BF 00713 Hwy 582 Over Dogpound Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0012
B = 13 m, h = 3.5 m, T_h = 22 m
Use AT equation

At Bank Height : Y = 3.5 m, V = 1.9 m/s, Q = 115 cms
At Channel Capacity : Y = 4.5 m, V = 2.3 m/s, Q = 190 cms

Historical Highwater Data :

The approach road was washed out in 1916. A 1959 report notes a HWM with Y = 3.3m (had been over grade prior to grade being raised), and a 1967 report notes a HWM with Y = 2.7m. HW was noted in April 1969 with water over bank and about 1m below the top of rock (Y = 3 – 3.5m).

There are no WSC gauges on Dogpound Ck. Nearby gauges with longer records show a wide variety of flood responses, with some of the more common being in June 1990 and May 1967. The largest storms in the database for this area are June 1970 and June 1928 with about 120mm of rainfall. There are many other storms with rainfall in the 90 to 100 mm range.

Basin Runoff Potential :

d = 60mm, T_p = 20hrs, q = 0.7 cms/km^2.
Gross DA = 890 km^2.
Q_p = 620 cms.

Conclusion :

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

Recommended parameters : Y = 4.5 m, V = 2.3 m/s, Q = 190 cms.