BF 74518 Hwy 599 Over Tributary to Nelson Creek
Hydrotechnical Summary

Channel Capacity :

S = 0.0008
B = 3 m, h = 0.7 m, T_h = 6 m.
Use n = 0.05

At Bank Height : Y = 0.7 m, V = 0.4 m/s, Q = 1 cms
At Channel Capacity : Y = 1.2 m, V = 0.6 m/s, Q = 4 cms

Historical Highwater Data :

A 1955 bridge report notes a HWM with Y = 0.8m and estimates Q = 3cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1965, 1069, 1971, and 1974. The largest storms in the database for this area are about 160mm of rainfall in June 1973, 150mm in July 1962, and 120mm in June 1983.

Basin Runoff Potential :

d = 35 mm, T_p = 40 hrs, q = 0.25 cms/km^2
Gross DA = 40 km^2
Q_p = 10 cms

Conclusion :

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

Recommended parameters : Y = 1.2 m, V = 0.6 m/s, Q = 4 cms.