

Libby : June Runoff Forecast & Flood Control Calculation

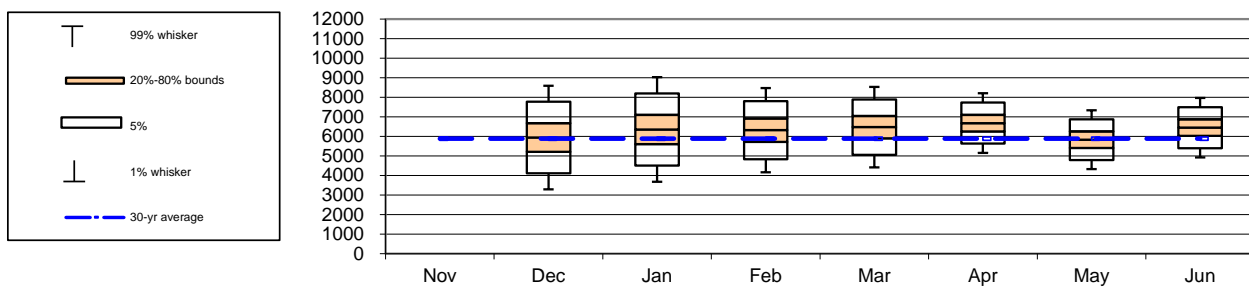
WY 2016

Runoff Forecast and Flood Control				1981-2010 Average	Percent of Average	1929-2008 Average	Percent of Average
Most Probable Runoff Volume:	Apr-Aug	6445	KAF	5885	110%	6282	103%
	Apr-Jul	5936	KAF	5342	111%	5720	104%
	May-Jul	4785	KAF	4821	99%	5199	92%

Seasonal Flood Control VARQ Flood Control Implemented								
Forecast Date >>	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast		5940	6354	6318	6472	6681	5831	6445
First-of-Month Elev	2440.7	2436.5	2415.0	2411.0	2410.1	2397.6	2406.5	2419.9

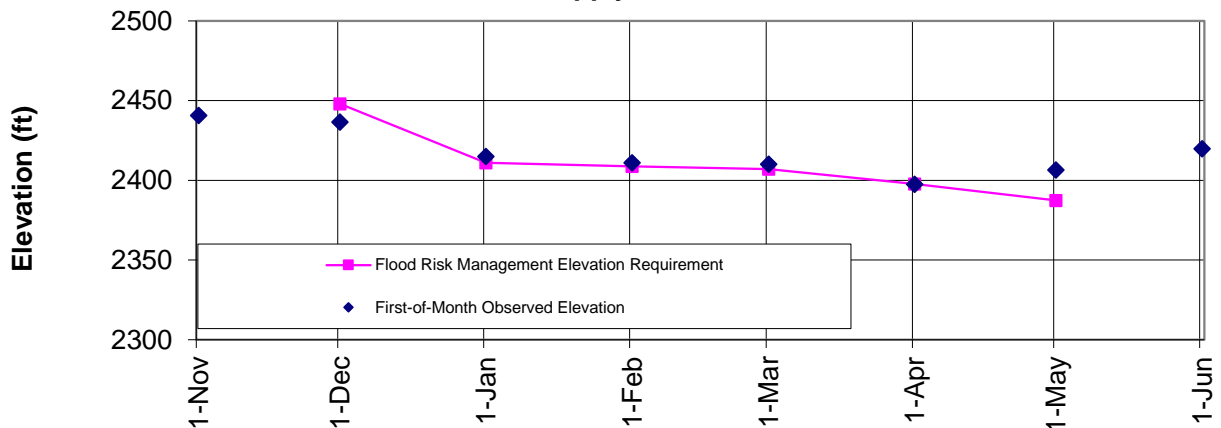
Date >>	30-Nov	31-Dec	31-Jan	28-Feb	31-Mar	30-Apr
Flood Control Space	500	2000	2083	2145	2453	2772
Flood Control Elevation	2448.0	2411.0	2408.7	2407.0	2397.8	2387.4

Spread of values around expected forecast



Libby Flood Control Elevations - 2016

Latest water supply forecast: Jun



Notes:

1. The given forecast is the official Corps of Engineers forecast for Libby. If you have any questions please contact Joel Fenolio (206) 764-6683, Kevin Shaffer (206) 764-3660, Adam Price (206) 764-3604, or Kristian Mickelson (206) 764-6927.
2. If a prior month's forecast as published in this document is different than what was originally published in the issue month, then the earlier forecast has been adjusted to reflect updated values for precipitation or streamflow.

Libby : June Runoff Forecast & Flood Control Calculation

Apr-Aug Runoff Forecast Calculation:						
Variable	Month(s)	Units	Observed Value	Percent of Average	Regression Coefficient	Marginal Runoff (KAF)
			A		B	=A*B
SOI	∑Jun:Jul					
Eureka RS, MT	∑Oct:May Prcp	inches	12.07	139%	37.7	454.6
West Glacier, MT	∑Oct:May Prcp	inches	26.03	123%	22.5	584.7
Cranbrook A, BC	∑Oct:May Prcp	millimeters	278.70	121%	2.0	565.8
Fernie, BC	∑Oct:May Prcp	millimeters	878.40	104%	0.5	441.0
Hawkins Lake, MT	1-Jun SWE	inches	0.00	0%	10.1	0.0
Stahl Creek, MT	1-Jun SWE	inches	22.30	77%	10.3	229.9
East Creek, BC	1-Jun SWE	millimeters	380.00	52%	0.4	164.3
Moyie Mountain, BC	1-Jun SWE	millimeters	0.00	0%	0.8	0.0
Sunshine Village, AB	1-Jun SWE	millimeters	208.00	44%	0.6	129.2
Akamina Pass, AB	1-Jun SWE	millimeters	0.00	0%	0.7	0.0
South Racehorse Creek, AB	1-Jun SWE	millimeters	0.00	0%	0.6	0.0
Intercept			1		978.0	978.0
	1-June Forecast (KAF)				∑	3547.4

Data used in Libby Water Supply Forecast

WY 2016

Climate Data				Jun-15	Jul-15				
SOI				-0.60	-1.10				
Precipitation Data	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Units
Eureka RS, MT	1.37	1.73	2.69	1.33	0.59	0.51	0.67	3.18	inch
West Glacier, MT	1.93	2.45	4.62	3.07	2.68	3.68	1.20	6.40	inch
Cranbrook A, BC	16.60	49.30	50.80	38.00	17.20	29.00	6.00	71.80	mm
Fernie, BC	104.00	198.40	172.00	104.00	85.00	112.00	15.00	88.00	mm
Snow Water Equiv			1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	Units
Hawkins Lake, MT				17	23	30	21	0	inch
Stahl Creek, MT			15	24	32	39	34	22	inch
East Creek, BC				691	846	1006	791	380	mm
Moyie Mountain, BC			185	286	353	406	0	0	mm
Sunshine Village, AB			252	291	414	541	479	208	mm
Akamina Pass, AB				283	320	464	73	0	mm
South Racehorse Creek, AB				286	361	429	148	0	mm
Streamflow			Jan	Feb	Mar	Apr	May	Jun	Units
Libby Inflow Volume			189.4	199.1	294.0	1150.6	1746.9		KAF
Reservoir Elevation	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	Units
Libby FOM Elev	2440.7	2436.5	2415.0	2411.0	2410.1	2397.6	2406.5	2419.9	feet

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