

A compilation of eastern Canadian historic tsunamis

A. Ruffman

Geomarine Associates Limited, P.O. Box 41, Station M, Halifax, Nova Scotia B3J 2L4, Canada

The Canadian Hydrographic Service has completed a compilation of known historic tsunamis from 1755 to the present. Previously, only the November 18, 1929 tsunami from the Laurentian Slope "Grand Banks" Earthquake was recorded in the literature; there was also a brief mention of an 1864 event in the Avalon Peninsula. The 1864 St. Shotts tsunami is now suspected

to be related to a local felt event and may be related to seismic activity in the Laurentian Slope Seismic Zone.

Tsunamis are now known in Lake Ontario with a possible tsunami in Lake Erie. The Bay of Fundy area, southwest of Nova Scotia, northern Cape Breton Island and the Gulf of St. Lawrence have all experienced tsunamis. A widespread event in 1848

affected northeast Newfoundland from St. John's to southern Labrador. The tsunami generated by the great Lisbon Earthquake of November 1, 1755 is now known to have affected northeast Newfoundland. The number of eastern Canadian tsunamis now totals at least eleven. A rock fall tsunami event is also known in Western Brook Pond in Newfoundland. Only the 1929 tsunami is known to have cost lives. The November 18, 1929 tsunami's

death toll is revised to include a death in Nova Scotia. This tsunami is shown to have refracted counterclockwise around the Avalon Peninsula and to have affected northeast Newfoundland in the early hours of November 19, 1929. A major storm tide accompanied a large storm the next morning just after daybreak on November 19, 1929 and this high lunar/storm tide is often confused by people as being the effects of the tsunami.