BF 77583 Hwy 734 Over Elk Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.005
B = 7 m, h = 1.2 m, T_h = 10 m
Use n = 0.045

At Bank Height : Y = 1.2 m, V = 1.5 m/s, Q = 15 cms
At Channel Capacity : Y = 1.8 m, V = 2.1 m/s, Q = 35 cms

Historical Highwater Data :

HWM is noted in the 1970 report (Y = 1.5m), and the 1975 report (Y = 1.2m). A photo from 2000 indicates icing to 1.2m below the bottom flange (Y ~ 1.0m).

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1965, June 1970, June 1972, July 1981, June 1990, and July 1999. The largest storms in the database for this area are June 1972 with 120mm of rainfall, and June 1970 and July 1981 with 105mm.

Basin Runoff Potential :

d = 80 mm, T_p = 20 hrs, q = 1.1 cms/km^2
Gross DA = 64 km^2.
Q_p = 70 cms.

Conclusion :

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

Recommended parameters : Y = 1.8 m, V = 2.1 m/s, Q = 35 cms.