BF 01486 Hwy 44 Over Riviere Qui Barre Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0018
B = 3 m, h = 1.2 m, T_h = 7 m
Use n = 0.05

At Bank Height : Y = 1.2 m, V = 0.7 m/s, Q = 4 cms
At Channel Capacity : Y = 1.8 m, V = 1.1 m/s, Q = 11 cms

Historical Highwater Data :

Reports from 1956, and 1976 note HWM's with Y = 1.2 - 1.5m and estimate Q = 9 – 11cms. A photo from May 2004 shows water close to top of bank u/s. A 1998 assessment and 2002 design were based on Q = 12cms and Y = 1.1 – 1.5m.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1971, 1974, and 1985. The largest storm for this area in the storm database is about 160 mm of rainfall in July 1953, with about 110mm in July 1937, June 1952, and July 1986.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 44 km^2.
Q_p = 24 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 = 1.1 m/s, Q = 11 cms.