

HIBISCUS COAST/EAST COAST BAYS REPORTING AREA

Includes Devonport-Takapuna, Hibiscus and Bays, Waiheke and Rodney local boards

STATE OF AUCKLAND MARINE REPORT CARD

2018



QUICK FACTS

THERE ARE ONLY AROUND 200 KNOWN **BRYDE'S WHALES** (PRONOUNCED BROODERS) IN NEW ZEALAND, WITH MOST SIGHTINGS IN THE HAURAKI GULF

OVERALL SPECIES ASSEMBLAGES **ON ROCKY REEFS** REMAIN SIMILAR TODAY TO WHEN MONITORING BEGAN IN **1999**

WATER QUALITY

F	E	D	C	B	A
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CONTAMINANTS IN SEDIMENT

F	E	D	C	B	A
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ECOLOGY

F	E	D	C	B	A
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The East Coast Bays and Hibiscus Coast reporting areas have been amalgamated to better align with freshwater catchment boundaries used for planning. As a result the grades from the previous reporting areas have changed.

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.

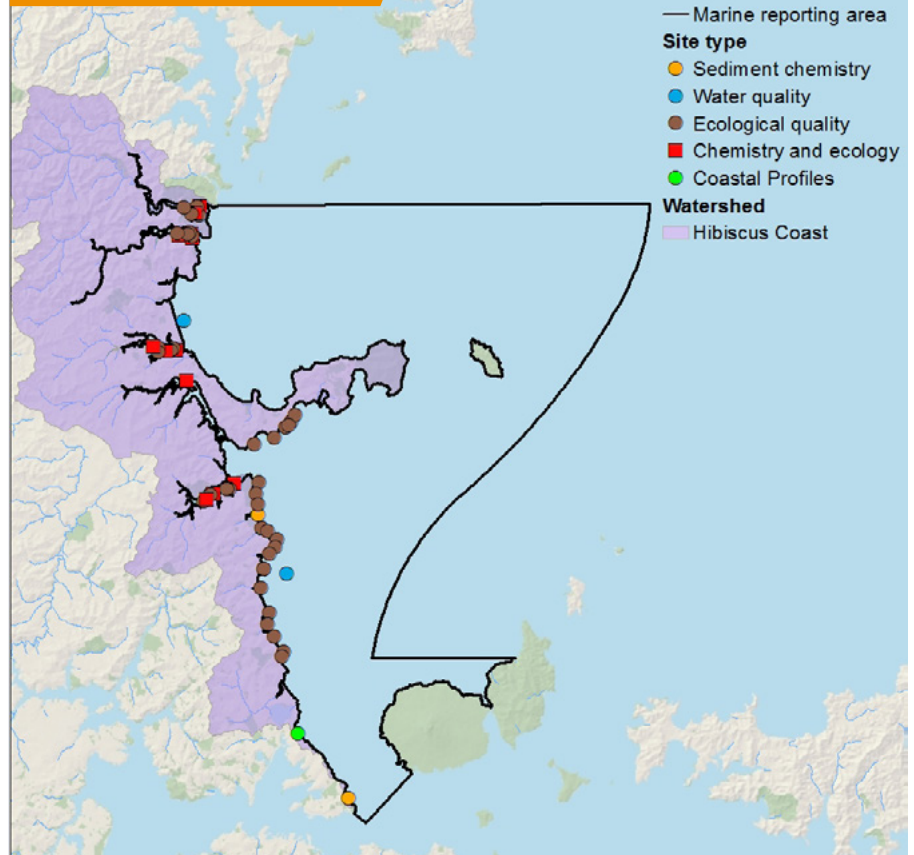
RANGITOTO ISLAND EMERGED FROM THE SEA AROUND 600 YEARS AGO, CREATING UNIQUE HABITATS AND EXTRAORDINARY FLORA AND FAUNA INCLUDING MARINE LIFE. THE ISLAND HAS HAD AN INTENSIVE PEST ERADICATION PROGRAMME AND WAS **DECLARED PEST FREE IN 2011**

THE LONG BAY - OKURA MARINE RESERVE

SUPPORTS A VAST VARIETY OF COASTAL HABITATS FROM ROCKY REEFS, SANDY BEACHES, ESTUARINE MUDFLATS AND MANGROVES



HIBISCUS 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

A slight change in the boundary of the Hibiscus Coast report card since 2016 resulted in the inclusion of a second water quality site at Orewa that has been sampled since 1991. Water quality was graded as 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 (TR2018/027). Applying the new method to previous years, water quality at Browns Bay has increased over time. The water quality at Orewa has also increased over time but was lower in 2016 than previous years.



CONTAMINANTS IN SEDIMENT

Sediment quality sampling began in 1998. Contaminant build up in sediments in more open coastal areas is limited by relatively high wave energy, which tends to disperse fine sediments and associated contaminants widely. All sites, (coastal and estuarine), had low concentrations of metal contaminants and fell into the ERC green category for copper, lead and zinc.



ECOLOGICAL HEALTH

The ecology grade for this area is based on estuarine sites and it is important to note that the grade does not represent the wider coastal environment. The area includes Okura, Orewa, Waiwera, one site in Weiti and as a result of a boundary change also now Puhoi. There has been no change in the overall ecology grade since 2014. Ecological health was generally ranked as 'good' or 'extremely good' near the mouth of the estuaries, declining to 'moderate' or 'poor' up the estuaries. The one site in the Weiti Estuary received a 'poor' grade. Monitoring of rocky reefs around the Hauraki Gulf indicates that the diversity and abundance of species remain relatively stable since monitoring began in 1999. One change to note is the establishment of the invasive pest, Mediterranean fan worm (*Sabella spallanzanii*) at sites both inside and outside the Okura-Long Bay marine reserve.

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