

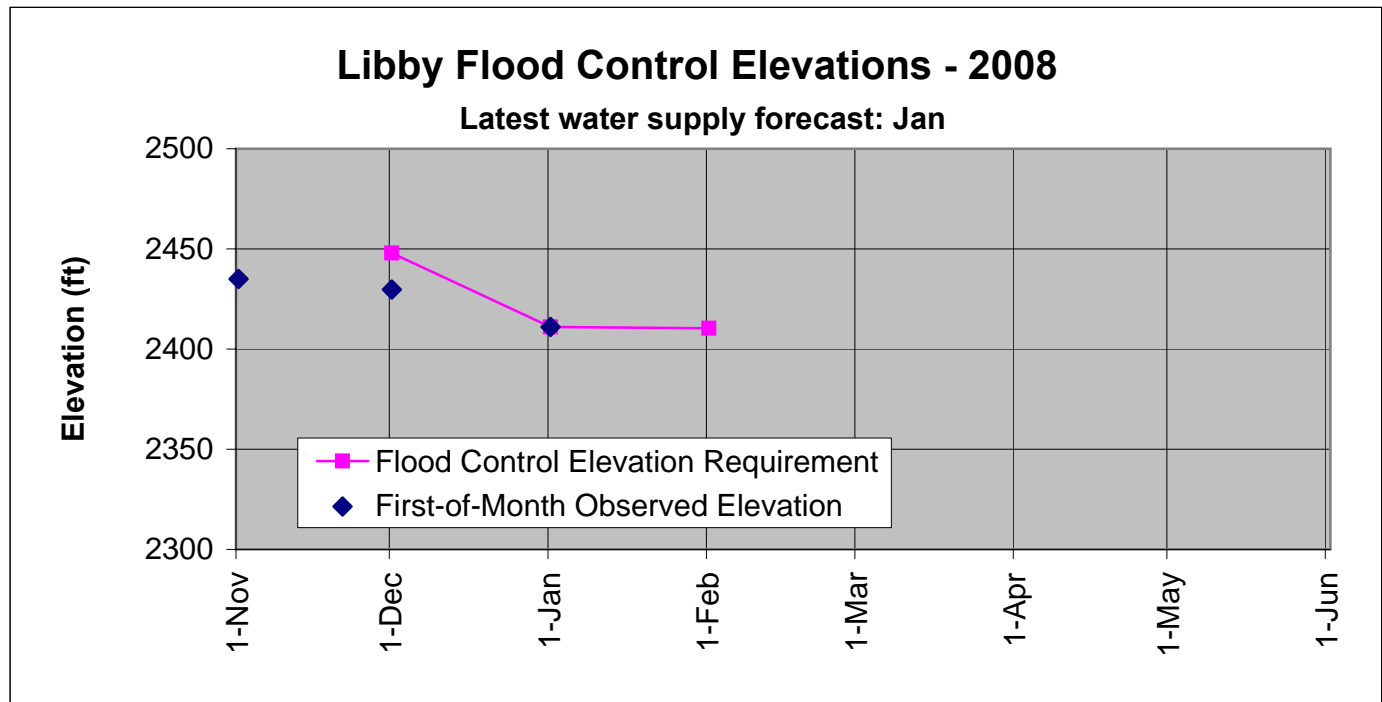
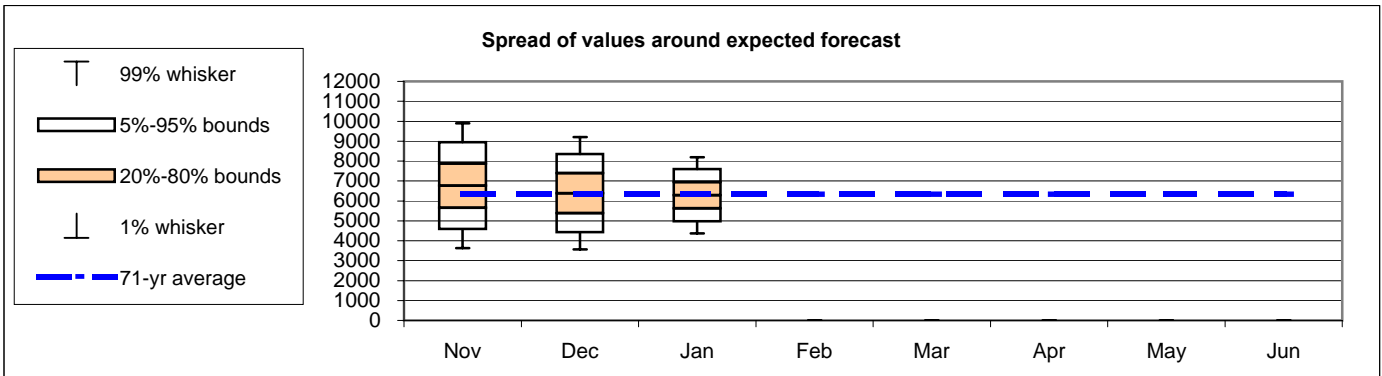
# Libby : January Runoff Forecast & Flood Control Calculation

WY 2008

Runoff Forecast and Flood Control			
Most Probable Runoff Volume:	Apr-Aug	6282	KAF
	Apr-Jul	5720	KAF
	May-Jul	5201	KAF
31-Jan Flood Control Space		2025	KAF
31-Jan Flood Control Elevation		2410.3	ft

1929-1999 Average	Percent of Average
6337	99%
5771	99%
5247	99%

Seasonal Flood Control VARQ Flood Control Implemented								
Forecast Date >>	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast	6764	6385	6282					
First-of-Month Elev	2435.0	2429.7	2411.0					
Date >>	30-Nov	31-Dec	31-Jan	28-Feb	15-Mar	31-Mar	15-Apr	30-Apr
Flood Control Space	500	2000	2025					
Flood Control Elevation	2448.0	2411.0	2410.3					



- Notes:
- The given forecast is the official Corps of Engineers forecast for Libby. If you have any questions please contact Ken Soderlind (503 808-3950), Patti Low (503 808-3958), or John McCoskery (503 808-3951).
  - Subsequent forecasts may differ from the originally published forecast due to updated values for precipitation, snow or streamflow.
  - Vermillion River snow measurements, with adjustments, are serving as a surrogate for Marble Canyon.

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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
Fernie, BC	ΣOct,Nov,Dec Prcp	inches	15.54	98%	21.8	339.2
Glacier NP RP, BC	ΣOct,Nov,Dec Prcp	inches	25.04	115%	22.0	552.0
Kaslo, BC	ΣOct,Nov,Dec Prcp	inches	11.98	106%	44.2	528.9
Fortine 1N, MT	ΣOct,Nov,Dec Prcp	inches	2.50	63%	109.4	273.5
West Glacier, MT	ΣOct,Nov,Dec Prcp	inches	8.88	103%	47.3	420.1
Libby 1 NE RS, MT	ΣOct,Nov,Dec Prcp	inches	6.99	112%	70.1	490.1
Banff, AB	Dec Prcp	inches	1.44	114%	93.2	134.3
Cranbrook, BC	Dec Prcp	inches	2.28	137%	112.5	256.3
Vermillion R #3, BC	1-Jan SWE <sup>3</sup>	inches	5.35	94%	----	
Marble Canyon, BC	1-Jan SWE <sup>3</sup>	inches	6.25		57.7	360.5
East Creek, BC	1-Jan SWE	inches	22.13	120%	23.8	527.7
Intercept			1		2398.9	2398.9
1-Jan Forecast (KAF)					Σ	6281.6

## Data used in Libby Water Supply Forecast

WY 2008

Climate Data	June	July	Aug	Sep					Units	
SOI	0.20	-0.50	0.10	0.20						
Precipitation Data	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Units	
Cranbrook A, BC			57.90	25.80					mm	
Fernie, BC	137.20	85.40	172.00	129.60					mm	
Glacier NP Rogrs Pass, BC	168.60	211.00	256.50						mm	
Kaslo, BC	81.80	87.80	134.60						mm	
Banff, AB			36.60	19.80					mm	
Fortine 1N, MT	0.62	1.02	0.86						inch	
West Glacier, MT	2.96	2.00	3.92						inch	
Libby 1 NE RS, MT	2.05	1.91	3.03	2.68					inch	
Snow Water Equiv				1-Jan	1-Feb	1-Mar	1-Apr	1-May	15-May	Units
Vermillion Rvr No. 3, BC				136	187					mm
East Creek, BC				562	705					mm
Morrissey Ridge, BC										mm
Moyie Mountain, BC										mm
Sullivan Mine, BC										mm
Hawkins Lake, MT					18.7					inch
Stahl Peak, MT					27.1					inch
Streamflow				Jan	Feb	Mar	Apr	May	Jun	Units
Libby Inflow Volume				159.7						KAF
Reservoir Elevation	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	Units	
Libby FOM Elev	2435.0	2429.7	2411.0	2408.2					feet	