

# GREAT BARRIER ISLAND REPORTING AREA

Great Barrier Local Board

2018

## STATE OF AUCKLAND MARINE FACTSHEET



Medlands, Great Barrier, S Hailes.

To better manage and mitigate environmental effects in estuaries, Auckland Council and NIWA supported by NIWA Coasts & Oceans Programme 5 – Managing Marine Ecosystems have developed indices of estuarine ecological health.

The indices are based on sediment-dwelling invertebrates and the ways in which they respond to stressors. These indices were developed and verified using invertebrate data from >100 estuarine sites throughout the Auckland region (including Waitematā, Manukau, Mahurangi and Kaipara Harbours). Several other councils and government agencies have also now expressed interest in these tools. For more information please contact Dr Drew Lohrer, Principal Scientist, NIWA, Hamilton.

At the end of October, 2015, after a hui with Rodney Ngawaka of Ngati Rehua Ngatiwai Ki Aotea Trust, a team of marine ecologists from NIWA visited tidal flats in three estuaries on Great Barrier Island. The data collection served two purposes. We were able to assess the biodiversity and the relative health status of three

estuaries on Great Barrier Island, which has not been done before, and we advanced the development of the health metrics. Pristine sandflat sites such as those on Great Barrier Island are needed to calibrate the indices, to better understand the health of estuaries throughout Aotearoa.

The three estuaries sampled were Whangapoua Estuary, Whangaparapara Estuary and Shoal Bay. The ecology was diverse and characteristic of relatively sandy sites with many species sensitive to mud present (indicating low to no impact of muddiness). Contaminant levels for copper, lead and zinc were all low. The habitats identified in each estuary were numerous and diverse.

### Bathing beach water quality:

Check Safeswim [safeswim.org.nz](http://safeswim.org.nz) for live information on water quality and swimming conditions at your favourite swimming spots.



Great Barrier cask or tun shell, *Tonna tankervillei*, K Carter.

In the absence of comprehensive data for some areas, report cards are not available. In these areas fact sheets have been generated until more information is collected.

### FIND OUT MORE

This report card is part of a series prepared by Auckland Council's Research and Evaluation Unit, which undertakes monitoring and research to provide information and evidence to inform the council's activities and reporting. More report cards can be found at: [aucklandcouncil.govt.nz/environment](http://aucklandcouncil.govt.nz/environment). The report card series includes reporting on freshwater, terrestrial, marine, air, soil, capacity for growth, demographics and quality of life.

For more information: e-mail [rimu@aucklandcouncil.govt.nz](mailto:rimu@aucklandcouncil.govt.nz) or call us on 09 301 0101.

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