BF 72273 Hwy 658 Over Bull Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.004
B = 2.5 m, h = 1.4 m, T_h = 5 m
Use n = 0.05

At Bank Height : Y = 1.4 m, V = 1.1 m/s, Q = 6 cms
At Channel Capacity : Y = 2.1 m, V = 1.7 m/s, Q = 15 cms

Historical Highwater Data :

The 1960 bridge report notes a HWM with Y = 1.8m and estimates Q = 8cms. A 2001 assessment notes a HWM at 0.5m above the u/s crown (Q = 12 - 15cms range).

There are no WSC Gauges on this stream. Gauges in the area suggest HW events in April 1974, April 1982, and July 1986. There largest storms in the storm database are 140mm of rainfall in June 1965, 125mm in June 1944, and about 105mm in August 1957, August 1989, and July 1990.

Basin Runoff Potential :

d = 55 mm, T_p = 20 hrs, q = 0.75 cms/km^2.
Gross DA = 55 km^2.
Q_p = 41 cms.

Conclusion :

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

Recommended parameters : Y = 2.1 m, V = 1.7 m/s, Q = 15 cms.