

**Sea level change during the Late Quaternary in the Botwood (NTS 2E/03) map area
(Poster)**

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Isostatic depression in the Botwood map area was influenced by both local Newfoundland ice and Laurentide (mainland) ice, with the larger Laurentide ice mass exerting the greater influence. As the Newfoundland ice mass decayed and retreated isostatic rebound occurred at a much slower rate. This resulted in higher sea levels as the sea invaded isostatically depressed terrain. As the ice decayed large quantities of meltwater were produced. Deltas formed as the meltwater reached the sea. Deltaic deposits within the study area consist of interbedded, stratified sands to cobbles, with

the beds dipping steeply northeastwards towards the Bay of Exploits.

In the Botwood map area the marine limit has been estimated at 58 m asl, based on the height of the raised marine delta at Laurenceton. As isostatic recovery continued and relative sea level fell subsequent stands were recorded at 42, 35, and 11 m asl producing either deltas or marine terraces. The occurrence of small, isolated marine terraces and raised gravel beach bars at elevations between 7 and 1 m asl suggest that isostatic deformation is ongoing at the present.