

NORTH EAST COAST REPORTING AREA

Rodney Local Board

STATE OF AUCKLAND MARINE REPORT CARD

WATER QUALITY



CONTAMINANTS IN SEDIMENT



ECOLOGY



This report card was previously known as the Warkworth to Wellsford Coast. The boundary has been slightly changed to exclude Puhoi and to better align with freshwater catchment boundaries used for planning.

These grades represent a summary of results from individual sites and are not designed to track trends. Each programme samples at a number of representative sites across Auckland and collects parameters specific to the programme which are amalgamated to provide the grade. More detailed analyses are presented in technical reports available on Knowledge Auckland. See the back page for monitoring results and interpretation. Note that the water quality scores have been assessed using an updated methodology which may result in a change to the grade unrelated to a change in quality.

The Department of Conservation produces report cards for the two Marine Reserves in this area:

doc.govt.nz/nature/habitats/marine/type-1-marine-protected-areas-marine-reserves/marine-reserve-report-cards



2018



QUICK FACTS

KAWAU BAY IS ONE OF THE MOST DIVERSE MARINE AREAS IN AUCKLAND

LEIGH MARINE RESERVE IS THE OLDEST MARINE RESERVE IN THE COUNTRY, EST. IN 1975

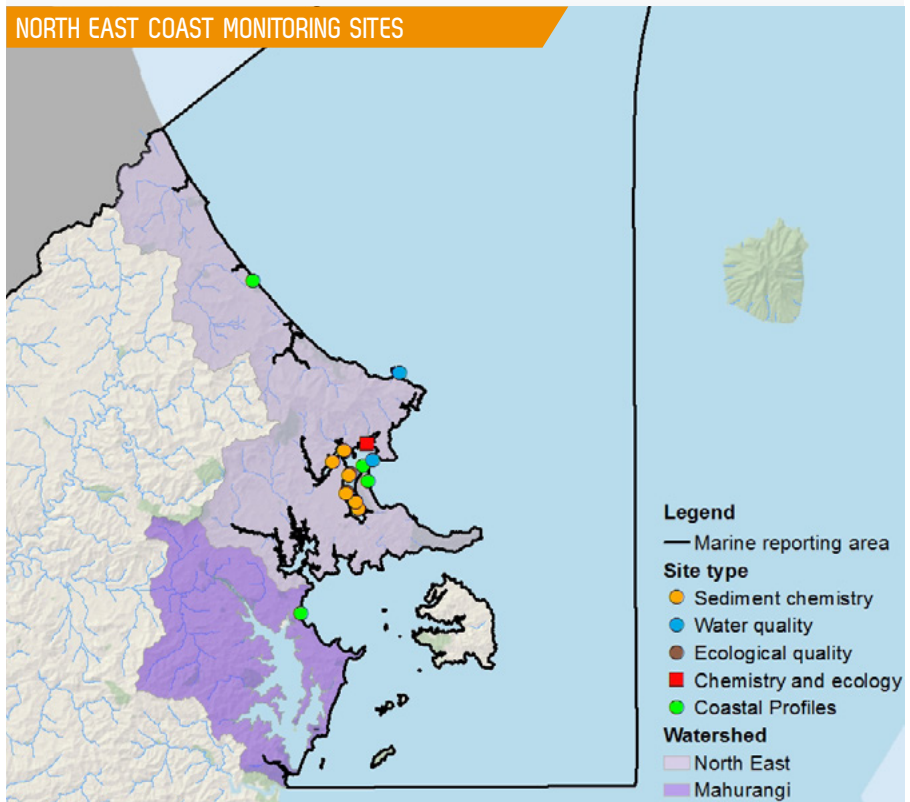
TĀWHARANUI MARINE RESERVE HAS BEEN OFF LIMITS FOR FISHING SINCE 1981, BUT IT WAS ONLY MADE A MARINE RESERVE IN 2011

THE EXPOSED PAKIRI COASTLINE PROVIDES HABITAT FOR FAIRY TERN AND NORTHERN NZ DOTTEREL

WHANGATEAU HARBOUR HAS BEEN CLOSED FOR THE HARVESTING OF COCKLES AND PIPI SINCE 2016, BECAUSE OF DISEASE. AN ANNUAL COCKLE COUNT IS CONDUCTED BY WHANGATEAU HARBOUR CARE AND VOLUNTEERS.

WHANGATEAU HARBOUR AND OMAHA SPIT PROVIDE ONE OF THE LARGEST BREEDING AND FLOCKING SITES FOR THE NORTHERN NZ DOTTEREL

NORTH EAST COAST MONITORING SITES



MONITORING BACKGROUND AND INTERPRETATION

Water quality: To measure the health of our marine waters, a comprehensive range of parameters are measured, including nutrients, turbidity, salinity, and pH. Overall water quality is assessed using the Water Quality Index, which was developed by the Canadian Council of Ministers of the Environment in 2001 and adapted by Auckland Council. Scores are calculated by comparing average values from the last three years to water quality objectives. The methods used to calculate the scores for 2018 have changed and sites have been split into open water and estuary sites to better reflect the differing water circulation conditions. This more conservative approach means some water quality grades are lower than in previous years due to the change in index rather than a change in water quality. See Technical Report 2018/027 on Knowledge Auckland for more information on the methodology change.

Contaminants in sediment: Auckland Council tests for zinc, copper and lead every two to five years. Environmental Response Criteria (ERC) are used: green indicates low levels of contaminants, amber indicates some elevation and red indicates relatively high levels. The most recent results can be found in technical report TR2016/020.

Ecology: At selected harbour and estuarine sites, species living in or on intertidal sand flats are counted. Results are classified according to a five-point health index (TR2012/012), which ranges from 'extremely good' to 'unhealthy with low resilience'. Ecology is also monitored more frequently at sentinel sites, every two to three months for soft sediment sites.

Bathing beach water quality: Check Safeswim (safeswim.org.nz) for live information on water quality and swimming conditions at your favourite swimming spots

Warning: These State of the Environment indicators **do not** measure or indicate food quality or safety; refer to foodsafety.govt.nz for more information.

MONITORING RESULTS



WATER
QUALITY

Marine water quality sampling began between 1991 and 1993. The water quality for the Warkworth/Wellsford Coast is marginal, with a grade of 'C'. This is lower than previous report cards due to a change in method for calculating the Water Quality Index which uses a more stringent test for coastal waters, which are now separated calculated separately to estuary sites (see Technical Report 2018/27). Applying the new method to previous years, water quality has improved since 2010 but has declined slightly in the 2017 with some increases in nutrients



CONTAMINANTS
IN SEDIMENT

Sediment quality sampling was carried out in 2010. Three sites at the Puhoi Estuary and seven sites at the Whangateau Estuary were sampled for contaminants in the sediment. All sites had very low concentrations of contaminants and consequently fell into the ERC green category for copper, lead and zinc.



ECOLOGICAL
HEALTH

The overall ecological health grade for this reporting area remains unchanged. It is important to note that the ecological grade is derived from sites within the monitored estuaries and does not reflect the wider coastal environment. Individual site grade within Puhoi ranged from 'extremely good' to 'unhealthy', and 'good' to 'moderate' in Whangateau. Grades generally improve towards the mouth of the estuaries.

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. 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 or call us on 09 301 0101.

GET INVOLVED

Auckland Council provides more than 20 environmental programmes across the region that you can get involved in. To find out more on how you can help visit: aucklandcouncil.govt.nz