BF 71353 Local Road Over Beavertail Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0008
B = 8 m, h = 3.5 m, T_h = 18 m
Use n = 0.04

At Bank Height : Y = 3.5 m, V = 1.2 m/s, Q = 55 cms
At Channel Capacity : Y = 4.5 m, V = 1.6 m/s, Q = 100 cms

Historical Highwater Data :

HW was observed in June 1990 over the deck (Y d/s ~ 4.8m), with some drift. HW was also noted to the deck in 1965 (Yd/s ~ 4.5m) with V ~ 0.9m/s and an estimate of Q = 70cms.

WSC Gauge 07GD002 (DA = 662km^2, 1983 – Now) located d/s reports Q = 123cms in June 1990, (gauged at Q = 35cms), followed by Q = 50cms in April 1997. The largest storms for this area in the storm database is about 100mm of rainfall in June 1964 and 1990.

Basin Runoff Potential :

d = 70 mm, T_p = 20 hrs, q = 1 cms/km^2.
Gross DA = 610 km^2 .
Q_p = 610 cms.

Conclusion :

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

Recommended parameters : Y = 4.5 m, V = 1.6 m/s, Q = 100 cms.