



## PROJECT DESCRIPTION

Coldwater Consulting Ltd. was contracted to design shore protection works at Panmure Island, a small island situated on the east coast of Prince Edward Island. Panmure Island is connected to the mainland by a sandy isthmus approximately 2.5 km long. This isthmus is the only land transportation link to the island and forms part of a provincial park that is a highly popular summer recreational area. A sequence of storm events during the winter of 2004 caused unprecedented shoreline erosion, damaging the highway roadbed.

### **DESIGN APPROACH**

Coldwater adopted an approach that would restore the shore in a manner that would ensure the longer-term stability of the road while maintaining the dune system and the recreational use of the beach.

The following services were performed:

- assessment of conditions leading up to the shoreline erosion that occurred at the causeway;
- provision of recommendations for shore protection that are compatible with dune restoration and larger-scale shoreline restoration works;
- assessment of design conditions (waves, water levels, sediment transport);
- design of coastal engineering works for a buried revetment barrier to prevent further erosion, including recommendations for dune restoration and ongoing maintenance of the dune, and;
- provision of all engineering drawings, construction specifications, quantity takeoffs and on-site construction supervision.

# CLIENT

PEI Transportation Dept. Charlottetown, PEI

#### LOCATION

Panmure Island, PEI

## DATE

2005-2006

