

HE POUTOKOMANA WA

INSIGHT INTO THE BARRIERS AND
OPPORTUNITIES FOR HAPŪ-BASED AQUATIC
CULTIVATION PRACTICE

2023

Prepared by the Whakaika Research Collective:
Rangiroa Rongonui, Ōeo Pā
Bubby Tamakehu & Gerrard Albert, Ngā Tangata Tiaki o Whanganui
Sid Tamakehu, Matahiwi Marae
Te Rerekohu Tuterangiwhiu, Cawthron Institute
Kelly Ratana, Manaaki Te Awanui
Tekiteora Rolleston-Gabel, NIWA
Peter Van Kampen, The Nature Conservancy

WHAKATAKINGA

Whakaika Te Moana (Whakaika) is a project funded by the Sustainable Seas National Science Challenge to investigate traditional aquatic cultivation practice. This project also seeks to highlight understandings of hapū-based economies and what some of the barriers and opportunities there are for whānau, hapū and iwi in reclaiming both knowledge and practice that supports those economies.

This infographic report **He Poutokomanawa** builds on the work described in the He Pou Kai Āwha report, and provides an overview of some of the practices discussed throughout the project as well as some insights into the national scale and localised barriers and opportunities for whānau across Aotearoa. We worked alongside whānau from Ōeo Pā in South Taranaki and various marae of the Tamaūpoko (middle reaches) region of the Whanganui River to help identify some of those opportunities and barriers to continuing their traditional aquatic cultivation practices now and into the future.

KAUPAPA

The first section of this report provides a brief summary of the relevant legislation, policies and plans that influence whānau, hapū and iwi in the aquatic cultivation space as well as highlighting some of the potential barriers and enabling factors that are present.

The map demonstrates some of the progressive legislation and plans that highlights enabling pathways for whānau, hapū and iwi to navigate aquatic cultivation, and more specifically non-commercial aquatic cultivation.

The remainder of the report will describe some of the key practices explored in Whakaika alongside our whānau from Taranaki and Whanganui. Additionally, we outline other practices identified across Aotearoa, highlighting the breadth of potential held by whānau, hapū and iwi.

The report concludes by highlighting some of the key difficulties and barriers experienced by whānau, and locating the enabling factors that support in their continuation of mātauranga (knowledge) and mōhiotanga (application-based wisdom) tuku iho (handed down through generations).



In essence, the only place for law with respect to tikanga and kawa is to say there is a place for it to exist and then let it exist.

- Hapū practitioner, 2022



NATIONAL LEGISLATION AND REGULATION

LEGISLATION/REGULATION	DESCRIPTION
TE TIRITI O WAITANGI/TREATY OF WAITANGI <i>(referred to as Te Tiriti o Waitangi throughout)</i>	Te Tiriti o Waitangi is the founding document of Aotearoa. Signed in 1840, it is an agreement between Māori and the British Crown.
TREATY OF WAITANGI ACT 1975	This Act established the Waitangi Tribunal as an ongoing commission of inquiry to hear Māori grievances against the Crown concerning breaches of the Treaty of Waitangi/Te Tiriti o Waitangi.
RESOURCE MANAGEMENT ACT 1991 <i>(Currently under review)</i>	RMA is the primary legislation governing the use of natural resources in Aotearoa. It requires regional councils to manage freshwater resources sustainably, and to provide for the social, economic, and cultural well-being of the community.
FISHERIES ACT 1996	The purpose of this Act is to provide for the utilisation of fisheries resources while ensuring sustainability.
CONSERVATION ACT 1987	Part 5B of this Act is particularly relevant as it applies to freshwater fisheries and includes provisions for Māori fishing rights.
NATIONAL COASTAL POLICY STATEMENT 2010	The New Zealand Coastal Policy Statement 2010 (NZCPS) guides councils in their day-to-day management of the coastal environment.
NATIONAL POLICY STATEMENT FOR FRESHWATER MANAGEMENT 2020	The National Policy Statement for Freshwater Management 2020 (NPS-FM) sets out the objectives and policies for freshwater management under the Resource Management Act 1991.
HECTOR'S AND MĀUI DOLPHIN THREAT MANAGEMENT PLAN	The threat management plan is a planning framework to manage human-caused threats to Hector's and Māui dolphin.
MARINE AND COASTAL AREA (TAKUTAI MOANA) ACT 2011	The purpose of this Act is to establish a durable scheme to ensure the protection of legitimate interests of all New Zealanders, recognise mana tuku iho exercised in the marine and coastal area, provide for the exercise of customary interests, and acknowledge Te Tiriti o Waitangi.
MĀORI COMMERCIAL AQUACULTURE CLAIMS SETTLEMENT ACT 2004	The purpose of this Act is to provide full and final settlement of Māori claims to commercial aquaculture and the allocation and management of aquaculture settlement assets.

This table demonstrates some of the key national level legislation, policy statements and plans that relate to aquatic cultivation. Many of these speak to aspects that would suggest there is an overall support of whānau, hapū and iwi being able to enact their customary fishing and cultivation practices, however sometimes the provisions can be also used as or felt to be barriers.

ENABLING POWERS

POTENTIAL BARRIERS

Under Article 2 of Te Tiriti Māori fishing rights and rangatiratanga of taonga, kāinga and whenua is guaranteed. Treaty settlements have introduced a range of legislative regimes, some which have recognised the environment as a legal entity and put in place strong co-management arrangements.

Since signed, there have been numerous breaches of the guarantees under Te Tiriti o Waitangi. It can be an enduring and costly process to settle past grievances and breaches. Without settlement oftentimes whānau have minimal decision-making recognition or powers.

This Act allows for grievances and breaches of Te Tiriti o Waitangi/Treaty of Waitangi to be heard. The recommendations of the Tribunal may support claims by Māori.

The Waitangi Tribunal is limited to make findings and recommendations but cannot make legally binding determinations.

The RMA requires regional councils to consult with Māori on resource management issues. This has been increasingly recognised and incorporated into decision-making processes across the country.

Consultation processes vary across councils, with many inadequate. "Māori consultation is often restricted to the cultural and spiritual effects in relation to the environment [1]". The Act sections that support Māori consultation are often considered subservient to the purpose of the legislation.

This Act sets out provisions for recognising and providing for customary food gathering by Māori and the special relationship between tāngata whenua and places of importance for customary food gathering (including tauranga ika and mahinga mātaītai) to the extent that it is non-commercial.

Fines and other penalties for fisheries offences are particularly heavy compared to some other kinds of criminal offending, because the fisheries laws specifically require judges to provide a deterrent when they're sentencing.

Māori fishing rights are guaranteed in this Act. Conservation Law Reform 1990 Section 26ZH – "Nothing in this Part shall affect any Māori fishing rights."

The lack of communication, education or awareness about this provision means whānau are sometimes impeded or persecuted for practicing their fishing right.

This statement gives effect to the principles of Te Tiriti o Waitangi in relation to the coastal environment by recognising tāngata whenua relationship with coastal environments and providing opportunities for Māori involvement in decision-making processes and tikanga Māori.

The statement requires consultation with Māori but does not provide for decision-making power.

This statement requires every local authority to actively involve tāngata whenua (to the extent they wish to be involved) in freshwater management (including decision making processes) [2]

"Often tāngata whenua are included as a 'stakeholder' alongside other stakeholder communities" [1]. This does not represent the partnership outlined by, or give full effect to, Te Tiriti o Waitangi.

Whānau reported being impacted heavily by these restrictions on gill netting which impose heavily on some of their traditional fishing practices [1].

This allows whānau, hapū and iwi to apply for their customary interests to be recognised under customary marine title, and restores any customary interests extinguished under the Foreshore and Seabed Act 2004.

Provisions for decision-making or control over a recognised customary interest are determined in court. This is a very lengthy and potentially costly process.

No enabling considerations for whānau and hapū based aquaculture outside of commercial assets.

[1] Hapū practitioner, Pers Comms. 2022
[2] Part 3.4 of NPS-FM

The Freshwater Fisheries Act 2004 states that nothing in this Act shall affect a Māori fishing right... It started as a Conservation Law Reform Bill, and then it became the Freshwater Fisheries...

...on that legislation, I won a case against the Conservation Department with that provision in the Act, which allowed me to fish when and by whatever means I wanted to fish. Whether I put a pā there or I fish at night for the whitebait.

- Hapū Practitioner, 2022



REGIONAL LEGISLATION AND REGULATION

Treaty settlement legislation, regional plans and policies are beginning to demonstrate a willingness of Crown entities and agencies to support opportunities for whānau, hapū and iwi to practice aquatic cultivation and fishing practices in their locations. This map shows some of the current acts, plans and provisions that support whānau, hapū and iwi in this pursuit.

WAIKATO REGIONAL COUNCIL Proposed Regional Council Coastal Plan 2022

Marae-based aquaculture

The proposed plan includes a new policy to enable tangata whenua to undertake marae-based aquaculture in accordance with tikanga Māori (Note: This proposed plan is currently being reviewed).

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WAIKATO RIVER Waikato River Settlement Act 2010

Settlement legislation

The purpose of the settlement is to restore and protect the health and well-being of Waikato River for future generations. It recognises Waikato River as an indivisible whole and includes co-management provisions.

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WHANGANUI RIVER Te Awa Tupua Act 2017

Settlement legislation

Te Awa Tupua is recognised as an indivisible and living whole, comprising of the Whanganui River from the mountains to the sea, and all of its tributaries, physical and metaphysical elements. Te Awa Tupua is a legal person and has all the rights, powers, duties, and liabilities of a legal person.

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NORTHLAND REGIONAL COUNCIL Proposed Regional Plan for Northland 2022

Marae-based aquaculture

This regional plan includes provisions for non-commercial and marae-based aquaculture. Marae-based aquaculture is also subject to being non-commercial and occurring within the area traditionally harvested by the marae.

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BAY OF PLENTY REGIONAL COUNCIL Regional Coastal Environment Plan 2019

Non-commercial aquaculture

This regional plan includes provisions for non-commercial aquaculture that provides significant environmental, social, cultural or educational benefits.

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TE UREWERA Te Urewera Act 2014

Settlement legislation

The purpose of this Act is to establish and preserve the perpetuity and legal identity of, and protected status for Te Urewera. It also recognises the connection between Tūhoe people and Te Urewera.

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TASMAN DISTRICT COUNCIL Tasman Resource Management Plan 2023

Aquaculture activities (not specific to Māori)

Aquaculture activity must recognise and provide for the relationship of iwi and their customs and traditions with their ancestral lands, waters, sites, wāhi tapu, and other taonga.

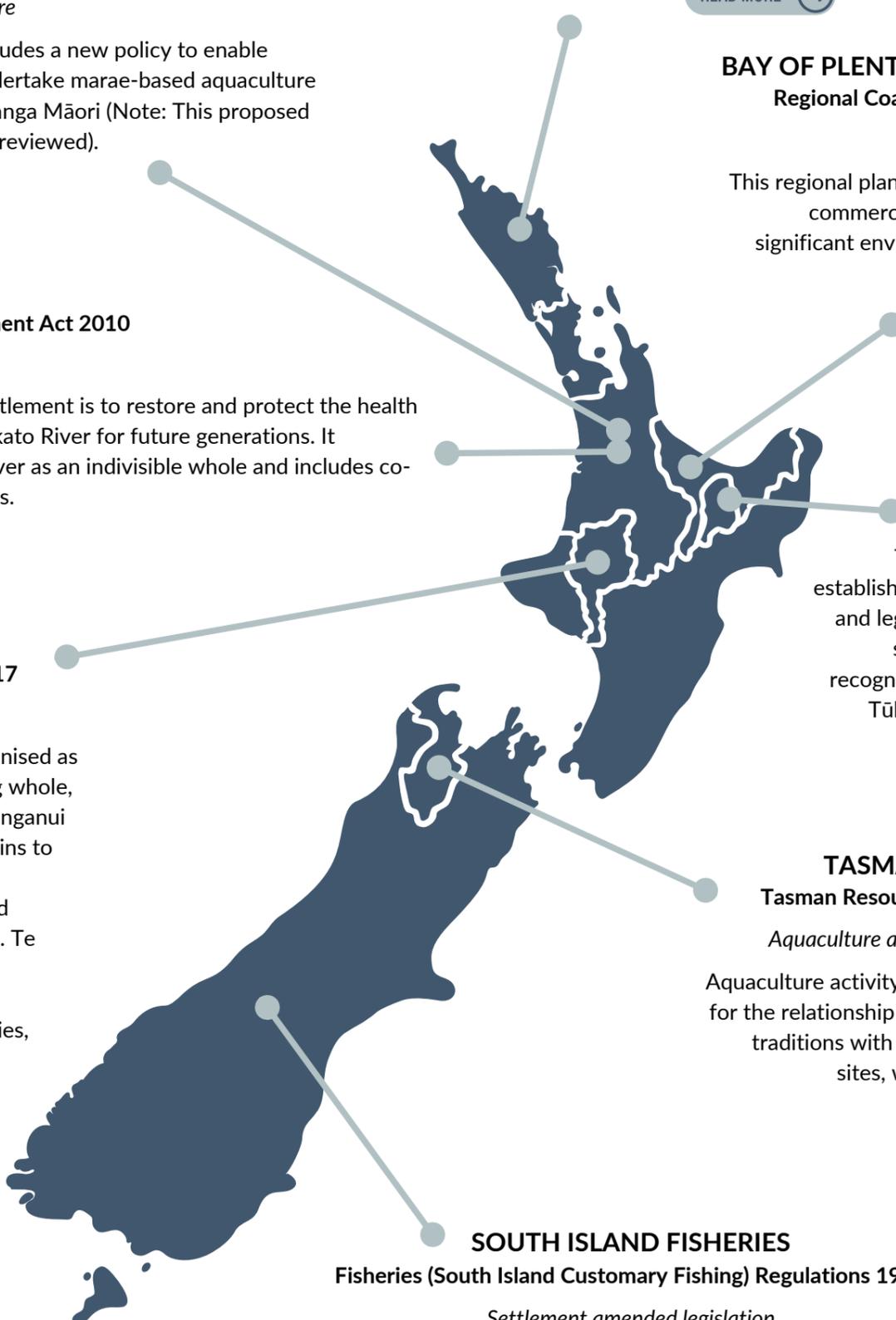
[READ MORE](#) →

SOUTH ISLAND FISHERIES Fisheries (South Island Customary Fishing) Regulations 1999

Settlement amended legislation

This change to the fisheries legislation through the Ngāi Tahu Claims Settlement Act 1998, provides for appointed tāngata tiaki/kaitiaki to authorise any individual to take fish, aquatic life, or seaweed for customary food gathering purposes.

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WAO TŪPUNA PRACTICES

While national and regional scale legislation, planning and policy continues to exist, it is unclear as to where the practices our whānau explored in Whakaika fit within this context. Until each of those enabling powers are tested and tried, they will remain theoretical powers. One way that we may be able to work within these layered and vast networks of agencies, legislation and regulation is by utilising our own layers of organisation - iwi, hapū and whānau.

- **Iwi** - are best positioned to negotiate and prioritise the interest that are mandated by their hapū at a national scale. This will help to ensure that there is a coordinated approach to enabling hapū.
- **Hapū** - are naturally regional and place-based, associated to particular waterscapes by their shared whakapapa. Hapū can negotiate and prioritise at a regional level, and hold the mana over their lands and water as well as the collective responsibility for their wao atua to produce well-being for their hapū members.
- **Whānau** - are the holders of mātauranga and mōhio. It is at this scale that the active practice and knowledge retention of the individual practices sit, in specific locations.

The next sections of the report identify the practice, construction and connections to resources shared by the whānau we worked alongside in Whakaika.

WAO
ATUA

WAO
TŪPUNA

WAO
TĀNGATA

UTU PIHARAU

PRACTICE

This practice is used to harvest the returning piharau in the Whanganui River which is still in use today. It targets the browned piharau in the middle reaches of the Whanganui main stem, predominantly on flood flows, as described by whānau in the Tamaūpoko region of the river. This practice is well documented both historically and today with functioning utu in operation. Utu take advantage of deep knowledge of both river flow and piharau migration tendencies.

Fishing was done according to the maramataka, including fishing seasons and particular moon phases. It was common practice that fishermen did not attend tangihanga for the duration of the piharau season. If fishermen decided to attend a tangihanga it was an expectation that they wouldn't be fishing the rest of the season.



CONSTRUCTION

Construction of the utu piharau includes the building of a wooden weir to create a spot of calm water downstream of the weir. This creates an area for piharau migrating upstream along the river banks to rest behind the weir. At the end of the weir closer to the middle of the river, a gap in the weir creates an area of swift river flow. As piharau swim along the weir once they are ready to carry on upstream, they encounter the gap and the swift downstream flow turns them into the poha (guiding net) and eventually into the hīnaki (catching net). The net is kept floating and expanded by sitting in the swift flow created by the weir.

The river is observed during flood flows each year, then during the summer months, utu were constructed by pūkenga (experts) fishers. Angles of the utu needed to be just right so as to stand up to flood flows observed during fishing periods and also to avoid being damaged or risking fishers lives during the fishing season. Fish were caught and stored in korotete (boxes) in the river, which ensured live piharau were available as and when required, also supporting on-growth and prolonged harvest.

CONNECTIONS TO REOURCES

Much consideration was given to the river flow needed when both building and fishing with the utu. Traditional materials used included kōpuka, kareao, aka kiekie, tā/rāta, mānuka brush, rarauhe bundles, silt/clay, as well as harakeke and akatea for making of the poha and hīnaki.



PĀ ĪNANGA

PRACTICE

This practice is used to harvest īnanga (whitebait) and is described here by whānau at Ōeo Pā, which is still in use today. This practice takes place predominantly in river mouths and targets the returning īnanga juveniles as they begin to return to freshwater. It draws on knowledge of the īnanga behaviour – specifically schooling and hugging the banks of the river mouths during migration. Although the building of pā īnanga is not permanent, the practice allows for considered and regulated take of īnanga during the right times of the year.

This practice is a fishing technique, however utilising this knowledge allowed whānau in Taranaki to supplement their food sources.



Ōeo Pā,
Taranaki

CONSTRUCTION

Built by arranging rocks and boulders (head size or larger) into a pā (rock wall race) that runs semi-parallel or slightly angled out from the bank of the river mouth. If possible a larger boulder may form the upstream anchor for the pā. These rocks do not block the entire mouth of the river, but act as a guide for schools that are coming up to the river mouth on tidal surges.

Ideally the hīnaki (net) is set behind one or two larger rocks to ensure it remains in place. The net sits with the opening (front end) facing to the ocean, and raised slightly above the back of the net. The gap below the raised opening and the bottom of the stream bed is filled with smaller rocks so no īnanga aren't missed. A second fisher can also walk the race created with a stick to help herd the īnanga into the net both during and after a wave surge. Catch is stored in storage containers on the river bank until the required amount is caught.

CONNECTIONS TO RESOURCES

Materials required for construction of the pā (race) are suitably sized rocks. Materials required for the hīnaki include harakeke, and akaaka/kareao. The atua spaces on the Southern Taranaki coast include sandy beaches scattered with rocks, free flowing freshwater streams, with a direct link to the moana, attracting īnanga. These components are intimately understood by the fishers on their particular rivers.



WHAKAPARU

PRACTICE

This practice is used to sustainably harvest the newly returned blue piharau from sea and is described here by whānau in at Ōeo Pā, as a practice used in living memory.

This practice takes place predominantly in the first 1-2km of the river, upstream from the sea, and targets piharau that have just returned from their ocean phase and prior to spawning. It draws on behavioural and migrational knowledge, specifically the inclination of piharau to travel at night, burrow under boulders and seek out safety along their migration path.



CONSTRUCTION

Construction of the whakaparu includes manipulation of large boulders and rocks (larger than head-sized and able to be moved by individuals) arranged into a pā (wall), and takes advantage of large immovable boulders if they are in the right position.

The whakaparu arranges a line of rocks on the inside curve of the river in a line perpendicular (or slightly angled to manage against flow) to the river bank. If there is an appropriate large boulder in the river flow, this can be used as an anchor for the pā and it is built back to the bank from there. The downstream rocks need to be placed very close together and where possible have gaps of 1-2cm that run with the river flow.

Once the pā is in place, rarauhe (bracken fern) are placed with the tips of the stems on top of the pā and the butt ends upstream of the pā on the river bed. A second layer of wiwi (knobby clubbrush) bundles are placed on top in a similar fashion. These layers must be thick and leave no gaps for light to get in as darkness allows for piharau to hide. Once the rarauhe and wiwi are laid onto the pā, another line of stones (head size or larger) are placed on top of the butt ends to anchor them and close off the whakaparu. This creates a triangular pocket behind pā and under the rarauhe and wiwi that provides slower flow, darkness and a place for migrating piharau to rest. Harvesting of the piharau happens by reaching in between the rarauhe and wiwi to take what is needed.

CONNECTIONS TO RESOURCES

Materials required to build whakaparu include appropriately sized rocks, rarauhe, wiwi, free flowing freshwater, piharau, wadeable and meandering (i.e. windy to create slow areas in the flow on a bend) rivers, as well as fishers with intimate and grounded knowledge of piharau behaviour on their rivers.



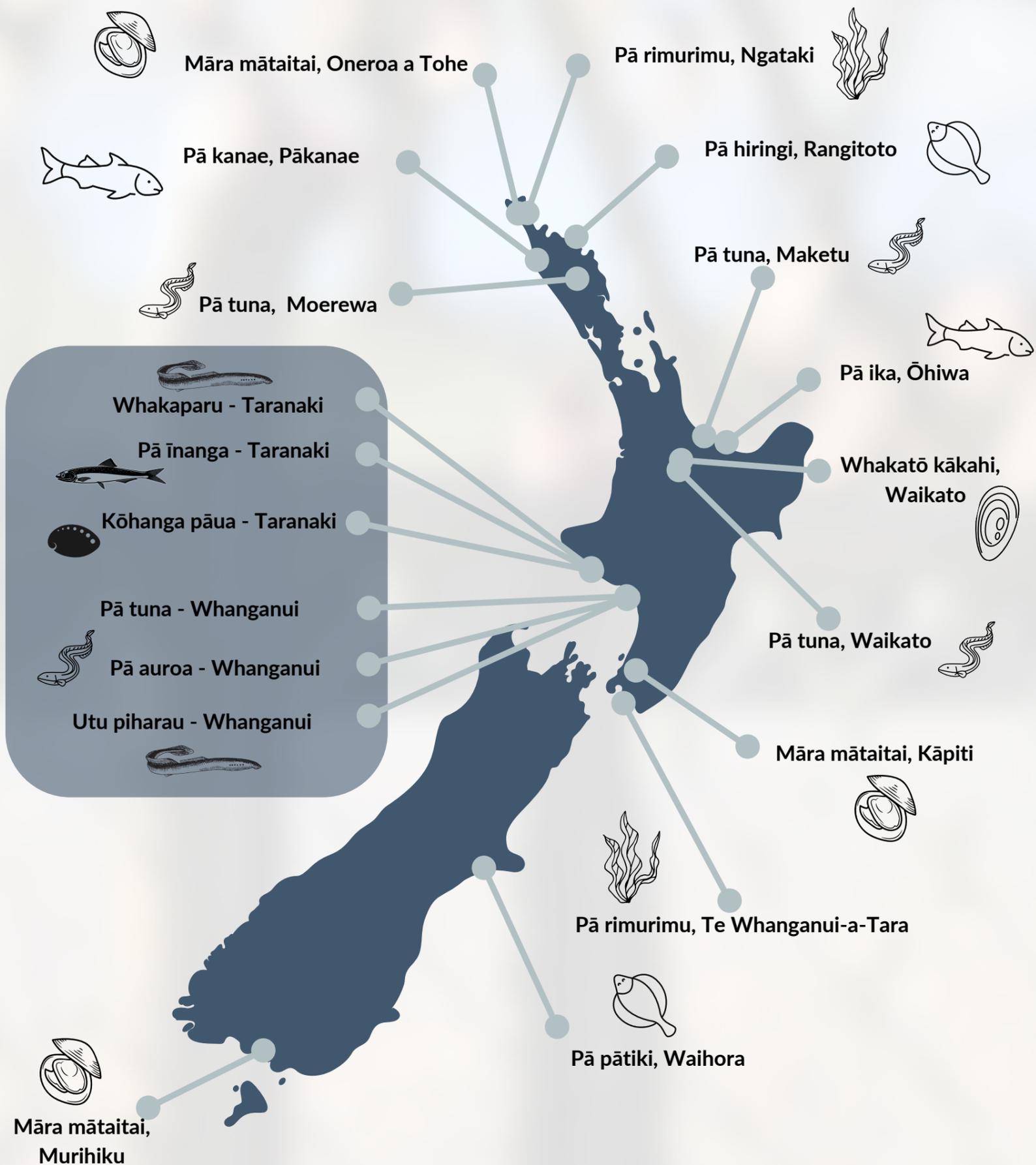
OTHER CULTIVATION PRACTICES

The map below demonstrates the various types of aquatic cultivation practices that the Whakaika project identified. The practices located in the blue box indicate those explored in Whakaika as well as others that were identified by whānau from the Whanganui and Taranaki areas.

Although Whakaika did not explore all of these tūpuna practices, it's important to highlight that

aquatic cultivation was not only for fish, but for rimurimu (seaweeds) and mātaimai (shellfish) as well.

It is also important to note that place names like Pākanae, for example, help us to locate dormant cultivation practices in our landscape. As we redefine what aquatic cultivation looks like, there are many examples to learn from that already work within the bounds of Te Ao Tūroa.



OPPORTUNITIES

While there is little doubt that Māori practiced various forms of aquatic cultivation, it is clear that over time there has been a systematic dismantling of those practices through various mechanisms.

The following section outlines some of the common ongoing barriers described by whānau in Whakaika, and provides some examples of the enabling factors that are supporting those we worked with to continue to practice and maintain their kawa, tikanga and ritenga.



ONGOING BARRIERS

Legislation & regulation

"... kei te pēnei tonu ērā o ngā ture o te Kāwana e aukatingia i a tātou nē...there has been an erosion of Māori fishing rights in New Zealand through the legislative changes, I would say even up to now..."

Despite their enabling potential, the implementation of legislation and regulation can often create barriers that impede cultivation and in some cases fishing practices, which includes the risk of criminal conviction. This was seen in the prosecution of some of our whānau when exercising their rights to fish in their awa. In most instances, law and lore do not align with Māori customary fishing rights or stand up to legal interrogation when they are tested. This emphasises the importance of understanding the legislation which enables these practices to continue, which can require expensive court battles.



Access to sites

"... All our land was confiscated... So it is at the discretion of the farmer for me to be able to go to that traditional place which is still a Māori reserve but happens to be across his or her land..."

Historical land confiscations continue to affect traditional cultivation practices today as they alienate significant sites. These sites are often surrounded by private landowners or administered by trusts that do not provide access to all beneficiaries. As identified in the Te Ao Tūroa framework (see He Pou Kai Āwha report), to be able to continue practicing requires both knowledge and space within wao atua. The inability to get to a site severely restricts the ability of whānau to maintain these aquatic cultivation techniques.

"... The slip from the flood means the utu isn't working as it should and is harder to get to..."

Another barrier that was highlighted as impeding whānau was the ability to safely access the sites they work in. This has changed significantly with extreme weather events and climate change.

Human impacts and habitat change

"...it's flooding because there's nothing to hold that water and that tension. Because the wetland's all been drained and they drain them into ditches and then everything gets overwhelmed..."

The extensive habitat modifications and changes to wao atua are a large driver in the decline of the habitat taonga species require, as well as the taonga species themselves. Boulder habitat used for spawning and nesting of piharau, for example, is expected to have decreased nationwide as a result of forest conversion and the installation of hydroelectric dams. Rivers are changed by extreme flooding, sedimentation and straightening, removing the natural curves of the water and increasing the water flow. All of these and more human induced changes are causing the loss of all the interconnected resources that are required to maintain both the knowledge and practice.



Loss of knowledge and taste for traditional foods

"... I was thinking of the people that have had experience with say piharau, because there's not many of them...It's a dying art. It's, it's becoming irrelevant to people's lives..."

A combination of the impacts of colonisation, indoctrination, legislation, regulation, alienation from places and environmental degradation has reduced significantly both the number of active practitioners of Māori aquatic cultivation as well as those who still hold the knowledge. With the passing of older generations, there has been a loss of experience, knowledge and taste for the foods produced and preserved from these practices. This has resulted in a single hapū practitioner remaining in some areas.

Public and agency perceptions

"...All I know is that over time, last 200 years, the fishing regulations have restricted us from acting in a manner that we have known since time immemorial..."

In the experience of our whānau, the enforcement of restricting and ill-understood regulations have meant that either the public or agents of national or local government have misunderstood the practices and their tikanga, as they have been taught to the hapū practitioners. Some of our whānau have faced charges by Crown agencies, under legislation that purports to protect their customary fishing rights. It is clear that there is a need for agency led education and awareness raising, for both the public and their staff, to prevent this happening again.



ENABLING FACTORS

Te Awa Tupua Act 2017

"... Te Awa Tupua is the Act, and so, it establishes that [Whanganui] the river system as, as a living and indivisible whole called Te Awa Tupua. Now, people think that's a symbol, as a symbol of cultural, spiritual sort of recognition. It is definitely cultural and spiritual recognition. But it's actually a political paradigm shift in terms of values and the way that decisions have to be made...Because the whole intent of Te Awa Tupua is to drive back and have the value set that leads all ...planning and decisions, as one that's come from river itself and its people, led by hapū and iwi..."

While legislation has been identified as a barrier that can be felt by our whānau, it has also been identified as a tool that enables some whānau, hapū and iwi. This is more evident in settlement legislation like Te Awa Tupua Act 2017, Te Urewera Act 2014 and the Waikato River Settlement Act 2010. Whānau described Te Awa Tupua, in particular, as an enabler because it is working to address the disablers found in the legislative and regulatory space. For example Section 15 of the Act provides for decisions to be made under Te Awa Tupua legislation. This is unlike other legal frameworks that suggest regulators must 'take into account' the principles of Te Tiriti o Waitangi or 'recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga' as in the Resource Management Act 1991.

Te Awa Tupua is working towards a common, relational way of seeing the river and changing the paradigm of environmental management in Whanganui by making everybody responsible to a value set that is shared and led by the river itself and the whānau, hapū and iwi that belong to it, providing agency to the entire Whanganui community.

Active practitioners and intergenerational transfer

"... I'm quite excited about the idea of actually meeting up with those who are still alive, that practice similar practices as myself. You know, there is very few of them. There's only a handful..."

Whakaika has also highlighted that although there aren't as many as there once were, there are still active practitioners of these systems across the country. Both the whānau in Whanganui and Taranaki have remaining active practitioners, which allows for the ability to transfer practice-based learning through experience. Our whānau highlighted in some places, there are very few practitioners, but that they are willing to share their knowledge and practice with others who have similar value systems, teaching others in a similar way to how they were taught. Other whānau identified that intergenerational transfer within specific whakapapa lines has been actively occurring over a number of years. It is important that our practitioners, who are often the least seen or heard, are recognised for the vast wealth of experience and knowledge that they hold, and are supported further to ensure that these practices are enabled into the future.

Localised Practice of Tikanga

"...Rules are in place for people who don't abide by kawa and tikanga..."

Tikanga, kawa and ritenga were identified as enabling factors by some whānau, in contrast to rules and regulations set by others (e.g. government agencies). Tikanga, kawa and ritenga contain the principles, morals, ethics and actions whānau use to practice. These practices and their associated tikanga often expect a higher standard of care than that of agency rules or regulations, because of the inherent obligations and responsibilities afforded to them by their whakapapa. In rural and remote places, practice is still governed and guided by tikanga, where whānau keep themselves accountable by their commitment to supporting their hapū and iwi. It is these tikanga, kawa and ritenga that have enabled and continue to ensure the longevity of taiao, whakapapa, reo, culture, mātauranga, mōhiotanga and practice.



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Report:

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Prepared by the Whakaika Research Collective:

Rangiroa Rongonui, Ōeo Pā

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