

Our progress 2020/2021



**35,000
ha**

We are working with farmers, scientists, councils, mana whenua and local communities across 35,000 ha in five catchments across New Zealand

72%

of Fonterra farmers engaged in Living Water catchments

up from 68% in 2020

48%

of Fonterra farmers implementing freshwater improvement actions in Living Water catchments

up from 40% in 2020



64

projects underway or completed

36

trials to see what can be scaled to improve freshwater

9

solutions that have been scaled or are being used by others

10

case studies completed about our trials



52

partnerships in place

1973

social media followers up from 1481 in 2020

10

projects are directly building iwi and hapū capacity and capability as kaitiaki for freshwater

12

Living Water projects that directly integrate Mātauranga Māori

Catchment highlights 2020/2021



Wairua, Northland

Mātauranga Māori: Monthly water quality monitoring and bi-annual fish surveys in the Okarika Pocket are now being done by Ngā Kaitiaki o Ngā Wai Māori, a hapū collective, combining western science and Māori knowledge in freshwater improvement initiatives. Hapū members volunteered with Living Water for two years to learn the methods. A cultural assessment for the state of the catchment using a newly developed WAlora app is planned for later in 2021.

On-farm support: We've completed 12 of 17 Farm Environment Plans in the Okarika Pocket and 20,000 natives have been planted on dairy farms. Over 100,000 natives have been planted to date along with 5km of waterways fenced.

Sediment and nutrient reduction: Monitoring of two detention bunds constructed in 2018 is now complete. One of the bunds was found to be effective at retaining water during intense rainfall and significantly reducing sediment and nutrient inputs. The second bund was less effective as it was not sized correctly for the catchment area. We're now working on sharing the results with farmers, councils and land managers to help with the knowledge base for the design and installation of these types of solutions.



Pūkoro-Miranda, Hauraki

Mountains to sea: Continued work with the Western Firth Catchment Group to fund mitigations such as planting, fencing and sediment traps in targeted areas based on the CAPTURE prioritisation.

Building community: Worked with the catchment community on predator trapping. A positive response from the community plus knowledge sharing has strengthened community engagement, leading to working together on more remediation projects.

Partnering for progress: The Tiaki Repo ki Pūkoro-Miranda Trust have nearly finished a restoration approach to expand critical shorebird habitat and improve neighbouring farm land's resilience to sea level rise. DOC, Living Water and Councils provided support and guidance to the community-based trust.



Waikato Peat Lakes, Lake Areare, Lake Ruatuna and Lake Rotomānuka

Sediment and nutrient reduction: Worked with neighbouring landowners at Lake Ruatuna to fence and plant high risk areas. The sediment traps were constructed where drainage enters the lake and have been planted with native rushes and Carex to provide shade and improve nutrient uptake.

Mātauranga Māori: Eleven varieties of harakeke are thriving in the Pā harakeke rongoā education trail. Progress continues with plans to add more varieties of rongoā plants, valued by māori for their medicinal values.

Keeping pests out: An adult koi carp barrier was installed at the outlet of Lake Ruatuna in May. Maintaining the koi free status of Lake Ruatuna is a priority to protect the lake from an increase in nutrients, sediment resuspension and effects to biodiversity.



Ararira-LII, Canterbury

Partnering for progress: Research from our two year collaboration with the University of Canterbury's CAREX research group has given us an understanding of the catchment's complex waterway network and highlighted flooding, excessive sediment, high nitrates, poor ecology/ habitat in waterways and invasive aquatic weeds as major issues. Trial interventions at carefully chosen locations are underway.

Sediment and nutrient reduction: A 'treatment train' - sediment trap, bioreactor, two-stage channel has been installed along one kilometre of an intermittent spring-fed waterway on a dairy farm to test how this approach can reduce contaminants. The waterway started flowing again in June 2021 so monitoring has begun.

Catchment scale change: We embarked on a project early in 2021 with Te Taumutu Rūnanga, Selwyn District Council, LII Drainage Committee and Environment Canterbury to take a catchment approach to redesigning the Ararira-LII drainage network to be more friendly for freshwater life. We hope the outcome of this project can be a blueprint for drainage network managers across New Zealand.



Waituna, Southland

Improving stream habitats: Fish have voted with their fins, the Waituna Creek restoration trial is a success. Seven years of research shows the diversity, abundance and biomass of fish was significantly higher around the instream habitat structures we installed. Having permanent places for fish to hide is really important if we want to keep them in our rural streams.

Sediment and nutrient reduction: Four Peak Run Off Control structures have been constructed and are being closely monitored with initial results showing they are working well to slow water flow during high rainfall. We will continue monitoring these though to spring 2022 to see how much nutrient and sediment they help to capture.

Partnering for progress: Through the collective efforts of the Whakamana Te Waituna Partnership, land purchased to help relieve flooding around Waituna Lagoon was transitioned back into Awarua Rūnanga ownership, allowing for better management of lagoon health and also enabling Awarua Rūnanga to reconnect with their whenua, practice kaitiakitanga and gather mahinga kai in their rohe.

