BF 13849 Hwy 43 Over Beaverlodge River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0012
B = 3 m, h = 1.2 m, T_h = 6 m
Use n = 0.045

At Bank Height : Y = 1.2 m, V = 0.7 m/s, Q = 4 cms
At Channel Capacity : Y = 1.8 m, V = 1.0 m/s, Q = 9 cms

Historical Highwater Data :

HW was noted in June 1964 with Y = 1.4m. A 1955 report noyes a HWM with Y = 1.4m and a 2000 BIM report notes a HWM with Y = 1.1m. A 1985 report notes water over the top of bank u/s due to beaver dams. A 1997 design was based on Y = 1.8m and Q = 25cms.

There are no WSC Gauges on this stream. Gauges in the area suggest HW events in April 1974, June 1990, and April 1997. The largest storms for this area in the storm database are 135mm of rainfall in June 1990, 120mm in July 1951 and June 1964, and 105mm in June 1965.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 73 km^2.
Q_p = 40 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 = 1.0 m/s, Q = 9 cms.