# BF 01552 Local Road Over Riviere Qui Barre Tributary
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.0018
B = 4 m, h = 1.2 m, $T_h$ = 8 m
Use n = 0.05

At Bank Height : Y = 1.2 m, V = 0.7 m/s, Q = 5 cms
At Channel Capacity : Y = 1.8 m, V = 1.1 m/s, Q = 13 cms

**Historical Highwater Data :**

HW was noted in 1956 with water close to the deck and over the north grade (Y = 1.8 – 2.0m). A 1957 report estimates Q = 12cms.

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 = 55 $km^2$.
$Q_p$ = 30 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 = 13 cms.