BF 75050 Hwy 40 Over Cabin Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0085
B = 7 m, h = 1.4 m, T_h = 12 m
Use n = 0.045

At Bank Height : Y = 1.4 m, V = 2.1 m/s, Q = 30 cms
At Channel Capacity : Y = 2.1 m, V = 3.0 m/s, Q = 65 cms

Historical Highwater Data :

HW was noted in July 1997 (Y ~ 1.8m) and there is a reference to HW in 1972. A 1958 report notes that the existing structure runs full (Y = 1.2 – 1.5m), and a 1968 report was based on Y = 1.1m and Q = 30cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1972, June 1980, and July 1997. The largest storms in the storm database are ~ 150mm in June 1980, 130mm in July 1997, and 100mm in June 1972.

Basin Runoff Potential :

d = 70 mm, T_p = 20 hrs, q = 1.0 cms/km^2.
Gross DA = 95 km^2.
Q_p = 95 cms.

Conclusion :

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

Recommended parameters : Y = 2.1 m, V = 3.0 m/s, Q = 65 cms.