

Factsheet 02

## Te Whakaheke o Te Wai

## Vision Mātauranga

Vision Mātauranga is a policy to unlock the innovation potential of Māori knowledge, resources and people to assist in creating a better future. In the Te Whakaheke o Te Wai Programme (TWOTW) we have explored mātauranga (knowledge and knowledge sharing processes) to better understand the Heretaunga Plains aquifer over time. Understanding the history of the catchment will help inform explorations of catchment restoration efforts and community decision making.



We have explored mātauranga relating to wai (water) in the Heretaunga Plains. Our experiences of knowledge sharing included:

- · hui and field site visits;
- mapping of waterways, wetlands springs, habitation and their changes over time;
- exploration of Māori Land Court documents; and
- · informal oral histories.

## Vision Mātauranga

Exploring indigenous knowledge sharing gives us a better understanding of how land and waterways have changed over time. A combination of groundwater mātauranga and other science allows us to make more informed water management decisions, relating to issues such as:

- restoration efforts (wetlands, native plantings)
- water use and limits (drinking water availability, irrigation).

Using a knowledge sharing approach, we have:

- developed a catchment biography showing changes in Bridge Pa hydrology over time (e.g., Pariatua Stream, see Figure)
- explored anthropogenic induced and natural changes
- linked the knowledge from the local lived experience with modern data measurements.



Our approach recognises that the Heretaunga Plains catchment is part of a complex socio-ecological system. Although challenging, knowledge sharing has supported a richer and more robust understanding of the catchment. Importantly, this work provides information to support community focused restoration and participation in resource management decisions.

Moore C., Aranui A., et. al., 2022. Model-Based processing of measured and historical stream behavior; seeking culturally meaningful environmental restoration. NZHS & MSNZ Joint Conference 6 – 9 December 2022, Otepoti Dunedin.

