

Modelling a model of the tides on the St. Lawrence Seaway

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Abstract

The Hydraulics Laboratory of the National Research Council of Canada uses a hydraulic model of the St. Lawrence River estuary to perform tidal studies. In this model a pump creates the tidal variations at the boundary where the height profile is set to represent actual observed values. The original scheme for controlling the pump was inadequate for periods exceeding one simulated day. In order to experiment with improved control schemes to extend the usefulness of the simulation beyond one day, we needed a computer model of the hydraulic model. This paper describes the development of that model.