

LIBBY PROJECT INFLOW FORECAST, KAF

2000

FORECAST DATE	1 Jan	1 Feb	1 Mar	1 Apr	1 May
FORECAST'S KAF					
Apr-Aug runoff, Fort Steele	3197	4027	3734	3837	3896
Apr-Aug runoff, Libby Local	2372	2338	2950	3029	3068
Apr-Aug runoff, Libby inflow	6802	6804	6684	6866	6964
Apr-Aug norm, 6376.8, 1961-1990	106.7%	106.7%	104.8%	107.7%	109.2%
Apr-Jul runoff	6164	6166	6057	6222	6311
May-Jul runoff	5654	5656	5556	5708	5668
Jan-Jul runoff	6787	6920	6872	7065	7154
Date-Jul runoff	6787	6589	6289	6236	5669
Date-Jul standard error	1069	731	666	643	572
Date-Jul confidence limit, 1.64	1759	1202	1096	1058	941
Date-Jul 95% confidence	5028	5386	5193	5179	4728
Date-Jul 5% confidence	8545	7791	7385	7294	6610

FLOOD CONTROL, DRAFT BY:	31 Jan	28 Feb	15 Mar	31 Mar	30 Apr	lookback
required draft, KAF	3196.8	4027.5	4180.4	4358.9	3997.4	
required elevation, FT	2372.3	2338.3	2331.3	2322.6	2339.6	

FORECAST COMPONENT SUMMARY	FRO	WP	SWE	SP	SP+NS	INT	TOTAL
FORT STEELE, B.C., (FS)	2.526	82.77	113.7	8.17	30.70		
inches=(fro(1.309)+wp(0.068)+swe(0.067)+sp(0.167))-5.114							
inches	3.306	5.628	7.618		5.127	-5.114	16.565
inches*235.2=kaf							3896
LIBBY LOCAL, (LL)	1.881	81.78	85.6	6.88	26.66		
inches=(fro(0.921)+wp(0.086)+swe(0.046)+sp(0.152))-4.183							
inches	1.733	7.033	3.938		4.052	-4.183	12.573
inches*244.0=kaf							3068

TERM DEFINITION  
 fall runoff is FRO  
 winter precip is WP  
 normal subsequent is NS  
 snow water equivalent is SWE  
 spring precip(weighted) is SP  
 equation constant, or, y-INTERCEPT is INT

OBSERVED DATA, usage, FS=Fort Steele, LL=Libby Local							
WINTER PRECIP(WP), inches		Oct	Nov	Dec	Jan	Feb	Mar
Banff	FS	2.56	1.53	0.19	0.54	0.95	1.12
Brisco	FS	1.44	2.25	1.30	2.00	1.10	0.72
Fernie	LL	3.20	9.50	6.69	7.19	6.39	5.64
Kaslo	FS	3.27	5.79	4.50	3.59	2.09	2.25
Rogers Pass	FS	7.29	9.39	9.30	9.40	5.00	5.20
Fortine	LL	1.12	2.05	1.11	1.16	0.90	0.85
Libby RS	LL	1.44	3.60	1.30	2.79	1.31	1.00
Bonnars Ferry	LL	1.43	3.85	1.64	2.90	1.18	1.08
Polebridge	LL	1.69	3.20	2.10	2.37	1.50	1.60
SNOW WATER EQUIVALENT(SWE), inches				31 DEC	31 JAN	28 FEB	31 MAR
Glacier	FS			14.7	21.0	23.9	29.3
Kicking Horse	FS			6.3	9.3	10.0	13.6
Kimberly	LL			1.5	1.2	2.9	4.0
Marble Canyon	FS			8.8	9.3	11.4	14.4
Mirror Lake	FS			5.2	7.2	10.2	12.0
Morrissey Ridge	FS & LL*.5			8.3	14.2	18.9	22.8
New Fernie	FS & LL			3.4	7.0	11.4	12.0
Sullivan Mine	FS & LL			2.7	5.3	7.5	9.6
Red Mtn.	LL			6.6	8.9	13.0	15.8
Weisel Divide	LL			11.9	20.6	26.2	32.8

FALL RUNOFF(FRO), kaf		Oct	Nov	SUM
Fort Steele	f=235.2	178	416	594
Libby local	f=244.0	136	323	459

f=, is to convert from basin inches to acre feet(x), or acre feet to basin inches(/).

LIBBY INFLOW, kaf		Oct	Nov	Dec	Jan	Feb	Mar	Apr
		314	739	374	331	252	246	656

SPRING PRECIP(SP), inches		Apr
Brisco	FS	0.92
Creston	FS	1.50
Kaslo	FS & LL	3.74
Wasa	FS	0.57
Fortine	LL	0.78
Porthill	FS & LL	1.44
Whitefish	LL	0.92

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