BF 08316 Local Road Over Bearhead Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0012
B = 6 m, h = 3.0 m, T_h = 14 m
Use n = 0.045

At Bank Height : Y = 3.0 m, V = 1.2 m/s, Q = 35 cms
At Channel Capacity : Y = 4.0 m, V = 1.6 m/s, Q = 70 cms

Historical Highwater Data :

HW was noted in 1941 (damage to bridge), and 1958 (Y = 3.7 – 4m). A 1961 report estimates Q = 31cms.

There are no WSC gauges on Bearhead Ck. Gauges in the area suggest HW events in August 1964, April 1965, April 1974, May 1979, and April 1997. There are no storms in the database that exceed 100mm in this area.

Basin Runoff Potential :

d = 60mm, T_p = 20hrs, q = 0.83 cms/km^2.
Gross DA = 480 km^2.
Q_p = 400 cms.

Conclusion :

The channel capacity estimate appears to be consistent with historic data and within the basin runoff potential.

Recommended parameters : Y = 4.0 m, V = 1.6 m/s, Q = 70 cms.