



Threats to Climate and Sea: Kaipara Harbour

ECO Annual Conference
Saturday 2nd July 2011



Kaipara Harbour



Pouto North Head Peninsula



Resource Consent Has Been Granted to:



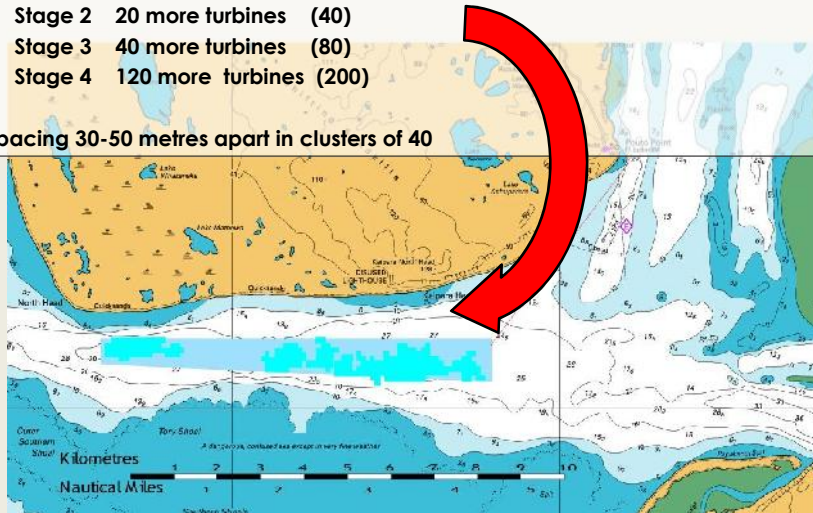
- Placement of 200 underwater turbines on the seafloor in the entrance to the Kaipara Harbour
- A submarine tidal powerstation of this size is totally untried and untested anywhere!

What is Planned?



- Stage 1A 3 turbines (3)
- Stage 1 17 more turbines (20)
- Stage 2 20 more turbines (40)
- Stage 3 40 more turbines (80)
- Stage 4 120 more turbines (200)

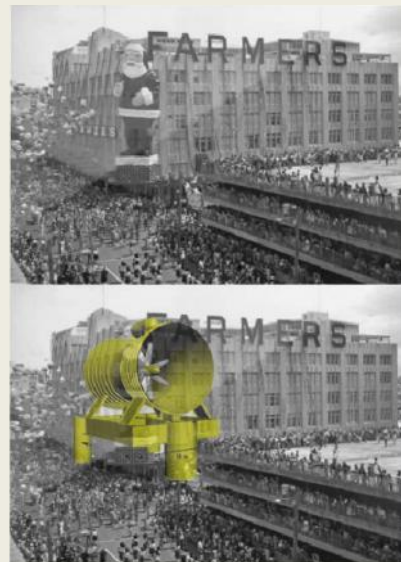
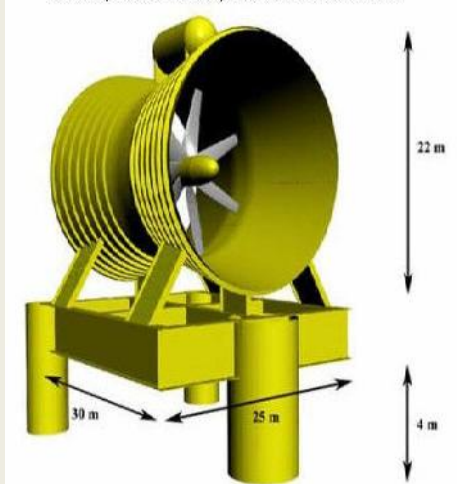
Spacing 30-50 metres apart in clusters of 40



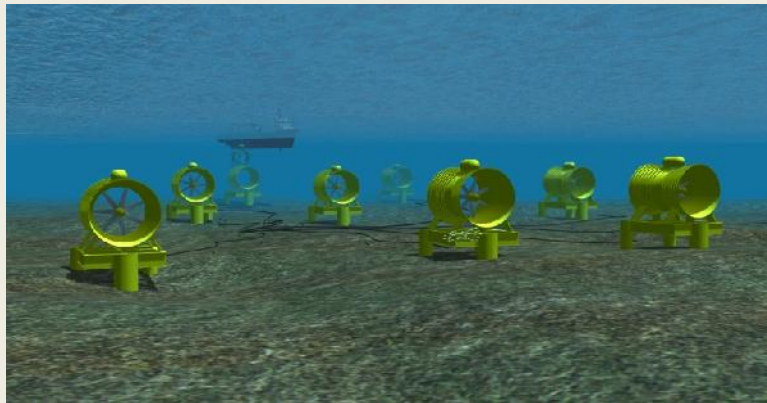
How Submarine Turbines Look



Artist impression courtesy RTT Rotec T dal Turzine



Artists Impression of Powerstation

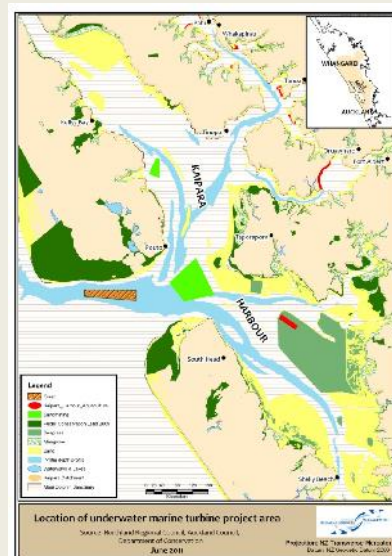


The Kaipara is ALREADY Impacted



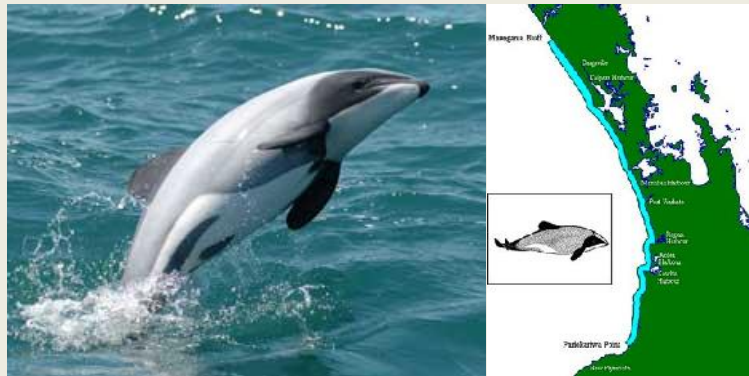
Cumulative effects of:

- Sandmining
- Commercial fishing
- Recreational fishing
- Multiple land-based stressors
- Invasive species & disease
- Coastal Development
- Climate Change
- Deforestation



What are we risking now?

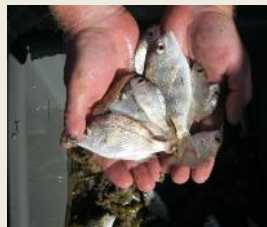
Critically Endangered Maui Dolphin



Kaipara's Important Marine Biodiversity



- Sharks – habitat and nursery
- Skates and rays – habitat and nursery
- Snapper-nursery & spawning grounds
- Trevally, Gurnard, Mullet, Flounder
- Dolphins & Orca home range
- Tuna & inganga



Kaipara's Important Marine Biodiversity

- Shellfish – scallop, greenlipped mussel, pipi, cockle, pupu, toheroa, tuatua
- Significant marine ecosystems – seagrass, mangroves, saltmarsh, mudflats, sandflats, dunelands
- Significant seabird habitat – feeding & breeding



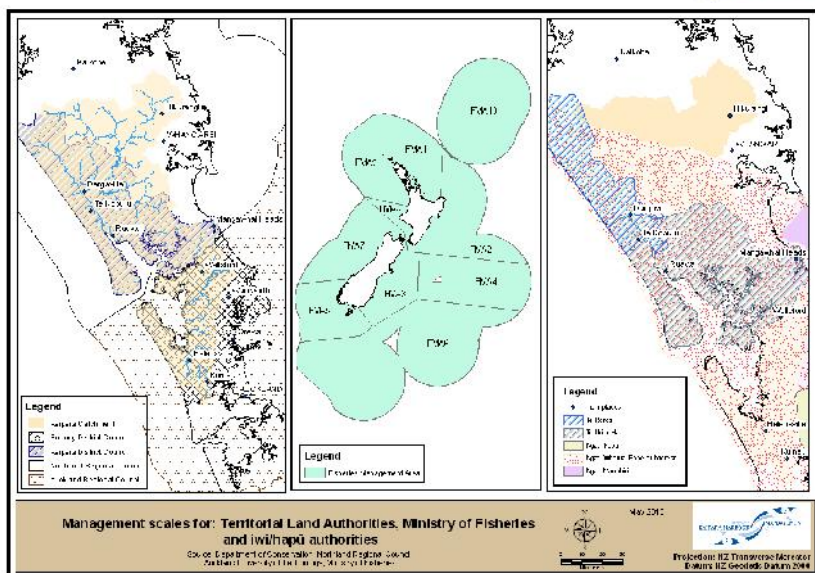
Customary




- Fishery
- RMA process
- Kaitiakitanga
- Rangatiratanga
- Deed of Settlement
- Statutory Acknowledgments



Promote integration






The map shows the Kaipara Harbour and its extensive catchment area in the North Island of New Zealand. It features numerous rivers and streams flowing into the harbour, with various locations and districts labeled. A scale bar and a north arrow are included in the bottom left corner. An inset map in the top right corner shows the location of the Kaipara Harbour within the North Island. The map is titled "Kaipara Harbour & Catchment" and is dated "1 of 2011".

TE URI O HAU
SETTLEMENT TRUST
ENVIRONS HOLDINGS LTD

The World of Kaipara

Information Review & Gap Analysis

www.kaiparaharbour.net.nz



An aerial photograph of the Kaipara Harbour, showing the coastline, the harbour's waters, and the surrounding land. The water is a deep blue, and the land is a mix of green and brown. The sky is clear with some light clouds.

Common Vision:

"A healthy and productive Kaipara harbour"