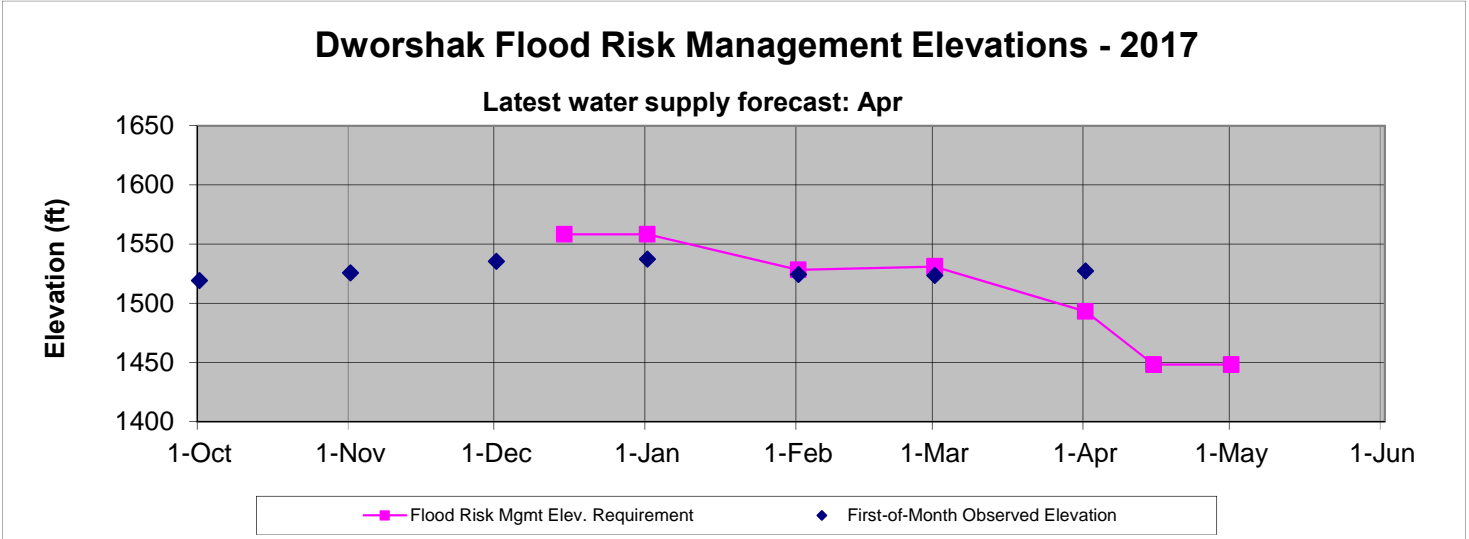
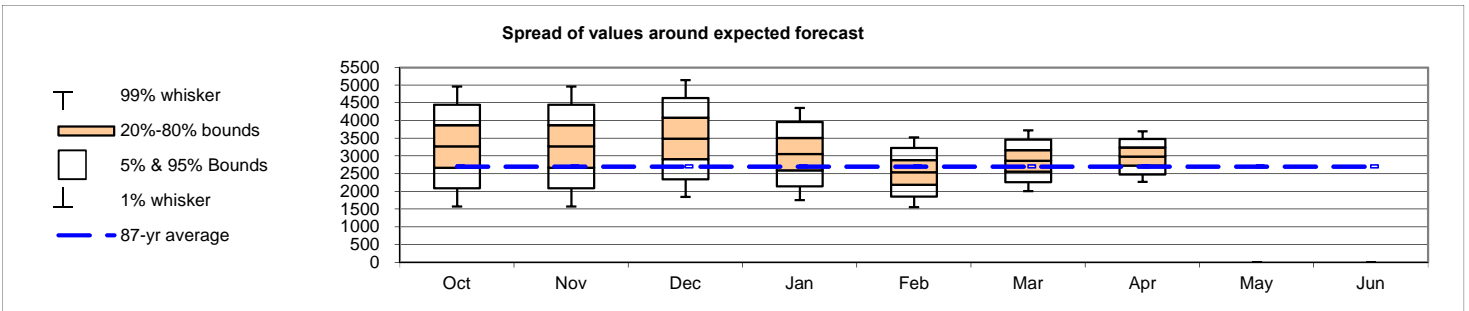


Runoff Forecast and Flood Risk Management (FRM)				1981-2010 Average	Percent of 30yr Average	1929-2008 Average	Percent of Average		
Most Probable Runoff Volume	Apr-Jul	2984	KAF	2438	122%	2696	111%		
	May-Jul	2182	KAF	1784	122%	1972	111%		
30-Apr Flood Risk Management Space		1986	KAF						
30-Apr Flood Risk Management Elevation		1448.3	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	3271	3271	3493	3055	2541	2867	2984		
First-of-Month Elev	1519.1	1525.9	1535.4	1537.3	1524.5	1523.6	1527.4		
Date >>	15-Dec	31-Dec	31-Jan	28-Feb	31-Mar	15-Apr	30-Apr	31-May	
FRM Space	--	700	700	1120	1082	1551	1986	1986	
FRM Elevation	--	1558.2	1558.2	1528.3	1531.1	1493.1	1448.3	1448.3	



## 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	1.20		171.32	205.6
HQSI Cumulative Precip	Oct-Date	38.50	141%	22.32	859.3
Elk Butte SWE	1-Apr	35.8	104%	11.61	415.6
Hoodoo Basin SWE	1-Apr	42.4	108%	10.27	435.4
Sherwin SWE	1-Apr	4.8	70%	19.49	93.6
Lost Lake SWE	1-Apr	50.4	97%	7.91	398.7
Crater meadows SWE	1-Apr	44.2	103%	13.37	591.0
Intercept		1		-15.43	-15.4
1-Apr Forecast (KAF)				$\Sigma$	2983.7

Data Station	Sept	Nov	Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
<b>Climate (Stdzd SOI)</b>									
September SOI	1.20								
<b>Precipitation (in)</b>									
Headquarters, ID	7.90	3.90	3.70	4.70	8.20	10.10	--		
Cumulative HQSI Data	7.90	11.80	15.50	20.20	28.40	38.50	--		
<b>Snow Water Equiv (First of Month values) (in)</b>									
Elk Butte, ID				14.8	20.3	32.1	35.8		
Cool Creek, ID				15.9	20.8				
Hoodoo Basin, MT				11.9	17.2	31.8	42.4	--	--
Sherwin, ID				6.5	8.5	10.2	4.8		
Shanghi Summit, ID								--	--
Lost Lake, ID				17.8	24.6	39.0	50.4	--	--
Hemlock, ID								--	--
Crater Meadows Mar						35.6	44.2		
<b>Streamflow (End of Month) (kaf)</b>				Jan	Feb	Mar	Apr	May	Jun
Dworshak Inflow				127	471	1242	--	--	--

- Notes:
1. 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 Connell (509-527-7632), or Alfredo Rodriguez (509-527-7532).
  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 Management Space is fixed at 700 KAF.

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