

PUKEKOHE REPORTING AREA

Franklin Local Board

AUGUST 2016

AREA
GRADE

D

STATE OF AUCKLAND FRESHWATER REPORT CARD

QUICK FACTS

WHAT MAKES UP THIS GRADE?



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.

THE REPORTING
AREA COVERS
271KM²
REPRESENTING 5.5% OF
THE REGION – THE EIGHTH
LARGEST REPORTING AREA

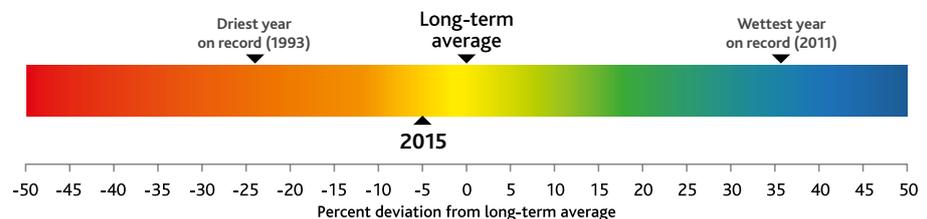
LAND COVER IS MAINLY
PASTORAL VEGETATION
(78%)
BUT IT ALSO CONTAINS THE
REGION'S LARGEST AREA OF
HORTICULTURAL LAND (4072HA)

THE EXTENT OF
IMPERVIOUS SURFACE
(HARD SURFACES) IS LOW

(4%)

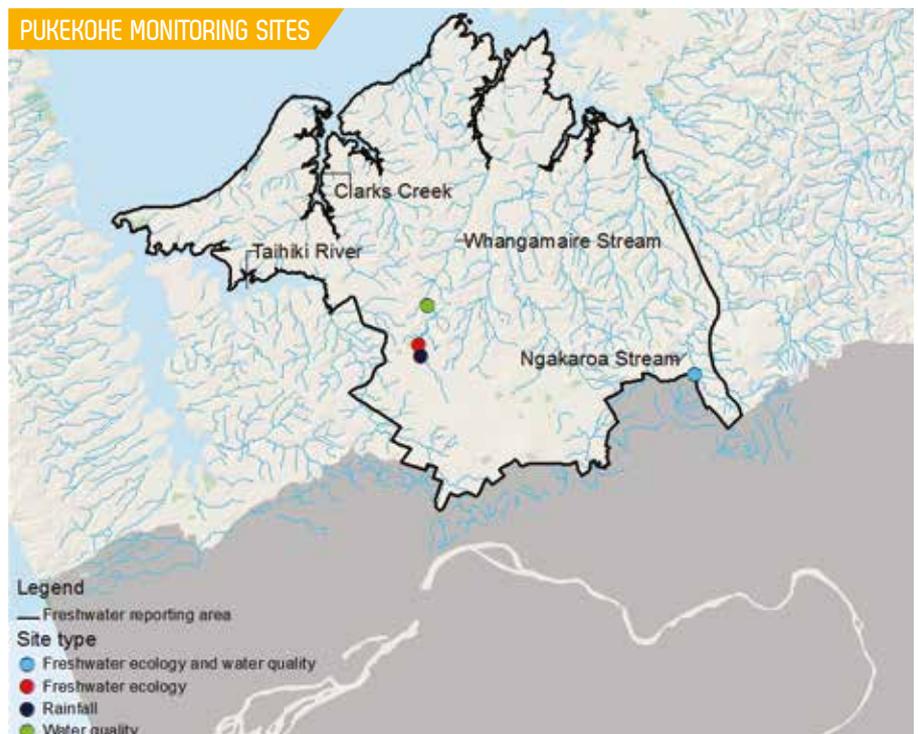
WHEN COMPARED WITH THE
REGIONAL AVERAGE
OF 9%

Annual Rainfall 2015



Total rainfall in 2015 (1251mm) was 4.9% less than the long-term average (1316mm). There are 23.2 years of rainfall record from the Patumahoe rain gauge.

PUKEKOHE 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 Pukekohe reporting area is predominantly pastoral land use, but with a large area of intensive horticulture. As a result, the health of the area's rivers is considered to be impaired. Rivers in this 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 much of the original riparian vegetation has been removed to allow more intensive land use.

The low level of urban development means there is little channel modification or pollution from discharges or stormwater, although there may be diffuse sources of contaminants from the pastoral and horticultural land use and physical damage from stock access.

WAI CARE FRANKLIN



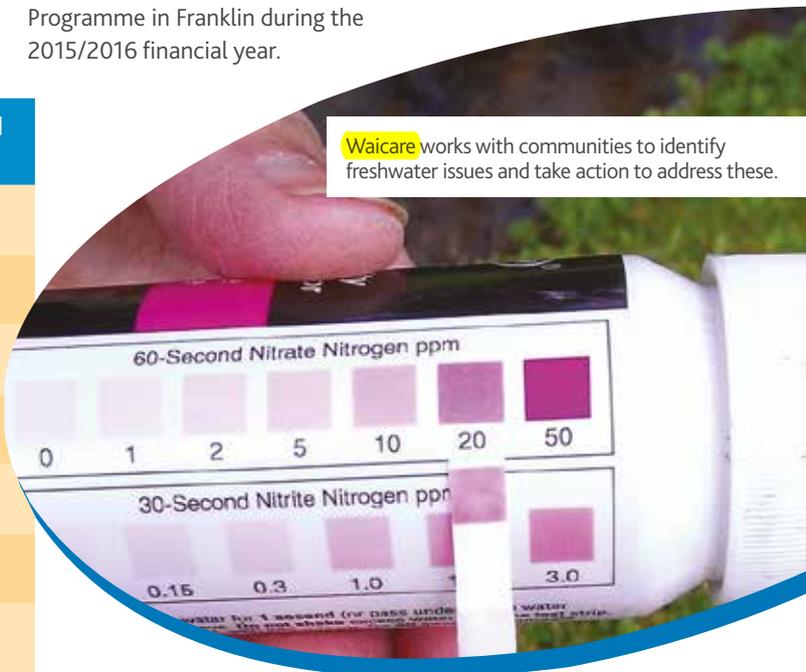
Wai Care is a water quality education, monitoring and action programme managed by Auckland Council, for schools and community groups in the Auckland region.

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 Franklin during the 2015/2016 financial year.

The programme aims to educate people about freshwater issues

Achievement	Total Franklin 2013/2014	Total Auckland 2013/2014
Active groups	13	152
Sites monitored	19	256
Education sessions	33	373
Students involved in education	1259	11118
Action events	14	106
People involved in action	761	4217
Native trees planted	5150	28577



Waicare works with communities to identify freshwater issues and take action to address these.

For more information on Wai Care, or to view site data for your area, go to waicare.org.nz or call 09 301 0101 and ask for Wai Care.

FIND OUT MORE

This report card is part of a series prepared by Auckland Council's Research and Evaluation Unit (RIMU), which provides the mandatory and critical evidence to support the council's decision-making, activities and reporting. Report cards and the latest full State of the Environment Report can be found at aucklandcouncil.govt.nz/stateofauckland

To view technical publications visit aucklandcouncil.govt.nz/EN/planspoliciesprojects/reports/technicalpublications/Pages/home.aspx

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 the Auckland Council website.