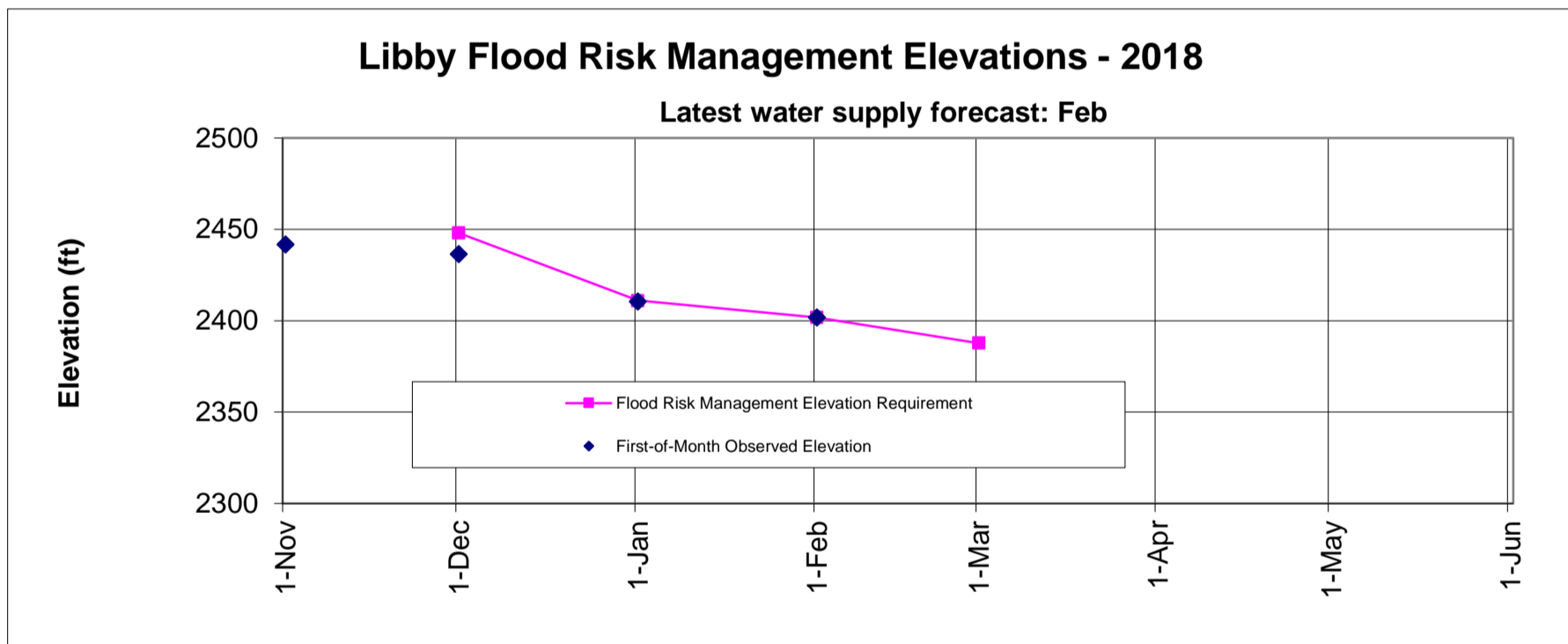
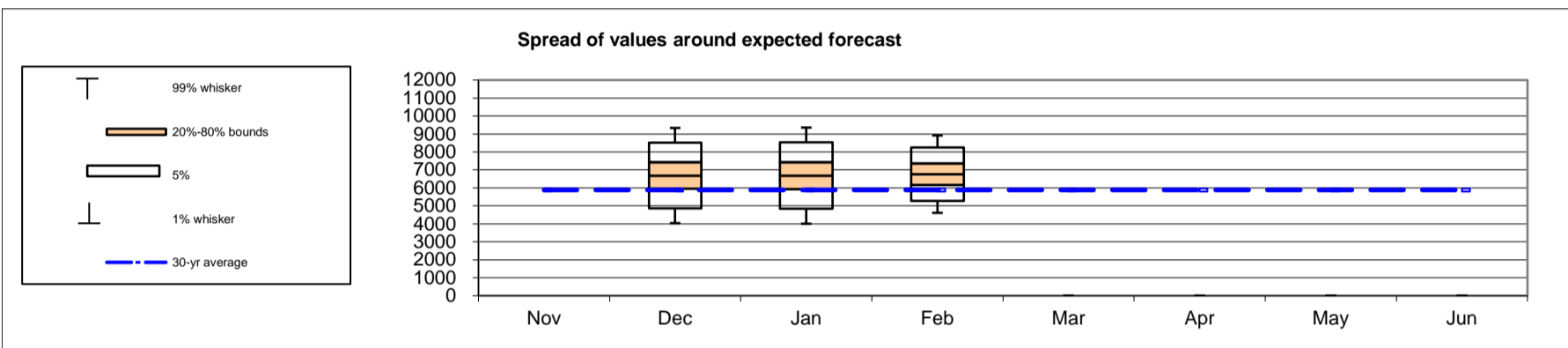


# Libby : February Runoff Forecast & Flood Risk Management Calculation

WY 2018

Runoff Forecast and Flood Risk Management			
Most Probable Runoff Volume:	Apr-Aug	6765	KAF
	Apr-Jul	6141	KAF
	May-Jul	5542	KAF
28 Feb Flood Risk Management Space		2762	KAF
28 Feb Flood Risk Management Elevation		2387.7	ft
Seasonal Flood Risk Management		VARQ Flood Risk Management Implemented	
Forecast Date >>	Nov	Dec	Jan
Apr-Aug Runoff Forecast		6687	6682
First-of-Month Elev	2441.8	2436.5	2410.6
Date >>	30-Nov	31-Dec	31-Jan
Flood Risk Management Space	500	2000	2322
Flood Risk Management Elevation	2448.0	2411.0	2401.8

1981-2010 Average	Percent of Average	1929-2008 Average	Percent of Average
5885	115%	6282	108%
5342	115%	5720	108%
4821	115%	5199	108%



- Notes:
1. The given forecast is the official Corps of Engineers forecast for Libby. If you have any questions please contact Joel Fenolio (206) 764-6683, Jon Moen (206) 764-3561, or the general Water Management line (206) 764-3584.
  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. The Akamina Pass snow station was destroyed in a fire in Sept. 2017. Akamina Pass SWE was estimated based on a regression equation and observed values at nearby sites Grave Creek, Hand Creek, Lost Creek South, Mount Odlum, and Three Isle Lake.

# Libby : February Runoff Forecast & Flood Risk Management Calculation

Apr-Aug Runoff Forecast Calculation:						
Variable	Month(s)	Units	Observed Value	Percent of Average	Regression Coefficient	Marginal Runoff (KAF)
			A		B	=A*B
SOI	∑Jun:Jul					
Eureka RS, MT	∑Oct:Jan Prcp	inches	5.80	134%	78.5	455.1
West Glacier, MT	∑Oct:Jan Prcp	inches	16.08	131%	31.0	497.7
Cranbrook A, BC	∑Oct:Jan Prcp	millimeters	165.40	143%	2.8	469.7
Fernie, BC	∑Oct:Jan Prcp	millimeters	582.00	118%	0.7	419.0
Hawkins Lake, MT	1-Feb SWE	inches	18.00	109%	30.6	550.8
Stahl Creek, MT	1-Feb SWE	inches	25.80	110%	23.0	593.1
East Creek, BC	1-Feb SWE	millimeters	659.00	108%	0.8	494.3
Moyie Mountain, BC	1-Feb SWE	millimeters	318.00	111%	1.5	470.6
Sunshine Village, AB	1-Feb SWE	millimeters	399.00	103%	1.5	586.5
Akamina Pass, AB	1-Feb SWE	millimeters	365.41	114%	1.3	464.1
South Racehorse Creek, AB	1-Feb SWE	millimeters	309.00	110%	1.5	472.8
Intercept			1		1291.5	1291.5
1-Feb Forecast (KAF)					∑	6765.3

## Data used in Libby Water Supply Forecast

WY 2018

Climate Data		Jun-17	Jul-17						Units	
SOI		-0.40	0.80							
Precipitation Data		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Units
Eureka RS, MT		0.87	1.76	2.33	0.84					inch
West Glacier, MT		3.10	4.57	4.23	4.18					inch
Cranbrook A, BC		25.00	63.60	47.00	29.80					mm
Fernie, BC		132.00	193.00	77.00	180.00					mm
Snow Water Equiv		1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	Units		
Hawkins Lake, MT			18						inch	
Stahl Creek, MT			15	26					inch	
East Creek, BC				659					mm	
Moyie Mountain, BC			194	318					mm	
Sunshine Village, AB			284	399					mm	
Akamina Pass, AB				365					mm	
South Racehorse Creek, AB				309					mm	
Streamflow		Jan	Feb	Mar	Apr	May	Jun	Units		
Libby Inflow Volume		205.1							KAF	
Reservoir Elevation		1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	Units
Libby FOM Elev		2441.8	2436.5	2410.6	2401.8					feet

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