

## LIBBY PROJECT INFLOW FORECAST, KAF

06 APR 2006

FORECAST DATE	1 Nov	1 Dec	1 Jan	1 Feb	1 Mar	1 Apr	
FORECAST'S KAF Draft requirements based on Libby VARQ storage reservation diagram.							
Apr-Aug runoff, Libby inflow	6976	6581	5451	6186	6350	6076	
Apr-Aug normal, 6248 KAF, 1971-2000	111.7%	105.3%	87.2%	99.0%	101.6%	97.2%	
Apr-Jul runoff	6300	5942	4922	5586	5734	5487	
May-Jul runoff	5718	5394	4467	5070	5205	4980	
Jan-Jul runoff	7041	6642	5501	6347	6485	6202	
Date-Jul runoff	7041	6642	5501	6025	5982	5487	
Forecast standard error, KAF	1303	1177	776	579	553	542	
95% Confidence Error - Single Tailed Probability @ 1.68	2189	1977	1304	973	929	911	
95% Non-exceedance Limit, KAF	9165	8558	6754	7158	7279	6987	
5% Non-exceedance Limit, KAF	4787	4603	4147	5213	5421	5166	
VARQ FLOOD CONTROL, DRAFT BY:	30 Nov	31 Dec	31 Jan	28 Feb	15 Mar	31 Mar	30 Apr
required draft, KAF	500	2000	1400	1960	2245	1779	1779
required elevation, ft	2448.0	2411.0	2426.7	2412.1	2404.1	2417.0	2417.0

FORECAST	Observed Value	Percent Average	Regression Coefficient	Marginal RO (KAF)	Percent Average
Oct-Dec Precip at Fortine, MT	4.19	116%	104.8	439	
Oct-Dec Precip at Glacier NP RP, BC	14.28	66%	19.4	276	
Oct-Dec Precip at Kaslo, BC	8.48	71%	43.1	366	
Oct-Dec Precip at West Glacier, MT	11.00	126%	46.1	507	
Dec-Mar Precip at Banff, AB	1.85	45%	69.1	128	
Dec-Mar Precip at Cranbrook, BC	4.24	100%	56.6	240	
Dec-Mar Precip at Fernie, BC	18.49	97%	30.6	565	
Dec-Mar Precip at Libby 1NE RS, MT	10.93	159%	65.0	710	
1-Apr East Creek Snow Course, BC	36.50	100%	17.8	651	
1-Apr Hawkins Lake Snow Course, MT	27.10	100%	19.9	540	
1-Apr Vermillion R #3 Snow Course, BC	8.50	59%	47.0	400	
1-Apr Stahl Peak, MT	38.30	108%	19.7	756	
Intercept	1.00		497.9	498	

LIBBY APR-AUG RUNOFF FORECAST, KAF	6076	97.2%
95% Non-exceedance Limit, KAF	6987	111.8%
5% Non-exceedance Limit, KAF	5166	82.7%

## REGRESSION MODEL APR-AUG FORECAST STATISTICS

1971-2000 Normal Runoff, KAF	6248	100.0%
Forecast Standard Error, KAF	542	
95% Confidence Factor - 1.68 - Single Tailed Probability	911	

## 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. Questions? Ken Soderlind, 503-808-3950; Patti Etzel, 503-808-3958; John McCoskery, 503-808-3951

## 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.