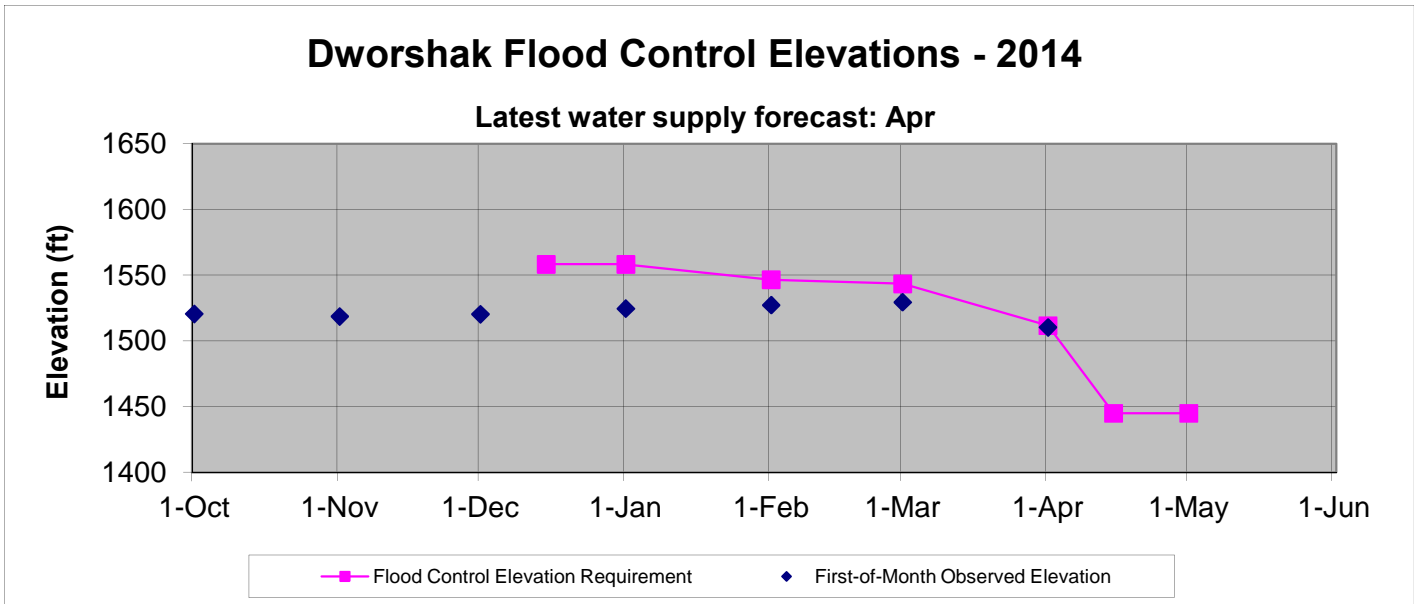
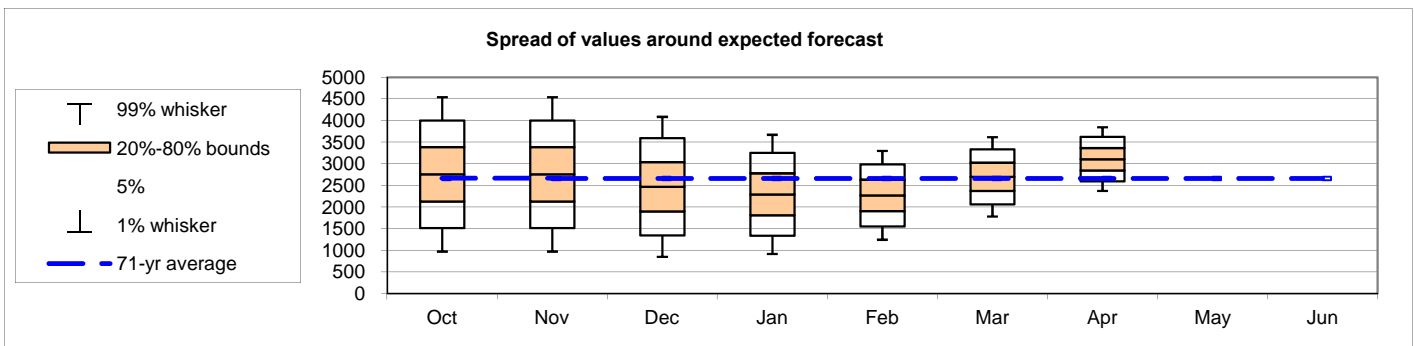


Dworshak : April Runoff Forecast & Flood Control Calculation

WY 2014

Runoff Forecast and Non-Shifted Flood Control				1981-2010 Average	Percent of 30yr Average	1929-2010 Average	Percent of Average		
Most Probable Runoff Volume	Apr-Jul	3111	KAF	2438	128%	2663	117%		
	May-Jul	2281	KAF	1784	128%	1953	117%		
30-Apr Flood Control Space		2016	KAF						
30-Apr Flood Control Elevation		1445.0	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	2274	2701	3111		
First-of-Month Elev	1520.6	1518.7	1520.4	1524.6	1527.3	1529.5	1510.4		
Date >>	15-Dec	31-Dec	31-Jan	28-Feb	31-Mar	15-Apr	30-Apr		
Flood Control Space	--	700	700	869	912	1336	2016	2016	
Flood Control Elevation	--	1558.2	1558.2	1546.5	1543.5	1511.6	1445.0	1445.0	



- 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.
 4. 15-Apr target elevation does not reflect flood control shift operation between Dworshak and Grand Coulee.
 5. 30-Apr target elevation may vary as runoff occurs throughout the month of April.

Dworshak : April 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		171.32	51.4
HQSI Cumulative Precip	Oct-Date	28.30	112%	22.32	631.7
Elk Butte SWE	1-Jan	42.9	108%	11.61	498.1
Hoodoo Basin SWE	1-Jan	52.3	115%	10.27	537.1
Sherwin SWE	1-Jan	3.4	34%	19.49	66.3
Lost Lake SWE	1-Jan	59.6	99%	7.91	471.4
Crater meadows SWE	1-Jan	65.1	142%	13.37	870.4
Intercept		1		-15.43	-15.4
1-Apr Forecast (KAF)				∑	3110.9

Data Station	Sept	Nov	Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
Climate (Stdzd SOI)									
September SOI	0.30								
Precipitation (in)									
Oct									
Headquarters, ID	0.40	4.20	4.90	5.00	5.80	8.00	--		
Cumulative HQSI Data	0.40	4.60	9.50	14.50	20.30	28.30	--		
Snow Water Equiv (First of Month values) (in)									
Elk Butte, ID				12.8	21.4	32.2	42.9		
Cool Creek, ID				16.6	28.6				
Hoodoo Basin, MT				13.3	22.2	37.3	52.3	--	--
Sherwin, ID				2.7	6.0	9.3	3.4		
Shanghi Summit, ID								--	--
Lost Lake, ID				19.8	30.0	44.9	59.6	--	--
Hemlock, ID								--	--
Crater Meadows Mar						46.9	65.1		
Streamflow (End of Month) (kaf)				Jan	Feb	Mar	Apr	May	Jun
Dworshak Inflow				132	143	678	--	--	--

Approval:

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 Ch., Hydrologic Engineering and Power Branch
 Columbia Basin Water Management Division