BF 78339 Local Road Over Athabasca River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.004
B = 4 m, h = 1.2 m, T_h = 7 m
Use n = 0.05

At Bank Height : Y = 1.2 m, V = 1.1 m/s, Q = 7 cms
At Channel Capacity : Y = 1.8 m, V = 1.6 m/s, Q = 17 cms

Historical Highwater Data :

A 1974 report notes a HWM with Y = 1.8m and a 1975 report notes a HWM with Y = 1.8m and estimates Q = 25cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1971, April 1974, August 1996, and April 1997. The largest storms in the storm database are about 145mm in June 1970, and 95mm in August 1996.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 90 km^2.
Q_p = 50 cms.

Conclusion :

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

Recommended parameters : Y = 1.8 m, V = 1.6 m/s, Q = 17 cms.