BF 00310 Hwy 27 Over Dogpound Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0007
B = 12 m, h = 4.5 m, T_h = 22 m
Use AT equation

At Bank Height : Y = 4.5 m, V = 1.8 m/s, Q = 135 cms
At Channel Capacity : Y = 5.5 m, V = 2.1 m/s, Q = 200 cms

Historical Highwater Data :

High ice from an ice jam was reported in April 1943 to be slightly above the bottom flange (reported at EL 1011.2m, Y = 5.5m on DD889). A 1953 note states that residents believe this happened several times, possibly also in 1920, with the ice jams caused by the bridge. HW observations were taken in June 1952 and July 1999, but do not appear to be very significant. The existing bridge was designed for Y = 5.2m and DD889 shows Y = 5.6m.

There are no WSC gauges on this stream. Nearby gauges provide little information on likely HW events on this basin. The storm database indicates that the largest storm was in June 1928 with about 130mm, followed by June 1970 with about 120mm.

Basin Runoff Potential :

d = 50mm, T_p = 20 hrs, q = 0.7 cms/km^2.
Gross DA = 1025 km^2.
Q_p = 720 cms.

Conclusion :

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

Recommended parameters : Y = 5.5 m, V = 2.1 m/s, Q = 200 cms.