BF 07903 Local Road Over Maskwa Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 3 m, h = 1.2 m, T_h = 6 m
Use n = 0.045

At Bank Height : Y = 1.2 m, V = 0.7 m/s, Q = 4 cms
At Channel Capacity : Y = 1.8 m, V = 1.1 m/s, Q = 10 cms

Historical Highwater Data :

A 1964 report notes a HWM with Y = 1.8m and estimates Q = 9cms. A 1968 report notes an observation that water has been close to the bottom flange (Y = 1.8m).

WSC gauge 05FA014 (DA = 80km^2, 1972 – Now) reports Q = 9cms in April 1974 (stage rise = 1.3m, gauged), and Q = 5.5cms in April 1982. The largest storms in the storm database are July 1990 with 125mm of rainfall, June 1911 with 110mm and July 1982 with 105mm.

Basin Runoff Potential :

d = 35mm, T_p = 40hrs, q = 0.25 cms/km^2.
Gross DA = 107 km^2.
Q_p = 27 cms.

Conclusion :

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

Recommended parameters : Y = 1.8 m, V = 1.1 m/s, Q = 10 cms.