BF 70252 Hwy 2 Over Assineau River
Hydrotechnical Summary

Channel Capacity :

S = 0.0035
B = 10 m, h = 3.0 m, T_h = 20 m
Use AT equation

At Bank Height : Y = 3.0 m, V = 2.5 m/s, Q = 110 cms
At Channel Capacity : Y = 4.0 m, V = 3.2 m/s, Q = 210 cms

Historical Highwater Data :

HW has been observed at this site in 1960 (Y = 4.2m u/s), July 1971 (Y = 3.4m u/s), June 1983 (Y = 3.6m u/s), July 1988 (Y = 4.6m u/s, Y = 3.7m d/s, possible hydraulic jump, erosion of right bank u/s and at ends of both guidebanks d/s), and June 1996 (Y = 3.4m u/s, 2.5m d/s). The bed elevation appears to have lowered about 1.0m between 1961 and 1993.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1983, July 1988, and June 1996. The largest storms in the database for this area are July 1988 with about 125 mm of rainfall, and June 1961, July 1979, June 1983, and June 1993 with 105 mm.

Basin Runoff Potential :

d = 90mm, T_p = 20hrs, q = 1.25cms/km^2
Gross DA = 130 km^2.
Q_p = 160 cms.

Conclusion :

Basin runoff potential governs for this site (possibly due to increased channel capacity from degradation) and is consistent with historic observations accounting for headloss through the bridge due to constriction, blockage, and alignment.

Recommended parameters : Y = 3.6 m, V = 2.9 m/s, Q = 160 cms.