BF 70839 Hwy 15 Over Beaverhill Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0017
B = 2 m, h = 1.0 m, T_h = 4 m
Use n = 0.05

At Bank Height : Y = 1.0 m, V = 0.6 m/s, Q = 2 cms
At Channel Capacity : Y = 1.5 m, V = 0.9 m/s, Q = 5 cms

Historical Highwater Data :

HW was noted in 1957 with water over the road (Y = 2.7m, but due to backwater from d/s CNR crossing). A 1961 report estimated Q = 6cms based on CNR structure (assuming no blockage). A 2007 BIM report notes a HWM 0.7m below the u/s crown, but photos show that this again was due to backwater from the CNR crossing.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1971, April 1974, July 1983, and April 1997. The largest storms in the storm database are about 130mm of rainfall in July 1955, 120mm in June 1965, 110mm in September 1958, and 100mm in June 1983.

Basin Runoff Potential :

d = 35 mm, T_p = 40 hrs, q = 0.25 cms/km^2.
Gross DA = 30 km^2.
Q_p = 8 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 0.9 m/s, Q = 5 cms.