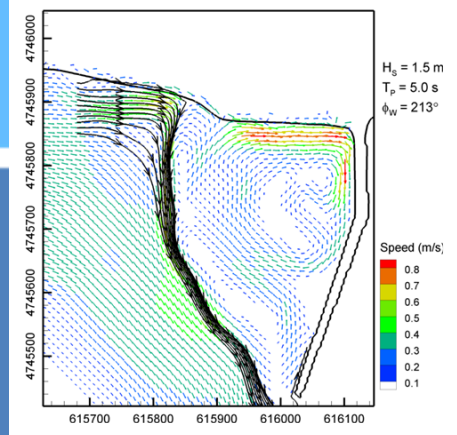




PROJECT DESCRIPTION

There have been several accidental drowning deaths attributed to rough water, currents and undertow along the Port Maitland portion of the Lake Erie shoreline in recent years. Coldwater Consulting Ltd. was contracted by Haldimand County to characterize nearshore currents at the beach at Port Maitland and to provide guidance on appropriate measures for promoting public awareness of swimming hazards.

PROJECT APPROACH

Coldwater's work included:

- a literature review of research on coastal currents and swimming safety, focusing on the physical factors that influence nearshore swimming conditions;
- a review of conditions at the beach from available data;
- a review of available data on the shoreline and nearshore bathymetry;
- development of a CoastL nearshore coastal circulation model to investigate current patterns generated by winds and waves at the beach;
- assemblage of best practices for nearshore currents and swimming safety, including rip current indices developed in the US for the Great Lakes;
- preliminary statistical assessment of the expected frequency of occurrence of red flag beach conditions; and
- development of recommendations for the County regarding signage, public awareness, and further technical work.

CLIENT

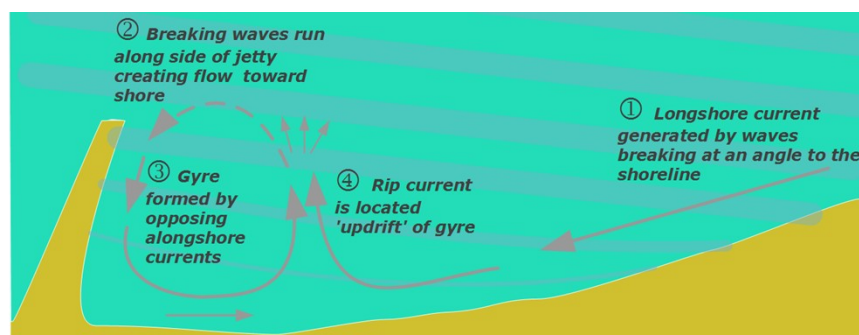
Haldimand County
Cayuga, ON

LOCATION

Port Maitland, ON

DATE

2012



Rip current generation by waves at an angle to a jetty