

LIBBY PROJECT INFLOW FORECAST, KAF

06 APR

2002

FORECAST DATE	1 Jan	1 Feb	1 Mar	1 Apr				
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FORECAST'S KAF								
Apr-Aug runoff, Fort Steele	3108	3000	3146	3312				
Apr-Aug runoff, Libby Local	2831	2379	2770	2988				

Apr-Aug runoff, Libby inflow	5939	5924	5916	6300				
Apr-Aug norm, 6376.8, 1961-1990	93.1%	92.9%	92.8%	98.8%				
Apr-Jul runoff	5382	5369	5361	5709				
May-Jul runoff	4937	4925	4918	5237				
Jan-Jul runoff	6004	5991	5970	6278				
Date-Jul runoff	6004	5790	5591	5722				
Date-Jul standard error	1069	731	666	643				
Date-Jul confidence limit, 1.645	1759	1202	1096	1058				
Date-Jul 95% confidence	4245	4587	4495	4664				
Date-Jul 5% confidence	7762	6992	6687	6780				
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FLOOD CONTROL, DRAFT BY:	31 Jan	28 Feb	15 Mar	31 Mar				
required draft, KAF	2602.7	2999.8	3123.6	3700.0				
required elevation, FT	2393.0	2379.4	2375.0	2352.5				
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FORECAST COMPONENT SUMMARY	FRO	WP	WP+NS	SWE	SWE+NS	NSSPW	INT	TOTAL
FORT STEELE, B.C., (FS)	0.978	66.54	66.54	127.1	127.1	29.20		
inches=(fro(1.309)+wp(0.068)+swe(0.067)+sp(0.167))-5.114								
inches	1.280		4.525		8.516	4.876	-5.114	14.083
inches*235.2=kaf								3312
LIBBY LOCAL, (LL)	0.504	80.34	80.34	112.2	112.2	25.62		
inches=(fro(0.921)+wp(0.086)+swe(0.046)+sp(0.152))-4.183								
inches	0.464		6.909		5.160	3.894	-4.183	12.245
inches*244.0=kaf								2988
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								
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OBSERVED DATA, usage, FS=Fort Steele, LL=Libby Local								
WINTER PRECIP(WP), inches								
	Oct	Nov	Dec	Jan	Feb	Mar		
Banff FS	0.53	0.96	0.22	1.18	0.64	1.20		
Brisco FS	0.87	1.06	0.63	1.89	0.91	0.94		
Fernie LL	8.06	2.59	4.77	5.89	5.45	1.79		
Kaslo FS	2.17	4.29	2.64	2.76	2.56	1.97		
Rogers Pass FS	6.30	5.59	7.36	7.91	6.42	5.55		
Fortine LL	2.27	0.75	1.41	0.73	0.77	1.72		
Libby RS LL	8.44	1.04	3.81	2.41	1.11	1.93		
Bonnars Ferry LL	2.40	1.77	2.78	1.99	1.41	1.35		
Polebridge LL	2.20	1.30	2.50	2.50	2.20	3.00		
SNOW WATER EQUIVALENT(SWE), inches								
			31 DEC	31 JAN	28 FEB	31 MAR		
Glacier FS			11.1	17.3	22.4	26.3		
Kicking Horse FS			4.2	6.6	8.5	10.6		
Kimberly LL			2.8	4.7	3.4	6.0		
Marble Canyon FS			5.4	9.3	11.9	13.9		
Mirror Lake FS			3.4	9.2	11.9	14.5		
Morrissey Ridge FS & LL*.5			12.6	18.5	27.0	34.1		
New Fernie FS & LL			5.7	9.9	12.5	16.0		
Sullivan Mine FS & LL			5.0	5.6	8.9	11.7		
Red Mtn. LL			9.0	10.7	14.0	21.4		
Weisel Divide LL			16.3	24.0	31.6	40.0		
FALL RUNOFF(FRO), kaf								
	Oct	Nov	SUM					
Fort Steele f=235.2	116	114	230					
Libby local f=244.0	49	74	123					
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		
	165	188	154	201	178	177		
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Questions? Patrick O'Brien, 503-808-3961; Chan Modini, 503-808-3958

Footnote: