BF 70248 Hwy 647 Over Paddle River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.013
B = 1.0 m, h = 1.0 m, T_h = 2.5 m
Use n = 0.055

At Bank Height : Y = 1.0 m, V = 1.3 m/s, Q = 2 cms
At Channel Capacity : Y = 1.5 m, V = 2.1 m/s, Q = 6 cms

Historical Highwater Data :

A 1952 report notes a HWM with Y = 1.2m and estimates Q = 3cms.

There are no gauges on this stream. Gauges in the area suggest large runoff events in June 1965, April 1974, July 1986, and August 1989. The largest storms in the storm database are 150mm of rainfall in June 1944 and August 1989, 135mm in June 1965, and 105mm in July 1990.

Basin Runoff Potential :

d = 60mm, T_p = 20hrs, q = 0.83 cms/km^2.
Gross DA = 7 km^2.
Q_p = 6 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 2.1 m/s, Q = 6 cms.