BF 74325 Highway 35 over Keg River
Hydrotechnical Summary

Channel Capacity :

S = 0.0009
B = 12 m, h = 4 m, T_h = 20 m
Use AT Equation

At Bank Height : Y = 4.0 m, V = 1.8 m/s, Q = 120 cms
At Channel Capacity : Y = 5.0 m, V = 2.2 m/s, Q = 185 cms

Historical Highwater Data :

A 1990 report notes highwater of Y~3.6m.

There is a WSC gauge on this stream at this crossing. Gauge 07HF002 (1971 – present) reports the highest flows of 145 cms in August 1987 (gauging station under water, surrounding land flooded), 105 cms in June 1991, and 100 cms in June 1977 (Y~5.1m). The largest storms in the database for this area are June 1991 with about 145mm of rainfall and July 1987 with about 130mm.

Basin Runoff Potential :

d = 70mm, T_p = 20hrs, use q = 0.97 cms/km^2.
Gross DA = 675 km^2.
Q_p = 670 cms.

Conclusion :

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

Recommended parameters : Y = 5.0 m, V = 2.2 m/s, Q = 185 cms.