

Te Ara Ki Kōpū

Te Arawa Climate Change Strategy

Te Arawa, ahu Hawaiki

Past, present and future generations of
Te Arawa – secure and well

Developed by

Te Urunga o Kea: Te Arawa Climate Change
Working Group in partnership with
Te Arawa Lakes Trust and Scion

2021



Katohia ngā rau o onamata
Katohia ngā rau o nāia
Raraungia he kete mātauranga mō anamata

Gather the leaves of the past,
Gather the leaves of the present
Weave a basket of knowledge for the future

Nā Ruihana Te Nahu (Tūhourangi; Ngāti Whakaue) &

Ngahuia Hona-Paku (Tūhourangi; Ngāti Wāhiao; Ngāti Whakaue; Ngāti Hurungaterangi; Ngāti Hinemihi)

Te Arawa:

A history of navigating change and transformation

The story of Tamatekapua and Ngātoro-i-rangi and their fraught journey to Aotearoa is hugely significant for Te Arawa.

There are varying accounts of the journey.

At the time of leaving Hawaiiki, the waka was named Ngā waka e rua o Atuatua and the people were named for the great ancestor Ohomairangi. During their voyage, Tamatekapua tried to seduce his cousin's wife Kearoa.

On discovering what Tamatekapua had done, Ngātoro-i-rangi in his rage performed the following karakia:

Unuhia, unuhia, ko te pou mua, ko te pou roto, ko te pou te wharaua
He aturangi mamao, hekeheke iho i runga i ō ara
Tākikiwhara te ara ō Ngātoro, he ara whano ki te pō
Ko te pō nui, ko te pō roa, ko te pō matirerau, ko te pō whaiariki
E ko taku waka ko Te Arawa, ngahue i te Parata
Eke, eke, eke Tangaroa, eke panuku
Hui ē! Taiki ē!

Te-Korokoro-o-te-Parata (the Great Whirlpool) was created and as the waka was descending into it, the people aboard cried out to Ngātoro-i-rangi pleading for their lives. The phrase 'E Toro, kua taka te urunga o Kearoa!' was uttered.

Eventually Ngātoro-i-rangi felt sorry for the people, reciting a powerful karakia to stop this catastrophe from occurring. There are varying accounts (or purākau) as to what happened next. Some say that it was during this time that a red shark appeared at the bow of the waka. It was an Arawa shark, a sign of divine assistance. Ngātoro-i-rangi ordered that the canoe follow the shark.

It is said that when the waka rose, it ascended upon the rays of the sun and thus was re-named, Te Arawa, 'The pathway laid down by the sun'.

The story is an inspiration to Te Arawa, as it faces the modern storm of climate change.



The front cover illustration, developed by Scion graphic designer Dale Corbett in partnership with Te Urunga o Kea, depicts the journey taken by Te Arawa waka. The takarangī (double spiral) represents the whirlpool (Te Korokoro o te Parata) leading to the pathway to Aotearoa, guided by Kōpū (Venus). The green pathway at the top represents our traditional knowledge while the pink/orange pathway at the bottom acknowledges the untapped energies of future generations.



Te Kete Rokiroki (Artist: Jamie Huia Rolleston, Ngāti Whakaue, 2021)

Description: "Whakaotirangi was aboard ngā rākau mātahipū a Atuatua, aka Te Arawa & Tainui both (arguably). Both waka narratives feature this wahine. According to Tainui, she was the wife of Hoturoa and according to us here in Te Arawa, she was the wife of Ruaeo who was taken by Tamatekapua aboard the waka to eventually arrive in Maketū.

Both pūrakau tell us Whakaotirangi was the preeminent kaitiaki kūmara, botanist, and scientific grower of this staple kai that was key to the survival of our tūpuna. Some insist this wahine was the first to introduce kūmara to this land. The garden she established in Maketū was called Te Kete Rokiroki a Whakaotirangi which also alludes to the preserving and safeguarding of kai and other resources for the future. Whakaotirangi was the original Te Arawa champion of food security and sovereignty for the iwi."

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Te Ara ki Kōpū: Te Arawa Climate Change Strategy

Mai Maketū ki Tongariro

Ko Te Arawa te waka

Ko Te Arawa māngai-nui ūpoko tū-takitaki

From Maketū to Tongariro

Te Arawa, the canoe

Te Arawa, the determined people

Te Ara ki Kōpū is a climate change strategy for Te Arawa.

Developed by Te Urunga o Kea: Te Arawa Climate Change Working Group in partnership with Te Arawa Lakes Trust and Scion, this Strategy provides a pathway for our whānau, hapū and iwi to work collectively and proactively as we head into uncertain times (likened to Te Korokoro o Te Parata) and ensure we reach our shared destination (described within our strategic vision as Kōpū).

Climate change is impacting the ability of Ranginui and Papatūānuku to provide the environment in which we need to thrive. It is our version of Te Korokoro o Te Parata – a swirling whirlpool representing the urgency and immediacy which requires a call to action for our survival.

As Te Arawa we can liken the challenge of climate change to the journey of the Te Arawa waka, with an impending crisis affecting our way of life and the need to respond and seek a new way of life to ensure our collective survival.

This Strategy is named “Te Ara ki Kōpū” which translates to “The Pathway to Venus”.

It is said that Kōpū was one of the main guiding stars for the journey to Aotearoa.

What will Te Ara ki Kōpū do?

We have a long history of navigating change and transformation. Te Ara ki Kōpū gives voice to the significant courage, resilience and adaptation of our people over many generations.

Te Ara ki Kōpū enables us to:

- Shape our actions (our future) based on our own knowledge and resilience (our past).
- Equip ourselves with traditional and contemporary knowledge.
- Take tangible action in the face of uncertainty.

Te Ara ki Kōpū grounds our collective response in the continuum of our ongoing story. We will continue to look to our whakapapa and the generations of knowledge, that have supported our way of life, to show us the way forward.

Te Urunga o Kea

The role of leadership cannot be underestimated at this time. Te Urunga o Kea will reprise the role of Kearoa by navigating Te Arawa through climate change. Whānau, hapū and iwi representatives will:

- Lead Strategy implementation.
- Guide, influence and empower Te Arawa whānau, hapū and iwi to empower our way of knowing.
- Ensure that the voice of Te Arawa is heard – within our rohe, nationally and internationally – in relation to climate change.

Te Arawa & Climate Change

Climate change poses a genuine concern for our communities 'mai Maketū ki Tongariro'. There will be social (health, housing, energy, transport); cultural (association, connection, infrastructure); economic (land use and investment); and environmental (taonga species, inundation, and erosion) implications for Te Arawa whānau, hapū and iwi.

Recent impacts of climate change

We have seen the impacts of significant weather events and erosion within our rohe.

In just two years, this included:

- Flooding to low lying areas at Maketū and Little Waihi in 2018 caused by king tides.
- Damage to the wharekai roof at Pāruaharanui marae from a large storm event in 2018.
- Bank erosion behind Parawai marae following the flooding of Ngongotahā stream in 2018.
- Coastal erosion at Okurei point causing a landslide in January 2019, unearthing human remains.



Flooding at Kahurangi, Bledisloe Park, Little Waihi (Photo: Leanne Brown, 2018)



Tree damage at Pāruaharanui Marae, Mourea (Photo: Rotorua Daily Post – Ben Fraser, 2018)

Anticipated impacts of climate change

Within our rohe, this may include¹:

- Rising sea levels, and increased storm events which will change our coastline (approx. 0.6-1.6m by 2130)

This in turn will have an impact on our coastal marae, urupā and other areas of cultural significance, particularly at Maketū and Little Waihī.

Nearby land, currently used for productive purposes, may be compromised through rising and/or saline water tables.

- Warming river, stream, lake and coastal waters

This can result in more frequent algal blooms and/or changes in our mahinga kai species. Some species, including pests, may thrive under the new conditions while others may diminish.

- Warming air temperature (up to 3.6°C warmer by 2090).

This will lead to fewer frosts and more extreme weather events e.g. heavier easterly rainfall, floods, droughts. Horticultural productivity on our Māori land blocks in particular may be affected.

- Increasing average temperatures.

Heat waves with extreme temperatures pose a health risk, particularly to the elderly.

The challenge ahead

Te Arawa social and economic wellbeing is closely linked to natural resources which ranges from fishing, tourism, farming, forestry and conservation. The state of the social and economic ecosystems are deeply interconnected with the state of the environment. Therefore, a change to these environments will directly impact the people living there. Historical land losses and legislation encouraging urbanisation have also led to displacement of Te Arawa people and consequently disconnected many from their land-based whakapapa.

The challenge is huge for our Te Arawa marae. Putting this into context, there are at least 130 whare tupuna descended from Te Arawa waka scattered across our rohe, mai Maketū ki Tongariro. The patterns of marae settlements are mainly concentrated on the coastline, and those inland are located close to waterways such as rivers and lakes. In times of natural disasters or large scale emergencies many marae have opened up to cater for displaced whānau and communities.

Te Arawa experiences a disproportionate amount of economic poverty. This means that our whānau face other struggles that make mitigation for and adaptation to climate change difficult. Half of our population is under 23 and half of our working population earn less than the living wage (\$42,744 pa). A large number of our marae are also uninsured.



Urupā unearthed by landslide at Maketū (Photo: Bay of Plenty Times – George Novak, 2019)

¹Source of information: <https://www.boprc.govt.nz/environment/climate-change>



// It is generally accepted that climate change is an unforeseen consequence of colonisation, global forest removal, capitalism, and rampant industrialisation. These all stem in the main from western individualistic consumerism and granular left brain approaches to science and thought. The solutions needed therefore must be sourced from a different values base and thought processes and this is why Māori and indigenous peoples must lead climate change solutions rather than just contributing to them. We as Te Arawa are part of the transformational leadership change that is needed to correct the way in which the environment is perceived and managed and to ensure climate change is reversed.

Douglas Macredie (2020)

Te Kōmiro o te Utuhina (Photo: Lani Kereopa, 2018)

Where we want to be

Our strategic vision is our Kōpū or guiding star – it articulates our destination or where we want to be in the future. Our outcomes describe what the future looks like, while our mission outlines the role of Te Urunga o Kea in achieving the vision.

Our Vision

Our Kōpū or Strategic Vision is:

Te Arawa, ahu Hawaiki

**Past, present and future generations of
Te Arawa – secure and well**

This intergenerational vision seeks to ensure the adaptation and survival of our people, cultural practices and taonga species in a world in which they can thrive.

As Te Arawa, we are all mokopuna of Tamatekapua and Ngātoro-i-rangi. We have the great privilege of whakapapa; the ability to know and understand our tupuna from generations before us and to celebrate their courage, foresight and resilience.

We must ask ourselves: what will our mokopuna say about our actions? What will they consider were the traits of our time? What is our legacy to be shared in 1000 years?

Our Mission

The role of Te Urunga o Kea in achieving our strategic vision is:

Navigating Te Arawa whānau, hapū and iwi through climate change by empowering our way of knowing to ensure continuity and wellbeing of Te Arawa whakapapa and taonga

Our Outcomes

We will be:

**Resilient | Connected | Innovative |
Leading by example | Self-determined |
Building our contemporary strategy for
survival**

Our Guiding Principles

Three innovative principles will guide our journey ahead, based on 'unuhiā te pou', the karakia uttered by Ngātoro-i-rangi to steer the waka from the dangers of Te Korokoro a Te Parata.

These principles are:

1. Te Pou Mua | Grounded Innovation

We will be innovative in the face of uncertainty; re-learning what we already know to guide the way while building knowledge on what is unknown.

2. Te Pou Roto | Balanced Transformation

We will take steps to restore balance; not just taking action but challenging the status quo, which requires changes in mindset and practice.

3. Te Pou Wharaua | Visionary Adaptation

We will be guided by knowledge and enlightenment to support the way we steer; ensure we're making progress and recalibrating if needed.



// Food sovereignty and self-sufficiency is becoming more and more important to iwi and hapū. Mahinga kai, including both wild food sources and māra kai or gardens, are an expression of ahi ka.

CNI Group. (2020). CNI Plan Change 10 CIA Stage 2

Maraeroa Mahinga Kai (Photo: Lani Kereopa, 2020)

// We are connected to all things – including nature, our ancestors, our gods – as well as to the past, present and the future. Our tribal knowledge and traditional responsibilities of kaitiakitanga include the protection and sustainability of natural resources. We view the natural environment as a taonga tuku iho - handed down from generation to generation - to be cared for and maintained, if not improved, for future generations.

Tapuika Iwi Authority Trust. (2014). Tapuika Environmental Management Plan 2014-2024



Kai Rotorua (Photo: Rotorua Lakes Council, 2020)

// It will be our cultural practices - how we do things using ancient and adaptable intergenerational knowledge, that will shape and reclaim our natural world and replenish the mauri of our people, taonga species and biodiversity.

Harina Rupapera (2021)



Horohoro Native Tree Nursery (Photo: Te Rūnanga o Ngāti Kea Ngāti Tuara, 2020)

Our Priority Actions and Kaupapa

A collective response to a changing climate is a huge undertaking. For this reason, we will focus our efforts on the actions and areas that will create the biggest impact for Te Arawa whānau, hapū and iwi.

Priority Actions

Over the next 10 years, we will focus our efforts on the following actions:

- 1. Action Planning**
Develop action plans to enable kaupapa-focused action.
- 2. Research and Monitoring**
Gather and collate robust information to guide planning, decision making and action.
- 3. Awareness**
Build tamariki, rangatahi, whānau, hapū and iwi awareness and understanding about climate change, including ways to mitigate, adapt and respond.
- 4. Social Mobilisation**
Inspire and empower whānau, hapū and iwi to be involved in or leading on-the-ground action.
- 5. Strategic Alliances**
Build and maintain effective and mutually beneficially relationships.
- 6. Advocacy**
Represent Te Arawa locally, regionally, nationally, and globally in relation to climate change.

Priority Kaupapa

Over the next 10 years, we will focus our efforts in the following areas:

- **Adaptation Planning & Resilience Building**
- **Biodiversity**
- **Circular Enterprise & Economies**
- **Energy Security & Sovereignty**
- **Food & Water Security & Sovereignty**
- **Land Use Change & Practices**

These are described in more detail in the Appendix on Page 11.

Each kaupapa will have an Action Plan which outlines the specific response in relation to Priority Actions 2-6.



(Photo: Te Runanga o Ngāti Keroa Ngāti Tuara)

// Our vision is to be self-sufficient with little reliance on external options. So our marae can operate off-grid and we have developed our people in a way where they have adopted this as a solution, cooperatively working together. The notion of poverty will be redefined. Being self-sufficient as a hapū may not necessarily mean having a lot of money in the bank, but we can provide for ourselves. We have our own power, food gardens, geo-thermal energy, and a social system operating where we are connected to the global world and are still engaging with external agencies. We can cater for tribal needs without relying on external systems, and we are developing villages of self-sustainable systems.

Eugene Berryman-Kamp (2019)



// The vision is to restore and enhance the mauri of land, rivers, streams, aquifers, wetlands, estuaries and the coastal environment within our rohe. In other words, “Ka ora te taiao, ka ora te tangata - Our environment is healthy, we are healthy and prosper.

Te Runanga o Ngāti Whakaue ki Maketu. (2018).
Te Rautau, Te Rāhui Taketake: Ngāti Whakaue ki Maketu Hapū Management Plan, 2018-2028, p17

(Photo: Kerri Anne Hancock, 2020)



Te Kōmiro o te Utuhina (Photo: Lani Kereopa, 2019)

Implementing the Strategy

Haumi e, hui e, tāiki e!

During the journey from Hawaiki, Ngātoro-i-rangi uttered many times this call to prepare and initiate a journey. It is a phrase used today by our modern leaders on the marae. This call signals that the group is ready and unified for a common purpose. For this Strategy, the phrase guides our way of approaching and taking action for mitigation and adaptation in each of the priority kaupapa areas.

Haumi e! (Alliance)

Te Arawa leadership, infrastructure, networks, and systems are planned and bound together through tikanga and kawa

Prior to leaving Hawaiki, preparations were made for the long and potentially dangerous journey. Much planning and discussions around roles and responsibilities, resources and how each person would contribute to the journey would have been considered.

For this Strategy, 'Haumi e' focuses on ensuring robust systems, infrastructure and networks to initiate a Te Arawa climate change response.

Hui e! (Gather)

Te Arawa information, resources and people are connected and established through tikanga and kawa

We look to both past and contemporary approaches to gather, secure and sustain:

- Our natural resources
- Te Arawa whakapapa and our networks
- Taonga tuku iho and the potential of taonga yet to come
- Multiple technologies and multiple knowledge systems.

Tāiki e! (Activate)

Multiple pathways for Te Arawa to communicate, exchange and activate ideas, information, data and wisdom are established appropriately through tikanga and kawa.

In relation to the Strategy, this calls for a collective Te Arawa decision to shift attitude and behaviour, knowledge and skills to unite and navigate climate change. Collective action requires collective critical reflections on ways we communicate and lead. It will also call into question the extent to the way we observe tikanga and kawa, and how prepared are we to modify our own behaviours and actions in times of change.

Successful implementation of the Strategy will look like:

- Whānau, marae, hapū and iwi implementing action plans and mitigating the effects of climate change
- Whānau, marae, hapū and iwi having access to, and utilising the best information and technologies in their climate change response
- Strategic alliances facilitating access to funding and expertise to enable implementation of action plans within kaupapa areas
- Our rangatahi and future generations having the capacity to lead the Te Arawa response to climate change
- Te Arawa helping to facilitate a global network of indigenous leadership in the climate change adaptation and mitigation space.



(Photo: Te Rūnanga o Ngāti Kēaroa Ngāti Tuara, 2020)

// At no point should there be further investment or rights provided to power and energy companies to deliver to 100% renewable. More focus on the micro and community-based solutions will be better for hapū and iwi long term.

Nicki Douglas (2019)



(Photo: Kerri Anne Hancock, 2020)

// Future-proofing for climate change requires the education of our rangatahi in necessary skills for adaptation and survival.

Mapihi Raharuhi (2018)



(Photo: Amy Toensing, 2010)

// What we need is for government and the climate commission to reflect the interests of Te Arawa; enable participation of hapū and iwi in the co-design and co-delivery of initiatives; and a commitment to investments in initiatives led by hapū and iwi. Te Arawa are ready, we are outcomes focused. Te Arawa are the ideal partner.

Nicki Douglas (2018)

Appendix: Our Priority Kaupapa



ADAPTATION PLANNING & RESILIENCE BUILDING

1. Te Arawa homes, marae, urupā and towns are safe from changing weather, waters and landscapes.
2. Te Arawa homes, marae, urupā and towns are able to prepare, adapt, mitigate, respond and recover from emergencies.

BIODIVERSITY

3. Our lands, forests, lakes, rivers, wetlands and estuaries are pest free and abundant with our taonga species.
4. The function and role of our wetlands and native forests are restored.

CIRCULAR ENTERPRISE & ECONOMIES

5. There is no waste in our environment.
6. Our whānau, hapū and iwi are in control of our own sustainable food & resource systems making up circular economies at local marae and community level.
7. Our whānau enjoy intergenerational and sustainable prosperity.
8. Our whānau are empowered to transition to skilled green jobs.

ENERGY SECURITY & SOVEREIGNTY

9. Our whānau use our ngāwhā to heat our homes, cook our kai and to bathe in.
10. Our whānau use solar panels on our homes and marae to generate and share our own electricity.
11. Our iwi uses the wind, water, and sun on our lands to generate and share our own electricity across our whānau, hapū and marae.

FOOD AND WATER SECURITY & SOVEREIGNTY

12. Our whānau have access to clean drinking water and abundant mahinga kai.
13. We grow our own nutritious food on our own lands.
14. We swim in, and eat kai from our clean awa, roto and moana.

LAND USE CHANGE & PRACTICES

15. Our whānau, including those displaced by climate change, live in healthy homes.
16. Our places of significance, wāhi tapū and cultural heritage sites are recognised and protected.
17. Our land use is determined by what is best for our soils, waters and ecosystems.
18. Our collective resources are used sustainably for the benefit of our whānau and hapū.
19. Rotorua homes, communities, city and surrounds are supported by green infrastructure.

