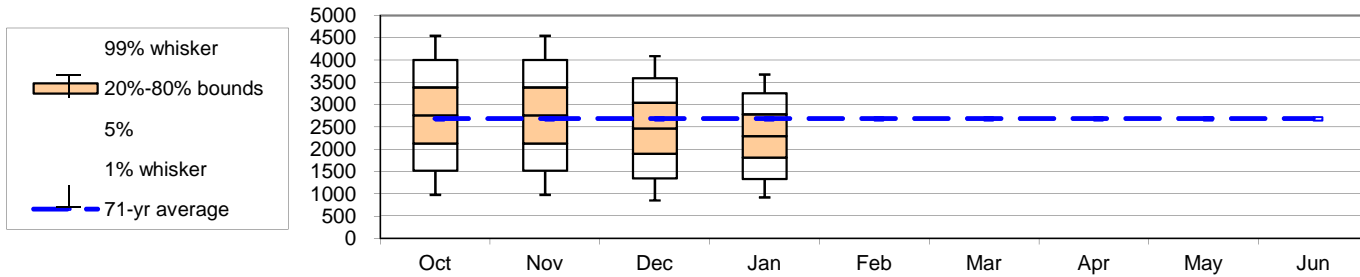


Dworshak : January Runoff Forecast & Flood Control Calculation

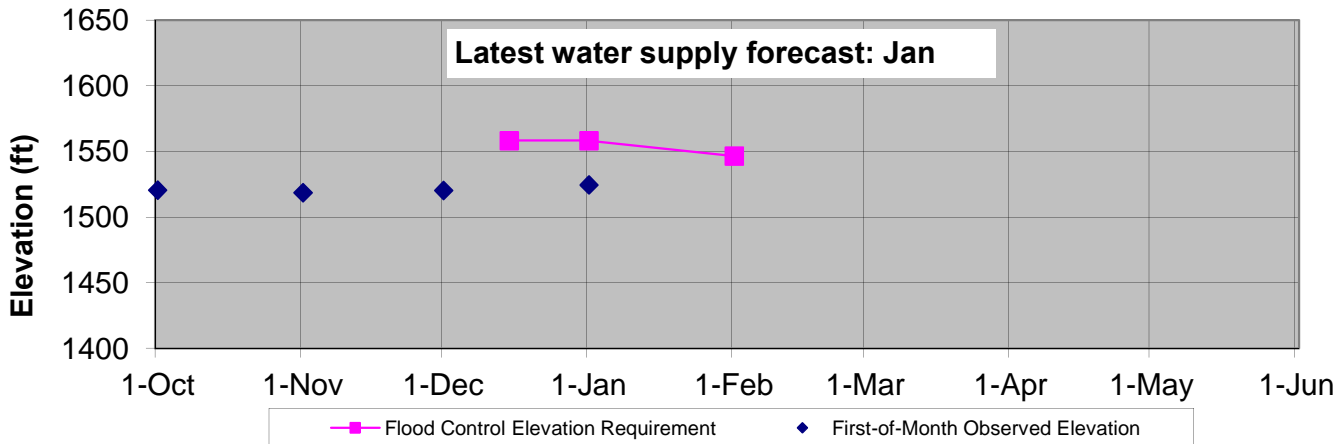
WY 2014

Runoff Forecast and Flood Control				1981-2010 Average	Percent of Average	1929-1999 Average	Percent of Average		
Most Probable Runoff Volume	Apr-Jul	2296	KAF	2438	94%	2683	86%		
	May-Jul	1646	KAF	1784	92%	1980	83%		
31-Jan Flood Control Space		869	KAF						
31-Jan Flood Control Elevation		1546.5	ft						
Seasonal Flood Control (assumes no shift of flood control space to Grand Coulee)									
Forecast Date>>	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Jul Runoff Forecast	2758	2758	2470	2296					
First-of-Month Elev	1520.6	1518.7	1520.4	1524.6					
Date >>		15-Dec	31-Dec	31-Jan	28-Feb	31-Mar	15-Apr	30-Apr	
Flood Control Space	--	700	700	869					
Flood Control Elevation	--	1558.2	1558.2	1546.5					

Spread of values around expected forecast



Dworshak Flood Control Elevations - 2014



Notes:

1. The given forecast is the official Corps of Engineers forecast for Dworshak. If you have any questions please contact Jeremy Giovando (509 527 7053), or Steve Hall (509 527 7550).
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 control space is fixed at 700 KAF.

Dworshak : January Runoff Forecast & Flood Control Calculation

Apr-Jul Runoff Forecast Calculation:					
Variable	Month	Observed Value	% of Average	Regression Coefficient	Marginal Runoff (KAF)
		A		B	=A*B
SOI	Sep	0.30		355.71	106.7
HQSI Cumulative Precip	Oct-Date	9.50	74%	48.12	457.1
Elk Butte SWE	1-Jan	12.80	75%	6.25	80.0
Cool Creek SWE	1-Jan	16.6	76%	9.96	165.3
Hoodoo Basin SWE	1-Jan	13.3	69%	12.22	162.5
Sherwin SWE	1-Jan	2.7	53%	44.69	120.7
Lost Lake SWE	1-Jan	19.8	73%	4.24	84.0
Intercept		1		1119.86	1119.9
1-Jan Forecast (KAF)				Σ	2296.2

Data Station	Sept	Nov	Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	1-Jul
Climate (Stdzd SOI)										
September SOI	0.30									
Precipitation (in)										
Oct										
Headquarters, ID	0.40	4.20	4.90	--	--	--	--			
Cumulative HQSI Data	0.40	4.60	9.50	--	--	--	--			
Snow Water Equiv (First of Month values) (in)										
Elk Butte, ID				12.8	--	--	--			
Cool Creek, ID				16.6	--					
Hoodoo Basin, MT				13.3	--	--	--	--	--	
Sherwin, ID				2.7	--	--	--			
Shanghi Summit, ID								--	--	
Lost Lake, ID				19.8	--	--	--	--	--	
Hemlock, ID								--	--	
Crater Meadows Mar						--	--			
Streamflow (End of Month) (kaf)										
				Jan	Feb	Mar	Apr	May	Jun	Jul
Dworshak Inflow				--	--	--	--	--	--	--

Approval:

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

Peter Brooks, P.E., D. WRE
 Ch., Hydrologic Engineering and Power Branch
 Columbia Basin Water Management Division