BF 72756 Highway 663 Over Tributary to Beaver River
Hydrotechnical Summary

Channel Capacity :

S = 0.0007
B = 3 m, h = 1.2 m, T_h = 8 m
Use n = 0.040

At Bank Height : Y = 1.2 m, V = 0.4 m/s, Q = 3 cms
At Channel Capacity : Y = 1.8 m, V = 0.7 m/s, Q = 7.5 cms

Historical Highwater Data :

The 2002 design was based on Q~12.5cms (V=2.3m/s).

There are no WSC gauges on this stream. Nearby gauges suggest high flow events in 1971, 1978, and 1974.

Lake levels have been recorded at upstream Missawai Lake since 1968 (WSC Gauge 06AA912). The highest recorded lake elevation was 568.99m (October 1975 and October 1975).

The storm on basin tool reports large rainfall events in June 1970 (110mm), and June 1973 (100mm).

Basin Runoff Potential :

d=40mm, Tp = 20 hrs, q = 0.56 cms/km^2
Gross DA= 335 km^2
Qp= 190 cms

Conclusion :

The channel capacity values are within the basin runoff potential :

Y=1.8m, V=0.7m/s, Q=7.5cms