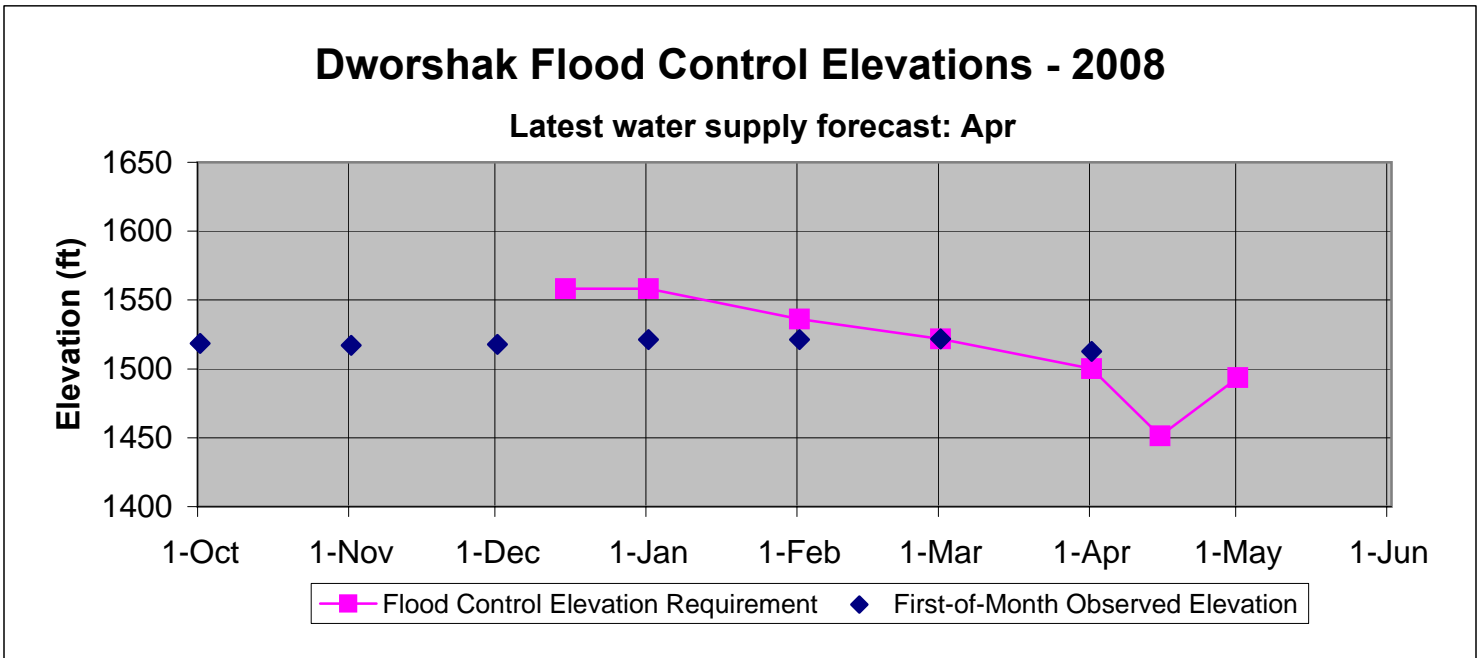
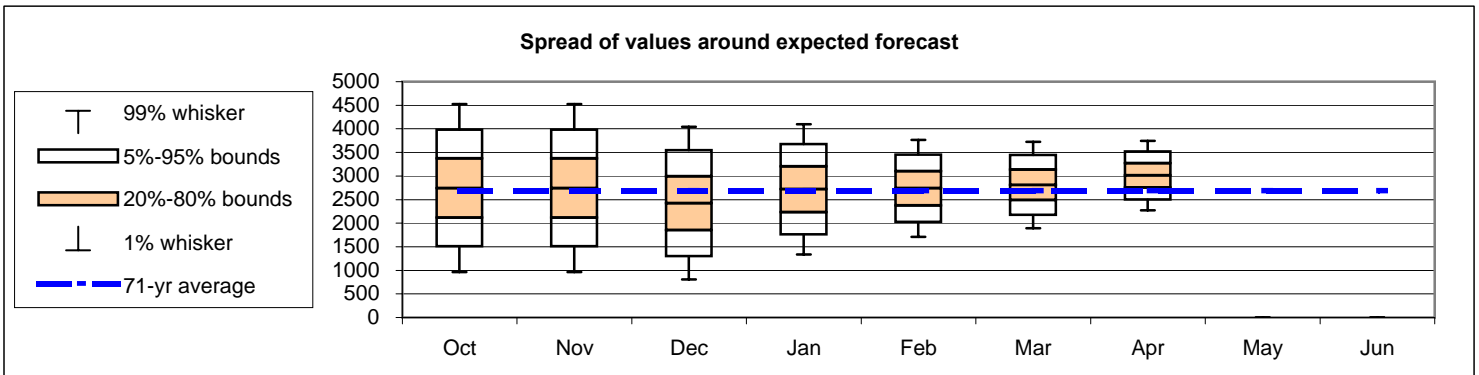


Dworshak : April Runoff Forecast & Flood Control Calculation

WY 2008

| Runoff Forecast and Non-Shifted Flood Control | | | | 1929-1999 Average | Percent of Average | | | | |
|--|---------|--------|--------|-------------------|--------------------|--------|--------|--------|-----|
| Most Probable Runoff Volume | Apr-Jul | 3010 | KAF | 2683 | 112% | | | | |
| | May-Jul | 2221 | KAF | 1980 | 112% | | | | |
| 30-Apr Flood Control Space | | 1544 | KAF | | | | | | |
| 30-Apr Flood Control Elevation | | 1493.7 | ft | | | | | | |
| Seasonal Flood Control (assumes no shift of flood control space to Grand Coulee) | | | | | | | | | |
| Forecast Date>> | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun |
| Apr-Jul Runoff Forecast | 2744 | 2744 | 2425 | 2717 | 2738 | 2810 | 3010 | | |
| First-of-Month Elev | 1518.4 | 1517.1 | 1517.7 | 1521.2 | 1521.3 | 1521.8 | 1512.6 | | |
| Date >> | | 15-Dec | 31-Dec | 31-Jan | 28-Feb | 31-Mar | 15-Apr | 30-Apr | |
| Flood Control Space | -- | 700 | 700 | 1015 | 1206 | 1473 | 1958 | 1544 | |
| Flood Control Elevation | -- | 1558.2 | 1558.2 | 1536.1 | 1521.8 | 1500.1 | 1451.3 | 1493.7 | |



- Notes:
1. The given forecast is the official Corps of Engineers forecast for Dworshak. If you have any questions please contact Ken Soderlind (503 808-3950), Patti Low (503 808-3958), or John McCoskery (503 808-3951).
 2. Due to updated values for precipitation, snow or streamflow, subsequent forecasts may be different from the forecast published herein.
 3. 15-Dec and 31-Dec flood control space is fixed at 700 KAF.
 4. 15-Apr target elevation does not reflect flood control shift operation between Dworshak and Grand Coulee.
 5. 30-Apr target elevation may vary as runoff occurs throughout the month of April.

Dworshak : April Runoff Forecast & Flood Control Calculation

| Apr-Jul Runoff Forecast Calculation: | | | | | |
|--------------------------------------|-------|----------------|--------------|------------------------|-----------------------|
| Variable | Month | Observed Value | % of Average | Regression Coefficient | Marginal Runoff (KAF) |
| | | A | | B | =A*B |
| SOI | Sep | 0.20 | | 114.61 | 22.9 |
| Elk Butte SWE | 1-Apr | 48.70 | 120% | 14.98 | 729.4 |
| Hemlock Butte SWE | 1-Apr | 59.00 | 121% | 15.43 | 910.3 |
| Hoodoo Basin SWE | 1-Apr | 51.40 | 113% | 14.46 | 743.2 |
| Shanghi Summit SWE | 1-Apr | 38.20 | 145% | 16.82 | 642.5 |
| DWR January Inflow | Jan | 86.68 | 43% | 0.860 | 74.5 |
| DWR February Inflow | Feb | 107.90 | 39% | 0.150 | 16.2 |
| DWR March Inflow | Mar | 198.10 | 50% | 0.406 | 80.4 |
| Intercept | | 1 | | -209.67 | -209.7 |
| 1-Apr Forecast (KAF) | | | | Σ | 3009.8 |

| Data Station | Sept | Nov | Dec | 1-Jan | 1-Feb | 1-Mar | 1-Apr | 1-May | 1-Jun |
|--|------|------|------|-------|-------|-------|-------|-------|-------|
| Climate (Stdzd SOI) | | | | | | | | | |
| September SOI | 0.20 | | | | | | | | |
| Precipitation (monthly depth, inches) | | | | | | | | | |
| Headquarters, ID | | 3.40 | 8.63 | | | | | | |
| Snow Water Equiv (first of month SWE depth, inches) | | | | | | | | | |
| Elk Butte, ID | | | | 16.7 | 29.7 | 39.0 | 48.7 | 48.0 | -- |
| Hemlock Butte, ID | | | | 19.6 | 34.0 | 45.0 | 59.0 | 63.8 | -- |
| Hoodoo Basin, MT | | | | 21.5 | 32.7 | 43.0 | 51.4 | 63.8 | -- |
| Pierce RS, ID | | | | 4.0 | 8.9 | 11.7 | | | |
| Shanghi Summit, ID | | | | | | | 38.2 | 55.0 | |
| Lost Lake, ID | | | | | | | | 55.0 | -- |
| Streamflow (monthly volume, KAF) | | | | | | | | | |
| Dworshak Inflow | | | | Jan | Feb | Mar | Apr | May | Jun |
| | | | | 87 | 108 | 198 | 200 | -- | -- |