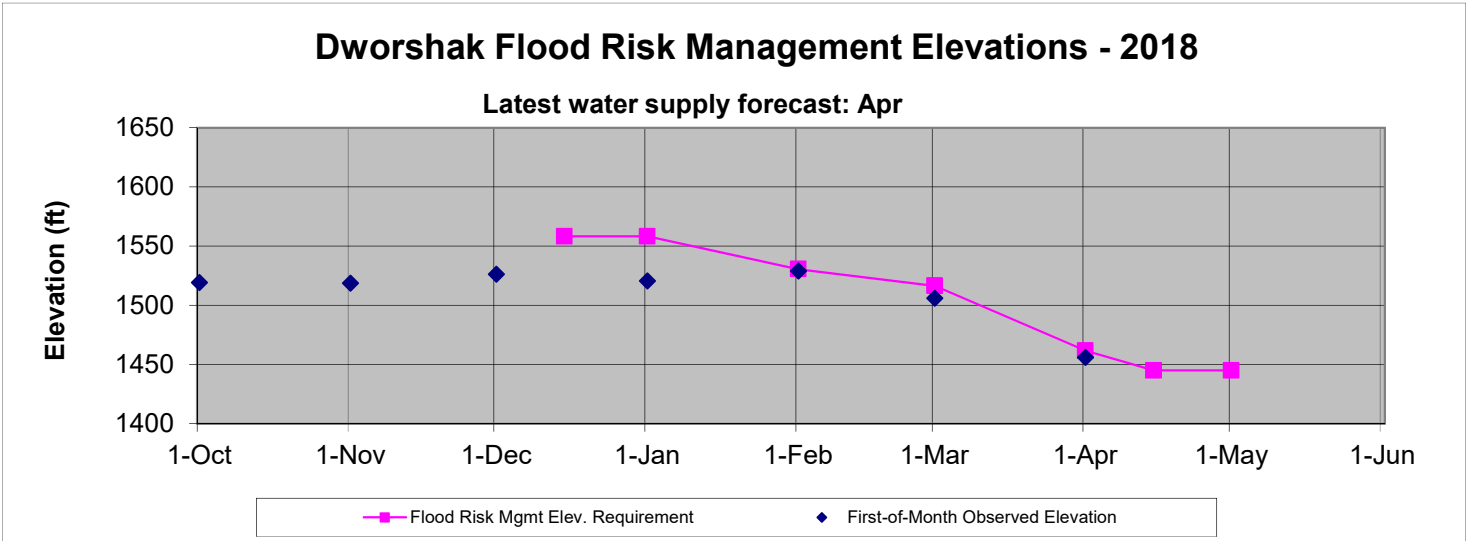
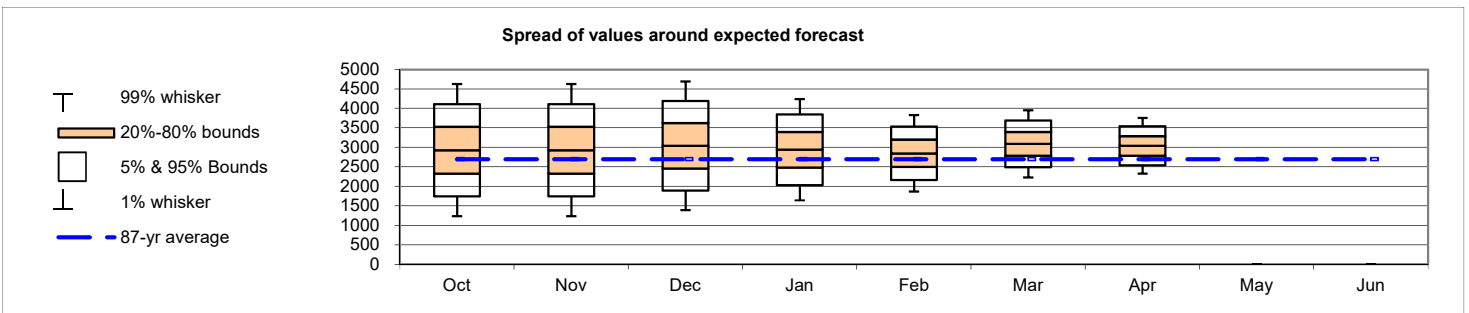


Runoff Forecast and Flood Risk Management (FRM)				1981-2010 Average	Percent of 30yr Average	1929-2008 Average	Percent of Average		
Most Probable Runoff Volume	Apr-Jul	3040	KAF	2438	125%	2696	113%		
	May-Jul	2223	KAF	1784	125%	1972	113%		
30-Apr Flood Risk Management Space		2016	KAF						
30-Apr Flood Risk Management Elevation		1445.0	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	3040		
First-of-Month Elev	1519.1	1518.7	1526.2	1520.7	1529.1	1506.0	1456.0		
Date >>	15-Dec	31-Dec	31-Jan	28-Feb	31-Mar	15-Apr	30-Apr	31-May	
FRM Space	--	700	700	1090	1276	1863	2016	2016	
FRM Elevation	--	1558.2	1558.2	1530.5	1516.5	1461.6	1445.0	1445.0	



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	0.60		171.32	102.8
HQSI Cumulative Precip	Oct-Date	30.55	112%	22.32	681.9
Elk Butte SWE	1-Apr	42.0	122%	11.61	487.6
Hoodoo Basin SWE	1-Apr	43.6	111%	10.27	447.8
Sherwin SWE	1-Apr	7.8	114%	19.49	152.0
Lost Lake SWE	1-Apr	59.9	115%	7.91	473.8
Crater meadows SWE	1-Apr	53.1	124%	13.37	709.9
Intercept		1		-15.43	-15.4
1-Apr Forecast (KAF)				Σ	3040.4

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)									
Headquarters, ID	3.65	6.20	6.10	4.50	7.00	3.10	--		
Cumulative HQSI Data	3.65	9.85	15.95	20.45	27.45	30.55	--		
Snow Water Equiv (First of Month values) (in)									
Elk Butte, ID				16.1	31.9	36.5	42.0		
Cool Creek, ID				18.9	32.0				
Hoodoo Basin, MT				18.7	29.5	39.8	43.6	--	--
Sherwin, ID				5.1	7.0	10.7	7.8		
Shanghi Summit, ID								--	--
Lost Lake, ID				22.3	38.0	52.6	59.9	--	--
Hemlock, ID								--	--
Crater Meadows Mar						46.9	53.1		
Streamflow (End of Month) (kaf)				Jan	Feb	Mar	Apr	May	Jun
Dworshak Inflow				316	520	358	--	--	--

- 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), Amanda Morelos (509-527-7632), Alfredo Rodriguez (509-527-7532), or Jon Roberts (509-527-7518).
 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