

# HIBISCUS COAST REPORTING AREA

Hibiscus and Bays Local Board

## STATE OF AUCKLAND FRESHWATER REPORT CARD

JULY 2014

AREA  
GRADE

A

### QUICK FACTS

THE REPORTING  
AREA COVERS  
**78KM<sup>2</sup>**  
REPRESENTING 1.6%  
OF THE REGION

LAND COVER IS A MIX OF  
PASTORAL VEGETATION

**(39%)**

URBAN (27%), NATIVE  
VEGETATION (20%) AND  
EXOTIC VEGETATION (13%)

THE EXTENT OF  
IMPERVIOUS SURFACE  
(HARD SURFACES) IS HIGH

**(14%)**

WHEN COMPARED  
WITH THE REGIONAL  
AVERAGE OF 9%

### WHAT MAKES UP THIS GRADE?

#### OVERALL GRADE



#### WATER QUALITY



#### FLOW PATTERNS



#### NUTRIENT CYCLING



#### HABITAT QUALITY



#### BIODIVERSITY



The overall grade is made up of five indicators:

**Water quality:** Water samples are tested for temperature, oxygen concentration, turbidity and the levels of pH, ammonia and nutrients (nitrogen and phosphorus). The results of this testing are compared against guidelines for Auckland to produce a water quality index.

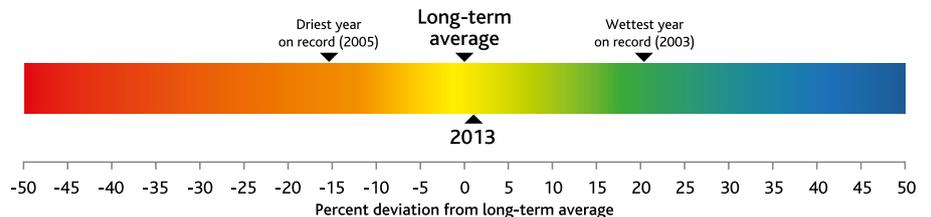
**Flow patterns:** This involves monitoring the hydrologic connectivity of the river to upstream and downstream reaches and the floodplain using the Stream Ecological Valuation (SEV), which is a method of assessing the ecological health of our rivers.

**Nutrient cycling:** This involves monitoring the inputs and processing of minerals, particulates and contaminants using the SEV biogeochemical functions.

**Habitat quality:** This involves monitoring the diversity and quality of habitats using the SEV habitat provision functions.

**Biodiversity:** Field assessments and samples are collected to assess the type and amount of native plants and animals using the SEV biodiversity functions.

#### Annual Rainfall 2013



Total rainfall in 2013 (1241 mm) was 1.6% more than the long term average (1221 mm). There are 17.7 years of rainfall record from the Orewa rain gauge.

#### HIBISCUS COAST MONITORING SITES



## MONITORING BACKGROUND AND INTERPRETATION

Auckland Council's State of the Environment (SoE) monitoring programme 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, after all, you can't manage what you don't monitor.

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

The health of the rivers in the Hibiscus Coast reporting area is very good. The relatively low intensity of the urban development, together with the large areas of forested land remaining, means the effects of urban development in this area are not as strong as elsewhere in the region.

Rivers in the Hibiscus Coast reporting area tend to have riparian margins with some trees and bush, which provide shade, leaf litter and woody debris to the stream and anchor the stream banks. The debris enhances the quality of habitat for flora and fauna, although some of the original riparian vegetation has been removed to allow for more intensive land use.

### WAI CARE HIBISCUS AND BAYS

Wai Care is a water quality education, monitoring and action programme managed by Auckland Council, for schools and community groups in the Auckland region.

The programme aims to educate people about freshwater issues and encourage and facilitate action in the local community, from water quality monitoring to streamside planting and litter clean-ups.

The following table shows achievements of the Wai Care Programme in Hibiscus and Bays during the 2013/2014 financial year.

Achievement	Total Hibiscus and Bays 2013/2014	Total Auckland 2013/2014
Active groups	6	138
Sites monitored	6	142
Monitoring sessions	34	246
Education sessions	3	198
Students involved in education	133	7704
Action events	0	82
People involved in action	0	2274
Native trees planted	0	16,140



Photo: Wai Care water quality testing kit used by school and community groups

#### Highlights

In December 2013, 30 students from Pinehill Primary School joined Wai Care at the Sanders reserve. The students learnt how to test the water quality and enjoyed identifying the macroinvertebrates from the stream.

For more information on Wai Care, or to view site data for your area, go to [www.waicare.org.nz](http://www.waicare.org.nz) or call 09 3010101 and ask for Wai Care.

### FIND OUT MORE

This report card is part of a series prepared by the Auckland Council's Research, Investigations and Monitoring Unit, which undertakes monitoring and research to provide information and evidence to inform the council's activities and reporting. Auckland's environment must be healthy and resilient in order

to support life and lifestyle. More report cards can be found at: [aucklandcouncil.govt.nz/stateofauckland](http://aucklandcouncil.govt.nz/stateofauckland). The report card series includes reporting on freshwater, terrestrial, marine, air, soil, capacity for growth, demographics and quality of life.

### GET INVOLVED

Auckland Council provides more than 20 environmental programmes across the region for you to get involved with and improve your local environment.

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