

# Dworshak : June Runoff Forecast & Flood Risk Management Calculation

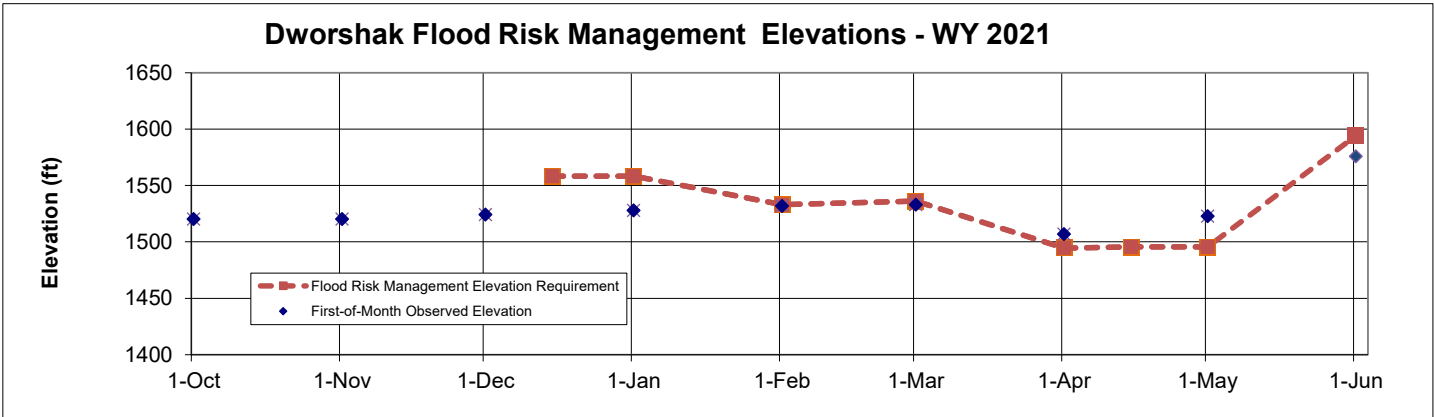
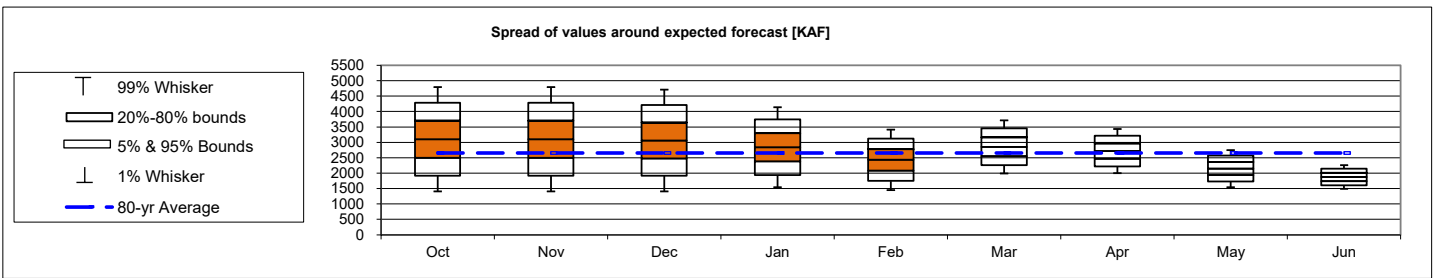
WY 2021

Runoff Forecast	June	1981-2010 Average	1981 - 2010 Percent of Average	1929-2008 Average	1929 - 2008 Percent of Average
Most Probable Runoff Volume: Apr-Jul (KAF)	1875	2438	77%	2655	71%
Most Probable Runoff Volume: May-Jul (KAF)	1358	1784	76%	1959	69%
Most Probable Runoff Volume: Jun-Jul (KAF)	497	853	58%	914	54%

Seasonal Flood Risk Management (assumes no shift of Flood Risk Management space to Grand Coulee, nor refill on the Flood Control Refill Curve)

Seasonal Flood Risk Management (FRM) Forecast	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Jul Runoff Forecast (KAF)	3100	3100	3063	2843	2432	2855	2716	2149	1875
First-of-Month Elevation (ft)	1520.2	1520.2	1524.2	1527.8	1531.7	1533.0	1506.8	1522.8	1575.6

Seasonal FRM Space	15-Dec	31-Dec	31-Jan	28-Feb	31-Mar	15-Apr	30-Apr
Flood Risk Management Space (KAF)	700	700	1057	1013	1534	1525	1525
Flood Risk Management Elevation (ft)	1558.2	1558.2	1533.0	1536.2	1494.6	1495.5	1495.5



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### Apr-Jul Runoff Forecast Calculation:

Variable	Month(s)	Units	Observed Value A	Percent of Average	Regression Coefficient B	Marginal Runoff (KAF) A*B
Hoodoo Basin SWE	1-Jun	Inch	22.8	88%	8.21	187.2
Shanghi Summit SWE	1-Jun	Inch	0.0	0%	10.26	0.0
Lost Lake SWE	1-Jun	Inch	25.4	78%	6.14	156.0
Hemlock SWE	1-Jun	Inch	2.0	11%	7.57	15.1
Intercept			1		138.78	138.8
1-Jun Forecast	Apr-Jul	KAF				497.1

### Data used in Dworshak Water Supply Forecast:

Climate Data	Sept								
SOI	0.90								
Precipitation Data	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Headquarters, ID (inch)		4.00	4.30	5.10	4.30	5.91	1.94	1.10	
Cumulative HQSI Data (inch)		4.00	8.30	13.40	17.70	23.61	25.55	26.65	
Snow Water Equivalent	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Elk Butte, ID (inch)				13.0	19.2	34.2	37.4		
Cool Creek, ID (inch)				16.4	24.3				
Hoodoo Basin, MT (inch)				14.9	21.1	30.9	34.2	35.5	22.8
Sherwin, ID (inch)				5.6	6.8	11.9	9.0		
Shanghi Summit, ID (inch)								8.8	0.0
Lost Lake, ID (inch)				18.8	27.0	44.0	48.8	48.5	25.4
Hemlock, ID (inch)								36.8	2.0
Crater Meadows Mar (inch)						41.4	49.4		
Streamflow	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Dworshak Inflow Volume (KAF)				160	205	146	255	517	861

- Notes:
1. The given forecast is the official Corps of Engineers forecast for Dworshak. If you have any questions please contact Willow Walker (509-527-7073), or Jon Roberts (509-527-7518).
  2. Due to updated values for precipitation, snow or streamflow, subsequent forecasts may be different from the forecast published herein.
  3. An approved deviation request allowed Dworshak reservoir to target elevation 1,533.8 ft for 30 April rather than the listed 30 April FRM target elevation of 1,495.5 ft.

Approval:

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