

**Libby : February Runoff Forecast & Flood Risk Management Calculation**

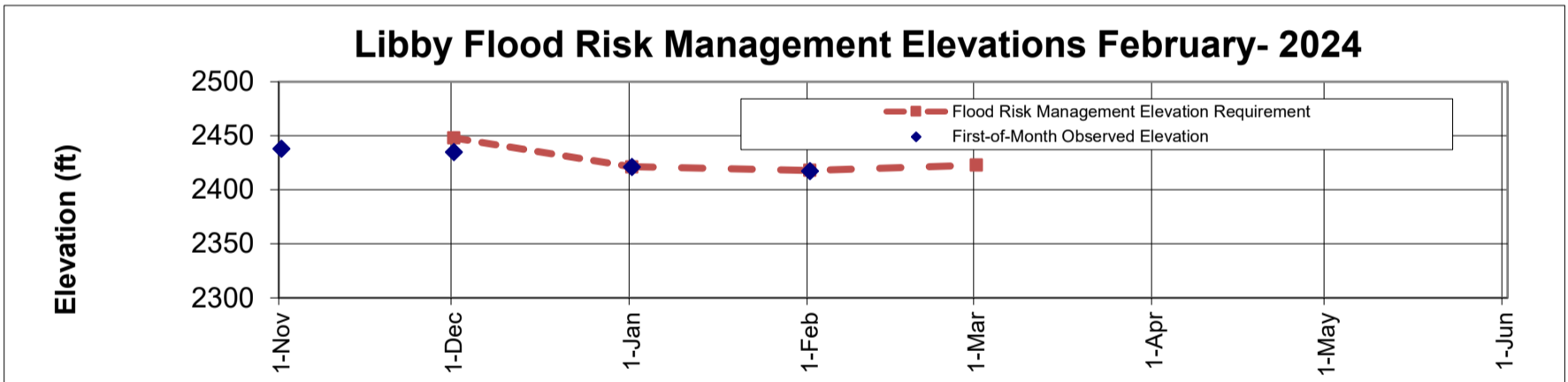
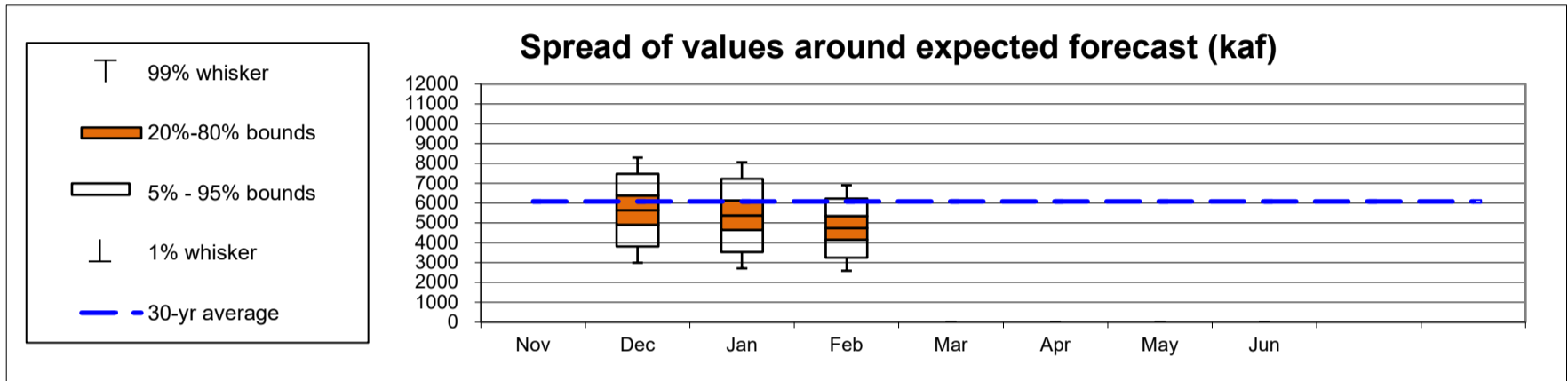
**WY 2024**

Runoff Forecast	February	1991-2020 Average	1991 - 2020 Percent of Average	1929-2020 Average	1929 - 2020 Percent of Average
Most Probable Runoff Volume: Apr-Aug (kaf)	4743	6080	78%	6259	76%
Most Probable Runoff Volume: Apr-Jul (kaf)	4270	5570	77%	5708	75%
Most Probable Runoff Volume: May-Jul (kaf)	3836	5014	77%	5183	74%

Flood Risk Management	February
28-Feb Flood Risk Management Space (kaf)	1547
28-Feb Flood Risk Management Elevation (ft)	2423.0

Forecast/Reservoir Data	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast (kaf)		5642	5385	4743				
First-of-Month Elev (ft)	2437.9	2434.8	2421.2	2417.5				

Seasonal FRM Requirements	30-Nov	31-Dec	31-Jan	28-Feb	31-Mar	30-Apr		
Flood Risk Management Space (kaf)	500	1613	1745	1547				
Flood Risk Management Elevation (ft)	2448.0	2421.3	2417.9	2423.0				



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, Courtney Moore (206) 316-3005, or David Varner (206) 316-3155.
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.

**Libby : February Runoff Forecast & Flood Risk Management Calculation**  
**Apr-Aug Runoff Forecast Calculation:**

<i>Variable</i>	<i>Month(s)</i>	<i>Units</i>	<i>Observed Value A</i>	<i>Percent of Average (1991-2020)</i>	<i>Regression Coefficient B</i>	<i>Marginal Runoff (KAF) =A*B</i>
SOI	∑Jun:Jul					
Eureka RS, MT	∑Oct:Jan Prcp	inches	4.28	93%	78.47	335.9
West Glacier, MT	∑Oct:Jan Prcp	inches	11.77	90%	30.95	364.3
Cranbrook A, BC	∑Oct:Jan Prcp	millimeters	78.50	63%	2.84	222.9
Fernie, BC	∑Oct:Jan Prcp	millimeters	559.05	112%	0.72	402.5
Hawkins Lake, MT	1-Feb SWE	inches	8.7	53%	30.60	266.2
Stahl Peak, MT	1-Feb SWE	inches	21.40	89%	22.99	492.0
East Creek, BC	1-Feb SWE	millimeters	433.01	70%	0.75	324.8
Moyie Mountain, BC	1-Feb SWE	millimeters	138.39	47%	1.48	204.8
Sunshine Village, AB	1-Feb SWE	millimeters	233.93	61%	1.47	343.9
Akamina Pass, AB	1-Feb SWE	millimeters	211.56	67%	1.27	268.7
South Racehorse Creek, AB	1-Feb SWE	millimeters	147.60	57%	1.53	225.8
Intercept			1		1291.47	1291.5
January Forecast	April - August	kaf				4743.2

**Data used in Libby Water Supply Forecast**

<i>Climate Data</i>	<i>Jun-23</i>	<i>Jul-23</i>
SOI	0.30	-0.30

<i>Precipitation Data</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>
Eureka RS, MT (inch)	0.58	1.88	0.70	1.12				
West Glacier, MT (inch)	1.52	4.12	2.74	3.39				
Cranbrook A, BC (mm)	4.80	22.20	27.40	24.10				
Fernie, BC (mm)	98.30	129.79	243.33	87.63				

<i>Snow Water Equiv</i>	<i>Nov</i>	<i>Dec</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>
Hawkins Lake, MT (inch)				9				
Stahl Peak, MT (inch)			12	21				
East Creek, BC (mm)				433				
Moyie Mountain, BC (mm)			85	138				
Sunshine Village, AB (mm)			169	234				
Akamina Pass, AB (mm)				212				
South Racehorse Creek, AB (mm)				148				

<i>Streamflow</i>	<i>Nov</i>	<i>Dec</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>
Libby Inflow Volume (kaf)			161.5					

<i>Reservoir Elevation</i>	<i>Nov</i>	<i>Dec</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>
Libby FOM Elev (feet)	2437.9	2434.8	2421.2	2417.5				

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