

LIBBY PROJECT INFLOW FORECAST, KAF

2006

FORECAST DATE	1 Nov	1 Dec	1 Jan	1 Feb	1 Mar	1 Apr	1 May	
Draft requirements based on Libby VARQ storage reservation diagram.								
Apr-Aug runoff, Libby inflow	6986	6596	5553	6301	6409	6131	6179	
Apr-Aug normal, 6248 KAF, 1971-2000	111.8%	105.6%	88.9%	100.9%	102.6%	98.1%	98.9%	
Apr-Jul runoff	6308	5956	5014	5690	5787	5536	5579	
May-Jul runoff	5726	5406	4551	5165	5253	5025	4949	
Jan-Jul runoff	7051	6657	5605	6459	6540	6251	6294	
Date-Jul runoff	7051	6657	5605	6138	6037	5536	4936	
Forecast standard error, KAF	1303	1177	776	579	553	542	503	
95% Confidence Error - Single Tailed Probability @ 1.68	2189	1977	1304	973	929	911	845	
95% Non-exceedance Limit, KAF	9175	8573	6857	7274	7338	7042	7024	
5% Non-exceedance Limit, KAF	4797	4619	4249	5329	5479	5221	5334	
VARQ FLOOD CONTROL, DRAFT BY:	30 Nov	31 Dec	31 Jan	28 Feb	15 Mar	31 Mar	30 Apr	lookback
required draft, KAF	500	2000	1442	2122	2344	1873	1954	
required elevation, ft	2448.0	2411.0	2425.6	2407.6	2401.1	2414.5	2412.3	

Variable	Observed Value	Percent Average	Regression Coefficient	Marginal RO (KAF)	Percent Average
Oct-Dec Precip at Glacier NP RP, BC	14.28	66%	22.3	318	
Oct-Dec Precip at Kaslo, BC	8.48	71%	50.4	427	
Oct-Dec Precip at West Glacier, MT	11.00	126%	51.8	570	
Dec-Apr Precip at Banff, AB	4.26	79%	67.9	289	
Dec-Apr Precip at Cranbrook, BC	5.96	113%	63.5	379	
Dec-Apr Precip at Fernie, BC	20.68	93%	32.5	673	
1-May East Creek Snow Course, BC	38.11	100%	16.0	609	
1-May Hawkins Lake Snow Course, MT	28.50	99%	20.6	588	
1-May Morrissey Ridge Snow Course, BC	30.98	104%	19.8	613	
1-May Stahl Peak, MT	40.30	107%	21.2	853	
Intercept	1.00		214.8	215	

LIBBY MAY-AUG RUNOFF FORECAST, KAF	5535	96.6%
LIBBY OBSERVED INFLOW FOR APRIL, KAF	644	123.5%
LIBBY APR-AUG RUNOFF FORECAST, KAF	6179	98.9%
95% Non-exceedance Limit, KAF	7024	112.4%
5% Non-exceedance Limit, KAF	5334	85.4%

REGRESSION MODEL FORECAST STATISTICS		
1971-2000 Normal Runoff, MAY-AUG, KAF	5727	100.0%
1971-2000 Normal Inflow, Apr, KAF	521	100.0%
1971-2000 Normal Runoff, APR-AUG, KAF	6248	100.0%
Forecast Standard Error, APR-AUG, KAF	503	
95% Confidence Factor - 1.68-constant Single Tailed Probability	845	

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.