

# Makaretu

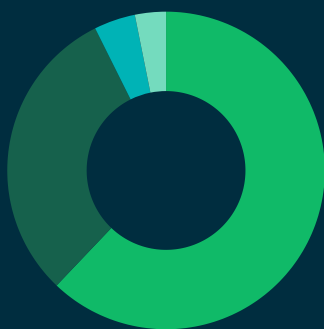


## SUB-CATCHMENT PLAN: SUMMARY

### MAKARETU AT A GLANCE

The Makaretu catchment spans 7869ha. Historically, the catchment's braided river system has been a valuable ecological feature, providing habitat for unique species. However, much of the native forest in the catchment has been cleared for agriculture, leaving only small remnants in the upper reaches.

Recognising the need for collective action, the Makaretu Catchment Group was formed in 2023, marking the first coordinated effort by local landowners to improve the catchment's ecosystem health. The group's primary goal is to enhance flood resilience and protect waterways and wetlands.



- Pasture
- Indigenous Forest
- Indigenous Scrub
- Exotic Forest

59 percent of the catchment is in pasture, 29 percent in indigenous forest and 4 percent in indigenous scrub. Notably, less than 3 percent of landcover is in exotic forest.

*"Tukituki Land Care (TLC) is tackling the big issues sub-catchment by sub-catchment, to piece together The Big Picture."*

**Richard Hilson**

Chair, Tukituki Land Care



SCAN FOR FULL REPORT





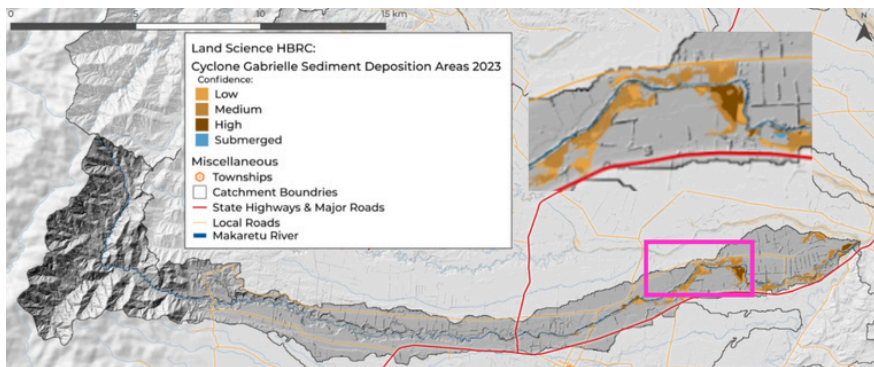
# MAKARETU CATCHMENT: CONTEXT

## LANDSCAPE CONTEXT

The Makaretu, at the downstream end of the catchment, is at risk of high flows and flooding events. The larger impacts of flooding will be challenging to alleviate as individual landowners or as a single catchment group. Some opportunity exists to reduce the impacts of localised flooding through soil

and flow attenuation structures like dams, detention bunds and riparian management.

SEDIMENT DEPOSIT AREAS OF THE MAKARETU



Understanding of priority areas for both soil conservation and flow attenuation/sediment capture has been developed through mapping collated in TLC's The Big Picture project.

FOR MORE INFORMATION HEAD TO [WWW.TUKITUKILANDCARE/MAKARETU](http://WWW.TUKITUKILANDCARE/MAKARETU)

## WATER QUALITY

The table below presents a five-year rolling average of water quality indicators for the Makaretu catchment. The standard reflects water quality thresholds set by the Tukituki Plan or national guidelines. Overall, water quality in the Makaretu catchment is considered good, with all measured parameters falling within the established standards.

Water Quality Parameter	Makaretu	Standard
Nitrogen (DIN)	0.466 mg/ L	0.8
Phosphorus (DRP)	0.01 mg/ L	0.015
Bacteria (E.coli)	100 (count)	260
Freshwater invertebrates (MCI)	108.87 (index)	100
Sediment (Turbidity)	1.79 mg/ L	4.1 FNU (light)



## LANDOWNER CONCERNS

At a December 2024 TLC workshop in the Makaretu catchment, landowners identified key challenges and priorities for managing the river and surrounding environment.

Major concerns include:

1. Communication from HBRC - particularly regarding gravel management. Attendees expressed frustration over the absence of clear contact points, limited community consultation, and a lack of updates on critical issues.
2. Gravel build-up - farmers are seeking clarity on problem areas and whether consents can be obtained for removal. Many also felt HBRC's approach to the issue had been largely reactive, with little proactive management in recent years.
3. Weed management - landowners noted that while HBRC had been active in the past, their presence and communication had recently declined. Landowners had no clear understanding of HBRC's long-term weed control plan.

Farmers also sought clarity on water quality parameters, particularly what measurements like Macroinvertebrate Community Index (MCI) and Dissolved Reactive Phosphorus (DRP) indicate and whether improving these metrics is feasible given the current riverbed conditions.



SCAN FOR FULL REPORT



## MAKARETU BASELINE REPORT

Farmers in the catchment, with support from TLC, have accessed expert advice through the Access2Experts programme to gather baseline data on the Makaretu River, providing a foundation for future efforts. One key recommendation from the report was to trial new plant species for edge protection. The group is now using a TLC Demonstration Grant to launch a community-driven planting project to put this recommendation into action. By combining scientific insights with local knowledge and collaboration, they aim to enhance the resilience and health of the Makaretu catchment for future generations. To view the baseline data report, visit [www.tukitukilandcare.org/makaretu](http://www.tukitukilandcare.org/makaretu).



# MAKARETU CATCHMENT: SUMMARY AND ACTIONS



Objective area	Primary Objective: Improve river management	Objective: Improve resilience	Objective: Improve water quality and ecology
	The community feels that river management in the catchment is out of their sphere of their influence and happening without their input.	This catchment is steep and narrow, creating high velocity flows. Due to the landscape shape, it is challenging to implement meaningful actions that improve resilience.	There is little natural ecosystems in the Tukituki catchment and ecological improvements can be hard fought and easily lost.
Impact	Poor communication and unknown strategic objectives for the river leads to mistrust between the community, HBRC and river management contractors.	Without weather resilience measures, impacts on lives, livelihoods, infrastructure and the economy.	Improving ecological systems in the catchment will likely support catchment and farm scale sustainability and resilience.
Priority action	Work with TLC staff to represent the interests of Makaretu residents with HBRC. Include immediate actions to improve communication, particularly around contractors and the community.	Reduce the impact of flooding through soil conservation, planting and stabilising streambanks with planting.	Prioritise animal pest control in vegetated areas. Focus restoration and planting in wetland and spring areas that are under-represented in the Tukituki.

WANT MORE DETAIL? HEAD TO [WWW.TUKITUKILANDCARE/MAKARETU](http://WWW.TUKITUKILANDCARE/MAKARETU)

Check out the online  
TLC Farmer Toolbox  
[www.tukitukilandcare.org/toolbox](http://www.tukitukilandcare.org/toolbox)

## MAKARETU CATCHMENT: NEXT STEPS

- Get involved with the Makaretu Catchment Group to review The TLC Catchment Plan, share knowledge and coordinate actions.
- Work with TLC and other impacted sub-catchment groups within the Tukituki to resolve issues with river management: gravel, weeds, flooding and erosion.
- Develop erosion management strategy. Consider poplar planting, oversowing with legumes, strategic fencing to retire or manage grazing, and native or exotic afforestation. Use [TLC's Surface Erosion Tool\\*](#), [TLC's On-Farm Action Planning Tool\\*](#) and [TLC's Plant Selection Tool\\*](#).
- Increase predator control.
- Connect with [local advisors\\*](#) for tailored advice and potential funding opportunities.
- Commit to TLC's THR3E: three practical steps you can implement on your farm over the next three years.

\* **The TLC Toolbox and the full catchment report are now available on the TLC website [www.tukitukilandcare.org](http://www.tukitukilandcare.org)**