BF 13649 Hwy 28 Over Kehiwin Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.001 (connector between lakes).
B = 2.5 m, h = 1.2 m, T_h = 5 m
Use n = 0.05

At Bank Height : Y = 1.2 m, V = 0.5 m/s, Q = 3 cms
At Channel Capacity : Y = 1.8 m, V = 0.8 m/s, Q = 6 cms

Historical Highwater Data :

The 1968 design was based on Y = 1.5m. A 2002 assessment was based on Q = 6cms, and noted that water was often ponded to Y = 1m.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1974, 1979, 1985, 1996, and 1997. The largest storm in the database for this area is June 1962 with about 120mm of rainfall.

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 39 km^2.
Q_p = 21 cms.

Conclusion :

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

Recommended parameters : Y = 1.8 m, V = 0.8 m/s, Q = 6 cms.