

LIBBY PROJECT INFLOW FORECAST, KAF

2005

FORECAST DATE	1 Nov	1 Dec	1 Jan			
FORECAST SUMMARY				Draft requirements based on Libby VARQ storage reservation diagram.		
Apr-Aug runoff, Libby inflow, KAF	6174	6181	5786			
Apr-Aug normal, 6248 KAF, 1971-2000	98.8%	98.9%	92.6%			
Apr-Jul runoff, KAF	5575	5581	5225			
May-Jul runoff, KAF	5060	5066	4743			
Jan-Jul runoff, KAF	6231	6238	5840			
Date-Jul runoff, KAF	6231	6238	5840			
Forecast standard error, KAF	1352	1175	776			
95% Confidence Error -	2258	1962	1296			
Single Tailed Probability @ 1.67						
95% Non-exceedance Limit, KAF	8432	8143	7070			
5% Non-exceedance Limit, KAF	3916	4218	4502			
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VARQ FLOOD CONTROL, DRAFT BY:	30 Nov	31 Dec	31 Jan	28 Feb	15 Mar	31 Mar
required draft, KAF	500	2000	1629	1401	1287	1287
required elevation, ft	2448.0	2411.0	2420.9	2426.7	2429.5	2429.5
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FORECAST						
Variable	Observed Value	Percent Average	Regression Coefficient	Marginal RO (KAF)	Percent Average	
Dec Precip at Cranbrook, BC	1.14	71%	112.5	128		
Dec Precip at Banff, AB	1.44	117%	93.2	134		
Oct-Dec Precip at Fernie, BC	11.69	74%	21.8	255		
Oct-Dec Precip at Libby 1N Ranger Stn., MT	4.16	67%	70.1	292		
Oct-Dec Precip at Fortine 1N, MT	4.24	117%	109.4	464		
Oct-Dec Precip at GNP Rogers Pass, BC	19.15	89%	22.0	421		
Oct-Dec Precip at Kaslo, BC	10.01	84%	44.2	442		
Oct-Dec Precip at West Glacier, MT	10.49	120%	47.3	496		
1-Jan SWE East Creek Snow Pillow, BC	18.35	105%	23.8	437		
1-Jan SWE at Vermillion R #3 Snow Course, BC	5.51	80%	57.7	318		
Intercept	1.00		2399.0	2399		
LIBBY APR-AUG RUNOFF FORECAST, KAF				5786	92.6%	
95% Non-exceedance Limit, KAF				7082	113.4%	
5% Non-exceedance Limit, KAF				4490	71.9%	
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REGRESSION MODEL FORECAST STATISTICS					
1971-2000 Normal Runoff, APR-AUG, KAF				6248	100.0%
Forecast Standard Error, APR-AUG, KAF			776		
95% Confidence Factor -			1296		
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.