BF 00249 Local Road over Weiller Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.001
B = 3 m, h = 1.5 m, T_h = 7 m
Use n = 0.05

At Bank Height : Y = 1.5 m, V = 0.6 m/s, Q = 4.5 cms
At Channel Capacity : Y = 2.3 m, V = 0.9 m/s, Q = 12 cms

Historical Highwater Data :

BF 543, 565 and 544 all contain some highwater information. Of particular note is 1902 when all three had a highwater noted.

There is one WSC gauge on Weiller Ck, Gauge 05FA024 (DA=235 km2), that was installed in 1985. Other gauges in the area show a wide variety of runoff responses with no consistent HW events between gauges. Data on all gauges in the area is intermittent. The largest storm in the storm database occurred in June 30, 1911 when 140 mm of rain fell. Runoff depth potential for the basin is 40 mm. There are many other storms with rainfall in the 90 to 100 mm range.

Basin Runoff Potential :

d = 40 mm, T_p = 20hrs, q = 0.56 cms/km^2
Gross DA = 185 km^2
Q_p = 103 cms

Conclusion :

The channel capacity estimate is consistent with historic observations at bridges upstream and downstream of the site.

Recommended parameters : Y = 2.3 m, V = 0.9 m/s, Q = 12 cms.