

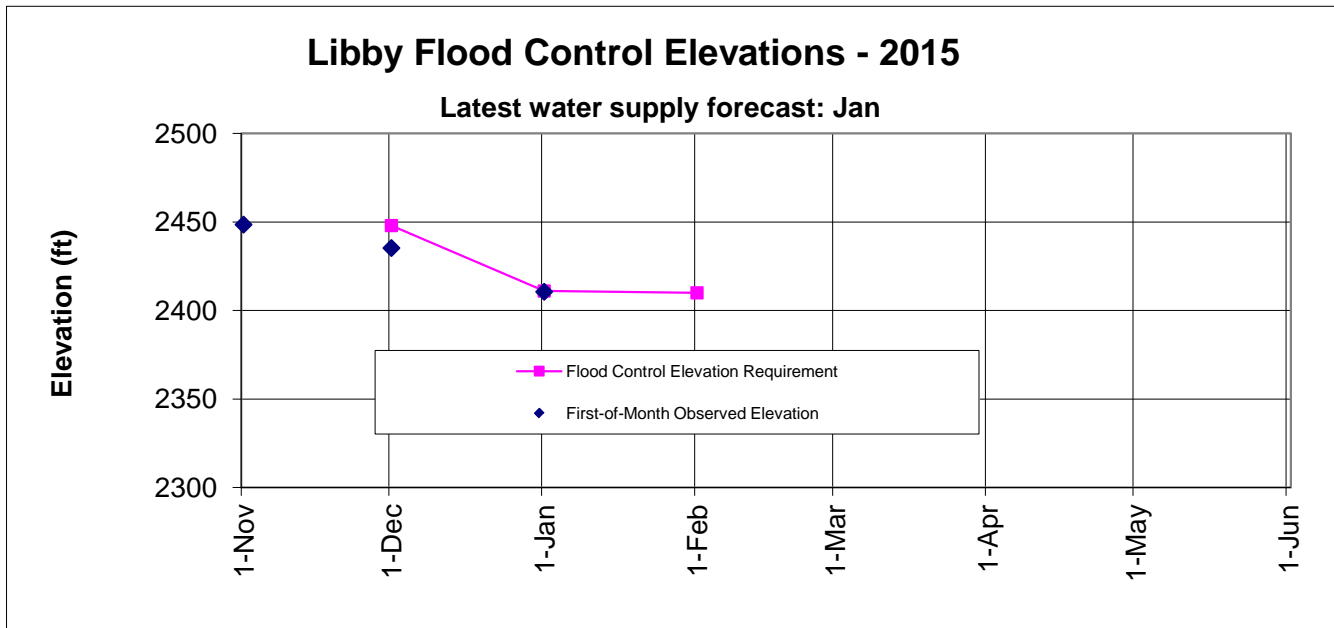
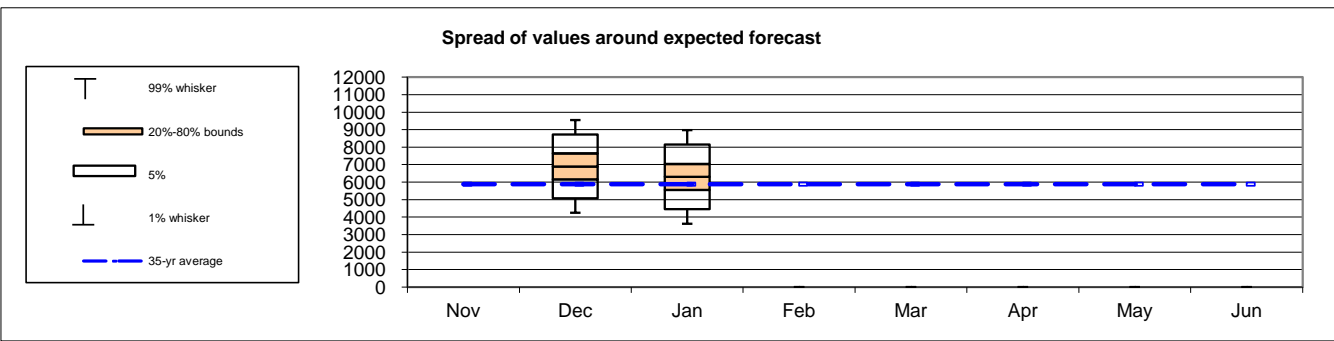
Libby : January Runoff Forecast & Flood Control Calculation

WY 2015

Runoff Forecast and Flood Control			
Most Probable Runoff Volume:	Apr-Aug	6297	KAF
	Apr-Jul	5716	KAF
	May-Jul	5158	KAF
31-Jan Flood Control Space		2037	KAF
31-Jan Flood Control Elevation		2410.0	ft

1981-2010 Average	Percent of Average	1929-2008 Average	Percent of Average
5885	107%	6282	100%
5342	107%	5720	100%
4821	107%	5199	99%

Seasonal Flood Control VARQ Flood Control Implemented								
Forecast Date >>	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast		6899	6297					
First-of-Month Elev	2448.5	2435.3	2410.6					
Date >>	30-Nov	31-Dec	31-Jan	28-Feb	15-Mar	31-Mar	15-Apr	30-Apr
Flood Control Space	500	2000	2037					
Flood Control Elevation	2448.0	2411.0	2410.0					



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, 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.

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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		0.00		95.3	0.0	
Eureka RS, MT	ΣOct,Nov,Dec Prcp	inches	4.19	123%	141.7	593.9	
West Glacier, MT	ΣOct,Nov,Dec Prcp	inches	12.48	139%	58.4	729.1	
Cranbrook A, BC	ΣOct,Nov,Dec Prcp	inches	108.50	119%	4.6	496.9	
Fernie, BC	ΣOct,Nov,Dec Prcp	inches	494.90	136%	1.2	593.9	
Hawkins Lake, MT	1-Jan SWE	inches				0.0	
Stahl Creek, MT	1-Jan SWE	inches	15.10	93%	34.6	522.9	
East Creek, BC	1-Jan SWE	inches				0.0	
Moyie Mountain, BC	1-Jan SWE	inches	131.00	73%	1.6	207.6	
Sunshine Village, AB	1-Jan SWE	inches	200.00	73%	2.1	428.0	
Akamina Pass, AB	1-Jan SWE	inches				0.0	
South Racehorse Creek, AB	1-Jan SWE	inches				0.0	
Intercept			1		2724.4	2724.4	
1-Jan Forecast (KAF)					Σ	6296.8	

Data used in Libby Water Supply Forecast	WY		2015		WY		2015		Units
	Jan-14	Feb-14	Mar-14	Jun-14	Jul-14	Oct-14	Nov-14	Dec-14	
Climate Data									
SOI				0.20	-0.20				
Precipitation Data	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
Eureka RS, MT	0.55	2.42	1.22						inch
West Glacier, MT	2.64	5.77	4.07						inch
Cranbrook A, BC	29.40	53.60	25.50						mm
Fernie, BC	126.90	273.00	95.00						mm
Snow Water Equiv			1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	
Hawkins Lake, MT									inch
Stahl Creek, MT			15						inch
East Creek, BC									mm
Moyie Mountain, BC			131						mm
Sunshine Village, AB			200						mm
Akamina Pass, AB									mm
South Racehorse Creek, AB									mm
Streamflow			Jan	Feb	Mar	Apr	May	Jun	
Libby Inflow Volume									KAF
Reservoir Elevation	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	
Libby FOM Elev	2448.5	2435.3	2410.6						feet

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