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A satellite image of the Earth, showing the North Atlantic Ocean and surrounding landmasses. The image is oriented vertically, with the top of the frame showing the Arctic region and the bottom showing the equatorial region. The text "Tidal Power – Our Potential" is overlaid in the center of the image.

Tidal Power – Our Potential



A 3D topographic map of the Bay of Fundy region. The land is shown in green with a textured, mountainous appearance, indicating elevation. The water is a solid blue. The map shows the coastline of New Brunswick to the north and Nova Scotia to the south, separated by the Bay of Fundy. The Atlantic Ocean is to the east. Labels for 'NEW BRUNSWICK', 'NOVA SCOTIA', 'Bay of Fundy', and 'Atlantic Ocean' are overlaid on the map.

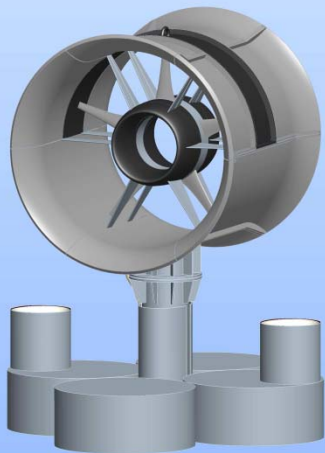
NEW BRUNSWICK

Bay of Fundy

NOVA SCOTIA

*Atlantic
Ocean*

Generators

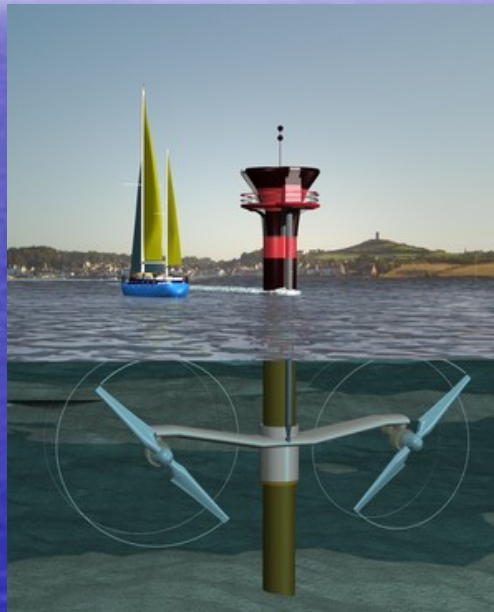


Clean Current Power Systems

(British Columbia, Canada)

Alstom Power

(France)

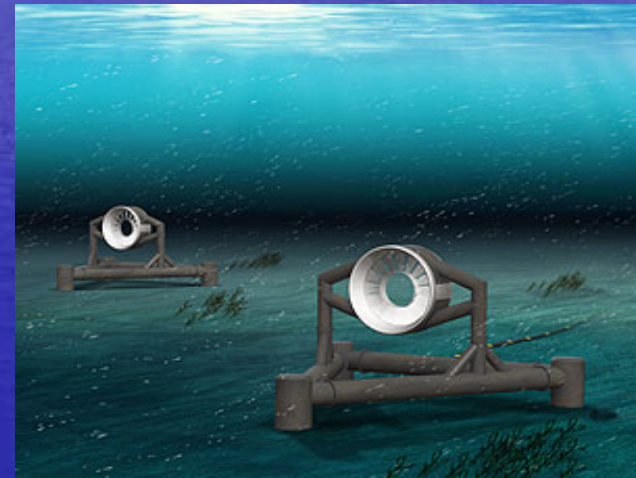


Minas Basin Pulp and Power

(Nova Scotia, Canada)

Marine Current Turbines

(Bristol, England)



Nova Scotia Power

(Nova Scotia, Canada)

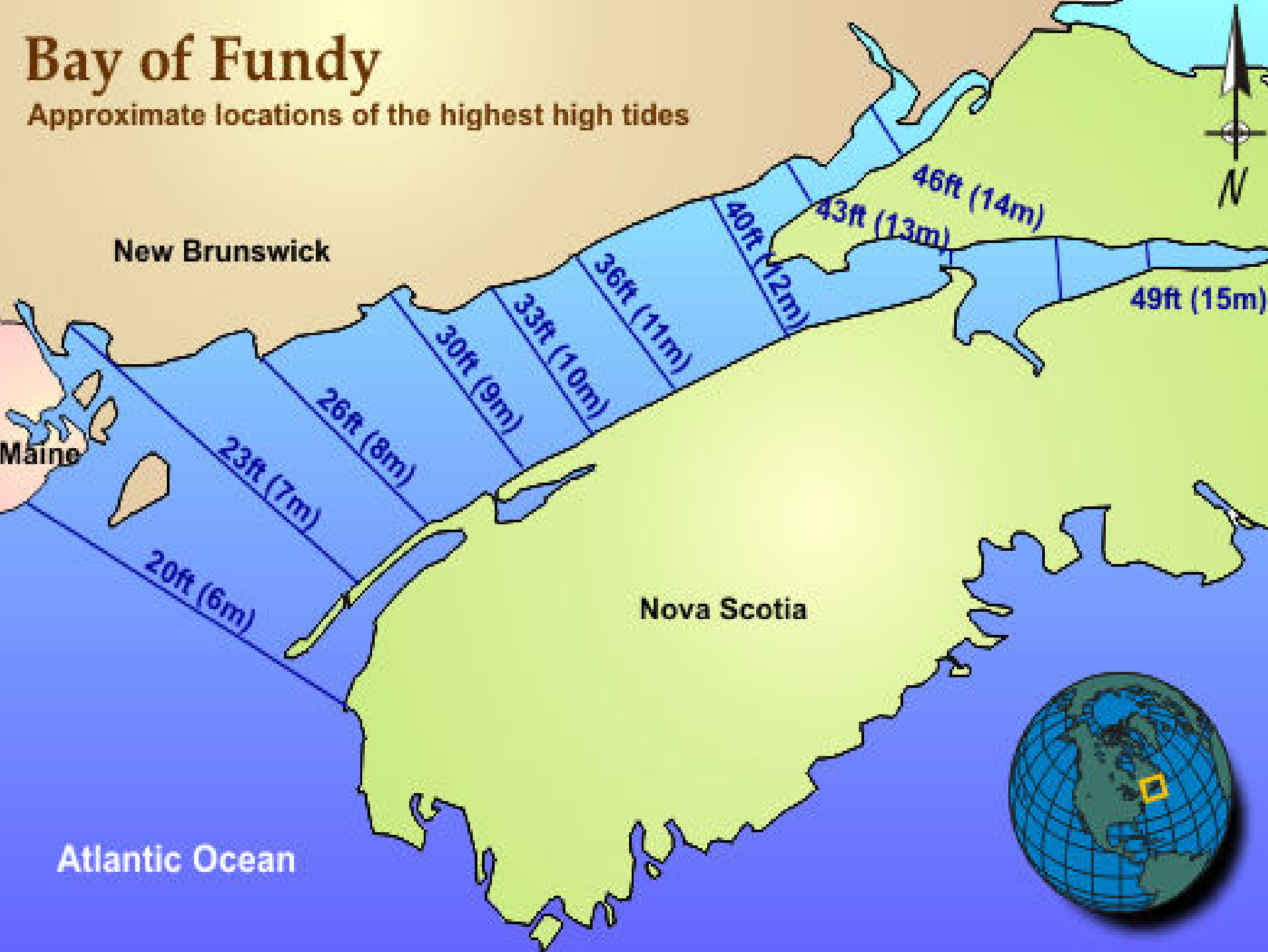
OpenHydro

(Dublin, Ireland)

The Bay of Fundy – Tides and Technology

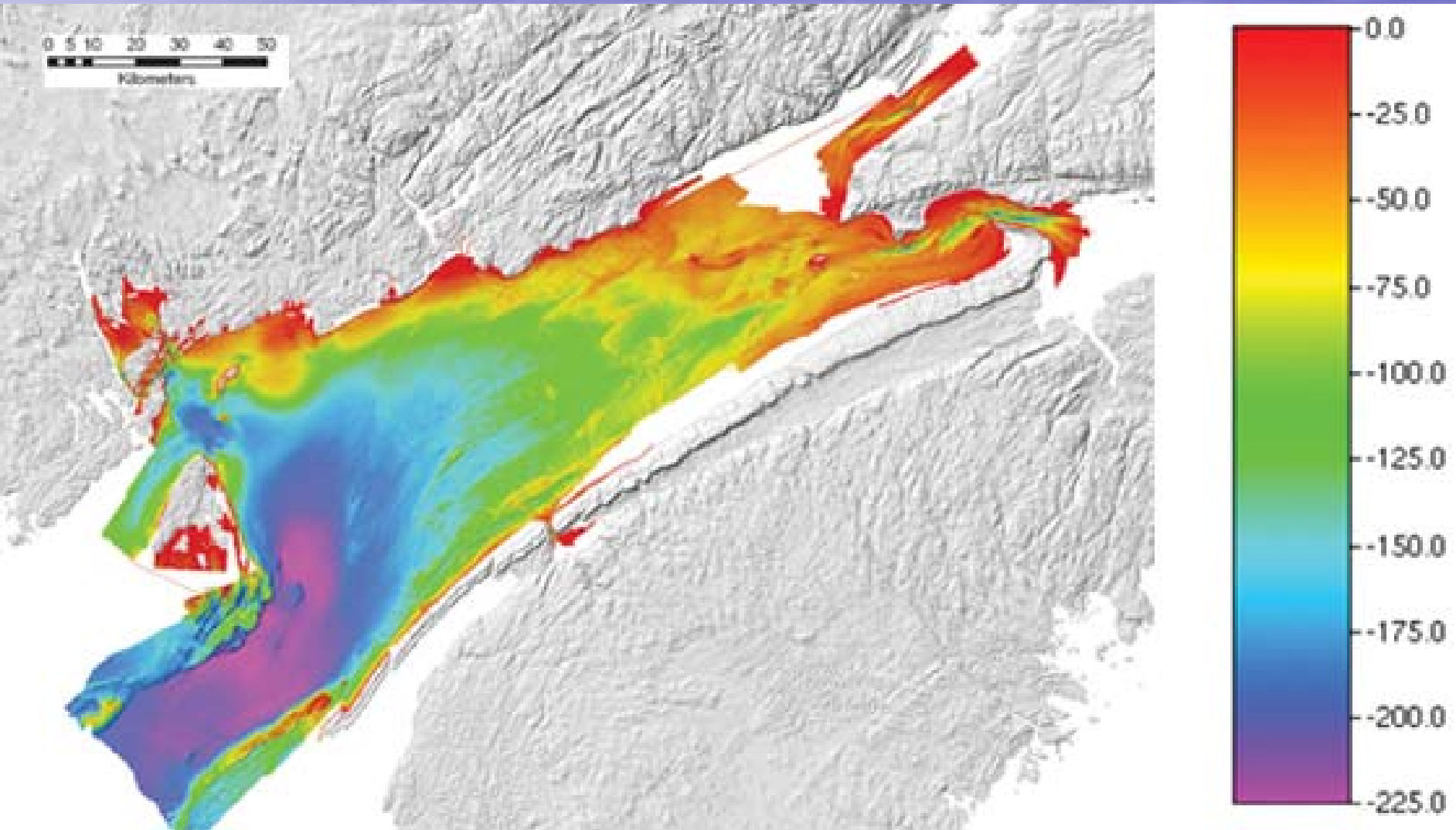
Bay of Fundy

Approximate locations of the highest high tides



Why are the tides so high?

Multibeam bathymetry data



What is the best location to put the in-stream turbines in the Bay of Fundy? Things to consider...

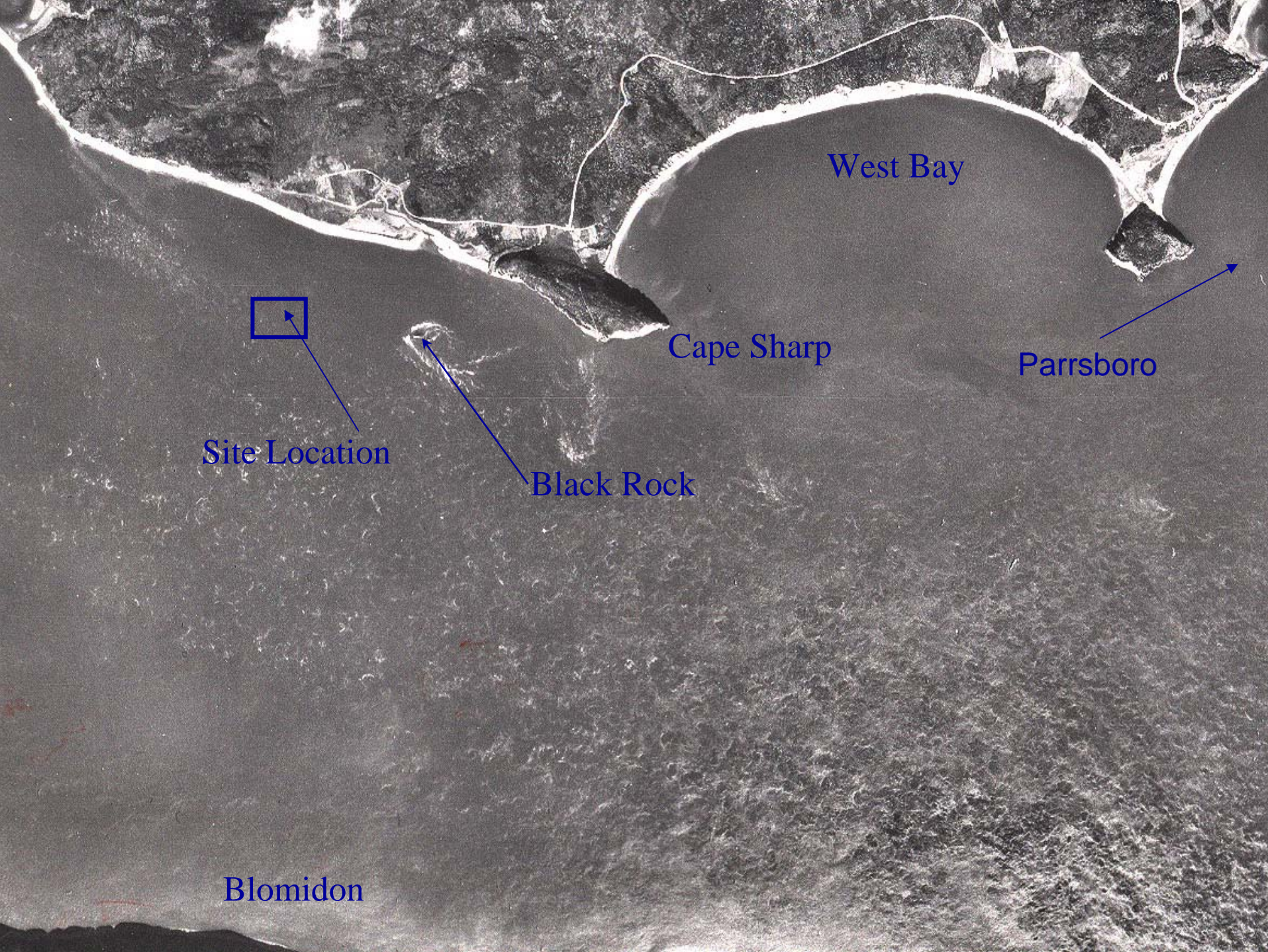
- Speed of current
- Direction of current
- Depth of in-stream turbines
- Seabed Geology
- Marine Environmental concerns



An aerial photograph of a coastal area with dense green vegetation. A large body of water, likely a bay or fjord, is visible. A blue arrow points from the text 'Minas Passage' to a narrow channel between two landmasses. The word 'Location' is written in the upper part of the image.

Location

Minas Passage



West Bay

Cape Sharp

Parrsboro

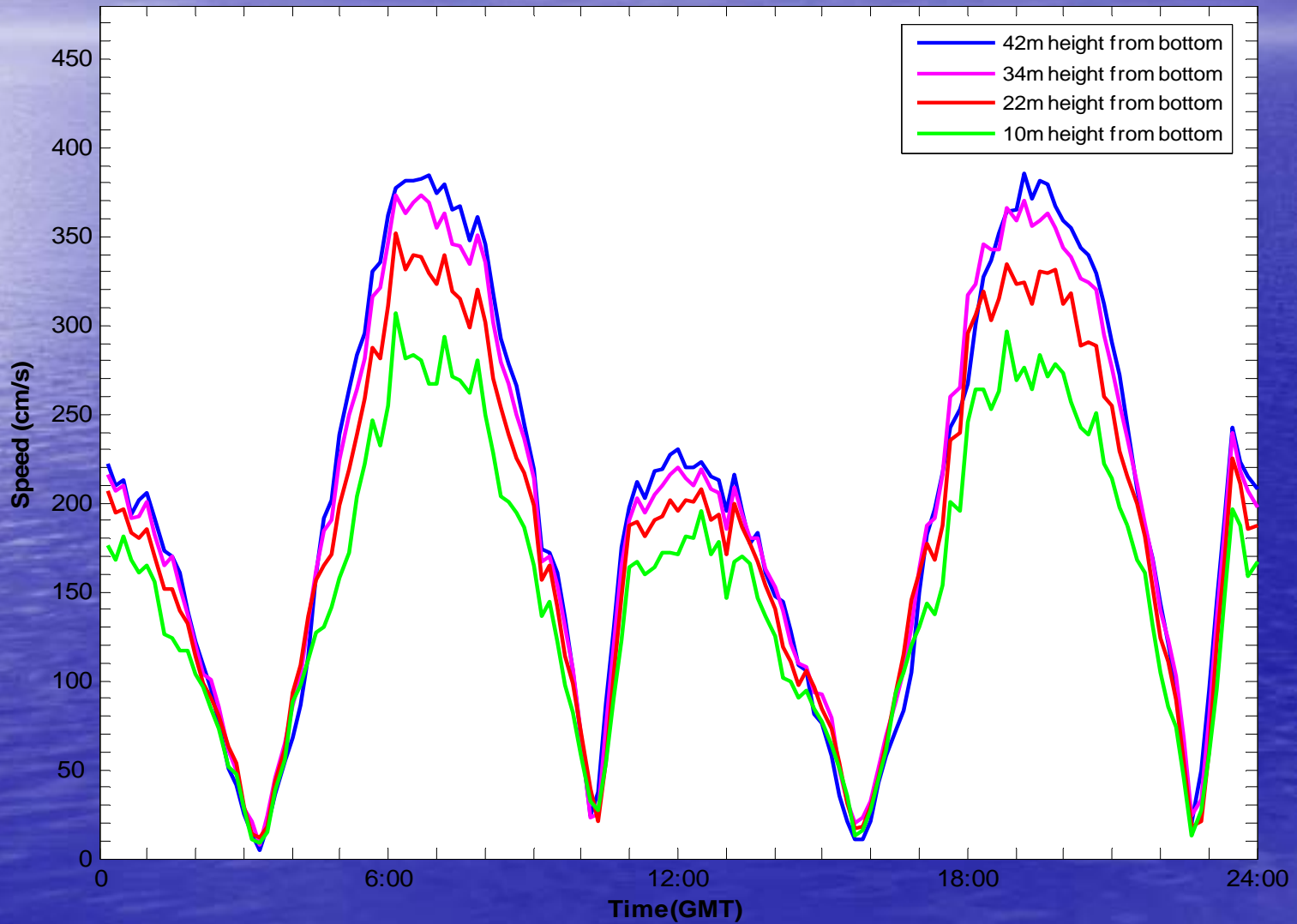
Site Location

Black Rock

Blomidon

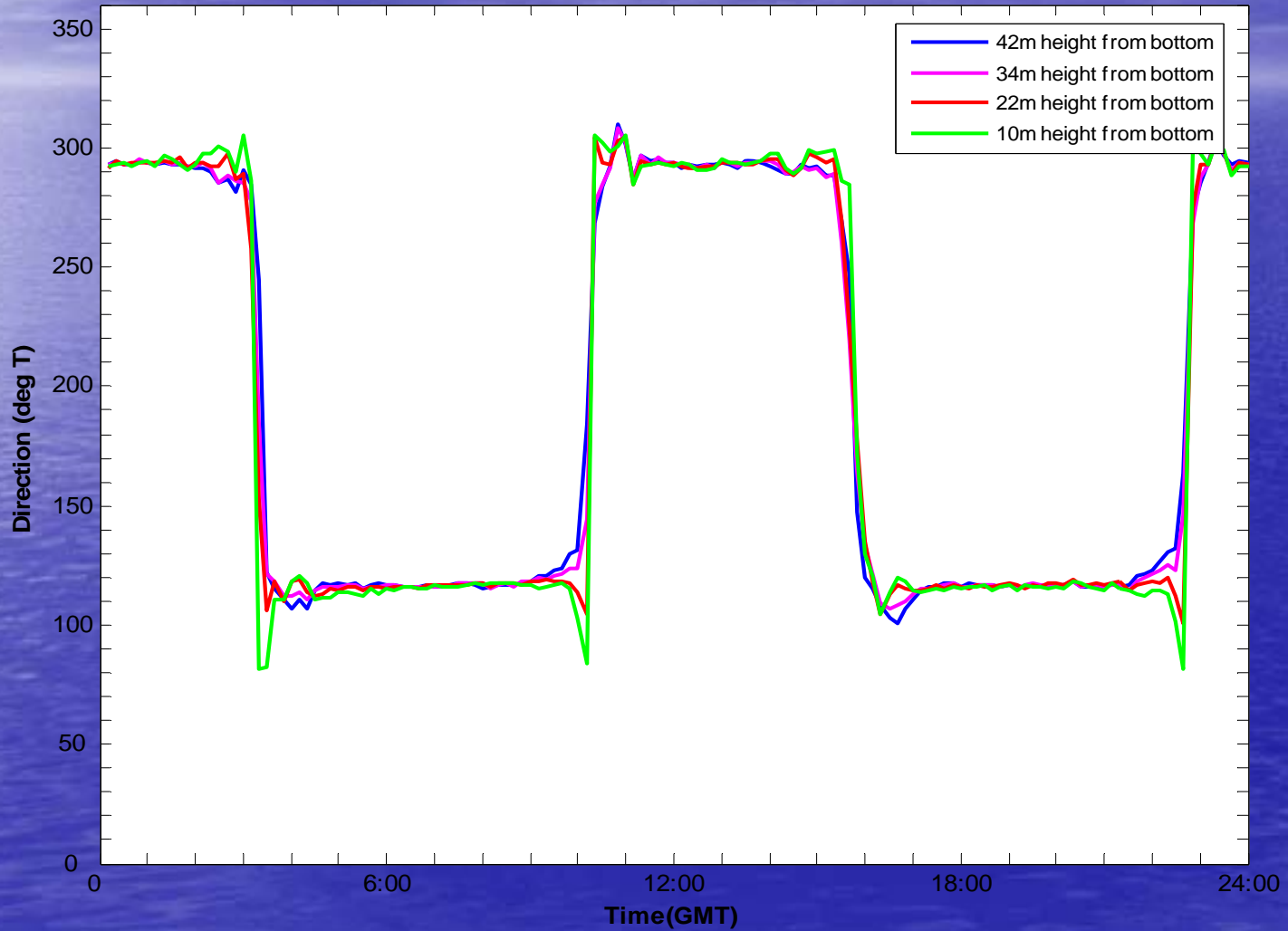
Current Speed

Current Speed during Median Tide on June 10, 2008, Minas Basin ($45^{\circ}22'15''\text{N}$, $64^{\circ}26'53''\text{W}$)

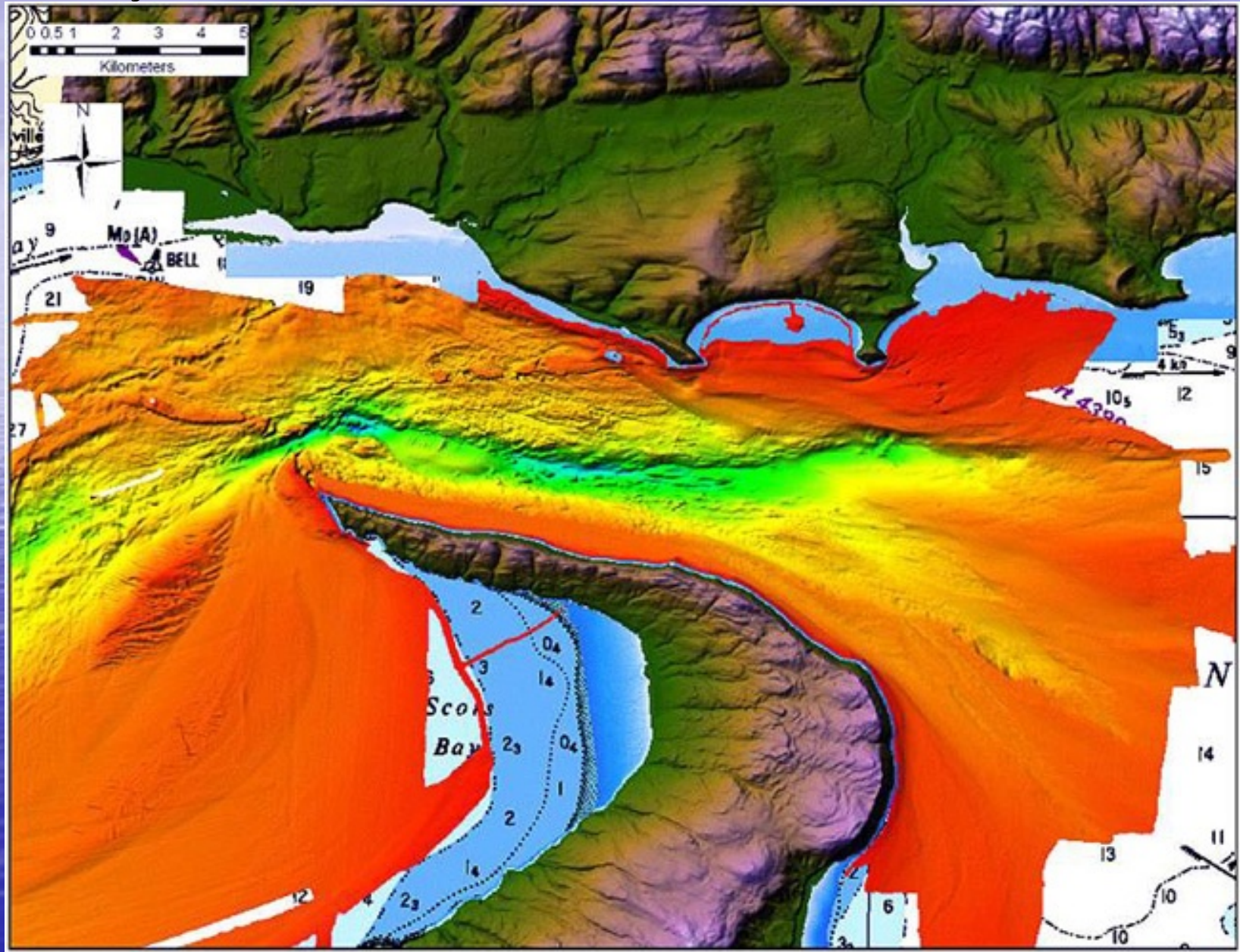


Current Direction

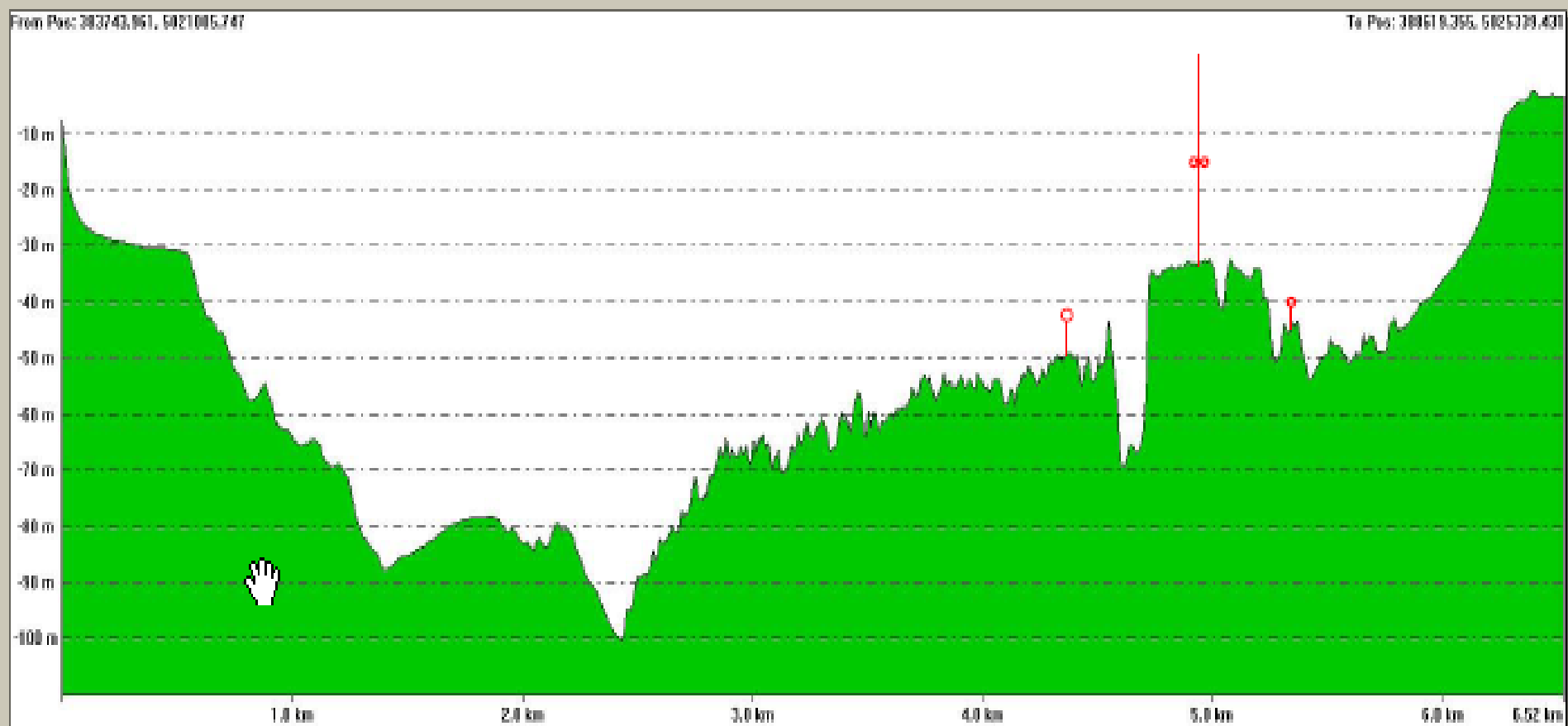
Current Direction during Median Tide on June 10, 2008, Minas Basin ($45^{\circ}22'15''$ N, $64^{\circ}26'53''$ W)



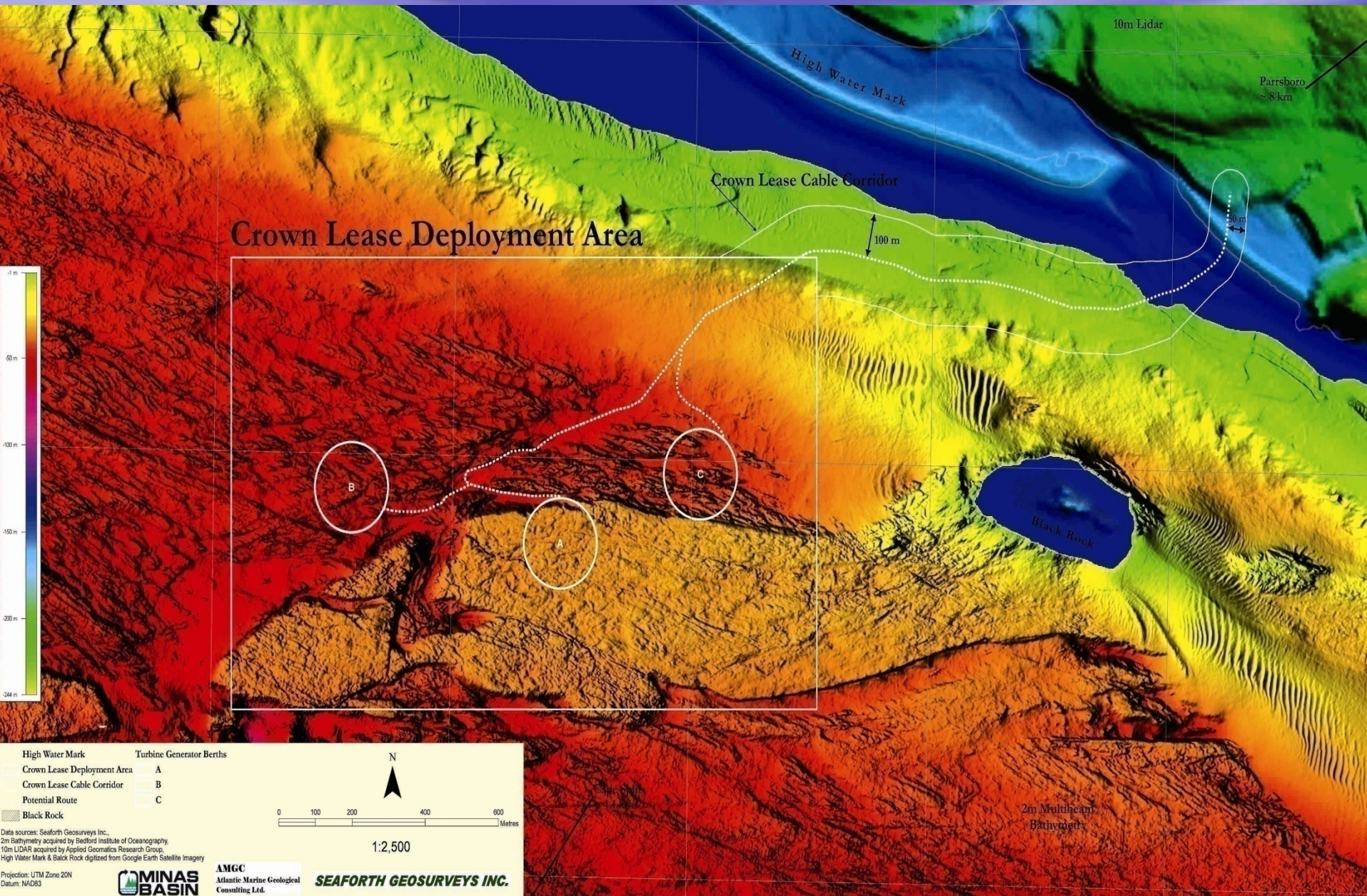
- Multibeam bathymetry, which provides a detailed picture of the topography of the seafloor and water depths, has been collected for areas of the Bay of Fundy.



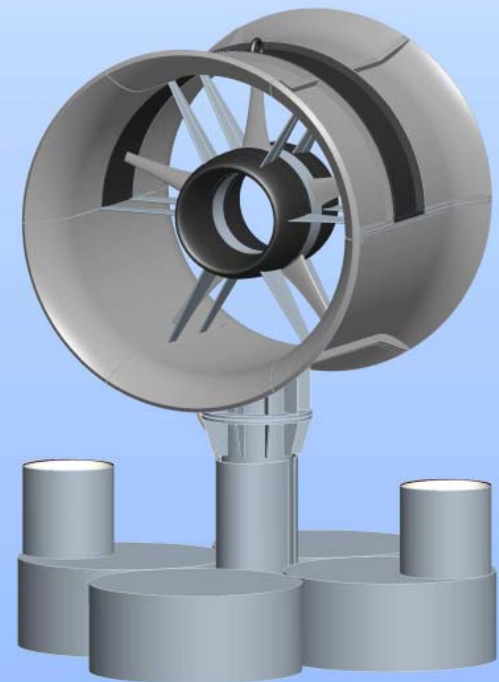
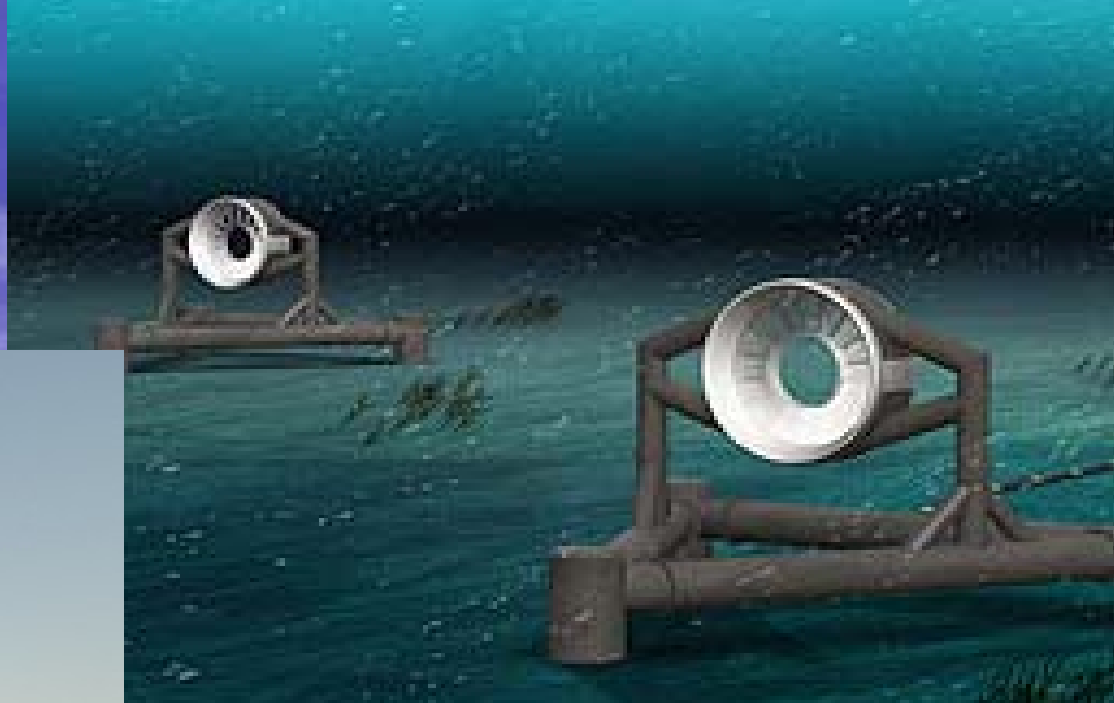
Crosssection of Minas Passage and 3 Test Turbines



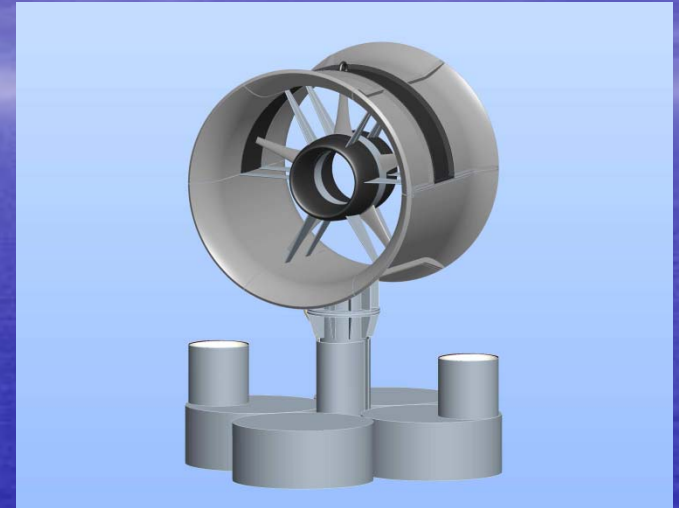
Generator sites selected



Generators



Clean Current Power Systems (British Columbia, Canada) Alstom Power (France)



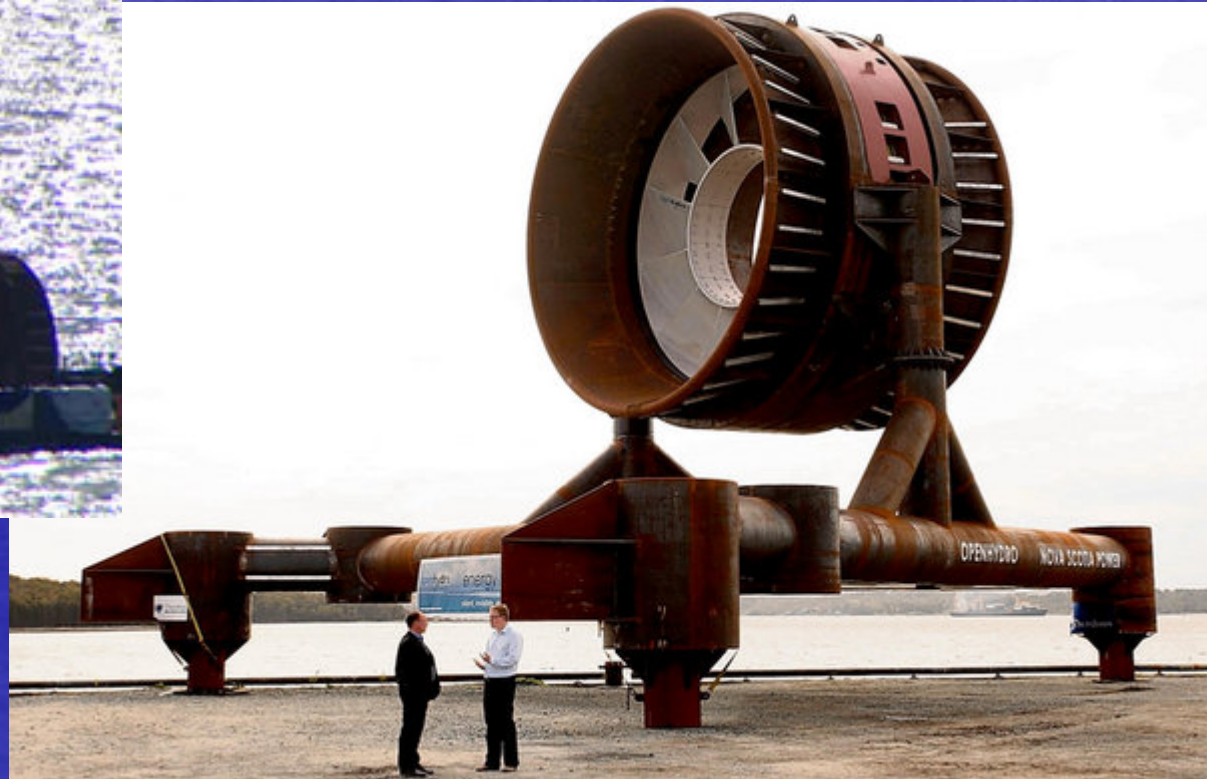
Minas Basin Pulp and Power (Nova Scotia, Canada)

Marine Current Turbines (Bristol, England)





Nova Scotia Power (Nova Scotia, Canada) OpenHydro (Dublin, Ireland)



The Beginning.....

Thank You

