

Table B1
Shear Stresses at Floodway Bridges

Bridge	Shear Stress Limit Grassed Clay/Till (N/m ²)	1997 Flood with Existing Floodway (N/m ²)	Shear Stress for 700 Year Flood with July 2004 Expanded Floodway (N/m ²)	Shear Stress for 700 Year Flood with Dec. 2006 Expanded Floodway (N/m ²)
St. Mary's	17.0	8.0	0.0 ¹	0.0 ¹
CPR – Emerson	17.0	8.5	9.0 ²	8.5 ⁴
PTH 59 South	17.0	9.0	11.0 ³	10.5 ⁵
CNR – Sprague	17.0	9.5	15.5	14.5
TCH	17.0	9.5	15.5	14.0
GWWD	17.0	9.5	14.0	19.0 ⁶
PTH 15	17.0	10.0	14.0	21.0 ⁶
CNR – Redditt	17.0	10.0	14.0	14.5
CPR – Keewatin	17.0	10.0	15.5	16.0
PTH 59 North	29.0	13.5	18.0	29.0 ⁶
CEMR – Pine Falls	29.0	13.0	24.0	26.0
PTH 44	29.0	14.0	26.0	28.0

- Notes:
- (1) Maximum Shear Stress of 13.0 N/m² occurs at approximately the 20 year flood.
 - (2) Maximum Shear Stress of 12.5 N/m² occurs at approximately the 300 year flood.
 - (3) Maximum Shear Stress of 13.0 N/m² occurs at approximately the 300 year flood.
 - (4) Maximum Shear Stress of 13.0 N/m² occurs at approximately the 300 year flood.
 - (5) Maximum Shear Stress of 13.5 N/m² occurs at approximately the 300 year flood.
 - (6) Maximum Shear Stress is at or exceeds the Shear Stress Limit