BF 76743 Local Road Over Wabamun Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.009
B = 1 m, h = 0.5 m, T_h = 2 m
Use n = 0.055

At Bank Height : Y = 0.5 m, V = 0.8 m/s, Q = 1 cms
At Channel Capacity : Y = 1.0 m, V = 1.5 m/s, Q = 3 cms

Historical Highwater Data :

HW was noted in July 1986 with Y < 0.5m. A 1999 BIM report notes a HWM with Y = 1.0m.

There are no gauges on this stream. Gauges in the area suggest large runoff events in June 1965, April 1974, April 1982, and July 1986. The largest storms in the storm database are 155mm of rainfall in June 1944, 145mm in July 1982, and 115mm in June 1965.

Basin Runoff Potential :

d = 50mm, T_p = 20hrs, q = 0.7 cms/km^2.
Gross DA = 5 km^2.
Q_p = 3 cms.

Conclusion :

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

Recommended parameters : Y = 1.0 m, V = 1.5 m/s, Q = 3 cms.