BF 13222 Local Road Over Peace River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0013
B = 3 m, h = 1.4 m, T_h = 5 m
Use n = 0.05

At Bank Height : Y = 1.4 m, V = 0.7 m/s, Q = 4 cms
At Channel Capacity : Y = 2.1 m, V = 1.0 m/s, Q = 9 cms

Historical Highwater Data :

HWM was noted in 2004 at Y = 2.0m (based on grass trapped in willows on the bank d/s). Similar HWM was noted in the 1981 report prior to installation of the struts which block most of the opening.

There are no gauges on this stream. Gauges in the area suggest HW events in June 1977, April 1979, May 1984, June 1990, and April 1997. The largest storms in the storm database for this area are 110mm in April 1982, and 95mm in July 1935 and July 1957.

Basin Runoff Potential :

d = 50 mm, T_p = 20 hrs, q = 0.7 cms/km^2.
Gross DA = 39 km^2.
Q_p = 27 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 = 1.0 m/s, Q = 9 cms.