

LIBBY PROJECT INFLOW FORECAST, KAF 08 Feb 2003

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FORECAST DATE 1/ 1 Jan 1 Feb

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FORECAST'S KAF

Drafts reflect VARQ flood control operations at Libby.

Apr-Aug runoff, Fort Steele	2670	2571
Apr-Aug runoff, Libby Local	2212	2088
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Apr-Aug runoff, Libby inflow	4882	4659
Apr-Aug norm, 6248, 1971-2000	78.1%	74.6%
Apr-Jul runoff	4408	4207
May-Jul runoff	4001	3819
Jan-Jul runoff	4927	4689
Date-Jul runoff	4927	4538
Date-Jul standard error	1069	731
Date-Jul confidence limit, 1.645	1759	1202
Date-Jul 95% confidence	3169	3336
Date-Jul 5% confidence	6686	5741

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FLOOD CONTROL, DRAFT BY:	31 Jan	28 Feb	15 Mar	31 Mar	30 Apr
required draft, KAF	1400.0	1000.0	800.0	547.8	211.5
required elevation, FT	2426.7	2436.4	2441.1	2446.9	2454.4

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FORECAST COMPONENT SUMMARY	FRO	WP	WP+NS	SWE	SWE+NS	NSSPW	INT	TOTAL
FORT STEELE, B.C., (FS)	1,059	30.43	51.60	55.0	93.6	29.20		
inches=(fro(1.309)+wp(0.068)+swe(0.067)+sp(0.167))-5.114								
inches	1.386		3.509		6.274	4.876	-5.114	10.931
inches*235.2=kaf								2571
LIBBY LOCAL, (LL)	0.648	38.55	58.43	38.7	70.1	25.62		
inches=(fro(0.921)+wp(0.086)+swe(0.046)+sp(0.152))-4.183								
inches	0.596		5.025		3.226	3.894	-4.183	8.559
inches*244.0=kaf								2088

TERM DEFINITION

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

OBSERVED DATA, usage, FS=Fort Steele, LL=Libby Local

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WINTER PRECIP(WP), inches	Oct	Nov	Dec	Jan
Banff FS	0.70	0.38	0.45	0.36
Brisco FS	0.09	0.98	1.28	1.64
Fernie LL	0.73	2.52	1.93	2.41
Kaslo FS	0.69	2.62	3.90	3.97
Rogers Pass FS	2.35	5.02	5.43	0.57
Fortine LL	0.04	0.90	1.66	1.21
Libby RS LL	1.50	1.78	3.67	2.28
Bonnars Ferry LL	0.39	1.34	6.16	3.43
Polebridge LL	0.40	1.00	3.30	1.90
SNOW WATER EQUIVALENT(SWE), inches			31 DEC	31 JAN
Glacier FS			7.5	14.3
Kicking Horse FS			2.6	5.7
Kimberly LL			2.1	0.6
Marble Canyon FS			2.5	7.2
Mirror Lake FS			2.1	3.8
Morrissey Ridge FS & LL*.5			6.9	13.0
New Fernie FS & LL			1.6	4.5
Sullivan Mine FS & LL			3.7	6.5
Red Mtn. LL			4.0	7.1
Weisel Divide LL			7.3	13.5

FALL RUNOFF(FRO), kaf	Oct	Nov	SUM
Fort Steele f=235.2	151	98	249
Libby local f=244.0	80	78	158

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

LIBBY INFLOW, kaf	Oct	Nov	Dec	Jan
	231	176	186	151

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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.