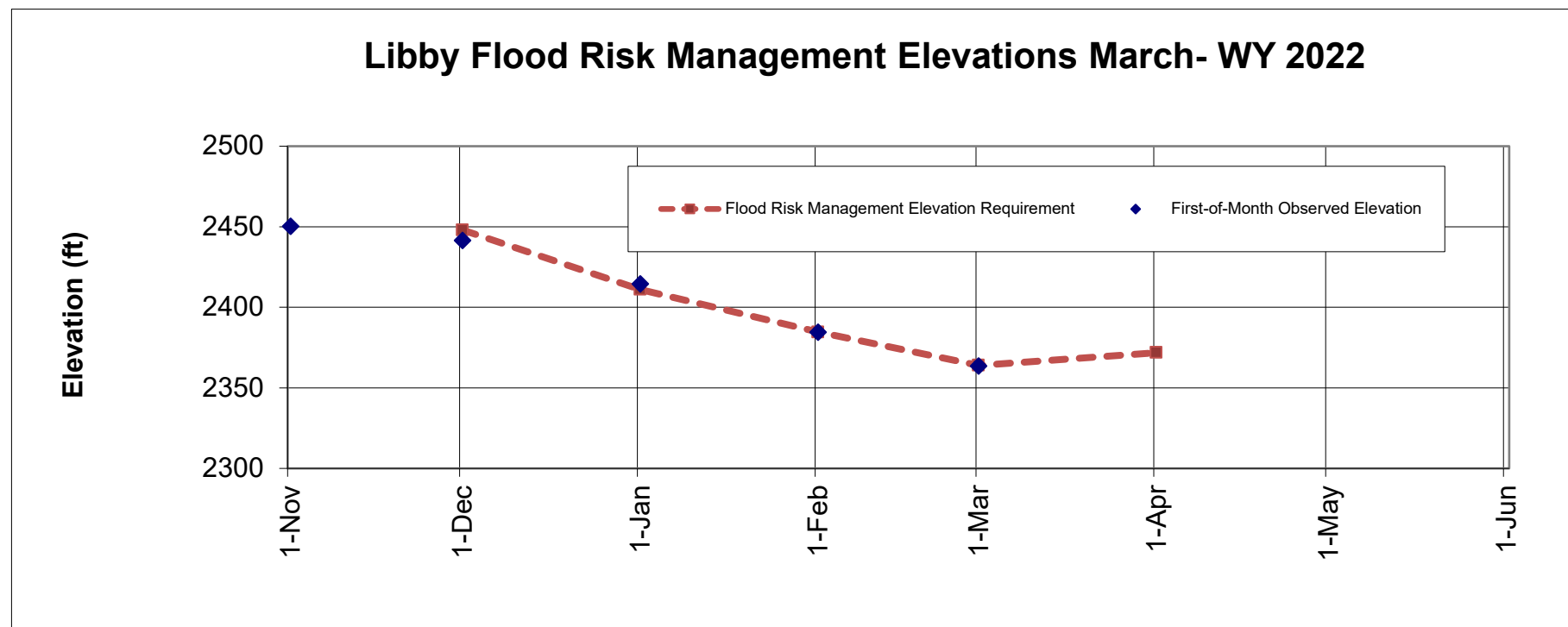
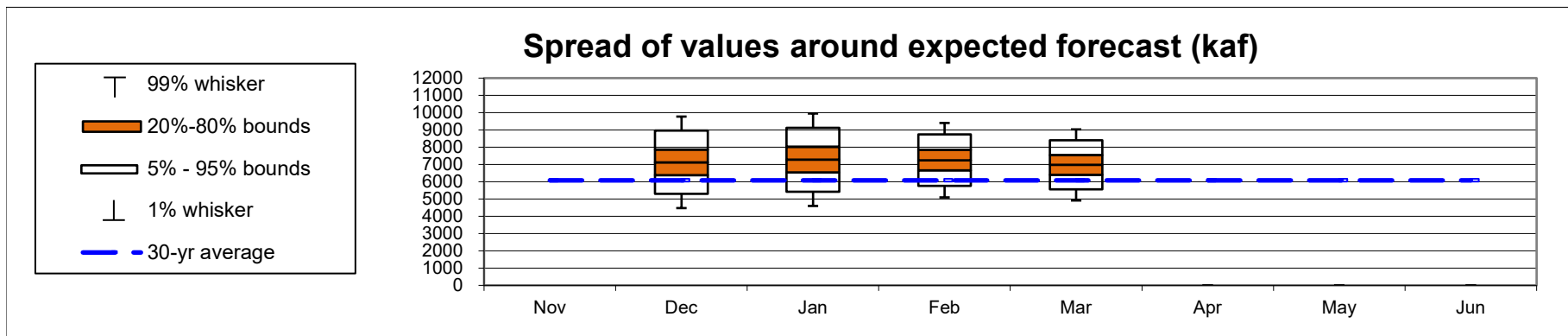


Runoff Forecast	March	1991-2020 Average	1991 - 2020 Percent of Average	1929-2008 Average	1929 - 2008 Percent of Average
Most Probable Runoff Volume: Apr-Aug (kaf)	6972	6080	115%	6259	111%
Most Probable Runoff Volume: Apr-Jul (kaf)	6388	5570	115%	5708	112%
Most Probable Runoff Volume: May-Jul (kaf)	5750	5014	115%	5183	111%

Flood Risk Management	March
31-March Flood Risk Management Space (kaf)	3209
31-March Flood Risk Management Elevation (ft)	2371.8

Reservoir/Forecast Data	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast (kaf)		7123	7273	7249	6972			
First-of-Month Elev (ft)	2450.2	2441.6	2414.4	2384.5	2363.5			

Seasonal FRM Requirements	30-Nov	31-Dec	31-Jan	28-Feb	31-Mar	30-Apr
Flood Risk Management Space (kaf)	500	2000	2851	3416	3209	
Flood Risk Management Elevation (ft)	2448.0	2411.0	2384.6	2363.9	2371.8	



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, Jason Chang (206) 764-3528, or Kevin Shaffer (206) 764-3660.
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 intermittent during October through February. Nearby Cranbrook Airport Auto gage data was used instead.

Libby : March Runoff Forecast & Flood Risk Management Calculation

Apr-Aug Runoff Forecast Calculation:

Variable	Month(s)	Units	Observed Value A	Percent of Average	Regression Coefficient	Marginal Runoff (KAF) =A*B
SOI	ΣJun:Jul					
Eureka RS, MT	ΣOct:Feb Prcp	inches	4.86	91%	65.9	320.1
West Glacier, MT	ΣOct:Feb Prcp	inches	18.69	123%	28.5	532.9
Cranbrook A, BC	ΣOct:Feb Prcp	millimeters	151.10	104%	2.7	412.5
Fernie, BC	ΣOct:Feb Prcp	millimeters	870.91	151%	0.6	548.7
Hawkins Lake, MT	1-Mar SWE	inches	19.80	96%	24.3	481.7
Stahl Peak, MT	1-Mar SWE	inches	35.10	118%	19.1	670.8
East Creek, BC	1-Mar SWE	millimeters	1040.00	141%	0.7	676.0
Moyie Mountain, BC	1-Mar SWE	millimeters	300.00	82%	1.3	381.0
Sunshine Village, AB	1-Mar SWE	millimeters	617.50	139%	1.3	778.1
Akamina Pass, AB	1-Mar SWE	millimeters	455.50	114%	1.0	473.7
South Racehorse Creek, AB	1-Mar SWE	millimeters	396.40	118%	1.4	555.0
Intercept			1		1142.0	1142.0
March Forecast	April - August	kaf				6972.4

Data used in Libby Water Supply Forecast

WY 2022

Climate Data	Jun-21	Jul-21
SOI	0.40	1.40

Precipitation Data	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Eureka RS, MT (inch)	1.52	1.12	0.63	0.66	0.93			
West Glacier, MT (inch)	3.51	4.63	4.54	3.03	2.98			
Cranbrook A, BC (mm)	34.20	34.10	45.80	33.20	3.80			
Fernie, BC (mm)	180.85	337.00	194.82	106.17	52.07			
Snow Water Equiv	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
Hawkins Lake, MT (inch)				17	20			
Stahl Peak, MT (inch)			19	28	35			
East Creek, BC (mm)				935	1040			
Moyie Mountain, BC (mm)			127	235	300			
Sunshine Village, AB (mm)			432	597	618			
Akamina Pass, AB (mm)				420	456			
South Racehorse Creek, AB (mm)				347	396			
Streamflow	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Libby Inflow Volume (kaf)			299.2	206.1				
Reservoir Elevation	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
Libby FOM Elev (feet)	2450.2	2441.6	2414.4	2384.5	2363.5			

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