BF 77670 Local Road Over Kakut Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.01
B = 1 m, h = 0.7 m, T_h = 3 m (assumed)
Use n = 0.06

At Bank Height : Y = 0.7 m, V = 0.9 m/s, Q = 1 cms
At Channel Capacity : Y = 1.2 m, V = 1.6 m/s, Q = 4 cms

Historical Highwater Data :

HW was noted in 1959 with water over the grade at a small timber box culvert (apparently had happened a few years before also).

There are no gauges on this stream. Gauges in the area suggest HW events in June 1968, April 1974, April 1979, June 1990, and April 1997. The largest storms in the storm database are June 1990 with about 135mm of rainfall, August 1982 with 115mm, and July 1935 and June 1965 with 105mm.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 5 km^2.
Q_p = 4 cms.

Conclusion :

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

Recommended parameters : Y = 1.2 m, V = 1.6 m/s, Q = 4 cms.