# BF 76243 Local Road Over Sun Ck Tributary
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.004
B = 3 m, h = 1.6 m, $T_h$ = 5 m
Use n = 0.05

At Bank Height : Y = 1.6 m, V = 1.2 m/s, Q = 8 cms
At Channel Capacity : Y = 2.4 m, V = 1.8 m/s, Q = 20 cms

**Historical Highwater Data :**

A 1965 report refers to a recent washout and notes a HWM with Y = 2.4m and estimates Q = 13cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in July 1982, July 1986, July 1990, and July 1999. The storm database shows the largest storms to be July 1982 (140mm), July 1990 (120mm), and August 1989 (105mm).

**Basin Runoff Potential :**

d = 60 mm, $T_p$ = 20 hrs, q = 0.83 cms/$km^2$.
Gross DA = 24 $km^2$.
$Q_p$ = 20 cms.

**Conclusion :**

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

Recommended parameters : Y = 2.4 m, V = 1.8 m/s, Q = 20 cms.