

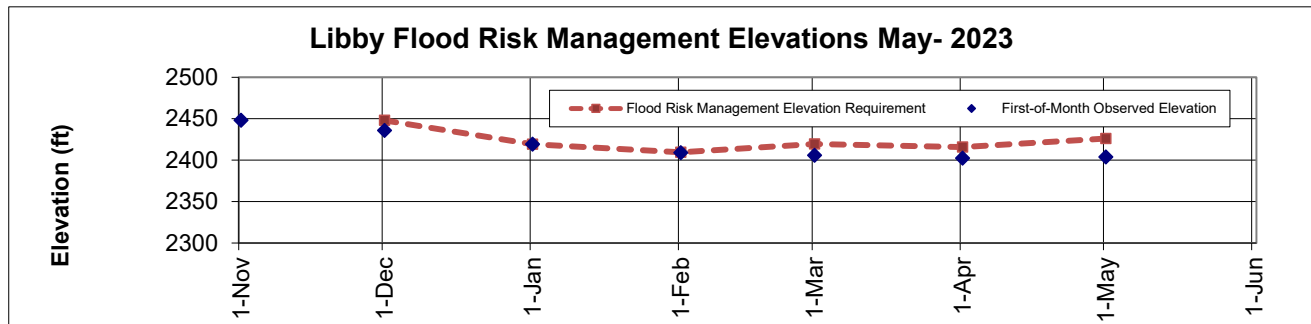
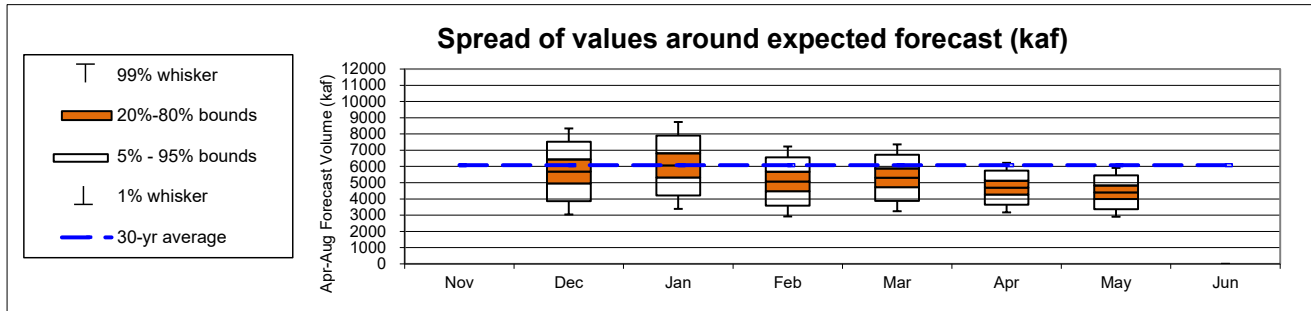
Libby : May Runoff Forecast & Flood Risk Management Calculation

WY 2023

Runoff Forecast	May	1991-2020 Average	1991 - 2020 Percent of Average	1929-2020 Average	1929 - 2020 Percent of Average
Most Probable Runoff Volume: Apr-Aug (kaf)	4408	6080	72%	6259	70%
Most Probable Runoff Volume: Apr-Jul (kaf)	4028	5570	72%	5708	71%
Most Probable Runoff Volume: May-Jul (kaf)	3732	5014	74%	5183	72%

Forecast/Reservoir Data	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast (kaf)		5692	6063	5075	5302	4698	4408	
First-of-Month Elev (ft)	2448.0	2435.9	2419.3	2409.0	2405.7	2402.4	2403.8	

Seasonal FRM Requirements	30-Nov	31-Dec	31-Jan	28-Feb	31-Mar	30-Apr		
Flood Risk Management Space (kaf)	500	1689	2054	1680	1823	1422		
Flood Risk Management Elevation (ft)	2448.0	2419.3	2409.5	2419.6	2415.8	2426.1		



Notes:

- The given forecast is the official Corps of Engineers forecast for Libby. If you have any questions please contact Leon Basdekas (208) 353-2564, Jason Chang (206) 764-3528, Lumas Helaire (206) 316-3875, Ethan Cheng (206) 316-3875, or Kevin Shaffer (206) 764-3660.
- 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 : May Runoff Forecast & Flood Risk Management Calculation**  
**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	∑ Jun:Jul					
Eureka RS, MT	∑ Oct:Apr Prcp	inches	4.1	56%	57.5	235.0
West Glacier, MT	∑ Oct:Apr Prcp	inches	13.2	66%	28.0	371.2
Cranbrook A, BC	∑ Oct:Apr Prcp	millimeters	143.2	73%	2.8	401.0
Fernie, BC	∑ Oct:Apr Prcp	millimeters	571.1	75%	0.6	348.4
Hawkins Lake, MT	1-May SWE	inches	21.3	80%	17.3	368.5
Stahl Peak, MT	1-May SWE	inches	28.0	74%	16.7	468.7
East Creek, BC	1-May SWE	millimeters	669.5	70%	0.6	381.6
Moyie Mountain, BC	1-May SWE	millimeters	261.0	69%	0.9	237.5
Sunshine Village, AB	1-May SWE	millimeters	423.5	69%	1.3	533.6
Akamina Pass, AB	1-May SWE	millimeters	229.3	63%	0.6	126.1
South Racehorse Creek, AB	1-May SWE	millimeters	279.1	79%	0.8	231.7
Intercept			1		408.0	408.0
Forecast Inflow	May-August	kaf				4111.3
Observed Inflow	April	kaf	296.2			296.2
May Forecast	April - August	kaf				4407.5

**Data used in Libby Water Supply Forecast**

Climate Data				Jun-22	Jul-22
SOI				1.7	0.8

Precipitation Data	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Eureka RS, MT (inch)	0.4	1.1	1.6	0.2	0.5	0.1	0.2	
West Glacier, MT (inch)	2.0	2.8	4.5	0.8	1.8	0.4	1.0	
Cranbrook A, BC (mm)	13.0	24.5	36.6	32.8	6.0	4.1	26.2	
Fernie, BC (mm)	98.8	118.0	112.3	36.1	52.1	35.1	118.9	

Snow Water Equiv	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
Hawkins Lake, MT (inch)				14.1	18.5	21.8	21.3	
Stahl Peak, MT (inch)			15.6	19.0	25.5	28.0	28.0	
East Creek, BC (mm)				437.0	604.0	670.0	669.5	
Moyie Mountain, BC (mm)			219.0	256.0	325.0	379.0	261.0	
Sunshine Village, AB (mm)			236.1	261.3	356.4	392.7	423.5	
Akamina Pass, AB (mm)				254.4	339.9	381.0	229.3	
South Racehorse Creek, AB (mm)				242.2	326.4	371.8	279.1	

Streamflow	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Libby Inflow Volume (kaf)			170.3	122.5	131.7	296.2		

Reservoir Elevation	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
Libby FOM Elev (feet)	2448.0	2435.9	2419.3	2409.0	2405.7	2402.4	2403.8	

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