

## LIBBY PROJECT INFLOW FORECAST, KAF

07 MAR 2006

FORECAST DATE	1 Nov	1 Dec	1 Jan	1 Feb	1 Mar			
Draft requirements based on Libby VARQ storage reservation diagram.								
Apr-Aug runoff, Libby inflow	6976	6581	5451	6186	6350			
Apr-Aug normal, 6248 KAF, 1971-2000	111.7%	105.3%	87.2%	99.0%	101.6%			
Apr-Jul runoff	6300	5942	4922	5586	5734			
May-Jul runoff	5718	5394	4467	5070	5205			
Jan-Jul runoff	7041	6642	5501	6347	6485			
Date-Jul runoff	7041	6642	5501	6025	5982			
Forecast standard error, KAF	1303	1177	776	579	553			
95% Confidence Error - Single Tailed Probability @ 1.68	2189	1977	1304	973	929			
95% Non-exceedance Limit, KAF	9165	8558	6754	7158	7279			
5% Non-exceedance Limit, KAF	4787	4603	4147	5213	5421			
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VARQ FLOOD CONTROL, DRAFT BY:	30 Nov	31 Dec	31 Jan	28 Feb	15 Mar	31 Mar	15 Apr	30 Apr
required draft, KAF	500	2000	1400	1960	2245	2245	2245	2245
required elevation, ft	2448.0	2411.0	2426.7	2412.1	2404.1	2404.1	2404.1	2404.1
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FORECAST	Observed Value	Percent Average	Regression Coefficient	Marginal RO (KAF)	Percent Average
Variable					
Oct-Dec Precip at Fortine, MT	4.19	116%	103.4	433.4	
Oct-Dec Precip at Glacier NP RP, BC	14.28	66%	19.6	280.2	
Oct-Dec Precip at Kaslo, BC	8.48	71%	41.4	351.2	
Oct-Dec Precip at West Glacier, MT	11.00	126%	45.1	495.9	
Dec-Feb Precip at Banff, AB	1.53	49%	74.3	113.8	
Dec-Feb Precip at Cranbrook, BC	3.64	108%	56.9	207.2	
Dec-Feb Precip at Fernie, BC	16.14	104%	31.4	506.5	
Dec-Feb Precip at Libby 1NE RS, MT	9.89	177%	72.3	715.0	
1-Mar East Creek Snow Course, BC	33.98	109%	18.3	620.8	
1-Mar Hawkins Lake Snow Course, MT	22.90	99%	22.0	504.9	
1-Mar Vermillion R #3 Snow Course, BC	8.27	64%	44.3	366.6	
1-Mar Stahl Peak, MT	34.20	114%	20.6	703.8	
Intercept	1.00		1050.8	1050.8	

LIBBY APR-AUG RUNOFF FORECAST, KAF	6350	101.6%
95% Non-exceedance Limit, KAF	7279	116.5%
5% Non-exceedance Limit, KAF	5421	86.8%

## REGRESSION MODEL APR-AUG FORECAST STATISTICS

1971-2000 Normal Runoff, KAF	6248	100.0%
Forecast Standard Error, KAF	553	
95% Confidence Factor - 1.68 - Single Tailed Probability	929	

## LONG TERM HISTORIC STATISTICS

1929-2002 Normal Runoff, APR-AUG, KAF	6313	
1929-2002 Standard Deviation, APR-AUG, KAF	1492	
Historic 74-year 95% non-exceedance limit	8820	139.7%
Historic 74-year 5% non-exceedance limit	3806	60.3%

The given forecast values are to be considered the Corps of Engineers Official Forecast for Libby.

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Note:

1/ Forecasts for months other than the current month may be different than the official forecast released earlier. Differences are due to updated streamflow, precip, or snow data.