

# HIBISCUS COAST REPORTING AREA 2018

Includes Rodney, Hibiscus and Bays, Devonport-Takapuna and Kaipatiki Local Boards

## STATE OF AUCKLAND FRESHWATER REPORT CARD

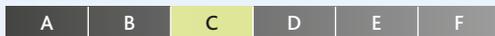
### WATER QUALITY



### HYDROLOGY



### HABITAT QUALITY



### BIODIVERSITY



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.

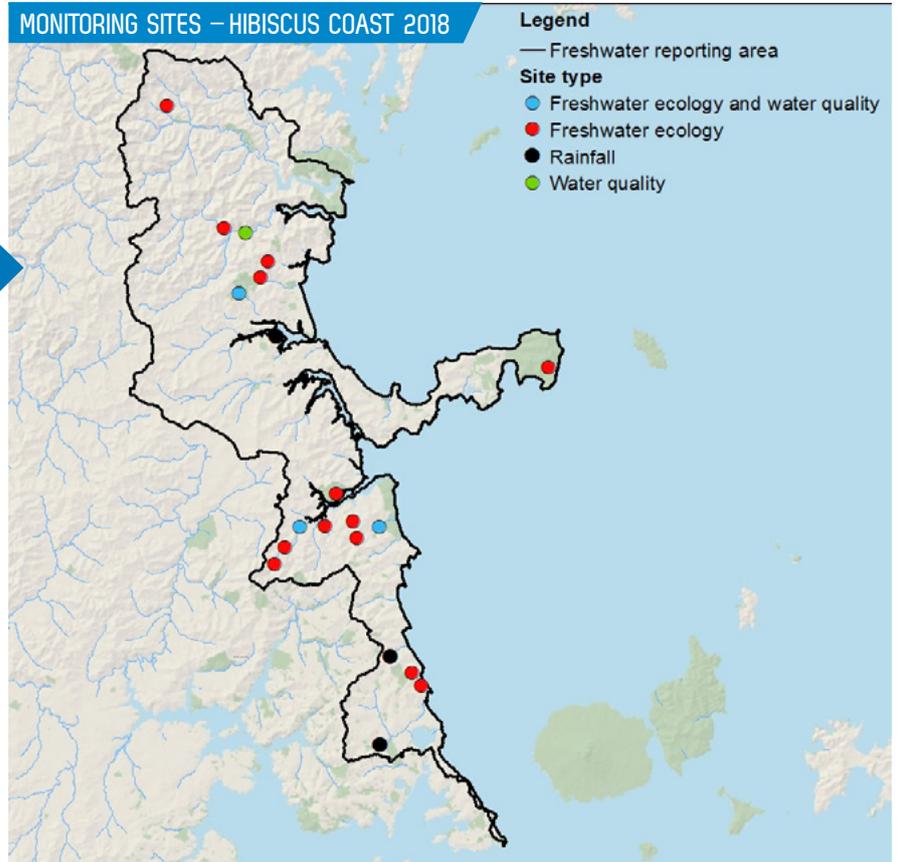
**Biodiversity:** Field assessments are made to determine the type and amount of native plants and animals. Stream macroinvertebrate samples are also collected to assess the diversity and tolerance levels of the macroinvertebrate community.

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.

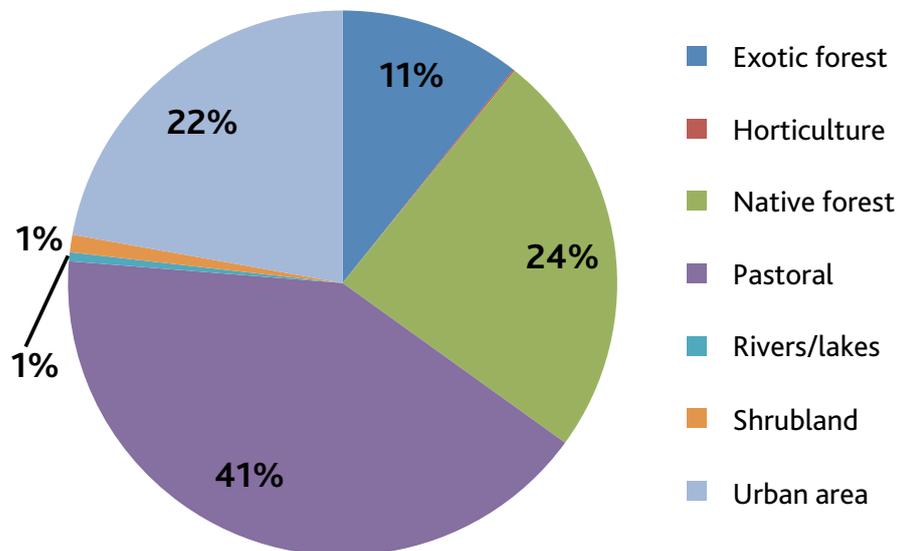
These report cards are not designed to track trends or report on National Policy Statement for Freshwater (NPS-FM) attributes which relate to specific parameters and bands. Note that grades given to amalgamated results or indicators here do not relate to the grades assigned to individual parameters in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

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

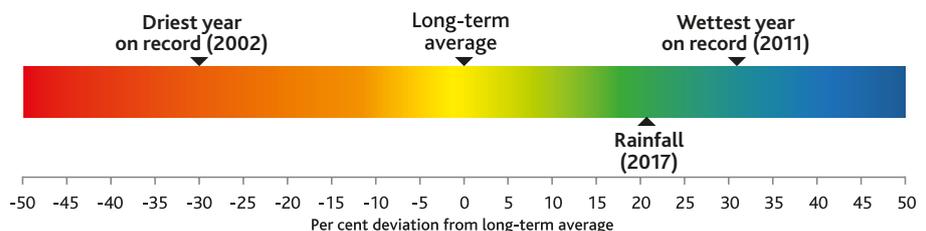
### MONITORING SITES – HIBISCUS COAST 2018



### HIBISCUS COAST LAND COVER



### HIBISCUS COAST RAINFALL



Mean rainfall in 2017 (1474 mm) was 22 per cent greater than the long-term average (1208 mm). The longest rainfall record in the Hibiscus Coast reporting area is 44 years at the Wairau testing station site.

## 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 overall health of the Hibiscus Coast rivers is considered to be relatively impaired compared to reference sites. Urban development has led to increased impervious surface areas which prevents rainfall from soaking into the ground. This can have flow on effects such as high water temperatures, changes to natural flow patterns and increased pollution from contaminated stormwater.

### SPOTLIGHT ON HIBISCUS COAST

The Hibiscus and Bays Local Board funded an investigation into two sites (Nukumea Stream in Orewa and Rothesay Bay stream in the East Coast) for their potential for inanga spawning. Volunteers helped to map the saline wedge at both sites and install and check artificial inanga spawning habitat for eggs during the spawning season (March to June). Because of this project, a new inanga spawning site was identified on the

Rothesay Bay Stream. Students from Orewa North Primary and Orewa Primary Schools also monitored water quality, assessed stream health, investigated stream life and monitored pest activity on the Nukumea Stream at Alice Eaves Reserve. At the end of the project, students were able to come up with actions that could help protect and restore this valuable stream.



The Nukumea Stream at Alice Eaves Reserve

### 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](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.

### 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](http://aucklandcouncil.govt.nz)