BF 71146 Hwy 642 Over Riviere Qui Barre
Hydrotechnical Summary

Channel Capacity :

S = 0.0007
B = 7 m, h = 3.0 m, T_h = 15 m
Use n = 0.04

At Bank Height : Y = 3.0 m, V = 1.0 m/s, Q = 35 cms
At Channel Capacity : Y = 4.0 m, V = 1.4 m/s, Q = 65 cms

Historical Highwater Data :

HW was noted in spring of 1958 with Y = 3.7m, just below the deck of the bridge, with Q estimated to be 51cms. A 1992 BIM report notes a HWM with Y = 2m.

There are no WSC gauges on this stream. Gauges in the area report HW events in April 1971, 1974, 1982, and 1997. The largest storms in the database for this area are July 1953 with about 160mm of rainfall, and July 1937 and June 1965 with about 110mm of rainfall.

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 180 km^2.
Q_p = 100 cms.

Conclusion :

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

Recommended parameters : Y = 4.0 m, V = 1.4 m/s, Q = 65 cms.