



Coastal Engineering Laboratory

Built in the late 1960's, the 1750 m² Queen's Coastal Engineering Laboratory (QCEL), operated by the Department of Civil Engineering, is the largest university hydraulics laboratory in Canada. Located at the West Campus, it houses three 45 m long wave flumes, a large wave basin, three river simulator flumes, a rotating fluids table, 20 m³ landslide flume and two other water channels. In mid-2014, the QCEL will become home also to the new Queen's River and Estuarine Morphodynamics Research Facility (QRIVEST).

The QCEL is a state-of-the-art facility for fundamental and applied research as well as teaching in a broad range of water areas, and especially in the fields of River Engineering, Lake Dynamics, Coastal Engineering, Water Supply Systems, and Landslides. Examples of natural phenomena presently being investigated at the QCEL include the formation of dunes and bars under unidirectional (river) flows, erosion of steep coastal shorelines, mechanics of lake density currents and effect of earth rotation on lakes, and generation of tsunamis by landslides.