BF 00304 Local Road Over Dogpound Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0012
B = 13 m, h = 3.5 m, T_h = 20 m
Use AT equation

At Bank Height : Y = 3.5 m, V = 1.9 m/s, Q = 110 cms
At Channel Capacity : Y = 4.5 m, V = 2.4 m/s, Q = 180 cms

Historical Highwater Data :

HW was noted over the deck in July 1902 (deck height unknown). A timber pier was damaged by ice in 1947, 1951, and 1952. A 1952 note refers to a HWM with Y = 4.0m. A 1961 report notes a HWM with Y = 5.1m (0.6m over the deck), and a 1963 design note used this value and estimated Q = 225cms.

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 = 770 km^2.
Q_p = 540 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 = 2.4 m/s, Q = 180 cms.