

KO PUKEPOTO TE KĀINGA

Hapū Environment Plan

He karanga tēnei kia hoki ki te ūkaipō

This is a call to return home



Prepared By:

Tui Bedggood & Waikarere Gregory

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HE MIHI

Acknowledgements

This plan is drawn as much from our hui and wānanga as it is from the many stories shared over the years - over cuppas, while waiting at the marae, on the road to a hui, while shelling kina, doing the dishes, at our live-ins as young ones.

It is grounded in those kōrero tuku iho, and in the lived experiences of generations who have grown, lived and been nurtured in the kāinga of Pukepoto.

We give thanks to our iwi – both those living and those who have passed on – whose stories, wisdom, and guidance have shaped this plan and the vision for Pukepoto and its people.

This is for your uri, your tamariki, and mokopuna - our future.

We also acknowledge the valuable tautoko from our iwi, Te Rarawa and Te Kaunihera Rohe o Te Tai Tokerau who helped bring this plan into being.

Ka ngahorohoro ngā maharatanga

anō he rau rākau,

Ka kohikohia katoatia anō he taonga utu nui

The leaves of memories

Do softly fall,

Gently we gather and treasure them all.

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1.He Kupu Whakataki | Introduction

1.1 He Mahere mō te Hapū, kaua noa mō te Taiao

This is not just a plan for the environment. This is a plan for our people.

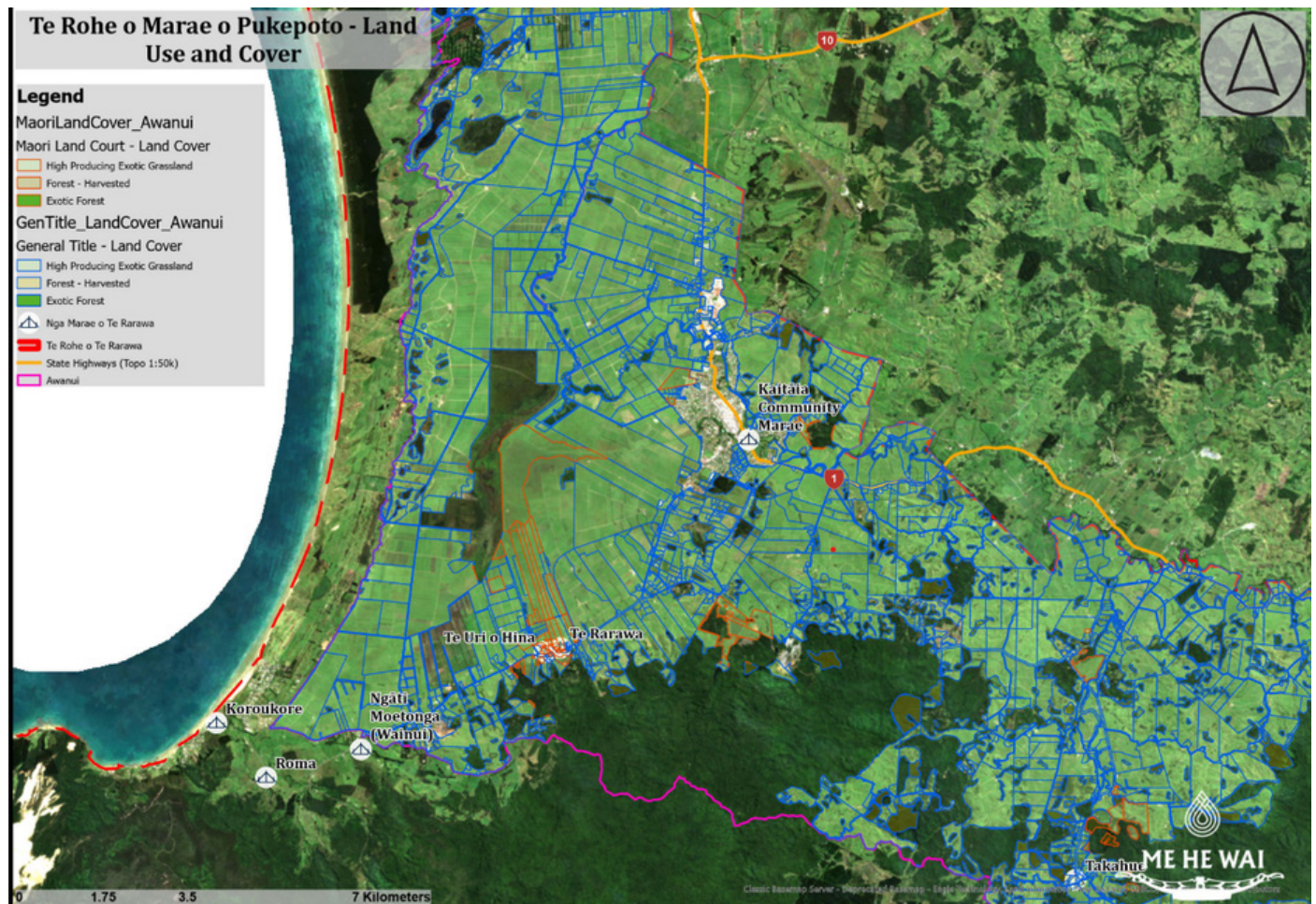


**Ko Kokohuia, ko Okokoremuka, ko Taumatamahoe ngā maunga
Ko Tangonge te wai
Ko Rangihaukaha te tapu
Ko Te Uri o Hina me Te Rarawa ngā marae
Ko Te Tahāwai, Te Uri o Hina me Ngāti te Ao ngā hapū
Ko Pukepoto te kāinga**



As a people, we descend from **te waka o Tinana, ko Tumoana te tangata** and the iwi **Te Rarawa**. **Ngamotu**, daughter of **Tarutaru & Ruapounamu**, settled here in Pukepoto with her tane, Te Paa, naming this place in remembrance of her father's burial ground in **Waihou, Panguru**.

Under the three hapū of Pukepoto — Te Tahaawai, Te Uri o Hina, and Ngāti Te Ao — our **takiwā** stretches from Takahue in the southeast, following the **pae maunga**, Te Kaha Whakapiki a Kaha, westward to Ahipara and northeast to the Awanui. Within this area lies part of Herekino Forest, Tangonge, Pukepoto, and the township of Kaitaia.



These are not exclusive or clearly defined boundaries in the Pākehā sense of land ownership. Our understanding of place is shaped by the movements of our tūpuna, whakapapa and **whanaungatanga** — relationships that are fluid, living, and interwoven across **whenua, awa, ngāhere**, and people.

For generations, our **tūpuna** have walked and traversed this whenua — gathering what they needed to survive, and often a little more to preserve for times of hardship or celebration. They moved with the seasons: when **kaimoana** was abundant, they journeyed across land to **Te Oneroa a Tōhē**; when the **tuna** migrated, they stood at river mouths setting **punga**, harvested **manu** from the ngāhere. They tended vast gardens on the fertile foothills and flats — growing **taro, kūmara, uwhi, hue, rīwai**, and later introducing **corn, maize, cabbage**, and orchards.

This land has sustained our people for generations — and we intend for it to continue doing so for generations to come. This is our collective history, and our shared future.

1.2 Why we are creating this Plan

This is not just a plan for the environment.
This is a plan for our people.
For our whenua, our wai, our tamariki and mokopuna.



For the renewal of relationships that once defined our world — and still can and must for our continued survival.

For too long, we have been told that managing the land means controlling it, using it, building on it. Our connection to **Papatūānuku** has been reshaped through concrete, councils, and consents. We have seen rivers piped and drained, wetlands farmed, ngahere cleared — all in the name of “development.”

But we remember who we are.

- We are not separate from the environment — **we are the environment.**
- We descend from atua, from awa, from maunga: whenua, birds, wind, and sky.
- To harm them is to harm ourselves. To restore them is to return to ourselves.

This plan is our response — not only to climate change and environmental degradation, but also to disconnection caused by colonisation, land loss, economic pressure, and systems that taught us to see the world as something to own, rather than something to belong to.

Crown agencies, administration come and go and so too do our iwi/Rūnanga personnel.

We don't. We have a whakapapa, a connection to this whenua.

We are calling ourselves home.

1.3 What this Plan is

This is our hapū setting our own direction — not simply responding to others.

We know our whenua, our wai, our stories, our needs.

This plan captures our aspirations, our tikanga, and the values that must guide all future decisions within our takiwā.

It will inform how we:

- Engage with developers
- Respond to resource consents
- Reclaim our lands and waterways
- Educate our tamariki
- Build infrastructure
- Feed our people
- Create jobs
- Manage waste
- Adapt to climate change
- Protect and restore wāhi tapu



We are clear: **our taiao cannot be managed unless we, the people, change.**

If we change how we build, how we grow, how we consume, how we dispose, how we think — the taiao will respond. It has always responded. That is its nature. And that is our responsibility.

We also say clearly: **this is not a plan of compliance.**

It is not created to satisfy a council checklist or box on a form.

It is a living, breathing **taonga** — a mauri-led declaration of values, actions, and vision for the world we want to build, rooted in the wisdom of our tūpuna and the needs of our mokopuna.

1.4 He Whakaaro Rangatira | A Declaration of Intent

This plan arises from our belief that the **creation story is not over. We are still in the story.**

Every choice we make, every word we speak, every seed we plant—or choose not to—is part of that story. We are co-creating the future alongside our atua, our tūpuna — with every action, every resistance, every return.

We walk in the footprints of our tūpuna — across ancient pā, to the gathering grounds of Tangonge, where kanae raukura were caught, karaka berries prepared, and to the shores of Te Oneroa-a-Tōhē — where the world made sense because it was in balance.

We walk those same paths now, with a different task:

to remember, to restore, to retell, to reawaken.

This plan is our tool, our map, our wero.

It is a commitment to a way of living that is not new, but **ancient and enduring.**

Ngā manaakitanga ki a tātou katoa — let this framework guide our journey into a future we create together, grounded in our whakapapa and our hope.

2. Our Creation Story Continues

2.1 He Kōrero Tuku Iho,

He Kōrero o āiane i hoki



Our creation story was never a myth. It is an ongoing reality.

The separation of Ranginui and Papatūānuku was not the end of the story — it was the beginning of a world in motion, where atua became the forces of light, growth, water, weather, kai, memory, and connection.

We are the descendants of these atua, they are our tūpuna. We carry their stories, their attributes, their mauri within us. This worldview is not a metaphor — it is literal.

We are made from the same elements that formed the heavens, the moana, and the whenua beneath our feet.

2.2 Whakapapa to

Everything

Through whakapapa, we trace our lines back to:

- **Ranginui** (Sky Father) and **Papatūānuku** (Earth Mother)
- Their children: **Tāne, Tangaroa, Tūmataurangi, Rongo, Haumie, Tāwhirimātea**, and others — each becoming atua of domains we still rely on

From there, we descend through our **iwi, hapū, whānau**, to ourselves and beyond — to our **tamariki and mokopuna**, who will inherit the world we leave behind.

Every part of the taiao — the whenua, the awa, the maunga, the ngārara, the manu — is also part of that whakapapa.

They are not “natural resources.” They are relatives.

They are tūpuna.

They are beings with their own mauri, rights, and memories.

When we clear the bush, we are not “developing land” — we are displacing tūpuna.

When we pollute water, we are not just causing environmental harm — we are wounding whakapapa.



2.3 Living the Creation Story Today

We believe that the *ao* — still unfolds around us each day.

Every decision we make, from what we grow, to what we throw away, to what we speak into the world, either nourishes or tears at this woven universe.

We are still creating the world — with every action and inaction.

And so we ask:

- What kind of world are we weaving for our mokopuna?
- Are we moving further into disconnection, or returning to balance?
- Are we speaking and living in ways that honour our whakapapa — or distort it?

This environmental plan is not a separate document from that story.

It is part of it.

It is our woven strand in the *kahua*, a guide, a hope, a call to remember that we are not bystanders in the face of climate change, consumerism, or degradation.

We are part of the unfolding.

We are part of the healing.

We are part of the ongoing act of creation.

3. Ngā Pou o te Mahere | Guiding Pillars

These pou are not abstract concepts — they are living principles.

They ground our thinking, guide our actions, and remind us who we are in relationship to the whenua, to each other, and to our atua.

Every action, aspiration, and policy outlined in this plan must align with these pou.

3.1. Whakapapa – Ko Wai Tātou? | Who are we?

Everything begins with whakapapa.

It is the genealogical web that connects people to land, water, species, atua and each other. It defines our identity, our belonging, and our responsibility.

This plan is shaped by the understanding that:

- We are not owners of land — we are descendants of it.
- Awa, maunga, repo, manu, and creatures all carry whakapapa, just as we do.
- Our climate response is not just about survival — it's about honouring and protecting our wider whānau in the taiao.

Planning Implication: All development, infrastructure, and decision-making must start with understanding who and what exists in that place, what whakapapa it holds, and how we uphold those relationships.

3.2. Whanaungatanga – Relationships Over Regulation

At the heart of our work is relationship:

- To place
- To one another
- To knowledge
- To the stories that live in our whenua and wai

This plan prioritises reconnection — of our people to land, of generations to each other, of community to story, and of mātauranga to practice.

We do not believe we can “manage” the environment with regulations alone.

We believe in rebuilding relationships so that protection becomes a natural expression of love, respect, and identity.

Planning Implication: All actions must strengthen bonds — between people and land, between hapū members, and between the past and future.

3.3. Mauri – The Pulse of Life

Mauri is the life force that exists in all things. When mauri is strong, things thrive. When mauri is degraded — in water, soil, people, or systems — healing is needed.

Mauri is not only physical health. It includes:

- Wairua (spiritual vitality)
- Mana (authority and integrity)
- Oranga (wellbeing)

Every project, policy, or development must be assessed on how it impacts mauri — whether it uplifts or undermines it.

Planning Implication: Resource consents, land use, and system design must include a mauri assessment — not just environmental impact, but mauri restoration.

3.4. Mana Motuhake – Self-Determination and Leadership

This plan is not a request — it is a declaration. We are asserting our right to determine what happens in our takiwā, based on our values, mātauranga, and aspirations.

Mana motuhake means:

- Local decision-making
- Local employment and training
- Local solutions that reflect our way of life

We are not seeking to fit into existing systems. We are creating new ones — built from our tikanga, our stories, and our needs.

Planning Implication: Government departments/ministries, Councils, agencies, and developers must engage with us from the start — not after decisions are made. Tautoko is conditional upon alignment with our kaupapa.

3.5. Aroha ki te Taiao - Love in Action

Aroha is not sentiment — it is commitment in practice.

This plan challenges the extractive, consumer-based model of relating to the environment. It replaces it with aroha — care through action.

That means:

- Regenerating, not just sustaining
- Growing kai, not just buying it
- Designing systems that mimic Papatūānuku, not override her
- Listening, not dominating

This pou calls us to act with compassion, humility, and imagination.

It means doing the hard mahi, not for recognition, but for love of future generations.

Planning Implication: All actions, policies, and investments must ask — *does this action restore, reconnect, and regenerate?* If not, it needs rethinking.

4. Te Urutaunga ā-Āhuarangi | Climate Adaptation

Ka ora te whenua, ka ora te tangata – *If the land is well, the people will thrive.*

Before we can adapt to climate change, we must first ask:

What are we adapting to — and what are we adapting from?

Our answer:

We are adapting from a way of life that is out of balance.

A way of life that has prioritised profit over whakapapa, concrete over whenua, growth over wellbeing.

We are adapting to something older — something wiser — something that brings us home.

Not back in time, but forward into a future grounded in:

- | | |
|---|---|
| <ul style="list-style-type: none">● whakapapa,● mauri, | <ul style="list-style-type: none">● tikanga,● and our own local knowledge systems. |
|---|---|

4.1 Climate Change as Disconnection

From a Māori worldview, climate change is not just environmental.

It is cultural.

It is spiritual.

It is a symptom of disconnection — from whenua, from atua, from tikanga, and from ourselves and each other.

Urbanisation, industry, land clearance, consumerism — all have pulled us away from:

- the gardens of Tangonge,
- the pathways to Te Oneroa a Tohe,
- the tuna runs, the karaka groves, the mokomoko of our kāinga.

This disconnection has led us here.

The only real adaptation is reconnection.

4.2 Reframing Kaitiakitanga – What Are We Protecting, and From Whom?

We challenge the dilution of “kaitiakitanga” into a policy buzzword.

In Te Ao Māori, **kaitiaki** are not us — they are the taniwha, the mokomoko, the winds, the signs, the ancestors of the land.

We walk alongside them, not above them.

We do not protect the land as “stewards.”

We protect whakapapa by living in balance.

We are not separate. We are not managers. We are part.

We ask again:

What are we protecting, and from whom?

If we are protecting Papatūānuku from ourselves — then we must first change how we live.

4.3 Our Key Climate Adaptation Goals

Our approach to adaptation must be:

- **Place-based** – specific to our whenua, our stories, our climate
- **Intergenerational** – for the mokopuna yet unborn
- **Holistic** – healing whenua, wai, and wairua
- **Tikanga-led** – grounded in values, not just science
- **Transformational** – not propping up the old, but building the new

We focus on four pou of adaptation:

4.3.1. Reducing Vulnerability

Lessening the exposure and sensitivity of our whenua, wai, and people to the changing climate

This includes:

- Restoring ecosystems including repo and ngāhere - through fenced off large-scale native planting to stabilise soil, reduce slips & flooding, filter pollutants & nutrient runoff, enhance biodiversity by providing habitats for native species, and to naturally sequester carbon
- Shifting from monoculture to diverse, regenerative land use systems that are better able to withstand pests, diseases, and extreme weather events
- Reducing chemical use, synthetic fertilisers and stocking rates on farms
- Protecting food and water supply chains from disruption
- Hazard mapping to identify areas prone to flooding, erosion, or drought, guiding development away from high-risk zones and informing adaptation planning

4.3.2. Enhancing Adaptive Capacity

Adaptive capacity refers to the ability of our hapū to adjust and respond effectively to change. By building the knowledge, resources and systems needed to not only respond effectively to climate impacts but also to be innovative in it

This requires:

- integrating climate education into kura, marae, and community hubs to raise understanding and responsiveness to climate impacts
- Training our own whānau to take up local food, forestry, and farm roles
- Embedding not only mātauranga Māori into school and community learning but also putting it into action and connecting it to local employment opportunities particularly those within our takiwā and iwi-owned
- Reclaiming traditional food systems: such as tuna and karaka, ensuring that our kai is our rongoa too. As well as reintroducing ancestral crops such as kūmara, uwhi, and taro, which are naturally suited to our local conditions and so strengthen our food resilience
- Developing local employment linked to environmental restoration
- Equipping ourselves for extreme weather response and recovery, involving training whānau in disaster preparedness, first aid, water management, and food security practices that are grounded in mātauranga Māori

4.3.3. Strengthening Resilience

Ensuring our people are ready for immediate shocks and long-term shifts

This includes:

- Establishing secure and sustainable water systems, including localised rainwater harvesting, storage and greywater reuse
- Wastewater and Stormwater systems that mimic nature (wetlands, swales, composting and vermiculture) Permeable surfaces will be prioritised to manage stormwater naturally, reducing flood risks while enhancing water quality and biodiversity.
- Protecting cultural and food-gathering sites with pou and access pathways
- Investment in small-scale renewable energy generation, such as solar, wind, and micro-hydro systems, to reduce reliance on vulnerable centralised power grids
- Creating circular systems for energy, waste, and kai strengthening food sovereignty through local/marae-based gardens, orchards, farms

4.3.4. Supporting Just Transitions

Moving away from harmful and unsustainable systems while ensuring our people are not left behind

This includes:

- Making resource consent support conditional on:
 - 15% native planting in all subdivisions
 - Onsite wastewater innovation
 - Fencing of waterways
 - Stormwater harvesting infrastructure
 - Limits on non-permeable surface area
- Advocating for subsidies for composting, rainwater collection, renewable energy projects, and non-chemical systems
- Supporting policies that localise procurement and reduce waste generation
- Rejecting development that extracts without giving back
- Retraining and skill-building opportunities particularly for whānau whose livelihoods are affected by changes in farming, forestry, or fisheries

4.4 A Future Worth Building

We do not want to just survive climate change.

We want to build a future our tamariki and mokopuna will be proud to inherit and thrive in.

That means:

- Building new knowledge from old
- Reclaiming our stories, spaces and systems
- Reawakening our mahinga kai practices
- Healing our whenua through connection, not extraction
- Creating jobs, homes and futures grounded in care



This is climate adaptation the Māori way —
Rooted in whenua, whakapapa, and a vision beyond survival.
We are not adapting to a broken world.
We are transforming it.



5. Wai Māori | Freshwater – Our Living Whakapapa

Ko wai au? Ko wai koe? Ko wai tātou? Ko wai anō hoki te wai?

Who am I? Who are you? Who are we? And what is water, if not also us?

Let us resist the capitalist framing that reduces our wai to a mere *resource* — something separate, inanimate, and lifeless

Wai is not a resource. Wai is whakapapa.

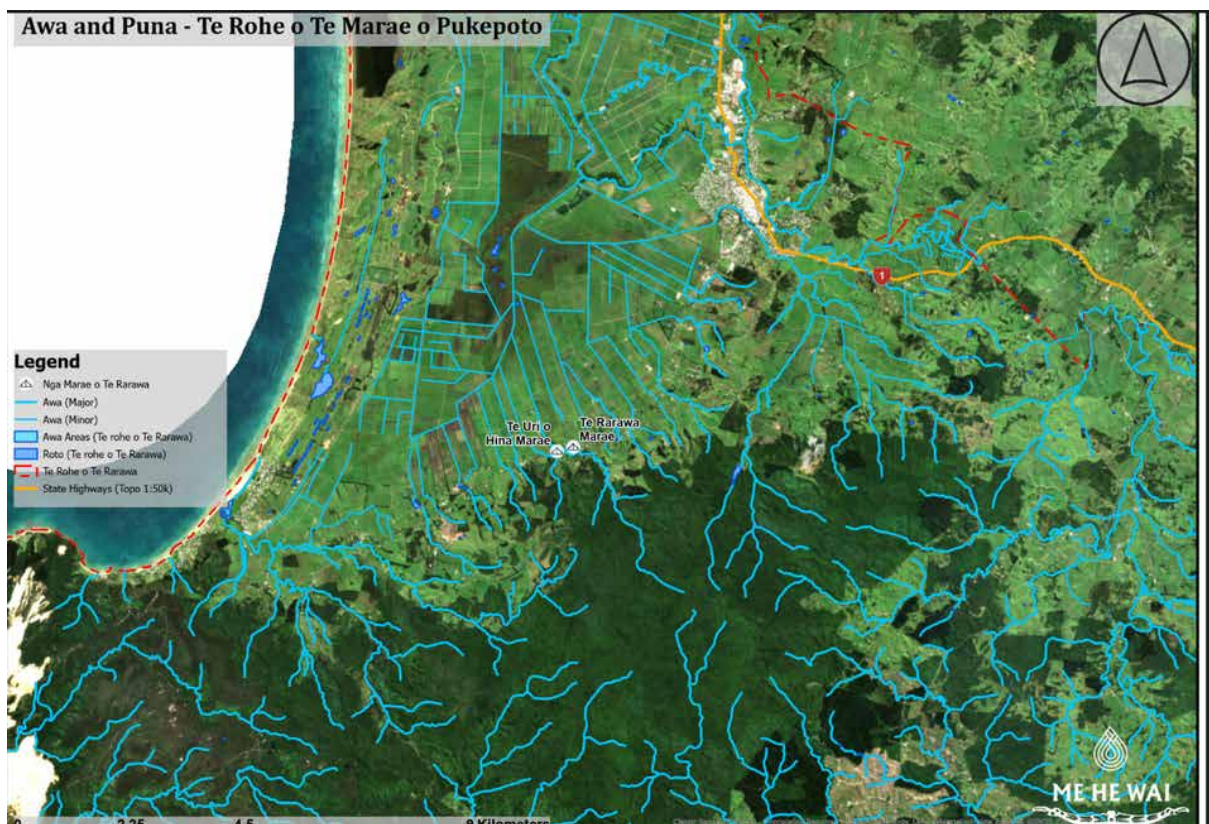
Wai is a living being. A connector. A courier of memory.

Wai is our tūpuna crying in the rain.

Wai is the sweat of our mahi, the tears of birth and tangihanga, the flow of life between whenua and moana.

Wai is us.

If we remember this, our systems must change.



5.1 It's All the Same Water

We must unlearn the colonial logic that divides wai into compartments:

- **Drinking water**
- **Stormwater**
- **Wastewater**

He aha te rerekētanga? Kāhore he rerekētanga — it's all one whakapapa.

What changes is the way we treat it.

This understanding must guide:

- | | |
|---|--|
| <ul style="list-style-type: none">• Cultural Impact Assessments (CIAs)• Resource consents• Development and infrastructure | <ul style="list-style-type: none">• Urban planning and rural design• Every drop, every decision |
|---|--|

5.2 Naming the Unnamed – Restoring the Mauri of Our Awa

Between **Kaitaia** and **Ahipara**, there are more than **ten named manga** — small streams flowing down from **Te Kaha Whakapiki a Kaha** (known in part as Herekino Forest), through **Tangonge**, before joining the **Awanui** River and heading to the moana at **Rangaunu**.



These awa are crossed daily with little notice, their names unspoken, their presence unacknowledged. But they carry life, memory, and the tears of Ranginui. Their neglect weakens their mauri — and ours.

To draw attention to these waters, we propose the erection of **simple, creative signage** that restores their **ingoa** to the landscape. In doing so, we reclaim the presence of these waterways and honour them as living relations. This small act of recognition is a step toward restoring their vitality, and reconnecting our people to their names, their stories, and their flow.

5.3 Te Kete Kai o Tangonge – Reawakening the Food Bowl

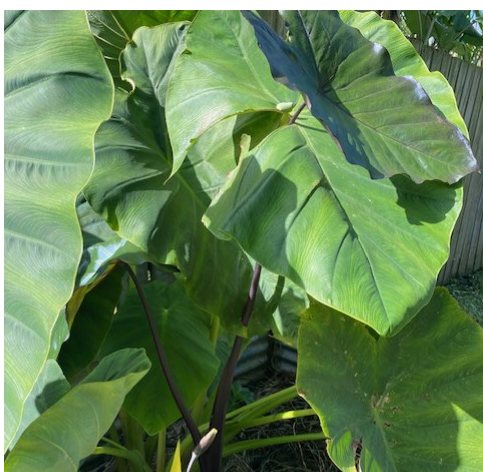
At the heart of this vision lies **Tangonge**, once a great lake and food basket of our people — a **wetland area of abundance** that was drained by the Crown in the 1920s to make farmland and control flooding. That act of destruction tore not just the lake from the whenua, but a deep source of sustenance, memory, and identity from our hapū.



Since childhood, we have heard the stories — the naming of **Tangonge**, the vast gardens of **taro and koroī**, and the shimmering sight of **undulating taro leaves** rippling across the wetland. These memories live within us still.

Our vision is to **restore Tangonge**, not necessarily as a vast open lake, but as a living system — a **wetland mosaic** of fertile lands, native plantings, and a **small permanent water body** to support **tuna, kanae**, and cultural practices. We envision the return of **taro gardens, rongoā plants**, and the introduction of crops brought by our tūpuna on the waka: **kumara, yams, bananas**, perhaps arranged in **banana circles**, nestled near our pou — **Ngā Koroī o Tangonge**, standing beneath the township of **Kaitaia**.

This is not just ecological restoration — it is cultural renewal. It is memory becoming whenua again.



5.4 How Our Current Systems Are Failing

Our whenua is being buried under concrete and roof tiles.

Our wai is being treated as a waste product — filtered by chemicals, discharged, discarded.

Every time it rains in Kaitia, stormwater systems overflow.

Tankers can't collect milk. Waste goes into awa.

Infrastructure fails because it was never designed to serve us — it was designed to serve a growth model, not whakapapa.

And so, we must return to systems that whakapapa to Ranginui and Papatūānuku — that work with their rhythms, not against them.



We have included Wai Data in the appendices, (pgs 31-35, 10.1-10.5) captured by the kaupapa, Me He Wai under Te Runanga o Te Rarawa and funded by NRC. Which provides a small window into the quality of wai within a limited part of our takiwā. This is indicative of the range of land uses and activities in the area, including quarries, a wastewater treatment plant, a township, and farms, gardens, and orchards.

5.5 Wai Innovation and Adaptation – The Pukepoto Way

We need bold, tikanga-led water strategies that heal.

We Propose:

5.5.1. Rethinking Water Use

- **Harvesting the tears of Ranginui** — rain tanks on all buildings, especially businesses/industries and sports grounds
- **Greywater reuse** — for toilet flushing, irrigation
- **Avoiding the use of potable water where it's not needed** — stop wasting drinking water on gardens, for watering sports greens and industry

5.5.2. Reimagining Wastewater

- **Compost and worm-based toilets** – return nutrients to the whenua, not to the drains
- **Closed-loop greywater systems** – nourish native plantings and kai
- **Decentralised treatment systems** – local, affordable, resilient
- **Ban glyphosate and harmful chemicals, synthetic fertilisers** – protect repo, soil and waterways from long-term harm

5.5.3. Stormwater That Heals

- **Nature-based systems** – wetlands, bioswales, rain gardens, permeable paving
- Limits on impermeable surfaces, especially in all subdivisions
- **Requiring minimum of 15% native planting** in every new land development
- **Fencing and planting riparian areas** for shade, erosion control, filtering and biodiversity

5.5.4. Reimagining Wastewater

- Tikanga-embedded **Resource consent conditions** to include:
 - Localised, natural water systems
 - Reduced chemical use
 - Protection of wetlands and riparian zones
 - Retention of open soil for water absorption
- **Incentivise and Investment in innovation** – subsidies for composting systems, rain tanks, greywater reuse systems for non potable purposes ie toilet flushing, irrigation
- **Procurement policies** to support circular systems and reduce waste to landfill

5.6 The Deeper Shift: Honouring the Mauri of Wai

To adapt and thrive, we must not just change systems —

We must change our relationship.

This means asking:

- How do we speak to the wai before we use it?
- What tikanga do we uphold before returning it to the whenua?
- How do we honour the life force of something that gave us life?

When we let wai pass through our hands, homes and community, we must treat it as if we're handing our mokopuna a taonga.

Because **we are**.

5.7 He Ara Hou – A New Path Forward

We cannot solve a problem by using the same thinking that created it.

Our wai systems must move:

- From **extraction** to **restoration**
- From **disposal** to **return**
- From **separation** to **whakapapa**

This means:

- Localised water cycles
- Infrastructure that mimics wetlands
- Innovation grounded in tikanga
- Wai policies written by those who live with the water, not just over it

5.8 We Are Now Part of the Water Cycle

Our bodies, our whenua, our kāinga — they are all water carriers now.

So we ask:

How can we return our wai with aroha, not with pollutants?

What legacy of wai will we leave our mokopuna?

Will they thank us for giving back more than we took?

Let us not waste our wai.

Let us not waste this moment.



6. Whakatupuranga – Rebuilding Futures for Our People

Me hoki ki te kāinga, ki te ūkaipō, ki te puna o te ora.

Let us return home, to our source, to where life begins.

This section lays out our vision for a thriving future — where our whānau live, learn, grow, and lead from their own whenua. It acknowledges that environmental change is not just about the taiao — it is about people. The well-being of our hapū cannot be separated from the well-being of our land, our waters, our systems of work, and our ways of life.

The climate crisis has shown us how fragile global systems are — for food, energy, income, and infrastructure. But it also presents us with an opportunity to reset, to reshape, and to rebuild systems that are grounded in our tikanga, sustained by our whenua, and led by our own uri.

6.1 Whānau Staying Home - Learning & Earning

Too many of our whānau have left our kāinga in search of training, income, and opportunity. Our vision is to bring them home — not just to live here, but to thrive here.

Within our **takiwā**, we are fortunate to have a number of iwi-owned enterprises and businesses. We aim to build strong and lasting connections between these entities and our kura, to enable succession planning and create clear, supported pathways for our people into mahi that works for them — mahi that keeps them close to home, on their whenua, where they belong and is fulfilling.

We are building:

- **Education and training pathways** grounded in mātauranga Māori and hands-on experience

- **Whare and mahi development packages** that allow whānau to live and work on whenua

- **Apprenticeships and local learning** connected to our whenua, our forest, our taiao, our industries

Examples include:

- Environmental restoration crews working on pest control, fencing, seed gathering, planting and māra kai
- Regenerative farming traineeships linked to iwi farms and kura
- Builders and tradespeople trained to use sustainable, innovative and natural methods and materials
- Reo Māori immersion pathways for taitamariki in industry and enterprise
- Marae and kāinga-based activities in kai production, rongoā, mahi toi, taonga tuku iho



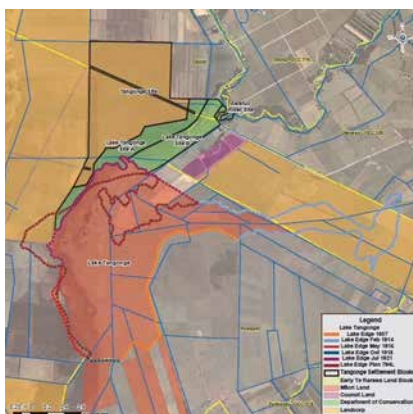
On our iwi-owned farm, **Te Rarawa Farming Ltd**, we expect to see representation that reflects our hapū voice and whakapapa. We support the instating of a hapū representative, elected by the hapū of Pukepoto — not chosen for business credentials alone, but for their connection to the whenua. Representation must be grounded in whakapapa, not corporate models.

6.2 Whānau-Led Innovation and Enterprise

As tangata whenua, we are not leaving our whenua. We are here to stay. We are not transient like many others who come and go — we are the permanent people of this land. Therefore, we are the best people to lead any mahi involving our whenua and our wai.

Our plan supports innovation that is led by hapū values, not economic extraction.

We expect to be notified directly — **not via iwi structures or Rūnanga**, but kanohi ki te kanohi, at place — of any activity within our takiwā. A relationship must be established with our hapū, and any data or results collected on or from our whenua must be shared with us openly and promptly, as an act of honour and recognition of our mana.



Our aspirations for enterprise are grounded in values of collectivity and interdependence. We seek to collectivise our land blocks and establish **integrated polycultural systems** that nurture both whānau and whenua.

These systems will include:

- Beehives, pigs, chickens, sheep, cows
- Native nurseries, māra kai and orchards
- Water storage and wetland systems
- Riparian planting with potential for coppicing for firewood, waka, carving and stock feed
- Seasonal kai systems grounded in tikanga
- Regenerative farming, mātauranga-based rongoā and seedbanks
- **Renewable energy sources** - local solar, hydro, and wind generation to power our kāinga
- **Circular economy businesses** using waste as resource
- **Papa kāinga and kaumatua housing**

We are calling for:

- **Investment in kaupapa Māori enterprises**
- **Incentives and subsidies** for sustainable living, farming, māra kai, and papakāinga
- **Access to whenua** for innovation hubs, learning, experimental spaces, and restoration programmes

6.3 Capacity Building – Future-Focused

We must look beyond short-term projects and imagine the long-term shape of our kāinga.

What does “success” look like?

What does a thriving local workforce look like?

What are the skills, knowledge, and values needed to rebuild our systems from the whenua up?

We envision:

- **Taitamariki growing up fluent in te reo and science, tikanga and tech**
- **Kaimahi who can plant, harvest, weld, repair, build, and teach**
- **Kaitiaki who do not just “manage” the taiao but live in rhythm with it**
- **Whānau who can stay, and want to stay — because the whenua feeds them in every way**

6.4 Whānau-Based Solutions Must Lead

This is not about outsourcing.

This is not about waiting for others to fix what's broken.

We are the solution.

We will support:

- **Marae and papakāinga as hubs** for resilience, learning and leadership
- **Whānau plans** that support water harvesting, kai growing, and maumau kore
- **Collective infrastructure**- toolsheds, repair spaces, kai kitchens, composting centres
- **Cooperative ownership models** — so our people are not just workers, but owners and decision-makers



6.5 Te Tirohanga Whānui – Our Vision

He ao hou, he ao ora, he ao hapū e puta nei.

A new world, a thriving world, a hapū-led world is emerging.

We hold in our minds and hearts a vision where:

- Our wai, whenua, and hauora are healed and protected
- Our mokopuna grow up with stories, skills, and security
- Our whānau work, live, and learn in their takiwā
- Our systems reflect our whakapapa, not colonial logic
- Our decisions honour our tūpuna and create space for those yet to come

Let's Keep Asking the Hard Pātai:

- Who benefits from development?
- Who carries the cost of pollution?
- What does true restoration look like?
- What skills and systems will our mokopuna need — and how are we preparing them now?

We answer those questions not with theory, but with action.

We do the mahi.

We walk the whenua.

We plant the seed.

7. Ngā kaupapa Auaha - Innovation, Circular Systems & Maumau Kore/Zero Waste

Ko te para, he taonga – me titiro anō tātou ki te mea e kiia nei he para.

Waste is resource — we must reframe what we call rubbish and recognise what we discard.

This section turns toward the creative, practical, and policy-shifting solutions that allow us to break the linear, extractive models we've inherited — where we take, make, use, and dump.

We are calling for a return to **closed-loop**, tikanga-aligned systems, where nothing is wasted, and everything is honoured.

7.1 The Problem with Waste

Landfills across Aotearoa are filling with:

- Compostable kai
- Compostable packaging
- Green waste and organics
- Recyclables that were never separated or processed
- Reusable materials and taonga

All this becomes **rapihi ka whāngaihia ki a Papatūānuku**, feeding the belly of our earth with decay and chemicals that strip the whenua of its wairua and vitality.

This isn't just an environmental issue.

It's a whakapapa issue.

It's a resource issue.

It's a wero to our values and our intelligence.

7.2 Reframing Waste as Resource

We are clear: **waste is a design failure.**

To reverse this, we must:

- Reduce what is produced in the first place
- Reuse and repurpose what already exists
- Regenerate instead of extract
- Create systems that reflect tikanga, not consumerism

We call for investment in:

- **Local composting infrastructure** – small-scale, community-driven, chemical-free
- **Resource recovery centres** – where reuse, repair and repurposing are the norm
- **Circular economy initiatives** – whānau-based enterprises using waste as raw material
- **Compostable packaging bans** on items that cannot realistically be composted locally
- **Research into material life-cycles** – so we understand the whakapapa of what we use

7.3 Policy and Procurement That Reflect Tikanga

We want procurement systems (local councils, DHBs, government departments, developers) to:

- **Source locally, seasonally, and sustainably**
- **Mandate waste separation and reduction**
- **Avoid single-use items wherever alternatives exist**
- **Choose products with known, non-toxic end-of-life uses**
- **Incentivise innovation**, not just compliance

This is how we embed **values into systems** — not just aspiration, but act

7.4 Protecting Our Ecosystems from False Solutions

We have seen firsthand the damage caused by the introduction of non-native plant, animal and bird species — many of which have escaped, been dumped, or abandoned from private property, and now threaten our native ecosystems. Despite this, new species continue to be introduced, often justified by short-term economic value.

We are saying **enough**.

We do **not support** the continued introduction of overseas plant species into our takiwā. We oppose the **sale and planting of species like bangalow palms and phoenix palms**, which have already shown their invasive potential. We have learned from previous mistakes — and we refuse to repeat them.

Likewise, we are **firmly opposed** to the establishment of exotic forests in our rohe for the purposes of **carbon credits**. These schemes are not grounded in our tikanga or te taiao — they prioritise monocultures, carbon counting, and overseas profit over biodiversity, resilience, and whakapapa. They do not serve our whenua, nor our whānau.

Unfortunately, many new solutions over time become problems themselves, without consideration being given to their lifecycle, their parts and end of life prior to being introduced to the market. For example there are very few recycling schemes for solar panels or EV batteries resulting in further environmental impacts. Greenwashing and false, misleading information is a big part of the current system.

True climate action must be guided by **indigenous knowledge, native species**, and **restorative, not extractive, land use**.

7.5 Examples of Tikanga-Driven Waste Innovation

We support the development of:

- **Bottle buy-back schemes**
- **Repair cafés and workshops** (fixing clothes, electronics, tools)
- **Biochar** made from forestry slash, to store carbon and nourish soils
- **Worm-based toilets and compost loos**
- **Greywater systems** for irrigation, cleaning, and toilet flushing
- **Construction that prioritises earthbuilding**, reusable materials, and non-permanent structures
- **Shared toolsheds and equipment hubs** to reduce unnecessary duplication and consumption

7.6 Manaakitanga for the Whenua

We must stop **burying our waste in Papatūānuku**, as if she can endlessly absorb the consequences of our broken systems.

Instead, we ask:

- Can our waste be **used to grow kai**, not methane?
- Can our packaging **return to earth**, not to landfill?
- Can our items be **repaired and passed down**, not thrown away?
- Can our systems be **closed-loop**, not pipelines to pollution?



7.7 Waste and Climate Change – A Direct Link

Most people don't realise:

- When compostables go to landfill, they **don't compost** — they rot, anaerobically, and create methane.
- Methane is **80x more potent** than CO₂ in trapping heat in the short term.
- Our waste system is **actively fuelling climate change**, when it could be part of the solution.

Composting, resource recovery, and waste avoidance are not side projects — they are climate solutions.

7.8 Designing for our Future

This isn't just about where waste ends up — it's about **how we design our lives**.

We must ask:

- How were our items made?
- What were they made from?
- Can they be taken apart?
- Can they nourish soil, rather than pollute it?
- Can they be valued, not wasted?

We want to build a future where:

- **Every marae has its own composting system**
- **Every home separates organics at the source**
- **Every business has a resource reduction plan**
- **Every school teaches tamariki the whakapapa of waste**

This all in turn creates new mahi opportunities

7.9 Our Kaupapa Is Not Anti-Development — It's Pro-New Look

Ehara tēnei i te whakahē i te whanaketanga – engari he karanga kia whanake tātou i runga i te whakaaro Māori.

This is not a rejection of development — it is a call to evolve in a way that reflects Māori values.

We welcome smart, yet simple sustainable, tikanga-led development —
But we will not support business-as-usual wrapped in green branding.

We demand:

- **Limitations on impermeable surfaces**
- **15% native planting minimums in new subdivisions**
- **Fencing and buffer zones for waterways**
- **On-site water reuse and stormwater filtration**
- **Composting, recycling, and energy generation systems on site**
- **End-of-life plans for materials used**

We do not fear rules — we fear inaction.

We are not against growth — we are against disconnection.

7.10 He Ara Hou – New Pathways Are Emerging

We have the opportunity now to:

- Transform the waste system into a living, breathing cycle of regeneration
- Build infrastructure that honours te taiao
- Use mātauranga Māori to design the next generation of systems
- Influence planning, consents, and policy from the roots up

This is what climate adaptation looks like when it's Māori-led.



8. Te Whakakapi - He Kōrero mō Āpōpō | Conclusion

*Tuia i runga, tuia i raro
Tuia i roto, tuia i waho*

*Tuia te here tangata
Ka rongo te ao, ka rongo te pō
Tihei Mauri Ora.*

This plan is more than a strategy — It is a **karanga across time**
A calling to our tūpuna, to our mokopuna,
And to those standing beside us today.
It is a remembering, a reawakening, a reclaiming.

It is **not about managing the environment** as if it were separate from us —
It is about managing **ourselves**, our systems, our behaviours,
So that we can return to right relationship with all that lives and breathes.

We are not “protecting” the whenua.
We are **being in relationship** with her again.
We are not “saving” wai.
We are **remembering it is us**.
We are not resisting change.
We are **leading transformation**.

8.1 On Legislation and Te Tiriti o Waitangi

We have intentionally and deliberately chosen not to reference other legislation in this plan.

For us, this is not an exercise in compliance.

This is about reinforcing Te Tiriti as a living treaty — not one diminished by being buried under layers of policy, but one elevated through action.

To reference other legislation, in our minds, is to dilute or detract from the mana and centrality of Te Tiriti o Waitangi as the foundation of right relationship between tangata whenua and tangata Tiriti.

8.2 Ko te Mahere o te Hapū – Our Living Document



This is not a fixed plan.

It is a **taonga ora** — living, evolving, growing as we grow.

Let it be held by our people,
Read by our tamariki,
Guided by our kaumātua,
Actioned by our mahi.

Let it influence councils, developers, planners —
Not because they are told to,
But because they are moved to.

8.3 He Kōrero ki ngā Uri Whakatipu – A Message to the Future

Mokopuna mā —

We wrote this not to impress policy-makers,
But to **honour you**.

To make decisions now that will feed your wellbeing later.

To choose discomfort today so that you may inherit peace tomorrow.

To turn our grief into action,

Our memories into movement,

Our pain into purpose.

8.4 E kore e ngaro – The Vision Endures

What we want is simple:

Clean wai, healthy whenua, strong whānau.

Work that has meaning.

Homes that are warm.

Food that is nourishing.

Ways of being that are tika and pono.

Joy.

Dignity.

Whakawhanaungatanga.

We are part of the ongoing creation story.

We do not stand outside of te ao — we are inside it.

And so, every action we take, every word we speak, every system we design —
is part of the sacred thread that connects us all, **our whakapapa**.

Let us walk backwards into the future,

Eyes fixed on our tūpuna,

Feet firmly grounded in our whenua,

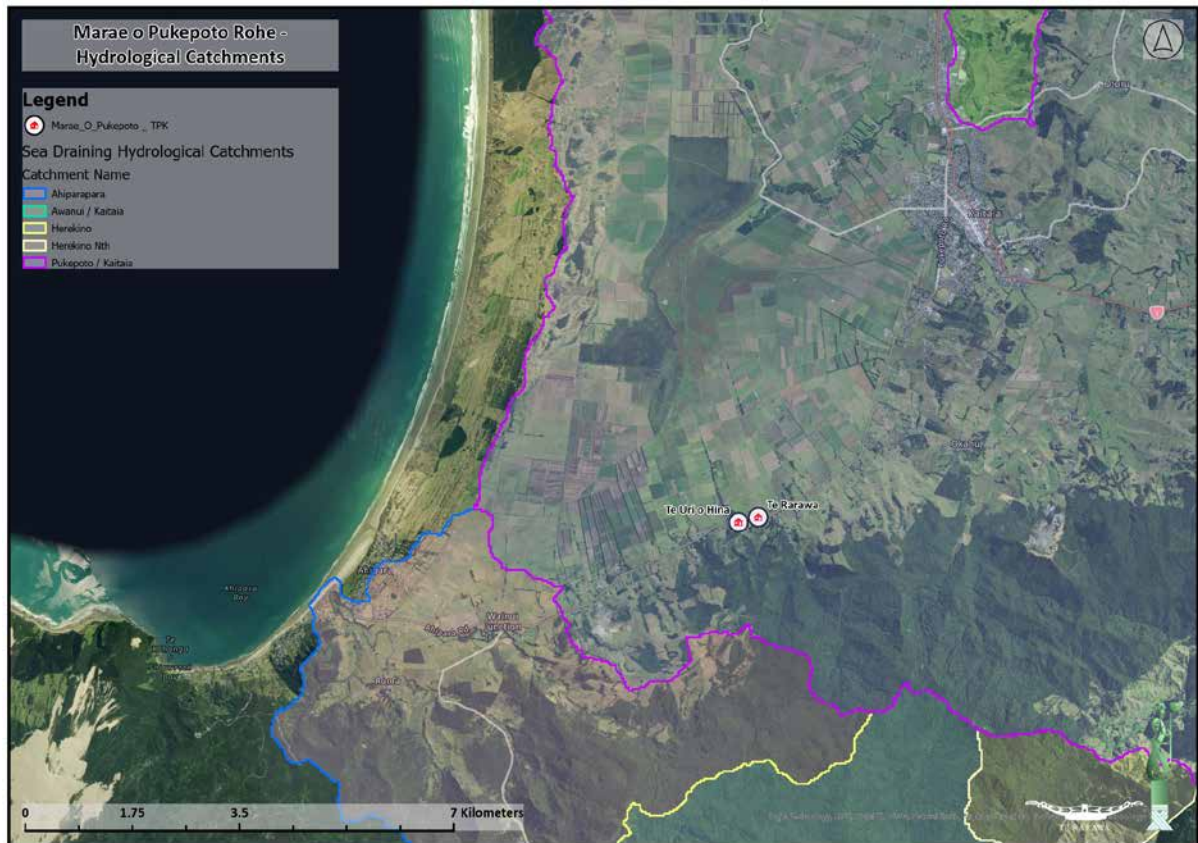
Hearts open to the possibilities of what we might still become.

9. Glossary

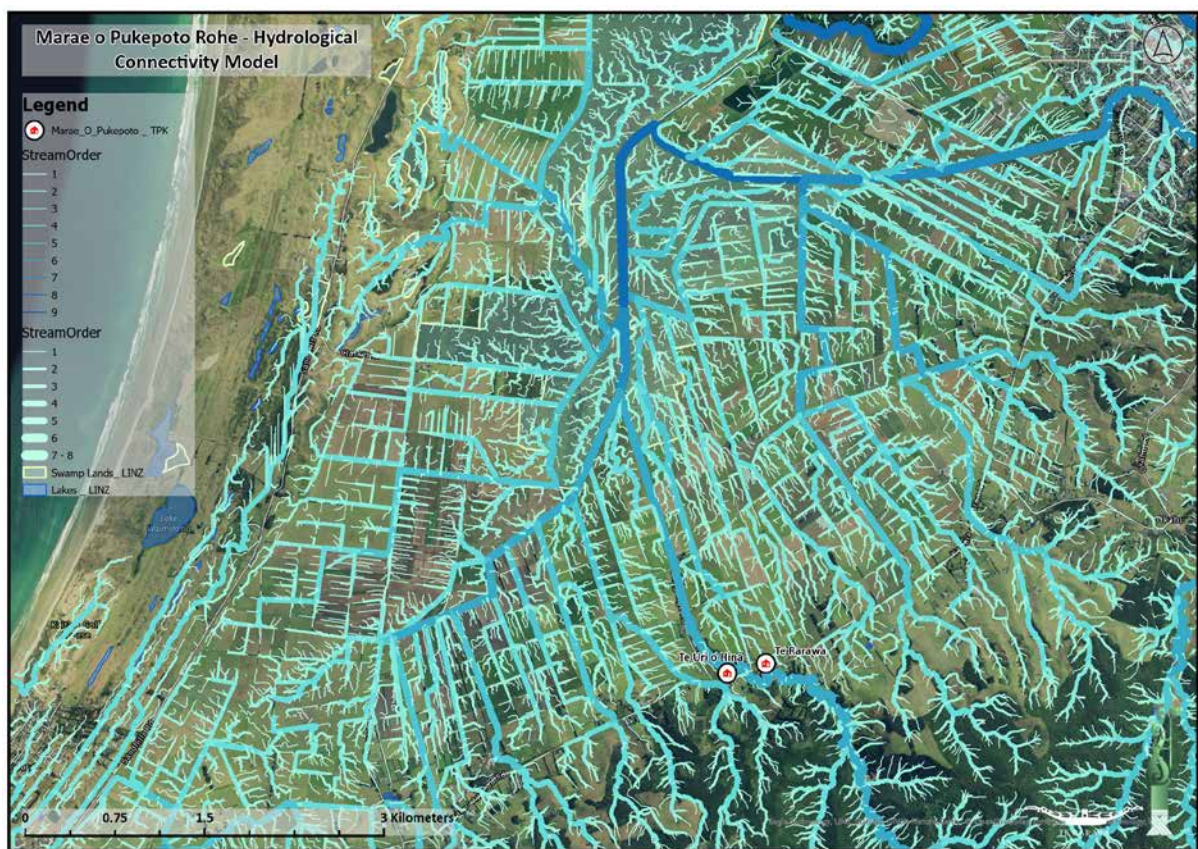
- **ao:** world
- **aroha:** love
- **atua:** ancestor with continuing influence, god
- **awa:** river
- **hapū:** subtribe
- **iwi:** tribe
- **kahuao:** cloak for the world
- **kai:** food
- **kaimahi:** worker
- **kāinga:** village, home
- **kaitiaki:** guardian
- **kanohi ki te kanohi:** face to face
- **karanga:** ceremonial call
- **kaupapa:** principle, cause, policy
- **kaumātua:** elder both male & female
- **kāinga:** village, home
- **kanae:** mullet
- **kaupapa:** issue, subject, topic
- **koroī:** fruit & grove of kahikatea tree
- **kura:** school
- **mahere:** plan
- **mahi:** work, job
- **manaakitanga:** hospitality, kindness
- **manga:** stream
- **marae:** tribal meeting grounds
- **māra:** garden
- **mātauranga:** knowledge
- **maunga:** mountain
- **mauri:** life force
- **moana:** sea, ocean
- **mokopuna:** grandchildren, descendants
- **ngāhere:** forest
- **pae maunga:** mountain range
- **Papatūānuku:** Earth Mother
- **pā:** fortified village
- **papa kāinga:** home base, group of homes usually on communal land
- **pātai:** question
- **pou:** pillar
- **rangatira:** leader, chief
- **Ranginui:** Sky Father
- **repo:** wetland
- **reo:** language
- **rongoā:** traditional medicine
- **taitemariki:** youth
- **takiwā:** area
- **tamariki:** children
- **tangata:** person **tāngata:** people
tangata whenua: person of the land
- **taiao:** environment
- **taonga:** treasure
- **taonga tuku iho:** treasure passed down
- **tapu:** sacred
- **toi:** art
- **tikanga:** customs, correct procedures
- **tūpuna:** ancestors
- **uri:** descendants
- **ūkaipō:** origin, source of sustenance, real home
- **waka:** canoe
- **wai:** water
- **whakapapa:** genealogy, lineage
- **whakawhanaungatanga:** to make connection/connection
- **whakatupuranga:** generation
- **whānau:** family
- **whanaungatanga:** relationships, kinship
- **whare:** building, house
- **whenua:** land

10. Ngā Tapiritanga | Appendices

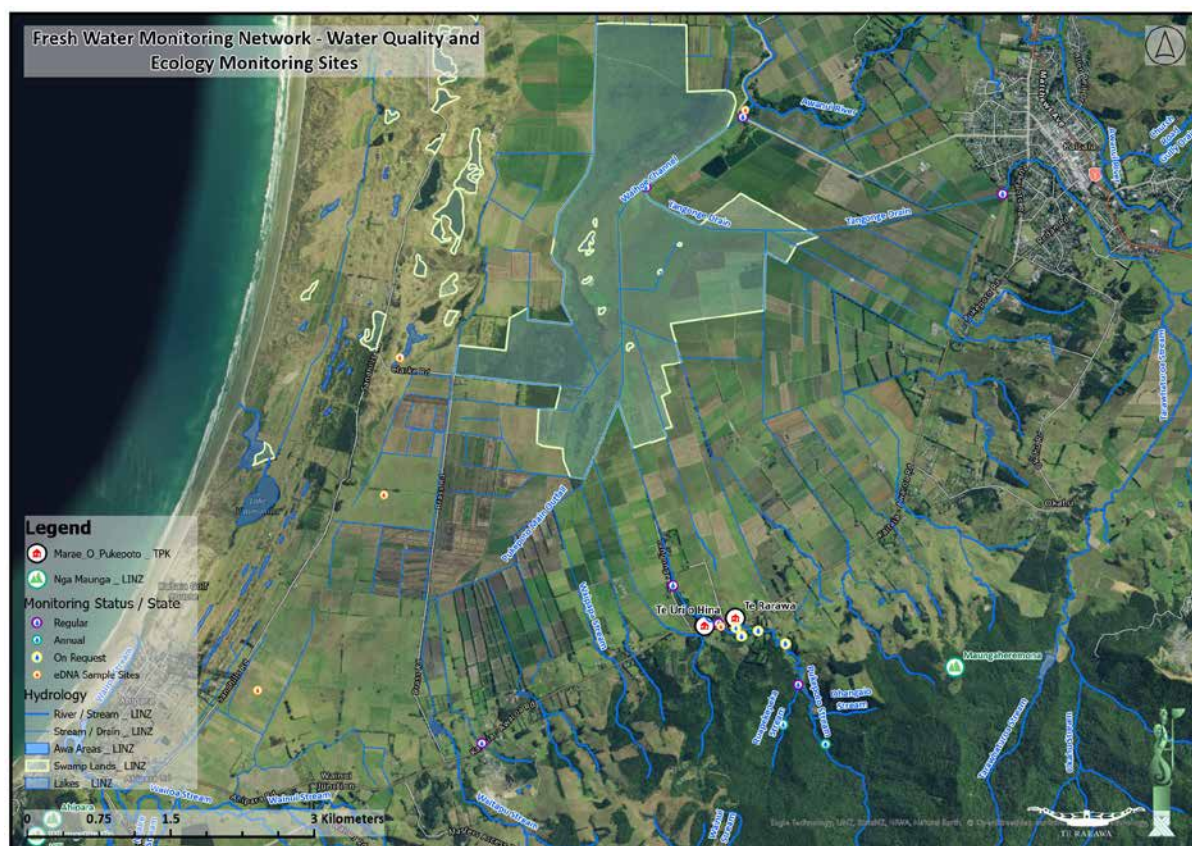
10.1 Wai Data - Pukepoto Hydrological Catchment



10.2 Wai Data - Pukepoto Hydrological Connectivity



10.3 Wai Data - Pukepoto Monitoring Sites



10.4 Pukepoto Me He Wai Data

10.4.1 Parameter Values

Results dated: 28.4.2025					
Awa	Parameter	Unit	Measured value	Measured value interpretation	Parameter score
Pukepoto Stream	E.Coli	MPN / mL	200.5	Good	75
Pukepoto Stream	Nitrate	mg NO3-N / L	0.06	Excellent	100
Pukepoto Stream	Total phosphorus	mg/L	10.04	Poor	25
Pukepoto Stream	Temperature	°C	17.4	Good	75
Pukepoto Stream	Clarity	m	0.7905	Fair	50
Pukepoto Stream	pH	pH units	7.7	Excellent	100
Pukepoto Stream	Conductivity	µS/cm	220.9	Good	75
Pukepoto Stream	Dissolved Oxygen	mg/L	8.44	Excellent	100
Pukepoto Stream	Salinity	parts per thousand	0.09	Excellent	100
Tangonge	E.Coli	MPN / mL	200.5	Good	75
Tangonge	Nitrate	mg NO3-N / L	0.2	Excellent	100
Tangonge	Total phosphorus	mg/L	0.55	Good	75
Tangonge	Temperature	°C	18.6	Good	75
Tangonge	Clarity	m	0.35	Poor	25
Tangonge	pH	pH units	7.31	Excellent	100
Tangonge	Conductivity	µS/cm	228.5	Good	75
Tangonge	Dissolved Oxygen	mg/L	4.04	Fair	50
Tangonge	Salinity	parts per thousand	0.12	Excellent	100
Tangonge Tributary - Quarry	Temperature	°C	17.2	Good	75
Tangonge Tributary - Quarry	Clarity	m	0.1	Poor	25
Tangonge Tributary - Quarry	pH	pH units	7.435	Excellent	100
Tangonge Tributary - Quarry	Conductivity	µS/cm	383.35	Good	75
Tangonge Tributary - Quarry	Dissolved Oxygen	mg/L	1.81	Poor	25
Tangonge Tributary - Quarry	Salinity	parts per thousand	0.185	Excellent	100
How to read this workbook					
1. Parameter Values tab links each measured value to its parameter score and band guide.					
2. NIWA WQ Scoring Tables shows the final weighted scores for each awa.					
3. Bands and Interpretation defines the scoring ranges.					
This tab lists the measured median/mean values for each water quality parameter at each awa (e.g. nitrate, phosphorus, temperature, pH, dissolved oxygen, clarity, salinity), along with units and simple health interpretations (Excellent/Good/Average/Poor). It is derived directly from the individual parameter tabs in the original Pukepoto MHW dataset.		NOTE: Tangonge Tributary - Quarry has no E.Coli, Nitrate, or Total phosphorus measured values in the original workbook, so these are blank in the score table.			

10.4.2 Bands and Interpretation

Parameter	Unit	Range description	Score	Score interpretation						
E.Coli	MPN / mL	≤ 130	100	Excellent / healthy	This tab provides the numeric bands (thresholds) and associated scores for each parameter, plus a “Score interpretation” (Excellent/Good/Fair/Poor). It is derived from the NIWA WQ Scoring Tables and other band tables in the original Pukepoto MHW file, and serves as a legend showing how measured values and scores translate into simple health categories for the awa. It helps inform where the value interpretations in tab 2 come from and is basically a summary of all the tables in the original document.					
E.Coli	MPN / mL	131 to 260	75	Good / healthy						
E.Coli	MPN / mL	261 to 540	50	Fair / average						
E.Coli	MPN / mL	> 540	25	Poor / unhealthy						
Nitrate	mg NO3-N / L	≤ 1	100	Excellent / healthy						
Nitrate	mg NO3-N / L	1.1 to 2.4	75	Good / healthy						
Nitrate	mg NO3-N / L	2.5 to 6.9	50	Fair / average						
Nitrate	mg NO3-N / L	> 6.9	25	Poor / unhealthy						
Total phosphorus	mg/L	≤ 0.25	100	Excellent / healthy						
Total phosphorus	mg/L	0.26 to 1	75	Good / healthy						
Total phosphorus	mg/L	1.1 to 5	50	Fair / average						
Total phosphorus	mg/L	> 5	25	Poor / unhealthy						
Temperature	°C	15	100	Excellent / healthy						
Temperature	°C	16 to 20	75	Good / healthy						
Temperature	°C	21 to 24	50	Fair / average						
Temperature	°C	> 24	25	Poor / unhealthy						
Clarity	m	1	100	Excellent / healthy						
Clarity	m	0.75	75	Good / healthy						
Clarity	m	0.5	50	Fair / average						
Clarity	m	0.25	25	Poor / unhealthy						
pH	pH units	6.5 to 8.5	100	Excellent / healthy						
pH	pH units	< 6.5 - pH - >8.5	75	Good / healthy						
pH	pH units	<4.5 - pH - >10	50	Fair / average						
pH	pH units	1 - pH - 14	25	Poor / unhealthy						
Conductivity	µS/cm	≤ 150	100	Excellent / healthy						
Conductivity	µS/cm	151 to 400	75	Good / healthy						
Conductivity	µS/cm	401 to 1000	50	Fair / average						
Conductivity	µS/cm	>1000	25	Poor / unhealthy						
Dissolved Oxygen	mg/L	≥ 7.5	100	Excellent / healthy						
Dissolved Oxygen	mg/L	5 to 7.4	75	Good / healthy						
Dissolved Oxygen	mg/L	4 to 4.9	50	Fair / average						
Dissolved Oxygen	mg/L	< 4	25	Poor / unhealthy						
Salinity	ppt	0 to 0.45	100	Excellent / healthy						
Salinity	ppt	0.46 to 1	75	Good						
Salinity	ppt	1.1 to 3	50	Fair / average						
Salinity	ppt	> 3	25	Poor / unhealthy						

10.4.3 NIWA WQ Scoring Tables

Results dated: 28.4.2025			
	Pukepoto Stream	Tangonge	Tangonge Tributary - Quarry
E.Coli score	75	75	NO DATA
Nitrate score	100	100	NO DATA
Total Phosphorus score	25	75	NO DATA
Temperature score	75	75	75
Clarity score	50	25	25
pH score	100	100	100
Conductivity score	75	75	75
Dissolved Oxygen score	100	50	25
Salinity	100	100	100
Overall weighted score	85	77.5	40
Overall Health of Awa	GOOD	GOOD	POOR/UNHEALTHY
This tab summarises overall water quality scores for each awa, using NIWA's Me He Wai-style weighting of individual parameters (e.g. E. coli, nutrients, temperature, clarity) into a single "overall weighted score."			

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10.6 Collaborative Mahi

In recent years, there have been a number of collaborative projects as well as research done within our takiwā, these continue to be undertaken. These projects mostly include water monitoring and planting mahi completed alongside kura, hapū, iwi, with the support of local council and funding agencies such as World Wildlife Fund.



Currently local Hapū alongside Ngāi Takoto and Te Rarawa iwi, and in collaboration with community group, Te Pokapū Tiaki Taiao and Wāhine Wild have been replanting natives at Waihou where Tangonge drains into the Awanui.

This project has been ongoing over many years, beginning in collaboration with Te Papa Atawhai/DOC, local hapū and iwi, also with limited pest and predator control.

The annual summer program, Te Rarawa Noho Taiao, and then in winter months Te Hiku Ringa Raupā Noho Taiao have also been involved in this mahi - planting, kayaking, water monitoring, and studying tuna with NIWA.

Similarly local kura, notably Pukepoto, Kaitaia College, and Ngā Kura Kaupapa Māori o Rangianiwaniwa me Pukemiro have helped with this mahi.



Also because of the notable role our lake Tangonge plays within the Kaitaia Flood Scheme is the need for ongoing interaction with Councils, Awanui River Liason Scheme, on which we have a hapū rep, Kaitaia Drainage Scheme etc as well as happenings, the future of KWWTP.

Following on from Covid a number of local Māori artists & those further afield who have a whakapapa connection to the north were a part of Te Hiku Revitalisation Project - large sculptural installations depicting history, pūrākau, kōrero tuku iho to remember how we are placed in our whenua, what it once was, what happened and who we share this whenua with.

We envision more of this in the future, reinforcing the kōrero of the whenua, perhaps also used as boundary markers as our tūpuna did in times past, as well as the trees they planted.

Our desire is to continue this collaborative mahi into the future with other stakeholders, landowners, whānau and whenua trusts, iwi, councils etc knowing that better water and soil quality, indeed our own quality of life, comes not only from what you plant on the waters edge but also what mahi is done on the whenua, and our relationship to it all.

We see an opportunity to transition away from the extractive, productivity and profit driven focus to more meaningful, inclusive, long lasting relationships, together working towards better inputs and practices whilst holding to the tikanga of our tūpuna and asserting their place in a changing world.

Kia whakatōmuri te haere whakamua
Walking backwards into the future