

Dworshak : May Runoff Forecast & Flood Control Calculation

WY 2013

Runoff Forecast and Flood Control

Most Probable Runoff Volume	Apr-Jul	2296	KAF
	May-Jul	1665	KAF

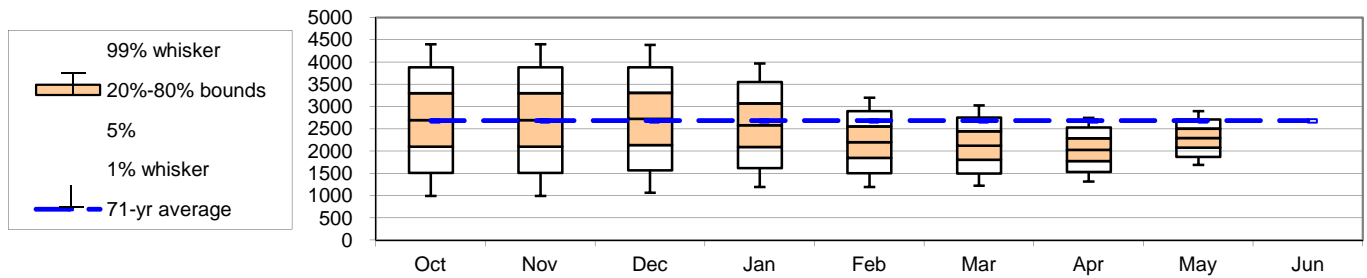
1981-2010 Average	Percent of Average	1929-1999 Average	Percent of Average
2438	94%	2683	86%
1784	93%	1980	84%

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

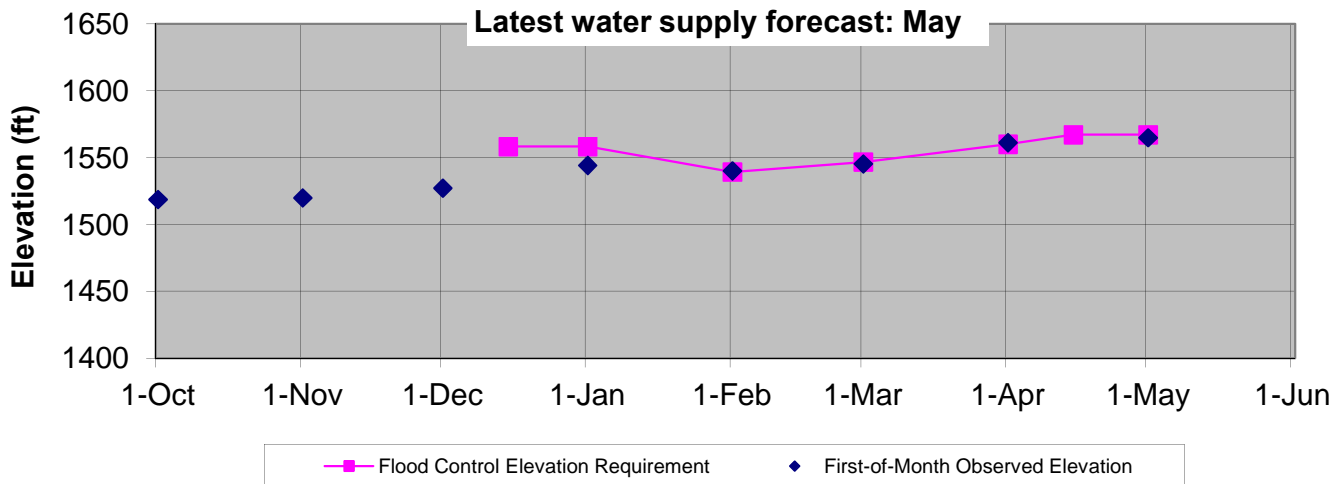
Forecast Date >>	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Jul Runoff Forecast	2701	2701	2727	2587	2202	2128	2036	2296	
First-of-Month Elev	1518.8	1519.9	1527.3	1544.2	1540.2	1545.3	1561.2	1564.9	

Date >>		15-Dec	31-Dec	31-Jan	28-Feb	31-Mar	15-Apr	30-Apr
Flood Control Space	--	700	700	970	867	675	567	567
Flood Control Elevation	--	1558.2	1558.2	1539.2	1546.7	1560.0	1567.1	1567.1

Spread of values around expected forecast



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. 30-Apr flood control elevation is based on the 95% confidence Flood Control Refill Curve as computed on 1 April.

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May-Jul Runoff Forecast Calculation:					
Variable	Month	Value	Average	Coefficient	Runoff
		A		B	=A*B
SOI	Sep	0.20		96.46	19.3
Elk Butte SWE	1-May	28.80	79%	10.48	301.8
Hemlock Butte SWE	1-May	40.10	84%	9.52	381.8
Hoodoo Basin SWE	1-May	40.60	88%	9.54	387.3
Shanghi Summit SWE	1-May	9.40	51%	11.93	112.1
Lost Lake SWE	1-May	47.10	78%	7.99	376.3
Intercept		1		86.63	86.6
1-May Forecast (KAF)					Σ 1665.3

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	28.8	--
Hemlock Butte, ID				15.1	25.6	32.0	38.3	40.1	--
Hoodoo Basin, MT				17.2	23.8	29.9	36.6	40.6	--
Pierce RS, ID				1.9	5.6	6.2			
Shanghi Summit, ID							16.3	9.4	
Lost Lake, ID								47.1	--
Streamflow (monthly volume, KAF)				Jan	Feb	Mar	Apr	May	Jun
Dworshak Inflow				158	162	331	630	--	--

Approval:

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