

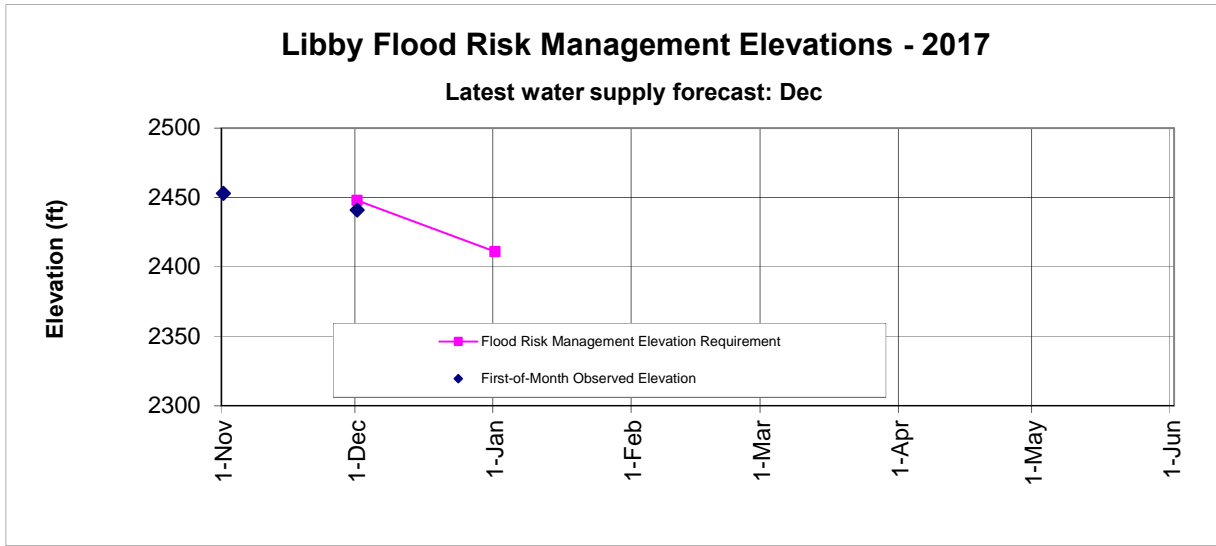
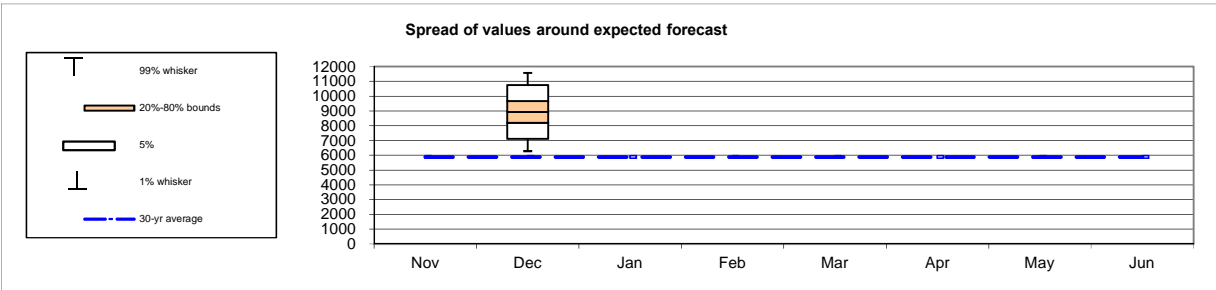
**Libby : December Runoff Forecast & Flood Risk Management Calculation**

**WY 2017**

<b>Runoff Forecast and Flood Risk Management</b>			
<b>Most Probable Runoff Volume:</b>	<b>Apr-Aug</b>	<b>8929</b>	<b>KAF</b>
	<b>Apr-Jul</b>	<b>8106</b>	<b>KAF</b>
	<b>May-Jul</b>	<b>7315</b>	<b>KAF</b>
<b>31-Dec Flood Risk Management Space</b>		<b>2000</b>	<b>KAF</b>
<b>31-Dec Flood Risk Management Elevation</b>		<b>2411.0</b>	<b>ft</b>

1981-2010 Average	Percent of Average	1929-2008 Average	Percent of Average
5885	152%	6282	142%
5342	152%	5720	142%
4821	152%	5199	141%

<b>Seasonal Flood Risk Management</b>		<b>Variable End-of-Dec Flood Risk Management Implemented</b>							
Forecast Date >>	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
<b>Apr-Aug Runoff Forecast</b>		8929							
<b>First-of-Month Elev</b>	2452.9	2441.0							
Date >>	30-Nov	31-Dec	31-Jan	28-Feb	15-Mar	31-Mar	15-Apr	30-Apr	
<b>Flood Risk Management Space</b>	500	2000							
<b>Flood Risk Management Elevation</b>	2448.0	2411.0							



**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, Kevin Shaffer (206) 764-3660, Logan Osgood-Jacobs (206) 764-6928, or Kristian Mickelson (206) 764-6927.
2. If you notice that 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 : December 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	ΣJun:Jul		1.00		133.4	133.4
Eureka RS, MT	ΣOct,Nov Precip	inches	5.61	238%	267.7	1501.6
West Glacier, MT	ΣOct,Nov Precip	inches	13.31	221%	106.0	1410.3
Cranbrook A, BC	ΣOct,Nov Precip	mm	134.00	226%	8.8	1177.9
Fernie, BC	ΣOct,Nov Precip	mm	514.00	193%	2.0	1002.3
Intercept			1		3704.0	3704.0
	1-Dec Forecast (KAF)				Σ	8929.4

## Data used in Libby Water Supply Forecast

WY 2017

Climate Data	SOI	Jun-16	Jul-16						
Precipitation Data	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Units
Eureka RS, MT	4.54	1.07							inch
West Glacier, MT	10.60	2.71							inch
Cranbrook A, BC	113.80	20.20							mm
Fernie, BC	357.00	157.00							mm
Snow Water Equiv	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	Units		
Hawkins Lake, MT									mm
Stahl Creek, MT									mm
East Creek, BC									inch
Moyie Mountain, BC									mm
Sunshine Village, AB									mm
Akamina Pass, AB									mm
South Racehorse Creek, AB									inch
Streamflow	Jan	Feb	Mar	Apr	May	Jun	Units		
Libby Inflow Volume									KAF
Reservoir Elevation	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	Units
Libby FOM Elev	2452.9	2441.0							feet

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