BF 09001 Hwy 748 Over Edson River
Hydrotechnical Summary

Channel Capacity :

S = 0.0008
B = 9 m, h = 4.5 m, T_h = 18 m
Use AT equation

At Bank Height : Y = 4.5 m, V = 1.8 m/s, Q = 110 cms
At Channel Capacity : Y = 5.5 m, V = 2.2 m/s, Q = 170 cms

Historical Highwater Data :

HW was noted at this site in July 1965 with water over the road to the east and up to 0.3m below the deck u/s and about 0.9m below deck d/s (Y = 5.5m). The bridge opening scoured out. Headslopes were also restored after HW in June 1972. A 1961 report and survey note a HWM with Y = 4.6m. HW was noted at BF70000 u/s in August 1989.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1972, June 1980, July 1986, and July 1999. The largest storms in the database for this area are July 1939, June 1944, June 1958, July 1965, and June 1972 with about 105mm of rainfall.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2
Gross DA = 550 km^2.
Q_p = 460 cms.

Conclusion :

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

Recommended parameters : Y = 5.5 m, V = 2.2 m/s, Q = 170 cms.