The processes that influence the erosion of drowned drumlins in coastal Atlantic Canada are not particularly well understood. Consequently, management strategies and engineering practices focussed on limiting erosion have had limited success and in some cases have resulted in shoreline modifications that have significant ecological and social impacts. This study focuses on determining the relative importance of the hydrostratigraphic, geomorphological and physical parameters that contribute to headward erosion of seven drowned drumlin islands in Mahone Bay, southwestern Nova Scotia.

The islands studied are palimpsest drumlins formed during Wisconsinan ice advance from 30 ky to 17 ky BP.