BF 78169 Highway 40 over Lovett River
Hydrotechnical Summary

Channel Capacity :

S = 0.004
B = 5 m, h = 1.5 m, T_h = 12 m
Use n = 0.045

At Bank Height : Y = 1.5 m, V = 1.4 m/s, Q = 15 cms
At Channel Capacity : Y = 2.3 m, V = 2.0 m/s, Q = 45 cms

Historical Highwater Data :

HW was noted in 1980 (est Y~0.7m) and 1986 (est Y~1.2m).

There is a WSC Gauge (07BA003, DA~100sqkm, operating from 1975 – present) on this stream. The highest reported gaugings were in August 1980 (Q=60cms) and July 1986 (Q=40cms). The storm database reports large events in August 1969 (155mm), July 1986 (155mm), August 1980 (150mm), and July 1966 (110mm).

Basin Runoff Potential :

d = 80 mm, T_p = 20 hrs, q = 1.1 cms/km^2.
Gross DA = 45 km^2.
Q_p = 50 cms.

Conclusion :

The channel capacity estimate is consistent with historic observations and is within the basin runoff potential.

Recommended parameters : Y = 2.3 m, V = 2.0 m/s, Q = 45 cms.