

Dworshak : April Runoff Forecast & Flood Control Calculation

WY 2013

Runoff Forecast and Non-Shifted Flood Control

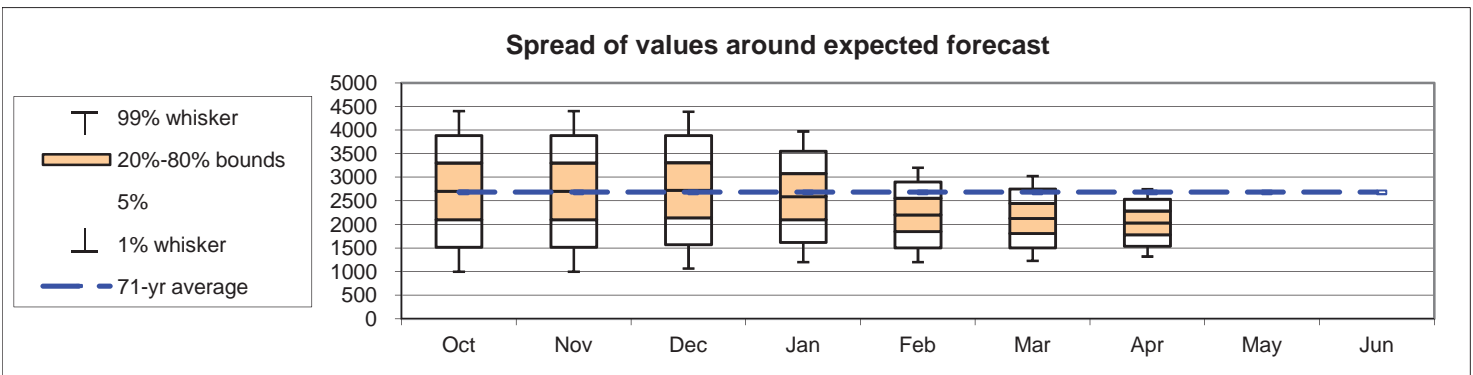
Most Probable Runoff Volume	Apr-Jul	2036	KAF
	May-Jul	1502	KAF
30-Apr Flood Control Space		544	KAF
30-Apr Flood Control Elevation		1568.5	ft

1929-1999 Average	Percent of Average
2683	76%
1980	76%

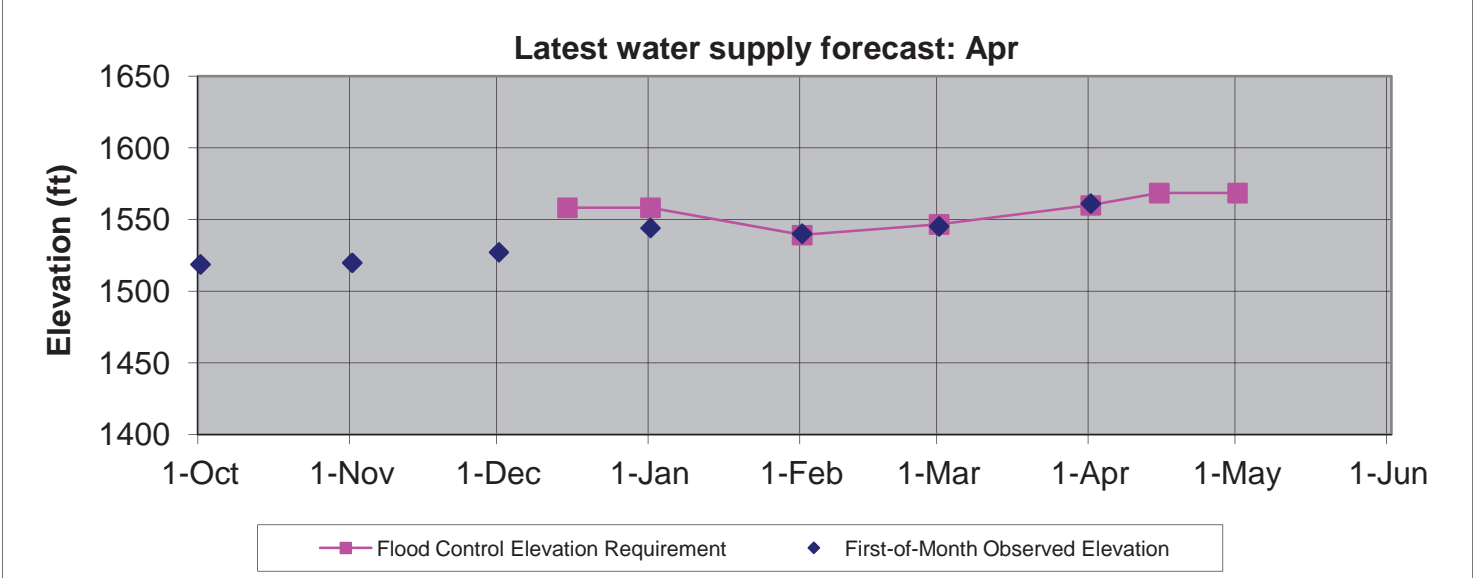
Seasonal Flood Control (assumes no shift of flood control space to Grand Coulee)

Forecast Date>>	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Jul Runoff Forecast	2701	2701	2727	2587	2202	2128	2036		
First-of-Month Elev	1518.8	1519.9	1527.3	1544.2	1540.2	1545.3	1561.2		

Date >>		15-Dec	31-Dec	31-Jan	28-Feb	31-Mar	15-Apr	30-Apr
Flood Control Space	--	700	700	970	867	675	544	544
Flood Control Elevation	--	1558.2	1558.2	1539.2	1546.7	1560.0	1568.5	1568.5



Dworshak Flood Control Elevations - 2013



- 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.

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Apr-Jul Runoff Forecast Calculation:					
Variable	Month	Observed Value	% of Average	Regression Coefficient	Marginal Runoff (KAF)
		A		B	=A*B
SOI	Sep	0.20		123.36	24.7
Elk Butte SWE	1-Apr	29.70	73%	15.71	466.6
Hemlock Butte SWE	1-Apr	38.30	78%	15.31	586.4
Hoodoo Basin SWE	1-Apr	36.60	81%	13.92	509.5
Shanghi Summit SWE	1-Apr	16.30	62%	17.92	292.1
DWR January Inflow	Jan	158.08	78%	0.750	118.6
DWR February Inflow	Feb	162.05	59%	0.210	34.0
DWR March Inflow	Mar	331.20	84%	0.440	145.7
Intercept		1		-141.94	-141.9
1-Apr Forecast (KAF)				Σ	2035.6

Data Station	Sept	Nov	Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
Climate (Stdzd SOI)									
September SOI	0.20								
Precipitation (monthly depth, inches)									
Headquarters, ID		5.30	6.30						
Snow Water Equiv (first of month SWE depth, inches)									
Elk Butte, ID				12.6	21.0	25.9	29.7	--	--
Hemlock Butte, ID				15.1	25.6	32.0	38.3	--	--
Hoodoo Basin, MT				17.2	23.8	29.9	36.6	--	--
Pierce RS, ID				1.9	5.6	6.2			
Shanghi Summit, ID							16.3	--	--
Lost Lake, ID								--	--
Streamflow (monthly volume, KAF)									
Dworshak Inflow				Jan	Feb	Mar	Apr	May	Jun
				158	162	331	--	--	--

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