ARARIRA / LII

TE WAIHORA / LAKE ELLESMERE

CATCHMENT AREA 6,600 ha

76km of council drains Approx. 75km of private drains

Living Water is trialling approaches in this rural catchment to transform the drainage network into a healthy freshwater ecosystem

Map 1st Edition - MAY 2020

Te Mana Ararira partnership

We are working with Te Taumutu Rūnanga to build capacity and capability for mana whenua to rejuvenate the mauri of Te Waihora.

Progress: In 2018 we established the Te Mana Ararira Advisory group, a specific forum that allows us to engage proactively with mana whenua.

A cultural health assessment of waterways from Lincoln to the Lake was completed in October 2019, a second one will be carried out in 2023.

Partnering on Waterways

We are working with Selwyn District Council and Te Taumutu Rūnanga to redesign how drains are managed. This new approach to management will continue to provide landowners with drainage and will also allow Iwi and the wider community to reconnect with a healthy freshwater environment.

The University of Canterbury is supporting our work with catchment wide water quality monitoring and advice on alternative drain management approaches.

Aim: By trialling alternative approaches to managing classified drains as waterways across a whole district we hope to develop a 'recipe' that other councils around New Zealand can use.

> Blue lines indicate drainage network Blue dots indicate water monitoring sites

Waterway Management Trials

Current waterway management uses diggers and tends to release large amounts of sediment and destroy habitat for native animals. We are trialling a few different ways of rebattering, planting, creating flow variability and tools such as sediment traps to improve water quality, increase habitat for wildlife, allow access to mahinga kai and reduce the need for mechanical clearance.

Progress: Trial area established along approx 4km of drains/waterways. A 2019 survey in our trial reach saw an increase in the number of fish (compared with 2017 baseline survey), as well as the abundance of native vegetation water quality clarity and habitat improvements while still providing drainage.





Both were present at a number of sites in our 2019 Cultural Health Assessment.

Riparian plantings & Fencing

In several key areas riparian planting and management have been used to restore and enhance waterways. Plants stabilise the banks and help prevent land erosion while also increasing the habitat for native wildlife. Fencing has been installed or moved back for better protection of waterways.



Te Waihora / Lake Ellesmere



Fact Sheet: Ararira/LII Catchment

July 2021

About the area

The Ararira/LII River is a significant spring-fed tributary of Te Waihora/Lake Ellesmere, New Zealand's fifth largest lake and an important wetland ecosystem. Te Waihora has special significance to Ngāi Tahu as a tribal taonga representing a major mahinga kai and an important source of mana.

Unique features of this catchment include headwater springs, an extensive network of drains and waterways, and two wetland areas – Yarrs Flat and Yarrs Lagoon/Tā-rere-kau-tuku. The catchment's network of highly modified waterways and remnant wetlands provide some habitat for native fish, bird and plant species although it is severely degraded.

The Challenge

In the Ararira-LII River catchment there has been a significant loss of wetland, freshwater ecosystems and lowland habitat. Water quality is poor due to high levels of suspended sediment, nutrients (phosphorous) and faecal coliforms. Much of this has been caused by various productive land uses in the catchment and modification of the waterway, wetland and lagoon hydrology for drainage purposes.

Living Water's key focus is transforming the drain and water network into a healthy freshwater ecosystem in this productive agricultural landscape.

Projects include developing Farm Environment Plans for Fonterra farms in the catchment, trialling nutrient and sediment reduction interventions on farm, trialling in drain restoration approaches and working with strategic partners on a catchment-wide drain and water network improvement concept.

At a glance

- 6,600ha total catchment area
- 5 main types of farming (dairy, sheep, beef, deer, horticulture)
- 50% of the catchment is dairy farms
- Only 1% of the original vegetation remains on the Canterbury Plains

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