# BF 00940 Local Road Over Dogpound Ck
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.0009
B = 13 m, h = 4.0 m, $T_h$ = 22 m
Use AT equation

At Bank Height : Y = 4.0 m, V = 1.8 m/s, Q = 130 cms
At Channel Capacity : Y = 5.0 m, V = 2.2 m/s, Q = 200 cms

**Historical Highwater Data :**

A 1907 cross section notes a HWM with Y = 5.0m. HW was observed in 1916 with water over the east flats (Y = 4.5 – 5.0m). A 1954 report notes a HWM with Y = 5.4m, and a 1958 report notes a HWM with Y = 5.0m (over both grades). HW was noted in April 1969, described as an ice run, with flow over the east grade.

There are no WSC gauges on Dogpound Ck. Nearby gauges with longer records show a wide variety of flood responses, with some of the more common being in June 1990 and May 1967. The largest storms in the database for this area are June 1970 and June 1928 with about 120mm of rainfall. There are many other storms with rainfall in the 90 to 100 mm range.

**Basin Runoff Potential :**

d = 60mm, $T_p$ = 20hrs, q = 0.7 cms/km$^2$.
Gross DA = 925 km$^2$.
$Q_p$ = 650 cms.

**Conclusion :**

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

Recommended parameters : Y = 5.0 m, V = 2.2 m/s, Q = 200 cms.