

Libby : December Runoff Forecast & Flood Risk Management Calculation

WY 2025

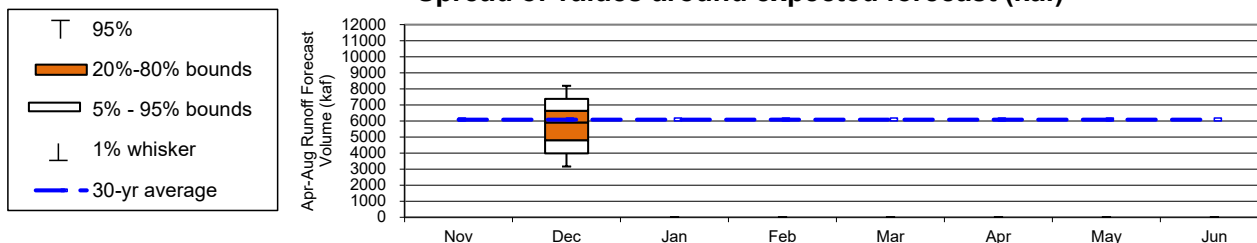
Runoff Forecast	December	1991-2020 Average	1991 - 2020 Percent of Average	1929-2020 Average	1929 - 2020 Percent of Average
Most Probable Runoff Volume: Apr-Aug (kaf)	5812	6080	96%	6259	93%
Most Probable Runoff Volume: Apr-Jul (kaf)	5324	5570	96%	5708	93%
Most Probable Runoff Volume: May-Jul (kaf)	4793	5014	96%	5183	92%

Flood Risk Management	December
31-Dec Flood Risk Management Space (kaf)	1867
31-Dec Flood Risk Management Elevation (ft)	2414.6

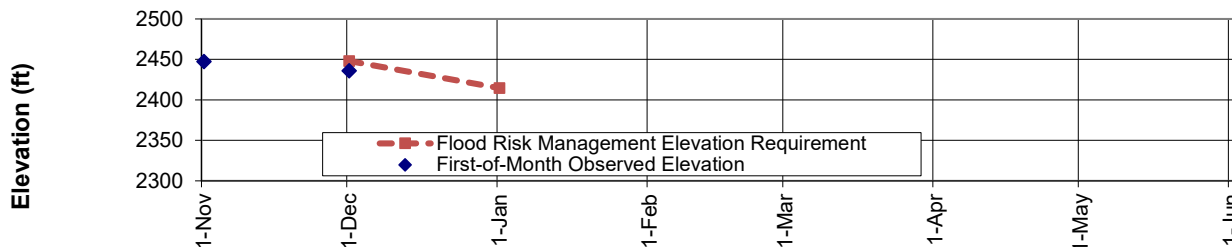
Forecast/Reservoir Data	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast (kaf)		5812						
First-of-Month Elev (ft)	2447.5	2436.1						

Seasonal FRM Requirements	30-Nov	31-Dec	31-Jan	28-Feb	31-Mar	30-Apr		
Flood Risk Management Space (kaf)	500	1867						
Flood Risk Management Elevation (ft)	2448.0	2414.6						

Spread of values around expected forecast (kaf)



Libby Flood Risk Management Elevations December- 2025



Notes:

1. The given forecast is the official Corps of Engineers forecast for Libby. If you have any questions please contact Leon Basdekas (208) 353-2564 or Andrew McCall (206) 715-2793.
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.
3. Cranbrook A gage data was fully available in the months of October and November. Nearby Cranbrook Airport Auto gage data was not used.

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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	Σ Jun:Jul		-0.70		133.38	-93.4
Eureka RS, MT	Σ Oct:Nov Prcp	inches	1.85	75%	267.66	495.2
West Glacier, MT	Σ Oct:Nov Prcp	inches	5.47	87%	105.96	579.6
Cranbrook A, BC	Σ Oct:Nov Prcp	millimeters	52.90	85%	8.79	465.0
Fernie, BC	Σ Oct:Nov Prcp	millimeters	339.09	124%	1.95	661.2
Intercept			1		3704.00	3704.0
December Forecast	April - August	kaf				5811.6

Data used in Libby Water Supply Forecast

Climate Data				Jun-22	Jul-22
SOI				0.00	-0.70

Precipitation Data	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Eureka RS, MT (inch)	0.60	1.25						
West Glacier, MT (inch)	0.98	4.49						
Cranbrook A, BC (mm)	8.50	44.40						
Fernie, BC (mm)	151.89	187.20						

Snow Water Equiv	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
Hawkins Lake, MT (inch)								
Stahl Peak, MT (inch)								
East Creek, BC (mm)								
Moyie Mountain, BC (mm)								
Sunshine Village, AB (mm)								
Akamina Pass, AB (mm)								
South Racehorse Creek, AB (mm)								

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

Reservoir Elevation	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
Libby FOM Elev (feet)	2447.5	2436.1						

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