BF 77581 Hwy 734 Over Radiant Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.006
B = 3 m, h = 1.2 m, T_h = 5 m
Use n = 0.045

At Bank Height : Y = 1.2 m, V = 1.5 m/s, Q = 7 cms
At Channel Capacity : Y = 1.8 m, V = 2.1 m/s, Q = 17 cms

Historical Highwater Data :

A 1970 report notes a HWM with Y = 1.2m and a 1975 report notes a HWM with Y = 0.6m. The 2000 BIM report refers to a HW event in 1999 that caused some bank erosion. Large beaverdams have been observed at both the u/s and d/s ends of this bridge.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1965, June 1970, June 1972, July 1981, June 1990, and July 1999. The largest storms in the database for this area are June 1970 and June 1972 with 130mm of rainfall, July 1981 with 115mm, and August 1925, July 1969, and July 1999 with 105mm.

Basin Runoff Potential :

d = 80 mm, T_p = 20 hrs, q = 1.1 cms/km^2
Gross DA = 27 km^2.
Q_p = 30 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 = 2.1 m/s, Q = 17 cms.