# BF 71678 Hwy 763 Over Paddle River Tributary
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.0009
B = 4 m, h = 1.8 m, $T_h$ = 7 m
Use n = 0.045

At Bank Height : Y = 1.8 m, V = 0.7 m/s, Q = 7 cms
At Channel Capacity : Y = 2.7 m, V = 1.1 m/s, Q = 17 cms

**Historical Highwater Data :**

A 1955 report notes a HWM over the deck (Y = 3m u/s), and estimates Q = 22cms. The 1978 design was based on Q = 28cms.

There are no gauges on this stream. Gauges in the area suggest large runoff events in June 1965, July 1971, and April 1974. The largest storms in the storm database are 200mm of rainfall in August 1957, and 130mm in June 1965.

**Basin Runoff Potential :**

d = 50mm, $T_p$ = 20hrs, q = 0.7 cms/$km^2$.
Gross DA = 105 $km^2$.
$Q_p$ = 74 cms.

**Conclusion :**

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

Recommended parameters : Y = 2.7 m, V = 1.1 m/s, Q = 17 cms.