

## LIBBY PROJECT INFLOW FORECAST, KAF

2002

FORECAST DATE	1 Jan	1 Feb	1 Mar	1 Apr	1 May	1 Jun			
FORECAST'S KAF									
Apr-Aug runoff, Fort Steele	3108	3000	3146	3312	3278	3552			
Apr-Aug runoff, Libby Local	2831	2379	2770	2988	2943	3150			
Apr-Aug runoff, Libby inflow	5939	5924	5916	6300	6221	6702			
Apr-Aug norm, 6376.8, 1961-1990	93.1%	92.9%	92.8%	98.8%	97.6%	105.1%			
Apr-Jul runoff	5382	5369	5361	5709	5637	6087			
May-Jul runoff	4937	4925	4918	5237	5171	5621			
Jan-Jul runoff	6004	5991	5970	6278	6206	6643			
Date-Jul runoff	6004	5790	5591	5722	5184	4167			
Jun-Aug residual forecast						4782			
Date-Jul standard error	1069	731	666	643	572	443			
Date-Jul confidence limit, 1.645	1759	1202	1096	1058	941	729			
Date-Jul 95% confidence	4245	4587	4495	4664	4243	3439			
Date-Jul 5% confidence	7762	6992	6687	6780	6125	4896			
FLOOD CONTROL, DRAFT BY:									
required draft, KAF	2602.7	2999.8	3123.6	3700.0	3500.4				
required elevation, FT	2393.0	2379.4	2375.0	2352.5	2360.6				
FORECAST COMPONENT SUMMARY									
FORT STEELE, B.C., (FS)	0.978	66.54	127.1		21.54	35.30	INT	TOTAL	
inches=(fro(1.309)+wp(0.068)+swe(0.067)+sp(0.167))-5.114									
inches	1.280	4.525	8.516			5.895	-5.114	15.102	
inches*235.2=kaf								3552	
LIBBY LOCAL, (LL)	0.504	80.34	112.2		18.07	30.00			
inches=(fro(0.921)+wp(0.086)+swe(0.046)+sp(0.152))-4.183									
inches	0.464	6.909	5.160			4.560	-4.183	12.910	
inches*244.0=kaf								3150	

## 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	0.53	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  
Fort Steele f=235.2  
Libby local f=244.0  
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
		165	188	154	201	178	177	466	1454
SPRING PRECIP(SP), inches		Apr	May						
Brisco	FS	0.79	1.61						
Creston	FS	1.60	4.60						
Kaslo	FS & LL	1.46	4.89						
Wasa	FS	0.74	0.68						
Fortine	LL	1.25	1.87						
Porthill	FS & LL	1.20	3.97						
Whitefish	LL	0.73	2.70						

Questions? Patrick O'Brien, 503-808-3961; Chan Modini, 503-808-3958

## 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.