

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

**WY 2016**

**Runoff Forecast and Flood Risk Management**

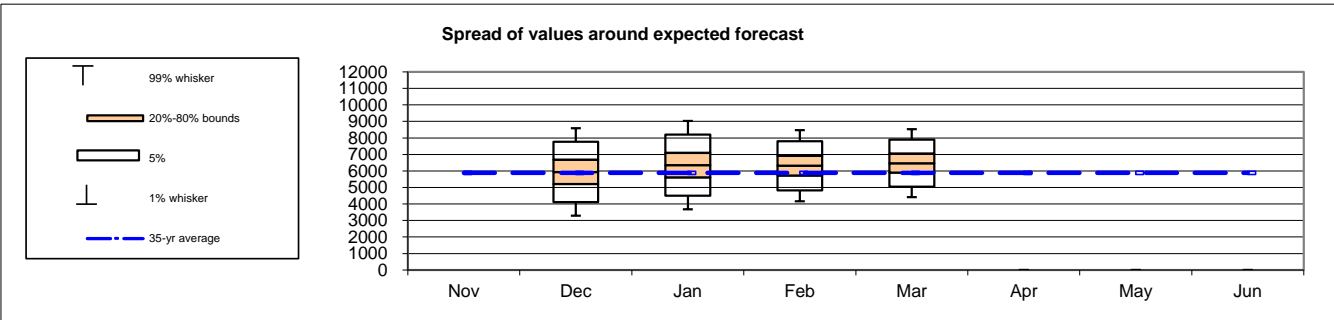
<b>Most Probable Runoff Volume:</b>	<b>Apr-Aug</b>	<b>6472</b>	<b>KAF</b>
	<b>Apr-Jul</b>	<b>5875</b>	<b>KAF</b>
	<b>May-Jul</b>	<b>5302</b>	<b>KAF</b>
<b>31-Mar Flood Risk Management Space</b>		<b>2453</b>	<b>KAF</b>
<b>31-Mar Flood Risk Management Elevation</b>		<b>2397.8</b>	<b>ft</b>

1981-2010 Average	Percent of Average	1929-2008 Average	Percent of Average
5885	110%	6282	103%
5342	110%	5720	103%
4821	110%	5199	102%

**Seasonal Flood Risk Management VARQ Flood Risk Management Implemented**

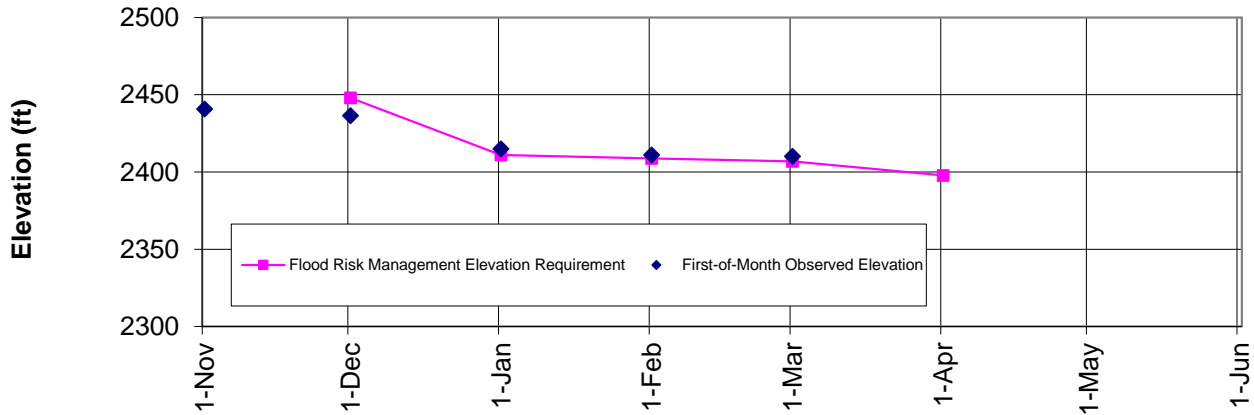
Forecast Date >>	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>Apr-Aug Runoff Forecast</b>		5940	6354	6318	6472			
<b>First-of-Month Elev</b>	2440.7	2436.5	2415.0	2411.0	2410.1			

Date >>	30-Nov	31-Dec	31-Jan	28-Feb	31-Mar	30-Apr
<b>Flood Risk Management Space</b>	500	2000	2083	2145	2453	
<b>Flood Risk Management Elevation</b>	2448.0	2411.0	2408.7	2407.0	2397.8	



**Libby Flood Risk Management Elevations - 2016**

Latest water supply forecast: Mar



**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, Kristy Riley (206) 316-3947, Kevin Shaffer (206) 764-3660, Adam Price (206) 764-3604, or Kristian Mickelson (206) 764-6927.
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 : March 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:Feb Prcp	inches	7.71	156%	65.9	507.9
West Glacier, MT	∑Oct:Feb Prcp	inches	14.75	104%	28.5	420.5
Cranbrook A, BC	∑Oct:Feb Prcp	inches	171.90	127%	2.7	469.3
Fernie, BC	∑Oct:Feb Prcp	inches	663.40	116%	0.6	417.9
Hawkins Lake, MT	1-Mar SWE	inches	22.80	113%	24.3	554.7
Stahl Creek, MT	1-Mar SWE	inches	31.50	110%	19.1	602.0
East Creek, BC	1-Mar SWE	inches	846.00	119%	0.7	549.9
Moyie Mountain, BC	1-Mar SWE	inches	353.00	100%	1.3	448.3
Sunshine Village, AB	1-Mar SWE	inches	414.00	89%	1.3	521.6
Akamina Pass, AB	1-Mar SWE	inches	320.00	82%	1.0	332.8
South Racehorse Creek, AB	1-Mar SWE	inches	361.00	104%	1.4	505.4
Intercept			1		1142.0	1142.0
1-Mar Forecast (KAF)					∑	6472.3

Climate Data	Jan-15	Feb-15	Mar-15	Jun-15	Jul-15	Oct-15	Nov-15	Dec-15	Jan-16
SOI				-0.60	-1.10				
Precipitation Data	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Units
Eureka RS, MT	1.37	1.73	2.69	1.33	0.59				inch
West Glacier, MT	1.93	2.45	4.62	3.07	2.68				inch
Cranbrook A, BC	16.60	49.30	50.80	38.00	17.20				mm
Fernie, BC	104.00	198.40	172.00	104.00	85.00				mm
Snow Water Equiv	1-Jan			1-Feb	1-Mar	1-Apr	1-May	1-Jun	Units
Hawkins Lake, MT				17	23				inch
Stahl Creek, MT				15	24				inch
East Creek, BC				691	846				mm
Moyie Mountain, BC				185	286				mm
Sunshine Village, AB				252	291				mm
Akamina Pass, AB					283				mm
South Racehorse Creek, AB					286				mm
Streamflow	Jan		Feb	Mar	Apr	May	Jun	Units	
Libby Inflow Volume	189.4		199.1					KAF	
Reservoir Elevation	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	Units
Libby FOM Elev	2440.7	2436.5	2415.0	2411.0	2410.1				feet

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