BF 08271 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 spring 1997 (Y = 3 - 3.5m). A 1960 report notes a HWM with Y = 3.3m. Headslope scour was noted in 1978. BIM reports from 1987 and 2001 note HWM with Y = 2.5m.

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 = 520 km^2.
Q_p = 430 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.