BF 07947 Hwy 59 Over Webber Creek
Hydrotechnical Summary

Channel Capacity :

S = 0.003
B = 5 m, h = 2.0 m, T_h = 10 m.
Use n = 0.045

At Bank Height : Y = 2.0 m, V = 1.5 m/s, Q = 22 cms
At Channel Capacity : Y = 3.0 m, V = 2.1 m/s, Q = 50 cms

Historical Highwater Data :

HW was noted in May 1963 (Y = 2.7 – 3m), June 1964 (Y = 2.4m), and spring 1965 (Y = 2.2m). A 1958 report notes a HWM with Y = 3m and estimates Q = 20 – 30cms. The 2000 design was based on Y = 3.4m and Q = 45cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1990 and April 1997. The largest storm in the database for this area is 130mm in June 1964, with other storms in the 100mm range in June of 1965, 1971, and 1990.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 120 km^2.
Q_p = 100 cms.

Conclusion :

The channel capacity values are consistent with historic observations, and are within the basin runoff potential.

Recommended parameters : Y = 3.0 m, V = 2.1 m/s, Q = 50 cms.