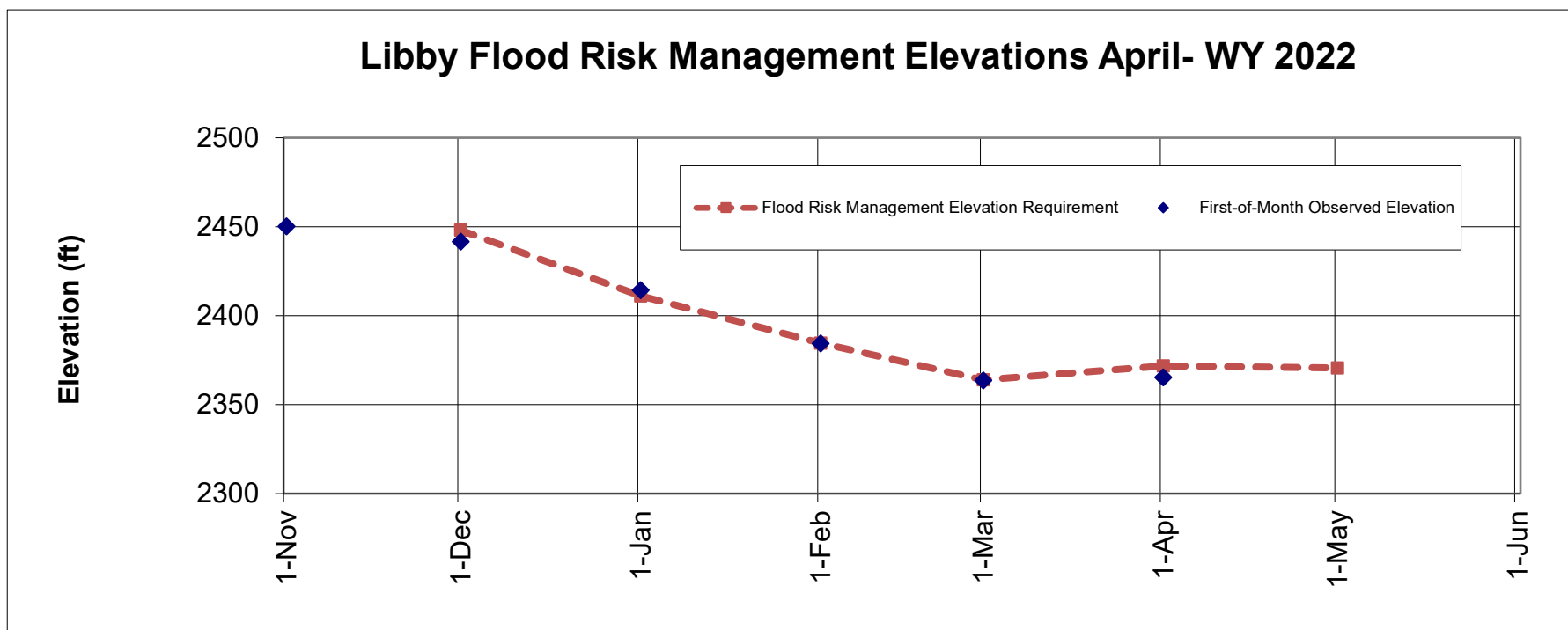
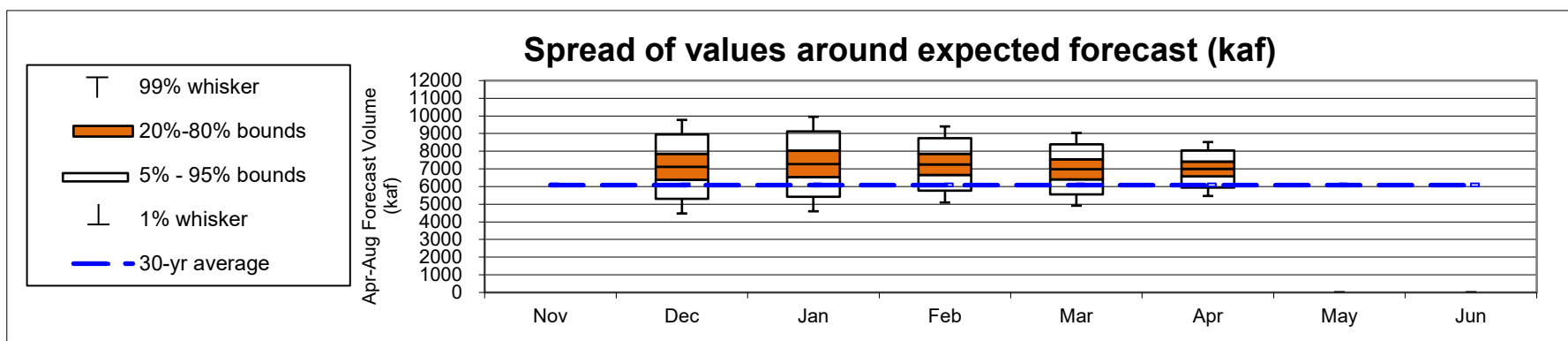


Runoff Forecast	April	1991-2020 Average	1991 - 2020 Percent of Average	1929-2008 Average	1929 - 2008 Percent of Average
Most Probable Runoff Volume: Apr-Aug (kaf)	6992	6080	115%	6259	112%
Most Probable Runoff Volume: Apr-Jul (kaf)	6406	5570	115%	5708	112%
Most Probable Runoff Volume: May-Jul (kaf)	5766	5014	115%	5183	111%

Flood Risk Management	April
30-April Flood Risk Management Space (kaf)	3238
30-April Flood Risk Management Elevation (ft)	2370.7

Forecast/Reservoir Data	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast (kaf)		7123	7273	7249	6972	6992		
First-of-Month Elev (ft)	2450.2	2441.6	2414.4	2384.5	2363.5	2365.3		

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	3238
Flood Risk Management Elevation (ft)	2448.0	2411.0	2384.6	2363.9	2371.8	2370.7



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 in the month of November through March. Nearby Cranbrook Airport Auto gage data was used instead.

Libby : April 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	Σ Jun:Jul		1.80			0.0
Eureka RS, MT	Σ Oct:Mar Prcp	inches	5.72	92%	68.5	391.9
West Glacier, MT	Σ Oct:Mar Prcp	inches	22.61	127%	29.5	666.3
Cranbrook A, BC	Σ Oct:Mar Prcp	millimeters	175.00	101%	3.0	523.3
Fernie, BC	Σ Oct:Mar Prcp	millimeters	970.73	143%	0.7	689.2
Hawkins Lake, MT	1-Apr SWE	inches	22.50	88%	22.4	504.7
Stahl Peak, MT	1-Apr SWE	inches	42.00	117%	19.7	827.4
East Creek, BC	1-Apr SWE	millimeters	1177.00	132%	0.7	859.2
Moyie Mountain, BC	1-Apr SWE	millimeters	349.00	79%	1.2	422.3
Sunshine Village, AB	1-Apr SWE	millimeters	707.40	126%	1.4	1011.6
Akamina Pass, AB	1-Apr SWE	millimeters	558.70	119%	0.7	402.3
South Racehorse Creek, AB	1-Apr SWE	millimeters	461.65	111%	1.4	623.2
Intercept			1		70.5	70.5
April Forecast	April - August	kaf				6991.9

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	0.86		
West Glacier, MT (inch)	3.51	4.63	4.54	3.03	2.98	3.92		
Cranbrook A, BC (mm)	34.20	34.10	45.80	33.20	3.80	23.90		
Fernie, BC (mm)	180.85	337.00	194.82	106.17	52.07	99.82		
Snow Water Equiv	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
Hawkins Lake, MT (inch)				16.9	19.8	22.5		
Stahl Peak, MT (inch)			19.3	28.1	35.1	42.0		
East Creek, BC (mm)				935.0	1040.0	1177.0		
Moyie Mountain, BC (mm)			127.0	235.0	300.0	349.0		
Sunshine Village, AB (mm)			432.5	596.9	617.5	707.4		
Akamina Pass, AB (mm)				420.3	455.5	558.7		
South Racehorse Creek, AB (mm)				347.2	396.4	461.7		
Streamflow	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Libby Inflow Volume (kaf)			299.2	206.1	291.0			
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	2365.3		

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