribe | Cle Elem Hatchery | CH1 | SP | 2007 | 287,645 | 03-15-07 | 05-15-07 | Clark Flat Acclim Pond Jack Creek Acclim | Yakima River |
| Yakama Tribe | Cle Elem Hatchery | CH1 | SP | 2007 | 291,991 | 03-15-07 | 05-15-07 | Pond | Yakima River |
| Yakama Tribe Total | | | | | 860,812 | | | | |
| Grand Total | | | | | 7,758,412 | | | | |

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> | # | | | | | |
| | <u>Avg</u> | <u>Avg</u> | | <u>High</u> | <u>Avg</u> | | <u>Avg</u> | <u>High</u> | | <u>Avg</u> | <u>Avg</u> | | <u>High</u> | <u>Avg</u> | | | <u>Avg</u> | <u>High</u> | <u>Avg</u> | <u>Avg</u> |
| 3/2 | --- | --- | --- | 0 | 99 | 99 | 100 | 24 | 101 | 101 | 101 | 24 | 101 | 101 | 102 | 24 | --- | --- | --- | 0 |
| 3/3 | --- | --- | --- | 0 | 99 | 99 | 100 | 24 | 100 | 101 | 101 | 24 | 101 | 101 | 102 | 24 | --- | --- | --- | 0 |
| 3/4 | --- | --- | --- | 0 | 100 | 100 | 101 | 24 | 101 | 101 | 101 | 24 | 101 | 102 | 102 | 24 | --- | --- | --- | 0 |
| 3/5 | --- | --- | --- | 0 | 100 | 101 | 101 | 24 | 102 | 102 | 102 | 24 | 102 | 102 | 105 | 24 | --- | --- | --- | 0 |
| 3/6 | --- | --- | --- | 0 | 101 | 102 | 103 | 24 | 102 | 102 | 102 | 24 | 102 | 102 | 103 | 24 | --- | --- | --- | 0 |
| 3/7 | --- | --- | --- | 0 | 102 | 103 | 104 | 23 | 103 | 103 | 103 | 24 | 103 | 103 | 105 | 23 | --- | --- | --- | 0 |
| 3/8 | --- | --- | --- | 0 | 102 | 103 | 103 | 24 | 102 | 103 | 103 | 24 | 102 | 103 | 104 | 24 | --- | --- | --- | 0 |
| 3/9 | --- | --- | --- | 0 | 102 | 103 | 103 | 24 | 102 | 102 | 103 | 24 | 102 | 102 | 104 | 24 | --- | --- | --- | 0 |
| 3/10 | --- | --- | --- | 0 | 102 | 103 | 104 | 24 | 102 | 102 | 103 | 24 | 102 | 102 | 104 | 24 | --- | --- | --- | 0 |
| 3/11 | --- | --- | --- | 0 | 103 | 104 | 105 | 22 | 103 | 103 | 103 | 23 | 103 | 104 | 105 | 22 | --- | --- | --- | 0 |
| 3/12 | --- | --- | --- | 0 | 104 | 104 | 106 | 24 | 103 | 103 | 103 | 24 | 103 | 103 | 105 | 24 | --- | --- | --- | 0 |
| 3/13 | --- | --- | --- | 0 | 104 | 105 | 109 | 24 | 103 | 103 | 103 | 24 | 102 | 102 | 103 | 24 | --- | --- | --- | 0 |
| 3/14 | --- | --- | --- | 0 | 103 | 103 | 104 | 24 | 102 | 102 | 103 | 24 | 102 | 102 | 104 | 24 | --- | --- | --- | 0 |
| 3/15 | --- | --- | --- | 0 | 103 | 104 | 105 | 24 | 102 | 102 | 102 | 24 | 101 | 102 | 104 | 24 | --- | --- | --- | 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> | # | | | | | |
| | <u>Avg</u> | <u>Avg</u> | | <u>High</u> | <u>Avg</u> | | <u>Avg</u> | <u>High</u> | | <u>Avg</u> | <u>Avg</u> | | <u>High</u> | <u>Avg</u> | | | <u>Avg</u> | <u>High</u> | <u>Avg</u> | <u>Avg</u> |
| 3/2 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/3 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/4 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/5 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/6 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/7 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/8 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/9 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/10 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/11 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/12 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/13 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/14 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/15 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |

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> | # | | | | | |
| | <u>Avg</u> | <u>Avg</u> | | <u>High</u> | <u>Avg</u> | | <u>Avg</u> | <u>High</u> | | <u>Avg</u> | <u>Avg</u> | | <u>High</u> | <u>Avg</u> | | | <u>Avg</u> | <u>High</u> | <u>Avg</u> | <u>Avg</u> |
| 3/2 | --- | --- | --- | 0 | --- | --- | --- | 0 | 98 | 99 | 99 | 24 | 100 | 100 | 100 | 24 | 99 | 100 | 100 | 24 |
| 3/3 | --- | --- | --- | 0 | --- | --- | --- | 0 | 98 | 98 | 98 | 24 | 99 | 99 | 100 | 24 | 99 | 99 | 99 | 24 |
| 3/4 | --- | --- | --- | 0 | --- | --- | --- | 0 | 98 | 98 | 99 | 24 | 100 | 100 | 100 | 24 | 100 | 101 | 101 | 24 |
| 3/5 | --- | --- | --- | 0 | --- | --- | --- | 0 | 99 | 99 | 100 | 24 | 101 | 101 | 101 | 24 | 100 | 101 | 101 | 24 |
| 3/6 | --- | --- | --- | 0 | --- | --- | --- | 0 | 100 | 100 | 101 | 24 | 101 | 102 | 102 | 24 | 101 | 101 | 102 | 24 |
| 3/7 | --- | --- | --- | 0 | --- | --- | --- | 0 | 102 | 102 | 102 | 24 | 103 | 104 | 106 | 24 | 102 | 103 | 103 | 24 |
| 3/8 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/9 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/10 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/11 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/12 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/13 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/14 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/15 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 | --- | --- | --- | 0 |

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 Avg | 12 h Avg | High | | 24 h Avg | 12 h Avg | High | | 24 h Avg | 12 h Avg | High | | 24 h Avg | 12 h Avg | High | | 24 h Avg | 12 h Avg | High | |
| 3/2 | 99 | 100 | 100 | 24 | --- | --- | --- | 0 | 101 | 101 | 102 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/3 | 99 | 99 | 100 | 24 | --- | --- | --- | 0 | 101 | 101 | 102 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/4 | 100 | 101 | 101 | 24 | --- | --- | --- | 0 | 101 | 102 | 103 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/5 | 101 | 101 | 101 | 24 | --- | --- | --- | 0 | 102 | 102 | 103 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/6 | 101 | 102 | 102 | 24 | --- | --- | --- | 0 | 102 | 103 | 104 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/7 | 103 | 103 | 104 | 24 | --- | --- | --- | 0 | 102 | 103 | 104 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/8 | --- | --- | --- | 0 | --- | --- | --- | 0 | 102 | 103 | 104 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/9 | --- | --- | --- | 0 | --- | --- | --- | 0 | 103 | 103 | 105 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/10 | --- | --- | --- | 0 | --- | --- | --- | 0 | 103 | 104 | 104 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/11 | --- | --- | --- | 0 | --- | --- | --- | 0 | 103 | 104 | 105 | 23 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/12 | --- | --- | --- | 0 | --- | --- | --- | 0 | 103 | 104 | 104 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/13 | --- | --- | --- | 0 | --- | --- | --- | 0 | 112 | 121 | 129 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/14 | --- | --- | --- | 0 | --- | --- | --- | 0 | 103 | 103 | 104 | 24 | --- | --- | --- | 0 | --- | --- | --- | 0 |
| 3/15 | --- | --- | --- | 0 | --- | --- | --- | 0 | 117 | 127 | 129 | 22 | --- | --- | --- | 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 Avg | 12 h Avg | High | | 24 h Avg | 12 h Avg | High | | 24 h Avg | 12 h Avg | High | | 24 h Avg | 12 h Avg | High | | 24 h Avg | 12 h Avg | High | |
| 3/2 | --- | --- | --- | 0 | --- | --- | --- | 0 | 99 | 100 | 100 | 24 | --- | --- | --- | 0 | 100 | 101 | 106 | 24 |
| 3/3 | --- | --- | --- | 0 | --- | --- | --- | 0 | 99 | 99 | 99 | 24 | --- | --- | --- | 0 | 102 | 106 | 115 | 24 |
| 3/4 | --- | --- | --- | 0 | --- | --- | --- | 0 | 99 | 100 | 100 | 24 | --- | --- | --- | 0 | 104 | 110 | 117 | 24 |
| 3/5 | --- | --- | --- | 0 | --- | --- | --- | 0 | 100 | 100 | 100 | 24 | --- | --- | --- | 0 | 105 | 111 | 116 | 24 |
| 3/6 | --- | --- | --- | 0 | --- | --- | --- | 0 | 101 | 102 | 103 | 24 | --- | --- | --- | 0 | 106 | 113 | 124 | 24 |
| 3/7 | --- | --- | --- | 0 | --- | --- | --- | 0 | 102 | 102 | 103 | 24 | --- | --- | --- | 0 | 104 | 107 | 110 | 24 |
| 3/8 | --- | --- | --- | 0 | --- | --- | --- | 0 | 101 | 102 | 104 | 24 | --- | --- | --- | 0 | 104 | 108 | 115 | 24 |
| 3/9 | --- | --- | --- | 0 | --- | --- | --- | 0 | 102 | 102 | 103 | 24 | --- | --- | --- | 0 | 105 | 109 | 115 | 24 |
| 3/10 | --- | --- | --- | 0 | --- | --- | --- | 0 | 104 | 104 | 105 | 24 | --- | --- | --- | 0 | 106 | 112 | 118 | 24 |
| 3/11 | --- | --- | --- | 0 | --- | --- | --- | 0 | 104 | 104 | 105 | 23 | --- | --- | --- | 0 | 104 | 106 | 110 | 23 |
| 3/12 | --- | --- | --- | 0 | --- | --- | --- | 0 | 105 | 105 | 109 | 24 | --- | --- | --- | 0 | 105 | 107 | 112 | 24 |
| 3/13 | --- | --- | --- | 0 | --- | --- | --- | 0 | 103 | 103 | 104 | 24 | --- | --- | --- | 0 | 106 | 109 | 110 | 24 |
| 3/14 | --- | --- | --- | 0 | --- | --- | --- | 0 | 103 | 103 | 103 | 10 | --- | --- | --- | 0 | 109 | 110 | 110 | 24 |
| 3/15 | --- | --- | --- | 0 | --- | --- | --- | 0 | 102 | 102 | 102 | 6 | --- | --- | --- | 0 | 109 | 110 | 111 | 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 Avg | 12 h Avg | High | | 24 h Avg | 12 h Avg | High | | 24 h Avg | 12 h Avg | High | | 24 h Avg | 12 h Avg | High | | 24 h Avg | 12 h Avg | High | |
| 3/2 | --- | --- | --- | 0 | 99 | 99 | 99 | 24 | --- | --- | --- | 0 | 100 | 100 | 100 | 24 | --- | --- | --- | 0 |
| 3/3 | --- | --- | --- | 0 | 98 | 99 | 99 | 24 | --- | --- | --- | 0 | 99 | 99 | 100 | 24 | --- | --- | --- | 0 |
| 3/4 | --- | --- | --- | 0 | 99 | 99 | 101 | 24 | --- | --- | --- | 0 | 100 | 100 | 102 | 24 | --- | --- | --- | 0 |
| 3/5 | --- | --- | --- | 0 | 103 | 107 | 127 | 24 | --- | --- | --- | 0 | 100 | 101 | 101 | 24 | --- | --- | --- | 0 |
| 3/6 | --- | --- | --- | 0 | 101 | 101 | 107 | 24 | --- | --- | --- | 0 | 101 | 101 | 102 | 24 | --- | --- | --- | 0 |
| 3/7 | --- | --- | --- | 0 | 101 | 101 | 104 | 24 | --- | --- | --- | 0 | 102 | 102 | 103 | 24 | --- | --- | --- | 0 |
| 3/8 | --- | --- | --- | 0 | 101 | 102 | 102 | 24 | --- | --- | --- | 0 | 101 | 102 | 102 | 24 | --- | --- | --- | 0 |
| 3/9 | --- | --- | --- | 0 | 107 | 111 | 111 | 24 | --- | --- | --- | 0 | 102 | 102 | 102 | 24 | --- | --- | --- | 0 |
| 3/10 | --- | --- | --- | 0 | 110 | 112 | 113 | 24 | --- | --- | --- | 0 | 102 | 102 | 102 | 24 | --- | --- | --- | 0 |
| 3/11 | --- | --- | --- | 0 | 105 | 105 | 105 | 23 | --- | --- | --- | 0 | 102 | 103 | 103 | 23 | --- | --- | --- | 0 |
| 3/12 | --- | --- | --- | 0 | 104 | 105 | 106 | 24 | --- | --- | --- | 0 | 103 | 103 | 103 | 24 | --- | --- | --- | 0 |
| 3/13 | --- | --- | --- | 0 | 104 | 104 | 105 | 24 | --- | --- | --- | 0 | 105 | 106 | 107 | 24 | --- | --- | --- | 0 |
| 3/14 | --- | --- | --- | 0 | 104 | 104 | 104 | 24 | --- | --- | --- | 0 | 105 | 106 | 107 | 24 | --- | --- | --- | 0 |
| 3/15 | --- | --- | --- | 0 | 103 | 103 | 103 | 24 | --- | --- | --- | 0 | 104 | 104 | 104 | 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> | # | <u>24h</u> | <u>AVG</u> | <u>High</u> | # | |
| | Avg | Avg | | High | Avg | | Avg | High | | Avg | Avg | | High | Avg | | Avg | High | Avg | | AVG |
| 3/2 | --- | --- | --- | 0 | 99 | 100 | 100 | 24 | --- | --- | --- | 0 | 100 | 100 | 101 | 24 | --- | --- | --- | 0 |
| 3/3 | --- | --- | --- | 0 | 99 | 99 | 99 | 24 | --- | --- | --- | 0 | 100 | 100 | 100 | 24 | --- | --- | --- | 0 |
| 3/4 | --- | --- | --- | 0 | 100 | 100 | 100 | 24 | --- | --- | --- | 0 | 100 | 100 | 100 | 24 | --- | --- | --- | 0 |
| 3/5 | --- | --- | --- | 0 | 101 | 101 | 102 | 24 | --- | --- | --- | 0 | 101 | 101 | 101 | 24 | --- | --- | --- | 0 |
| 3/6 | --- | --- | --- | 0 | 102 | 102 | 103 | 24 | --- | --- | --- | 0 | 101 | 101 | 102 | 24 | --- | --- | --- | 0 |
| 3/7 | --- | --- | --- | 0 | 103 | 103 | 103 | 24 | --- | --- | --- | 0 | 102 | 102 | 102 | 24 | --- | --- | --- | 0 |
| 3/8 | --- | --- | --- | 0 | 103 | 103 | 104 | 24 | --- | --- | --- | 0 | 101 | 102 | 102 | 24 | --- | --- | --- | 0 |
| 3/9 | --- | --- | --- | 0 | 103 | 103 | 104 | 24 | --- | --- | --- | 0 | 102 | 102 | 102 | 24 | --- | --- | --- | 0 |
| 3/10 | --- | --- | --- | 0 | 103 | 103 | 103 | 24 | --- | --- | --- | 0 | 102 | 102 | 102 | 24 | --- | --- | --- | 0 |
| 3/11 | --- | --- | --- | 0 | 103 | 103 | 103 | 23 | --- | --- | --- | 0 | 103 | 103 | 103 | 24 | --- | --- | --- | 0 |
| 3/12 | --- | --- | --- | 0 | 103 | 103 | 104 | 24 | --- | --- | --- | 0 | 103 | 103 | 103 | 24 | --- | --- | --- | 0 |
| 3/13 | --- | --- | --- | 0 | 103 | 104 | 104 | 24 | --- | --- | --- | 0 | 103 | 103 | 103 | 24 | --- | --- | --- | 0 |
| 3/14 | --- | --- | --- | 0 | 104 | 104 | 107 | 24 | --- | --- | --- | 0 | 103 | 103 | 103 | 24 | --- | --- | --- | 0 |
| 3/15 | --- | --- | --- | 0 | 106 | 108 | 113 | 24 | --- | --- | --- | 0 | 103 | 103 | 103 | 24 | --- | --- | --- | 0 |

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> | # | <u>24h</u> | <u>12h</u> | # | | |
| | Avg | Avg | | High | Avg | | Avg | High | | Avg | Avg | | High | Avg | | Avg | High | | Avg | AVG |
| 3/2 | 100 | 100 | 100 | 24 | 100 | 100 | 101 | 24 | 102 | 102 | 103 | 24 | 101 | 101 | 101 | 24 | 107 | 107 | 107 | 24 |
| 3/3 | 100 | 100 | 100 | 24 | 100 | 101 | 101 | 24 | 102 | 103 | 103 | 24 | 102 | 103 | 104 | 24 | 108 | 109 | 109 | 24 |
| 3/4 | 100 | 100 | 101 | 24 | 101 | 102 | 102 | 24 | 104 | 105 | 105 | 24 | 103 | 103 | 104 | 24 | 110 | 110 | 111 | 14 |
| 3/5 | 100 | 100 | 101 | 24 | 102 | 102 | 102 | 24 | 105 | 105 | 106 | 24 | 104 | 105 | 105 | 24 | 111 | 111 | 113 | 17 |
| 3/6 | 100 | 101 | 101 | 24 | 102 | 103 | 103 | 24 | 105 | 105 | 105 | 24 | 104 | 105 | 106 | 24 | 110 | 110 | 111 | 17 |
| 3/7 | 101 | 101 | 102 | 24 | 102 | 103 | 103 | 24 | 105 | 106 | 106 | 24 | 105 | 105 | 106 | 24 | 109 | 110 | 110 | 17 |
| 3/8 | 101 | 101 | 101 | 24 | 102 | 102 | 102 | 24 | 104 | 104 | 105 | 24 | 104 | 105 | 105 | 24 | 109 | 109 | 109 | 11 |
| 3/9 | 101 | 101 | 102 | 24 | 102 | 102 | 102 | 24 | 103 | 103 | 104 | 24 | 103 | 104 | 104 | 24 | 109 | 110 | 112 | 24 |
| 3/10 | 101 | 102 | 102 | 24 | 102 | 102 | 102 | 24 | 104 | 105 | 105 | 24 | 103 | 103 | 104 | 24 | 106 | 106 | 107 | 17 |
| 3/11 | 102 | 102 | 103 | 23 | 102 | 103 | 103 | 23 | 105 | 105 | 106 | 23 | 105 | 106 | 107 | 23 | 106 | 107 | 108 | 17 |
| 3/12 | 103 | 103 | 104 | 24 | 103 | 103 | 103 | 24 | 105 | 106 | 106 | 24 | 105 | 106 | 106 | 24 | 109 | 109 | 111 | 17 |
| 3/13 | 102 | 102 | 103 | 24 | 103 | 103 | 103 | 24 | 103 | 103 | 104 | 24 | 104 | 105 | 105 | 24 | 109 | 109 | 110 | 17 |
| 3/14 | 102 | 102 | 103 | 24 | 102 | 102 | 103 | 24 | 103 | 103 | 103 | 24 | 103 | 103 | 104 | 24 | 110 | 111 | 114 | 17 |
| 3/15 | 102 | 103 | 103 | 24 | 102 | 103 | 103 | 24 | 102 | 103 | 103 | 24 | 103 | 103 | 104 | 24 | 114 | 115 | 116 | 17 |

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) |
| 03/02/2007 | --- | 0 | --- | --- | --- | --- | --- | --- | --- | --- | 0 |
| 03/03/2007 | --- | 0 | --- | --- | --- | --- | --- | --- | --- | --- | 0 |
| 03/04/2007 | --- | 0 | --- | --- | --- | --- | --- | --- | --- | --- | 0 |
| 03/05/2007 | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 0 |
| 03/06/2007 | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 0 |
| 03/07/2007 | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 0 |
| 03/08/2007 | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 0 |
| 03/09/2007 | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 0 |
| 03/10/2007 | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 0 |
| 03/11/2007 | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 0 |
| 03/12/2007 | 0 | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 0 |
| 03/13/2007 | * | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 0 |
| 03/14/2007 | * | 0 | 0 | 0 | --- | --- | --- | --- | --- | --- | 0 |
| 03/15/2007 | 0 | --- | 0 | 0 | --- | --- | --- | --- | --- | --- | 0 |
| 03/16/2007 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | | | | | | | | | | |
| Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # Days: | 11 | 13 | 11 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| Average: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| YTD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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

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

Definitions for Smolt Index Counts

- WTB (Collection) = Salmon River Trap at Whitebird : Collection Counts
- IMN (Collection) = Imnaha River Trap : Collection Counts
- GRN (Collection) = Grande Ronde River Trap : Collection Counts
- LEW (Collection) = Snake River Trap at Lewiston : Collection Counts
- LGR (Index) = Lower Granite Dam Bypass Collection System : Passage Index Counts
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.

