

LIBBY PROJECT INFLOW FORECAST, KAF

2001

FORECAST DATE	1 Jan	1 Feb	1 Mar	1 Apr	1 May	1 Jun
FORECAST'S KAF						
Apr-Aug runoff, Fort Steele	1841	1048	1902	1907	2019	1850
Apr-Aug runoff, Libby Local	2415	2435	1464	1415	1493	1311

Apr-Aug runoff, Libby inflow	4764	3936	3366	3322	3512	3161
Apr-Aug norm, 6376.8, 1961-1990	74.7%	61.7%	52.8%	52.1%	55.1%	49.6%
Apr-Jul runoff	4317	3567	3050	3011	3182	2871
May-Jul runoff	3960	3272	2798	2762	2954	2647
Jan-Jul runoff	4936	4138	3576	3484	3657	3338
Date-Jul runoff	4936	3984	3275	3017	2966	1633
Jun-Aug residual forecast						1923
Date-Jul standard error	1069	731	666	643	572	443
Date-Jul confidence limit, 1.64	1759	1202	1096	1058	941	729
Date-Jul 95% confidence	3178	2781	2180	1960	2025	904
Date-Jul 5% confidence	6695	5186	4371	4075	3907	2362

FLOOD CONTROL, DRAFT BY:	31 Jan	28 Feb	15 Mar	31 Mar	30 Apr	lookback
required draft, KAF	1840.5	1048.3	500.0	500.0	508.2	
required elevation, FT	2415.3	2435.3	2448.0	2448.0	2447.8	

FORECAST COMPONENT SUMMARY	FRO	WP	SWE	SP	SP+NS	INT	TOTAL
FORT STEELE, B.C., (FS)	0.995	38.04	66.5	14.00	27.76		
inches=(fro(1.309)+wp(0.068)+swe(0.067)+sp(0.167))-5.114							
inches	1.302	2.587	4.456		4.636	-5.114	7.866
inches*235.2=kaf							1850
LIBBY LOCAL, (LL)	0.898	37.88	43.6	10.86	22.79		
inches=(fro(0.921)+wp(0.086)+swe(0.046)+sp(0.152))-4.183							
inches	0.827	3.258	2.006		3.464	-4.183	5.371
inches*244.0=kaf							1311

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	0.30	0.37	0.45	0.17	0.77	0.52
Brisco	FS	0.50	0.60	1.29	0.26	0.41	0.42
Fernie	LL	2.79	3.32	4.43	1.29	2.25	2.69
Kaslo	FS	1.69	0.70	2.66	0.50	0.15	0.98
Rogers Pass	FS	3.00	3.10	5.60	4.40	4.40	4.80
Fortine	LL	0.72	0.65	0.84	0.31	0.33	0.47
Libby RS	LL	0.33	1.28	1.33	0.88	0.89	0.83
Bonnors Ferry	LL	1.65	1.04	1.59	0.67	0.26	0.34
Polebridge	LL	1.10	0.80	2.40	0.80	0.70	0.90
SNOW WATER EQUIVALENT(SWE), inches		31 DEC	31 JAN	28 FEB	31 MAR		
Glacier	FS		7.5	12.2	14.9	19.1	
Kicking Horse	FS		3.0	4.0	5.5	7.0	
Kimberly	LL		1.6	0.1	0.0	3.0	
Marble Canyon	FS		2.9	4.2	6.0	7.6	
Mirror Lake	FS		2.5	3.1	4.8	6.2	
Morrissey Ridge	FS & LL*.5		4.8	6.8	9.1	14.2	
New Fernie	FS & LL		3.1	3.5	4.6	6.1	
Sullivan Mine	FS & LL		2.8	4.0	4.8	6.3	
Red Mtn.	LL		3.5	2.5	5.6	8.8	
Weisel Divide	LL		6.4	9.2	11.4	12.3	

FALL RUNOFF(FRO), kaf		Oct	Nov	SUM
Fort Steele	f=235.2	148	86	234
Libby local	f=244.0	118	101	219

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	May
		266	187	166	154	147	166	224	1014

SPRING PRECIP(SP), inches		Apr	May
Brisco	FS	0.80	0.84
Creston	FS	2.80	1.30
Kaslo	FS & LL	1.10	1.00
Wasa	FS	1.50	0.45
Fortine	LL	0.95	0.40
Porthill	FS & LL	3.33	0.88
Whitefish	LL	2.54	0.66

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 Previous fcsts have changed because some estimated precip has been replaced with observed.
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