

# 1. Introduction

As stated in the original research proposal for the Maori Methods and Indicators for Marine Protection project that was submitted to the Ministry of Research, Science and Technology, marine reserves meet many conservation objectives but often conflict with iwi/hapu objectives for marine management. There is a need to understand how marine reserves and alternative methods of marine management contribute to meeting iwi/hapu objectives. There is also a need to understand how marine reserves and alternative methods of marine protection contribute to meeting conservation objectives at a range of trophic levels. This knowledge will assist in determining how both iwi/hapu and conservation objectives can be met through either a particular management method or a suite of methods. It will also promote an appreciation and understanding of iwi/hapu interests, values and knowledge associated with marine management.



*Sunrise at Paremahu*

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



# Background



Marine reserves have been established to protect the habitat of marine life and for scientific study. These protected areas are recognised as being of national importance but are often perceived to be in conflict with the needs and interests of local communities, particularly iwi/hapu.

The involvement of Maori in the establishment of marine reserves in New Zealand, and indeed their support for marine reserves, has varied. Concerns have been raised by iwi/hapu about the effect of marine reserves on their mana ki te moana/ancestral waters and access to traditional fishing grounds. For many Maori, their mana depends on their ability to collect kaimoana/seafood (DOC 2000). However, tangata whenua have also raised concerns over the depletion of kaimoana, and marine reserves and other marine protected areas have been established in part to address these concerns.



Internationally, there is increasing recognition that protected areas cannot be separated from the communities that surround them. According to the World Conservation Union:

*‘Protected areas will survive only if they are seen to be of value, in the widest sense, to the nation as a whole and to local people in particular.’*

(IUCN 2004)

This collaborative study aimed to explore how different marine management systems can meet the goals and aspirations of iwi/hapu in their rohe moana/coastal area as well as wider conservation objectives. The marine management systems referred to in this project include marine reserves, taiapure reserves, mataitai reserves and the appointment of Tangata Kaitiaki to manage customary fishing in an iwi/hapu rohe moana.

It is envisaged that a better understanding of how different methods of marine management meet both iwi/hapu and other management interests will lead to more positive outcomes for the marine environment. It will also promote an appreciation of iwi/hapu interests, values and knowledge with regard to marine management.

The protection, enhancement and restoration of the mauri/life force of taonga/treasures such as the marine environment is considered to be of great importance by Maori on a national scale (MfE 1998). However, despite iwi/hapu having a clear interest in marine management, their objectives for the marine environment in terms of marine protected areas have rarely been identified.

## OBJECTIVES



*Pou rahui, overlooking Te Tapuae o Rongokako Marine Reserve; it was erected by Ngati Konohi for the opening of the reserve in November 1999*

This was a collaborative project between Ngati Kere, Ngati Konohi, the Department of Conservation (DOC) and the Ministry for the Environment (MfE). The project was funded by the Ministry of Research, Science and Technology (MORST) in 2000, planning and preparation took place in 2001, and the project ran for 3 years between 2002 and 2005. The three overall project objectives were:

1. To identify specific iwi/hapu objectives, interests and expectations for marine management
2. To define a process to identify iwi/hapu marine indicators (tohu) of environmental health and pilot their implementation
3. To measure different species assemblages at a range of trophic levels in order to test how marine reserves and controlled areas (including taiapure or mataitai) contribute to meeting iwi/hapu and conservation objectives

The information for objective 1 was collected through social science research that was led by iwi/hapu members. The methodology and findings from this research are outlined in section 2, and the lessons learnt from this process are reflected on in section 5.

Objective 2 aimed to develop a process for iwi/hapu to identify tohu/marine indicators that can be used to monitor and report on the health of the marine environment. This objective related to the Ministry for the Environment's Environmental Performance Indicators (EPI) project (which has since been disestablished). The outcomes of this objective are presented in section 3.

Objective 3 aimed to scientifically measure whether the marine protected areas in the rohe of Ngati Kere and Ngati Konohi were achieving, or contributing to, the objectives identified by the hapu during the social science component of this research project. The ecological science that was undertaken is reported on in section 4.

Another key objective of the project was to share skills and build capacity amongst iwi/hapu in terms of social and ecological field research and the interpretation of results. This is reported on in section 5.

This report summarises the findings from the 'Maori Methods and Indicators for Marine Protection' project and identifies the lessons learnt by the research team. Much of the information in this summary is taken from the original reports for each objective, the full references for which are given in section 8.



### **Te Kupenga a Te Huki**

*(Te Huki's net of unity)*

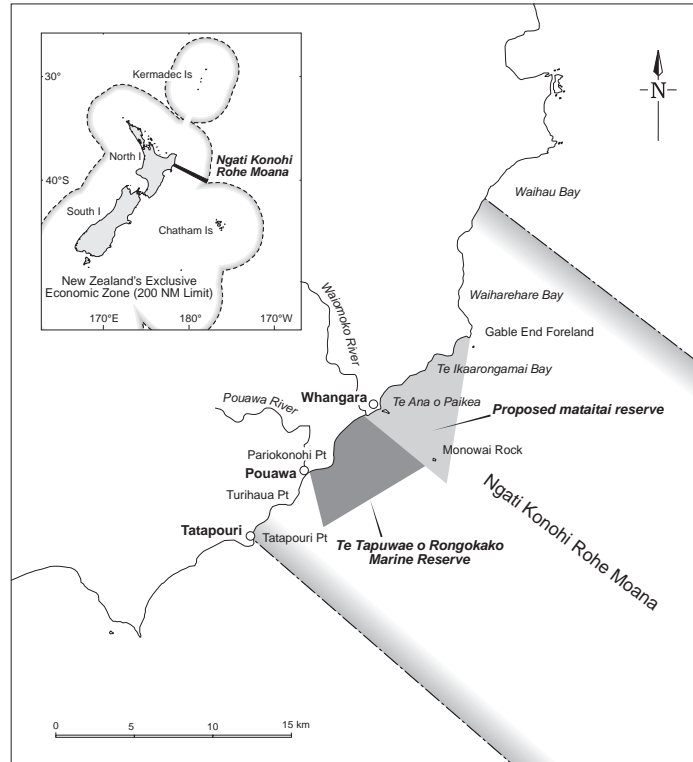
*Te Huki controlled the conservation and husbandry of food sources that were so necessary for the well-being of his people. His net is signified by the anchorage of pou/posts, starting at Whangara (Gisborne) in the north to Poroporo (Cape Turnagain) in the south; and uniting all hapu within. Our tipuna Ngarangiwhakaupoko lived at this southernmost point and received mana from the union of nga hapu by arranged marriage to Hineimatekitawhiti. His name flies on our flag at Rongomaraeroa Marae, Porangahau, which depicts this net.*

**RESEARCH PARTNERS**

This research was undertaken in the rohe moana of Ngati Kere of Porangahau and Ngati Konohi of Whangara. Figure 1 shows the location of the two case studies and the current and proposed marine management systems in these areas.



*Te Kupenga a te Huki*



*Rohe Moana of Ngati Konohi*



*Ngati Kere Rohe Moana Boundaries*

Figure 1. Location of two case studies and marine management systems.



*Te Tapuwae o Rongokako  
Marine Reserve—Kaiora  
intertidal area*

### **NGATI KERE**

Ngati Kere is a coastal hapu of Ngati Kahungunu Iwi located at Porangahou on the southern Hawke's Bay coast. An abundance of kaimoana is very important to Ngati Kere, who are renowned for their hospitality. They uphold their mana through the prestige of being able to provide kaimoana for visitors (Wakefield & Walker 2005).

Within the Ngati Kere rohe, Te Angiangi Marine Reserve is located on the central Hawke's Bay coast, between Aramoana and Blackhead Beach. Established in 1997, it protects a 446-ha area and contains habitats that are representative of the central Hawke's Bay coastal and marine environment (DOC 1994).

Te Taonga o Ngati Kere (Porangahau Taiapure) was established in 1992. It covers much of the rohe of Ngati Kere, from Cape Turnagain in the south to Parimahu (Blackhead Point) in the north. Currently, no bylaws have been established for the Taiapure, so that the fisheries regulations for the surrounding area apply.

### **NGATI KONOHI**

Ngati Konohi is a coastal hapu of Ngati Porou Iwi located at Whangara Mai Tawhiti, 16 km north of Gisborne. Ngati Konohi were among the first North Island iwi/hapu to have their rohe moana affirmed and Tangata Kaitiaki appointed under the Kaimoana Customary Fishing Legislation.

Te Tapuwae o Rongokako Marine Reserve was established in November 1999 as a result of a joint application between Ngati Konohi and the Director-General of the Department of Conservation (DOC & Ngati Konohi 1998). It protects 2452 ha of coastal and marine habitats that are representative of the coast between East Cape and Mahia Peninsula, and is located approximately 16 km north of Gisborne, in the rohe moana of Ngati Konohi (Fig. 1).

The remainder of the rohe moana is currently managed under various area-based restrictions implemented by the Ministry of Fisheries (MFish) (Froude & Smith 2004), but applications for both Mataitai and Taiapure Reserves are in process.



Ngati Kere kuia blessing te kete taonga

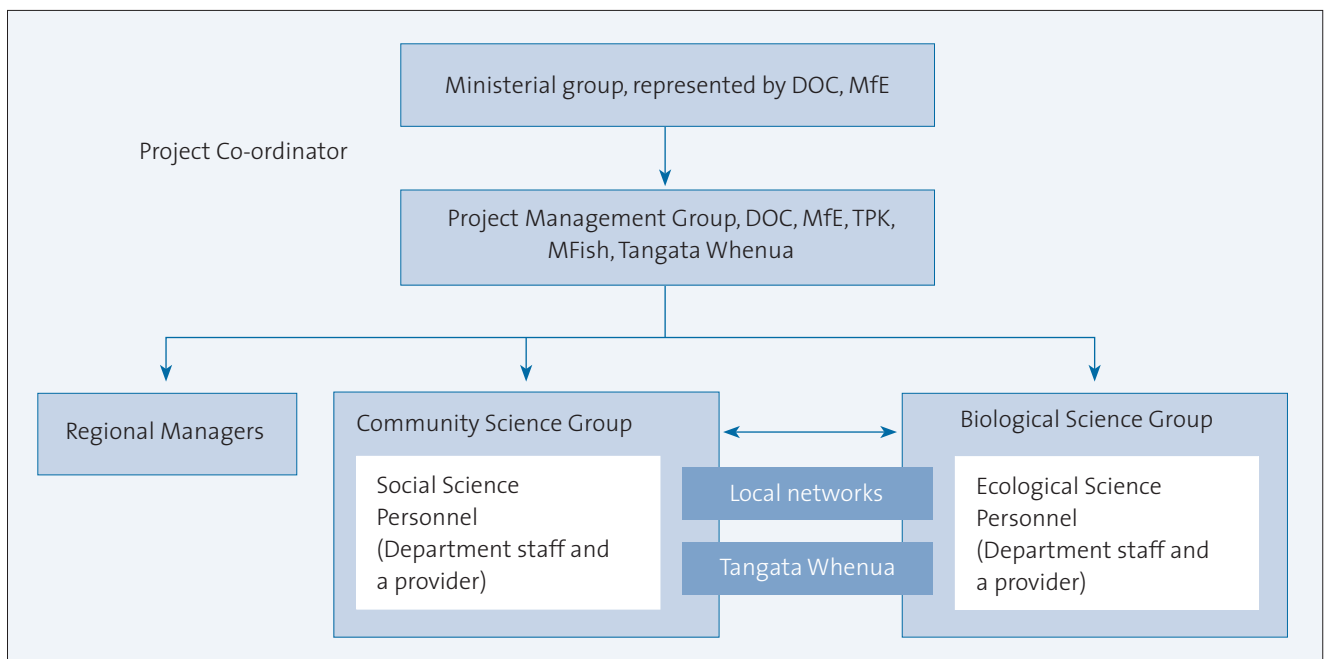


Project leader Alan Wakefield and author Lisa Walker with Ngati Kere report

### PROJECT STRUCTURE

This Ngati Kere, Ngati Konohi, DOC and MfE project involved a number of interrelated research teams working on community research and ecological science in the two rohe, as illustrated in Fig. 2. The work of these teams was monitored by a project management group reporting to MORST, which included a range of key stakeholders.

Figure 2. Project management structure.



The project structure was established following discussions with hapu at both sites. In both cases, a kaumatua or senior hapu member attended the project management group meetings. This individual was also a member of the community research team and provided advice, direction and information to other hapu researchers. Section 6 outlines some of the lessons learnt by the project team in its attempt to develop an inclusive collaborative research process.

### **PROJECT MANAGEMENT GROUP**

An overall project management group (Ngati Kere, Ngati Konohi, DOC, MfE and MFish) was established to oversee project development and progress. This group met approximately every 3 months to receive progress updates and discuss any issues, and was facilitated by the project leader (a DOC staff member).

### **COMMUNITY RESEARCH TEAM**

A community research team was established at both sites to plan the implementation of objectives 1 and 2 and to report to the project management group. Ngati Kere and Ngati Konohi developed their own teams to undertake interviews and hui with their hapu. The role of the community research team was to provide support and direction to these local researchers.

### **ECOLOGICAL SCIENCE TEAM**

The ecological research was undertaken by a number of groups, including DOC staff members, hapu members and contracted research providers. Because much of the ecological research was highly specialised, the personnel or organisations who completed the various components of the research relied on technical skills, qualifications and prior experience.

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



## 2. Iwi/hapu interests and expectations for marine management

### INTRODUCTION

The community research aimed to identify the following:

- The future goals and aspirations of Ngati Kere and Ngati Konohi for their rohe moana
- The key species of importance to Ngati Kere and Ngati Konohi in their rohe moana
- How Ngati Kere and Ngati Konohi would like to use the different management systems in their rohe moana
- The tohu/signs or indicators that have traditionally been used or that are currently used by Ngati Kere and Ngati Konohi to tell them whether the rohe moana is healthy

This section reviews the research process adopted by each hapu, the findings from the research, and the outcomes from objective 1. The last of these points provided background for objective 2 of the project, and is reported on in section 3.

### METHODOLOGY

The exact approach taken to recruit researchers and the research methods adopted for each study were decided in discussions between representatives from Ngati Kere/Ngati Konohi, DOC and MfE.

For Ngati Kere, the senior hapu representative on the steering group selected a local assistant to work with him to complete the community research. The senior hapu representative and his assistant, neither of whom had any social research experience, were contracted to undertake the research with the assistance and support of the DOC and MfE members of the community research team. The hapu representative and his assistant then coordinated a Ngati Kere research team and contracted three local people to conduct interviews and review the oral history interviews that had previously been collected as part of an archives project.





For Ngati Konohi, the senior hapu representative on the steering group selected a hapu member with some social research experience who lived outside the area. This person was contracted to be part of the community research team and was responsible for collecting information to be included in the report. The researcher worked alongside the other members of the community research team and held two workshops for hapu members and then carried out a series of interviews with interested members of Ngati Konohi.

Both hapu decided to use qualitative social science research methods, particularly semi-structured interviews and workshops with the hapu. More detailed information on the approaches adopted can be found in the individual reports (DOC et al. 2005; Wakefield & Walker 2005). An evaluation of the research process is included in section 6.

### GOALS AND ASPIRATIONS FOR THE ROHE MOANA

Ngati Kere highlighted the importance of the mauri of Tangaroa and described the rohe moana as a spiritual and cultural source of solitude, sustenance and satisfaction (Wakefield & Walker 2005). Similarly, Ngati Konohi stressed the importance of having a holistic approach to taking care of the rohe moana (DOC et al. 2005).

Ngati Kere and Ngati Konohi had several common goals, aspirations and visions for the rohe moana, including that:

- The hapu should have responsibility for managing their rohe moana
- Kaimoana should be managed sustainably and be available in abundance for future generations
- People should be educated about the importance of the rohe moana and tikanga
- There should be opportunities for the hapu to gain employment and revenue

Also mentioned was the need to have:

- A clean and pollution-free environment (Ngati Konohi)
- Access to traditional fishing grounds and places of gathering (Ngati Kere)
- Hapu living close to the rohe, and fishing, caretaking and teaching for the betterment of the hapu (Ngati Kere)

### KEY SPECIES OF IMPORTANCE IN THE ROHE MOANA

Both hapu referred to the mana associated with being able to present kaimoana to manuhiri/visitors at the marae—manaakitanga/hospitality. Ngati Kere also mentioned the importance of local flora and fauna for sustenance, maintaining tradition, education, and providing tools for weaving, carving and crafts (Wakefield & Walker 2005). Ngati Konohi referred to species as a source of income and being used for decoration and medicine (DOC et al. 2005).

When asked to identify the key species of importance, Ngati Konohi stressed the importance of recognising that all of Tangaroa's children are important and rely on each other, and that all species are of equal importance (DOC et al. 2005). The Ngati Kere researchers stressed the importance of including river species, as they are an integral part of the connection between moana/sea and whenua/land.

The Ngati Konohi researcher specifically asked people to identify the species that they placed a high value on, whereas the Ngati Kere research team identified the species most commonly talked about in the archive interviews as well as the species used in waiata, stories, weaving, carving and other art work.



*Gathering kina (looking south to Paremahu)*



*Top: Pouraka—traditional piriita and harakeke pot  
Below: Cray pot being hand-set at Parimahu, January 2004*

## Pipiri Hononga Mareikura

Found in 1984 at Parimahu (Blackhead 'wreck' beach).

Lying undisturbed beneath 3 m of water, encrusted with sand and shells for perhaps 200–300 years, only a very small part of this pounamu/green stone was showing through the sand. This pounamu revealed itself to the eyes of Alan Tutepourangi Wakefield, as he waited in ambush for a fish to swim by. If the want of a fresh fish on the barbie had not arisen, this stone may have lain for another 300 years. Deep concentration overtook the wanting for a fish, and after what seemed a lifetime, this pounamu was raised to the surface.

This pounamu was given the name Pipiri Hononga Mareikura during a blessing performed by canon Wi Huata and Piri Sciascia, at the commencement of the building of Tamatea Arikinui o te Waka Takitimu; it is a taonga/treasure to nga hapu o Porangahau and signifies connection to the past occupations of our tipuna/ancestors.

Known as a Toki poutangata, research has dated it as far back as c. 1450–1550. Shaped with stone tools and used solely for ceremonial purposes, it originates from south Westland, South Island. Its longest point is 200 mm, its widest point 90 mm, and its thickest part 25 mm; it weighs 700 g.



*Pipiri Hononga Mareikura found in 1984 at Parimahu (Blackhead 'wreck' beach)*

There were a lot of commonalities between both case studies in the species mentioned as being important. Koura, paua and kina were key species for both hapu. Ngati Konohi interviewees also frequently mentioned pupu and parengo, while other species of significance to Ngati Kere were karengo<sup>1</sup>, pipi, tuangi, patiki and kuku. In the Ngati Kere report, there is a detailed discussion of how these and other fauna and flora are used by the hapu, their traditional and current management, and the condition of the species (Wakefield & Walker 2005).

Both hapu discussed traditional management and harvesting practices, often as told by kaumatua or as remembered by grandparents. Using specific examples, both hapu also raised concerns about the decline in the quantity and diversity of many species and the health of the rohe moana (DOC et al. 2005; Wakefield & Walker 2005).

### MANAGEMENT SYSTEMS IN THE ROHE MOANA

Both hapu have a number of marine management systems in place in their rohe. Ngati Kere referred to Te Angiangi Marine Reserve, Te Taiapure o Porangahau and Tangata Kaitiaki (appointed during the project) (Wakefield & Walker 2005). Ngati Konohi also referred to their appointed Kaitiaki, Te Tapuwae o Rongokako Marine Reserve, and proposed mataitai and taiapure reserves (DOC et al. 2005).

Both hapu acknowledged that these systems could help them to take responsibility for managing the rohe moana. However, it was felt that many hapu members did not have sufficient knowledge about the different management systems to comment on how these systems could be used.

Ngati Kere suggested that a preferred approach would be to work with authorities to identify how traditional management systems could be used and promoted within the rohe moana, as these modern systems have often been developed independently of the hapu. They acknowledged that many people within Ngati Kere lack a detailed understanding of modern management regulations, but stated that there is also a lack of understanding of the Ngati Kere traditional management practices amongst authorities. Two-way discussions and information sharing are needed within Ngati Kere and also between Ngati Kere and resource management authorities (Wakefield & Walker 2005).

<sup>1</sup> Karengo and parengo are the same species; this is a difference in dialect.

The issue of a lack of knowledge on both sides is discussed further in section 5. In particular, this highlights the recent appointment of Pou Hononga (Iwi liaison) and Pou Takawaenga (Extension service) by MFish to help increase the knowledge and understanding of marine management tools.

As well as considering how these different management systems work separately, Ngati Konohi noted that it is also important to consider how these systems can work together in the rohe moana, which led to the development of a concept of marine management known as the 'Tangaroa Suite'. Following the interviews with Ngati Konohi, the community research team developed a proposal for an integrated management system for the Ngati Konohi rohe moana, as outlined in Fig. 3. This suggests how Ngati Konohi's vision 'to honour and sustain the bounty of Tangaroa for present and future generations' could be addressed with the assistance of modern management systems.

A similar proposal was developed with Ngati Kere to link their vision and goals to potential marine management systems (Fig. 4).

#### 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.

Figure 3. Ngati Konohi vision statement.

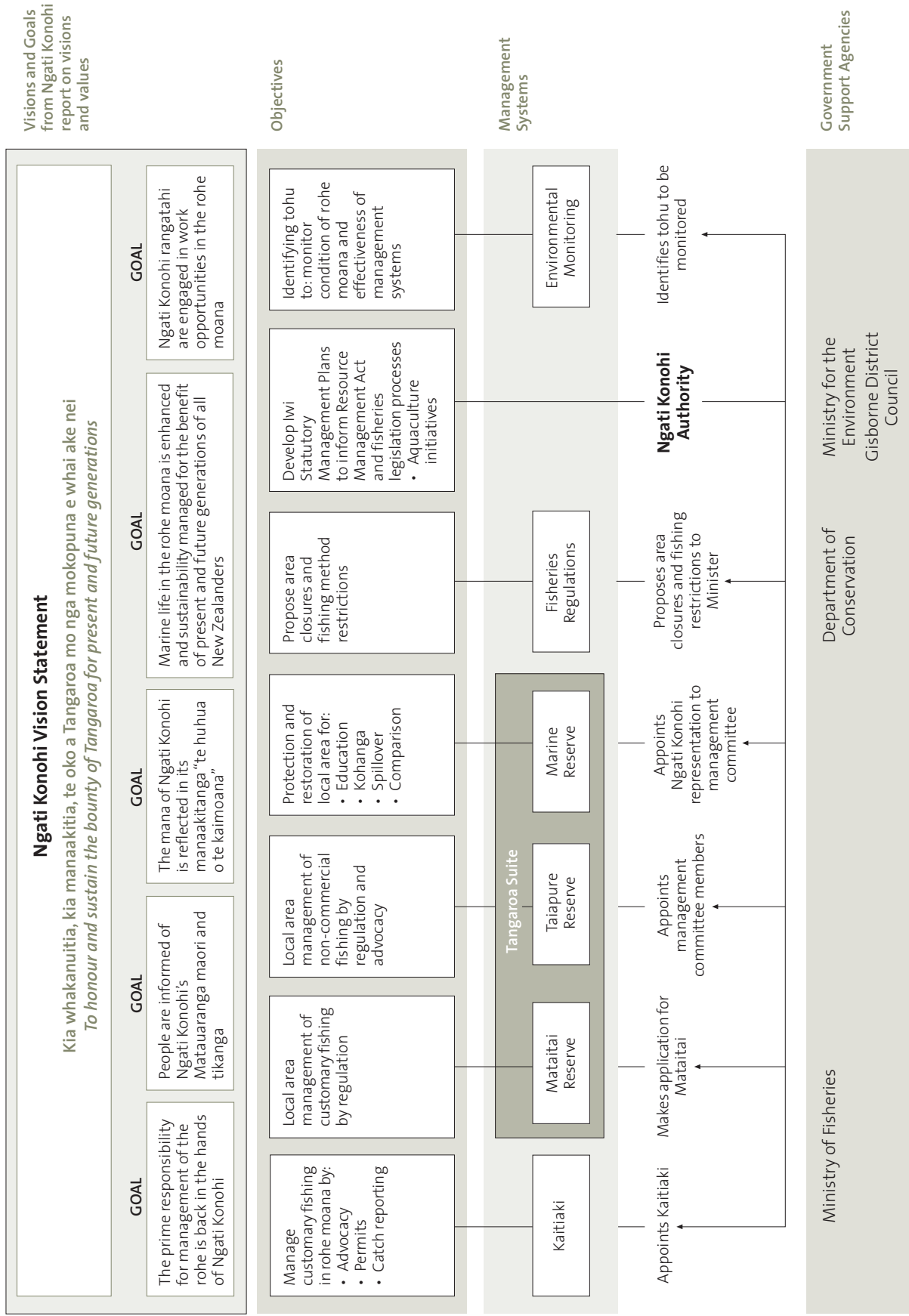
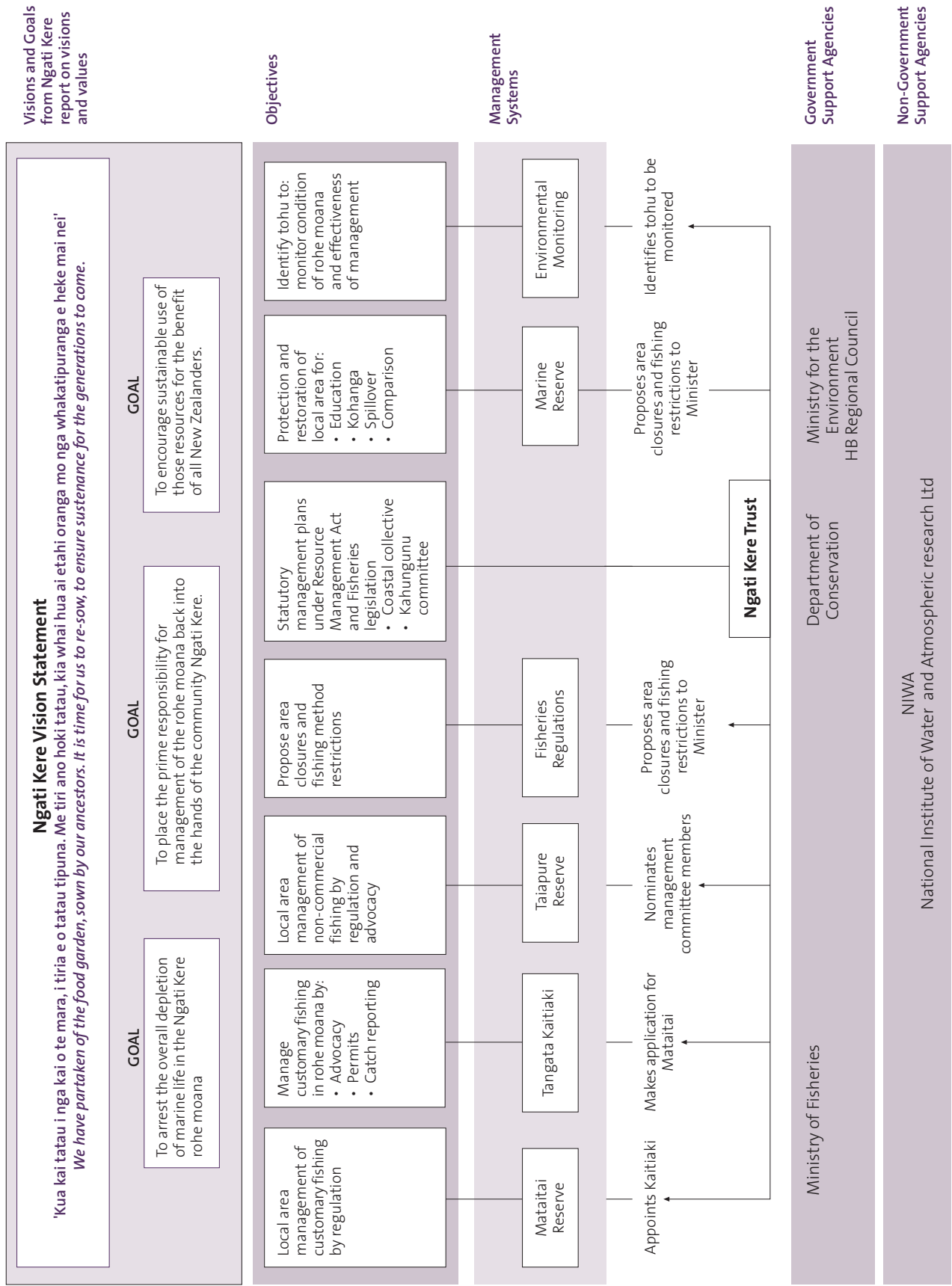


Figure 4. Ngati Kere vision and management systems.





*Lisa Walker, author of Ngati Kere report*



*Hone Taumanu receives Ngati Konohi report*

## **CONCLUSIONS**

The visions of both hapu clearly indicate the importance of the rohe moana to them and the need for effective management:

*'To strive to sustain the mauri of the rohe moana through tikanga Maori'*  
(Ngati Kere)

*'To honour and sustain the bounty of Tangaroa for present and future generations'*  
(Ngati Konohi)

Kaimoana is connected to mana, particularly with regard to being able to provide kai for visitors and manaakitanga/hospitality. As well as providing kaimoana, local flora and fauna are important for sustenance, tradition, education, and providing tools and inspiration for weaving, carving and crafts. They can be a source of income and can also be used for medicine and decoration.

Both hapu raised serious concerns about the decline in the quantity and diversity of many species and the health of the rohe moana, and thus the ability to sustain traditional use and maintain the mauri of the rohe.

While both hapu were clear that they wanted to manage their own rohe and have a greater role in policy, rules, monitoring and enforcement, there was a common view that many people within the hapu were not clear about how modern management systems worked and how they could be integrated to meet their vision and goals. However, there is also a lack of knowledge about traditional management systems amongst authorities and Ngati Kere particularly stressed the need for agencies to work alongside hapu to develop management systems together, rather than working in isolation and simply presenting conclusions to the hapu.



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

Both hapu highlighted the need for further discussion within the hapu on marine management systems, and Ngati Kere stressed the need for the hapu to have clear, transparent and coordinated decision-making processes if they are to achieve their marine management goals.

This social research initiative has been useful for identifying the vision and goals of each hapu and to begin discussions about how best to achieve them. As concluded in the Ngati Kere report:

*'By achieving goals, communities can develop a sense of ownership that will be rewarding to all and to future generations.'*

(Wakefield & Walker 2005: 48)

While the research did identify the goals and key species, further work is required to progress the implementation of marine management systems. This is discussed further in section 5.