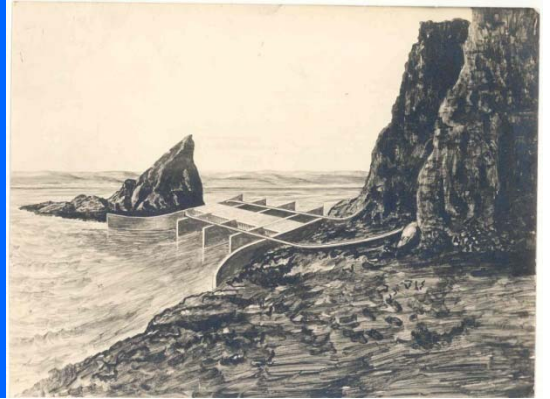


# Update on Environmental and Socio-economic Impact Assessment of Tidal Energy Developments in the Bay of Fundy

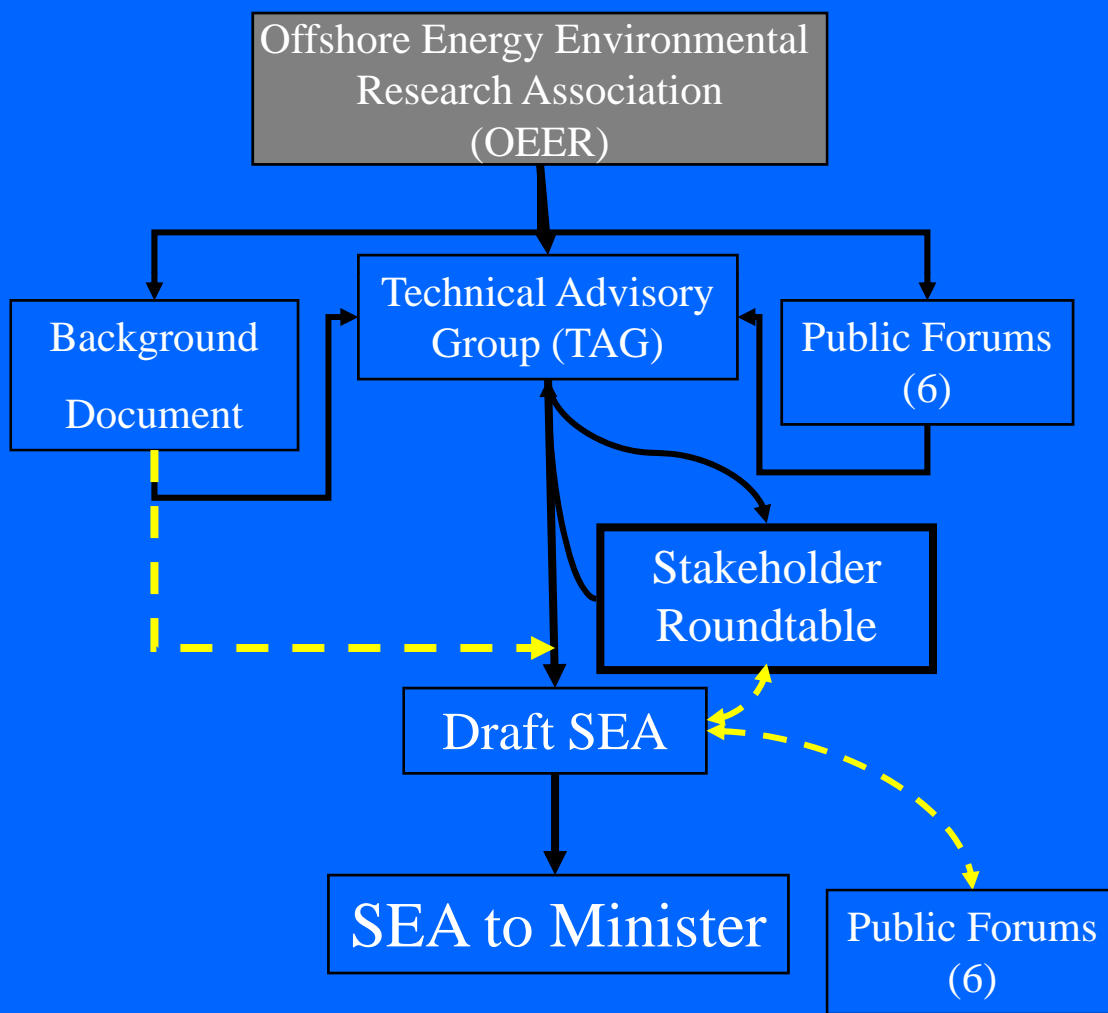


*Graham R Daborn*  
*OREG Symposium*  
*Fall 2008*  
*Whistler, BC*

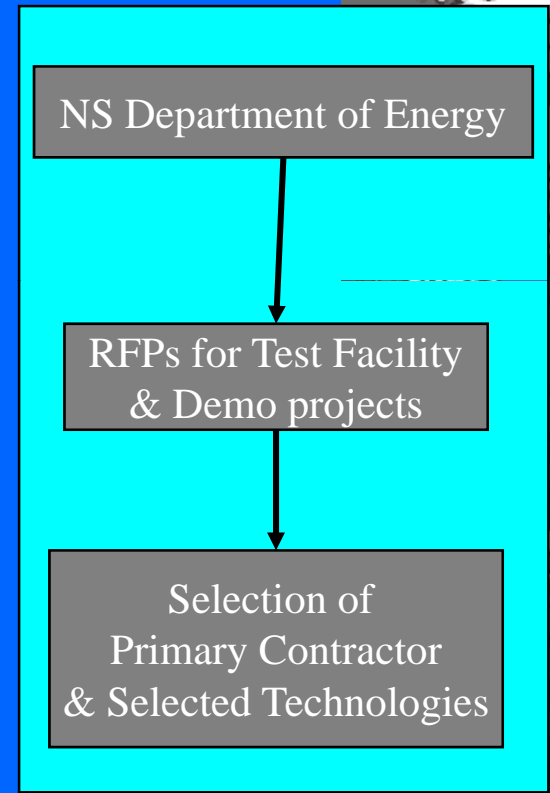


# Strategic Environmental Assessment — Nova Scotia-style

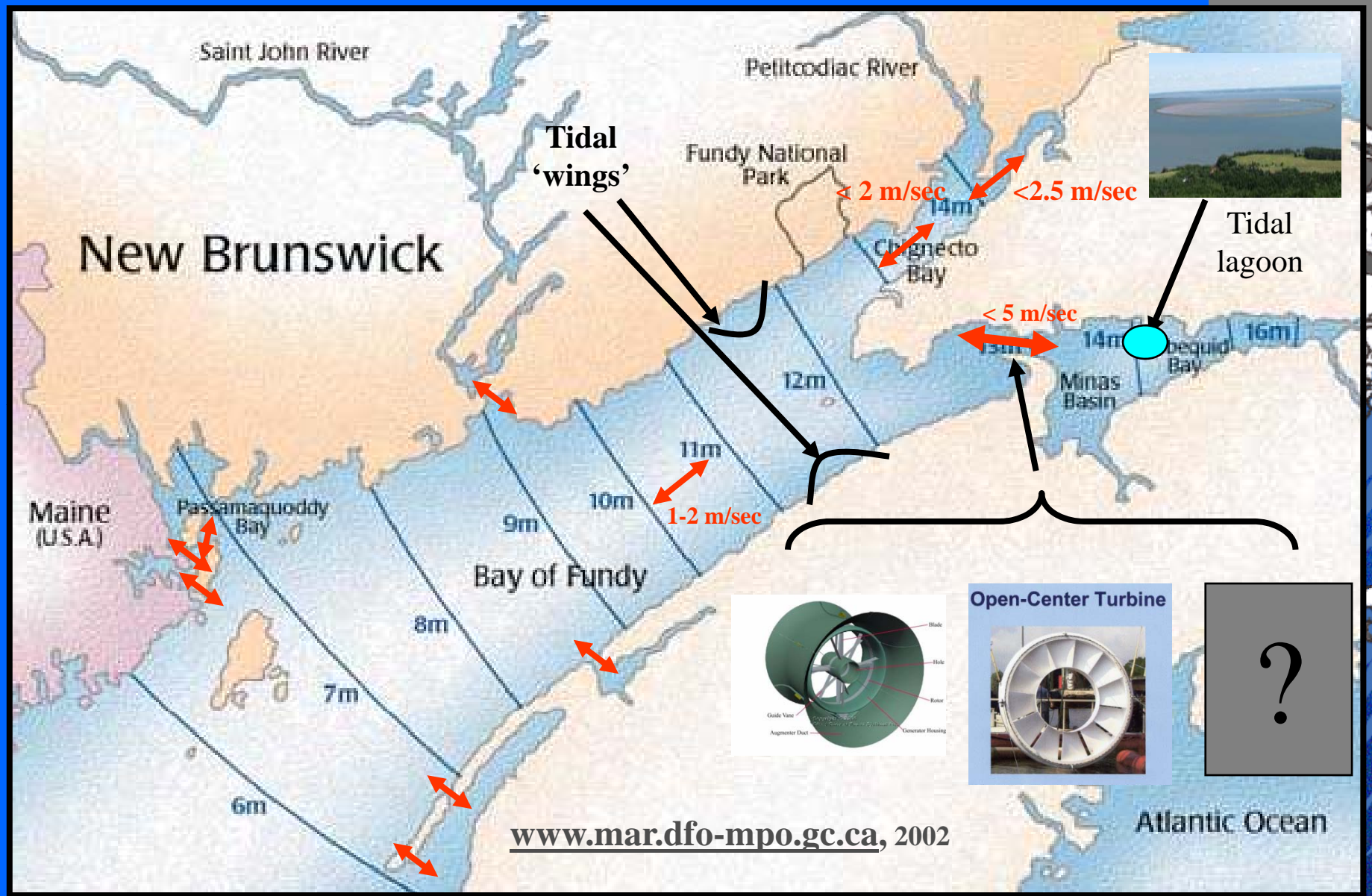
March 2007



TIME



April 2008



Tidal Energy Options in the Bay of Fundy

# Environmental Issues: Physical

- ▲ *Tidal dynamics*
  - ▲ *Effects on flows; how much energy can be taken?*
- ▲ *Sediments & substrate*
  - ▲ *What are effects on scour & deposition patterns?*
- ▲ *Ice*
- ▲ *Noise & Vibration*
- ▲ *Electromagnetic field effects*
- ▲ *Pollution & contaminants*



# Environmental Issues: Biological

## ▲ *Fish*

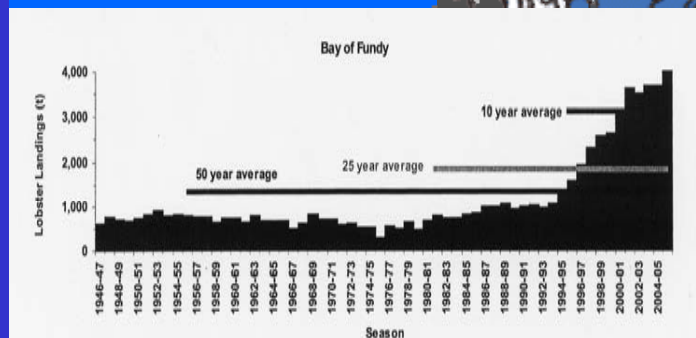
- ▲ *Interference with migration pathways?*
- ▲ *Resident vs migratory stocks?*
- ▲ *Effects of EMF?*

## ▲ *Other fauna: mammals, fish, birds & benthos*

- ▲ *Effects of noise/vibrations?*
- ▲ *Secondary effects of sediment changes?*

## ▲ *Species & sites at risk*

- ▲ *Right whale; iBoF Atlantic salmon; Striped bass; Sturgeon; wolffish; cusk...etc.*



# Socio-Economic Issues

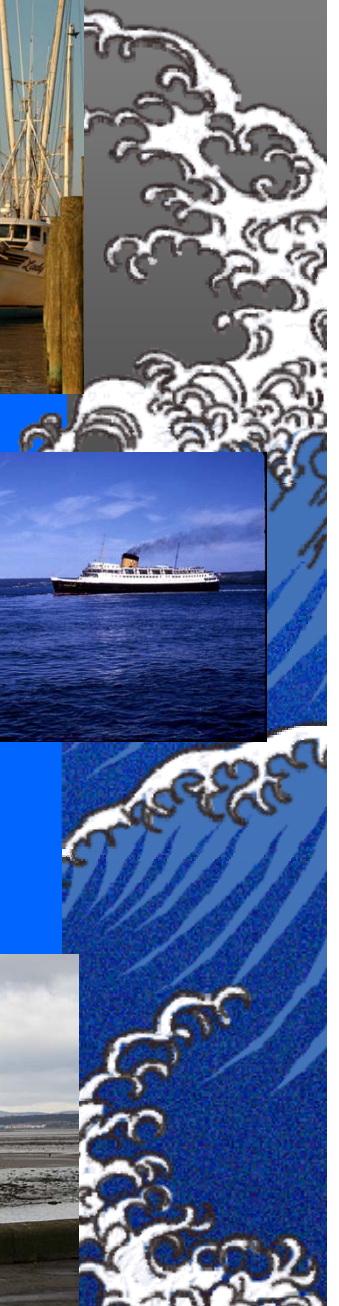
## ▲ *Displacement*

- ▲ *fisheries,*
- ▲ *recreation,*
- ▲ *transportation etc.*

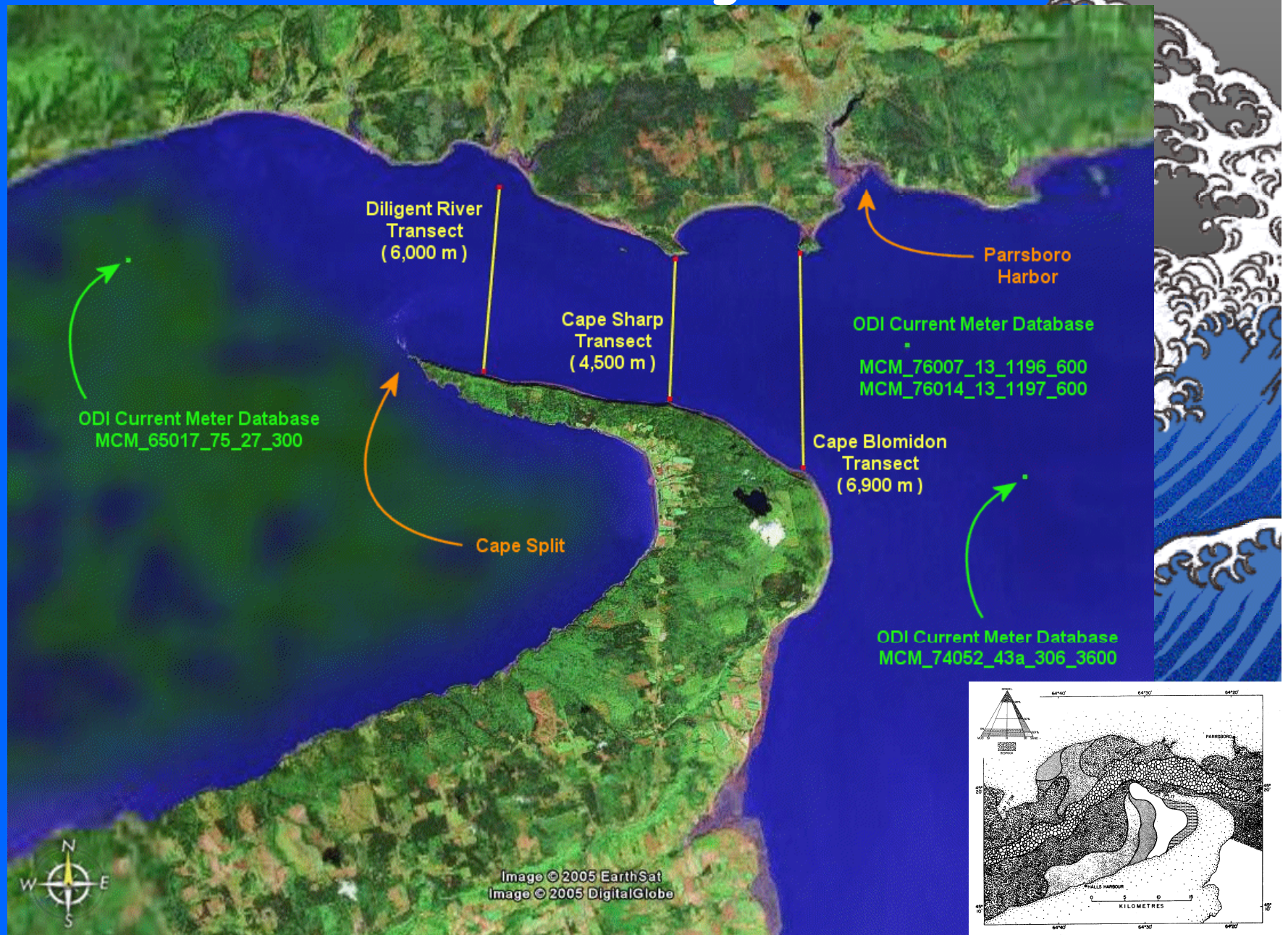


## ▲ *Economic benefits*

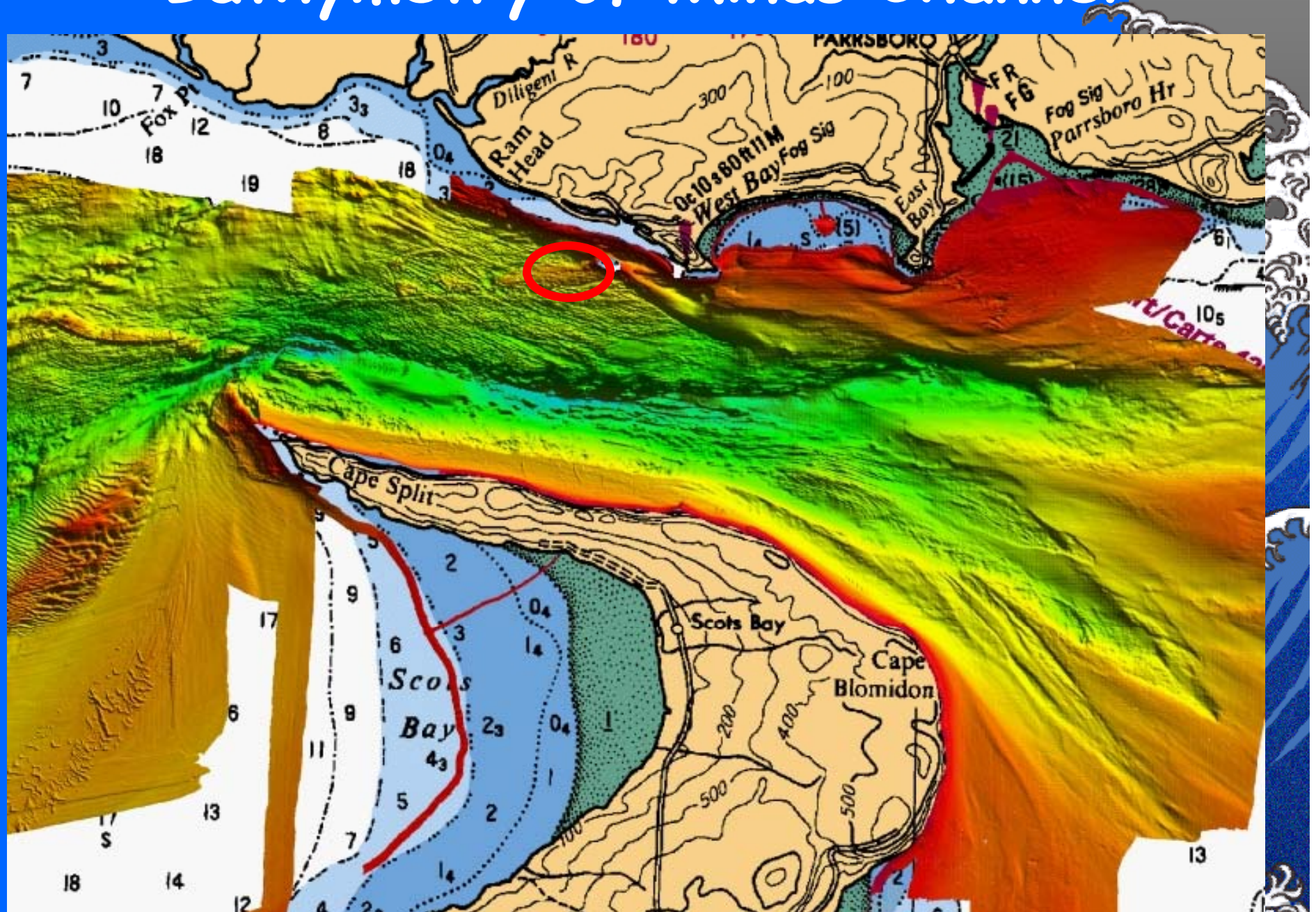
- ▲ *Scale: local vs. regional (grid-connected)*
- ▲ *Export vs. local development*
- ▲ *Employment*
- ▲ *Tourism*

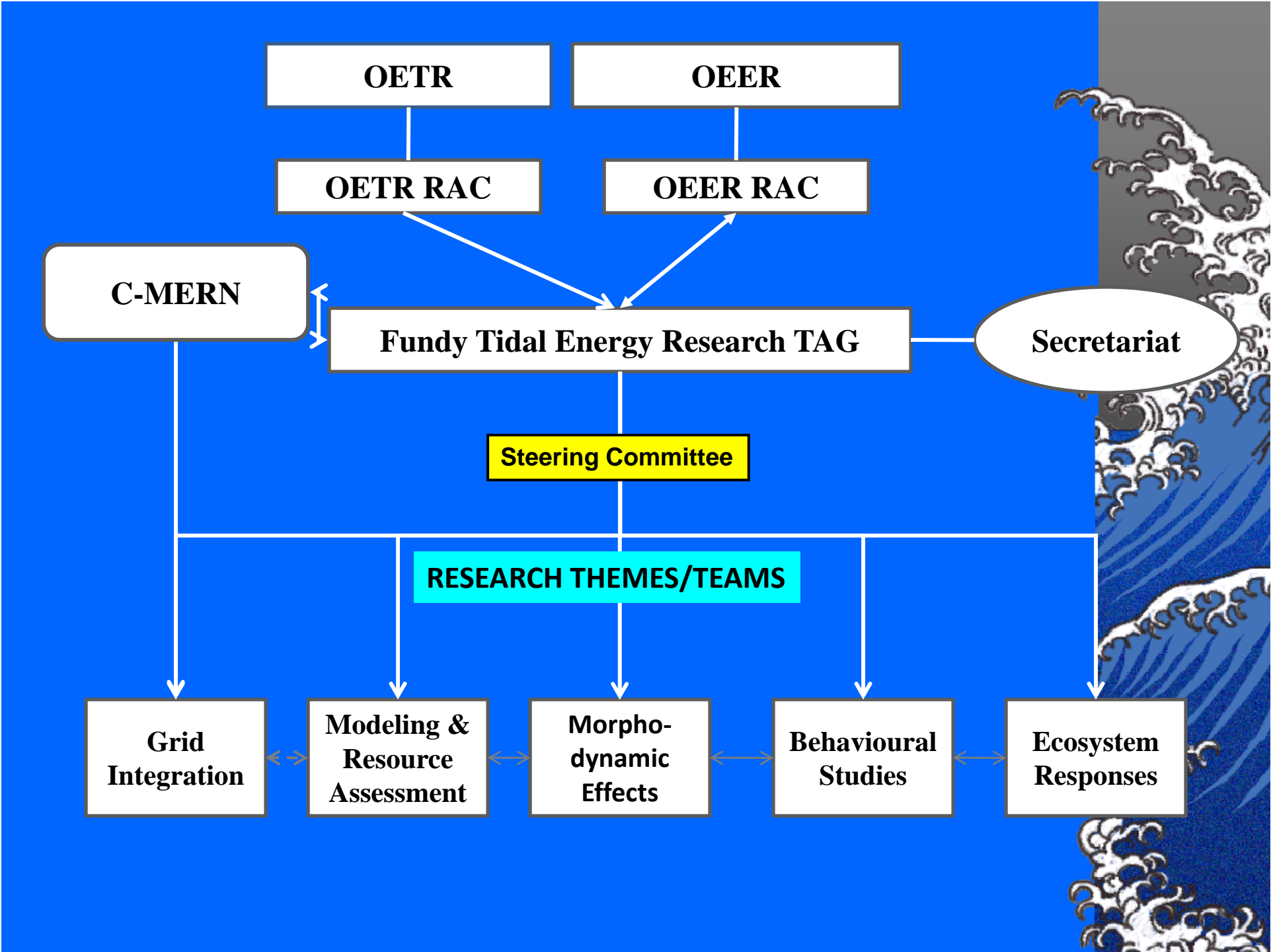


# Minas Passage



# Bathymetry of Minas Channel







## Recent Multi-beam Bathymetry from the Upper Bay of Fundy

*The way forward:*

- 1. Initiate long-term research on aquatic characteristics of Minas Passage*
- 2. Develop monitoring and research protocols*
- 3. Disseminate knowledge to the public*
- 4. Get moving.....*