

## LIBBY PROJECT INFLOW FORECAST, KAF

06 APR 2005

FORECAST DATE	1 Nov	1 Dec	1 Jan	1 Feb	1 Mar	1 Apr	
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FORECAST'S KAF	Draft requirements based on Libby VARQ storage reservation diagram.						
Apr-Aug runoff, Libby inflow	6174	6181	5786	5630	5371	5401	
Apr-Aug normal, 6248 KAF, 1971-2000	98.8%	98.9%	92.6%	90.1%	86.0%	86.4%	
Apr-Jul runoff	5575	5581	5225	5084	4850	4877	
May-Jul runoff	5060	5066	4743	4614	4402	4427	
Jan-Jul runoff	6231	6238	5840	5805	5638	5724	
Date-Jul runoff	6231	6238	5840	5484	5060	4877	
Forecast standard error, KAF	1352	1175	776	579	553	542	
95% Confidence Error -	2258	1962	1296	967	924	905	
Single Tailed Probability @ 1.67							
95% Non-exceedance Limit, KAF	8432	8143	7070	6593	6273	6275	
5% Non-exceedance Limit, KAF	3916	4218	4502	4666	4470	4528	
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VARQ FLOOD CONTROL, DRAFT BY:	30 Nov	31 Dec	31 Jan	28 Feb	15 Mar	31 Mar	30 Apr
required draft, KAF	500	2000	1629	1182	800	770	731
required elevation, ft	2448.0	2411.0	2420.9	2432.1	2441.1	2441.8	2442.7
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Variable	Observed Value	Percent Average	Regression Coefficient	Marginal RO (KAF)	Percent Average
Oct-Dec Precip at Fortine, MT	4.24	117%	104.8	444	
Oct-Dec Precip at Glacier NP RP, BC	19.15	89%	19.4	371	
Oct-Dec Precip at Kaslo, BC	10.01	84%	43.1	431	
Oct-Dec Precip at West Glacier, MT	10.49	120%	46.1	483	
Dec-Mar Precip at Banff, AB	4.54	112%	69.1	314	
Dec-Mar Precip at Cranbrook, BC	3.28	78%	56.6	186	
Dec-Mar Precip at Fernie, BC	14.70	77%	30.6	449	
Dec-Mar Precip at Libby 1NE RS, MT	4.55	66%	65.0	296	
1-Apr East Creek Snow Course, BC	33.39	91%	17.8	596	
1-Apr Hawkins Lake Snow Course, MT	15.50	57%	19.9	309	
1-Apr Vermillion R #3 Snow Course, BC	9.69	68%	47.0	455	
1-Apr Stahl Peak, MT	28.80	81%	19.7	569	
Intercept	1.00		497.9	498	

LIBBY APR-AUG RUNOFF FORECAST, KAF	5401	86.4%
95% Non-exceedance Limit, KAF	6306	100.9%
5% Non-exceedance Limit, KAF	4496	72.0%
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REGRESSION MODEL APR-AUG FORECAST STATISTICS		
1971-2000 Normal Runoff, KAF		6248 100.0%
Forecast Standard Error, KAF	542	
95% Confidence Factor -	905	
1.67-constant Single Tailed Probability		
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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		8805 139.5%
Historic 74-year 5% non-exceedance limit		3821 60.5%

The given forecast values are to be considered the Corps of Engineers Official Forecast for Libby. Questions? Ken Soderlind, 503-808-3950; Chan Modini, 503-808-3958; Arun Mylvahanan, 503-808-3961

## Footnote:

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.