BF 79381 Local Road Over Redwater River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 2 m, h = 0.7 m, T_h = 4 m
Use n = 0.055

At Bank Height : Y = 0.7 m, V = 0.4 m/s, Q = 1 cms
At Channel Capacity : Y = 1.2 m, V = 0.7 m/s, Q = 3 cms

Historical Highwater Data :

A 2005 photo shows beaver dam at the inlet and a small hanging outlet (no rock placed at time of construction).

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1971, April 1974, April 1982, July 1986, and April 1997. The largest storms in the storm database are about 125mm in July 1953, and 90mm in June 1944.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 13 km^2.
Q_p = 7 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 = 0.7 m/s, Q = 3 cms.