

LIBBY PROJECT INFLOW FORECAST, KAF 2002

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FORECAST DATE          1 Jan
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FORECAST'S KAF
Apr-Aug runoff, Fort Steele      3110
Apr-Aug runoff, Libby Local      2952
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Apr-Aug runoff, Libby inflow     6062
Apr-Aug norm, 6376.8, 1961-1990 95.1%
      Apr-Jul runoff              5494
      May-Jul runoff              5040
      Jan-Jul runoff              6115
      Date-Jul runoff             6115
Date-Jul standard error          1069
Date-Jul confidence limit, 1.645 1759
Date-Jul 95% confidence          4357
Date-Jul 5% confidence           7874
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FLOOD CONTROL, DRAFT BY:      31 Jan  28 Feb  15 Mar
required draft, KAF           2698.7  3182.4  3343.7
required elevation, FT        2389.8  2372.8  2366.7
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FORECAST COMPONENT SUMMARY      FRO      WP      WP+NS      SWE      SWE+NS      NSSPW      INT      TOTAL
FORT STEELE, B.C., (FS)         0.978   32.74   70.61     47.4     110.1     29.20
inches=(fro(1.309)+wp(0.068)+swe(0.067)+sp(0.167))-5.114
      inches                    1.280           4.801           7.379     4.876     -5.114     13.223
      inches*235.2=kaf .....
LIBBY LOCAL, (LL)               0.504   51.88   87.62     45.1     95.4     25.62
inches=(fro(0.921)+wp(0.086)+swe(0.046)+sp(0.152))-4.183
      inches                    0.464           7.535           4.389     3.894     -4.183     12.100
      inches*244.0=kaf .....
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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
Banff          FS              0.53     0.96     0.22
Brisco         FS              0.87     1.06     0.63
Fernie         FS      LL              8.06     2.59     8.64
Kaslo          FS              2.17     4.29     2.76
Rogers Pass    FS              6.30     5.59     7.36
Fortine        FS      LL              2.27     0.75     1.41
Libby RS       FS      LL              8.44     1.38     3.81
Bonners Ferry FS      LL              2.40     2.69     3.54
Polebridge     FS      LL              2.20     1.20     2.50
SNOW WATER EQUIV(SWE), inches  31 DEC
Glacier        FS              11.1
Kicking Horse  FS              4.2
Kimberly       FS      LL              2.8
Marble Canyon  FS              5.4
Mirror Lake    FS              3.4
Morrissey Ridge FS & LL*.5      12.6
Fernie East    FS & LL              5.7
Sullivan Mine  FS & LL              5.0
Red Mtn.       FS      LL              9.0
Weasel Divide  FS      LL              16.3
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
                                  165     188     154
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