Return to previous file: Part 1

Introduction

This report documents a process for the development of marine tohu/indicators relevant to Ngati Kere for monitoring the health of their rohe moana/coastal and marine area. It has been produced from a Ngati Kere perspective, and aims to be useful to iwi and hapu organisations and others involved in the monitoring of marine health.

NGATI KERE HAPU

Ngati Kere is a recognised hapu within Central Hawke's Bay, whose traditional coastal boundaries range from Ouepoto Stream in the north to Akitio River in the south. Porangahau (population 255) is the main township where descendants of Keretipiwhakairo (Kere) still reside.

Sunrise at Paremahu

Left: Te Poho o Kahungunu Rongomaraeroa
Right: Ohinemuhu and Parekoau

The following hapu are acknowledged as a collective of coastal hapu that are represented in this report. This report refers to 'Ngati Kere' hapu as a representation of all hapu having manawhenua and manamoana in the Ngati Kere rohe:

Ngati Maru	– Ouepoto	Ngati Pakiua	– Parimahu
Ngati Wharenui	– Parimahu	Ngati Manuhiri	– Porangahau
Ngati Kere	– Porangahau	Ngati Pihere	– Porangahau
Ngati Tamatea	– Porangahau	Ngati Taanehimoa	– Porangahau
Ngati Hinetewai	– Porangahau	Ngati Hineraru	– Whangaehu
Ngati Te Rangiwawahia	– Whangaehu	Ngati Hinepare	– Te Poroporo

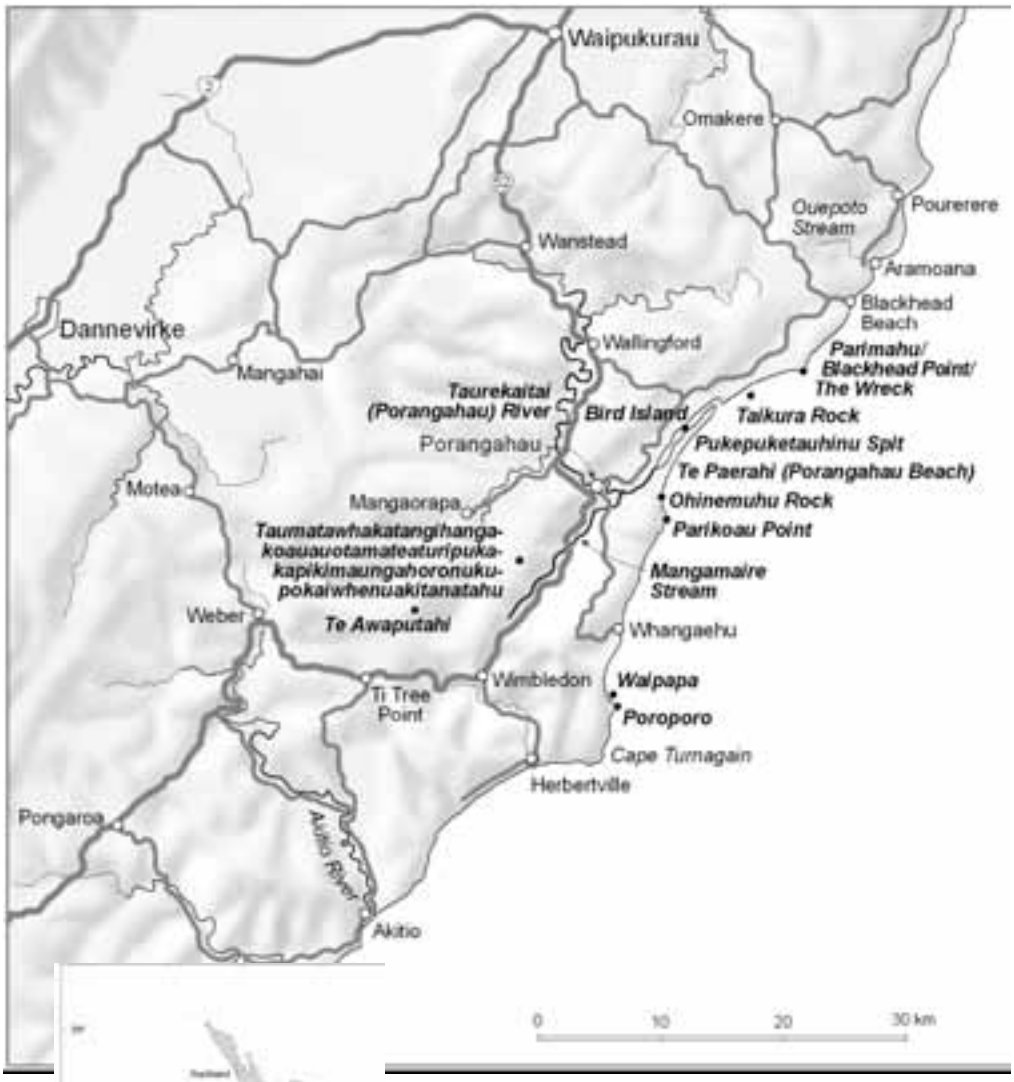
NGATI KERE HAPU CONNECTIONS WITH THE ROHE MOANA

An abundance of kaimoana/sea food is very important to Ngati Kere. They are renowned for their hospitality; hence the naming of their marae, Rongomaraeroa. They uphold their mana through the prestige of being able to provide kaimoana for visitors to the hapu. They traditionally used kaimoana in exchange for various inland kai and as gifts to nearby tribes. Their coastline has been used for hundreds of years as a pantry for kaimoana and as a place where Kahungunu, the man, came to rest and re-nourish after battles. An estimated 6000 Maori inhabited the area when James Cook anchored the Endeavour in 1796. Ngati Kere were known as food gatherers, cultivators, makers of nets and specialised fishermen.

Their whakapapa/geneology is to Ngati Kere, whose boundaries are registered with the Maori Land Court under the Ture Whenua Act 1990. These boundaries were first recognised in English law at the Maori Land Court at Waipawa in 1886, in the 'Porangahau Block'. These boundaries have been reaffirmed by the establishment of Te Angi Angi Marine Reserve, Te Taiapure o Porangahau, and now Ngati Kere Tangata Kaitiaki.

Ngarangiwhakaupoko —ancestral flag of Ngati Kere depicting Te Kupenga o Te Huki—the net of unity between Ngati Kere, Ngati Pahauwera and Ngati Konohi

Mai i Ouepoto ki Akitio
(from Ouepoto to Akitio)



Te Kupenga a te Huki

Looking north from Paremahu to Taiapure boundary

NGATI KERE TANGATA WHENUA RELATIONSHIP TO THE ROHE MOANA

Ngati Kere experience a wellspring of deep wanting or craving to interact with the rohe moana. It draws them like a powerful magnet and connects them firmly with their history and tradition. They may go to the beach 'for a feed', but in the process of doing so they are reconnected deeply with their tipuna/ancestors.

They go to the same places their tipuna went to for kai; they use the same old names for the fishing holes; they walk on the same stones to get to those holes; and they remember them and feel the connection with them in ways that nourish them far beyond the fish they take home to eat.

Karengo harvest

They are reminded of their ancestors who have given them the opportunity to be here. They remember the stories of the hapu and gain a strong sense of belonging and inheritance through the repeated telling of these stories that relate historical events.

Their kaitiakitanga/guardianship responsibility to sustain the mauri/life force of their moana is derived from whakapapa links to Keretipiwhakairo. Such obligations cannot be passed to others or denied. Intricately linked to these obligations is their authority derived from rangatiratanga/chieftanship. Such rights derive from customary practices and have been affirmed by the Treaty of Waitangi.

Context

Since the late 1980s, voluntary groups have been established within the Ngati Kere rohe moana relating to the conservation of marine life and its environment. Te Taiapure o Porangahau Committee, Ngati Kere Tangata Kaitiaki and the Te Angi Angi Marine Reserve Committee are examples. These groups exist because of the common interests they share in the conservation, and recreational and commercial use of the marine environment.

The following diagram (p. 12) links the vision and goals of Ngati Kere with the Ngati Kere Trust and the marine management system.

OVER-ARCHING PRINCIPLE

'Ngati Kere strive to sustain the mauri of the rohe moana through Tikanga Maori practices.'

VISION STATEMENT

'Kua kai tatau i nga kai o te mara, i tiria e o tatau tipuna.

Me tiri ano hoki tatau, kia whai hua ai etahi oranga.

mo nga whakatipuranga e heke mai nei.'

'We have partaken of the food garden, sown by our ancestors.

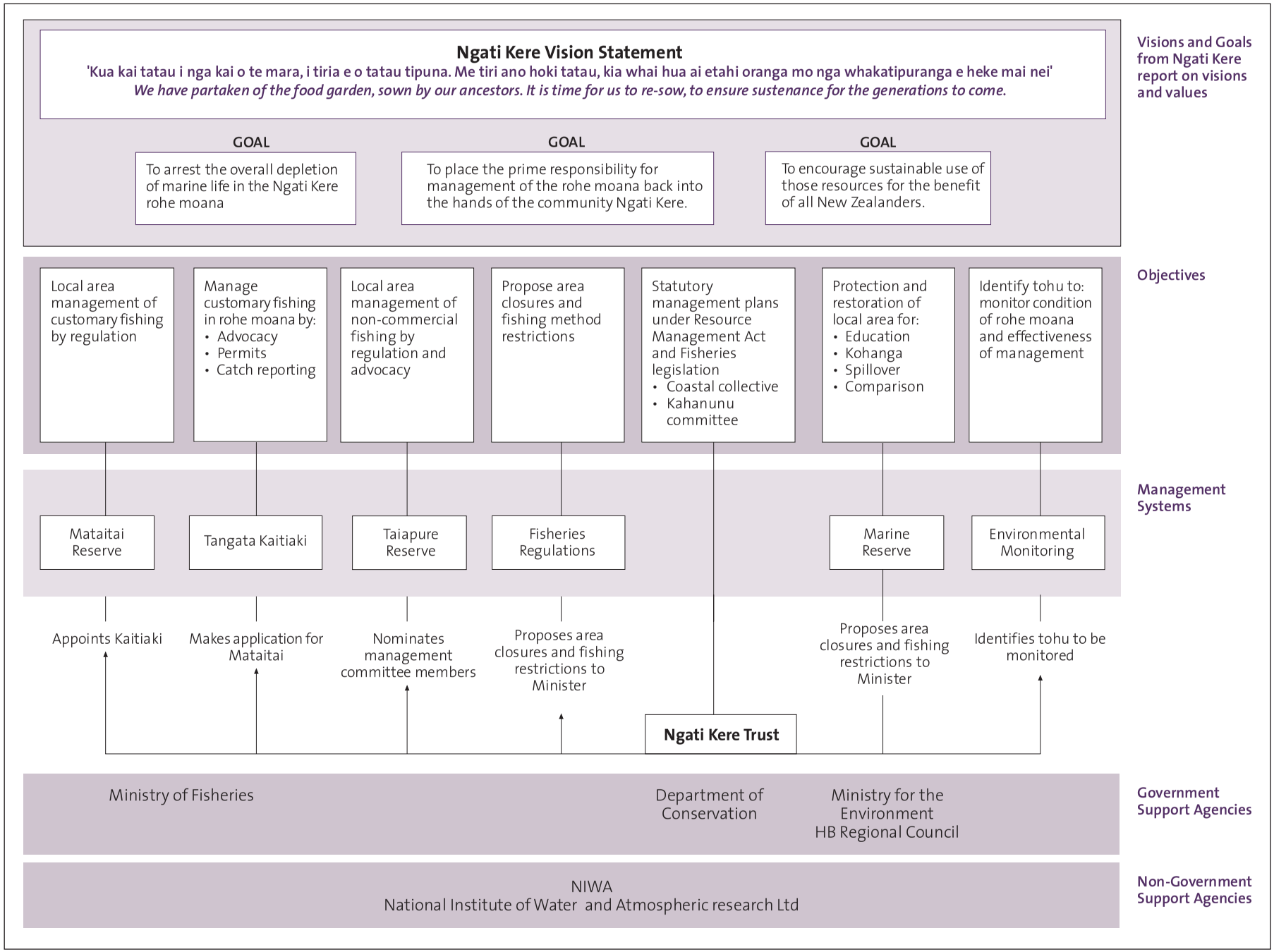
It is time for us to re-sow.

to ensure sustenance for the generations to come.'

The late Ngarangiwhakaupoko (Rangatira/Chief of Ngati Manuhiri, Ngati Kere) stated this vision for the people.

GOALS

- To arrest the overall depletion of marine life in the Ngati Kere rohe moana.
- To place the prime responsibility for management of the rohe moana back into the hands of the community Ngati Kere.
- To encourage sustainable use of those resources for the benefit of all New Zealanders.


Ngati Kere Vision Statement
'Kua kai tatau i nga kai o te mara, i tiria e o tatau tipuna. Me tiri ano hoki tatau, kia whai hua ai etahi oranga mo nga whakatipuranga e heke mai nei'
We have partaken of the food garden, sown by our ancestors. It is time for us to re-sow, to ensure sustenance for the generations to come.
GOAL
To arrest the overall depletion of marine life in the Ngati Kere rohe moana
GOAL
To place the prime responsibility for management of the rohe moana back into the hands of the community Ngati Kere.
GOAL
To encourage sustainable use of those resources for the benefit of all New Zealanders.
Visions and Goals from Ngati Kere report on visions and values
Local area management of customary fishing by regulation
Manage customary fishing in rohe moana by:
• Advocacy
• Permits
• Catch reporting
Local area management of non-commercial fishing by regulation and advocacy
Propose area closures and fishing method restrictions
Statutory management plans under Resource Management Act and Fisheries legislation
• Coastal collective
• Kahanunu committee
Protection and restoration of local area for:
• Education
• Kohanga
• Spillover
• Comparison
Identify tohu to: monitor condition of rohe moana and effectiveness of management
Objectives
Mataitai Reserve
Tangata Kaitiaki
Taiapure Reserve
Fisheries Regulations
Marine Reserve
Environmental Monitoring
Management Systems
Appoints Kaitiaki
Makes application for Mataitai
Nominates management committee members
Proposes area closures and fishing restrictions to Minister
Proposes area closures and fishing restrictions to Minister
Identifies tohu to be monitored
Ngati Kere Trust
Ministry of Fisheries
Department of Conservation
Ministry for the Environment
HB Regional Council
Government Support Agencies
NIWA
National Institute of Water and Atmospheric research Ltd
Non-Government Support Agencies

MAORI METHODS AND INDICATORS FOR MARINE PROTECTION PROGRAMME

There is a need to better understand how marine reserves and other methods of marine management contribute to meeting the objectives and interests of iwi/hapu. This will not only lead to more positive outcomes for the marine environment, but will also promote an appreciation and understanding of iwi/hapu interests, values and knowledge associated with marine management.

This report documents a process for identifying and developing Maori marine indicators to measure the health of the environment. It forms the second part of a 3-year Foundation for Research Science and Technology (FRST)-funded research study of Maori methods and indicators for marine protection. The study is taking place at two sites in partnership with Ngati Kere of Porangahau and Ngati Konohi of Whangara. The joint project by Ngati Kere Trustees, Department of Conservation (DOC) and the Ministry for the Environment (MfE) involves two interrelated research teams, one working on community research and the other on ecological science.

The three overall project objectives are:

Stage one	To identify specific iwi/hapu visions, and values, interests and expectations for marine management.
Stage two	**To define a process to identify Maori marine indicators to measure the health of the environment.**
Stage three	To measure different species assemblages at a range of trophic levels in order to test how marine reserves, controlled and uncontrolled areas (including some manipulations, Taiapure and/or Mataitai) contribute to meeting iwi/hapu and conservation objectives.

Carla Wilson, Fiona McKay of DOC, Alan and Maureen Wakefield, and Hamish Wilson of MfE looking at sites at the beach to implement tohu monitoring

NGATI KERE ROHE MOANA PROJECT

Stage one

In Stage one of the project, Ngati Kere interests and expectations for their rohe moana were expressed[1].

Stephen Long celebrating the launch of the Stage one report 'Maori methods and indicators for marine protection: Ngati Kere interests and expectations for the rohe moana'

These included:

- Ngati Kere vision and values for the future of the rohe moana
- Key species important to Ngati Kere in the rohe moana
- The blend of marine management systems best for Ngati Kere
- Some tohu/indicators that Ngati Kere consider appropriate to judge the health of the rohe moana

This report is available at:

www.doc.govt.nz>Publications>Science&technical>online catalogue

Stage two

The second stage of the project is described in this report—a process for identifying and developing tohu to measure the health of the Ngati Kere rohe moana.

1 Wakefield, A.T.; Walker, L. 2005: Maori methods and indicators for marine protection: Ngati Kere interests and expectations for the rohe moana. Department of Conservation, Ngati Kere and Ministry for the Environment. 43 p.

WHY DEVELOP TOHU AND REPORT ON THE HEALTH OF THE ROHE MOANA FROM A MAORI PERSPECTIVE?

The Ministry for the Environment (MfE) reports on whether national policies are achieving the intended environmental outcomes. In this project, Ngati Kere have identified tohu that can be used to measure whether the goals and aspirations Ngati Kere have for their rohe moana are being achieved. This project will inform MfE of how Ngati Kere identified which tohu they would use (traditional or not), how methods to measure the tohu were determined (traditional or western), and how the tohu could be tested to ensure that reliable information is being produced about the health of the environment. It was also necessary to devise a method that allowed us to report this information without disclosing information that Ngati Kere did not wish to go outside the hapu.

The Environmental Indicators Programme, which supported the development of indicators relevant to Maori, has now ended. However, MfE continues to endeavour to improve participation in resource management processes and decision making[2] . The Sustainable Management Fund[3] also funds iwi, the community, industry and local government in a wide range of practical environmental initiatives.

WHAT ARE TOHU?

Tohu are indicators that are measured regularly to show trends or changes in the health of an environment. Tohu are signs that show whether things are getting better or worse. Over time, continued measurement of tohu allows you to see those changes. They can provide the community with management information that sustains their vision for their environment.

Learning about tohu monitoring at Parimahu

2 Contact the Maruwhenua team at the Ministry for the Environment for further information.

3 www.smf.govt.nz

Tohu development process

As discussed above ('Context'), Stage one of this project identified some of the tohu that are related to the rohe moana (see Appendix 1).

To enable the successful monitoring of tohu over time, the process by which the team would work together to decide on the tohu and how they would be measured required further development. Therefore, early on, a number of project meetings were held to define the objective, produce a documented project plan, define roles and responsibilities, and discuss the manner in which the project would be carried out.

OBJECTIVE

The objective of the Ngati Kere Rohe Moana Tohu Project:

To develop and document a process to identify and monitor tohu that Ngati Kere could use to measure the health of the marine environment and the success of environmental management systems.

To achieve this objective, it was agreed that the following tasks would be undertaken:

- Identify the key values that Ngati Kere would like to be managed in their environment (completed in Stage one of the project)
- Identify the tohu that Ngati Kere believe signify the health of these values (indicators)
- Determine how to measure tohu to detect changes over time (for monitoring purposes, the tohu need to be consistent and repeatable to provide robust information)
- Measure these tohu to determine whether the environment is in good, bad or average health/state (establish criteria against which you would measure the health)
- Develop ways to communicate the health of the rohe to other agencies (for example, summary statements of health that could feed into regional council reports on the state of the environment with respect to tangata whenua values)

EXPECTED BENEFITS FOR NGATI KERE

Participation in the project was expected to result in the following benefits for Ngati Kere:

- Enable Ngati Kere to monitor and report on the condition of things that are of importance to them in the marine environment
- Support hapu goals
- Draw a comparison between what Ngati Kere have now with what they had in the past
- Support existing management systems (i.e. Te Taiapure, Tangata Kaitiaki and Te Angi Angi Marine Reserve)
- Assist with setting up communication links within the hapu, and with the wider community and government agencies
- Provide a contribution to local resource management plans

NGATI KERE VISION STATEMENT AND GOALS

The project is aligned with the vision statement and goals of Ngati Kere (see diagram on page 12):

NGATI KERE VISION STATEMENT

'Kua kai tatau i nga kai o te mara, i tiria e o tatau tipuna. Me tiri ano hoki tatau, kia whai hua ai etahi oranga mo nga whakatipuranga e heke mai nei.'

'We have partaken of the food garden, sown by our ancestors. It is time for us to re-sow, to ensure sustenance for the generations to come.'

NGATI KERE GOALS

- To place prime responsibility for management of the rohe moana back into the hands of the community of Ngati Kere
- To arrest the depletion of marine life in the Ngati Kere rohe moana
- To encourage sustainable use of those resources for the benefit of all New Zealanders

It is expected that this project may also help to achieve a number of longer term objectives for Ngati Kere, which include:

- Developing a management system for the conservation of the rohe moana that meets hapu objectives and has hapu endorsement and ownership
- Gaining support and resources for management of the rohe moana
- Producing a document, brochure, website or video that informs the hapu, fishermen, schools and councils of these objectives, and provides avenues for their education, participation and support

Approach statement

This project needs to balance traditional Maori/hapu structures and values, and Pakeha research and planning principles. Therefore, flexibility and cross-cultural sensitivity will be needed to arrive at a research outcome that both satisfies the government agencies involved and achieves hapu endorsement and ownership.

Project plan

The project plan (Appendix 2) was developed by Ngati Kere in consultation with MfE and DOC. The plan identified the tasks and illustrated how and when they would be done, and by whom. Throughout the project, the investigation leader was to communicate with the investigation coordinator to achieve the project's objective. The project plan specified a number of hui to be held in the initial period of the project (July–October 2004).

Reporting

After each hui, a draft report on the process and outcomes (of each hui) and a programme for monitoring was prepared by the investigation leader, with input from the investigation coordinator. The final report was to be produced and presented to the hapu and associated management groups (Te Taiapure, Tangata Kaitiaki, etc.).

Fieldwork

Fieldwork was planned to take place from 1 December 2004 through to 31 March 2005, as required. The investigation leader and hapu focus group were to undertake field work four to six times within this period. Sampling areas, time and criteria were to be determined by the hapu focus group and the investigation coordinator.

Final report

An initial report would be produced that collated the results and records of the monitoring process. The final report would include overall results and processes of the monitoring and reporting of tohu. Both these reports will go through a consultation process with and by the hapu before being published.

Communications and newsletter

Pre-project meetings were held to establish the lines of reporting and methods of communication for the project team. A key ingredient to the success of the project was the flow of information from the project team to the hapu and its various management structures. A community newsletter and regular reporting at Tangata Kaitiaki and Ngati Kere Trustees' meetings were seen as the best ways of achieving this.

Ngati Kere Trustees meet bi-monthly, and it was during these meetings that reporting to the hapu was planned to take place, both orally and in written form (by the investigation leader). Because of the length of agenda and discussions at these meetings, a focus group (specific to the tohu project) was set up to discuss and implement the needs of the tohu project. This group was made up of members from Te Taiapure, Tangata Kaitiaki, hapu divers and fishermen, so that a broad representation of hapu management could report the findings back to their individual committees.

The investigation assistant produced an initial newsletter to the hapu that updated everybody with regard to the completion of the rohe moana report and the purpose of the tohu report. A bi-monthly newsletter was to be produced, which included progress updates, findings, hui and fieldwork dates, and which provided an avenue for the hapu to respond. Other iwi authority and government agencies would also receive these newsletters. Examples of newsletters are included in Appendix 3.

The investigation leader and assistants met regularly to achieve the completion dates of the project tasks. They were to communicate regularly with MfE and DOC to update, advise, assess time schedules and identify the needs of the project.

Ngati Kere waiata—Pop Wakefield, Lisa Walker, Marina Scia Scia

Hapu focus group

The project team from the Stage one rohe moana report found it difficult to get hapu members together for hui on a larger scale. For the tohu project, a hapu focus group of no more than eight was set up to discuss and implement the tasks of the tohu project. This group was to be made up of members from Te Taiapure, Tangata Kaitiaki, hapu divers and fishermen. The group would meet (with the investigation leader and assistants) three times within the first 6 months of the project. The representatives from the various management groups would also form the fieldwork group, so that discussions, methods and findings were consistent with recordings. The tasks for the focus group are defined in the project plan contained in Appendix 2.

Evaluation process

The investigation leader was to continually assess whether:

- People had been sufficiently informed and, if not, how to overcome any hurdles/barriers
- The information being gathered and collated was relevant and/or sufficient to meet the objective of the project
- The specific needs of MfE for this project were being met
- Timeframes were being met and whether they needed adjusting
- More assistance and/or resources were required
- A reported process for developing tohu and implementing a monitoring programme

Tohu monitoring

The project produced a number of defined outcomes and deliverable products:

- A kete tohu (indicator tool box) for monitoring the state of and changes in the rohe moana
- Proposed methods for monitoring (monitoring programme)
- A survey method and results for assessing the level of hapu knowledge and perceptions about the state of the rohe moana[4]
- A number of communication tools—powerpoint presentation, newsletters and a media release (Appendices 5, 6 and 7)
- Learning about the development of tohu and monitoring programmes
- A reported process for developing tohu and implementing a monitoring programme

KETE TOHU DEVELOPMENT

Following on from the work done in Stage one, a number of potential tohu were developed to a point where they could be used for monitoring the state and changes in the health of the rohe moana.

For each individual tohu, five questions were asked to assist with their development:

1. Which stated goal of Ngati Kere has been addressed by the tohu?
   e.g. arresting the depletion of marine life
2. What aspect of the goal will the tohu specifically address?
   e.g. prevent decline in koura/crayfish
3. What will the tohu measure?
   e.g. number or size of koura
4. How will the tohu be used in the field?
   e.g. counting koura in knee-deep water
5. Does the tohu tell us what we need to know?

The process to develop the tohu included working with the focus group and gathering information and feedback from the wider community at the hui a hapu (see notes from this hui in Appendix 8). A complete record of the kete tohu and the five questions that were asked of each individual tohu is included in Appendix 4.

4 This was an additional outcome not included in the project plan. The information from the perceptions survey is available from the author, Justin Stanway (email: stanway_justin@hotmail.com).

Ohinemunu and parekoau

KETE TOHU

The following is a list of tohu that form the kete tohu developed by Ngati Kere for monitoring the state of the rohe moana in line with the vision and goals of Ngati Kere.

Tohu tuatahi—number and size of koura/crayfish in shallow water

The abundance of koura in shallow (knee-deep) water reflects the level of depletion of marine life. Koura occupy a particular niche in the food chain and the presence, size and abundance of them can indicate that a number of other factors are in place, ensuring a healthy rohe moana. Koura are an important source of kaimoana, particularly for special occasions on the marae. It is possible that paua could be interchanged or used as a complementary tohu to measure the depletion of marine life. These tohu would be measured by hapu members using a documented survey method and by recording customary and recreational takes.

Tohu tuarua—number and size of hapuka/groper close to the coast

In a similar way to koura, the presence, size and abundance of hapuka/groper close to shore gives an indication of the health of the rohe moana. Information about hapuka could be gathered during fishing competitions, using a definition of close to shore, i.e. 50 m.

Tohu tuatoru—level of Ohinemuhu rock above sand and abundance of pipi

Ohinemuhu rock has been used for generations to gauge the level of sand and sediment deposits on the beach. When the rock is showing well above the sand, the health and abundance of pipi is usually good. When the rock is mostly buried, the pipi are not so good. Records of how much of the rock is showing and the size, quality and ease of collection of pipi taken are required to show that this relationship holds true.

Tohu tuawha—level of involvement in marine management

A key goal of Ngati Kere is to reassert their management role in the marine environment. A number of factors can be used to determine their level of involvement in marine management: the number of people attending marine-management hui, the number of management plans that Ngati Kere have developed or contributed to, the number of submissions made on rules and plans, and the number of established contacts with external agencies.

Tohu tuarima—availability of native plant resources, e.g. pingao

The availability of traditional plant resources such as pingao provides an indication of the health of the coastal zone contained within the rohe moana. Traditional resources such as pingao are important for a number of different raranga/weaving processes.

Pingao – a natural resource

Tohu tuaono—number and type of customary take permits issued

This tohu provides information about the role of Ngati Kere in marine management and also can be used to indicate the health of the rohe moana. To be able to use this tohu, it is critical that accurate records are kept about the number of customary permits issued and the actual takes, including how difficult or easy they were to obtain.

Tohu tuawhitu—number, size and distribution of no-take areas

No-take areas are put in place by Ngati Kere Tangata Kaitiaki to protect depleted kaimoana resources. The number, size and distribution of no-take areas provide an indication of the level of health of the rohe moana and the management role that the hapu is playing. Accurate definition and recording of where and when no-take areas exist is required.

Tohu tuawaru—number of prosecutions for illegal catches and takes

The number and type of prosecutions for illegal catches and takes gives an indication of the success of education and enforcement programmes put in place to effectively manage kaimoana resources in a sustainable way.

Tohu tuaiwa—level of rohe moana knowledge within the hapu and community

Sustainable management of natural resources and the involvement of the hapu in marine management requires that members of the hapu have an understanding of traditional and contemporary rohe moana knowledge and management systems. A useful way of gauging this level of knowledge and understanding is through the use of a perception survey. This can also serve as a useful educational and awareness-raising tool.

MONITORING TOHU

Before any monitoring could take place, monitoring methods needed to be defined. General ideas about how the tohu should be measured in the field were discussed during the tohu development phase, but more detailed direction was required if the tohu were to be measured in the same way each time. Consistent and accurate monitoring is important if the information collected is going to be used by the hapu to make decisions and is to be shared and communicated with other agencies.

For each individual tohu, a range of monitoring methods were developed through discussion. These are described in Appendix 4.

As an example, one of the goals of Ngati Kere is to arrest the depletion of marine life. A defined target that would represent the achievement of that goal is the presence of koura in knee-deep water. To measure this, a tohu for the number and size of koura in knee-deep water was proposed, and the method by which this would be measured and the resources required to do it were defined.

Target	Tohu	Method(s)	Resources
To have koura in knee-deep water	Number and size of koura in knee-deep water	• Visual survey • Monitor recreational takes • Monitor customary permit takes	• Survey crew • Wetsuits • Rope • Buoys • Buoy anchors • Waterproof notepads • Method reference • Knee-deep definition • Safety equipment • Ruler

To ensure that tohu are measured in the same way each time, the methods used to take measurements will need to be described clearly and in detail, as different people will often be expected to assist with monitoring.

A visual survey method for koura in knee-deep water

- Identify areas that are knee deep (and at which tides)
- Divide areas into manageable survey sizes, e.g. 20 m x 20 m squares
- Randomly select a number of areas to survey
- Rope off boundaries of areas with rope, buoys and weights
- Note tide, weather and other conditions
- Move through centre of area and look down left and right to observe koura
- Record sightings of koura
- Catch and measure across back of tail in cm with ruler or estimate size across back of tail in cm/hand size/foot size
- Observe and note other species as appropriate, e.g. paua

Monitoring customary permitted takes of koura

- Set up document system for recording customary permits
- Documentation to include permitted take and actual take
- Include other relevant detail, e.g. observations
- Ensure customary takes are recorded
- Interview permit holders as a cross check and for other information

Monitoring recreational takes

- Set up document system for recording recreational takes
- Documentation to include key species
- Include other relevant detail, e.g. other species and observations
- Target key periods for interviewing recreational fishers
- Interview recreational fishers
- Record takes

Collecting other agency information that could be of use

- Arrange to obtain information from other agencies in a suitable format for use by Ngati Kere

MONITORING TRIAL

Using the monitoring methods described above, the practical use of the tohu was trialed at an informal whanau day at the beach. While the main focus of the day was to be together on the beach and gather kaimoana, it was also an opportunity to test out the use of the tohu and their associated measurement techniques.

Despite the monitoring trial being small in scale, it was a good starting point for future monitoring by Ngati Kere.

Selena's monitoring story

It was a typical March day: clear sky, no breeze and warm. My Papa (Rewi Wakefield) had just come back from the marae with four of his great-grandsons. They had helped him stack pumpkins in the shed at the marae and he had let the older two have turns at driving his new four-wheel drive back to my parents' home. Our whole family was home that weekend: myself, Paul, Arama, Anaru-Paul and Matawhero Sciascia, Lisa, Darren, Zachery, Alan-James and Polly Walker, Tracey, Darryl and Kane Croad, and my parents, Alan and Maureen Wakefield. We had all planned to go to Parimahu and on this particular day we were privileged to be taking our grandfather, or for my children and my sister's children, their great-grandfather, Rewi Wakefield. All 16 of us piled into three trucks and away we went along the track and out on the beach.

As the sea breeze hit my face, memories of my childhood came flooding back. I could smell fresh kahawai or gurnard being cooked by my grandmother, Parehuia Elers, for our breakfast in the camp and I could see all of us kids trying to climb the cliff face.

Our crew of fishermen for the day made our way round Parimahu Point. We drove out onto the rock platform north of Parimahu, including the reef, and began observations in the pools. The older grandchildren went with their great-grandfather and collected kina of varying sizes between 80 mm and 110 mm. We were told by Papa that the colour of kina indicated condition: the whiter the colour of the spines, the better the kina. The smaller kina, including the darker ones, were left in the water.

The younger grandchildren were with their grandmother and they collected 'boo boo' (pupu) of varying sizes from 10 mm to 30 mm. Only the larger 'boo boo' were taken; the smaller ones were returned to the water. They noted that the numbers of 'boo boo' were high in comparison to other shellfish.

I was in the channel with my father and husband and we observed and measured paua. The size of paua varied between 15 mm and 90 mm. No paua were taken from the pools. Darryl observed that plant life and some seaweeds had depleted since his previous observations made in January (22–23). We had all noted that there was a significant drop in numbers, except for 'boo boo'. It would be fair to say that the long easterly weather pattern would have played a big part in the condition of all sea life in this area. In the deeper water, visibility was not the best: about 2 metres max. Alan, Paul, Darren and myself, after making observations in the channel, began diving for our take-home catch. The paua numbers here were quite high, with some places having 15–20 paua per square metre. There was also sign of fresh crayfish shelling, three of these tails measuring between 55 mm and 56 mm, four measuring between 63 mm and 65 mm, and two measuring 69 mm.

The weather turned nasty while we were there. This made diving hard; cold easterly swells with a northerly wind, overcast with threatening rain.

Our whanau day was great. All of us had contributed to the monitoring programme that my father was involved in. We had collected kaimoana to take home and before we left Matawhero and Polly, the two youngest in the family, were baptised by Dad in one of our ancestor's diving holes, Pokanikani. Four generations from the one family participated in this day. Our day was special because we had our grandfather with us and as we headed round the point for home I could see Nanny at the camp by the waterfall preparing kai for us all on our return from collecting kaimoana.

Selina Wakefield

ABILITY TO MONITOR

A number of factors impacted on the monitoring programme that was planned for the summer:

- The Tangata Kaitiaki and Ngati Kere Trustees' committees had not provided a clear mandate for the monitoring work to be undertaken
- The project leader was unable to continue in his role due to acquiring full-time employment
- A limited number of hapu members were involved in the project and a suitable replacement was not available
- No contingency plans existed in the short window of time over the summer, particularly during periods of bad weather

In essence, the project has reached a point where tohu have been developed but need to be further trialed or tested in the field before they can be officially adopted. As described above, one exploratory field trip was undertaken by hapu members and a number of the tohu involving visual assessments were measured. It is expected that in fully testing the tohu in the field, some refinement or further development will be required.

TOHU DEVELOPED—WHERE TO FROM HERE?

Some good work has been done in developing a comprehensive set of tohu—the kete tohu. Opportunities exist to utilise this resource and test the usefulness of the tohu in practice. The following steps should be undertaken to capture the knowledge gained through the project:

- The Ministry of Fisheries (MFish), Hawke's Bay Regional Council (HBRC) and Central Hawke's Bay District Council should all receive a copy of this report and any additional supporting information about the kete tohu.
- When communicating with Ngati Kere and each other, these and other government agencies would benefit from being made aware of the information that has been provided to them by the involvement of Ngati Kere in this process. This specifically relates to the vision and goals that Ngati Kere have for their rohe moana and the kete tohu that can be used to measure whether or not their aspirations are being included and achieved.
- It would be advantageous if councils and agencies are proactive in their relationship with Ngati Kere and in their use of this information. The hapu would like to be kept informed and involved in work being conducted by outside agencies, particularly where monitoring is occurring.
- A comprehensive set of tohu has been developed in this project. A number of individual tohu or subsets of these tohu may have specific relevance to HBRC and other agencies. There are considerable benefits to be gained in pursuing the further development of those tohu in a collaborative manner.

For Ngati Kere, it is critical that the Tangata Kaitiaki are closely involved in the ongoing development of tohu, as they possess many of the required tools as a consequence of their mandated role as marine managers on behalf of the hapu.

The initial monitoring of the tohu has helped to increase the visibility of Ngati Kere in their role as marine managers. Hapu members plan to increase their presence on the beaches of the area in the future. This will improve beach users' awareness of their role and will demonstrate how they can be environmentally and culturally sensitive in their use of the area. There is also an intention to regularly collect beach-user information in order to add to the data pool that the tohu are measured against. This could be achieved both by being on the beach, and by revisiting beach users on a regular basis, talking about their use of resources and gathering specific information against a set of standard questions.

This project has developed a benchmark against which the health of the rohe moana can be assessed. It will now be up to Ngati Kere, as well as the relevant councils and government agencies, to support the way forward. This is discussed in the final section.

Conclusions

FINDINGS

Through the process of holding hui to develop the tohu and the initial monitoring programme, a number of key lessons were learned:

- Ngati Kere values for the state or health of the rohe moana are driven primarily by the availability of kaimoana and an ability to sustainably harvest kaimoana for the tangata whenua and for the manuhiri.
- External agencies, such as DOC, MFish, MfE and regional/district councils, have limited information that can be used by the hapu to gauge the state of the rohe moana in line with Maori values.

While the monitoring trial component of the project was not fully completed, a valuable resource has been created that captures knowledge and many of the aspirations that Ngati Kere have for their rohe moana. The kete tohu will serve as a useful reference tool for the hapu when planning and making decisions, and should be similarly used by the various agencies interacting with Ngati Kere on matters relating to the rohe moana.

Many of the project's key findings were discovered during the hui and development phase and are described in Appendix 1.

As a result of these reflections, we recommend that in future projects:

- A focus group, whose size is proportional to the nature of the project, should be used to carry out the work. All members of the focus group should be selected on the basis of their skills, knowledge and ability to contribute to the success of the project. Focus group members must be financially compensated for their time and efforts. The use of a focus group does not mean that the full hapu should not be consulted. It simply provides an efficient way of capturing hapu knowledge without the need for the logistics involved in organising larger groups. There also needs to be a process for wider approval or presentation to the full hapu at certain points in the project.
- The people selected to do the job must have a passion for the area where the project is focused. Without this, it is unlikely that the work will get done. In our experience, this passion comes largely from a sense of ownership and the long-term relationship between manawhenua and the area.
- Consistent and agreed criteria need to be made for performance and for any outputs that are associated with a project, particularly when a group of people are involved.
- Risks in carrying out projects like these need to be identified and contingency plans should be developed, particularly with respect to extending time limits.
- Necessary resources must be provided that enable those involved to place importance on the project. People may willingly give their time to a project, but this work can take a lot of time and effort, and therefore needs to be supplemented with payment. Often the scale of the work involved only emerges once it is underway, and unexpected challenges can arise. This includes taking hidden costs and liabilities into account, as even the little things contribute to the success of the overall outcomes of a project.

WHERE TO FROM HERE?

The decision about where Ngati Kere marine management should progress in the future needs to be informed by the important outcomes of this project. This project is an example of where tangata whenua, in relationship with other agencies, have developed, used and documented indicators to assess the health of their marine areas and the current management processes that govern them.

The process by which Ngati Kere have developed tools that they can use to measure the health of the rohe moana has supported progress towards a number of key goals, vision statements and long-term objectives:

- The project has increased the ability of Ngati Kere to monitor and report on the condition of things that are of importance to them in the marine environment.
- The tohu that have been developed have established an initial basis for a comparison of what Ngati Kere have now and what they had in the past.
- There is an increased awareness of existing marine management systems within the Ngati Kere rohe moana (i.e. Te Taiapure o Porangahau, Tangata Kaitiaki and Te Angi Angi Marine Reserve) and the way that they could be used to achieve the goals of Ngati Kere.
- A number of relationships and communication links have been developed between the hapu, the wider community and other agencies.
- The outcomes of this project have produced a base of tohu, monitoring information and goals to move ahead with. In the longer term, these could be a significant resource for hapu resource management plans and for furthering a management system for the rohe moana that meets hapu objectives.
- The reports themselves are documents that inform the hapu and others (fishermen, schools and councils) of Ngati Kere objectives for the rohe moana. They are tools that foster education, participation and support.

These all represent important steps towards the three main goals that Ngati Kere established in relation to their marine environment:

- To place prime responsibility for management of the rohe moana back into the hands of Ngati Kere
- To arrest the depletion of marine life in the Ngati Kere rohe moana
- To encourage the sustainable use of those resources for the benefit of all

For Ngati Kere, the question of 'Where to next?' will continue to be guided by the vision statement that they have created for the rohe moana. Ideally, their vision will influence future actions in the marine environment by all.

'Kua kai tatau i nga kai o te mara, i tiria e o tatau tipuna. Me tiri ano hoki tatau, kia whai hua ai etahi oranga mo nga whakatipuranga e heke mai nei.'

'We have partaken of the food garden, sown by our ancestors. It is time for us to re-sow, to ensure sustenance for the generations to come.'

Continue to next file: Part 3