BF 74679 Hwy 39 Over Bucklake Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 15 m, h = 3.5 m, T = 30 m
Use AT equation

At Bank Height : Y = 3.5 m, V = 2.0 m/s, Q = 150 cms
At Channel Capacity : Y = 4.5 m, V = 2.5 m/s, Q = 270 cms

Historical Highwater Data :

HW was observed in 1944 (washed out), 1982 (Y ~ 4m), and 1986 (Y ~ 4.5m). The 1957 design was based on Y ~ 3.5m.

There are no gauges on this stream. Gauges in the area suggest HW events in June 1980, July 1982, July 1986, July 1990, and July 1999.

Basin Runoff Potential :

d = 70mm, T_p = 20hrs, q = 1.0 cms/km^2.
Gross DA = 485 km^2.
Q_p = 485 cms.

Conclusion :

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

Y = 4.5 m, V = 2.5 m/s, Q = 270 cms.
EL 757.0 m (1974-P)