# BF 71312 Hwy 685 Over Hines Ck
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.0005
B = 14 m, h = 2.5 m, T = 22 m
Use AT equation

At Bank Height : Y = 2.5 m, V = 1.1 m/s, Q = 50 cms
At Channel Capacity : Y = 3.5 m, V = 1.4 m/s, Q = 95 cms

**Historical Highwater Data :**

HW was noted at this site in April 1974 (Y = 2.8m, EL. 667.8m on DD1203), and in June 1990 (Y = 2.0m u/s of culvert). Reports from 1951 and 1965 note HWM with Y = 2.4m.

WSC gauge 07FD011 (DA = 374km$^2$, 1975 – Now) reports highest flows of Q = 45cms (stage increase = 2.7m) in May 1984 and Q = 30cms in June 1990, with the highest gauged Q = 8cms in April 1990. WSC gauge 07FD008 (DA = 1240km$^2$, 1972 – 1991) report the highest flow of Q = 120cms in April 1974. The largest storms in the storm database are July 1963 and July 1987 with about 105mm of rainfall.

**Basin Runoff Potential :**

d = 50mm, $T_p$ = 20hrs, q = 0.7cms/km$^2$.
Gross DA = 595 km$^2$
$Q_p$ = 415 cms.

**Conclusion :**

The channel capacity estimate for this site is consistent with historic observations and is within basin runoff potential.

Recommended parameters : Y = 3.5 m, V = 1.4 m/s, Q = 95 cms