WEST COAST REPORTING AREA 2018

Includes Waitākere Ranges Local Boards

FRESHWATER REPORT CARD



The grades are made up of the following indicators:

Water quality: Water samples are tested for a range of parameters including temperature, pH, dissolved oxygen, nutrients and E. coli. The results for each site are compared against reference sites for Auckland to produce a water quality index.

Hydrology: Stream reaches are assessed for how well connected they are to upstream and downstream reaches, and the floodplain.

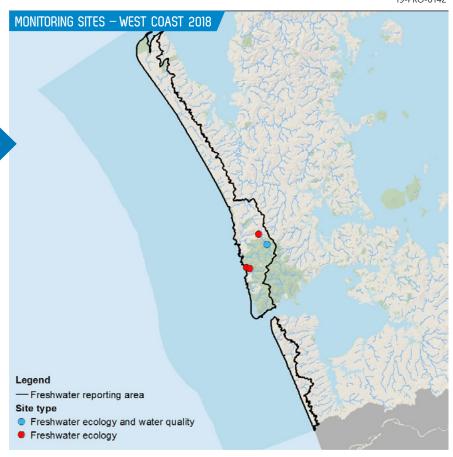
Habitat quality: The diversity and quality of habitats both in the streams and in the riparian margins is assessed.

Biodiversity: Field assessments are made to determine the type and amount of native plants and animals. Stream macroinvertebrate samples are also collected to assess the diversity and tolerance levels of the macroinvertebrate community.

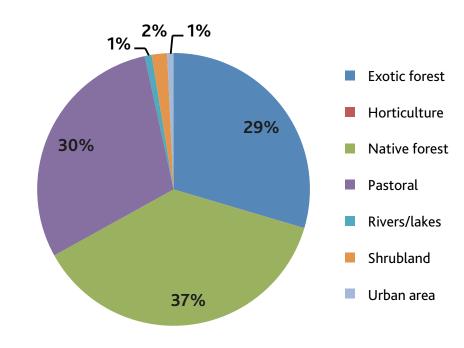
Each indicator is made up of several parameters. These grades represent a summary of indicator results from 2016 and 2017 from individual sites which are amalgamated for each reporting area to provide an indicator grade.

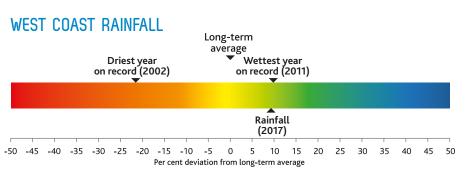
These report cards are not designed to track trends or report on National Policy Statement for Freshwater (NPS-FM) attributes which relate to specific parameters and bands. Note that grades given to amalgamated results or indicators here do not relate to the grades assigned to individual parameters in the NPS-FM.

More detailed analyses on sites and trends are presented in technical reports available on Knowledge Auckland.



WEST COAST LAND COVER





Mean rainfall in 2017 (1416 mm) was 9 per cent greater than the long-term average (1302 mm). The longest rainfall record in the West Coast reporting area is 10 years at the Piha station.

MONITORING BACKGROUND AND INTERPRETATION

Auckland Council's State of the Environment (SOE) monitoring has been building a record of Auckland's environment for more than 25 years. This information is critical to the effective management of Auckland's natural environment.

The monitoring programme shows there is a strong relationship between the health of the rivers and the type of land cover in the surrounding catchment. Rivers that drain forested catchments (particularly native forests) typically have excellent water quality and ecological health, while rivers that drain urban catchments generally have poor water quality and ecological health.

The West Coast reporting area is predominantly forested and as a result the health of the area's rivers is considered to be excellent. Rivers in this reporting area tend to have riparian margins with plenty of trees and bush, which provide shade, leaf litter and woody debris to the stream. These additions to the stream enhance the quality of flora and fauna which anchor the stream banks.

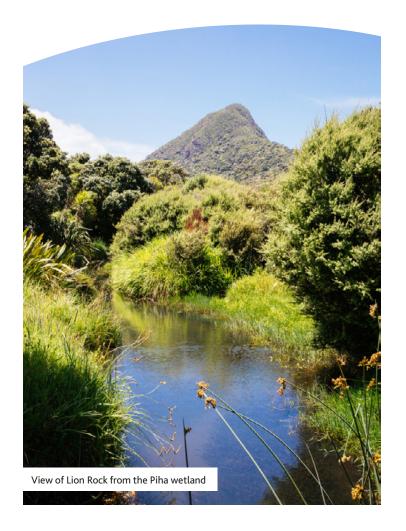
The absence of urban development means there is very little channel modification or pollution from discharges or stormwater.

SPOTLIGHT ON WEST COAST

The Biodiversity Team at Auckland Council put a case to the Parks Acquisition Committee in 2015 to purchase the former Ministry of Education wetland and buildings at Piha. The Piha Education Trust established an education centre which achieved much in terms of weed control and planting in the wetland. Paths were also created to improve access and allow interaction with the wetland. When the Ministry of Education chose to sell the wetland, Auckland Council purchased and added it to the regional park.

Piha Stream contains an array of species including giant kokopu, lamprey and shortjawed kokopu and the acquisition secures the long-term protection of this now underrepresented ecotype in Auckland and maintains an effective and vital buffer along this length of stream.

It is hoped that the purchase will also help build the Piha community's interest in the wetland. Awareness of the attributes and restoration potential of the site remains high within the community, as does a willingness to advocate and contribute, the latest example being a wetland workshop run by the community focussed on this wetland and a few other local wetlands of note. Piha Wetland was among a number of open space acquisitions settled in 2017/18.



FIND OUT MORE

This report card is part of a series prepared by the 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

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