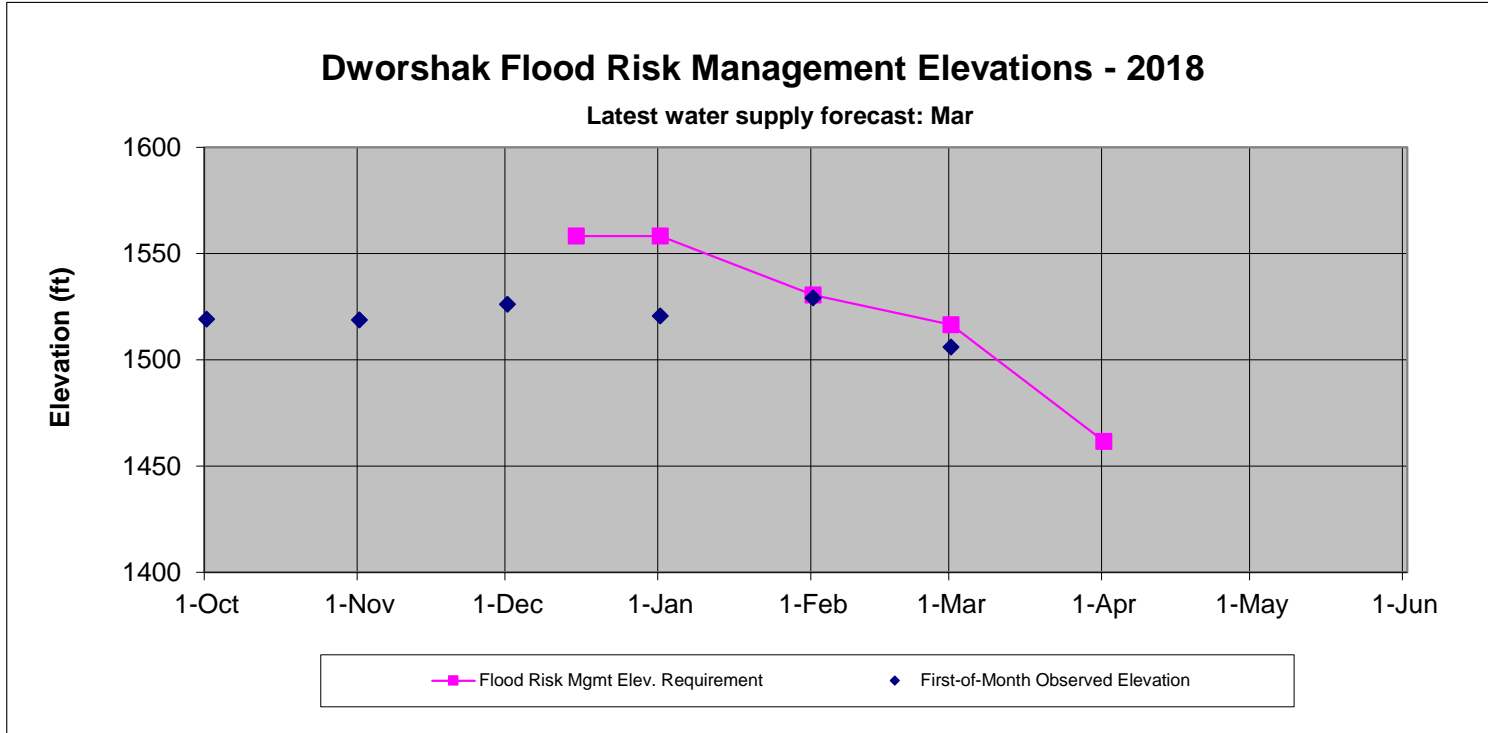
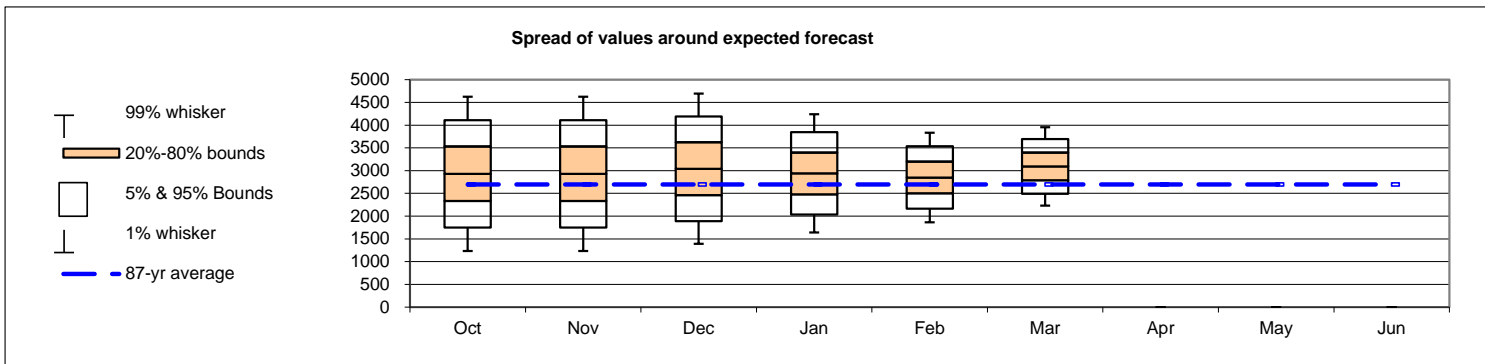


Runoff Forecast and Flood Risk Management (FRM)				1981-2010 Average	Percent of 30yr Average	1929-2008 Average	Percent of Average		
Most Probable Runoff Volume	Apr-Jul	3093	KAF	2438	127%	2696	115%		
	May-Jul	2261	KAF	1784	127%	1972	115%		
31-Mar Flood Risk Management Space		1863	KAF						
31-Mar Flood Risk Management Elevation		1461.6	ft						
Seasonal Flood Risk Management (assumes no shift of flood risk management space to Grand Coulee)									
Forecast Date>>	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Jul Runoff Forecast	2929	2929	3043	2941	2849	3093			
First-of-Month Elev	1519.1	1518.7	1526.2	1520.7	1529.1	1506.0			
Date >>		15-Dec	31-Dec	31-Jan	28-Feb	31-Mar	15-Apr	30-Apr	31-May
FRM Space	--	700	700	1090	1276	1863			
FRM Elevation	--	1558.2	1558.2	1530.5	1516.5	1461.6			



Dworshak : March 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	0.60		220.73	132.4
HQSI Cumulative Precip	Oct-Date	27.45	122%	23.39	642.1
Elk Butte SWE	1-Mar	36.5	124%	10.16	370.8
Hoodoo Basin SWE	1-Mar	39.8	122%	10.01	398.4
Sherwin SWE	1-Mar	10.7	123%	25.42	272.0
Lost Lake SWE	1-Mar	52.6	122%	6.99	367.7
Crater meadows SWE	1-Mar	46.9	132%	13.06	612.5
Intercept		1		296.75	296.8
1-Mar Forecast (KAF)				Σ	3092.7

Data Station	Sept	Nov	Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
Climate (Stdzd SOI)									
September SOI	0.60								
Precipitation (in)									
Oct									
Headquarters, ID	3.65	6.20	6.10	4.50	7.00	--	--		
Cumulative HQSI Data	3.65	9.85	15.95	20.45	27.45	--	--		
Snow Water Equiv (First of Month values) (in)									
Elk Butte, ID				16.1	31.9	36.5	--		
Cool Creek, ID				18.9	32.0				
Hoodoo Basin, MT				18.7	29.5	39.8	--	--	--
Sherwin, ID				5.1	7.0	10.7	--		
Shanghi Summit, ID							--	--	
Lost Lake, ID				22.3	38.0	52.6	--	--	--
Hemlock, ID							--	--	
Crater Meadows Mar						46.9	--		
Streamflow (End of Month) (kaf)				Jan	Feb	Mar	Apr	May	Jun
Dworshak Inflow				326	520	--	--	--	--

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), Wayne Jousma (509-527-7606), Amanda Morelos (509-527-7632), or Alfredo Rodriguez (509-527-7532).
- 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.
Chief Hydrology Section
Walla Walla District USACE

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