

### **Waterway Health Report Card 2019**

## Huritini-Halswell River catchment

Christchurch city has more than 200 kilometres of waterways within five main river catchments – Ōtākaro-Avon, Ōtūkaikino, Pūharakekenui-Styx, Ōpāwaho-Heathcote and Huritini-Halswell. We assess the health of each catchment, testing water and sediment quality and monitoring habitat, plants, insects, fish and periphyton such as algae.



**Source** Halswell

**Mouth**Te WaihoraLake Ellesmere

Report score

41 kilometres

D

Length

**Elevation** 1-26 metres above sea level Land use

Semi-rural (parks, reserves, lifestyle blocks and agriculture) and urban (residential, commercial and industrial)



### **Assessing waterway health**

We measure the health of each waterway using a Water Quality Index (WQI), a Sediment Quality Index (SQI) and the Quantitative Macroinvertebrate Community Index (QMCI).

See more at ccc.govt.nz/environment/water/waterways/waterway-monitoring

#### Water Quality Index (WQI) Score

We use a WQI specific to Christchurch waterways. Each monitoring site is scored against guideline levels for copper, zinc, pH, suspended solids, dissolved oxygen, temperature, ammonia, nitrogen, phosphorous, biochemical oxygen demand and *Escherichia coli*. The median across the catchment is graded:

A = 90 - 100 (very good)

B = 80 - 89.9 (good)

C = 70 - 79.9 (fair)

D = 40 - 69.99 (poor)

E = 0 - 39.9 (very poor)

Huritini-Halswell catchment WQI score: D

#### **Sediment Quality Index (SQI) Score**

We use a SQI specific to instream sediment of Christchurch waterways. This index is scored against guideline levels for copper, lead, zinc and polycyclic aromatic hydrocarbons. The median across the catchment is graded:

A = 90 - 100 (very good)

B = 80 - 89.9 (good)

C = 70 - 79.9 (fair)

D = 40 - 69.99 (poor)

E = 0 - 39.9 (very poor)

Huritini-Halswell catchment SQI score: A

The Halswell River-Huritini catchment overall score is D





# **Quantitative Macroinvertebrate Community Index (QMCI) Score**

The QMCI assesses the macroinvertebrate species (organisms with no spine) present and their tolerance to pollution, to determine a waterway's likely water quality. The index values are converted to scores for grading the catchment:

A = 6.00+ (excellent; clean water)

B = 5.00 - 5.99 (good; likely mild pollution)

C = 4.00 – 4.99 (fair; likely moderate pollution)

D = 0 - 3.99 (poor; likely severe pollution)

Huritini-Halswell catchment QMCI score: C

#### **Contact us**

Dr Belinda Margetts, Principal Waterways Ecologist

© 03 941 5943

belinda.margetts@ccc.govt.nz

