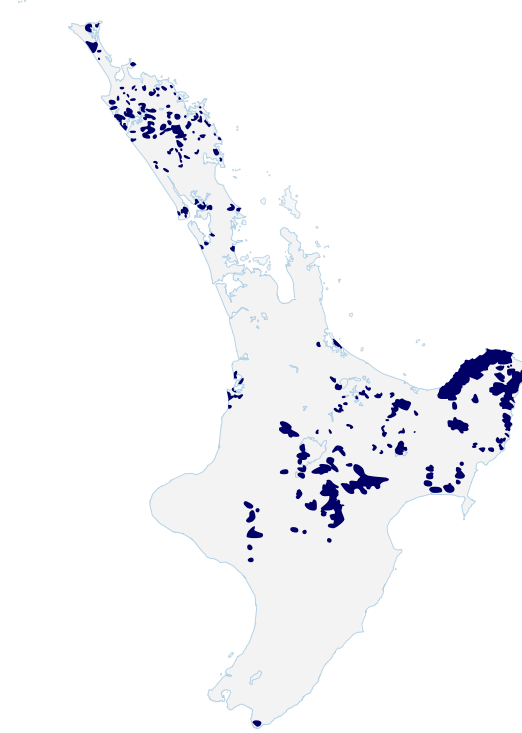


Cadence Kaumoana Chair, New Zealand Whānau Trust

Challenge ID 40: **Lacking historic knowledge on vegetation cover and surface water extent / river course**

Challenge ID 41: **Water pollution – care and protection, drinking quality, animal care**



Land-loss from 1860 – 2020

29 million acres – to 1 million acres

'Māori land loss, 1860-2000', URL: <https://nzhistory.govt.nz/media/interactive/maori-land-1860-2000>, (Ministry for Culture and Heritage), updated 21-Apr-2021

BLOCK : Waiwhakaata No 3E No 4E No 2A2

Print Block Details

| | |
|--------------------|---------------------|
| Block ID : | 33783 |
| District : | Waikato-Maniapoto |
| Title Order Type : | Partition Order |
| Title Order Ref : | 111 OT 33-40 |
| Title Notice Ref : | - |
| Title Order Date : | 17/10/1996 |
| Land Status : | Māori Freehold Land |
| Plan : | ML 22349 |
| LINZ Ref : | 5A058/600 |
| Area (ha) : | 29.2438 |
| Total Shares : | 82.9253 |
| Total Owners : | 33 |

Soil Report (from Landcare Research)
Soil report for this block (open in new window).





Waiwakaia
No 31 No 41
No 231

4530166

Waiwakaia
No 31 No 41
No 231

Section 4
Survey Office
Plan 39202
Block

Moutunui Rd

Te Kooi

- baselayer
- Goog
- Goog
- Goog
- Goog
- overlays
- All Ma
- Distr
- Regio

100 m
200 ft

Google

Indigenous Group – Who we are



Pirongia Maunga

Our ancestral mountain



Whānau members

A small gathering



Stardome Observatory

With the Prime Minister of New Zealand



Land Block

Chair of the Whānau Trust

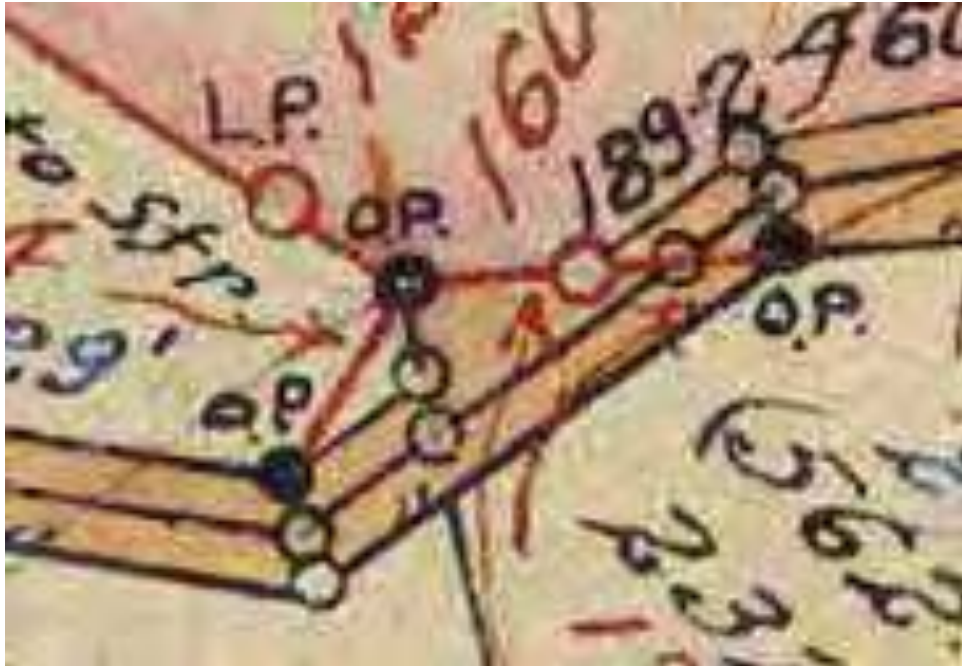
Process to addressing challenges

1. Obtain and review relevant data (UNOOSA support)
2. Research historical information (Local information)
3. Development and implementation plan development (Indigenous people level)
4. Resources and Support (funding)
5. Next Steps

1. Obtain and review relevant data
2. Research historical information



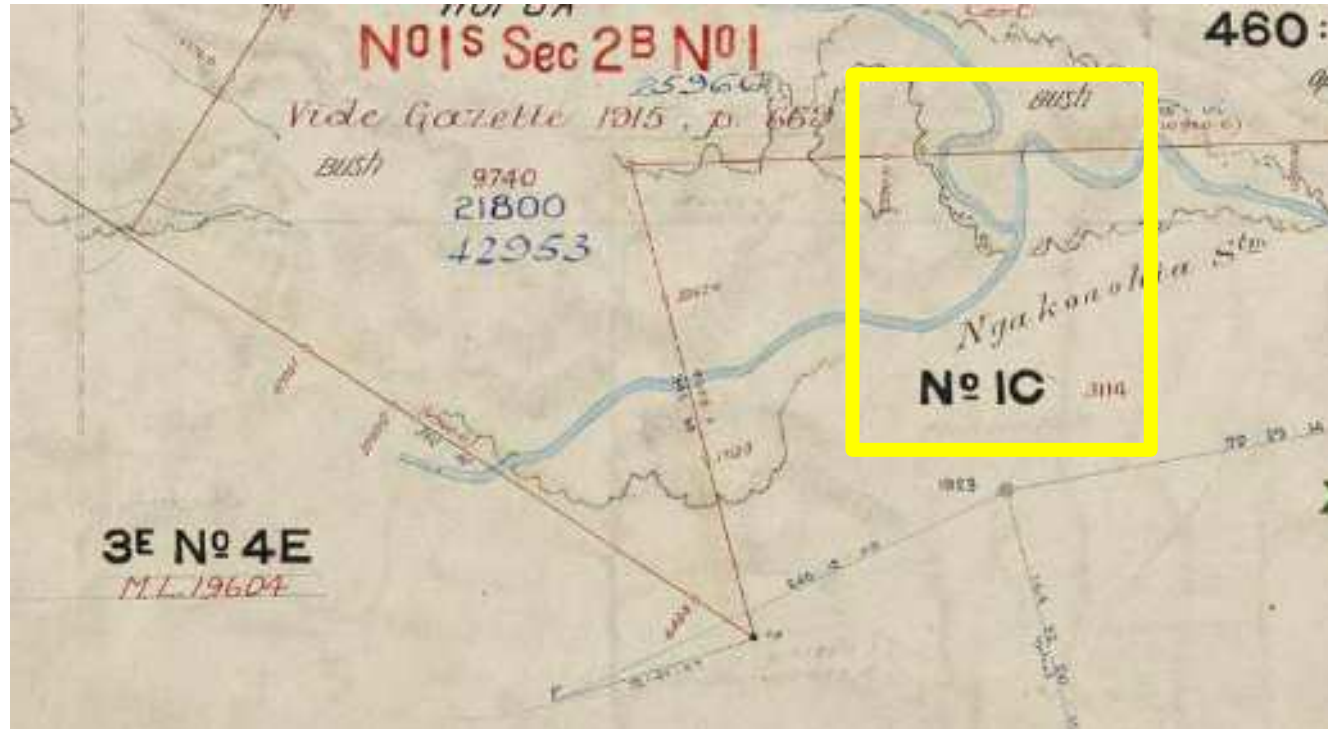
Location and survey peg information (1944)

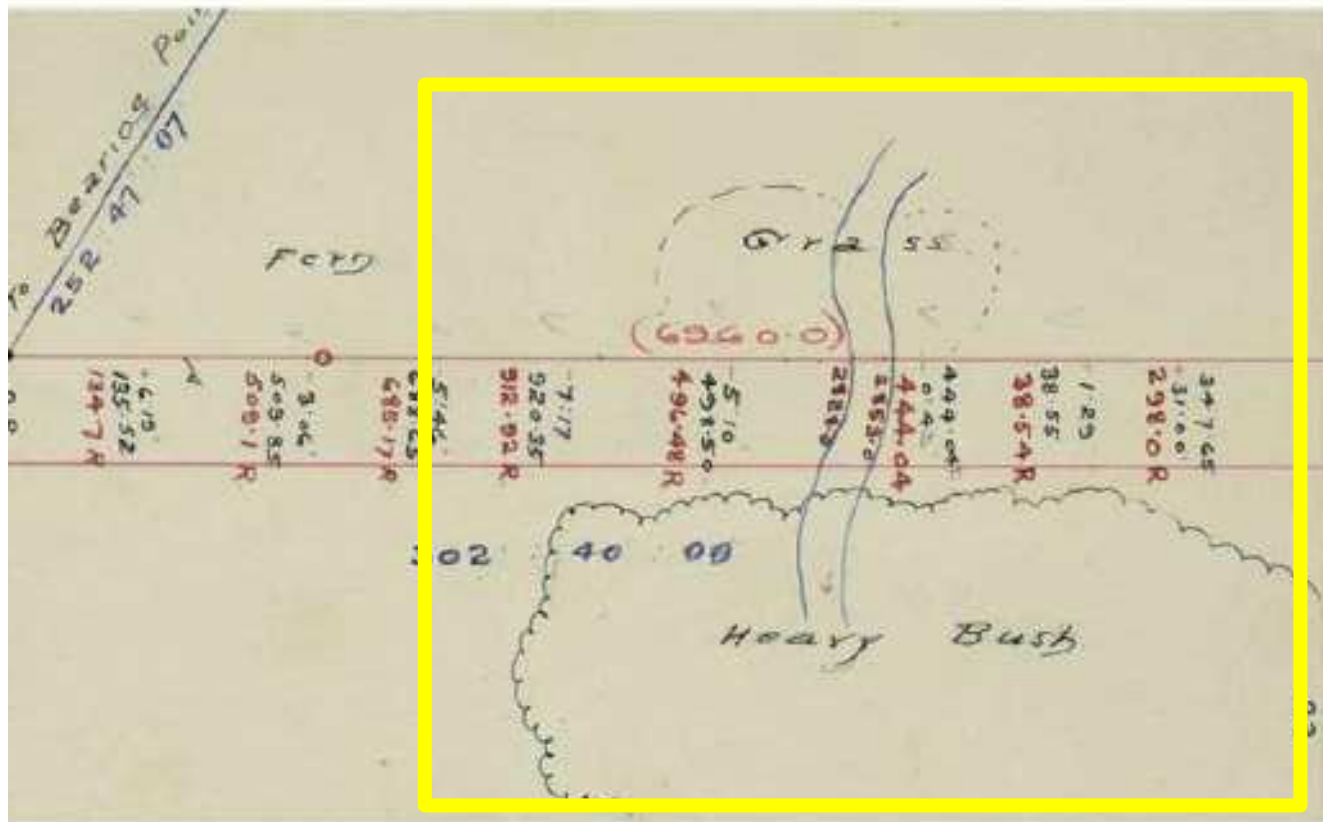


Vegetation
detail (1911)



Historical record of vegetation and stream-course (1911)





Historical record of vegetation and stream-course (1911)

3. Development and Implementation Plan



With no existing planting much of the bank alongside the stream is corroding, lack of plant life also impacts animal life – so the first goal was to plant!



With an idea of what has been there historically and engaging with local nursery experts we were able to identify and source locally grown plants.



We planned planting activities and gathered together and planted over 800 native trees and plants.



We also undertook water sampling.















Findings from Research

- Vegetation included: Fern, tutu, heather, manuka, grasses, bush.
- Water course: record of a spring at: 175.12963,-38.06559, (previously unidentified by local people), and another spring and 'swampy stream' with swamp symbology running from about 175.13318,-38.06879 to 175.13942,-38.06459. This still seems to exist on the aerial.
- Local knowledge confirmed plant species and locations.
- Initial water testing results are positive.

Water testing results

- Nitrate levels - below 1mgL-1
- pH levels - 7
- Temperature - >12°C
- Turbidity (colour and solids) - clear
- Oxygen, velocity and phosphorus testing requires technical testing support.
- Stream testing resources:

[National Stream Health Monitoring Kit](#)

[Waikato Regional Stream Test Guide](#)



4. Resources and Supports

- Local funding (to purchase materials, plants, contribute to travel costs, hireage, catering etc)
- Time (Indigenous group don't have funds to release them from their every-day employment to do this work, an add-on)
- People power (who will do the work!)
- Capability (research skills, leadership, cultural guidance)
- Specialist guidance/information (UNOOSA, Land Information New Zealand (LINZ), Elders, people-capability)

5. Next Steps

- Continue to monitor water over different seasons and years;
- Begin to track animal life within the stream;
- Continue to monitor plants, and continue with more planting along the stream;
- Secure fencing and resource consent for a bridge to limit pollution through the stream;
- Review the bush next to the stream for plant life and forest-health;
- Capture water for drinking.





The impacts

- This project has helped our people to reconnect to our land and waterways.
- Our people are significantly more involved in environmental care and protection.
- Our people are looking for ways to continue to improve our waterways and looking for ongoing restoration activities.
- We are yet to use the stream for drinking water – this is a work in progress.
- We are in the process of identifying the historical springs.



Thank you

Dr Cadence Kaumoana

Te Huia & Rangiwherowhero Whānau Trust

Aotearoa – New Zealand



Waikato Raupatu River Trust
Waikato Raupatu Kōwhiri Trust