

Project Name: Houlton - Hogsdon Stre
Stream Name: Hogsdon Stream
Bridge Name: _____
Route No. _____
Analysis by: CSH

PIN: 15629
Town: Houlton
Bridge No. _____
USGS Quad: _____
Date: 1/25/2008

Peak Flow Calculations by USGS Regression Equations (Hodgkins, 1999)

Enter data in blue cells only!

	km ²	mi ²	ac
A	183.23	70.745	45276.9
W	40.57	15.664	10025.0

Enter data in [mi²]

Watershed Area
 Wetlands area (by NWI)

P _c	
DIST	
ppta	
SG	

watershed centroid (E, N; UTM 19N; meters)
 distance from Gulf of Maine line
 mean annual precipitation (inches)
 sand & gravel aquifer as percentage of watershed area

A (km ²)	183.230
W (%)	22.14

Conf Lvl 0.67

Ret Pd	Peak Flow Estimate	
T (yr)	Lower	Upper
	Q _T (m ³ /s)	
1.1	13.33	
2	16.41	32.20
5	22.99	45.23
10	27.22	54.81
25	32.50	67.26
50	36.31	76.86
100	40.31	87.37
500	48.98	113.06

Q _T (ft ³ /s)
470.6
811.6
1138.6
1363.9
1650.9
1865.3
2095.5
2627.7

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Reference:

Hodgkins, G., 1999.
 Estimating the magnitude of peak flows for streams
 in Maine for selected recurrence intervals
Water-Resources Investigations Report 99-4008
 US Geological Survey, Augusta, Maine

$$Q_T = b \times A^a \times 10^{-wv}$$