BF 75641 Local Road Over Tributary to Beaver River
Hydrotechnical Summary

Channel Capacity :

S = 0.001
B = 5 m, h = 1.0 m, T_h = 10 m
Use n = 0.045

At Bank Height : Y = 1.0 m, V = 0.6 m/s, Q = 4 cms
At Channel Capacity : Y = 1.5 m, V = 0.8 m/s, Q = 10 cms

Historical Highwater Data :

HW was noted in 1965 with full flow at two small pipes, and in April 1974 with the pipe flowing ¾ full and Y = 1.2 – 1.5m.

There are no WSC gauges on this outlet of Rich Lake. Gauges in the area suggest HW events in 1962, 1970, 1971, 1974, and 1996. The largest storms for this area in the database are about 120mm in June 1970 and 100mm in June 1962.

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 282 km^2.
Q_p = 155 cms (several large lakes u/s).

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 0.8 m/s, Q = 10 cms.