# BF 13115 Local Road Over Muriel Ck
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.0003
B = 4 m, h = 1.5 m, $T_h$ = 8 m
Use n = 0.045

At Bank Height : Y = 1.5 m, V = 0.4 m/s, Q = 4 cms
At Channel Capacity : Y = 2.3 m, V = 0.6 m/s, Q = 9 cms

**Historical Highwater Data :**

A 1951 report notes a HWM with Y = 0.6m and estimates Q = 3cms, and a 1954 report estimates Q = 7cms.

There are no gauges on this stream. Gauges in the area suggest HW events in April 1974, 1979, and 1997. The largest storms in the storm database are June 1962 with about 130mm of rainfall, June 1988 with 115mm, and June 1970 with 100mm.

**Basin Runoff Potential :**

d = 40 mm, $T_p$ = 20 hrs, q = 0.55 cms/km$^2$.
Gross DA = 785 km$^2$.
$Q_p$ = 430 cms.

**Conclusion :**

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

Recommended parameters : Y = 2.3 m, V = 0.6 m/s, Q = 9 cms.