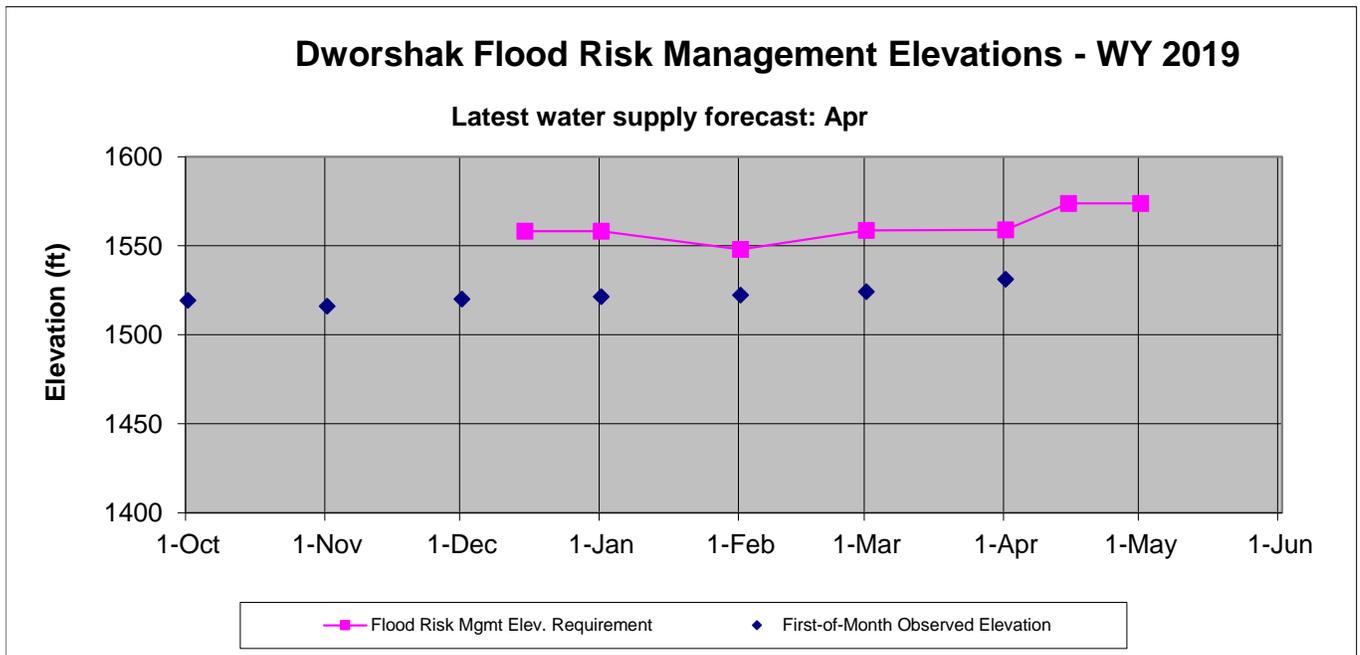
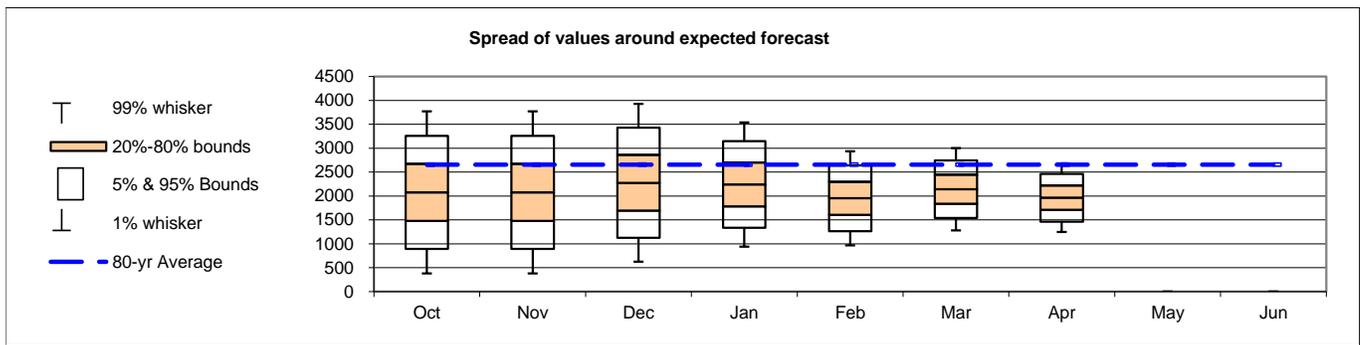


Runoff Forecast and Flood Risk Management (FRM)				1981-2010 Average	Percent of 30yr Average	1929-2008 Average	Percent of Average		
Most Probable Runoff Volume	Apr-Jul	1964	KAF	2438	81%	2655	74%		
	May-Jul	1437	KAF						
30-Apr Flood Risk Management Space		460	KAF						
30-Apr Flood Risk Management Elevation		1573.8	ft						
<b>Seasonal Flood Risk Management (assumes no shift of flood risk management space to Grand Coulee)</b>									
Forecast Date>>	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Jul Runoff Forecast	2075	2075	2276	2239	1951	2142	1964		
First-of-Month Elev	1519.3	1516.1	1520.1	1521.4	1522.3	1524.3	1531.3		
Date >>		15-Dec	31-Dec	31-Jan	28-Feb	31-Mar	15-Apr	30-Apr	31-May
FRM Space	--	700	700	849	694	689	460	460	
FRM Elevation	--	1558.2	1558.2	1547.9	1558.6	1559.0	1573.8	1573.8	



## Dworshak : April Runoff Forecast & Flood Risk Management Calculation

Apr-Jul Runoff Forecast Calculation					
Variable	Month	Observed Value	% of Average	Regression Coefficient	Marginal Runoff (KAF)
		A		B	=A*B
SOI	Sep	-0.90		171.32	-154.2
HQSI Cumulative Precip	Oct-Date	21.00	77%	22.32	468.7
Elk Butte SWE	1-Apr	31.3	90%	11.61	363.4
Hoodoo Basin SWE	1-Apr	33.1	84%	10.27	339.9
Sherwin SWE	1-Apr	5.7	83%	19.49	111.1
Lost Lake SWE	1-Apr	39.8	76%	7.91	314.8
Crater meadows SWE	1-Apr	40.1	93%	13.37	536.1
Intercept		1		-15.43	-15.4
1-Apr Forecast (KAF)				$\Sigma$	1964.5

Data Station	Sept	Nov	Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
<b>Climate (Stdzd SOI)</b>									
September SOI	-0.90								
<b>Precipitation (in)</b>									
	Oct								
Headquarters, ID	3.80	5.60	5.30	2.20	1.40	2.70	--		
Cumulative HQSI Data	3.80	9.40	14.70	16.90	18.30	21.00	--		
<b>Snow Water Equiv (First of Month values) (in)</b>									
Elk Butte, ID				15.5	20.6	29.9	31.3		
Cool Creek, ID				21.5	26.7				
Hoodoo Basin, MT				14.4	21.1	30.6	33.1	--	--
Sherwin, ID				3.7	6.1	10.2	5.7		
Shanghi Summit, ID								--	--
Lost Lake, ID				18.8	26.1	36.2	39.8	--	--
Hemlock, ID								--	--
Crater Meadows Mar						37.8	40.1		
<b>Streamflow (End of Month) (kaf)</b>									
				Jan	Feb	Mar	Apr	May	Jun
Dworshak Inflow				114	121	219	--	--	--

Notes:

- The given forecast is the official Corps of Engineers forecast for Dworshak. If you have any questions please contact Steve Hall (509-527-7550), Alfredo Rodriguez (509-527-7532), or Jon Roberts (509-527-7518).
- 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