

Dworshak : March Runoff Forecast & Flood Control Calculation

WY 2014

Runoff Forecast and Flood Control

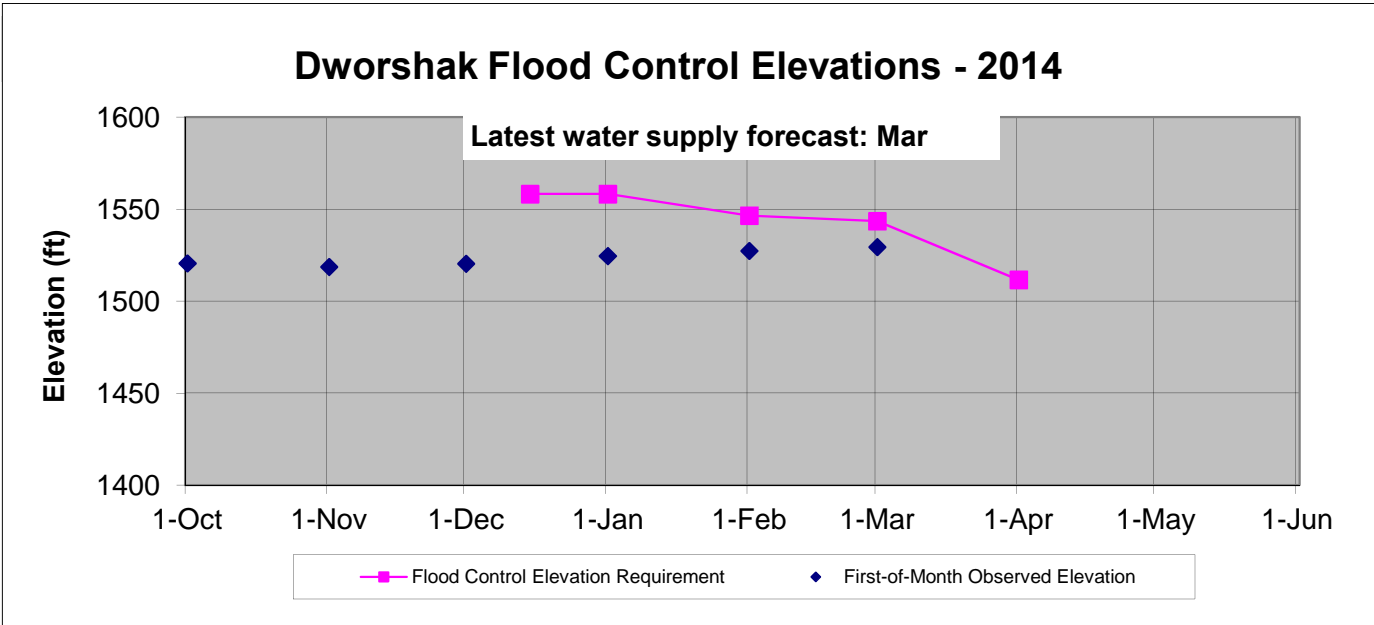
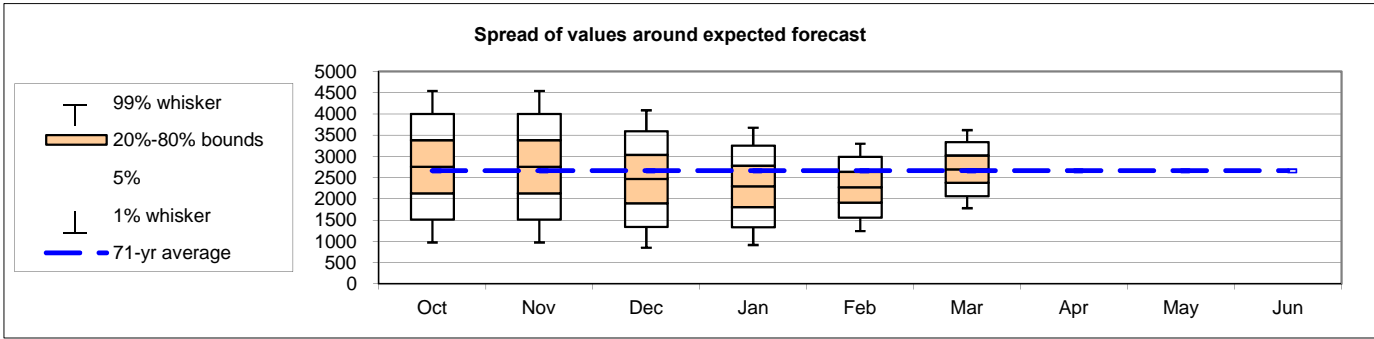
| | | | |
|---------------------------------------|----------------|---------------|------------|
| Most Probable Runoff Volume | Apr-Jul | 2701 | KAF |
| | May-Jul | 1981 | KAF |
| 31-Mar Flood Control Space | | 1336 | KAF |
| 31-Mar Flood Control Elevation | | 1511.6 | ft |

| 1981-2010 Average | Percent of Average | 1929-2010 Average | Percent of Average |
|-------------------|--------------------|-------------------|--------------------|
| 2438 | 111% | 2663 | 101% |
| 1784 | 111% | 1953 | 101% |

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 | 2758 | 2758 | 2470 | 2296 | 2274 | 2701 | | | |
| First-of-Month Elev | 1520.6 | 1518.7 | 1520.4 | 1524.6 | 1527.3 | 1529.5 | | | |

| Date >> | 15-Dec | 31-Dec | 31-Jan | 28-Feb | 31-Mar | 15-Apr | 30-Apr |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Flood Control Space | -- | 700 | 700 | 869 | 912 | 1336 | |
| Flood Control Elevation | -- | 1558.2 | 1558.2 | 1546.5 | 1543.5 | 1511.6 | |



Notes:
 1. The given forecast is the official Corps of Engineers forecast for Dworshak. If you have any questions please contact Jeremy Giovando (509 527 7053), or Steve Hall (509 527 7550).
 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.

Dworshak : March 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 | 0.30 | | 220.73 | 66.2 |
| HQSI Cumulative Precip | Oct-Date | 20.30 | 93% | 23.39 | 474.8 |
| Elk Butte SWE | 1-Mar | 32.2 | 93% | 10.16 | 327.2 |
| Hoodoo Basin SWE | 1-Mar | 37.3 | 97% | 10.01 | 373.4 |
| Sherwin SWE | 1-Mar | 9.3 | 86% | 25.42 | 236.4 |
| Lost Lake SWE | 1-Mar | 44.9 | 89% | 6.99 | 313.9 |
| Crater meadows SWE | 1-Mar | 46.9 | 121% | 13.06 | 612.5 |
| Intercept | | 1 | | 296.75 | 296.8 |
| 1-Mar Forecast (KAF) | | | | Σ | 2701.1 |

| Data Station | Sept | Nov | Dec | 1-Jan | 1-Feb | 1-Mar | 1-Apr | 1-May | 1-Jun | 1-Jul |
|--|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| Climate (Stdzd SOI) | | | | | | | | | | |
| September SOI | 0.30 | | | | | | | | | |
| Precipitation (in) | | | | | | | | | | |
| Oct | | | | | | | | | | |
| Headquarters, ID | 0.40 | 4.20 | 4.90 | 5.00 | 5.80 | -- | -- | | | |
| Cumulative HQSI Data | 0.40 | 4.60 | 9.50 | 14.50 | 20.30 | -- | -- | | | |
| Snow Water Equiv (First of Month values) (in) | | | | | | | | | | |
| Elk Butte, ID | | | | 12.8 | 21.4 | 32.2 | -- | | | |
| Cool Creek, ID | | | | 16.6 | 28.6 | | | | | |
| Hoodoo Basin, MT | | | | 13.3 | 22.2 | 37.3 | -- | -- | -- | |
| Sherwin, ID | | | | 2.7 | 6.0 | 9.3 | -- | | | |
| Shanghi Summit, ID | | | | | | | | -- | -- | |
| Lost Lake, ID | | | | 19.8 | 30.0 | 44.9 | -- | -- | -- | |
| Hemlock, ID | | | | | | | | -- | -- | |
| Crater Meadows Mar | | | | | | 46.9 | -- | | | |
| Streamflow (End of Month) (kaf) | | | | | | | | | | |
| Dworshak Inflow | | | | Jan | Feb | Mar | Apr | May | Jun | Jul |
| | | | | 132 | 143 | -- | -- | -- | -- | -- |

Approval:

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