BF 01987 Hwy 881 Over Grattan Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.001
B = 2 m, h = 1.0 m, T_h = 5 m (channel not well defined)
Use n = 0.05

At Bank Height : Y = 1.0 m, V = 0.5 m/s, Q = 2 cms
At Channel Capacity : Y = 1.5 m, V = 0.7 m/s, Q = 4 cms

Historical Highwater Data :

A 1981 report estimated Q = 8cms and Y = 1.3m. A 1999 photo shows drift to the inlet crown (Q ~ 4cms if no blockage). Water has been noted over the grade at BF75145 d/s (estimated Q = 4cms if no blockage).

There are no WSC Gauges on this stream. Gauges in the area suggest HW events in April 1969, April 1974, April 1997. The largest storms in the storm database are about 120mm in June 1965 and June 1973, and about 110mm in August 1931 and July 1962.

Basin Runoff Potential :

d = 35 mm, T_p = 40 hrs, q = 0.25 cms/km^2.
Gross DA = 925 km^2.
Q_p = 230 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 0.7 m/s, Q = 4 cms.