# BF 75202 Hwy 695 Over Kemp River
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.002
B = 11 m, h = 3.2 m, $T_h$ = 21 m
Use AT equation

At Bank Height : Y = 3.2 m, V = 2.1 m/s, Q = 110 cms
At Channel Capacity : Y = 4.2 m, V = 2.7 m/s, Q = 190 cms

**Historical Highwater Data :**

HW is reported on DD1290 for August 1987 with Y = 4.0m (apparently based on drift noted in 1988). The 1994 BIM report notes HW to Y = 3.0m. HW in 1990 noted with Y = 2.0m and V = 1.6m/s. HW noted at BF73426 u/s in June 1960 with Y = 4.3m u/s).

There are no WSC gauges on this stream. Gauge 07HF002 (DA = 667km$^2$, 1972 – Now) on Keg River shows HW events in August 1987, June 1991, and June 1977. The largest storms in the database for this area are July 1987 with about 140mm of rainfall, and July 1963 with about 100mm.

**Basin Runoff Potential :**

d = 40mm, $T_p$ = 20hrs, q = 0.55 cms/km$^2$.
Gross DA = 540 km$^2$.
$Q_p$ = 300 cms.

**Conclusion :**

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

Recommended parameters : Y = 4.2 m, V = 2.7 m/s, Q = 190 cms.