BF 72011 Local Road Over Woodpecker Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0033
B = 4 m, h = 1.5 m, T_h = 7 m
Use n = 0.05

At Bank Height : Y = 1.5 m, V = 1.1 m/s, Q = 10 cms
At Channel Capacity : Y = 2.3 m, V = 1.7 m/s, Q = 22 cms

Historical Highwater Data :

Reports from 1954 and 1959 note HWM with Y = 2.1m and estimate Q = 15 – 25cms. A 1998 BIM report noted drift to just above the u/s crown. A 2002 photo shows a large scour hole d/s. HW was noted at BF71631 u/s in April and April 1966.

There are no WSC gauges on this stream. Gauges in the area suggest HW in July 1971 and June 1996. The largest storms in the database for this area are about 130mm in July 1987 and about 100mm in Jun 1961, August 1976, July 1982, and June 1993.

Basin Runoff Potential :

d = 70mm, T_p = 20hrs, q = 1.0 cms/km^2.
Gross DA = 75 km^2.
Q_p = 75 cms.

Conclusion :

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

Recommended parameters : Y = 2.3 m, V = 1.7 m/s, Q = 22 cms.