BF 81758 Hwy 40 Over Chance Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.008
B = 2 m, h = 1.2 m, T_h = 6 m (LIDAR)
Use n = 0.055

At Bank Height : Y = 1.2 m, V = 1.3 m/s, Q = 6 cms
At Channel Capacity : Y = 1.8 m, V = 2.0 m/s, Q = 15 cms

Historical Highwater Data :

A 1978 survey notes a HWM with Y ~ 1.8m. An assessment from 2000 notes a HWM ~ 1.5m abobe the u/s crown and estimates Q ~ 20cms.

There are no gauges on this stream. Gauges in the area suggest large events in 1969, and 1980. The storm database suggests large rainfall events in July 1987 (~ 170mm), June 1980 (~150mm), Aug. 1969 (140mm), and June 1958 (~ 130mm).

Basin Runoff Potential :

d ~ 70 – 80mm (Q ~ 1 – 1.1cms/km^2)
DA = 24km^2
Q_p ~ 25cms

Conclusion :

Channel capacity governs and is consistent with historic observations.

Recommended parameters : Y = 1.8m , V = 2.0 m/s, Q = 15 cms.