BF 09853 Local Road Over Mooney Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.002
B = 7 m, h = 3.5 m, T_h = 14 m
Use n = 0.045

At Bank Height : Y = 3.5 m, V = 1.7 m/s, Q = 60 cms
At Channel Capacity : Y = 4.5 m, V = 2.1 m/s, Q = 110 cms

Historical Highwater Data :

HW was recorded at this site in July 1961 (to the bottom chord, Y = 3.3m), April 1963 (1.3m below deck, Y = 2.7m), 1965 (0.8m below cap), July 1988 (over deck, Y = 4.0 – 4.5m, east abutment washout, drift jam), and June 1996 (over deck, Y = 4.0 – 4.5m, east headslope washed out, drift removed during flood). HW may also have occurred in 1983, with headslope repair and drift removal in 1984.

There are no WSC gauges on this stream. Gauge 07BK009 on Sawridge Ck (1976 – Now, DA = 230km^2) reports large runoff events in July 1988 and June 1996. The largest storms in the database for this basin are about 130mm in July 1988, and 100 - 110mm in June 1961, July 1979, and June 1983.

Basin Runoff Potential :

d = 90 mm, T_p = 20 hrs, q = 1.2 cms/km^2.
Gross DA = 126 km^2.
Q_p = 150 cms.

Conclusion :

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

Recommended Parameters : Y = 4.5 m, V = 2.1 m/s, Q = 110 cms.