

Libby : April Runoff Forecast & Flood Risk Management Calculation

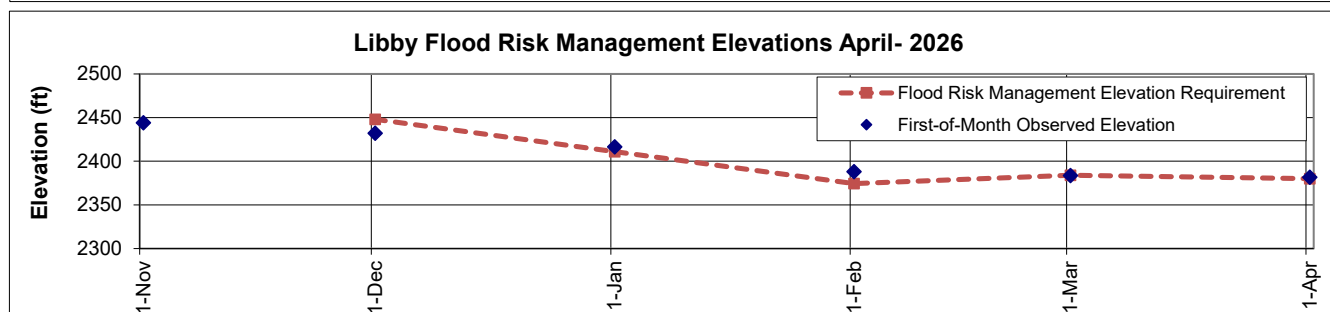
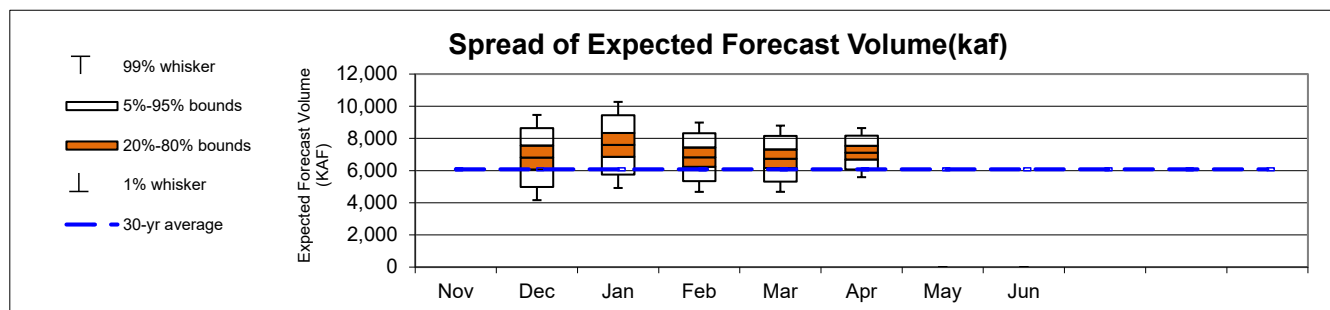
WY 2026

Runoff Forecast	April	1991-2020 Average	1991 - 2020 Percent of Average	1929-2020 Average	1929 - 2020 Percent of Average
Most Probable Runoff Volume: Apr-Aug (kaf)	7117	6080	117%	6259	114%
Most Probable Runoff Volume: Apr-Jul (kaf)	6520	5570	117%	5708	114%
Most Probable Runoff Volume: May-Jul (kaf)	5869	5014	117%	5183	113%

Flood Risk Management	April
30-Apr Flood Risk Management Space (kaf)	3425
30-Apr Flood Risk Management Elevation (ft)	2363.6

Forecast/Reservoir Data	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast (kaf)		6811	7595	6831	6738	7117		
First-of-Month Elev (ft)	2444.1	2432.3	2416.7	2388.1	2383.7	2381.8		

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	3425		
Flood Risk Management Elevation (ft)	2448.0	2411.0	2374.4	2383.9	2380.2	2363.6		



Notes:

- 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.
- 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:Mar Prcp	inches	8.13	130%	68.52	557.1
West Glacier, MT	ΣOct:Mar Prcp	inches	21.45	121%	29.47	632.0
Cranbrook A, BC	ΣOct:Mar Prcp	millimeters	168.30	97%	2.99	503.2
Fernie, BC	ΣOct:Mar Prcp	millimeters	915.33	134%	0.71	649.9
Hawkins Lake, MT	1-Apr SWE	inches	21.40	83%	22.43	480.0
Stahl Peak, MT	1-Apr SWE	inches	34.10	95%	19.70	671.8
East Creek, BC	1-Apr SWE	millimeters	1390.20	156%	0.73	1014.8
Moyie Mountain, BC	1-Apr SWE	millimeters	394.60	89%	1.21	477.5
Sunshine Village, AB	1-Apr SWE	millimeters	768.00	136%	1.43	1098.2
Akamina Pass, AB	1-Apr SWE	millimeters	464.60	99%	0.72	334.5
South Racehorse Creek, AB	1-Apr SWE	millimeters	464.50	112%	1.35	627.1
Intercept			1		70.54	70.5
January Forecast	April - August	kaf				7116.6

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	0.95		
West Glacier, MT (inch)	3.50	5.68	5.12	1.36	1.31	4.48		
Cranbrook A, BC (mm)	19.40	36.20	57.10	12.50	28.20	14.90		
Fernie, BC (mm)	113.03	221.74	189.65	93.47	82.04	215.39		

Snow Water Equiv	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Hawkins Lake, MT (inch)				17.7	20.4	21.4		
Stahl Peak, MT (inch)			20.9	24.5	28.7	34.1		
East Creek, BC (mm)				924.6	1056.0	1390.2		
Moyie Mountain, BC (mm)			207.5	279.6	377.4	394.6		
Sunshine Village, AB (mm)			436.0	498.0	565.0	768.0		
Akamina Pass, AB (mm)				336.2	379.7	464.6		
South Racehorse Creek, AB (mm)				261.0	330.0	464.5		

Streamflow	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Libby Inflow Volume (kaf)			329.9	214.9	560.8			

Reservoir Elevation	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Libby FOM Elev (feet)	2444.1	2432.3	2416.7	2388.1	2383.7	2381.8		

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