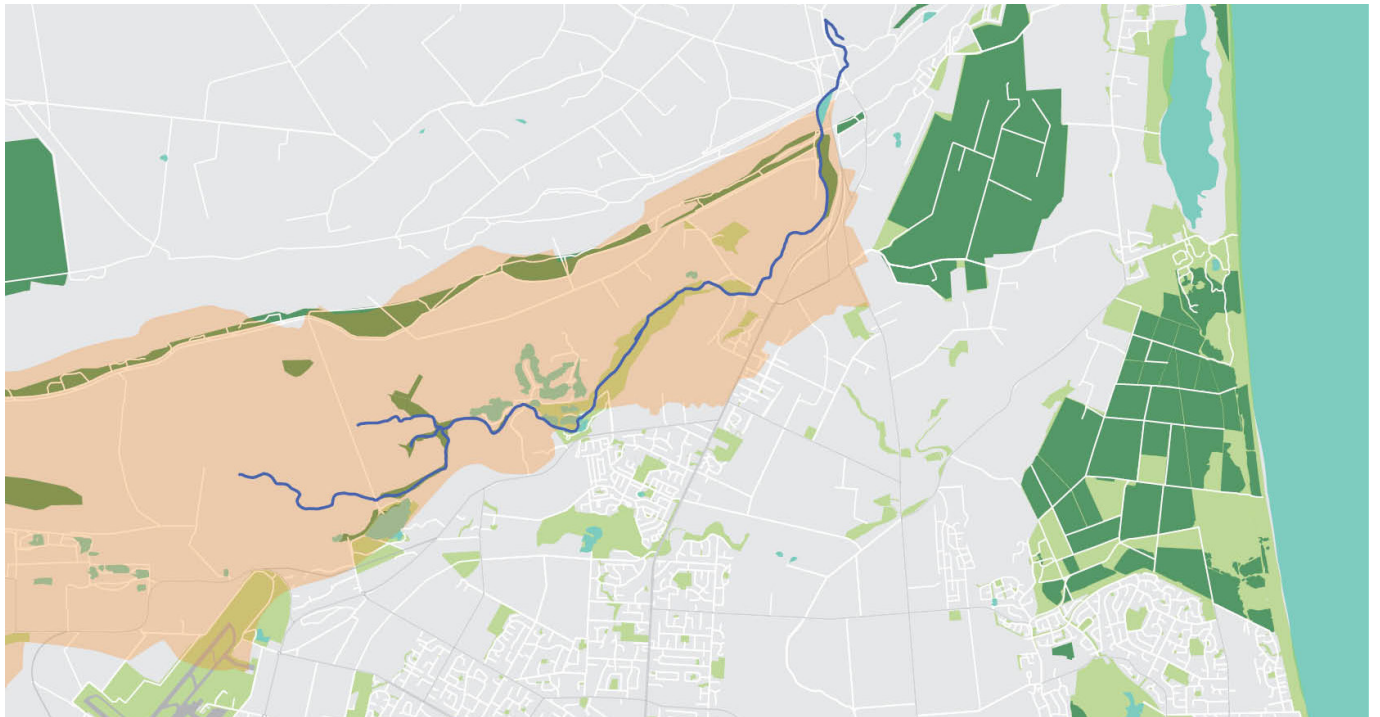


Waterway Health Report Card 2023

Ōtūkaikino River catchment

(Waimakariri River South Branch)

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

McLeans Island

Report score

C

Elevation

3-34 metres above
sea level

Land use

Rural (parks, reserves
and agriculture) and
urban (residential)

Mouth

Waimakariri River

Length

13 kilometres



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)

Ōtūkaikino catchment WQI score: **B**

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)

Ōtūkaikino catchment SQI score: **A**

The Ōtūkaikino catchment overall score is **C**

Contact us

-  Quality and Compliance Team, Three waters
-  waterbodyecology@ccc.govt.nz



Credit: Boffa Miskell

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)

Ōtūkaikino catchment QMCI score: **C**