BF 77352 Local Road Over Riviere Qui Barre
Hydrotechnical Summary

Channel Capacity :

S = 0.0009
B = 6 m, h = 2.5 m, T_h = 14 m
Use n = 0.045

At Bank Height : Y = 2.5 m, V = 0.9 m/s, Q = 25 cms
At Channel Capacity : Y = 3.5 m, V = 1.3 m/s, Q = 50 cms

Historical Highwater Data :

HW was noted in 1971 with water over the grade at a culvert crossing (Y = 3.6m u/s) and estimated Q = 28cms.

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 = 145 km^2.
Q_p = 80 cms.

Conclusion :

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

Recommended parameters : Y = 3.5 m, V = 1.3 m/s, Q = 50 cms.