

Open Data, Open Potential

Open data supporting agricultural sector and Māori land use decisions



Manaaki Whenua
Landcare Research



Manaaki Whenua
Landcare Research

Our Land, Our Future

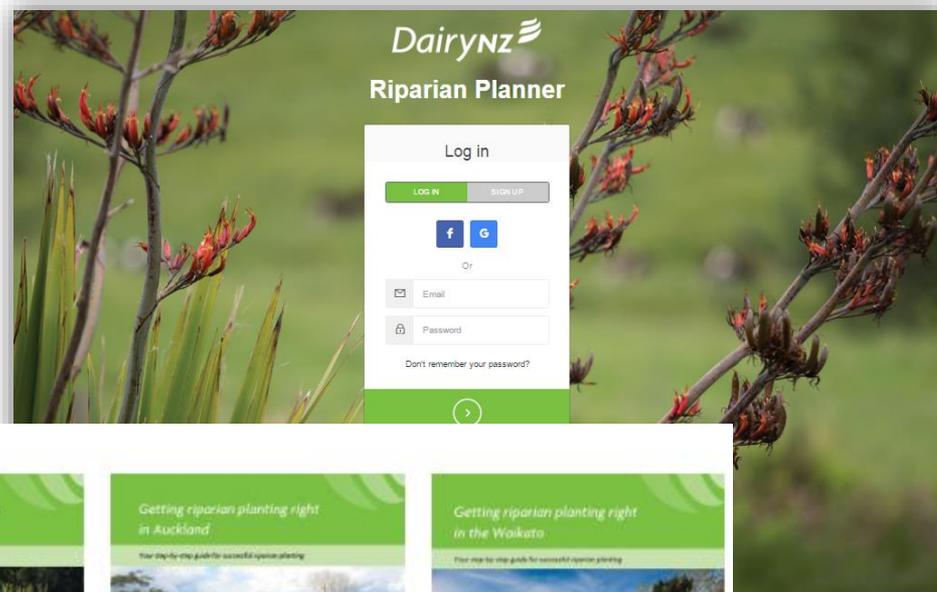
Tō tātou whenua, mō āpōpō

Riparian Planner Tool



Riparian Planner

- Launched mid-2016
- Free-to-use
- Voluntary
- ~1250 users
- Online maps
- Online guidance
- Supported under SLA



Riparian guides

<p>Getting riparian planting right in Northland</p> <p>Your step-by-step guide for successful riparian planting</p>  <p>Download</p> <p>Add to Cart</p>	<p>Getting riparian planting right in Auckland</p> <p>Your step-by-step guide for successful riparian planting</p>  <p>Download</p> <p>Add to Cart</p>	<p>Getting riparian planting right in the Waikato</p> <p>Your step-by-step guide for successful riparian planting</p>  <p>Download</p> <p>Add to Cart</p>
<p>Northland</p> <p>DOWNLOAD</p> <p>ADD TO CART</p>	<p>Auckland</p> <p>DOWNLOAD</p> <p>ADD TO CART</p>	<p>Waikato</p> <p>DOWNLOAD</p> <p>ADD TO CART</p>

How Farmers Use Riparian Planner

1. Describe Plan 2. Map Waterways 3. Plan Actions 4. Get Summary

Map your property boundaries and trace its waterways on the map below.
 First locate your property. You can do this by entering your address in the search box, or by zooming and dragging the map. Then use the tool buttons on the left to define your property's boundary, and to trace its waterways. Select a tool to see more information on how to use it.
 Before you move to the Plan Actions step, review and update the information for each waterway using the waterways list on the top right of the map.

Edit Waterways

- Stream
- Waterway name: Stream
- Waterway type: Accord River Or Stream
- Length to manage: 1,040m
- Manage both sides of this waterway: Yes
- Accord waterway (Waterways at least 1m wide by 30m deep and significant wetlands): Yes
- Stock excluded: No
- Length of fencing required to complete stock exclusion (m): 1640
- Eroding banks: Yes
- Predominant vegetation type: Grass
- Planned average width of riparian zone (m): 4
- Grass buffer (m): 1

Key features

- Locate property (address search)
- Mark farm boundaries
- Mark waterways
- Record stock exclusion
- Record setback
- Record plant cover & zones
- Prioritise erosion & weeds





How Farmers Use Riparian Planner

Stream

- This accord river or stream is not 100% stock excluded. **Prioritise fencing urgently.**
- This river or stream is **eroding**. Planting here to stabilise banks is a priority. Low eroding banks (<1.5m) can be stabilised with native plantings. High eroding banks (>1.5m) may require use of sterile willow or poplar poles. Please seek advice from your regional council

Site preparation	\$0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Crossings	\$4,000 1 new crossings required	\$ 4000	\$ 0	\$ 0	\$ 0	\$ 0
Fencing	\$9,020 Fencing type: 3 wire (35.00m) Total fencing required: 1640m 1640m	Length (m) 1640 \$ 9020	Length (m) 0 \$ 0	Length (m) 0 \$ 0	Length (m) 0 \$ 0	Length (m) 0 \$ 0
Planting	\$11,220 length to plant: 631m percentage to plant: 60.7% Number plants allocated from a total of 2,040	Plants 0 \$ 0	Plants 660 \$ 3740	Plants 660 \$ 3740	Plants 660 \$ 3740	Plants 0 \$ 0
Ongoing maintenance	\$1,020	\$ 0	\$ 0	\$ 340	\$ 340	\$ 340
Other costs	\$0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
		Note	Note	Note	Note	Note

- Action Plan (e.g., prep, fencing, planting, maintenance)
- Time-stamp all actions (plan for, report on)
- Auto-calculations (plants, fencing)
- Farmer decides on scale & rate of action
- Multiple plans (scenario-testing)

What's Next?

- Collaboration continues
- Data-driven
- Develop new functionality
- Meet regional needs

Data transfer – adding value to Farm Plans & RC land information portals

Improved **wetland** functionality

Developed **mapping** tools & end user experience

Manage **carbon** & **biodiversity**?



Māori Land Visualisation Tool

Integrating Land Information for Māori

<https://whenuaviz.landcareresearch.co.nz>

Visualising Māori Land

A prototype tool for accessing and interpreting environmental information about Māori land

[Home](#) [About](#) [Give Feedback](#) [Help](#)

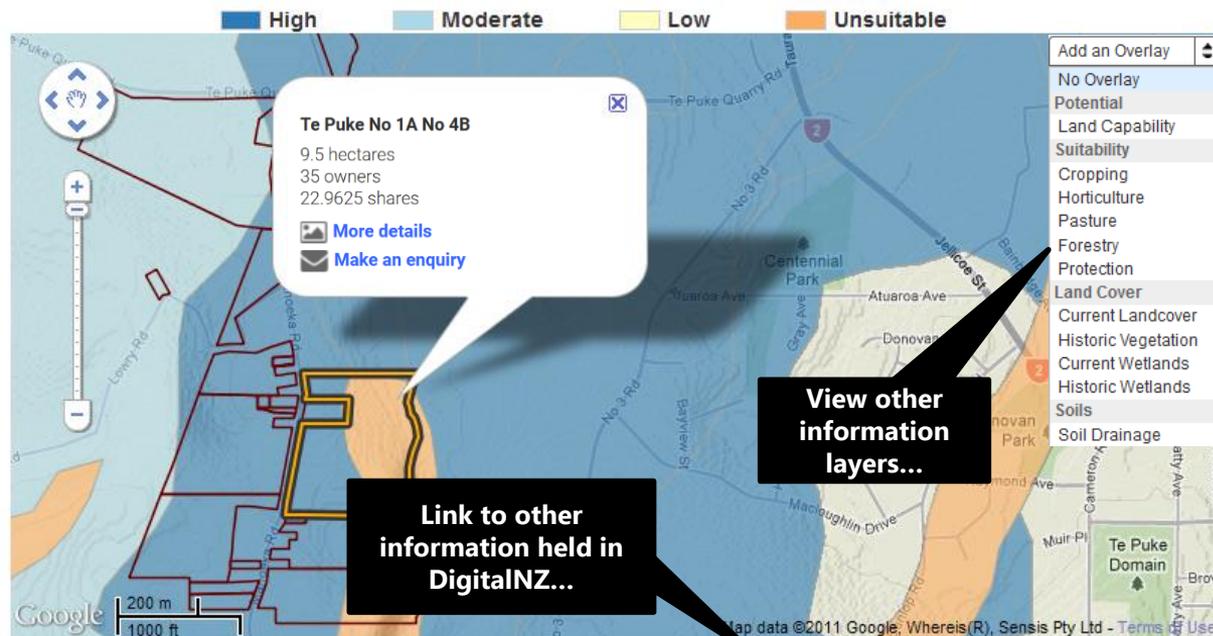
Search

Te Puke 1A17B1

Te Puke 1A17B1 has an area of 0.1 hectares. There is 1 share. There is 1 owner.

[View the block details at Māori Land Online.](#)

Link to Māori
Land Online...



View other
information
layers...

Link to other
information held in
DigitalNZ...

Nearby places: [Putaruru](#) [Takarangi](#) [Ohui](#) [Mount Misery](#)



Māori land information

Issues & barriers

- Land fragmented, many small blocks
- Many land blocks have no management
- Multiple ownership – Issues of governance on many blocks (planning, making decisions)
- Type of land (mostly low-productivity / steep)
- Much land considered underdeveloped, undeveloped, or under-utilised
- Difficulties in gaining access to high quality information on Māori land
- Information often highly technical (e.g. GIS, land evaluation, soil reports) hard to understand



What Māori are asking:

Where is my land?

What does it look like? *(what are the main characteristics of my land?)*

What is around me?, *other blocks in the vicinity/district?*

What can I do with it? *What is the land good for? suitable for? What is the potential of my land?*

Visualising Māori Land

A prototype tool for accessing and interpreting environmental information about Māori land

[Home](#) [About](#) [Give Feedback](#) [Help](#) [Make an enquiry](#)



Landcare Research
Manaaki Whenua



Nau Mai Haere mai - Welcome

This website is primarily intended to help Māori land owners and managers to find out more about the physical characteristics, constraints and potential of their Māori land blocks. To use this site either type the registered name of your land block in the search box above or using the map, zoom to the location of your land block and click on the land block's boundary. We welcome your thoughts and comments on the design of this tool.

Terrain | Map | Satellite Add an Overlay ▾

The map displays a geographical area of New Zealand with numerous red-outlined parcels overlaid. Labels for various locations and parks are visible, including Otoroponga, Tokoroa, Taupo, Lake Taupo, Urewera National Park, Waikato, Napier, Kaitiaki Forest Park, Kōwhiri Forest Park, Wairarapa National Park, Stratford, Inglewood, New Plymouth, and Eymour National Park. A scale bar at the bottom left shows 50 km and 20 mi. Map data is attributed to ©2013 Google.

No overlay selected
You can select an overlay from the top left of the map

**Click on a
Māori land
parcel...**

Search and locate a land parcel...

Visualising Māori Land

A prototype tool for accessing and interpreting environmental information about Māori land

[Home](#) [About](#) [Give Feedback](#) [Help](#) [Make an enquiry](#)



Landcare Research
Manaaki Whenua



Nau Mai Haere mai - Welcome

This website is primarily intended to help Māori land owners and managers to find out more about the physical characteristics, constraints and potential of their Māori land blocks. To use this site either type the registered name of your land block in the search box above or location of your land block and click on the land block's boundary. We welcome your thoughts and comments on the de

Terrain | Map | Satellite

Tataraakina C
14880.5 hectares
1029 owners
415813 shares
[More details](#)
[Make an enquiry](#)

No overlay selected
You can select an overlay from the top left of the map

Map data ©2013 Google - [Terms of Use](#) - [Report a map error](#)

The image shows a satellite map of a coastal region with several land parcels outlined in red. One parcel, 'Tataraakina C', is highlighted with a yellow border. A white callout box is positioned over this parcel, displaying its name and statistics. Below the map, there is a text box with the message 'No overlay selected' and a note about selecting overlays. At the bottom right, there is a small copyright notice for Google Maps.

Initial information about land parcel

Click on the 'More details' link for more information...

Visualising Māori Land

A prototype tool for accessing and interpreting environmental information about Māori land

[Home](#) [About](#) [Give Feedback](#) [Help](#) [Make an enquiry](#)



Landcare Research
Manaaki Whenua



Tatararakina C

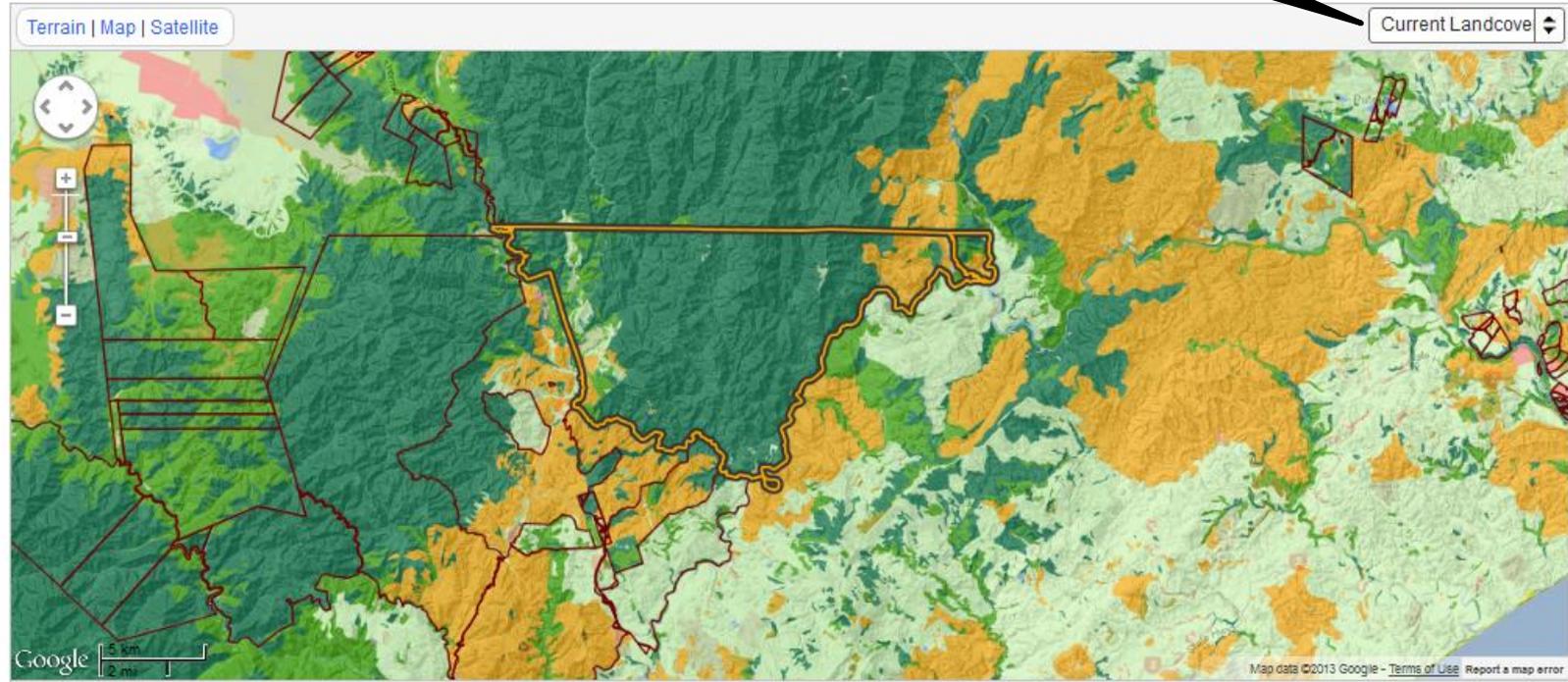
[View the block details at Māori Land Online.](#)

View a map of the land cover

[Make an enquiry about this parcel](#)

Shares: 415813

The land is managed by a trust.



Visualising Māori Land

A prototype tool for accessing and interpreting environmental information about Māori land

[Home](#) [About](#) [Give Feedback](#) [Help](#)



Te Puni Kōkiri
REALISING MĀORI POTENTIAL



Tatarakaikina C

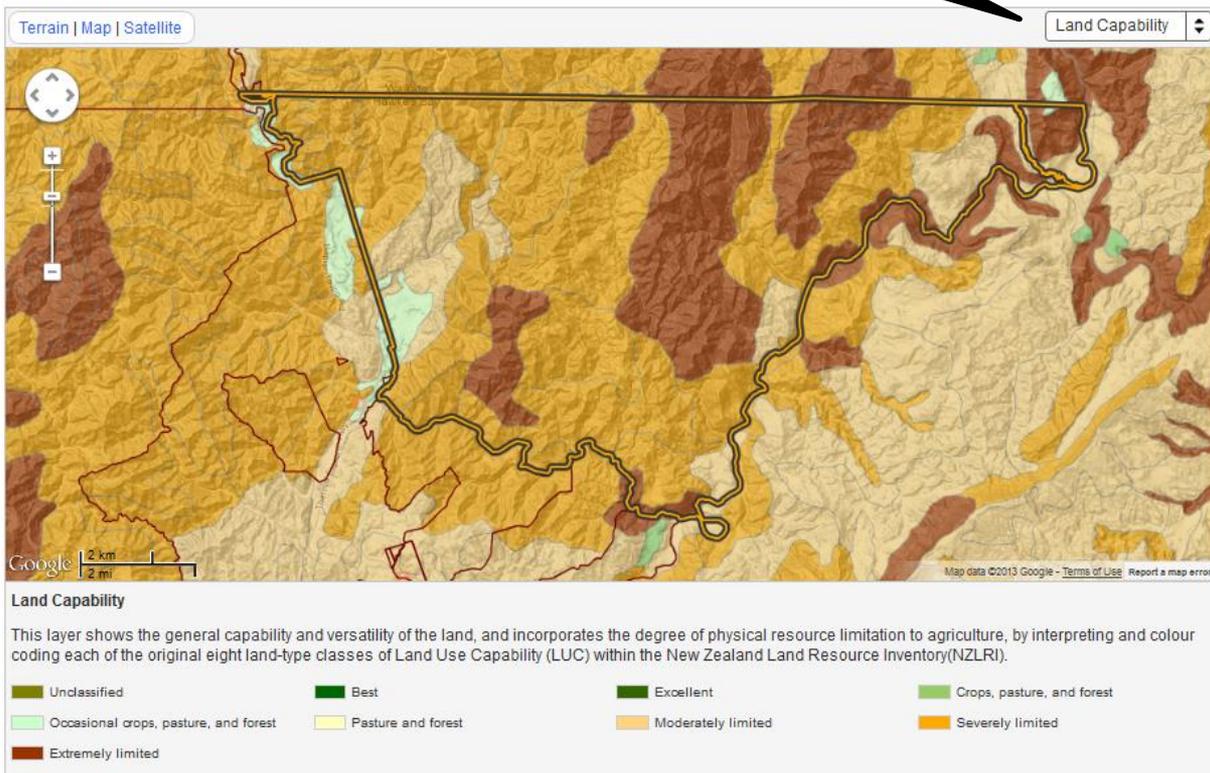
[View the block details at Māori Land O](#)

View a map of the Land Use Capability

[Make an enquiry about this parcel](#)

Shares: 415813

The land is managed by a trust.



Visualising Māori Land

A prototype tool for accessing and interpreting environmental data
[Home](#)



Parcel information

Tataraakina C

[View the block details at Māori Land Online.](#)

Title Information

Area: 14851.8 ha Owners: 881 Shares: 415813
Mortgaged: No Leased: Yes Notes: The land is managed by a trust.

[Make an enquiry about this parcel](#)

[Enquire about this land use](#)

Land Use class

Land potential Land cover Climate Soil properties

Land Potential

What is the potential of this land?

Class	Area	Description
7	57% 8474.84 ha	Marginal for pastoral and forestry Non-arable land with severe limitations to use under perennial vegetation such as pasture or forest.
8	28% 4149.73 ha	Extreme limitations Land with very severe to extreme limitations or hazards that make it unsuitable for cropping, pasture or forestry.
6	13% 1962.54 ha	Not suited Non-arable land with limitations such as pasture or forest.
4	2% 264.69 ha	Significant limitations Land with moderate limitations to cropping, pasture or forestry.

[Learn more about land use classes...](#)

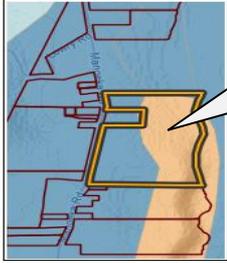
Land Use description

Proportion of land area that is Land Use class 8

Land Use limitations

What limitations are there?

14417.33 ha	Erosion erosion susceptibility, deposition or the effects of past erosion damage first limits production
434.48 ha	Soil Composition soil physical or chemical properties in the rooting zone such as shallowness, stoniness, low moisture holding capacity, low fertility (which is difficult to correct), salinity, or toxicity first limits production



Te Puke No.1A No.4B

9.5 hectares
32 owners
22.9625 shares
Managed by a trust

What are the soil properties of this land?

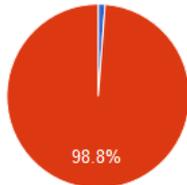
What is the drainage like on this land?

Current vs Historic Wetlands

No applicable features on this parcel.

[Learn more...](#)

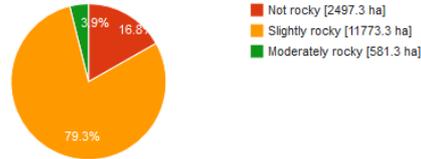
Soil Drainage



[Learn more...](#)

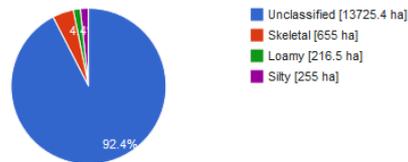
Soil Physical Characteristics

Rock outcrops and surface boulders



[Learn more...](#)

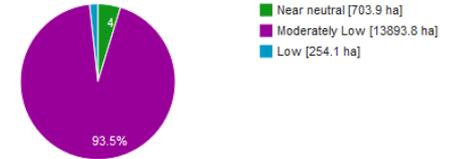
Particle Size



[Learn more...](#)

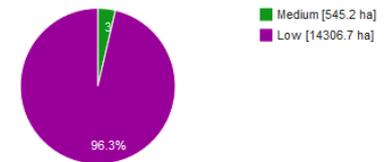
Soil Chemistry

Measure of acidity (pH)



[Learn more...](#)

Cation exchange capacity



[Learn more...](#)



Manaaki Whenua
Landcare Research

Our Land, Our Future

Tō tātou whenua, mō āpōpō