

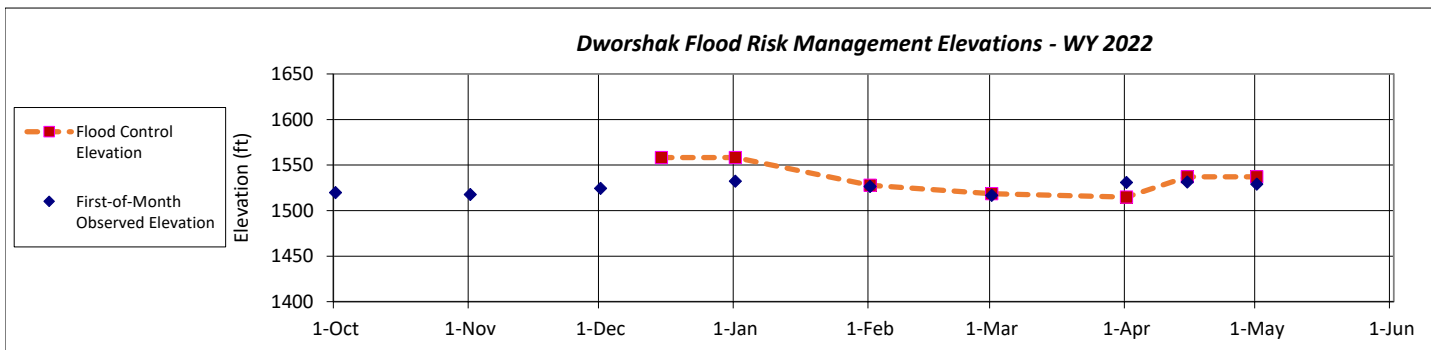
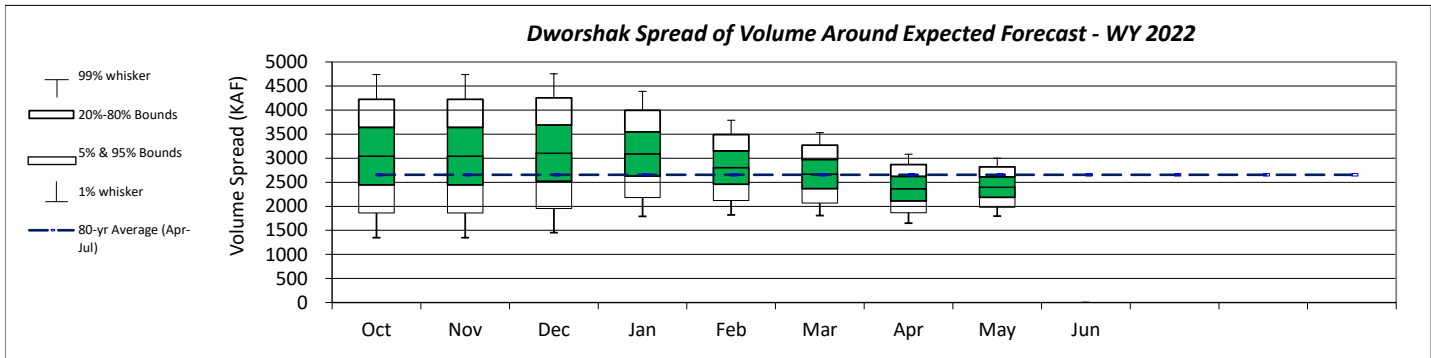
Dworshak : May Runoff Forecast & Flood Risk Management Calculation

Runoff Forecast	May Value	1991-2020 Average	1991 - 2020 Percent of Average	1929-2008 Average	1929 - 2008 Percent of Average
Most Probable Runoff Volume: Apr-Jul (KAF)	2399	2474	97%	2655	90%
Most Probable Runoff Volume: May-Jul (KAF)	1985	1788	111%	1959	101%

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

Seasonal FRM Forecast	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Jul Runoff Forecast (KAF)	3043	3043	3104	3090	2805	2669	2367	2399	
First-of-Month Elevation (ft)	1519.7	1517.7	1524.3	1532.3	1526.5	1516.7	1530.9	1529.0	

Seasonal FRM Space	15-Dec	31-Dec	31-Jan	28-Feb	31-Mar	15-Apr	30-Apr
Flood Risk Management Space (KAF)	700	700	1127	1248	1297	1000	1000
Flood Risk Management Elevation (ft)	1558	1558	1527.8	1518.6	1514.8	1537	1537.2



Dworshak : May Runoff Forecast & Flood Risk Management Calculation

May-Jul Runoff Forecast Calculation

<i>Variable</i>	<i>Month(s)</i>	<i>Units</i>	<i>Observed Value A</i>	<i>Percent of Average (1991-2020)</i>	<i>Regression Coefficient B</i>	<i>Marginal Runoff (KAF)</i>
SOI	Sept		0.80		122.04	97.6
Hoodoo Basin SWE	1-May	Inch	42.40	99%	11.71	496.5
Shanghi Summit SWE	1-May	Inch	16.60	113%	14.41	239.2
Lost Lake SWE	1-May	Inch	49.30	92%	9.67	476.7
Hemlock SWE	1-May	Inch	51.00	117%	11.58	590.6
Intercept			1		84.24	84.2
1-May Forecast	May-Jul	KAF				1984.9

Data used in Dworshak Water Supply Forecast

<i>Climate Data</i>	<i>Sept</i>
SOI	0.80

<i>Precipitation Data</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>
Headquarters, ID (inch)	2.30	7.10	7.50	5.70	2.60	3.30	4.20		
Cumulative HQSI Data (inch)	2.30	9.40	16.90	22.60	25.20	28.50	32.70		

<i>Snow Water Equivalent, 1st of Month</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>
Elk Butte, ID (inch)				13.0	21.4	24.8	25.6		
Cool Creek, ID (inch)				20.7	31.2				
Hoodoo Basin, MT (inch)				18.1	26.0	31.8	36.6	42.4	--
Sherwin, ID (inch)				6.1	9.1	10.9	2.5		
Shanghi Summit, ID (inch)								16.6	--
Lost Lake, ID (inch)				21.3	32.5	39.4	42.3	49.3	--
Hemlock, ID (inch)								51.0	--
Crater Meadows Mar (inch)						37.0	41.3		

<i>Streamflow</i>	<i>Sept</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>
Dworshak Inflow Volume (KAF)				205	145	109	533	414	--

Notes:

1. The given forecast is the official Corps of Engineers forecast for Dworshak. If you have any questions please contact 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.

Approval:

John J. Heitstuman P.E., D.WRE
 Chief Hydrology Section
 Walla Walla District USACE

William D. Proctor, P.E.
 Ch., Hydrologic Engineering and Power Branch
 Columbia Basin Water Management Division