

Libby : March Runoff Forecast & Flood Risk Management Calculation

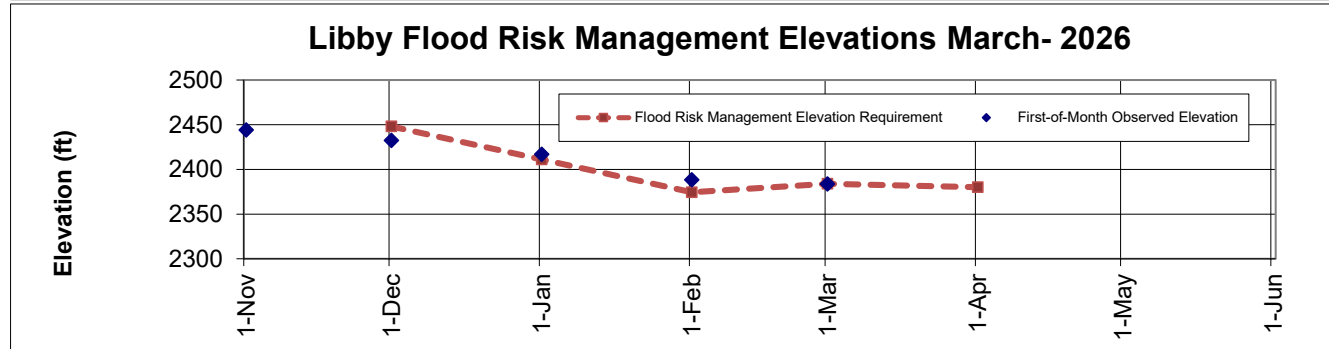
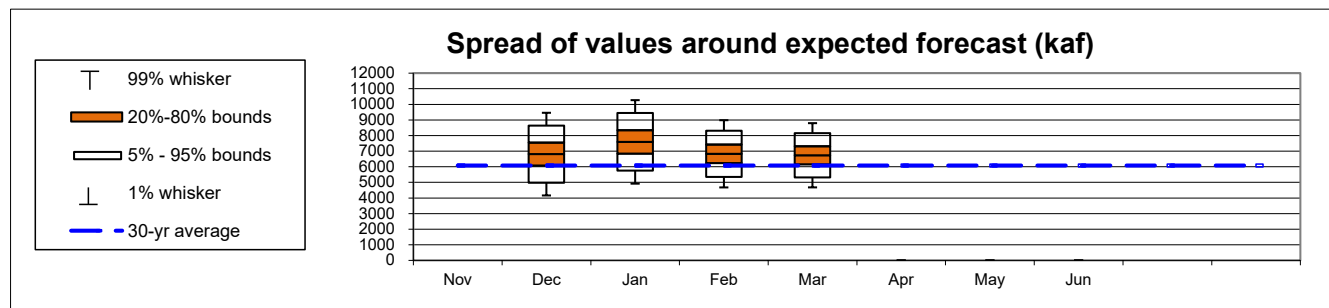
WY 2026

Runoff Forecast	March	1991-2020 Average	1991 - 2020 Percent of Average	1929-2020 Average	1929 - 2020 Percent of Average
Most Probable Runoff Volume: Apr-Aug (kaf)	6738	6080	111%	6259	108%
Most Probable Runoff Volume: Apr-Jul (kaf)	6173	5570	111%	5708	108%
Most Probable Runoff Volume: May-Jul (kaf)	5556	5014	111%	5183	107%

Flood Risk Management	March
31-Mar Flood Risk Management Space (kaf)	2978
31-Mar Flood Risk Management Elevation (ft)	2380.2

Forecast/Reservoir Data	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast (kaf)		6811	7595	6831	6738			
First-of-Month Elev (ft)	2444.1	2432.3	2416.7	2388.1	2383.7			

Seasonal FRM Requirements	30-Nov	31-Dec	31-Jan	28-Feb	31-Mar	30-Apr		
Flood Risk Management Space (kaf)	500	2000	3138	2871	2978			
Flood Risk Management Elevation (ft)	2448.0	2411.0	2374.4	2383.9	2380.2			



1. The given forecast is the official Corps of Engineers forecast for Libby. If you have any questions please contact David Varner (206) 316-3155, Leon Basdekas (208) 353-2564, Jason Chang (206) 764-3528, Lumas Helaire (206) 316-3875, Ethan Cheng (206) 572-2798, Piper Klinger (206) 764-6843, or David Doll (206) 316-3003.

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.

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Apr-Aug Runoff Forecast Calculation:

Variable	Month(s)	Units	Observed Value A	Percent of Average (1991-2020)	Regression Coefficient B	Marginal Runoff (KAF) =A*B
SOI	ΣJun:Jul					
Eureka RS, MT	ΣOct:Feb Prcp	inches	7.18	134%	65.87	472.9
West Glacier, MT	ΣOct:Feb Prcp	inches	16.97	112%	28.51	483.7
Cranbrook A, BC	ΣOct:Feb Prcp	millimeters	153.40	105%	2.73	418.8
Fernie, BC	ΣOct:Feb Prcp	millimeters	699.94	122%	0.63	441.0
Hawkins Lake, MT	1-Mar SWE	inches	20.40	99%	24.33	496.3
Stahl Peak, MT	1-Mar SWE	inches	28.70	97%	19.11	548.5
East Creek, BC	1-Mar SWE	millimeters	1056.00	143%	0.65	686.4
Moyie Mountain, BC	1-Mar SWE	millimeters	377.40	104%	1.27	479.3
Sunshine Village, AB	1-Mar SWE	millimeters	565.00	127%	1.26	711.9
Akamina Pass, AB	1-Mar SWE	millimeters	379.70	95%	1.04	394.9
South Racehorse Creek, AB	1-Mar SWE	millimeters	330.00	98%	1.40	462.0
Intercept			1		1142.00	1142.0
March Forecast	April - August	kaf				6737.7

Data used in Libby Water Supply Forecast

Climate Data				Jun-22	Jul-22
SOI				0.30	0.60

Precipitation Data	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Eureka RS, MT (inch)	1.18	2.08	2.51	0.40	1.01			
West Glacier, MT (inch)	3.50	5.68	5.12	1.36	1.31			
Cranbrook A, BC (mm)	19.40	36.20	57.10	12.50	28.20			
Fernie, BC (mm)	113.03	221.74	189.65	93.47	82.04			

Snow Water Equiv	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
Hawkins Lake, MT (inch)				18	20			
Stahl Peak, MT (inch)			21	25	29			
East Creek, BC (mm)				925	1056			
Moyie Mountain, BC (mm)			208	280	377			
Sunshine Village, AB (mm)			436	498	565			
Akamina Pass, AB (mm)				336	380			
South Racehorse Creek, AB (mm)				261	330			

Streamflow	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Libby Inflow Volume (kaf)			330	215				

Reservoir Elevation	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
Libby FOM Elev (feet)	2444.1	2432.3	2416.7	2388.1	2383.7			

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