TE WHARE WĀNANGA O
AWANUIĀRANGI

KOROWAI MANAAKI

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MĀNUERA MURPHY
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For the Master's of Māori Indigenous Studies

Te Whare Wānanga o Awanuiārangi, Whakatāne

He honore
He kororia ki te Atua
He maungārongo ki te whenua
He whakaaro pai ki ngā tangata katoa
Amine.

KAITUHITANGA - STATEMENT OF AUTHORSHIP

Ko tēnei rangahau, he taonga aroha na ahau.

Image 1: Front Page - Weaving a Korowai, Veranoa Hetet.
Hetet School of Māori Art TOI TV, 2015.

WHAKAMĀRAMA - DECLARATION

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material that I have submitted towards the award of any other degree or diploma in any other university or other institution.

This thesis represents research I have undertaken. The findings and opinions in my thesis are mine and they are not necessarily those of Te Whare Wānanga o Awanuiārangi.

This thesis has been stored at Te Whare Wānanga o Awanuiārangi, Whakatāne. It is therefore available for future students and researchers to read and reference.

Jeanette Hinerangi Eruera Mānuera Murphy

Signature: 

Date: 28 June 2021

NGĀ WHAKAMIHI - ACKNOWLEDGEMENTS

He uri ahau o Ranginui rāua ko Papatūānuku.
He uri ahau o Tāne rāua ko Hinetītama.
He uri ahau o tātou whenua, ki te moutere ataahua rā, ko te Ika a Maui.
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I tipu ahau i Te Teko, kei runga i o mātou whenua, Otamaoa, Te Rangitāiki. Heoi anō, i tēnei wā e noho ana ahau me tāku whānau ake, ki Patutātahi me ŌKōrero. Ko Jeanette Hinerangi Eruera Mānuera Murphy ahau.

Tēnā koutou. I take this first moment to acknowledge my many tūpuna, for I know that my existence is a gracious outcome of the many generational lines who have come to this earth and lived before me. I think often of the challenges, the struggles and the aspirations that you 'my persons', would have then, endured. I also express gratitude to my kaumātua, Eruera Riini Mānuera and Pareake Te Ua, Ngāmare and Pirihita, Koro Jack, Nanny Witch and Mere, beloved hungawai Bill and Monica and my matua Eriki Eric and Olga Paterihia, for intuitively instilling in me an appreciation for life, love, music, Hahi Ringatū and all things te ao Māori.

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Te Whare Wānanga o Awanuiārangi. Many blessings whānau katoa for granting me the time and space to study, often in isolation at ŌKōrero and for reminding me every so often, that you are collectively, what really matters the most.

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"Whēnā kei te tika tō mahi, ka haere noa mai ngā kōrero.
If you are doing the right thing, the information you are seeking will come to you."

Eruera Riini Mānuera.

Kia tau te rangimārie me tāku aroha i runga i ā whānau mā.
Arohamutunga kore.

Nā Hinerangi.

WHAKATAU MAUMAHARA - PREFACE

I remember the korowai weaving stand that Nanny Pareake had in her living room at Te Teko. It was about 2.5 metres tall, made of wood and fashioned with nails that held a long row of muka harakeke – threads made from flax. The frame was suitably positioned to the right of the chair that Koro Eruera would occupy, in view of the fireplace and over time, the black and white television. A surplus bundle of muka, a few kuku shells, small portion of soap, coloured tāniko thread and a bag of feathers, were kept close by.

I watched Nanny in awe. She was very patient, crafting one whenu at a time. Her hands were wrinkly. She worked a lot in silence. I sat and had a tutū once, although being 8 or so then, I could only just master a simple three-strand plait. No match at all for my kuia.

Whilst time progressed, I witnessed the stages of achievement. Her tāniko piece was intricate and as more huruhuru were added in, she would devotedly cover her work. Nanny Pareake took pride in all that she created. Her mahi aroha meant so much to me…as did she.

The crafting of a korowai, like many taonga māori, is incepted from the form of an intention. Be it commissioned for a special event, or woven for a certain whānau recipient, the cloak that features hukahuka or tassels, will manifest an important whakapapa, a pūrākau or story of its timeless journey and on personal occasion, that of its future wearer, or owner.

Several years before my mother passed, she gifted me with what was to be the one modern-day korowai that she would make. Like my kuia Pareake, who was in her time a master weaver, Mum spent many hours, days and months crafting the labour-intensive garment, adorning that cloak not only with feathers from our duck-shooting friends and whānau, but also with much needed patience, thoughtfulness, and love.

It is the contemporary korowai that I have used as an analogy, to purposefully frame and encapsulate this research. It is the korowai that when donned, forms the wairua, or inner circle of the key themes proposed in this study. It is the korowai that visually epitomises, manaaki, embrace and the craft of care.

Image 2: Watermark - Korowai of Aroha, Crafted by my Beloved Mum.
Hinerangi Eruera Murphy, 2017.

WAITARA - ABSTRACT

Ko Pūtauaki te tīpuna maunga	Pūtauaki is the ancestral mountain
Ko Rangitāiki te tīpuna awa	Rangitāiki is the ancestral river
Ko OKōrero te komutuawa	ŌKōrero is the river mouth
Ko Hakai Atua te taniwha	Hakai Atua is the guardian
Ko Ngāti Awa te iwi	Ngāti Awa is the tribe
Ko Te Patutātahi te hapū	Te Patutātahi is the subtribe

Disaster disrupts lives and the chaos that follows can influence how people manage themselves and their environment and how they behave as a community in the aftermath. Following on from the Edgecumbe flood event of April 2017, there has been ongoing concern about the land and the health, safety and welfare of the local town folk.

The principal aim of this thesis is to identify the key understandings that emerge from the practice of manaaki, for displaced whānau, in a disaster situation. Defining what manaaki means as a practice and how that ideal interconnects to the themes of Mana Whānau, Mana Whenua, Mana Tautoko and Mana Kōrero is imperative, in terms of the literature supporting this study. Related to that effort is the need to better understand whānau recovery demands, how environmental conditions affect human relationships and what communication technologies, and social media are used and why, in disaster and emergency management.

Image 3: Aerial photograph of Mount Pūtauaki and the Rangitaīki River.
Whites Aviation, 1955.

RARANGA KOROWAI - THE WEAVING PROCESS PRELUDE

Te harakeke. Te korari
Ngā taonga whakarere iho o te rangi, o te whenua, o ngā tīpuna
Homai he oranga mō mātou
Tihei mauri ora.

The weaving of a korowai involves the intricate intertwining of whenu and aho. That meticulous process is espoused here to aptly frame the stages of this research.

Ūpoko Tuatahi	Chapter 1	Whenu Aho Whakatuwhera	Cast on the Introduction.
Ūpoko Tuarua	Chapter 2	Whatu Ngā Tuhinga	Weave in the Literature.
Ūpoko Tuatoru	Chapter 3	Whatu Ngā Tikanga	Weave in the Methodology.
Ūpoko Tuawha	Chapter 4	Whatu Ngā Rōpū-a-Kōrero	Weave in the Focus Group Interview Findings.
Ūpoko Tuarima	Chapter 5	Whatu Ngā Rōpū-a-Kanohi	Weave in the Semi-Structured Group Interview Findings.
Ūpoko Tuaono	Chapter 6	Whatu Kohinga Mātauranga	Weave in the Document Collection Findings.
Ūpoko Tuawhitu -	Chapter 7	Whenu Aho Whakamutunga	Cast off the Conclusion.

The whiri whenu weave (above left) that is frequently depicted in this rangahau, resembles the helix shape of DNA and is coincidently the metaphoric symbol for human whakapapa. Whakapapa is our rightful foundation, tikanga and uara pathway our purpose and Te Reo Māori is at the heart of all that we think and do.

From this position of mana and empowerment, a series of karakia and generational excerpts have intentionally been woven in, to strengthen this korowai rangahau. Whakataukī and whakatauākī as proverbs and visionary tohu are appended and where valid, commentaries are further included to offer insight, inspire heartfulness and encourage reflective thinking.

Image 4: Whiri whenu - DNA - Whakapapa.
Hinerangi Eruera Murphy, 2020.

KOROWAI UPOKONGĀ - CONTENTS OF KOROWAI RANGAHAU

KARAKIA TIMATANGA

E te Atua
Nau ēnei rau harakeke he taonga
Tukuna ki ahau
Kia tika o tāku mahi
Ko Ranginui e tu iho nei
Ko Papatūānuku e takoto nei
Tuturu Whakamaua ki tina
Haumi e.
Hui e.
Tāiki e.

Creator
These flax fibres are your treasure
Consent this work to me
Guide me through this journey
Ranginui who stands
Papatūānuku who lies
Join together
Bind together
Let the work proceed.

ŪPOKO TUATAHI - CHAPTER ONE
WHENU AHO WHAKATUWHERA - CAST ON THE INTRODUCTION

1.0 Ūpoko Whakatūwhera - Chapter Introduction

This chapter casts on the first row of whenu and focuses on korowai manaaki, as the craft of care for displaced whānau in a disaster situation. At this initial stage, the practice of manaaki is defined as the sincerity and embrace, necessitated to comfort people. It is also about doctoring respect and attending to others as one would themselves, like to be attended to. Edgecumbe has been the centre of community misfortune. This thesis begins there.

Edgecumbe, also known over time as Riversleigh, Riverslea, Kaiwhakatere and Patutātahi, is a small rural town located on the Rangitāiki Plains (Figure 1), in the Eastern Bay of Plenty, North Island of New Zealand. Approximately 19 kilometres west of Whakatāne, the 890.5 km² region was once marshland and prone to flooding. Edgecumbe is renowned these days for dairy, grain and horticulture.

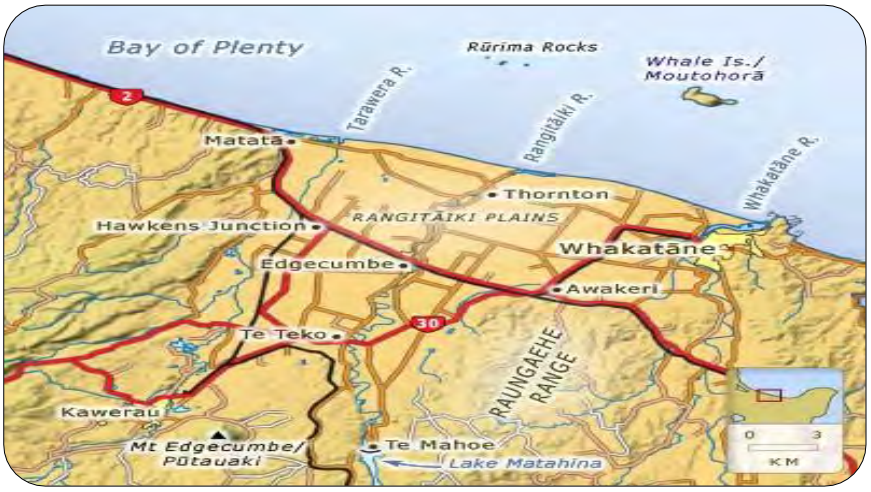


Figure 1: The Rangitāiki Plains and Surrounding Communities.
Te Ara, The Encyclopaedia of New Zealand, 2015.

On Thursday, the 6th day of April 2017 at 08.15hrs, residents along the concrete wall front of College Road in Edgecumbe, were urged to leave their homes. Remnants of ex-tropical Cyclone Debbie, the strongest cyclone since 2015 to strike the nearby country of Australia, had previously brought two days of heavy showers to the area. Approximately 200

millimetres of rainfall was recorded and there were serious concerns from the local residents, about the river level being high.

Image 5: College Road Floodwall Edgecumbe, 06 April 2017 at 08.14hrs.
Bay of Plenty Regional Council, 2017.

Fifteen minutes later, the Rangitāiki stop bank breached. The fire station sirens did not sound, and the community fled in all directions. Water quickly traversed over the land, entering up to 580 households. A state of emergency was declared at 08.45hrs.

Image 6: Rangitāiki River stop bank breach, 06 April 2017 at 11.00hrs.
Bay of Plenty Regional Council, 2017.

The Civil Defence Evacuation Management plan was not entirely clear and the Edgecumbe community relied greatly on trusted direction from the Whakatāne District Council. The township was evacuated and although no human lives were lost, over 1600 people had been affected. The korowai of care for the community of Edgecumbe had dissipated, as more than 265 homes were damaged. Many locals were displaced, anguished and in need of answers.

Image 7: Rangitāiki River stopbank breach, 08 April 2017.
Bay of Plenty Regional Council, 2017.

"It was estimated at the time that the flow in the river exceeded the design parameters of the stopbank by 30 per cent" (Australian Disaster Resilience Knowledge Hub, 2017). An independent review was led by former Finance Minister Michael Cullen, seeking answers to questions concerning the Matahina Dam being lowered prior to the flood, the concrete wall infrastructure and the circumstances that led to the breach and associated flooding within the township. A class action from the community was also being sought.

Image 8: Matahina Dam spillway operating during the April 2017 flood.
Chris McKeen, Fairfax NZ, 2017.

1.1 Whakapapa mō tēnei Ako Mahi - Background to the Study

The purpose of this study is to identify the key understandings that emerge from the practice of manaaki, for displaced whānau, in a disaster situation. This research primarily involves the interconnectedness between the whenua and Edgecumbe community. Hence the information that follows, provides for further contextual and historical understanding.

1.2 Māori Traditional Knowledge

Māori traditional knowledge asserts that land and people are associated. "The natural world forms a cosmic family… the weather, birds, fish and trees, sun and moon are related to each other, and to the people of the land" (Te Ara Encyclopaedia of New Zealand, 2012). Whakapapa and legendary names are used to explain relationships and authenticate Māori world views.

Te Kore, Te Pō, Te Ao. In the beginning there was nothing, then light and day. Thereafter came Ranginui, sky father and Papatūānuku earth mother, who gave birth to numerous offspring (Figure 2), including a swamp named Te Wai Koropūpū o Kaimanawa, or the flowing waters of Kaimanawa.

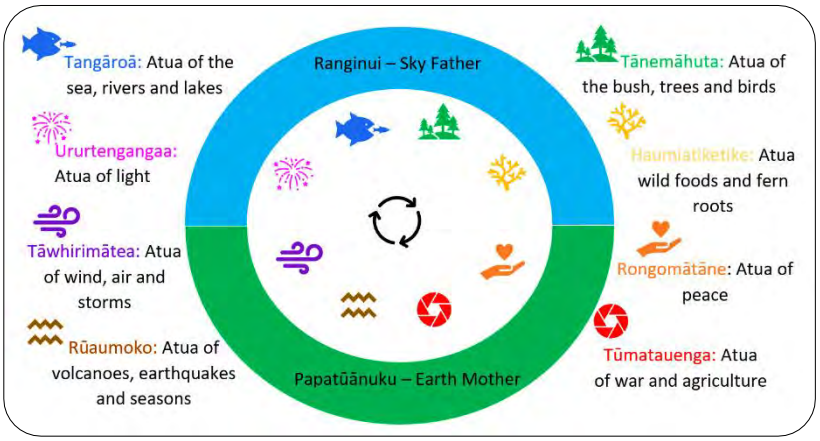


Figure 2: Ngā Atua.
Hinerangi Eruera Murphy, 2020.

It is also alleged (Te Nani Vercoe, as recounted by Pouroto Ngaropo, 2003), that two mountains of the central North Island namely Tongariro and Kaimanawa, fought for the honour of Ngauruhoe and Pihanga. Kaimanawa was defeated and the energy disbursed became known as Te Wai Koropūpū o Kaimanawa (Rangitāiki River Forum, 2015, p.6).

1.2.1 Ko Pūtauaki te maunga. Ko Rangitāiki te awa.

Te Wai Koropūpū o Kaimanawa as an affirmed water source, commences at the Kaimanawa ranges south of Lake Taupo and meanders across the Galatea Plains before entering Lake Aniwhenua. Lake Rerewhakaaitu also drains into the waterway (Figure 3), then passes through a gorge and out onto the Waiohau Plains to Lake Matahina.

The river is "740 metres above sea level" (Bay of Plenty Regional Council, 2017), rises approximately 130 kilometres from the Bay of Plenty coast and interconnects with three other rivers namely Whirinaki, Whaeao and Horomanga. Te Wai Koropūpū o Kaimanawa passes through two artificial lakes (Aniwaniwa and Matahina), flows over 155 kilometres alongside Mount Pūtauaki in the Eastern Bay of Plenty and is "… the primal source of what is known today as, the Rangitāiki River" (Rangitāiki River Forum, 2015, p.8).

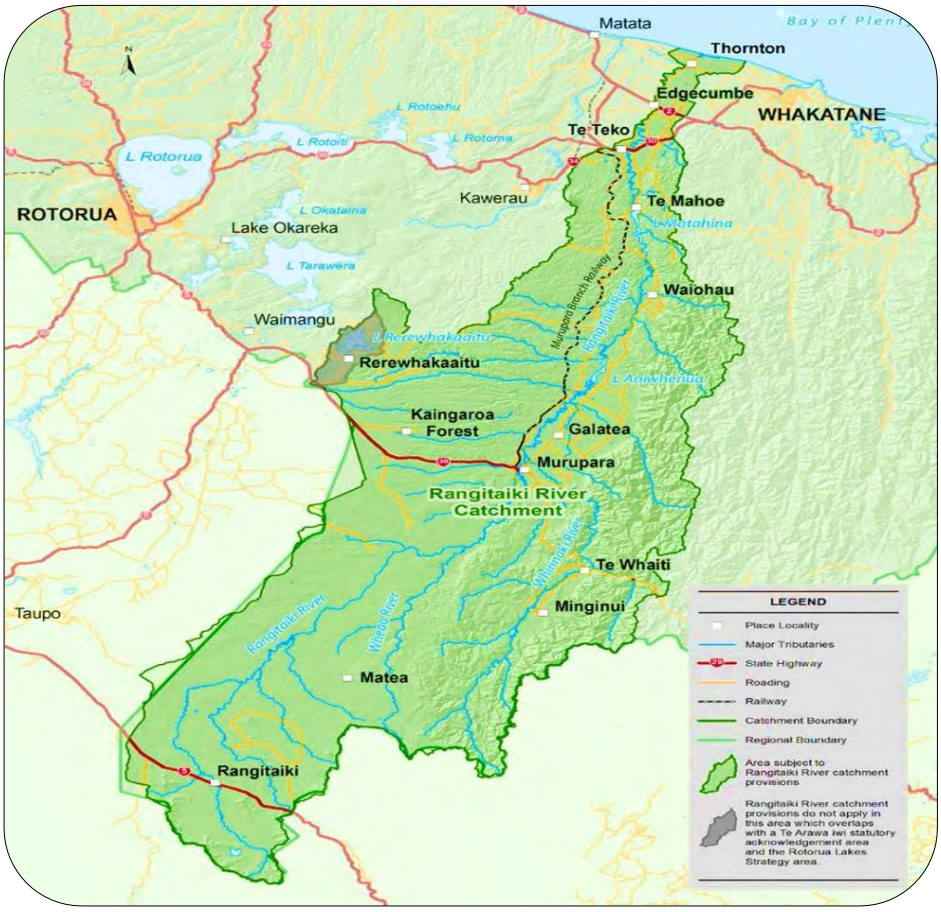


Figure 3: Rangitāiki River Catchment.
Bay of Plenty Regional Council, 2017.

The Rangitāiki River derives its legendary name from Māori traditional knowledge. Two accounts (Rangitāiki River Forum, 2015, p.6) similarly follow:

i. The waka Mataatua landed at ŌKōrero, Thornton and there the captain Toroa saw a corpse floating in the shallows and so he called the river Rangitāiki. Rangi means day and tāiki means body or skeleton.

ii. Toroa set out to explore the Thornton lagoon and he came across the remains of a descendent of Te Mārangaranga (earlier inhabitants of the land). To mark this discovery, he called the river 'Te Rangitāiki nui a tia' or 'Te Rangitāiki nui o Toroa' (Eruera Mānuera, as recounted by Pouroto Ngaropo, 2003).

1.2.2 Ngā Tipua me ngā Taniwha o Te Rangitaīki

Mythical tipua and taniwha are said to have lived in and along the Rangitāiki River. Hine-i-Wharoa was a tipua in the form of a white eel. Rimurimu who warned the Warahoe hapū of danger, was the tipua who occupied space between Te Teko and Matahina.

> "Raukawarua (kaitiaki of the river tribe and of all other river creatures) and Tarakura (the fearsome prowler), resided at Kōkōhīnau, Te Teko. Hakai Atua, the taniwha guardian and protector of Ngai Tamaoki, lived in and along the Ngāti Awa ki Rangitāiki boundary" (New Zealand Legislation. 2007, Ngāti Awa Settlement Claims Act, 2005).

1.2.3 Ko Ngāti Awa te iwi

Māori settlements were established by hapū, subtribes of Ngāti Awa, along the banks of the Rangitāiki River. The communities included Te Patere, originally inhabited by Ngāti Patuwai and later Te Pahīpoto at KōKōhīnau and Te Patutātahi, Edgecumbe, known today as Ngāi Taiwhakaea II (Rangitāiki River Forum, 2015, p.15).

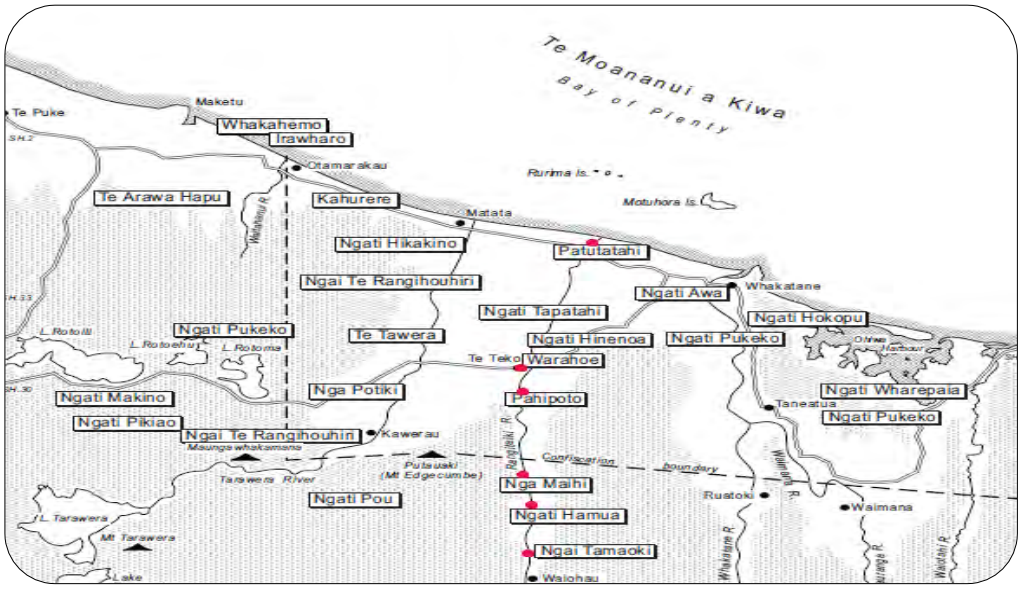


Figure 4: Hapū along the Rangitāiki River (as of 1840).
Waitangi Tribunal Report, 1999.

Further inland the hapū of Te Kupenga, Ngā Maihi, Ngāti Tamawera, Ngāi Tamaoki, (Te Teko), Ngāti Hamua (Mapou) and Warahoe were founded (Figure 4). The river provided villages with an abundance of food and material resources. Access to the Rangitāiki swamp land was not as easy however, with tracks along the sea, or by canoe, via the

Tarawera River. Ngāti Awa as an iwi co-op and self-governing body, was prosperous and wealthy then, in an economic sense. Trade between rohe hapū (Figure 5) and iwi of the central North Island, was trustworthy and recurring.

Marae	Approximate location	Hapu
Te Whare-o-Toroa (Wairaka)	Whakatane	Ngati Hokopu
Taiwhakaea	Whakatane	Ngai Taiwhakaea
Pukeko	Whakatane	Ngati Pukeko
Rewatu	Whakatane	Ngati Tamapare
Puawairua	Whakatane	Ngati Hikakino
Te Pahou	Whakatane	Ngati Rangataua
Te Rahui (Hokowhitu)	Whakatane	Ngati Hokopu
Toroa	Whakatane	Te Patuwai
Te Rangihouhiri	Whakatane	Ngai Te Rangihouhiri
Kokohinau	Te Teko	Te Pahipoto
Te Mapou	Te Teko	Ngati Hamua
Uiraroa	Te Teko	Ngati Tamawera
Tu Teao	Te Teko	Nga Maihi
Ruaihona	Te Teko	Ngai Tamaoki
Tuariki	South of Te Teko	Ngati Tuariki
Te Hinga-o-te-ra	Motiti Island	Ngati Maumoana
Tamatea-ki-te-huatahi	Motiti Island	Ngati Maumoana
Umutahi	Matata	Te Tawera-Umutahi
Mataatua	Mangere	Ngati Awa-ki-Tamaki Makaurau

Figure 5: Locations of Ngāti Awa Marae and Hapū.
Waitangi Tribunal Report, 1999.

1.3 Te Tiriti o Waitangi

In 1840, twelve local chiefs signed the Treaty of Waitangi document at Pohuturoa Rock, in Whakatāne. The document had two interpretations and was not clearly understood by both parties. Māori assumed that the Queen keep her own government, while iwi have autonomy over their own regions and maintain their rights to land ownership. Five years later the New Zealand Wars began.

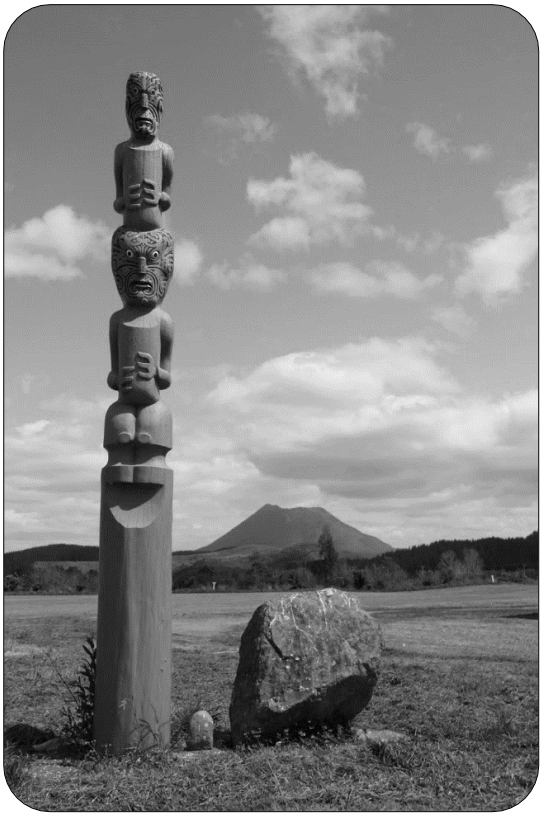


Image 9: Te Kupenga-a-Taramainuku, Te Teko.
Tumeke FM, 2017.

By 1865 the brutal attack on Te Kupenga-a-Taramainuku, Te Teko was instigated by vengeance following the battle of Gate Pā, Pukehinahina. Concurrently, the colonial forces under Major W.G Mair were determined to defeat the iwi of Ngāti Awa

and establish sovereignty over all land. It is said that some of the men involved in the execution of Reverend Carl Volkner and James (Te Mautaranui) Fulloon, took refuge in the natural fortresses of the Rangitāiki swamp.

1.3.1 Raupatu o Te Rangitāiki

Twenty five years later the Crown decreed that soldiers returning from overseas service be given the opportunity to settle on farms of their own (Figure 6). The Rangitāiki marsh, land comprising of 29,000ha was "… the most likely source of fertile ground" (Gibbons, 1990, p.3).

> "Crown purchase and the Native Land Court led to (colonisation) the displacement of large numbers of Māori. Deprived of their land, tribes were in many instances reduced to poverty, with no option but to live in overcrowded and unhygienic conditions. Losing land, they also lost access to traditional food sources. Lack of resources, overcrowding and poor diet helped disease to take hold and spread" (Te Ara, The Encyclopaedia of New Zealand, 2019).

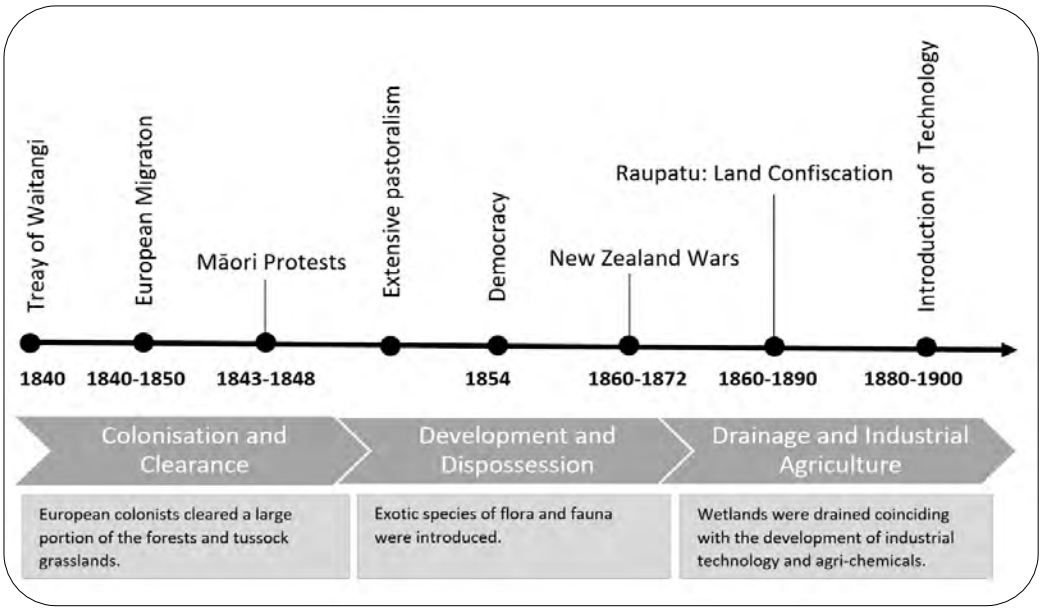


Figure 6: Adapted Timeline of Events from1840 -1900 for New Zealand, Aotearoa. Parsons, M., Nalau, J, 2016.

The Rangitāiki Drainage Board was established in 1894 and the Drainage Scheme area "… consisted of four erosion control structures, 328 kilometres of canals and drains, culverts at 22 locations and 1100 metres of river stopbanks" (BOP Regional Council, 2017).

Although the Rangitāiki tributary flowed through the Mataatua district and out a 1500m cut over Te Awa o te Atua, a man-made channel was excavated, via ŌKōrero (Figure 7).

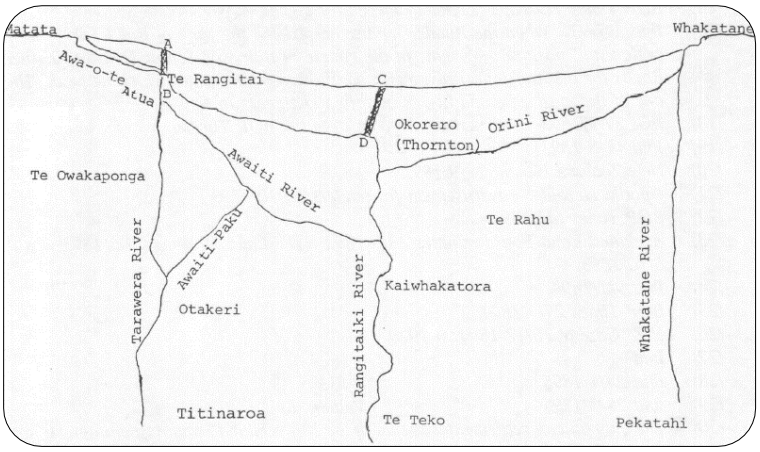


Figure 7: Rangitāiki River and ŌKōrero, Thornton.
Walter H Gibbons, 1990.

Image 10: The Rangitāiki Swamp.
Te Ara, The Encyclopaedia of New Zealand. 2015.

By 1919-1922 plots were balloted to ex-servicemen and the community known then as Riversleigh, "… was growing fast" (Clark, 2015, p.8). The new settlers met to agree on a town name. While 'Pūtauaki', (the ancestral mountain rising over the Rangitāiki Plains) and 'Riverslea' (known as a river in Lincolnshire, England) were considered, it was Edgecumbe, the title given by Captain Cook to Pūtauaki, (known too as a small village in Cornwall, United Kingdom) that was collectively decided.

The original name of Edgecumbe was Kaiwhakatere – landing place of the canoes, because local iwi, namely Te Marangaranga, Ngāti Awa and Te Patutātahi, launched their canoes from there (Clark, 2015, p.4).

By 1945 state housing commenced in the small rural town situated along the banks of the Rangitāiki River. Then under enormous pressure from the Edgecumbe Town Extension and Development Scheme, approximately 20 acres of ancestral land was lost to further develop urbanisation. The following discourse from Stanley Newton, an elder of the iwi Ngāti Pikiao, affirms the whenua once owned by the Ratahi whānau (Clark, 2015, p.97). His descendants affiliate to the Taiwhakaea hapū of Whakatāne.

"The history of the Ratahi family and their lands is a sad one indeed, and when one looks back into the ways, and means, whereby they were dispossessed or stripped of their ancestral lands, one can only wonder why so many of our kinsfolk are harking back to the Treaty of Waitangi. In vain, let me hark back to 1955 when Lots 51 and 52 of the Parish of Matata, a small dairy farm of some 26 acres occupied by Petera Ratahi and owned by him and his other six brothers and one sister named Whiuwhiu, how this property, coming under pressure from the Edgecumbe Town Extension and Development Scheme had to be sold by the Ratahi's in order to satisfy a local authority scheme of urbanisation."

Two plots along the riverbank were seized (without compensation) by the Bay of Plenty Catchment Commission, the Council took a share for public reserves, the Roading authority for streets and the Railway Services for its bridge. The NZ Post Office also snatched up one section. The Rangitāiki Agricultural and Pastoral Association accrued 10 acres for a Domain Reserve and a power station distributed electricity to the region and as far as Cape Runaway. With industrial development on the rise, the population increased and by 1970, sections were priced from $2800 - $4000, enticing more families to the area.

Image 11: Aerial View of Edgecumbe.
Archives New Zealand, 1969.

The mōteatea, Te Tangi a Matahina (Figure 8), expresses the adversity and suffering that impacts to this day on the iwi of Ngāti Awa, as a direct result of land confiscation, colonisation and the Crown's actions.

Kāore hoki e te rangi nei,	This day as I look back,
I te hua mahara i roto rā,	A thousand thoughts are in my mind,
ki ahau rā, ka noho pani nei.	Here I live as an orphan,
I pani ki te whenua,	An orphan upon the land and
I pani ki te tangata.	An orphan among the people.
Au tangi kau iho i te pō,	At night I weep helplessly,
Ka whakatū ki hea te aroha,	For where is hospitality to be given?
I te tōnga o te rā ki a Rikirangi,	When the sun set on Rikirangi (Te Kooti)
Ko tōku whānaunga ia tērā.	His relative am I.
Ina te āhua, i mihi ki te whenua,	For did he not greet the land!
I tangi ki te tangata,	Did he not weep for his people,
Ka noho wairangi nei.	Now left to live aimlessly!
Āpōpō, ka retireti, ki hea,	Tomorrow they move on,
Ka tahuri noa,	With no place to turn back to,
Ka rarapa noa,	I look about me and ask,
Kei hea ra he taūnga mo te waewae?	Where is a place for the feet to stand?
He aha te pai o te noho i konei?	What is the use of staying here?
Te āta rere ai ki Poihākena!	Better by far to flee to Poihākena!
Kei noho i konei rongo rā ai i te	For if I stay I will hear,
wāuaaaa…iii….	The groaning of the people.

Figure 8: Te Tangi A Matahina
New Zealand Legislation (2007). Ngāti Awa Settlement Claims Act, 2005.

Image 12: Te Whenua o Matahina.
The Timing Team Blog, 2019.

The following pictorial map details the Treaty claims and settlements including Ngāti Awa, within the Bay of Plenty Regional Council boundary.

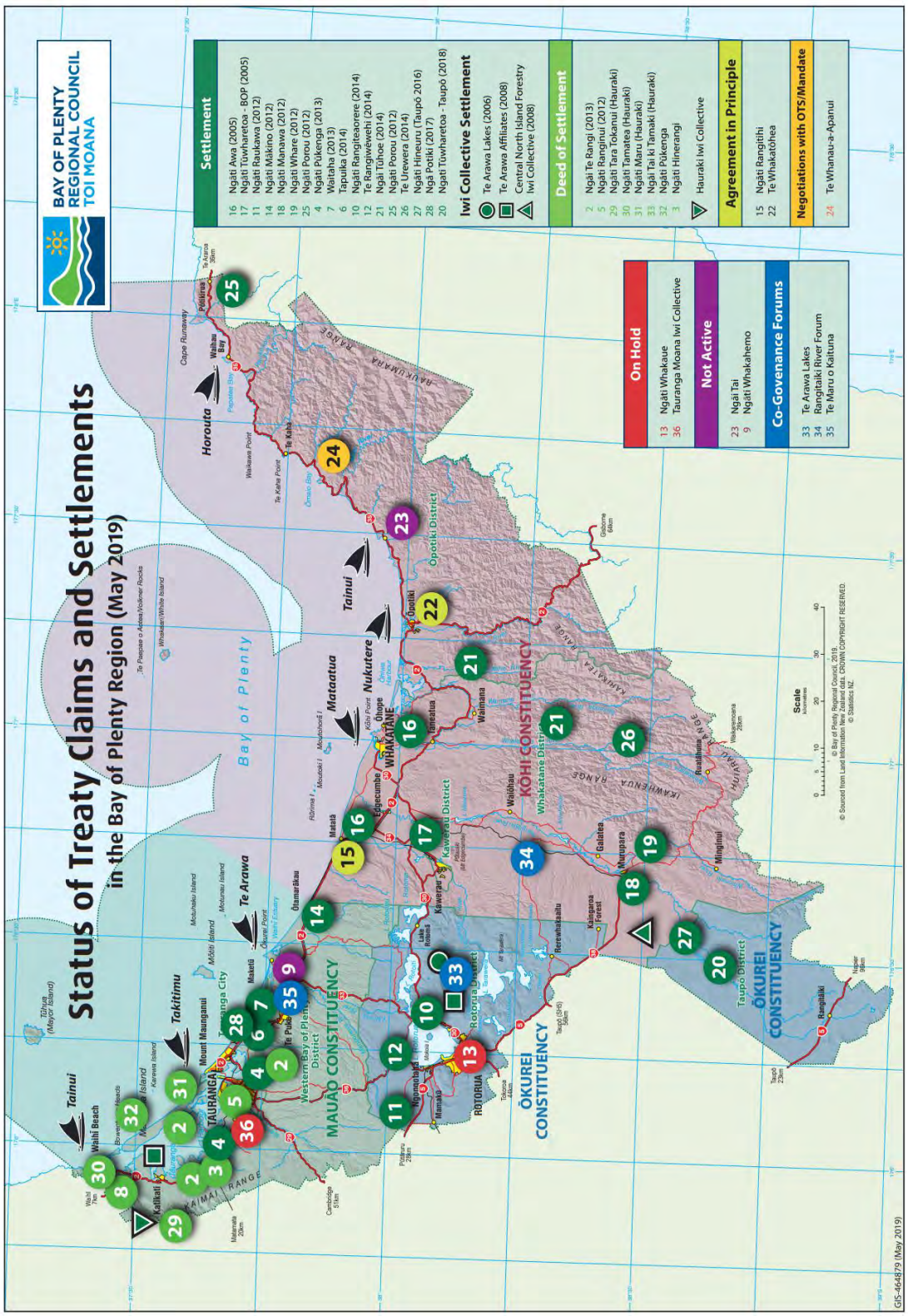


Figure 9: Status of Ngāti Awa Settlements as at May, 2019.
Bay of Plenty Regional Council, 2019.

1.4 Kaitiakitanga

The traditions of Ngāti Awa depict the spiritual, cultural and historical connections that local tangata whenua Māori have with the river and land. Whenua will always be an important part of how people define themselves. It is where high value is placed, generational connections are made and the rights of the occupants as kaitiaki, are not challenged. Both wai and whenua are inextricably linked too, to the female birthing pro-creative role of reproduction.

Māori also follow the maramataka and have an obligation to execute protection, preservation, and sustainability over the natural environment. By fulfilling this commitment, the iwi and affiliated hapū are meeting the expectations of their ancestors and considering the future of the land for generations.

1.4.1 Tangata Whenua

There are six iwi, 16 marae and 22 hapū that have a vested interest in the Rangitāiki River catchment. There were 6,560 people living in the area and more than half of that population, namely 61%, are Māori.

Image 13: The Rangitāiki River flowing through Edgecumbe.
Hinerangi Eruera Murphy, 2017.

Crown control and circumstances that include the discarding of milk residue directly into the river, have compromised relationships. Concerns have required that iwi play an integral role in environmental management. Making the catchment economically profitable has changed the natural pattern of the waterway and consequently diminished

the natural features. A co-governance partnership, namely the Rangitāiki River Forum under the Ngāti Manawa Claims Settlement Act 2012 and Ngāti Whare Claims Settlement Act 2012, with representation from each of the iwi (Ngāti Whare, Ngāti Manawa, Ngāti Awa, Ngāti Tūwharetoa) and local authorities (Bay of Plenty Regional Council and the Whakatāne District Council), was therefore established in 2014.

The purpose of the Forum as set out in the Ngāti Manawa Claims Settlement Act 2012 and the Ngāti Whare Claims Settlement Act 2012, is to protect, enhance and maintain the health and well-being of the Rangitāiki River. Current concerns as outlined by the Forum are that the:

- river is no longer providing a plentiful supply of food
- water quality is not always ideal for drinking and swimming
- younger generation no longer have strong links with the river
- river is not being care for and therefore losing its mauri and uniqueness.

For very early settlers with differing views however, the river had "… a tendency to flood frequently and its accompanying low-lying floodplains presented challenges to be overcome with European technology and science, not a life force to be respected and protected" (Bay of Plenty Regional Council, 2017).

1.4.2 Pacific Rim and Ring of Fire

Aotearoa, New Zealand is a small island on the Pacific Rim and Ring of Fire, where the Earth's Pacific and Australian tectonic plates meet, causing earthquake, volcanic and hydrothermal activity (Figure 10). The large coastline and the lack of other islands increases risk.

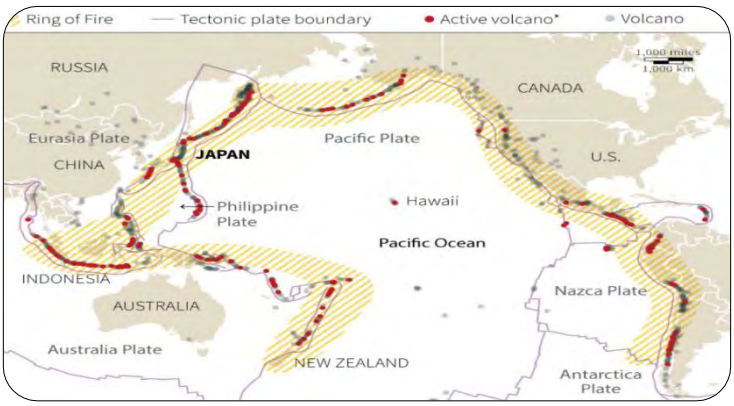


Figure 10: Pacific Rim and Ring of Fire.
Reuters, 2019.

It is not surprising then that over the past 20 years the community of Edgecumbe have borne the impact of a series of natural disasters (Bay of Plenty Regional Council, 2007). The earliest flood was recorded in 1904, followed by the flood of 1944, at which time a ban on building homes was heavily imposed, then later withdrawn. The floods of 1970, 1998 and 2004 occurred thereafter, along with an earthquake that measured 6.5 on the Richter scale in 1987. Inevitably the land has 'moulded itself' from deposits left by meandering rivers, wind-blown sand, ash deposits, peat formations and flooding.

Image 14: Flood Inundation of Edgecumbe and the Rangitaīki Plains, 2004.
Bay of Plenty Regional Council, 2017.

"Global climate change indicates too that by the year 2080 the temperature in the Bay of Plenty will increase by 2 degrees. The rainfall frequencies will double and flood frequency for the region will treble" (Kenny, 2006). Any change in weather frequency or intensity, is destined to affect tangata whenua and increase the amount of water typically held by local streams, channels and the Rangitāiki.

1.5 Whāinga me Ngā Pātai Rangahau - Aim and Research Questions

The overall aim of this study is to identify the key understandings that emerge from the practice of manaaki for displaced whānau in a disaster situation. To achieve the aim as described above, the researcher seeks to answer three subsidiary questions:

I. What are the needs that present for whānau directly affected by disaster?
II. How does a disaster impact on and reshape, the whānau unit?
III. What is the role of communication technologies and social media for displaced whānau, in a disaster situation?

1.6 Putanga - Significance

This rangahau is significant for three reasons. Firstly, with reference to Smith (1999 p.28), "It is essential that indigenous peoples (like me) learn the art of writing to research histories from their own account and perspectives, ensuring the stories are correctly recorded for future generations."

Secondly, this research will provide an overview of the concept manaaki to include the needs of displaced whānau and extend the Spee (2008) study on community recovery and sustainable development, after the 2005 Matata disaster:

> "There has been an unspoken assumption that social, psychological and community issues following a disaster will be resolved as a consequence of dealing with the immediate physical and economic problems and consequently there has been very little coordinated efforts in the area of recovery" (Paton, 1997, Angus, 2004). However, "recovery encompasses individual, social, cultural, physical, economic and environmental dimensions, and as such requires a multi-faceted approach" (Spee, 2008, p.32).

With support from the Earthquake Commission EQC (06/524), GNS Science and the Ministry of Civil Defence and Emergency Management, Spee (2008) investigated the recovery as a process required of the Matata community, identified factors promoting and hindering success and proposed several best practice guidelines, for working with whānau and community affected by disaster.

Thirdly, this research will offer contemporary perspectives about:

- risk management, in terms of collaboration and cultural responsiveness
- resilience to disaster and climate change
- sustainability, that necessitates disaster preparedness and social media education.

1.7 Rautaki Whakarārangi - Overview of Methods

The gathering of information by Māori researchers for the purpose of rangahau māori, differs in process, from that collected for western research. Thought and consideration to tikanga, Māori ethical frameworks, to include the interview protocols and practices from that of a māori lens, is duly required.

The purpose of this study is to identify the key understandings that emerge from the practice of manaaki for displaced whānau in a disaster situation. It is therefore important that the research follows Kaupapa Māori research methodologies.

As inferred by Smith (2012), "Kaupapa Māori research sets the field of study, defines what needs are to be studied and what questions should be asked." "It is a philosophy that guides the research and ensures māori protocol will be followed during the research processes" (Henry & Pene, 2001; Pihama et al., 2002; Smith, 2012). This proposes two factors in terms of the research outcome, as stated by Ruwhiu and Cathro (2014):

> "First, data collected comprises a genuine richness that includes Māori viewpoints which might have been silenced via more mainstream approaches; and second, it enables complex data collection both with regard to participation inside the research and with capacity to account for a myriad of perspectives and ways of valuing and interpreting the complexity represented."

Two interview methods were used to collect data, namely Focus Group hui and Semi-Structured interviews. The questions that centred on the key themes of this research were not isolate to one interview method and are discussed prior to each of the findings sections.

The two documents examined for this rangahau included a community focused newsletter and an online survey. Both sets of information were research driven and are deliberated on prior to the document findings section.

Tuhinga Whakarārangi - Overview of Thesis

Chapter One cast the first row of whenu on and introduced korowai manaaki, as the cloak and craft of care, for displaced whānau, in a disaster situation. Ūpoko Tuatahi also provided relevant historical content, māori traditional knowledge and contextual information regarding the whenua and the community of Patutātahi, Edgecumbe.

Chapter Two weaves in and presents the literature whenu and aho based on the key themes central to the practice of manaaki, namely Mana Whānau, Mana Whenua, Mana Tautoko and Mana Kōrero. Ūpoko Tuarua further extends on a range of kupu, that relate directly to the subsidiary questions of this study.

Chapter Three weaves in and presents the research framework whenu and aho, information about my background, why I started this journey and how the thesis purpose and intention was crafted. Ūpoko Tuatoru also confers the Kaupapa Māori research methodologies and the data collection methods that were used.

Chapter Four weaves in and presents the findings whenu and aho of the Focus Group interviews. In addition, Ūpoko Tuawha extends on a range of associated kupu, discloses the core subject areas grouped as codes and four pou concepts.

Chapter Five weaves in and presents the findings whenu and aho of the Semi-Structured Group interviews. Like the previous chapter, Ūpoko Tuarima extends on a range of associated kupu, details the core subject areas grouped as codes and four pou concepts.

Chapter Six weaves in and presents the findings whenu and aho of two document collections, relative to the key themes. Like the previous two chapters, Ūpoko Tuaono informs four pou concepts.

Chapter Seven casts off the closing whenu and aho of this research. Ūpoko Tuawhitu further provides an overview of each chapter, discusses and contrasts the findings of this study to relevant literature, then presents the conclusions and recommendations for future studies.

1.8 Ūpoko Whakarāpoto - Chapter Summary

Disaster and the chaos that follows, disrupts lives. How individuals and families manage, how relationships hold up and how the community behaves collectively, for others and the environment, all determine the extent of the deluge. Chapter One cast the first row of whenu on and introduced korowai manaaki, as the cloak and craft of care for displaced whānau, in a disaster situation. Ūpoko Tuatahi also provided relevant historical content, māori traditional knowledge and contextual information regarding the whenua and the community of Patutātahi, Edgecumbe.

ŪPOKO TUARUA - CHAPTER TWO
WHATU NGĀ TUHINGA - WEAVE IN THE LITERATURE

2.0 Ūpoko Whakatūwhera - Chapter Introduction

Ūpoko Tuatahi cast the first row of whenu on and introduced korowai manaaki, as the cloak and craft of care for displaced whānau, following the flood event of April 2017.

This chapter weaves in and presents the literature whenu and aho that were examined, based on aspects of (i) Tikanga Māori and (ii) the key themes central to the practice of manaaki, namely Mana Whānau, Mana Whenua, Mana Tautoko and Mana Kōrero. The notion of tikanga ensues integrity, whilst the themes as an analogy, collectively form the wairua, or inner circle of this korowai rangahau. Ūpoko Tuarua also extends on a range of kupu, that relate directly to the subsidiary questions of this study.

2.1 Tikanga Māori

The word tikanga is derived from the kupu 'tika' meaning right (Williams, 1975, p. 416). It is described as "a body of knowledge and customary practices" (Mead, 2003, p.13) and often referred to as, the Māori way of doing things. Te Aka, the Māori Dictionary (2011, p.208) listed the following definitions:

1. correct procedure, custom, habit, lore, method, manner, rule, way, code, meaning, plan, practice, convention
2. correct, right
3. reason, purpose, motive.

Tikanga Māori is essentially a "set of beliefs associated with the practices and procedures to be followed in conducting the affairs of a group or individual" (Mead, 2003). Tikanga based concepts that underpin that principle and interweave this korowai rangahau include:

- Whakapapa - family ancestry, genealogy
- Tika, pono, aroha - acting in a rightful manner with honesty and compassion
- Mauri - life force, essence, uniqueness

- Tapu (and noa) - sacredness, (common, just)
- Whanaungatanga - relationships, sense of belonging, kinship bonds
- Kaitiakitanga - tangata whenua connectivity with the land, reciprocity
- Kotahitanga - unity of people, collectiveness.

Tikanga practiced today originated largely from the traditional pūrākau of long ago, passed on through many, many generations and is considered a "…reliable and appropriate way of achieving and fulfilling certain objectives and goals" (Marsden, 2003).

2.2 Tuhinga Kaupapa - Key Literature Topics

Access to readily available published and archived research focused solely on the care of displaced whānau in a disaster situation within Aotearoa, New Zealand, is limited. Nonetheless there is an array of literature that relates to each of the key themes.

2.2.1 Mana

The word mana implies human control, status or the prestige of a person, place, or an object. Williams (1975, p. 172) offers the following meanings:

1. Authority, control
2. Influence, prestige, power
3. Psychic force
4. Effectual, binding, authoritative
5. Having influence or power
6. Vested with effective authority
7. Be effectual, take effect
8. Be avenged.

Mana as indicated in Te Aka, the Māori Dictionary (2011, p.5) is a supernatural, enduring force of the atua that is acquired at birth:

> "The authority of mana and tapu is inherited and delegated through the senior line from the atua as their human agent to act on revealed will. Since authority is a spiritual gift delegated by the atua, man remains the agent, never the source of mana. This divine choice is confirmed by the elders, initiated by the tohunga under traditional consecratory rites (tohi)."

According to Mead (2003, p.29) "personal and group relationships are always mediated and guided by the high value placed upon mana. Mana has to do with the place of the individual in the social group". People with mana as Mead (2003) further implies:

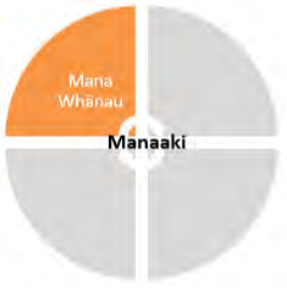
> "... tend to be persons in leadership roles in the community. They are well placed in terms of whakapapa and come from chiefly lines or from important families. People of mana draw their prestige and power from their ancestors (mana tipuna). This power is socially founded upon the kinship group, the parents, the whānau, hapū and iwi."

Mana is underpinned not only by kinship, but also by "… the giving of time and self for the good of all" (Kenny & Phibbs, 2015), the ways that the individuals choose to live their lives and the effects of the decisions they make. Mead (2003, p.52) emphasises that people "have a choice of following the path of evil or of good. Life is a challenge and will always be. Mana is a challenge too".

"There is also an element of stewardship or kaitiakitanga, associated with the term when it is used in relation to resources, including land and water" (Te Aka, the Māori Dictionary, 2011).

2.3 Mana Whānau

2.3.1 Whānau



The word whānau is often referred to mean family or a group of members who have kinship ties and closely reside together. It is defined by Williams (1975, p. 487) "as meaning 'be born', 'be in childbed', 'offspring, family group." Mead (2003, p.212) affirms that "a key characteristic of a group called whānau is that members are born into it and that members are all relatives."

The term whānau is beyond a nuclear definition. Associated words and cognates include:

- au - self
- whānau - family or, be born
- whānaunga - relative, blood relation ie: grandparents aunts, uncles, cousins
- whakawhānau - labour or birth
- whakawhānaungatanga - establishing relationships, relating to others.

"For Māori the whānau is the unit that provides care, nurture, identity, purpose and a sense of belonging" (Mckenzie, Sarah & Carter, Kristie, 2010). Traditional values underpin this notion. As asserted by Te Puni Kōkiri (2003), common definitions of whānau include:

- Whakapapa whānau - refers to individuals with a shared ancestry or common line of descent
- Kaupapa whānau - refers to individuals who may not have the same ancestor but share a common bond, such as geographical location, or shared purpose
- Statistical whānau - refers to family, whānau or household interchangeably.

Similarly, Durie (2001) identified the following whānau types:

- whānau as kin: who descend from a common ancestor
- whānau as shareholders-in-common: who are shareholders in land
- whānau as friends: who share a common purpose
- whānau as a model of interaction: for example, in a school environment
- whānau as neighbours: with shared location of residence
- whānau as households: urban dwellers
- the virtual whānau: that meets in cyberspace due to geographical separation.

Durie (2001) also refers to the term kaupapa whānau, as a means of "… describing those whānau that are not based within whakapapa relations."

Mana Whānau means supporting and empowering those who:

> "…have lost connection to their whenua and ancestral marae causing intergenerational loss of knowledge and values that strengthen cultural identity and belonging. Finding accessible pathways to restore fragmented knowledge and reconnect whānau to te ao Māori is an essential part of strengthening cultural identity in order to facilitate wellbeing" (Reweti, 2020).

Mana Whānau can be defined in this research as, the power and prestige held by tangata whenua, the local people, or residents. Mana Whānau also relates to the collective strength and social support prevailing tangata whenua. In a sudden disaster the local people include their friends, pets, neighbours and the wider ethnic community, as extended whānau.

2.3.2 Te Pā Harakeke

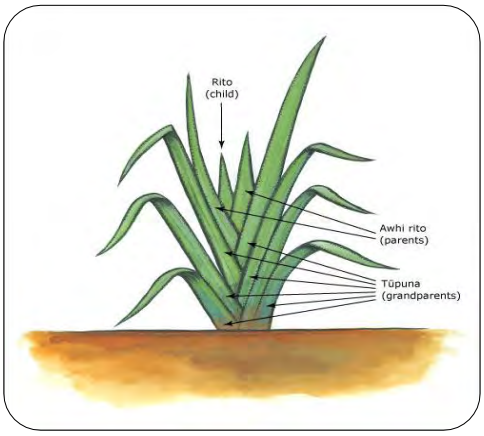


Figure 11: Harakeke Plant.
Te Ara, The Encyclopaedia of NZ, 2007 .

Harakeke is a native flax bush of Aotearoa, New Zealand and the analogy (te pā harakeke) used to illustrate the concept of whānau (Figure 11) whereby the:

- rito is the centre shoot - growing point, or child.
- two shoots immediately either side of the rito are the awhi rito or parents.
- outer mature shoots are the tūpuna or grandparents.

The importance of being linked to rito, awhi te rito and tūpuna (Te Ara Encyclopaedia of NZ, 2007) goes back many generations (whakapapa) to include a connection to the land, rivers, seas and mountains. This tie also acknowledges the roles and responsibilities of tūpuna, in helping to strengthen the whānau.

Te pā harakeke is further concerned with developing community and inter-generational support, embracing and protecting genealogical knowledge and regenerating generations. It is about valuing tamariki and supporting whānau, so they keep the rito as the prime focus.

Williams (2004) describes te pā harakeke as a Māori ethical framework, based on:

- te whakapapa
- te ira tangata
- te whanaungatanga, te matemateāone
- te manaaki, te tiaki, te atawhai
- te wairua, te mauri, te tapu
- te mana.

The flax bush as further mentioned by Mead (2003, p.44) "may be invoked to represent the ongoing passage of attributes." Mead also emphasises that te pā harakeke "… endures

after death, as a metaphor for the children who inherit parts of the gene pools of the two parents."

2.3.3 Modern Views of Whānau

In a modern context the term whānau is loosely used to also describe a group of non-relative people, who unite to fulfil a common purpose, or shared interest. Whilst a tight knit whānau might follow collective uara or values, the contemporary whānau may not. The Te Puni Kokiri Whānau Ora Commissioning Model (2020) "focuses on increasing the wellbeing of individuals in the context of their whānau. It is whānau centred (Figure 12) and differs from traditional social and health approaches that focus solely on the needs of individuals."

Figure 12: Whānau Ora Commissioning Model.
Te Puni Kōkiri, 2020.

Displaced whānau can be defined as family or impacted community members who have been forced to leave their homes, because of an event or circumstance out of their control, which may have also caused a significant amount of damage. Whānau in this context are challenged with managing the situation, caring for themselves both physically and mentally, while having to cope too with living in temporary accommodation.

2.3.4 Hapū

According to Te Ara, the Encyclopaedia of New Zealand (2005):

> "The most significant political unit in pre-European Māori society was the hapū, or subtribe. Hapū ranged in size from one hundred to several hundred people and consisted of a number of whānau (extended families). Hapū controlled a defined portion of tribal territory. Ideally, territory had access to sea fisheries, shellfish beds, cultivations, forest resources, lakes, rivers and streams."

"The hapū is a powerful symbol of identity and its call to action is difficult to ignore" Mead (2003). Membership is based first and foremost on whakapapa and the notions of hapū group size and environmental domains, continue today.

History indicates, as noted by Te Ara, the Encyclopaedia of New Zealand (2005), that:

> "Many hapū existed as independent colonies spread over a wide area and interspersed with groups from other iwi. This pattern of land use could give rise to a web of overlapping claims. Ruling families and their leaders mediated some disputes over land, and others were resolved through intermarriage. But failure to reconcile competing claims could lead to conflict. The viability of a hapū depended on its ability to defend its territory against others; in fact, the defence of land was one of its major political functions."

Hapū is also referred to as the carrying of an unborn child. Mead (2003, p.215) infers that "the metaphor used by our ancestors was that of a pregnancy, of the belly swollen by pregnancy, and of the members being born of the same womb."

2.3.4.1 Hapū Roles

There are several responsibilities that exist for hapū on a marae. The voluntary leadership roles range from Kaikaranga, the woman who calls to manuhiri or greet visitors, the Ahi Kaa, paetapu or local people who gather and assemble on behalf of the hapū, the Kaikōrero, who formally speak to the guests, to the ringawera who prepare food and attend to serving refreshments. Whilst the unwritten roles have assigned responsibilities based on context, or what is happening on the marae, they are unconsciously assumed by members of the hapū in an effort to get tasks done.

Five key values that Roche (2019) has identified underpinning hapū responsibility as Māori leadership are:

- Whakaiti - Humility, whereby great leadership is achieved 'behind the scenes'
- Ka tou rourou and manaakitanga - Altruism, in essence means giving for long term or future benefit and caring for others
- Whanaungatanga - The concept of connectivism

- Tari te wā and kaitiakitanga - Long term thinking and guardianship. The notion of a long journey ahead with a clear vision and remaining patient throughout
- Tikanga Māori - cultural authenticity. The fundamental guide for how Māori leaders behave.

2.3.5 Iwi

Iwi can be described as the larger group of a Māori hapū or subtribe. Mead (2003, p.232) mentioned that "… bones make a body strong and give form to it. Thus, bones in the sense of whakapapa and in giving strength to anything is important in understanding the concept of iwi." Ngā Tuara (1992) emphasised that "leaders were ascertained within waka, iwi, hapū and whānau." The Ranga Framework by Doherty (2012) complements the notion of leadership within groups of influence and further affirms the principles and practices used to define Māori culture (Figure 13).

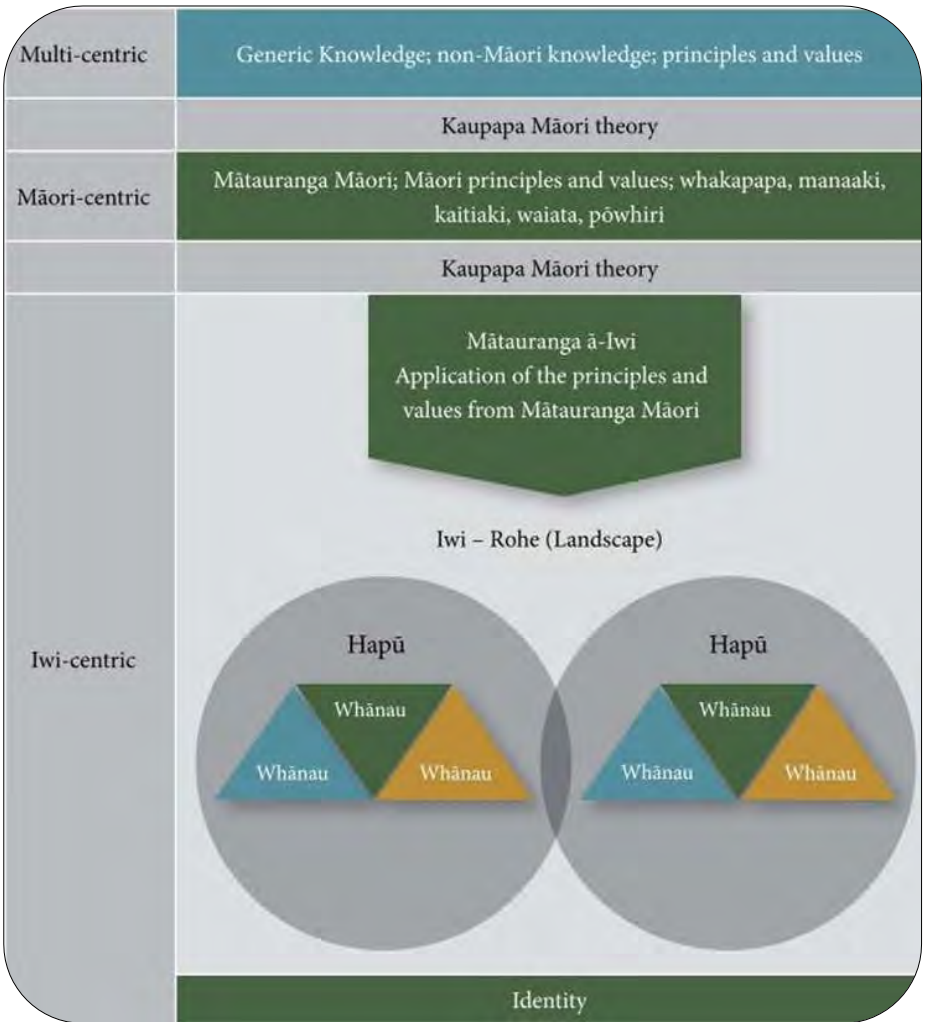


Figure 13: Ranga Framework.
Wiremu Doherty, 2012.

The Ranga model also explores the interwoven concepts of knowledge, identity and theory. It clearly illustrates the foundational relationships between Mātauranga Māori (Māori ways of knowing) and Iwi (tribes and sub-tribes) mātauranga (knowledge) described as Mātauranga-a-Iwi (tribal knowledge) and Kaupapa Māori theory (a Māori way). Generic knowledge is used in the model to describe non-māori knowledge. As Doherty (2012) explains:

> "Underpinning the Ranga Framework is identity. When the concept of whakapapa is applied to knowledge, it creates the connection to tribal lands (rohe), and to the individual. The Ranga Framework is in essence, an attempt to show that mātauranga Māori, mātauranga ā-iwi and kaupapa Māori theory are distinct but inseparable entities, each of which is required, to ensure the survival of Māori language, knowledge and culture."

2.3.6 Whakapapa

Whakapapa means genealogy, genealogical table, lineage (Te Aka Māori Dictionary, 2011), or family tree. It is derived from the principal kupu 'papa', which implies foundation, or purpose and aptly correlates with atua Papatūānuku, Earth Mother, the creator.

As a connected framework whakapapa "… maps relationships so that mythology, legend, history, knowledge, tikanga (custom), philosophies and spiritualities are organised, preserved and transmitted from one generation to the next" (Te Ara Encyclopaedia of NZ, 2015). Mead (2003, p.231) further elaborates that:

> "Whakapapa is a key attribute which validates membership into whānau, hapū and iwi. Rights to be on the hapū roll, to vote in hapū and iwi affairs, to participate in the affairs of the hapū marae - all flow from the attribute of whakapapa."

Reciting whakapapa was, and is, an important skill that has reflected the importance of genealogies in Māori society in terms of leadership, land and fishing rights, kinship and status (Te Aka Māori Dictionary, 2011).

2.4 Mana Whenua

2.4.1 Whenua

Whenua is described as the homeland or place, where people who originate from that particular area, stand (Mental Health Awareness, 2019). It is their valued connection to the locality - their source of life, nourishment and wellbeing for all. "Whenua includes soil, rocks, plants, animals and people - tangata whenua. People are linked physically and spiritually to the land - it is the earth through which that connection to tūpuna/ancestors and all the generations comes" (MAS Foundation, 2019). Whenua is also referred to as the human placenta (Te Papa, 2006):

> "After the birth of a baby it is customary Māori practice to bury the whenua (afterbirth) in the land, most often in a place with ancestral connections. This act has deep cultural significance. Underpinning it is the belief that human beings were first made from earth, from the body of Papatūānuku (the earth mother)."

2.4.2 Whakamārama of Mana Whenua

According to Te Aka Māori Dictionary (2011), mana whenua refers to:

> "The territorial rights, power from the land, authority over land or territory, jurisdiction over land or territory - power associated with possession and occupation of tribal land. The tribe's history and legends are based in the lands they have occupied over generations. The land provides sustenance for the people and hospitality for guests."

Berryman, M. & Ford, T. (2014) supposed the following definition for mana whenua:

> "From one iwi to the next, the mana whenua are recognised as guardians of the land. From a Māori perspective their worldly power and prestige as guardians and holders of the land, must continue to be acknowledged and respected. When this happens, the active participation and commitment of the mana whenua or local people, to different groups occupying these lands, can develop a reciprocal relationship of support and strength."

2.4.3 Wai

Wai is the māori definition for water and the second most common molecule in the universe that regulates the temperature of Earth. The whakapapa of Wai (nui) provides an overview of the connections to Atua Māori (Figure 14).

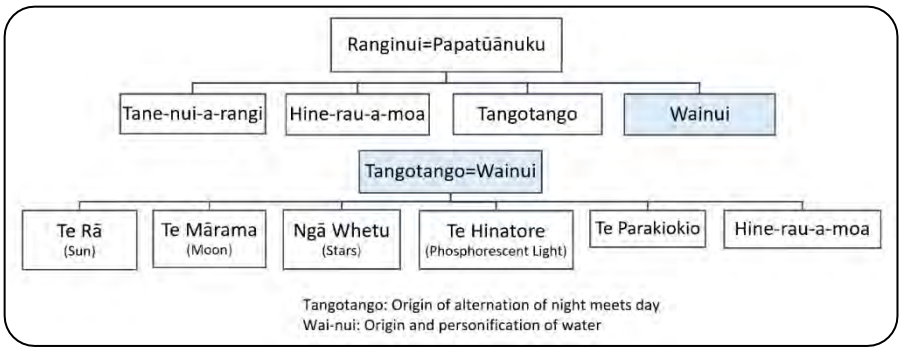


Figure 14: He Whakapapa mo Wanui
Hinerangi Eruera Murphy, 2020.

Wai also refers to the pronoun ‘who’, to tears, liquid and precipitation. Some of the ways that wai can be classified, as mentioned in Te Ara, the Encyclopaedia of New Zealand (2006) include:

- waikino - dangerous water, sometimes inclement seas or swollen rivers
- waitapu - sacred water, waters used for ceremonial purposes
- waimāori - pure water, water rich in mauri, used for cleansing and for ceremonial purposes
- waitai - sea water, saline water
- waimanawa-whenua - water from under the land
- waikarakia - water for ritual purposes
- waiwhakaika, waikotikoti - water to assist in the cutting of hair.

Further groupings include:

- waimate - unsafe, hazardous water
- waikino - polluted water
- waiurutapu - water no longer able to sustain life (ie: addition of sugar, preservatives, colour or chemicals).

The body of wai referred to in this research is the Rangitāiki, that originates from Te Wai Koropūpū o Kaimanawa and veers out Moananui-ā-Toitehuatahi at ŌKōrero, Thornton.

2.4.4 Maramataka: The Passage of Time

Ancient civilisations used the galaxy, stars and changes in the whenua and environment to track the passage of time. The actions of the sun and of the moon were used for ceremonial rituals and cleansing activities. Māori use similar methods for their fishing, hunting and planting calendar systems, specific to the rohe or area they reside in (Smith, 2011). Kāpehu whetu, the star compass (Figure 15), clarifies where the stars will rise and set on the celestial equator – slightly different for our horizon (Science Learning Hub, 2014).

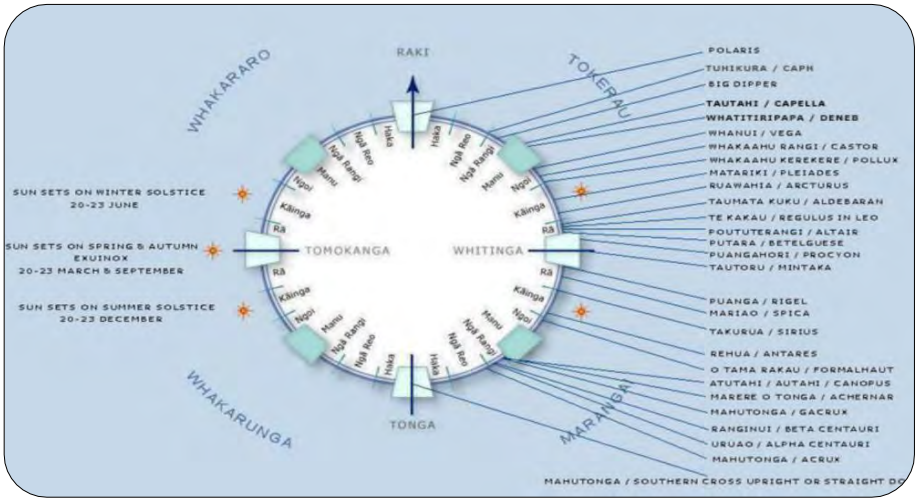


Figure 15: Kāpehu Whetu – The Star Compass.
Science Learning Hub, 2014.

The term maramataka means rotating moon. Whilst the maramataka divides the traditional Māori year into 12 lunar months (Figure 16), some iwi list 13 in their lunar calendar.

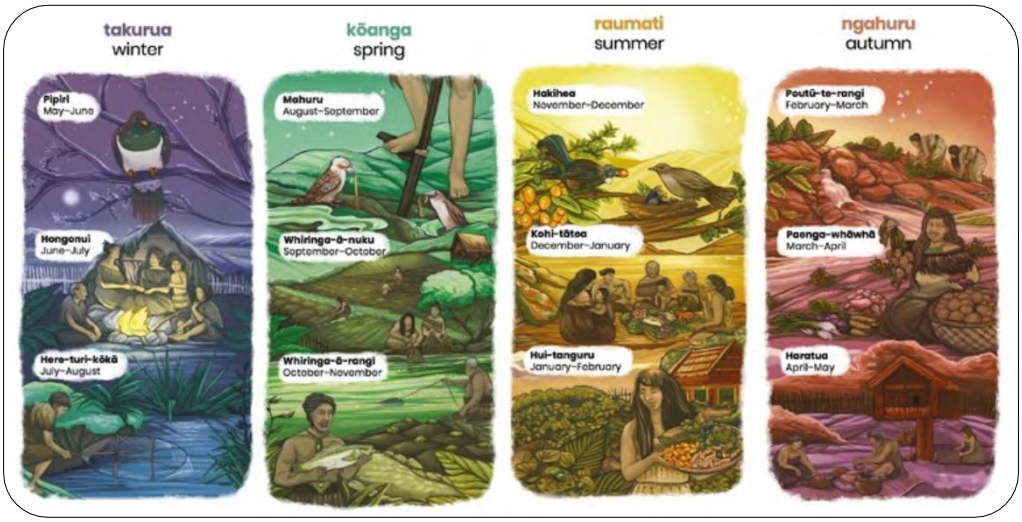


Figure 16: Maramataka – The Māori Calendar.
Science Learning Hub, 2020.

Te Whānau-ā-Apanui ancestors were dependent on the environment, and this led them to closely study the changes and cycles in nature so they could ensure their survival in their tribal area (Huia Publishers, 2013). The late Wiremu Tawhai from Whakatōhea, shared his mātauranga, as an important maramataka followed in the Mataatua region (Figure 17).

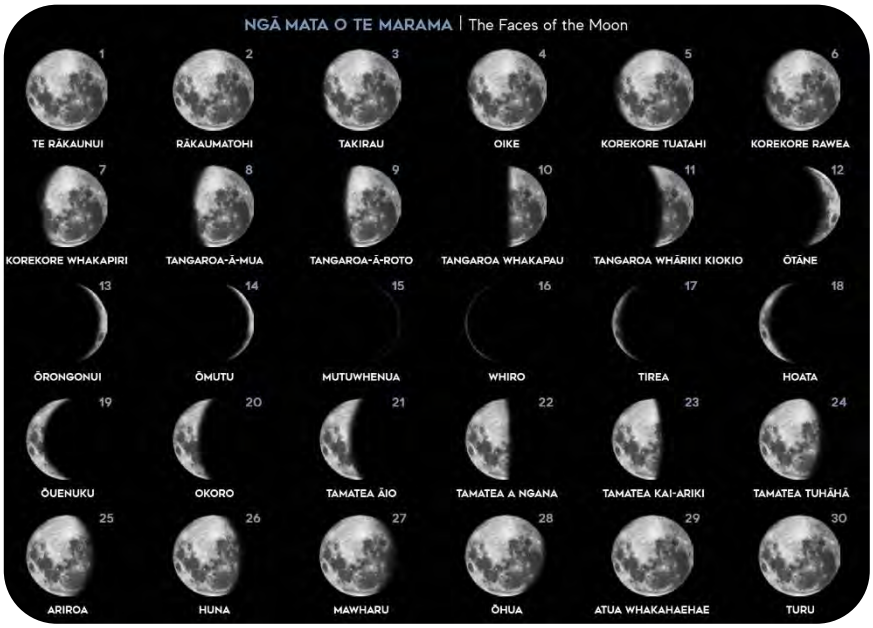
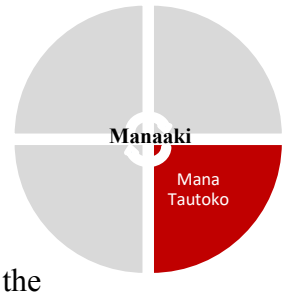


Figure 17: Ngā Mata o Te Mārama – The Faces of the Moon.
Tuhi Stationery, 2020.

2.5 Mana Tautoko

2.5.1 Tautoko



"Tautoko means to support, prop up, verify, advocate, accept (an invitation), agree" (Te Aka Dictionary, 2003, p.202). It is also defined as separate, keep at a distance or incite (Williams, 1975, p. 404). Mana Tautoko can be described in this research as, the support systems that people need to assist with their wellbeing.

2.5.2 Mātauranga Māori

Mātauranga Māori is māori knowledge and as Mead (2003) points out:

> "It is a part of Māori culture and, over time, much of the knowledge was lost. The reasons for the loss are well known. Several minds have worked to recover much of what was lost, to reconstruct it, to unravel it from other knowledge systems, to

revive parts of the general kete or basket of knowledge, and to make use of it in the education of students of the land, especially Māori students for whom this is a precious taonga, a treasure, a part of the legacy that is theirs to enjoy."

Shane Edwards (2011) states that:

"... there are several words in the Māori language that relate in various ways to knowledge - kōrero, mōhiotanga, mātauranga, māramatanga, and wānanga - as it exists in some contexts, and which are often used interchangeably" (Royal, 2008).

2.5.3 Resilience

Resilience is "the ability of a system to absorb shocks before altering its structure in some way, or the speed of recovery of a system during turbulence" (Adger, 2000*)* and as Lambert (2014) ensues it is "one that accommodates change." The kupu māori for resilient is aumangea, that more so refers to being strong, brave, persistent, determined, forceful, plucky, resilient, resolute, steadfast and tenacious (Te Aka Dictionary, 2011, p.396).

For many people, dealing with disaster is about adapting to any challenges or stressors and as Lambert (2014) further eludes, "Knowing what has contributed to Māori resilience is fundamental to the strategic enhancement of future urban communities - Māori and non-Māori." Resilience empowers people to accept and adapt to situations, then move forward. The Disaster Resilience Model (Figure 18) as affirmed by The Ministry of Civil Defence and Emergency Management (2008), illustrates that, "The response phase includes all actions taken immediately before, during or directly after an emergency event, essentially seeking to save lives and protect property. The recovery period consists of the regeneration of communities" (Lambert, 2014).

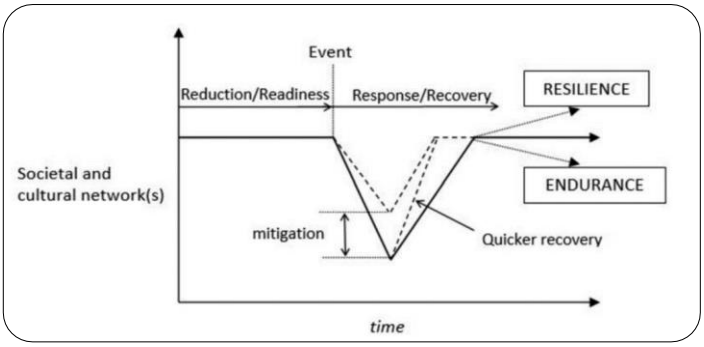


Figure 18: Disaster Resilience Model.
Lambert, 2014.

2.5.4 Emergency Management

One of the main objectives of an emergency is to reduce injury. Emergency Management is defined as:

> "The application of knowledge, measures, and practices that are necessary or desirable for the safety of the public or property, and are designed to guard against, prevent, reduce, recover from, or overcome any hazard or harm or loss that may be associated with any emergency, including the planning, organisation, co-ordination, and implementation of those measures, knowledge, and practices" (Ministry of Civil Defence & Emergency Management, 2019).

This notion is similar for Māori within the disaster management context (Figure 19), where Mātauranga Māori, Kaupapa and Tikanga as "cultural technologies are adapted and applied to mitigate disaster-related risks, address the social and environmental impacts of disasters as well as facilitate community recovery and resilience" (Kenny & Phibbs, 2015).

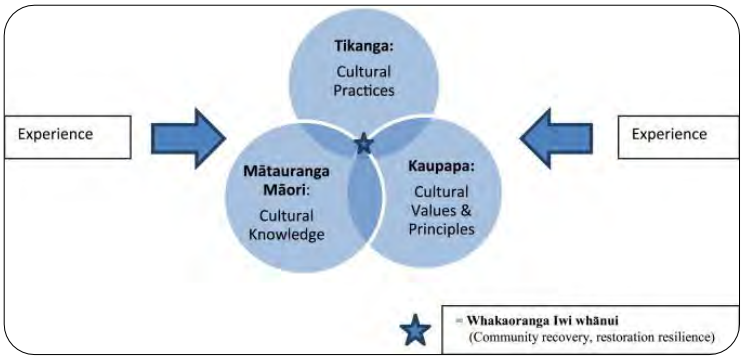
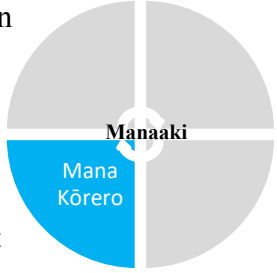


Figure 19: Conceptualisation of a Māori Cultural Technologies Approach. Kenny & Phibbs, 2015.

2.6 Mana Kōrero

2.6.1 Kōrero

Kōrero means to tell, say, address, speak, talk or conversation Cognate words include whaikōrero; speech, whakakōrero; make to speak and kōrerorero, talk much or frequently (Williams, 1975, p. 141). As a noun the term kōrero is a narrative, story, news, account, discussion, discourse, statement and information (Te Aka Dictionary, 2011, p.80).



Mana Kōrero can be defined in this research as, the digital information infrastructure that aids and supports both synchronous, real time and asynchronous, any time, communication.

2.6.2 The Internet

The term internet is derived from a binary of two words, interconnected and network. It is an enormous online communications infrastructure that uses power, telephone cables, satellites, and wireless connections, to link computers and devices across a collective information hub, known as the World Wide Web.

Whilst "people are natural information seekers, relying primarily on their own social networks" (Palen & Liu, 2007), the internet as a repository for gaining access to local government sites, had proved popular by interviewees. The internet as Jefferson (2006) stated, is "a reliable, flexible, network of networks that survives through redundant design. The internet is not dependent on a single enterprise, single service carrier, or geographic location."

New Zealand has one of the highest rates of internet access in the world, Statistics NZ, (2013). The graph below indicates internet usage, relative to specific age groups.

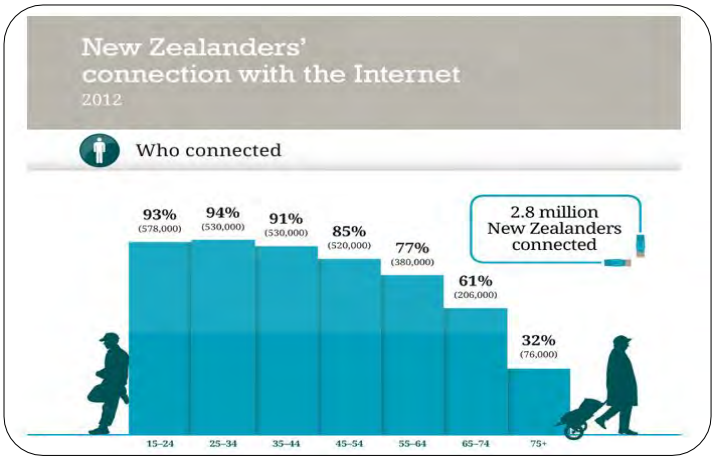


Figure 20: New Zealanders' Connection to the Internet, 2013. Statistics NZ, 2013.

The internet is a conducive platform for technology-based engagement and contributes to the success of many online communities. As society moves within this fast-paced high-tech world, contemporary jargon emerges and terms that include social media sites, social networking sites and social media are often misinterpreted.

2.6.3 Social Media

Social media has the potential to necessitate online communication and transform the face of human interaction. The internet and the use of social media in emergency situations, also offers the respondents with varying degrees of flexibility, agency, ubiquity, and connectedness. In terms of a disaster situation, "social media provides opportunities for engaging citizens in the emergency management by both disseminating information to the public and accessing information from them" (Simon, et al, 2015).

2.6.4 Social Networking Sites

At the heart of technologies and social media is social networking and that involves collaborative engagement with like-minded others. How rangatahi are using social networking sites to keep in contact with whānau and access information varies and as O'Carroll (2013) stated, "With one in five Māori living abroad, the ways of staying connected to whānau are becoming increasingly pertinent as rangatahi and pakeke (adults) continue to move overseas seeking job and study opportunities and working holidays."

Social networking sites provide online spaces where participants seemingly have a certain level of control over how they choose to represent themselves. Social networking sites are "another means of communication, another platform, another forum in which Māori identity is being expressed, articulated and formed" (O'Carroll, 2013). In terms of the quality of information being dispersed, educating not only rangatahi, but also society, to become better equipped for appropriate and safer behaviour in what they think, say and do online, is timely.

With a focus on identifying the criteria for information quality in the use of social media, Jensen (2012) infers that "Fostering information quality is important in order to validate the information collected for decision making during emergency management. Obtaining and disseminating accurate information is crucial and also result-oriented."

Three key criteria for information quality as Jensen (2012) further implies are:

1. Using verified and validated information
2. Using timely information
3. Building and using networks.

The information being dispersed within those spaces, not only by the public as crowd sourcing, but also by government organisations, must be timely, of sound quality and relevant. Individuals are often exposed to large quantities of information without being aware of the validity or risk. It is the informed users however, who are usually fast at band aiding the situation, thus making social media more controlled and self-regulating.

2.7 Ūpoko Whakarāpoto - Chapter Summary

Access to readily available published and archived research focused solely on the care of displaced whānau in a disaster situation within Aotearoa, New Zealand, is limited. Nonetheless there is an array of literature that relates to each of the key themes of Mana Whānau, Mana Whenua, Mana Tautoko and Mana Kōrero.

The themes and research topics collectively form the wairua, or inner circle of this research, as do many of the authors' writings. The following diagram illustrates the sum of many thematic parts.

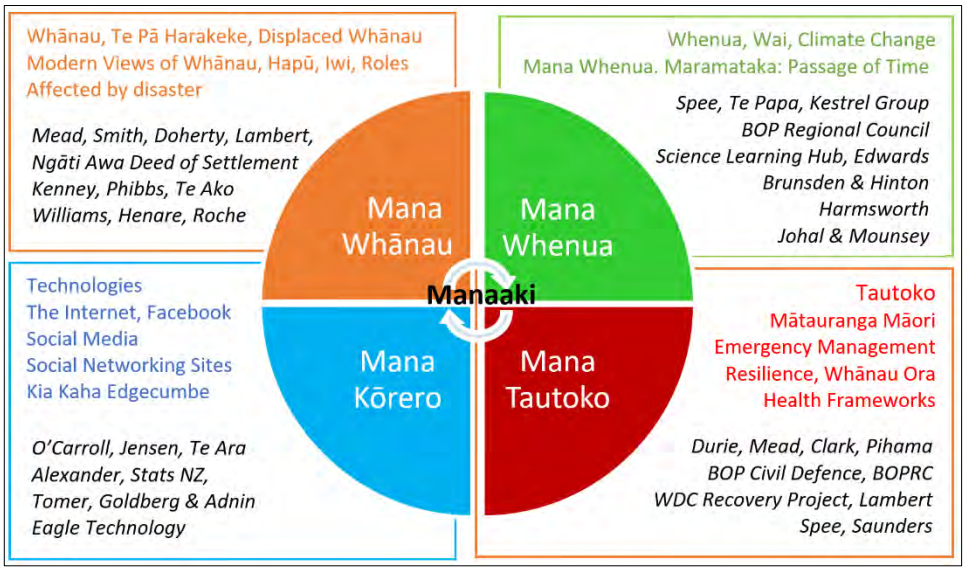


Figure 21: Visual representation of Literature - The practice of Manaaki.
Hinerangi Eruera Murphy, 2017.

This chapter interwove and presented the literature whenu and aho based on the key themes central to the practice of manaaki. Ūpoko Tuarua also extended on a range of kupu, that related directly to the subsidiary questions of this study.

ŪPOKO TUATORU - CHAPTER THREE
WHATU NGĀ TIKANGA - WEAVE IN THE METHODOLOGY

3.0 Ūpoko Whakatūwhera - Chapter Introduction

Ūpoko Tuarua presented the literature whenu and aho based on the key themes central to the practice of manaaki.

This chapter weaves in and presents the research framework whenu and aho, information about my background, why I started this journey and how the thesis purpose and intention was crafted. Ūpoko Tuatoru also confers the Kaupapa Māori research methodologies and the data collection methods that were used.

3.1 He Aha Ai? Why Research?

Mead (1996) posed several questions that underline the basis of Kaupapa Māori Research and may well encourage critical thinking, especially of new scholars:

- What research do we want to carry out?
- Who is that research for?
- What difference will it make?
- Who will carry out this research?
- How do we want the research to be done?
- How will we know it is a worthwhile piece of research?
- Who will own the research?
- Who will benefit?

Three years later as Smith (1999), she outlined the 'working' principles that have emerged from Kaupapa Māori contexts, namely whakapapa, te reo, tikanga Māori, rangatiratanga and whānau. Research with a Kaupapa Māori focus clearly lends itself and "… responds to the quest for tino rangatiratanga (self-determination and empowerment) for Māori people" (Smith, 2012).

3.2 Ko Wai Ahau? My Research Background and Reflective Thinking

Tauki ki te tū. Tāiki te rere. ŌKōrero ki a mau!

I am a descendant of Ngāti Awa, Te Pahīpoto, and I have lived in Edgecumbe for 30 years. I grew up in Te Teko on our ancestral whenua and hold very fond memories of the land and natural environment that surrounded me then.

> *"Nanny Pareake and Koro Eruera had planted maara kai and what seemed like an enormous orchard along the Rangitāiki River, immediately behind their home at Otamaoa. Willow trees hung low over the waterway and served as excellent platforms for jumping off and floating from. Summertime was spent with my siblings and cousins eating seasonal fruit and swimming. I was a water rat. At that time, many of us were. I loved the river then and I still do."*

Forty or so years later, in 2017 and at a time leading into Master's thesis writing, my husband, his business, our tamariki, their partners, our mokopuna and many of our close friends and their families, were directly affected by the Rangitāiki River deluge. Two of our three whānau homes have required rebuilding. Disaster and chaos disrupts lives. That traumatic event prompted me to think, like an emic - the researcher in the research.

I pondered for some time over the questions that Mead (1996) had supposed and of our own and community circumstances. Then I listed five reasons for commencing an investigative study. I was genuinely interested to find out more about whānau care, how individuals and families manage, how relationships hold up, where social media fits in and how the community behaves for others and the environment, following a flood event.

After speaking with my academic whānau and soon to be Supervisor, undertaking a series of personal brainstorming sessions and more thinking time, I crafted what has since become, the foundational aim and three subsidiary questions of this research. A series of tables and images that suitably extend on the interview content, evoke emotion and affirm events, were to be included.

3.2.1 Overcoming the Challenges of an Inside-Researcher

Smith (1999) emphasised that "… ethical, cultural, political and personal issues can present special difficulties for indigenous researchers who, in their own communities, work partially as insiders." Employed at the tertiary where I also studied, I was of no exception. To overcome those emotional times and maintain work balance as the inside-researcher, especially during the recovery phase spent at ŌKōrero, whilst temporarily removed too from my immediate whānau, I upheld two practices:

1. I would focus on the energy of my mokopuna and purposely take hīkoi breaks. That solitary ritual, regardless of the weather required I, (i) walk bare foot along the shoreline of Moananui-ā-Toitehuatahi, (ii) karakia and, (iii) recite my whakapapa continuously. Mana atua, as time well spent reconnecting with Ranginui and Papatūānuku, ensured that I reclaim myself and the inner strength, to continue.

2. I followed our local maramataka. To this day I track the moon phases, observe tohu from Te Taiao and keep a reflective diary. I annotate daily musings, record my ihi, doodle and post meditative mātauranga on occasion, to social media.

3.3 Whakarārangi Tikanga - Methodology Overview

Critical theory focuses on emancipation; pedagogy of the oppressed and conscientisation, or the purposeful mind shift of 'freeing ourselves from the conditions that colonise us'. Kaupapa Māori is about viewing the world of critical theory that implicates the cultural, economic and social relationships between groups of society who have power and those who do not, through kanohi māori. It also involves a reform in thinking.

Smith (1997) identified eight key principles within the Kaupapa Māori framework. Four of the principles recognised succeeding the Edgecumbe flood event are:

- Te Tiriti o Waitangi, the Treaty of Waitangi
- Tino rangatiratanga, self-determination
- Whānau, family
- Kaupapa, collective philosophy.

3.3.1 Whare Kōrero Rangahau - Research Frameworks

Kaupapa Māori research is descriptive and as "… a social project; it weaves in and out of Māori cultural beliefs and values, Western ways of knowing, Māori histories and experiences under colonialism, Western forms of education, Māori aspirations and socio-economic needs, Western economics and global politics", Smith (2012: p.193).

3.3.1.1 Koru of Māori Ethics

The Koru of Māori ethics was developed by Manuka Henare in 1998 (Figure 22). At the pito or centre are Mana, Mauri, Tapu, Io and Hau, then follow Wairuatanga, Whanaungatanga, Kaitiakitanga and Kotahitanga.

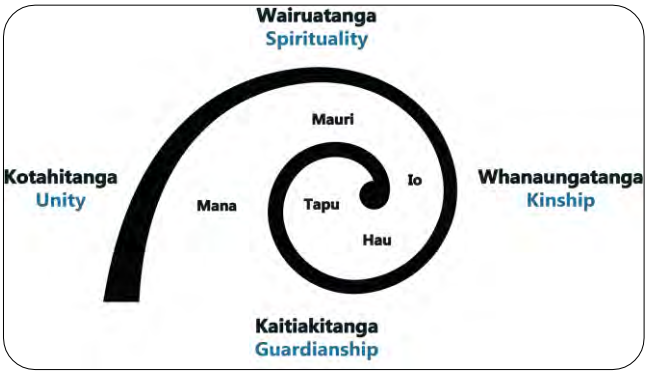


Figure 22: The Koru of Māori Ethics.
Manuka Henare, 1998.

The koru analogy is likened to that of the harakeke rito and growth, whereby the internal foundational principles are nurtured and maintained by the external, ethical practices.

3.3.1.2 The Five Tests of Tikanga Māori

Mead (2003) developed the following tikanga tests to assess contentious issues. This model helps to identify the practice of manaaki, ascertain the environmental impact of the flood and reflect on Māori positioning:

- Test 1: Tapu Aspect - The sacredness of a person. Will there be a breach of tapu? If so, how might the breach outcome be beneficial?
- Test 2: Mauri Aspect - The life essence of a person or object. How might the mauri of an object or a thing be compromised and to what extent?

- Test 3: Take-utu-ea aspect - An issue, cost or resolution. How might an issue, cost or action, be inverted to help restore and/or resolve?
- Test 4: Precedent aspect - Looking back at examples of similar issues. How might past examples be used to determine appropriate action for now?
- Test 5: Principles aspect - A collection of māori uara or values. How might the principles of manaakitanga, mana, whanaungatanga, tika (right) and noa (neutrality) enhance and/or inform an ethical debate?

3.4 Kaupapa Rangahau - Qualitative Research Methods

The purpose of this study is to identify the key understandings that emerge from the practice of manaaki for displaced whānau in a disaster situation. To achieve this aim, qualitative research methods were used to collate data and answer the following subsidiary questions.

Research Subsidiary Questions:

I. What are the needs that present for whānau directly affected by disaster?
II. How does a disaster impact on and reshape, the whānau unit?
III. What is the role of communication technologies and social media for displaced whānau, in a disaster situation?

"Qualitative research helps us understand and explain, the meaning of social phenomena with as little disruption of the natural setting as possible" (Merriam, 1998). "It is concerned with understanding individuals' perceptions of the environment, and ultizes methods such as interviewing observing and analyzing" (Strauss & Corbin, 1998).

3.4.1 Data Gathering Methods

Two distinct methods were chosen to gather information, namely interviews and document collection. "Interviews are believed to provide a deeper understanding of social phenomena than would be obtained from purely quantitative methods, such as questionnaires" (Gill, et at., 2008). Interviews are also an effective approach towards "understanding the experience of the participants" (Patton, 2002).

3.4.2 Interview Ethics

Informed consent is an ethical process whereby participants are advised about the study and they willingly decide to take part. Research participants were provided with concise information that clearly outlined the purpose of this rangahau, the methods being used and the intended outcomes. Tika, pono, aroha as principles of action, have required being sensitive, respectful, and proficient about the data collected. Confidentiality and autonomy protection have also necessitated that name identifiers be removed (unless authorised), from the findings of this research.

Interviewees were also afforded the right to withdraw from the research and could at any time:

- Decline to participate
- Decline to answer any particular question
- Withdraw from the study (timeframe specified)
- Ask questions about the study at any time during participation
- Provide information, understanding that their personal names will not be used
- Be given a summary of the project findings, once concluded.

3.4.3 Focus Group Interviews

Focus Groups can be classified as sets of demographically similar people who share common interests or views. The dynamics of the members initiate and generate reliable qualitative data. The Focus Group interviewees for this research comprised of seven residents who were issued yellow or red zone placards and directly affected by the Edgecumbe flood event.

Five consecutive hui of up to 30 minutes were scheduled and twenty-one questions asked. The interview recordings were transcribed and a thesis summary presented to the participants. Subject areas transpired and are represented as codes under each of the key themes. Of the 21 questions asked, 13 responses specific to the themes and research questions are presented in the findings section of this study. The remaining responses can be found as appendices.

3.4.4 Semi-Structured Interviews

The second data collection method was Semi-Structured interviews, of up to 30 minutes per session. The five interview participants were those who had whānau affected, or who supported community members affected by the flood event. Britten (1999) explicates that "Semi-Structured interviews consist of several key questions that help to define the areas to be explored, but also allows the interviewer or interviewee to diverge in order to pursue an idea or response in more detail."

Thirteen questions were asked of the Semi-Structured Group participants. Subject areas transpired and are represented as codes under each of the key themes. Like the Focus Group interviews, the transcripts were presented as a thesis summary to the participants. Eight responses specific to the themes and research questions are presented in the findings section. The remaining responses can be found as appendices.

The following Kaupapa Māori themes were used during both interview methods to "guide respectful, reciprocal and genuine relationships" (Smith, 2012):

1. Aroha ki te tangata. Enabling respect and empowerment for people
2. He kanohi kitea. Illustrating commitment by being a face that is seen and known to those who are participating in the research
3. Titiro, whakarongo, kōrero. Taking the necessary time to look, listen then speak. This also means developing an awareness of the participants day-to-day realties, priorities and aspirations
4. Manaaki ki te tangata. Being open to sharing and generous with the time required to develop sound relationships
5. Kia tupato. Acting with caution through culturally safe practices
6. Kia māhaki. Finding ways of sharing knowledge while remaining humble.

3.4.5 Document Collection

Documents that included a recovery public newsletter and an online survey were examined for this research. Bell (2010, p.5) advises that "the methods of research approached can vary according to different styles and traditions of gathering data. Proper selection of

documents is particularly important in content analysis, examination and interpretation of data."

The newsletters were published twice a week in May 2017 and from February 2018 on, distribution continued fortnightly until May 2018. The online survey focused primarily on communication technologies and social media. It comprised of 7 multi-choice with 2 optional responses, ie: one at the beginning of the survey for name and contact phone details and one at the end for any comments participants wanted to add.

3.5 Ūpoko Whakarāpoto - Chapter Summary

This chapter interwove and presented the research framework whenu and aho, information about my background, why I started this journey and how the thesis purpose and intention was crafted. Ūpoko Tuatoru also conferred the Kaupapa Māori research methodologies and the data collection methods that were used.

ŪPOKO TUAWHA - CHAPTER FOUR
WHATU NGĀ RŌPU-Ā-KŌRERO - WEAVE IN THE FOCUS GROUP FINDINGS

4.0 Ūpoko Whakatūwhera - Chapter Introduction

Chapter Three presented the research framework whenu and aho, information about my background, why I started this journey and how the thesis purpose and intention was crafted.

This chapter weaves in and presents the findings whenu and aho of the Focus Group interviews. In addition, Ūpoko Tuawha extends on a range of associated kupu, discloses the core subject areas grouped as codes and four significant concepts that have emerged.

4.1 Ngā Kitenga - Findings

The purpose of this study is to identify the key understandings that emerge from the practice of manaaki for displaced whānau in a disaster situation. Statistical information about the Focus Group interviewees has been collected (Figure 23).

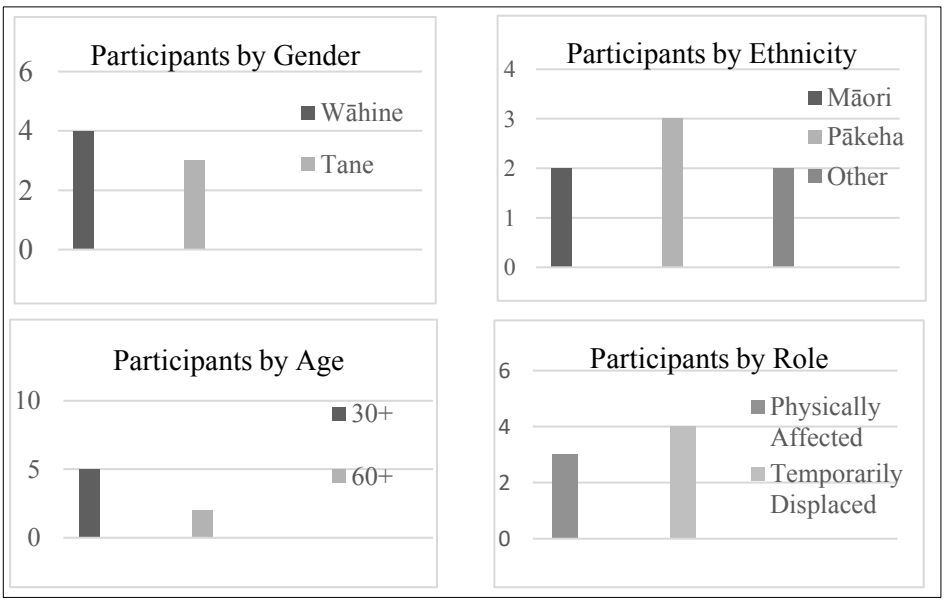


Figure 23: Demographic Information about the Focus Group Interviewees.
Hinerangi Eruera Murphy, 2020.

The participants comprised of seven homeowners, who had lived within a two-kilometre radius of the College Road breach for more than 10 years. There were three sets of

couples. All members had raised two or more children and owned pets. Of the group three participants had their homes demolished and four were temporarily displaced.

Five focus group interviews were conducted. Kenney et al (2015, p.47) stated that the dialogical interview is a useful research method because it ensures "… that power differentials between researchers and research participants are disrupted." In a disaster situation where interviewees have been traumatised by their experiences Kenney et al (2015) also mentioned that "… this method of data collection would be considered a psychosocially appropriate approach for ascertaining information."

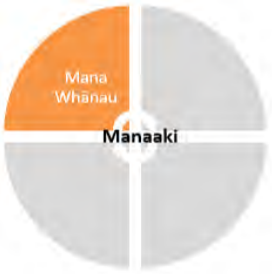
Twenty-one questions were derived in sets, based on the key themes of Mana Whānau, Mana Whenua, Mana Tautoko and Mana Kōrero (Figure 24). Each theme varied, as did the events and the time phases of response and recovery during and after the flood.

All the questions and participants sentiments have been collated and colour coded, based on corresponding themes and codes. Thirteen questions and comments are presented as tables in the findings. To show the commonalities and relationships at a glance, graphs are also included. The remaining responses can be found in the appendices section.

Focus Group Interviews - Themes and Questions		
Theme	Questions Asked of Participants	Questions Presented in Findings
Mana Whānau	5	5
Mana Whenua	5	3
Mana Tautoko	5	3
Mana Kōrero	5	2
Further Comments	1	0
Total	**21**	**13**

Figure 24: Focus Group Interviews - Themes and Questions.
Hinerangi Eruera Murphy, 2020.

4.2 Mana Whānau



He aha te mea nui o te ao? He tangata. He tangata. He tangata.
What is the most important thing in the world? It is the people.

QI. What are the needs that present for whānau directly affected by disaster?

Mana Whānau is a key theme central to the practice of manaaki. It can be defined in this research as, the power and prestige held by tangata whenua, the local people or residents. Mana Whānau also relates to the collective strength and social support prevailing tangata whenua. In a sudden disaster the local people include their friends, pets, neighbours and the wider ethnic community, as extended whānau.

Image 15: Edgecumbe Residents at Rautahi Marae, Kawerau.
Bay of Plenty Regional Council, 2017.

The sub themes that correspond with subsidiary Question I, positioned within the sphere of Mana Whānau are:

- *4.2.1 Response: Survival and Safety*
- *4.2.2 Tūrangawaewae: Connections to Land and the People*
- *4.2.3 Emotional Impact*
- *4.2.4 Post Flood Needs*
- *4.2.5 Iwi Support.*

4.2.1 Response: Survival and Safety

On the morning of 06 April 2017, residents of Edgecumbe were worried about the river level being high as remnants of Cyclone Debbie had previously bought two days of heavy rain to the area. This was further emphasised when the stop bank unexpectedly breached, triggering concerns for the survival and safety of local whānau. The seriousness of the situation was echoed by Fire Fighter IAP6 (2018) when he responded, "I was at the stop bank when it broke. I said to the Chief, I'm getting the fire truck and I'm going to tell my wife to get out now."

Image 16: Watching the College Road Stop Bank Breach.
New Zealand Herald, Andrew Warner, 2017.

Image 17: Truck to Transport Evacuees.
Tautini Hahipene, 2017.

The response phase in a disaster situation refers to the first 48 hours and the actions taken during that time to save lives, protect property and the care for the environment. All interviewees as long-time residents of Edgecumbe, were in some way physically or mentally affected by the flood and openly shared their sentiments (Figure 25).

Phase 1: Response — Focus Group Interviews

Mana Whānau

Q1(a). How did the Edgecumbe flood affect you?

ID	Sentiment ☺	Sentiment ☹	Comments
VIR1		●	*We were affected because our whare is in what they call the red zone, so directly opposite the breach of the wall.*
DEM2		●	*Displacement and an ongoing feeling of being unsettled... It destroyed our family home of 30 years.*
REC3		●	*There's a lot of memories at that place; rich-centered around the kids growing up and all that has disappeared. We don't have that anymore.*
KAD4		●	*Completely shocked that it happened... Concerned about my son because he was at home. We'd managed to talk to him briefly by phone before it got disconnected and text messages were out of sync... Possessions didn't matter initially, just family.*
DAD5		●	*I was trying to get home... I had my Uncle at my Dad's place. He didn't know what was going... Making sure that the whānau are alright.*
IAP6		●	*Being in the Fire Brigade, it's seeing what's on the other side. How I'm there to help other people, now I want other people to help me... Trying as well to get people out of the flood affected areas.*
JOP7		●	*That was definitely hard with the kids.*

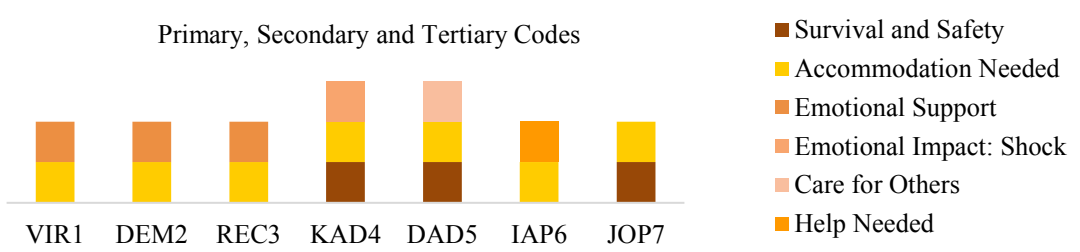


Figure 25: Focus Group Interviewees Responses to Question 1(a) Phase 1.
Hinerangi Eruera Murphy, 2020.

Serving as a voluntary Fire Fighter necessitates responsibility for others. It was assumed that IAP6 (2018) received more support and retracted from his line of duty, as and when time permitted.

Image 18: Truck of Evacuees on its Way Out of Edgecumbe.
Dominco Zapata, Fairfax NZ, 2017.

After 48 hours the community of Edgecumbe moved from response into the recovery phase. It is a challenging time as REC3 (2018) mentioned, "When survivors may experience many psychosocial symptoms such as stress, grief, depression and anxiety." Feelings of displacement were certainly being experienced and children were most concerned for the welfare of their family pets. The enormity of the flood and the clean up yet to come, was gradually being realised.

Image 19: Community Meeting at Rautahi Marae, Kawerau, 08 April 2017.
BOP Civil Defence, 2017.

4.2.2 Tūrangawaewae: Connections to Land and the People

Of the participants, one couple aged between 60-70 years, were first generation immigrants from the United Kingdom. Edgecumbe had become home for them and their parents too in those early years. Over time they had raised two boys, developed sound relationships with many people of the community and forged a new extended whānau. From a māori perspective the couple had recreated their whakapapa identity and established their tūrangawaewae, sense of belonging to the community. According to Mead (2003, p.288):

> "The concept of tūrangawaewae will always be important one not only for Māori, but most modern citizens… Land will always be an important part of how we define ourselves as people. We all need a place for our feet to stand, a place to call our own."

Environmental connections to the whenua were also acknowledged by REC3 (2018), given the couple's residence of 30 years and established gardens:

> "The trees were like family to us... We composted and mulched the leaves. We could look up at those trees and say that's next year's tomatoes, that's next year's potatoes. We did that every year, to feed ourselves from that little section."

As a result of the flood, the property and surrounding trees were demolished.

Image 20: 64-68 College Road, Edgecumbe, Feb 2010.
Google Maps, 2010.

Adversity was also expressed by five of the other interview participants (Figure 26).

Phase 2: Recovery — Focus Group Interviews

Mana Whānau

Q1(a). How did the Edgecumbe flood affect you?

ID	Sentiment ☺	Sentiment ☹	Comments
VIR1		●	*We no longer have a home on that side.*
DEM2		●	*It's been a long process of getting passed the numbness and the panic of the event… Then trying to struggle back to gain a sense of some form of wholeness, especially at our age… In our 60's and 70's it is trickier than it was, because we don't bounce back as easily.*
REC3		●	*I do wake up some mornings and think, what am I doing here? Why am I here?... An important thing really is to have that connection, that feeling of belonging to the people around us. You don't realise that, or just how important they were, until you're removed from them.*
KAD4		●	*It wasn't just a street flooding. It was our town and that was pretty overwhelming… We couldn't live in our home until it was repaired.*
DAD5		●	*Initially just making sure everyone was together again and then going from there …What do we do next?*
IAP6		●	*In the back of my mind, I'm wondering, How are my pets? How bad is my home?... It was about 9 days before we got back... You just don't believe it until you see the damage and the smell.*
JOP7		●	*The anxious thing of not knowing about our animals... Probably not knowing too what's happening to our house.*

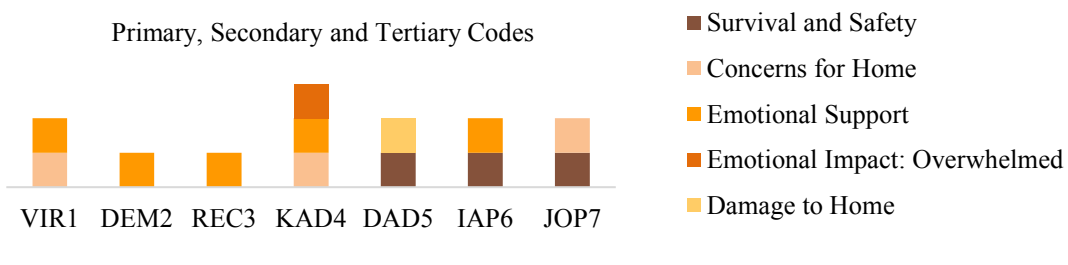


Figure 26: Focus Group Interviewees Responses to Question 1(a) Phase 2.
Hinerangi Eruera Murphy, 2020.

Efforts during the recovery phase as conducted by IAP6 (2018) involved relocating people, whilst searching simultaneously for an elderly neighbour, “Tractors, trailers, jet boats. They came from nowhere. It was awesome to see …Then I found Dave, the old Scottish guy. I said Dave, you stay with me.”

Image 21: Jet Boat and Some of the Rescue Crew at Edgecumbe.
Dominco Zapata, Fairfax NZ, 2017.

Fortunately, neighbour Dave was escorted to safety by another Fire Fighter and cardiac medication obtained for him that afternoon. As IAP6 (2018), further remarked, “That’s probably the last time I’ve seen him home.”

It is understood that Dave, who had lived in Edgecumbe for many years, never returned. He went to stay with family elsewhere and his property was put on the market.

Image 22: Evacuees being Transported Out of Edgecumbe.
Tautini Hahipene, 2017.

4.2.3 Emotional Impact

The aftereffects of a sudden disaster are clinical and often measured by Government leaders in numbers, ie: the amount of homes affected, the number of people displaced and the cost of the clean-up thereafter. That measure does not address or highlight the trauma experienced. Likewise, Johal and Mounsey (2016) stated that "the extended timeframe and disruptive nature of the impacts of flooding are such that the effects of secondary stresses are highly significant as they prolong the welfare, physical and psychosocial needs of those affected."

Participants spoke frankly about how the flood had affected their loved ones (Figure 27).

Phase 2: Recovery — **Focus Group Interviews**

Mana Whānau

Q2. How did the Edgecumbe flood affect your whānau?

ID	Sentiment ☺	Sentiment ☹	Comments
VIR1		●	*It's been quite a long process… We are trying to find a new normal, because we don't live in that whare… Just the depressed look of the homes as they sat there for many months, before they were removed.*
	●		*The support of other whānau members and community and little silver linings along the way.*
DEM2		●	*Our youngest son said it struck him that his entire childhood and all the things in his childhood, were wiped out... She (partner's mother) didn't experience it… The things that she collected through her entire life all went. We've had to recreate some of those memories.*
		●	*We tried to ask that the poplar tree on our section be saved, but our neighbour wanted his down... That was kind of a landmark for all... Both trees went... I thought at least I could always drive by, see the reserve and see the trees... That was painful.*
REC3		●	*The boys are upset that their home is gone. They're angry as well at the situation… My son stayed abroad; he didn't come through… For him New Zealand was family, and that house was our family house.*
KAD4		●	*It was hard to sleep... Really emotional. I got cross with Mum a few times.*
DAD5		●	*Where do we go from here? How long are we going to be away from home? I couldn't concentrate on anything else really.*
IAP6	●	●	*One thing I was grateful for was, the Board of Trustees shut the school that morning... I wish I'd said to my neighbours, "Get Out." But we didn't have time to.*
JOP7	●		*We had an elderly neighbour... He (partner), did find and help him.*

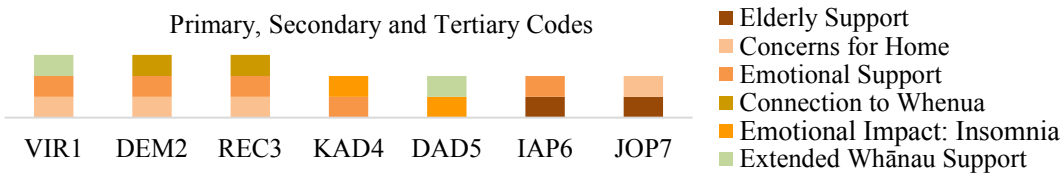


Figure 27: Focus Group Interviewees Responses to Question 2.
Hinerangi Eruera Murphy, 2020.

The human body's natural response in an emergency is fight or flight, ie: to release adrenaline and stress hormones in preparation for what is about to come. So, it was for IAP6 (2018) as a final mission that day of the flood, proved unsuccessful and emotionally disappointing:

> "I tried to get back that afternoon in the jet boat and get the pets. But the current was too strong to get down the right of way to our section… It was just hard to let go and unfortunately, we did lose a pet… We'd had her for 15 years."

Image 23: The Depth and Current of the Floodwater in Edgecumbe.
Chris McKeen, Fairfax NZ, 2017.

Research following disaster events like the flood, indicates as noted by Johal and Mounsey (2016), that "the social impacts such as disruption to lives and displacement from home during the restoration period have a strong impact on psychological health." Thus the feelings and reactions expressed by interviewees, whilst not confined to just these sentiments, were collated (Figure 28).

Emotional Impact: Feelings and Reactions		
Phase 1: Response	Phase 2: Recovery	
Immediate	Short Term	Long Term
Shock	Shock	Anxious
Panic	Panic	Unsettled
Disbelief	Disbelief	Stressed
Upset	Upset	
Disappointment	Fear of the unknown	Fear of the unknown
	Lack of sleep	Lack of sleep
	Painful	
	Lack of concentration	

Figure 28: Emotional Impact: Feelings and Reactions of Focus Group Interviewees.
Hinerangi Eruera Murphy, 2020.

The information was categorised further (Figure 29) to differentiate the feelings and body reactions.

Feelings	**Reactions**			
	Emotional	Mental	Behavioural	Physical
Shock	• Disbelief at what happened • Numbness as if the event is not real	• Inability to concentrate • Difficulty making simple decisions • Flashbacks of the flood	• Need for space • Loss of interest • Detached from everyday life	• Lack of sleep • Restlessness • Feeling tired • Panic - breathing difficulties • Upset – easily irritated
Fear	Of safety Of another flood Of the unknown			
Disappointment	Feeling helpless			

Figure 29: Categorised Feelings and Reactions.
Hinerangi Eruera Murphy, 2020.

All participants experiences differed based on what was happening for them at the time and/or the people present. Nonetheless, several common responses would have occurred. The feelings of sadness (loss) and anger (blame) may also have surfaced at some point.

Image 24: Residents Console Each Other, Emergency Meeting: 08 April, 2017.
Chris McKeen, Fairfax NZ, 2017.

While the effects on health and wellbeing can be extensive and sustained over time, whānau do recover with dedicated support from their relatives, friends, colleagues and neighbours. In the 2005 Matata flood event report, Spee (2008) commended this very approach:

> "The people who reside in a disaster-affected community hold the key to their own psychological and social recovery… They are the experts… and will know

intricacies often unseen by outsiders… Disaster recovery plans need to acknowledge the role that family/whānau play in assisting with their family members' recovery."

4.2.4 Post Flood Needs

The flood left a trajectory of property destruction and a damaged sense of balance for affected whānau of Patutātahi. When the interviewees were queried about the support, most people spoke of assistance over the recovery period. Communication regarding the evacuation plan for the Bay of Plenty region was not clear and the community relied on trusted leadership (Figure 30).

Phase 2: Recovery — **Focus Group Interviews**

Mana Whānau

Q3. What support did you need at the time?

ID	Sentiment ☺	Sentiment ☹	Comments
VIR1		●	*I needed clarity from the people that were in charge of the process. So obviously that's the local government… At the beginning it was quite hard to go and seek that information. You were kind of getting passed from one buck to the other and that causes a lot of friction, not just for the red zone people, actually the whole lot of the community.*
DEM2	●	●	*Our network was in Auckland, in England, in California. We didn't have anybody close by... For the first two or three weeks, it (communication) was really vague and hearsay... We got a lot of 'word of mouth' and I was learning things through people. The Cattery, Miss Molly's... She (owner) was an amazing force to go to.*
REC3		●	*We looked to the officials for help, and it was crazy… When you went to get information too, it was a bit chaotic.*
KAD4	●	●	*Very fortunate we had my Mum's to go to... I needed space and information. I don't like not knowing. I like to know what the plan is.*
KAD4	●		*We had to start the insurance process straightaway. That was good because I thought, that's something to do, but it was overwhelming.*
DAD5	●		*I was just trying to support her (partner).*
IAP6	●		*My parents took us in, no problems there with housing... Then WINZ gave us monetary support.*
JOP7	●		*We showered in the caravan we bought. We also went to the station for showers... Sorted the washing machine too... We were well set up.*

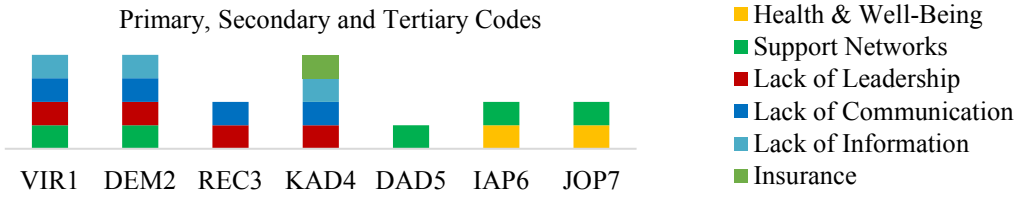


Figure 30: Focus Group Interviewees Responses to Question 3.
Hinerangi Eruera Murphy, 2020.

In addition to restoring their emotional, physical, behavioural and mental equilibrium during and well after the recovery period, residents had to overcome the secondary stressors of rebuilding, insurance claims, replacing material possessions and associated services. This required not only the expertise of iwi, hapū, tohunga, local tangata whenua, but also as mentioned earlier, the leadership of government and local support networks.

4.2.5 Iwi Support

Tikanga Māori as stated by Mead (2003), is the "Māori way of doing things" as it was in the past, as it is in the present and as it is yet to be. Living by māori values is often innate and based on the attitudinal values and beliefs that local hapū and iwi assume. When asked how Ngāti Awa had served them during the flood, five interviewees voiced how prompt the local hapū and iwi responded to the call of the community (Figure 31).

Phase 2: Recovery — **Focus Group Interviews**

Mana Whānau

Q4. What role did the local Hapū, and Iwi play for you in the disaster?

ID	Sentiment ☺	Sentiment ☹	Comments
VIR1	●		*When Ngāti Awa opened their marae, it was a relief for whānau… Although some people weren't staying there, they were gathering to find each other, to have a cup of tea and give that emotional support. Marae are the only ones that can actually mobilise quickly. They have the skills set.*
DEM2	●		*We had heard what a great support Kawerau marae had been… We always felt that if things got really tough, we would access that.*
REC3			*There seemed to be no separation between Māori and Pākehā. We're all in this together. Ngāti Awa were fantastic with the clean-up.*
KAD4	●		*NAVA, the Ngāti Awa Voluntary Army were amazing when they started helping people out... They had people from other areas coming in too.*
DAD5			*No comment.*
IAP6	●		*The Kawerau (Pūtauaki) Trust gave us monetary support, because the kids play for Te Teko... The lady said, "You're part of the family. You're part of the Eastern Bay of Plenty." That made me feel really, really, happy... As a community we're all in the same boat.*
JOP7	●		*There was no, "You're not from our iwi." Everyone cared for each other.*

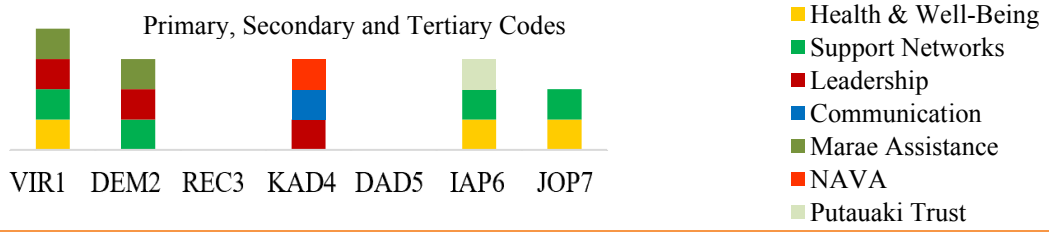


Figure 31: Focus Group Interviewees Responses to Question 4.
Hinerangi Eruera Murphy, 2020.

The iwi rallied together as a hapū welfare collective. Several marae were opened, temporary accommodation organised, mass meals prepared, clothing sourced, and essential items gathered. Ngāti Awa operated from a shared space of manaakitanga and focused wholly on matters they had control over.

Similarly, Kenny and Phibbs (2015) infer that, *"*Accepting responsibility for others is also intrinsically linked with enacting rangatiratanga (actioning leadership) and is embedded at every level of interaction during times of adversity."

Image 25: NAVA, Ngāti Awa Volunteer Army Clean Up at Edgecumbe.
Sources: Tautini Hahipene, Hinerangi Eruera-Murphy, 2017.

Image 26: Day One Ends, NAVA Volunteers at Ruaihona Marae.
Tautini Hahipene, 2017.

Floodwater damages property, soaks dwellings and destroys everything in its pathway. The concept of home implies a safe retreat for whānau, but when that shared space is suddenly disrupted by disaster, survival and safety are first and foremost. During the response phase of the Edgecumbe flood, individuals mobilised quickly alongside close whānau. They activated within their spheres of control (Figure 32), with people that they had immediate influence over (Mana Tangata).

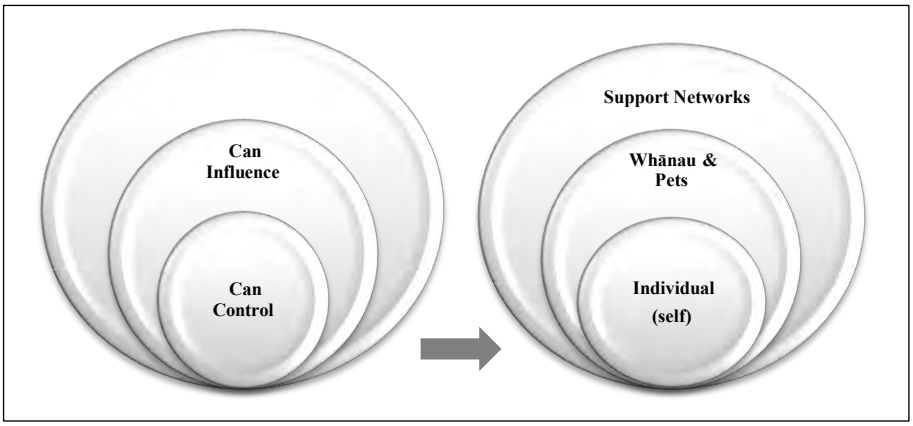


Figure 32: Circles of Control, Influence and Concern.
Hinerangi Eruera Murphy, 2020.

The emotional impact for the community of Edgecumbe was immense as was the appeal for local and regional help. Timely communication, strategic direction and trusted leadership from government officials was needed, along with assistance from various support networks. When the interviewees were asked what advice they might give whānau to better prepare them for a similar disaster in the future, the following tips were recommended:

- Keep informed about the weather
- Store your valuables up high
- Make sure your insurance is up to date.

Image 27: Domestic Contents Litter the Streets of Edgecumbe.
Tautini Hahipene, 2017.

4.3 Mana Whenua

Toitū te whenua, whatungarongo he tangata.
The land remains when the people have moved on.

Q II. How does disaster impact on and reshape, the whānau unit?

Mana Whenua is a key theme central to the practice of manaaki, It can be defined in this research as, the power and prestige held by local people over land, territory or environment. Mana Whenua also relates to the environmental conditions and the leadership that is required of governing bodies, in a disaster situation.

Image 28: A Town Submerged. Edgecumbe as Photographed from the Air.
Skyview Photography, NZ, 2017.

The sub themes that correspond with subsidiary question II, positioned within the sphere of Mana Whenua are:

4.3.1 Climate Change
4.3.2 The Impact of Weather
4.3.3 Roles and Responsibilities in Disaster Recovery and Management.

4.3.1 Climate Change

Climate change is the long-term effect of typical weather patterns. In a report on the Biotic effects of Climate Changes in the Bay of Plenty, Kenny (2006) underlined the impact of and for society, in years to come:

> "There is now compelling evidence that climate change resulting from human activity is an underlying trend that is already happening and is with us as an influence on our seasonal climate and climatic extremes. This influence may be relatively small at present, but it will become much greater in coming decades."

When questioned what they knew about climate change, three interviewees said that it was a topic they discussed with their immediate whānau. Others did so too with friends and work colleagues (Figure 33). Technologies had provided some general public awareness. It was not clear if participants understood the difference between weather, ie: short term atmospheric events, and climate change, ie: weather over a long period of time.

Phase 2: Recovery — **Focus Group Interviews**

Mana Whenua

Q6. What do you know about climate change?

ID	Sentiment ☺	Sentiment ☹	Comments
VIR1	●		*We discuss it as whānau… We're not going to solve this, but we can contribute how we treat our whenua and how we recycle.*
DEM2	●		*I think we are very well informed, because we've been fighting climate battles, since we got to New Zealand.*
REC3		●	*Suddenly to be told that you can look at the height of a river and see that it's higher because of climate change… But you couldn't do anything about the greenhouse gases that were causing it in the first place… We know that most of the world is not prepared and doesn't want to be.*
KAD4	●		*People definitely have an impact on climate… We're more aware because we've got social networking now.*
DAD5		●	*I think it'd be slowing down because you look at all the fossil fuels that we used to use years ago.*
IAP6		●	*There's 9 of us on shift... We all talk about it and they reckon we're going to global warming. There's the ice age as well.*
JOP7	●		*There seems to be more about all of that on TV.*

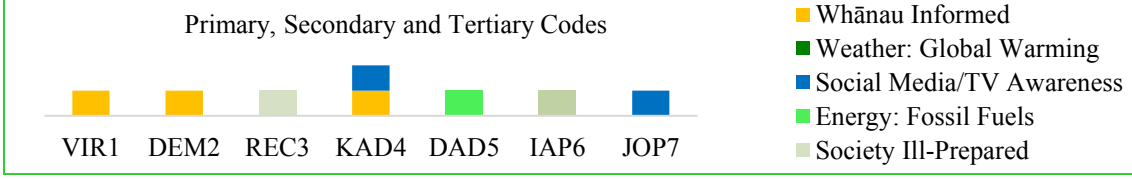


Figure 33: Focus Group Interviewees Responses to Question 6.
Hinerangi Eruera Murphy, 2020.

Climate change is a major concern for the Eastern Bay of Plenty region (Figure 34), and this was acknowledged by the Regional Council (2019) who surmised that:

> "As temperatures rise, scientists expect New Zealand's wind patterns to shift, which will also affect our future rainfall. There will be an increase in the number of hot days (25°C or more) which are expected to become the summer norm by the end of the century, along with fewer frosts."

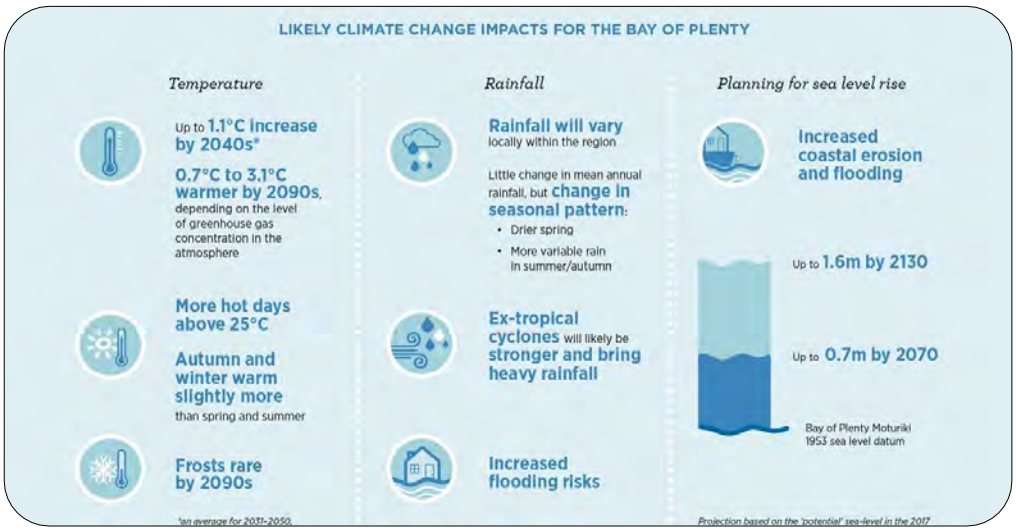


Figure 34: Impacts of Climate Change on the Bay of Plenty.
Regional Council, 2019.

A climate emergency was declared by the Regional Council in 2019. It is envisaged that the group will work alongside the Eastern Bay of Plenty community to educate, help lower fuel emissions and support climate adaptation.

4.3.2 The Impact of Weather

During the month of April 2017, the remnants of tropical cyclones Debbie and Cook, moved across Australia to New Zealand, within one week of each other. Strong winds and heavy rains caused flash flooding to many coastal areas and severe devastation for the Edgecumbe community. The impact of the flood and concerns about the atmospheric conditions were affirmed by VIR1 (2018) who remarked:

> "The storms and weather that we're having are on a bigger scale… It wouldn't enter our thoughts that anything major would happen, that we would have any flooding. Now when we hear the weather report coming across it's like, "How long? How much? What's the rainfall impact going to be?"

The interview participants were asked whether climate change had anything to do with the Edgecumbe flood and three assumed the disaster was a man-made event. One couple had highlighted that weather, more so the onset of rain, caused post flood anxiety and stress for their two primary aged children. Conversely the responses to this question were diverse (Figure 35).

Phase 2: Recovery — **Focus Group Interviews**

Mana Whenua

Q7. What do you think climate change has to do, with the flood event?

ID	Sentiment		Comments
	☺	☹	
VIR1	●	●	*I think there is a connection… The disasters across the world are not just in New Zealand... I don't think we've got the infrastructure in place around our townships to combat that.*
DEM2		●	*We want to have belief that the agencies being set up have a clear idea of a BIG forward plan, not a one-year plan, not a district plan, not 10 years. They should be creating a district plan of 50 years now. Things that are going to telescope and move fast.*
REC3		●	*I am very worried in terms of climate change that there are real estate agencies and other organisations making a profit from something which to me is highly dangerous, when all of this hasn't been sorted out yet. Climate change is not on the way, it's here!*
KAD4		●	*It happened because of weather, saturation of rain… It was a bad luck storm and there were other man-made factors.*
DAD5		●	*It was the natural way of a changing season.*
IAP6		●	*This was a man-made flood. There was a breach down Hydro Road and all they did was put silicon in the wall. The Regional Council's got a lot to answer for. That's just my opinion... The spillway was designed to breach. It didn't and they spent $14million on that.*
JOP7		●	*I agree with him (partner).*

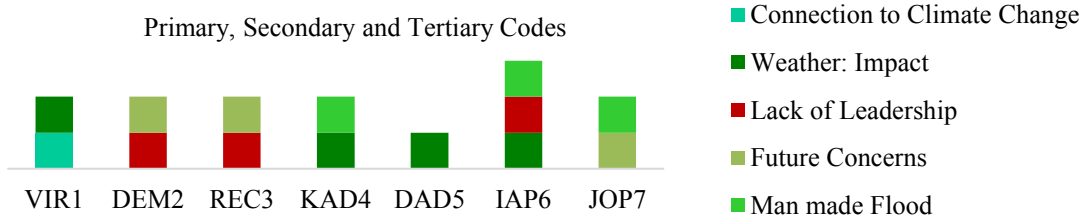


Figure 35: Focus Group Interviewees Responses to Question 7.
Hinerangi Eruera Murphy, 2020.

REC3 (2018) stressed that climate change is here and residents need to take personal responsibility now. "What is very hard to believe is why people who say it's not man made still don't see that even if it's a natural thing, you must do something about it."

All of the interviewees had concerns about what climate change might look and feel like in the future. Those doubts also ruminated who would be responsible for educating the community.

4.3.3 Roles and Responsibilities in Disaster Recovery and Management

At a time of great despair, the community relied heavily on trusted communication, direction and leadership. When questioned about the roles of the Whakatāne District Council (WDC) and the Civil Defence Emergency Management (CDEM) team at the time of the flood, the interviewees recollected that they were unsure of who, how and when local government support would be forthcoming, particularly during the first 48 hours (Figure 36).

Phase 2: Recovery — **Focus Group Interviews**

Mana Whenua

Q9. What role did WDC and CDEM play for you in the disaster?

ID	Sentiment ☺	Sentiment ☹	Comments
VIR1	●	●	*They were key… We understood that they were making knowledge-based decisions that we didn't know… We were seeking out their website, watching the feeds come through… The not so good thing personally was communication. It was a bit slow coming forth… They needed to mobilise better.*
DEM2		●	*Civil Defence didn't have a clue the night before, or in the morning… Even when we talked about recommending an evacuation.*
REC3	●	●	*There was no feeling that there were plans in place and that was alarming… The clean-up was fantastic… They were really willing to get in there and do all the work.*
KAD4	●	●	*I kept wondering where the Regional Council were… Civil Defence were all caught on the hop… Kawerau Council were really good. There was a lot of cross site miscommunication… They were blindsided themselves.*
DAD5		●	*People turned up at the War Memorial Hall and nothing was there.*
IAP6		●	*The Council did 'b'all really. That's my point of view. They didn't know what was happening. The (Fire) Chief and Deputy, went in and they got pushed aside. Civil Defence is run by the Council and our hands were tied. They acted like Edgecumbe wasn't there.*
JOP7		●	*The Mayor turned up every time the cameras were out.*

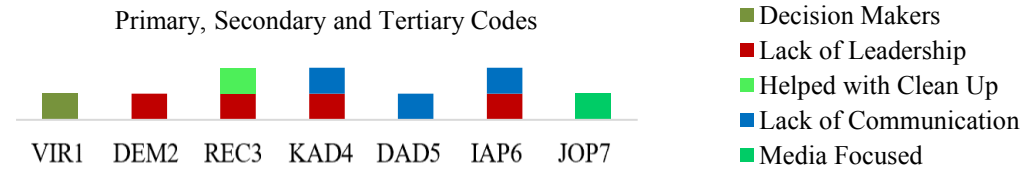


Figure 36: Focus Group Interviewees Responses to Question 9.
Hinerangi Eruera Murphy, 2020.

It was evident that interview participants had mixed perceptions, not only about the roles that the Whakatāne District Council and Emergency Management played, but also of the obligations held by the Regional Council.

Civil Defence Emergency Management (CDEM) comprises of four levels of co-ordination (Figure 37).

The role of the Emergency Management Bay of Plenty is to deliver the operational responsibilities for Civil Defence Emergency Management (CDEM) under the CDEM Act 2002, as a combined service that sits within the Bay of Plenty Regional Council.

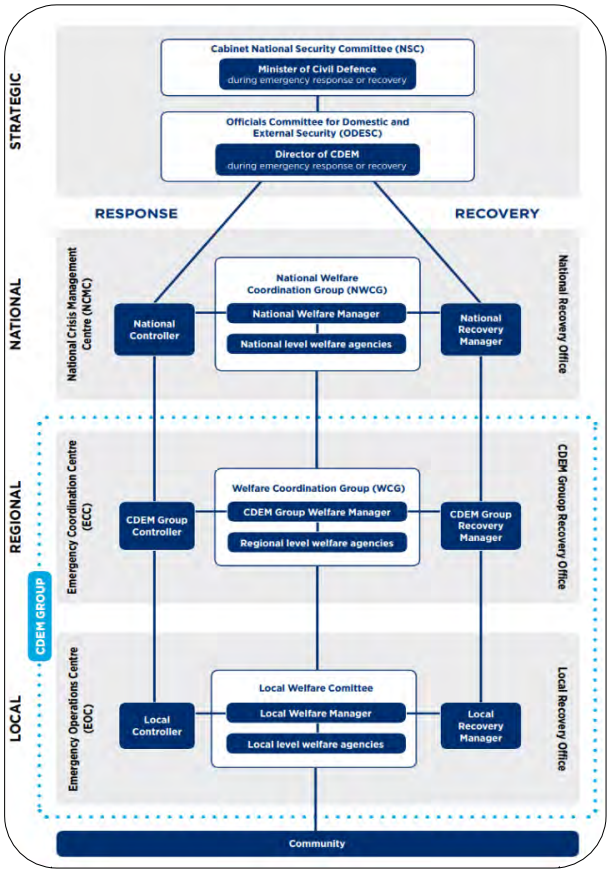


Figure 37: Emergency Levels of Co-ordination.
Bay of Plenty Regional Council, 2019.

Local level emergency and welfare delivers support and services to affected communities (Figure 38). To aid whānau who were impacted by the 2005 Matata flood disaster, "the government requested that Council put together an integrated regeneration package" (Spee, 2008).

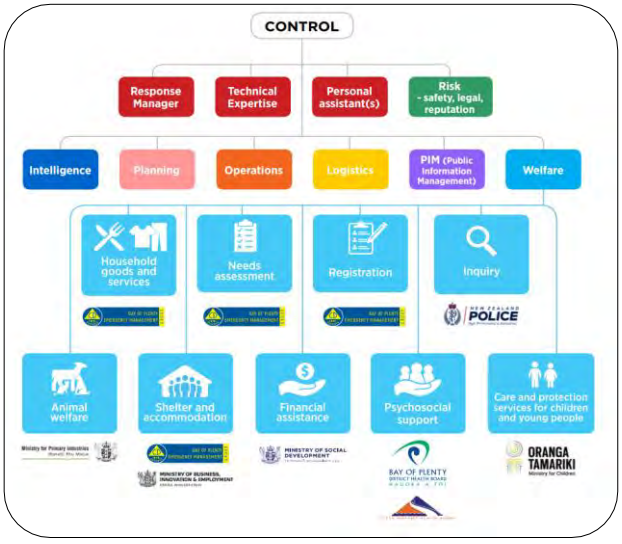
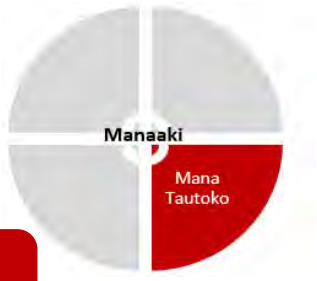


Figure 38: Local Level of Emergency Co-ordination.
BOP Civil Defence Plan, 2019.

4.4 Mana Tautoko



Ehara taku toa i te takitahi, he toa takitini.

My strength is not as an individual, but as a collective.

QI. What are the needs that present for whānau directly affected by disaster?

QII. How does disaster impact on and reshape, the whānau unit?

Mana Tautoko is a key theme central to the practice of Manaaki. It is defined in this research as, the support systems that displaced whānau need for physical, emotional and spiritual wellbeing. Mana Tautoko also relates to the direction and leadership within associated groups.

Image 29: Volunteers Breakfast, Rangitāiki Cosi Club.
Katee Shanks, 2019.

The sub themes that correspond with subsidiary questions I and II, positioned within the sphere of Mana Tautoko are:

- *4.4.1 Post Flood Support*
- *4.4.2 Leadership Structure*
  - *4.4.2.1 The Rangitāiki Community Board*
  - *4.4.2.2 The Recovery Hub*
  - *4.4.2.3 The Recovery Navigators*
- *4.4.3 Emotional Support*
- *4.4.4 Ngāti Awa Volunteer Army (NAVA)*
- *4.4.5 Monetary Assistance*
- *4.4.6 Community Activities.*

4.4.1 Post Flood Support

A disaster causes unusual emotions and unnecessary stress in people who have been directly and indirectly impacted by it. Due to the scale of the Edgecumbe flood, displaced residents needed local and regional assistance, in a very compassionate and timely manner.

When interview participants were asked what kind of external support they received during the flood event, the responses were vast and varied. One person spoke about the local Fire Brigade on the day of the flood, while others listed community groups. Much like DEM2 (2018) who expressed, "In a positive way it showed me amazingly how many people I didn't know, would step in and help us…we found extreme kindness…", all interviewees had agreed that the amount of physical, physiological, social and monetary support that was offered and also provided, was great, yet overwhelming (Figure 39).

Phase 2: Recovery — **Focus Group Interviews**

Mana Tautoko

Q11. Who helped you through the flood event (in terms of external support)?

ID	Sentiment ☺	Sentiment ☹	Comments
VIR1	●		*First off it was our whānau and friends… Our workplaces too, just allowing us to have time-off mahi… I will give Urban Search and Rescue (USAR) a big tick… To a degree, I was grateful to Council too.*
DEM2	●		*The (Tzu Chi) Buddhists, St Vincent De Paul and the Edgecumbe Recovery Centre… Our Insurance Broker was good… Our first external help was the Edgecumbe Fire Department… My sister started a GoFundMe page.*
REC3	●		*Graham Bates from the Property Group. He put cases forward to the Regional Council… A friend from Opotiki collected for us.*
KAD4	●		*We had help from my brother and his partner and from a few friends... 'N' came to help me with it. She was part of NAVA. Our loss adjuster was good. He kept in touch.*
DAD5	●		*We got funding for food, clothes and vouchers.*
IAP6	●		*Fonterra paid me right through. The Dairy Worker's Union gave us a grant. My workmates turned up and helped. Our builder as well.*
JOP7	●		*The schools were really good, helping with lunches… Councillors were there. My work colleagues who'd been through the flood too.*

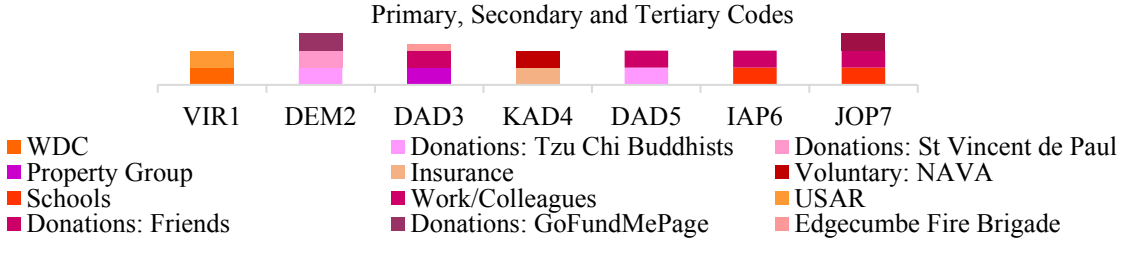


Figure 39: Focus Group Interviewees Responses to Question 11.
Hinerangi Eruera Murphy, 2020.

4.4.2 Leadership Structure

Leadership can be defined as the ability to strategically map out, motivate and influence a group of people or an organisation, towards collective objectives or goals. It is a social process that requires of the leader or leaders, demonstration and implementation of a myriad of personal and relational skills.

The term leader originates from the Old English meaning 'to go before'. "It was first used in the 14th century and when combined with the suffix 'ship', denotes the position of a leader or leaders" (Macmillan Dictionary Blog, 2021). Leadership as implied by Heifetz and Linsky (2002) often involves "challenging people to live up to their words, to close the gap between their espoused values and their actual behaviour."

When interviewees were queried about leadership support, most people spoke of assistance over the recovery period. Communication from the Whakatane District and Regional Councils regarding the evacuation plan for the Bay of Plenty region was not clear and the community relied on trusted leadership. In a hierarchical organisation as that of both Councils, leaders and associated others are ordered in a pyramid leadership structure (Figure 40). This implies that those at the bottom, take direction from supervisors and/or leaders at higher levels. Communication typically flows in the same manner and this hierarchical structure illustrates a chain of command.

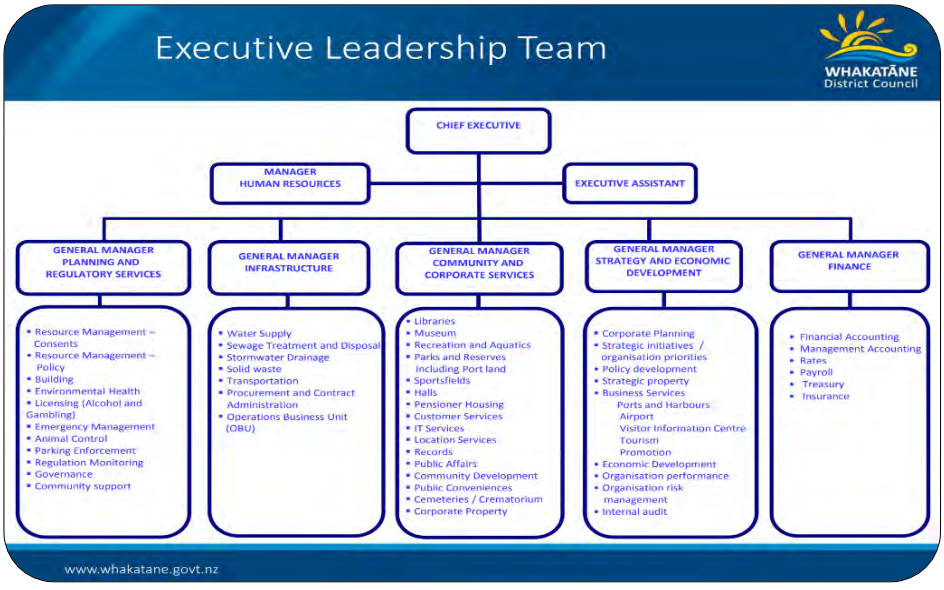


Figure 40: Executive Team: Hierarchical Leadership.
Whakatāne District Council.

The three key pieces of government legislation that set out what the Councils do are the Local Government Act 2002, the Resource Management Act 1991 and the Local Government Rating Act, 2002.

While the hierarchical leadership model was used to maintain the status quo many, many years ago and is appropriate for linear work, it presents some challenges. Communication top down only often results in lack of innovation and collaborative engagement from associates and the environment is seemingly bureaucratic and lethargic. Decision-making tends to take some time, as there are many layers of approval required to take action. This type of conventional power structure has implications in today's world.

4.4.2.1 The Rangitāiki Community Board

Under the Whakatāne District Council authority, the Rangitaīki Community Board were there to support displaced whānau. The Community Board Members at that time were Chair Charelle Stevenson, Deputy Chair Kris Byrne, Graeme Bourk, Alison Clark, Gavin Dennis, Evan Harvey and Gerard Van Beek.

Ms Stevenson who was herself directly affected by the flood, presented a list of community questions for answering to two Councillors. Similarly, she encouraged whānau feedback for the Independent Review panel, co-organised a community planning day, developed an emergency tool kit under Te Puni Kokiri (TPK) and facilitated 'Te Manawa o Rangitāiki, the Edgecumbe Community Plan for 2018-2021' amongst other tireless community regeneration efforts.

Image 30: Charelle Stevenson Presents the Community Questions.
Whakatāne District Council, 2017.

4.4.2.2 The Recovery Hub

Like the 'one stop welfare centre' that was initiated following the 2005 Matata disaster (Spee, 2008), a Recovery Hub was set up at the Edgecumbe Library. With guidance from Recovery Manger Julie Gardyne, Ms Stevenson, Rangitāiki Community Board then later Councillor Barbara Dempsey, a number of local agencies were made available. Other supporting external agencies joined too (Figure 41).

Figure 41: Supporting Agencies for the Edgecumbe Flood Community.
Whakatāne District Council, 2017.

4.4.2.3 The Recovery Navigators

Navigators were on site to help affected whānau with recovery issues and ongoing wellness. A secondment role was affirmed between the Recovery Team and Ngāti Awa Social and Health services. Te Tohu o Te Ora o Ngāti Awa CEO, Enid Ratahi-Pryor (2017), stated that, "… the secondment position was a collaboration between the Recovery Team and Ngāti Awa Social and Health services, enabling two diverse organisations and cultures to work alongside each other, to support whānau, to rebuild their lives and communities."

Image 31: Navigators Cheryl Wilson and Vicki Walker with the Ministers.
Whakatāne District Council, 2017.

Funding for the Navigator Service was secured from the Ministry of Social Development, Bay of Plenty District Health Board and Bay of Plenty Regional Council, with a grant from the Department of Internal Affairs-administered Lottery Grants Board fund for Edgecumbe recovery (Whakatāne District Council, 2017).

Image 32: Recovery Team, NASH and Edgecumbe Library Volunteers.
Whakatāne District Council, 2018.

Ten months on from the flood and the Recovery Navigators had contacted over 323 families. The enquiries and/or issues that were raised by the community varied to include accommodation financial assistance, health and wellbeing and insurance (Figure 42). The Liveable Homes Project (LHP) also featured as a support service.

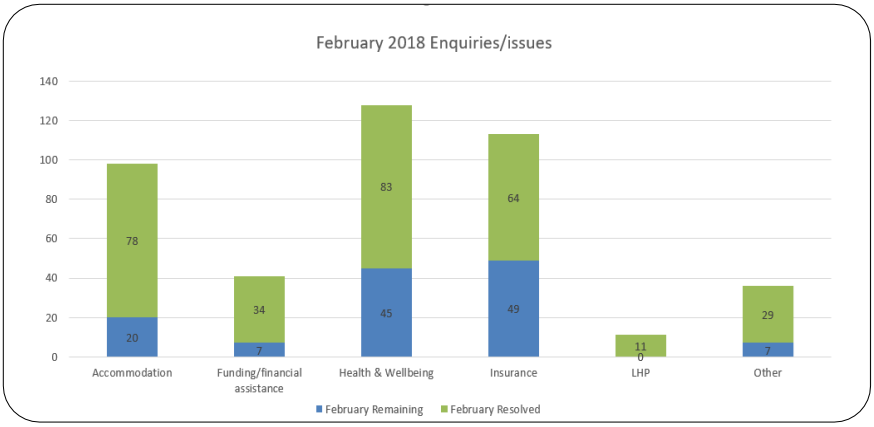


Figure 42: Edgecumbe Residents - Enquiries/Issues.
WDC Recovery Project, 2018.

A breakdown of both the funding/financial assistance and the health and wellbeing enquiries (Figure 43), were further categorised. It is understood that "there were 13 instances where Navigators felt that a referral to mental/social health services would be beneficial for the resident/owner" (WDC Recovery Project, 2018). Those support services included WINZ and Whānau Ora.

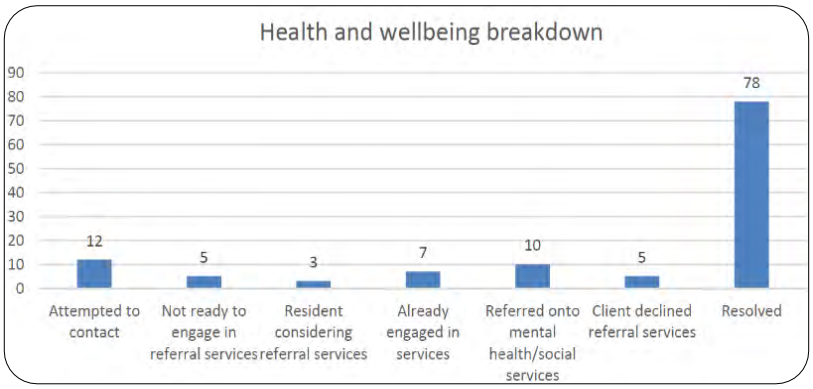


Figure 43: Edgecumbe Residents - Health & Well-Being.
WDC Recovery Project, 2018.

4.4.3 Emotional Support

"Disaster events, whether they are man-made or natural, have huge impacts on people. This cycle of disruption and change can be ongoing" (Spee, 2008). A psychosocial support plan was implemented by the District Health Board Recovery Team at the time of the flood.

"Psychosocial support is the process of meeting a person's emotional, social, mental and spiritual needs. It is a non-therapeutic intervention that helps a person to cope with stressors", WDC Recovery Project, (2018).

It is understood that the range of emotions experienced by displaced residents, volunteers and members of the community in the days, weeks, months and years following the flood, were diverse and have required expertise attention (WDC Recovery Project, 2018).

Image 33: Residents and Volunteers Clearing Up the Flood.
New Zealand Herald, 2018.

"Enhancing the possibility that people can more actively control their own lives is an essential component of community psychology" (Spee, 2008). Conversely psychosocial support during disaster response and recovery is not about returning to normality. It is about positively adapting to a changing reality (Figure 44).

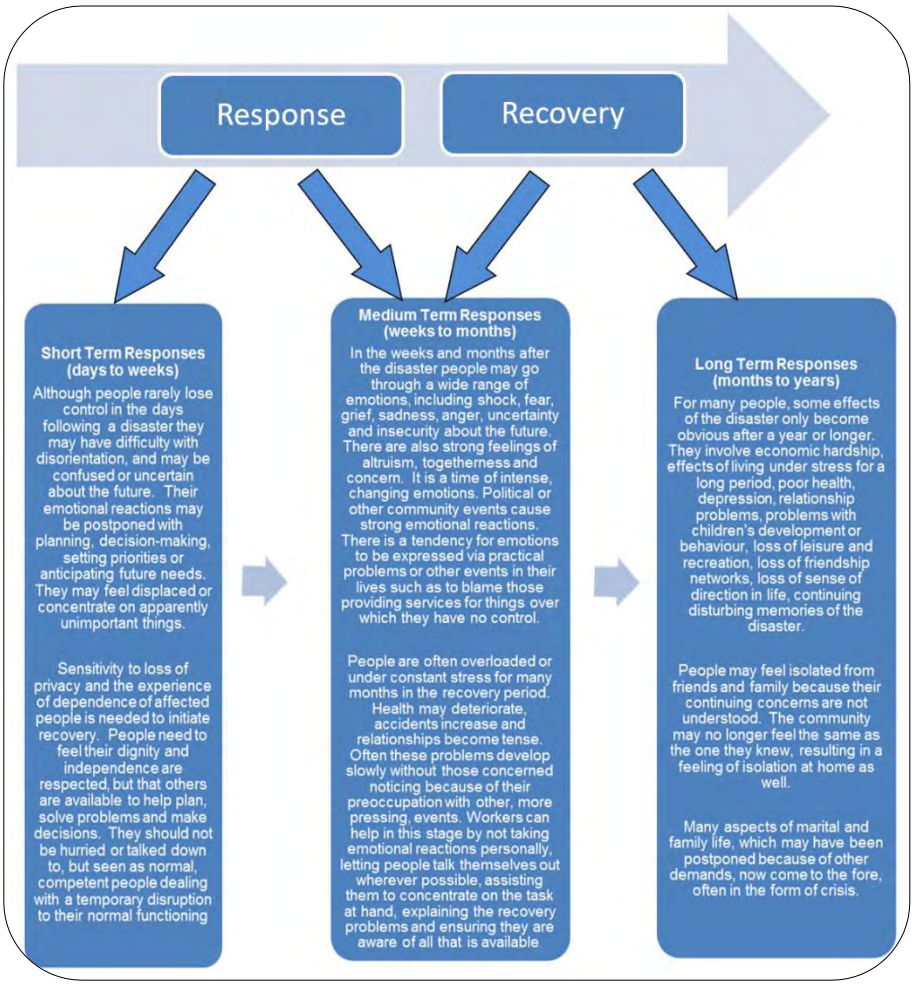


Figure 44: Psychosocial Recovery during Disaster Response and Recovery. WDC Recovery Project, 2018.

"Recovery may continue on for an indeterminate period, from weeks to decades" (Framework for Psychosocial Support in Emergencies MoH, 2015).

4.4.4 Ngāti Awa Voluntary Army (NAVA)

The flood had left excessive debris and devastation in homes and on the streets of Edgecumbe. To help with the huge community clean up, Te Rūnanga o Ngāti Awa collaborated alongside the Bay of Plenty Regional Council and the Whakatane District Council. A team recovery plan was contemplated and a national call for volunteers initiated.

Image 34: Wini Geddes Directs the NAVA Operation at Ruaihona.
Jason Rennes, Spinoff NZ, 2017.

"Any work with communities attempts to create shared visions and goals" (Spee, 2008). People from across Aotearoa along with many locals of the Mataatua region, turned up at Ruaihona Marae in Te Teko, the base of operations for the newly formed Ngāti Awa Voluntary Army (NAVA). Māori wardens were also established there and over 1500 volunteers registered to muck in and help. "Giving of yourself is a key cultural practice associated with manaakitanga" (Kenny & Phibbs, 2014).

Image 35: Day 1 Briefing for the NAVA Site Managers and Māori Wardens.
Hinerangi Eruera Murphy, 2017.

Volunteers were tasked to remove sediment and flood-damaged items from the homes of whānau who had given prior consent. As the work was labour intensive helpers needed to be 16 years or over and healthy enough to focus on four solid hours behind a shovel. Input from volunteers "played a significant part in firstly, reducing the impact of the event on people and property, and secondly, hastening the early stages of recovery" (Brunsdon & Hinton, 2017).

Image 36: Approximately 2500 Tonnes of Silt was Removed from Edgecumbe. Tautini Hahipene, 2017.

Image 37: Over 7000 Tonnes of Waste was Sent to the Landfill from Edgecumbe. Whakatane District Council, 2017.

Image 38: NAVA Volunteers Contributed More than 6,800 Hours over 11 Days. Whakatāne District Council, 2017.

4.4.5 Monetary Assistance

There were hundreds of thousands of dollars in grants and monetary donations given to the people of Edgecumbe. Over $160,000 was distributed from the Mayoral Relief Fund to 142 affected whānau and $300,000 to qualifying farmers through the Ministry of Business Innovation and Employment (MBIE) fund. The Buddhist Compassion Relief Tzu Chi Foundation gifted $100,000 in gift cards, to over 200 displaced whānau.

Image 39: Members of the Tzu Chi Foundation Meet with Residents.
Whakatāne District Council, 2017.

4.4.6 Community Activities

"Effective community development approaches encourage participation, a sense of community and empowerment of community members" (Spee, 2008). To boost community morale following the flood, numerous free events and activities were organised in consultation with the Community Board and the Edgecumbe Development Improvement (EDIT) Team.

Image 40: Whakatau for Moana and her Tribe.
Hinerangi Eruera Murphy, 2018.

When participants were asked how their lives had changed after the flood, three people who had lost their homes, reflected back on how strong they felt the community of Edgecumbe had become over the years and even more so post the event. The other responses varied, as some whānau were still hurting and their homes were being rebuilt at the time (Figure 45).

Phase 2: Recovery — **Focus Group Interviews**

Mana Tautoko

Q12. How has your life changed, as a result of the flood?

ID	Sentiment ☺	Sentiment ☹	Comments
VIR1	●	●	*We aren't living where we have been for 22 years… In some ways it's strengthened our community connectedness… All of us who were in the red zone, keep in touch with each other… My father-in-law is not living with us and so that's another disconnection that we've had to get through.*
DEM2	●		*In a positive way it showed me amazingly how many people I didn't know would step in and help us… I didn't realise I was in a community of neighbours until I stepped out of a community of neighbours.*
REC3	●		*We started thinking, if we're going to settle down and purchase a house somewhere, we need to actually look at minimising those hazards in the past. We never thought about that… Some people when they heard what we had done by checking out the contours, they wanted the apps that we had been using on the computer to do all that.*
KAD4	●		*It's closure really, coming back home. I always stayed connected because I'd come and do the garden… So, whenever anybody came to our house, they'd remember that it's someone's home.*
DAD5	●		*A lot better for me because I can walk to the Club and have a few.*
IAP6		●	*Angry with the Regional Council and the WDC since we're back in... If they'd just done the job properly.*
JOP7		●	*I get more anxious when its windy or raining... In the back of my mind I was thinking, what if that was to happen again?*

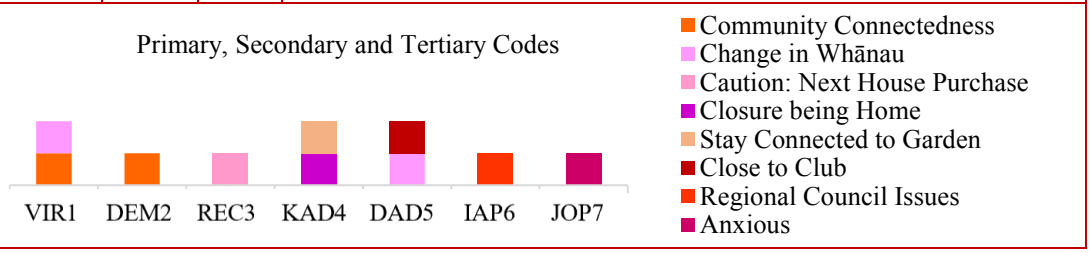


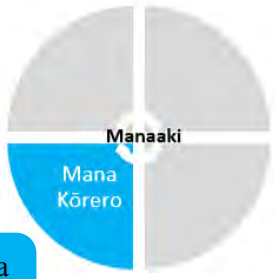
Figure 45: Focus Group Interviewees Responses to Question 12.
Hinerangi Eruera Murphy, 2020.

Participants were then asked what had made it easier for them to get through the flood. Many spoke about the community spirit and connections they will continue to have now with those who were affected too.

4.5 Mana Kōrero

Ko te kai a te Rangatira, he kōrero.

The sustenance of leaders is communication.



QIII. What is the role of communication technologies and social media for displaced whānau in a disaster situation?

Mana Kōrero is a key theme central to the practice of manaaki. It is defined in this research as, the digital information infrastructure that aids and supports both synchronous, real time and asynchronous, any time communication. Mana Kōrero also relates to technologies and the social networking sites that displaced whānau refer to in a disaster situation.

Image 41: Eagle Technologies Provided Managed IT Services.
Eagle Technologies, 2017.

The sub themes that correspond with subsidiary question III, positioned within the sphere of Mana Kōrero are:

4.5.1 Communication Technologies

4.5.2 Social Networking Sites

4.5.2.1 Facebook

4.5.2.2 Kia Kaha Edgecumbe

4.5.3 Using Technologies to Inform and Communicate.

4.5.1 Communication Technologies

Communication technologies refer to the equipment and devices that are used to process and effectively disseminate information. The tools vary from home land lines and mobile phones to computers, laptops, tablets, chromebooks and iPads.

When interview participants were asked what technologies they used at the time of the flood, most people spoke of their mobile phones although as it is understood that "… communication lines can be overloaded and cellular networks overwhelmed as too many people attempt to use them to access information" (O'Carroll, 2013). Television and radio accessed some hours later during the recovery period, were mentioned. Members also discussed social media that is enabled via the internet, using a communication device (Figure 46).

Phase 2: Recovery — **Focus Group Interviews**

Mana Kōrero

Q16. What communication technologies did you use and why during the flood event?

ID	Sentiment ☺	Sentiment ☹	Comments
VIR1	●		*Social Media because we wanted instant updates… I went straight to the local authority website first. That was my first contact and then I went into the Kia Kaha Facebook page.*
DEM2	●	●	*We had cell phones… and they weren't smartphones… It was very difficult in the beginning to access information… We got a tablet very fast, so that we could look things up.*
REC3	●		*One of the items we ran away with was our backup drive… We realised that all of our information was digital.*
KAD4	●	●	*TV, radio, Facebook, phone texting. No papers... That was my first introduction to Facebook ... It served the purpose. It got extremely out of hand at times too.*
DAD5			*No comment.*
IAP6		●	*Cell phone, although I remember there was 'a coverage block'. Everyone was obviously on their phones.*
JOP7		●	*Cell phone networks were just jammed.*

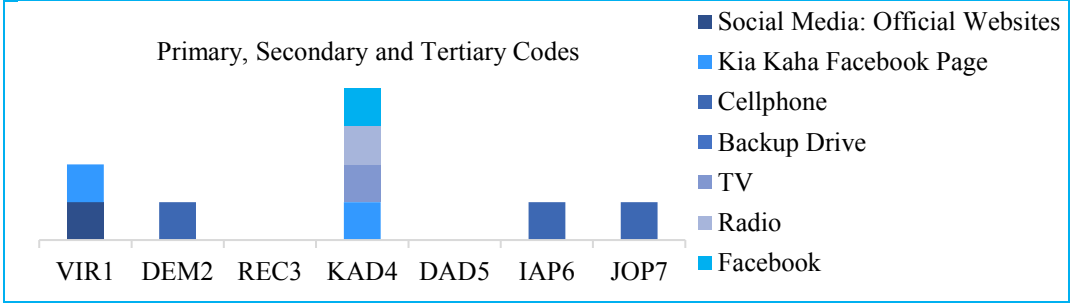


Figure 46: Focus Group Interviewees Responses to Question 16.
Hinerangi Eruera Murphy, 2020.

4.5.2 Social Networking Sites

The internet is a conducive platform for collaboration and contributes to the success of many social networking sites and online communities. In a disaster situation, "social media provides opportunities for engaging citizens in the emergency management by both disseminating information to the public and accessing information from them" *(*Simon, et al, 2015). Social networking sites (SNSs) also known as social media sites, are online venues like Facebook, that interview participants utilised to find whānau members, make contact with friends and obtain information (Figure 47).

Phase 2: Recovery — **Focus Group Interviews**

Mana Kōrero

Q17. What social media did you use and why during the flood event?

ID	Sentiment ☺	Sentiment ☹	Comments
VIR1	●		*I went to the website once for WDC, but I actually found that Facebook was a quicker response for some things… I wanted to hear it just from the authority first. I needed to know the facts.*
DEM2	●	●	*When we couldn't find people, we'd try and see if they had a Facebook page and put a post-up.*
REC3	●	●	*The only way you could make an application (or whatever), was you'd have to do it online. It wasn't always convenient to be able to do that.*
KAD4	●		*I found myself checking Regional Council's page... and I was forever checking the weather report.*
DAD5	●		*Facebook for me. Having a look to see what everyone else is talking about.*
IAP6	●		*Facebook's probably another one that people used... We used a lot of equipment at the station... The media picked up on this stuff pretty quick.*
JOP7	●		*Spark had sent me a text where they actually transferred our home-line number to my cell phone.*

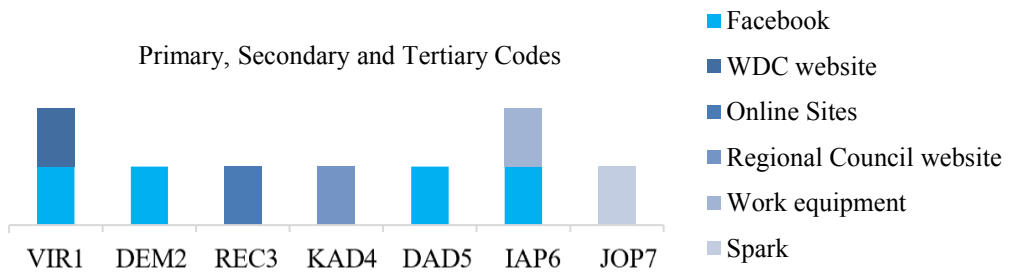


Figure 47: Focus Group Interviewees Responses to Question 17.
Hinerangi Eruera Murphy, 2020.

REC3 (2018) pointed out that while displaced whānau were expected to submit, or rectify matters online, "Council hadn't put enough effort into making that straightforward."

4.5.2.1 Facebook

Facebook as an online social networking site, was launched in 2004, by Mark Zuckerberg and four fellow students from Harvard University, America. The functionalities of Facebook provide all age users that include rangatahi, "… with a number of ways to express themselves, their personalities, their identity/identities through online profile pages" (O'Carroll, 2013). The following graph highlights the number of Facebook users in New Zealand by age group, as of January 2013.

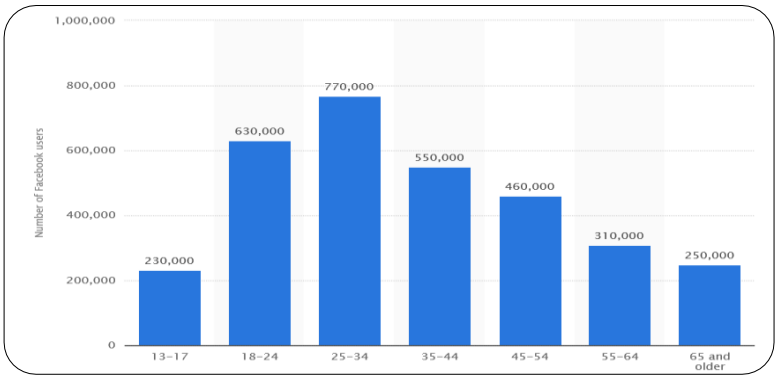


Figure 48: Facebook Users in New Zealand, by Age Group, 2013.
Statistics NZ, 2013.

4.5.2.2 Kia Kaha Edgecumbe

A public Facebook group page was created in response to the severe flooding. The page Kia Kaha Edgecumbe intended for information sharing and as a crowd-sourcing platform, is managed by three local administrators, one of whom also serves as a community journalist.

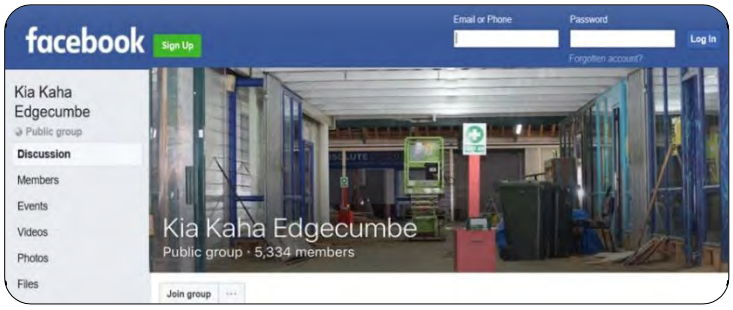


Image 42: Kia Kaha Edgecumbe Facebook Page.
Hinerangi Eruera Murphy, 2017.

The site has 5,344 diverse members and as mentioned by the interview participants, serves its purpose well. According to Taylor et al. (2012) "in order to maintain integrity and trust, the administrators of the social media pages must identify and ban as early as possible 'trolls' and other disturbances". That onerous task was required of the administrators.

4.5.3 Using Technology to Inform

As the Rangitaīki River flowed through the Edgecumbe township, local government urgently needed to map out the flood affected area. The Regional Council required the services of technological experts, so Eagle Technology was called in to assist.

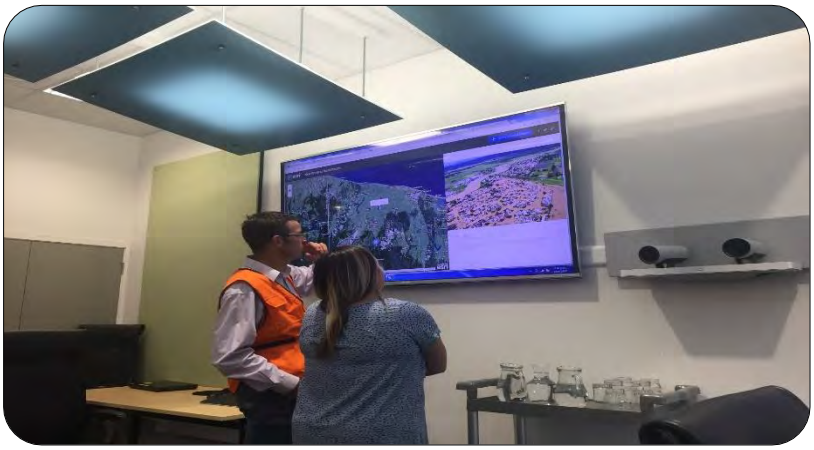


Image 43: Eagle Technology Assist Regional Council.
Eagle Technology, 2017.

A mapping portal (Figure 49) was prepared and as informed by Eagle Technology (2017):

> "The site included a live situational awareness viewer and field apps used internally for their coordinating the response. These same maps were used to provide up to date information with the Public through public maps on social media and the Whakatane District Council website."

Collaboration with several local emergency officials occurred thereafter as web applications, "… were quickly configured for incident intelligence, welfare assessment, building assessments and transportation updates" (Eagle Technology, 2017).

Figure 49: Eagle Technology Assist Regional Council with a Mapping Portal.
Eagle Technology, 2017.

To conclude the series of questions under the theme of Mana Kōrero, interviewees were asked what advice they might have about communication technologies and social media to better prepare whānau for a similar event. Although access to local websites and social media were again mentioned, the participants responses varied based on hindsight and of their own experiences of communication technologies during the flood event (Figure 50).

Phase 2: Recovery — **Focus Group Interviews**

Mana Kōrero

Q18. What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?

ID	Sentiment		Comments
	☺	☹	
VIR1	●		*If a District Council website is set up, utilise that for facts… You actually need on the ground information too.*
DEM2		●	*We're still in a society where there are a lot of people who don't cope with that stuff. Yet, that's the only option they're being given to get information, unless they have a radio, and the information is good.*
REC3	●	●	*It was really quite difficult at times working without technology.*
KAD4		●	*If there is going to be a Facebook page open like Kia Kaha, you need really good administrators... If you're using social media really think about what you're posting.*
DAD5			*No comment.*
IAP6	●	●	*If you find that your family's out of the house, you don't need your cell phone. Go use a landline somewhere else... If the News Media gets involved, give them the right information.*
JOP7		●	*Leave the mobiles for emergencies, like people stuck in homes.*

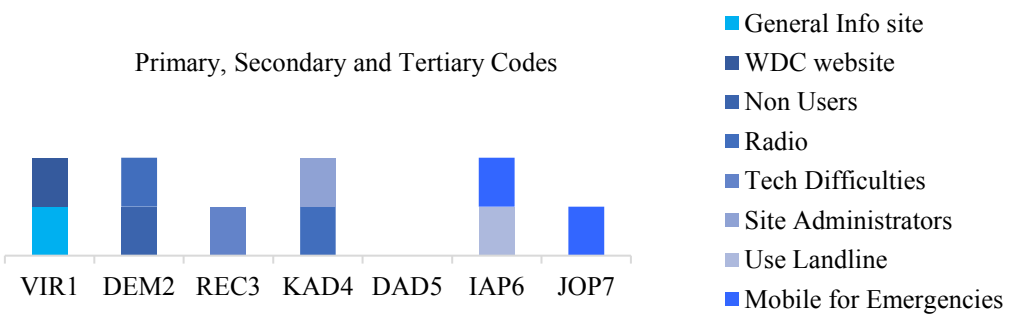


Figure 50: Focus Group Interviewees Responses to Question 18.
Hinerangi Eruera Murphy, 2020.

When members of the community were reacting instinctively to what was happening to them and their homes, the mainstream media were there to capture what they could. Photographs were snapped, unabridged tales were told, and the radio stations were broadcasting too. For many whānau, social media particularly Facebook, proved helpful, since mobile phone networks were chaotic, and families wanted to connect and convene quickly with their loved ones.

4.6 Ūpoko Whakarāpoto - Chapter Summary

Seven Focus Group interviewees were asked 21 questions based on the themes of Mana Whānau, Mana Whenua, Mana Tautoko and Mana Kōrero. The questions and participants sentiments were then collated. From that data, 13 sets of comments with relevance to the research subsidiary questions, were selected for this chapter.

As the responses were being compared, subject areas both new and common across the themes, transpired. To systematically organise this data, the subject areas were entered into a spreadsheet under the key themes and sub themes as primary, secondary and tertiary codes (Figure 51). The codes that are highlighted below, indicate the themes, areas and needs of most importance.

Chapter 4: Focus Group Interviews

Korowai Manaaki – Key Themes, Primary, Secondary and Tertiary Codes

	Mana Whānau		Mana Whenua		Mana Tautoko		Mana Kōrero
	Survival and Safety		**Climate Change**		**Post Flood Support**		**Communication Technologies**
3	Accommodation Needed	3	Whānau Informed	1	WDC	3	Social Media:Offical Websites
7	Mental Support Needed	1	Weather: Global Warming	1	Property Group	3	Kia Kaha Facebook Page
2	Emotional Impact: Shock	2	Social Media/TV Awareness	3	Schools	4	Cellphone
1	Care For Others	1	Energy: Fossil Fuels	4	Donations: Friends	1	Backup Drive
1	Help Needed	2	Society: Ill Prepared	1	Donations: Tzu Chi Buddhists	1	TV
				1	Insurance	1	Radio
	Tūrangawaewe		**The Impact of the Weather**	2	Work/Colleagues	3	Facebook
3	Survival and Safety	1	Conection to Climate Change	1	Donations:GoFundMe Page		
4	Concern for Home	2	Weather Impact	2	Donations:St Vincent Paul		**Social Networking Sites**
2	Mental Support	3	Lack of Leadership	4	Voluntary: NAVA	4	Facebook
1	Emotional Impact: Overwhelmed	3	Future Concerns	1	USAR	2	WDC website
	Damage to Home	4	Man made Flood	1	Edgecumbe Fire Brigade	2	Online Sites
2	**Emotional Impact**					1	Regional Council website
4	Elderly Support		**Disaster Recovery Management**		**Leadership Structure**	1	Work equipment
3	Concerns for Home	1	Decision Makers		**-The Rangitāiki Community Board**	2	Spark
2	Mental Support	4	Lack of Leadership		**-The Recovery Hub**		
2	Connection to Whenua	2	Helped with Cleanup		**-The Recovery Navigators**		**Facebook**
	Emotional Impact: Insomnia	3	Lack of Communication		**Emotional Support**		**Using Technologies to Inform**
		2	Media-Focused		**NAVA**	1	General Info Site
	Post Flood Needs				**Monetary Assistance**	2	WDC website
2	Health & Well-Being				**Community Activities**	1	Non Users
5	Support Networks			2	Community Connectedness	2	Radio
4	Lack of Leadership			2	Change in Whānau	3	Tech Difficulties
4	Lack of Communication			2	Caution: Next House Purchase	1	Site Administration
2	Lack of Information			1	Closure being Home	2	Use Landline
1	Insurance			1	Stay connected to Garden	3	Mobile for Emergencies
				1	Close to Club		
	Iwi Support			2	Regional Council Issues		
3	Health & Well-Being			1	Anxious		
2	Leadership						
2	Marae Assistance						
1	Pūtauaki Trust						
4	Support Networks						
1	Communication						
2	NAVA						

Figure 51: Focus Group Interviews – Themes and Codes.
Hinerangi Eruera Murphy, 2020.

To show the commonalities at a glance, colour coded graphs were included in each of the interview tables.

The overall aim of this study is to identify the key understandings that emerge from the practice of manaaki for displaced whānau in a disaster situation.

Research Subsidiary Questions:

I. What are the needs that present for whānau directly affected by disaster?
II. How does a disaster impact on and reshape, the whānau unit?
III. What is the role of communication technologies and social media for displaced whānau, in a disaster situation?

The findings of the Focus Groups interviews are indicative of the key themes, sub themes, primary, secondary and tertiary codes that weave together and interconnect like whenu and aho in a korowai. The following diagram illustrates the sum of many thematic parts and informs participants responses to the research questions. Four concepts as pou that preceded the themes, namely Health and Well-Being (Hauora), Support Systems (Awhi Oranga), Communication (Whakawhitinga) and Leadership (Rangatiratanga) are included.

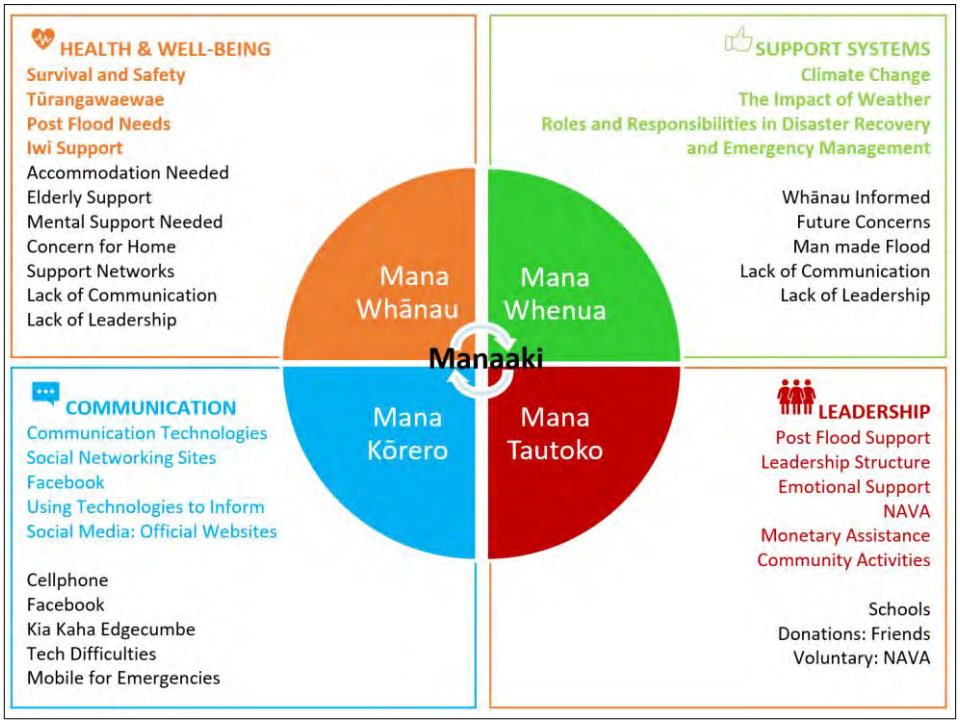


Figure 52: Focus Group Interviews: Summary of Concepts and Findings.
Hinerangi Eruera Murphy, 2020.

The findings have furthermore confirmed that, the (directly affected) participants were faced with multiple personal challenges during the flood recovery period.

In addition to finding temporary accommodation and restoring their own and whānau wellness, residents were tasked with rebuilding, insurance claims and replacing household goods. As time passed, so did the stages of recovery. Moving forward many supported the needs of others and planned collaboratively to regenerate the community.

To conclude this chapter the excerpts that follow, briefly validate the pou concepts and give rise to some of the key understandings that have emerged from the practice of manaaki for displaced whānau, during the Edgecumbe flood.

Health and Well-Being (Hauora)

***Survival and Safety**:* After 48 hours the community of Edgecumbe moved from response into the recovery phase. Feelings of displacement were certainly being experienced and children were most concerned for the welfare of their family pets. The enormity of the flood and the clean up yet to come, was gradually being realised.

Support Systems (Awhi Oranga)

***Post Flood Support**:* Five of the seven interviewees voiced how prompt the local hapū and iwi had responded to the call of the community. The iwi rallied together as a hapū collective. Several marae were opened, temporary accommodation was organised, mass meals prepared, clothing sourced, and essential items gathered.

Communication (Whakawhitinga)

Social Media - Official Sites: Social networking sites (SNSs) also known as social media sites, are online venues like Facebook, that interview participants utilised to find whānau members, make contact with friends and obtain information.

Leadership (Rangatiratanga)

Leadership Structure: When questioned about the roles of the Whakatāne District Council (WDC) and the Civil Defence Emergency Management (CDEM) team at the time of the flood, the interviewees recollected that they were unsure of who, how and when local government support would be forthcoming, particularly during the first 48 hours.

This chapter interwove and presented the findings whenu and aho of the Focus Group interviews. In addition, Ūpoko Tuawha disclosed the core subject areas grouped as codes and four significant concepts that emerged.

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ŪPOKO TUARIMA - CHAPTER FIVE
WHATU NGA RŌPU-Ā-KANOHI - WEAVE IN THE SEMI-STRUCTURED GROUP FINDINGS

5.0 Ūpoko Whakatūwhera - Chapter Introduction

Ūpoko Tuawha presented the findings whenu and aho of the Focus Group interviews.

This chapter weaves in and presents the findings whenu and aho of the Semi-Structured Group interviews. Like the previous chapter, Ūpoko Tuarima also details the core subject areas grouped as codes and four important concepts that emerged.

5.1 Ngā Kitenga - Findings

The purpose of this study is to identify the key understandings that emerge from the practice of manaaki for displaced whānau in a disaster situation. Six Semi-Structured interviews were conducted. Kenney et al (2015, p.47) stated that the dialogical interview is a useful research method because it ensures, "… that power differentials between researchers and research participants are disrupted." Where interviewees have been traumatised by their experiences Kenney et al (2015) also mentioned that "this method of data collection would be considered a psychosocially appropriate approach for ascertaining information."

The interviewees included five Māori, one male and four females, all over the age of 30, with affiliations to Ngāti Awa. One member had been affected by the flood, as were her immediate whānau. All participants have lived in the Mataatua region for more than 10 years and served on or supported marae associated groups.

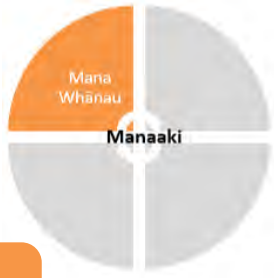
Thirteen questions were derived in sets, based on the key themes of Mana Whānau, Mana Whenua, Mana Tautoko and Mana Kōrero. Each theme varied, as did the events and the time phases of response and recovery during and after the flood.

All of the questions and participants sentiments have been collated and colour coded, based on corresponding themes (Figure 53). Eight questions and comments are presented as tables in the findings. To illustrate relationships at a glance, graphs are also included. The remaining responses can be found in the appendices section.

Semi-Structured Interviews - Themes and Questions		
Theme	Questions Asked of Participants	Questions Presented in Findings
Mana Whānau	3	2
Mana Whenua	3	2
Mana Tautoko	3	2
Mana Kōrero	3	2
Further Comments	1	0
Total	**13**	**8**

Figure 53: Semi-Structured Interviews - Themes and Questions.
Hinerangi Eruera Murphy, 2020.

5.2 Mana Whānau



He aha te mea nui o te ao? He tangata. He tangata. He tangata.
What is the most important thing in the world? It is the people.

QI. What are the needs that present for whānau directly affected by disaster?

Mana Whānau is a key theme central to the practice of manaaki. It is defined in this research as, the power and prestige held by tangata whenua, the local people, or residents. Mana whānau also relates to the collective strength and social support prevailing tangata whenua. In a sudden disaster the local people include their friends, pets, neighbours and the wider ethnic community, as extended whānau.

Image 44: Nylah Murphy Ngoungou Adds to the Childrens' Mural.
Hinerangi Eruera Murphy, 2018.

The sub themes that correspond within subsidiary Question I, positioned within the sphere of Mana Whānau are:

- *5.2.1 Māori in Leadership*
- *5.2.2 Principle Based Leadership Styles*
- *5.2.3 Ngāti Awa Te Toki: The Iwi Collective Leadership*
- *5.2.4 Marae*
- *5.2.5 Te Whare Tapa Wha*
- *5.2.6 KōKōhīnau Papakāinga Trust.*

"People need to find meaning in traumatic events and to move beyond trauma" (Spee, 2008). A crisis in the life of one or more whānau member influences the extended others and on a broader scale, can affect the whānau hapū and iwi. All interview participants have whakapapa connections to Mataatua. When asked how the flood had affected them, most participants spoke of general concerns, emphasising how Ngāti Awa had mobilised and the varied ways that support from the collective, was offered (Figure 54).

Phase 2: Recovery — Semi-Structured Interviews

Mana Whānau

Q1. How did the Edgecumbe flood affect you, your whānau or someone you know?

ID	Sentiment ☺	Sentiment ☹	Comments
CHS8		●	*It affected me as a whānau member… It bowled my brother's house and his business there… It affected my father's home… I'm a shareholder in our whānau business at Peppers and I have a responsibility of 8 staff members, of which four of them lived in Edgecumbe… It affected me in my role as the Chairperson of the Rangitāiki Community Board.*
CH09	●		*I've come to know a few families since the flood... In my professional role, I've been privy to what's been going on and they've opened up where, they wouldn't have otherwise.*
TO10		●	*We could see all these gaps as far as communications from Council were concerned... We did some brainstorming and the (Emergency Ops Centre) EOC wasn't or didn't have māori input and enough of our people communicating the problems between Patutātahi and CDEM.*
	●		*We needed people on the ground who could relate to those at Patutātahi. People who they could say, "Yes, this is my whānau. These are the people I whakapapa to. These are the people I feel most comfortable with."*
KE11	●		*Ngāti Awa Health & Social Service were going to mobilise people there... Then NAVA, the Ngāti Awa Voluntary Army... We had whānau over in Awakeri. Rautahi had already started... Hokowhitu was mobilised. Te Teko was getting stuff together... All the marae were.*
PM12	●		*That is the beauty about our Māori people. They just mobilise themselves. They are not going to wait for EOC to get started.*

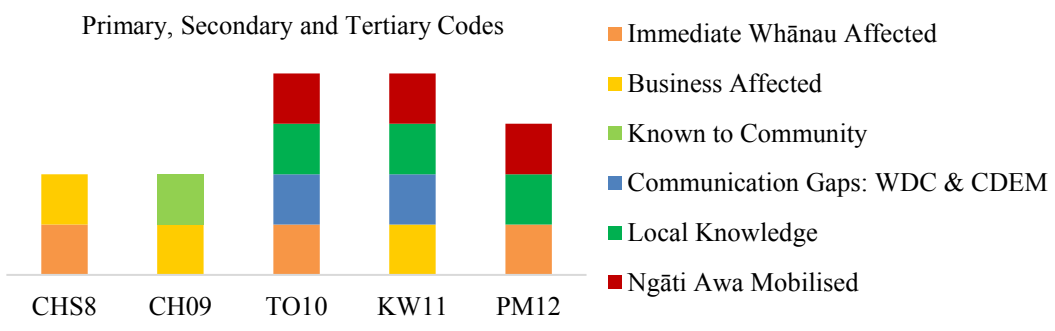


Figure 54: Semi-Structured Interviewees Responses to Question 1, Phase 2.
Hinerangi Eruera Murphy, 2020.

The interview participants had commended Ngāti Awa. They were asked further how they thought the local hapū had helped during the flood. CHS8 (2018) commented, "I needed some guidance from my Rūnanga and my hapū", which did increasingly eventuate, while other interviewees were pleased to readily support when and where they could (Figure 55).

Phase 2: Recovery — Semi-Structured Interviews

Mana Whānau

Q1(a). What role did the local hapū and iwi play for you, your whānau or someone you may know?

ID	Sentiment ☺	Sentiment ☹	Comments
CHS8	●	●	*After the shock of the flood and the enormity of what had happened, I started looking to my Rūnanga (Te Rūnanga o Ngāti Awa, TRoNA) for help. I could not see that presence in the first 48 hours, So, I spoke with my uncle, the Deputy Chair… I was also looking for some strength and guidance for me, as the Chair of the Community Board.*
	●		*I felt a big sense of relief because they (TRoNA) said, "If the Council or the Civil Defence isn't going to let us in there, we will be there regardless, because our people need us."*
CH09	●		*The Rūnanga were trying to be a part of the main support system. I was pleased when they did, because I was able to support that way... Very proud of the way that our hapū and iwi came together.*
TO10	●		*Our people had mobilised in different ways... Meanwhile, we were on the doorstep of Whakatāne District Council saying, "You need to communicate better with our people on the ground…" Now we have a conduit there…We got in touch with Civil Defence too.*
KE11	●		*Some hapū opened their doors instantly...That's what we did at Ngati Hokopu ki Te Hokowhitu atu, not only for those that were related to us but for anyone. We were there to help and manaaki others.*
PM12	●		*My daughter applied for grants through the hapū... Marae offered help too.*

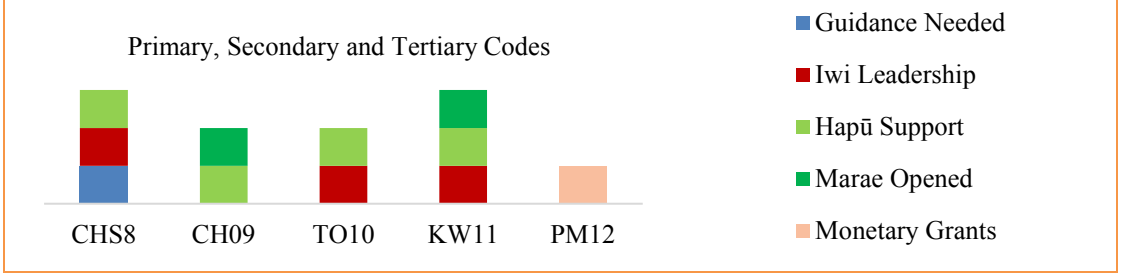


Figure 55: Semi-Structured Interviews Responses to Question 1(a), Phase 2.
Hinerangi Eruera Murphy, 2020.

"Indigenous values and beliefs operate as metaphysical actants that guide action" (Kenny & Phibbs (2015). For many whānau who were displaced, returning to Edgecumbe on a daily or weekly basis, checking the progress of house repairs and making connections with other locals of the community, aided the journey of getting back into routine and helped

with the healing process. Bonding with and taking good care of land for the collective good, lies also within Tikanga Māori.

5.2.1 Māori in Leadership

"The term 'rangatira' sheds light on the nature of Māori leadership. The word meaning 'chief', is gender neutral. The 'ranga' of 'rangatira' is an abbreviation of 'raranga' (weaving), and 'tira' signifies a group" ie: to weave the group into one and provide a sense of unity (Katene, 2013 p.13).

Williams (1975) offers the following five meanings for rangatira:

- Chief, male or female
- Master or mistress
- Person of good breeding
- Well born or noble
- In the expression of whenua rangatira; a state of peace.

The role of the rangatira in a hapū as outlined by Mead (2003, p.229), was to "ensure that the group survived and that its land base and resources were protected and defended." In regard to hapū discussions Mead further mentions that:

> "The kaumātua or rangatira of the whānau gathered together and shared in the decision making. The task of the hapū chief was to listen to the opinions of the kaumātua and others, consider the points and then, at the very end of the discussion, summarise and make a collective decision. The word of the chief then became the policy for all to follow."

Leadership defines strong rangatira as those who are "social and political leaders" (Katene, 2013, p.19), can navigate traditional and contemporary influences and are focused on tasks that support a collective vision. As inferred by Roche (2019), "They are charged with leading (often) marginalised communities, and weaving māori kaupapa (purpose, policy) with contemporary influences on leadership styles and practices." "Thus, it is important to encourage and support those community leaders (like our rangatira or kaumātua ahi kaa) to actively become involved in a disaster recovery" (Spee, 2008).

5.2.2 Principle Based Leadership Styles

Leadership styles are assumed from different philosophies, principles, personality traits and practices. "Traditionally, chiefly authority was not exercised *over* people, but wth their advice and support" (Katene, 2013, p.18). The leadership styles exerted by many of the māori led organisations before, during and after the Edgecumbe flood event were based on the principles of whanaungatanga, rangatiratanga and kotahitanga.

Whanaungatanga is about "people and relationships" (Katene, 2013, p.2), maintaining contact "through shared experiences" (Te Aka Māori Dictionary, 2011), supposing rights and exercising roles and responsibilities. Whanaungatanga within a leadership context implies all stakeholders are involved in some way or form, with addressing challenges and contesting norms. It denotes the *"*identification of problems as well as the development and implementation of solutions that occurs in collaboration with others" (Kenney & Phibbs, 2015). Whanaungatanga much like the non-indigenous concept of adaptive leadership, also ensures people mobilise, ie: they collectively face problems and decisions head on and this encourages for them, new ways of becoming or being.

Rangatiratanga is about exercising authority. sharing a problem or concern with a group of people and informing them in the decision-making process. Within a leadership context it involves collective consultation, obtaining information, asking for opinions about alternatives, delegating tasks or jointly making decisions. "From a māori point of view, accepting responsibility for others is also intrinsically linked with enacting rangatiratanga (actioning leadership) and is embedded at every level of interaction during times of adversity" (Kenny & Phibbs, 2015).

The concept of Kotahitanga is based on bringing people together, as the leaders will guide the way and motivate associated stakeholders to follow. In a leadership context it validates 'people movers' who thrive on success by taking the lead when building teams. Kotahitanga is also a collaborative process in which both groups as "leaders and followers help each other to advance to a higher level of morale and motivation" (Burns, 1978). This model, much like the non-indigenous notion of transformational leadership, focuses on shared benefits sustainability.

5.2.3 Ngāti Awa Te Toki: The Iwi Collective Leadership

There are 224 marae across the Mātaatua region. Sixteen of those marae and 22 hapū, have vested interest in the Rangitāiki River catchment (Figure 56).

Figure 56: Eastern Bay of Plenty Hapū that Affiliate to the Mātaatua Waka.
Te Rūnanga o Ngāti Awa, 2017.

Local hapū of Ngāti Awa responded to the call of the Edgecumbe and wider community by opening their doors and as it is known. "Marae, the traditional communal meeting places, have featured in past disaster responses, providing ready-made spaces for dislocated individuals and families" (Mutu, 2000; Webber, 2008). Iwi efforts across Ngāti Awa during the flood recovery phase and for some time, thereafter, were initiated as follows:

- Rautahi Marae in Kawerau operated as a welfare centre where families could stay, have meals together and access personal needs.

Image 45: Rautahi Marae, Kawerau Prepares for Displaced Whānau.
Regional Council, 2017.

- Iramoko Marae opened for evacuees of Matata.
- Te Hokowhitu a Tū Marae in Whakatāne helped displaced whānau, provided kai and acted as the drop-off point for clothing. Taiwhakaea remained on standby.

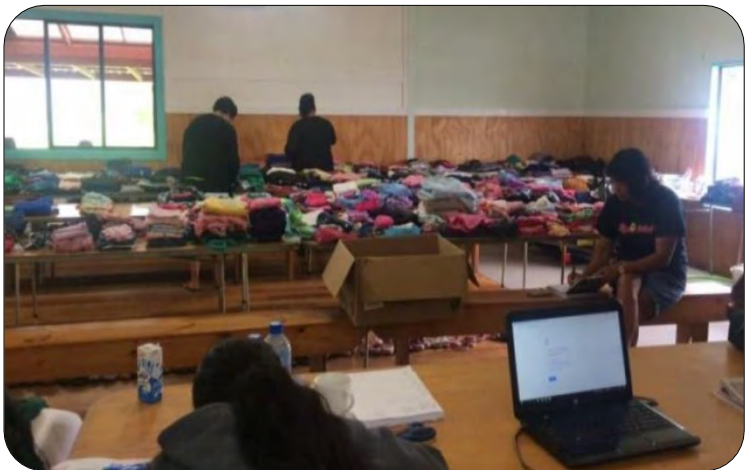


Image 46: Te Hokowhitu a Tū Marae, Whakatāne Drop-Off Point.
Keita Wharewera, 2017.

- Te Whare Wānanga o Awanuiārangi housed 65 whānau evacuees, the First Respondents and associated support workers, at the Whakatāne campus.
- Te Ōhanga Mataora nursing students and staff of Te Whare Wānanga o Awanuiārangi provided medical and trauma support for evacuees at Rautahi Marae.
- Rangataua and Pupuaruhe marae were made available as safe havens.
- Ruaihona Marae in Te Teko collaborated alongside the Whakatāne District and Regional Councils, to establish a base for the Ngāti Awa Voluntary Army and Māori wardens.

Image 47: Collaboration Hui at Ruaihona Marae, Te Teko.
Hinerangi Eruera Murphy, 2017.

- Hunters from around the Bay of Plenty donated kills and qualified butchers cut the meat up at Kōkōhīnau Marae. Supermarkets, packhouses and locals also donated to the Kaiwaka project.

Image 48: Carving up Donated Meat at KōKōhīnau Marae, Te Teko.
Radio New Zealand, 2017.

- NAVA - Ngāti Awa Voluntary Army set up to help with the community clean-up.
- Te Tohu Ora o Ngāti Awa had two nurse practitioners in emergency response mode.
- Te Tohu Ora o Ngāti Awa attended Welfare Centres set up in the Whakatāne Memorial Hall and Awakeri Community Hall. Staff also assisted at the cordon area supporting whānau anxious to check their homes.
- Māori wardens and local tangata whenua set up security and night patrol once the cordons were lifted in the Edgecumbe vicinity.
- Iwi presence alongside the two Councils, was always visible.

Image 49: Kaimahi of Te Tohu Ora o Ngāti Awa, Whakatāne, 2017.
NASH Kia Kaha Facebook Page Enid Ratahi-Pryor, 2017.

- The Te Teko Community Hall opened to welcome whānau with a cup of tea and act as a drop-off point for second-hand clothing, linen and small kitchen goods.

Image 50: Volunteers at the Te Teko Community Hall.
Whakatāne Recovery Project, 2017.

The Whakatāne District Council, Regional Council, Rangitāiki Community Board, Red Cross Rapid Response Team, Civil Defence Team, Police, Fire Brigade, SPCA, DHB and NZ Army were on site and operated for 10 days, from the Memorial Hall in Edgecumbe. Thereafter Te Tari Awhina, continued at the Library. The following public services also resumed:

- Te Whānau Ora was available two days a week at the Community Hub.
- Navigators were on site to assist families with accessing the services to help with recovery and ongoing wellness.
- Te Tohu Ora o Ngāti Awa was visible at Edgecumbe Primary School, with an outreach post alongside the DHB, at the Community Hub.
- Manaaki Whānau continued to assist displaced whānau.
- The Te Teko Community Hall remained open.
- Pou Whakaaro in Whakatāne continued as a drop off point for second-hand goods, furniture and whiteware.
- The Edgecumbe Voluntary team resumed under NAVA.
- Organisations that included Te Rūnanga o Ngāti Awa and Pūtauaki Trust provided displaced affiliated whānau with relief fund koha.
- Papakāinga as housing, was planned with Te Puni Kokiri, at Kōkōhīnau Marae.

5.2.4 Marae

The marae is an ancestral, communal space and haven for Māori, where whakapapa is known, culture is acknowledged and Te Reo Māori is actively spoken. As a 'home away from home' that has survived the impact of modern society and western civilisation, the marae is where whānau group and mātauranga-a-hapū, or the ways and values of the affiliated subtribe, are clearly reaffirmed.

Marae have the capability to cater for many people and the infrastructure that unassumingly afford Māori, to live as Māori. Marae also provide access to people, skills and resources, as well as recognised social networks and community leaders whose resources and expertise are vital to rapid response when disasters occur (Busby, 2010). At a time when direction and trusted leadership was needed, Ngāti Awa marae opened their doors and supported displaced whānau of Edgecumbe and the wider community.

5.2.5 Te Whare Tapa Wha

The wharenui or meeting house, is just one of the buildings located on a marae. It is a symbol widely used in the health sector to illustrate Mason Durie's Whare Tapa Wha Model (Figure 57). The four walls as human well-being dimensions, represent taha tinana (physical) taha hinengaro (psychological), taha wairua (spiritual) and taha whānau (family). Just as each corner of the wharenui must be strong and balanced to hold the structure, so must each dimension of health, for optimum well-being to exist. The Whare Tapa Wha was exercised by members of Te Tohu Ora o Ngāti Awa and the Recovery Navigators to support the recovery of Edgecumbe whānau.

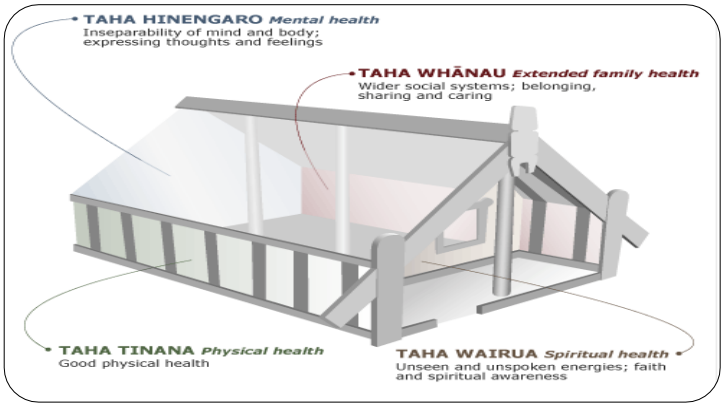


Figure 57: Whare Tapa Wha Model (Mason Durie, 1982).
Te Ara, The Encyclopaedia of New Zealand, 2015.

5.2.6 KōKōhīnau Papakāinga Trust

To assist displaced whānau affiliated to the hapū of Te Pahīpoto with temporary accommodation, papakāinga housing development was affirmed at KōKōhīnau Marae, just 5 kilometres out of Edgecumbe. "The term papakāinga refers to a group of houses, of three or more, on whenua māori as a 'community' which may include broader support and occupant involvement" (Te Puni Kokiri, 2017).

Land was offered in good will to the government, for the purpose of locating emergency houses and a partnership between the KōKōhīnau Papakāinga Trust, Māori Development Minister Te Ururoa Flavell and Minister Nick Smith was approved.

Image 51: The KōKōhinau Papakāinga Trust Housing Development. Taupara Eruera, 2017.

Stage 1A of the housing project has been completed. Five two bedroomed homes were built in 2018 and are now occupied by displaced whānau. When the need for temporary housing is no longer required or the tenancy agreements expire, the homes will be retained as rental homes for kaumātua. It is envisaged that a total of 19 more rental homes will be made available.

Stage two is aimed at erecting a whare oranga, social service delivery hub that provides medical support, counselling, health promotion, fitness and mobility, budget advice and marae-based leadership training. Stage three of the KōKōhīnau Papakāinga Trust development foresees that land will be made available to build a further 15 homes for whānau hapū, on a Lease to Own, or First Home Ownership Programme. The plans also include the inclusion of a foster care complex for tamariki/mokopuna.

5.3 Mana Whenua

Toitū te whenua, whatungarongo he tangata.

The land remains when the people have moved on.

Q II. How does disaster impact on and reshape, the whānau unit?

Mana Whenua is a key theme central to the practice of manaaki. It is defined in this research as, the power and prestige held by local people over land, territory or environment. Mana Whenua also relates to the environmental conditions and the leadership that is required of governing bodies, in a disaster situation.

Image 52: Sunset Over the Flooded Town of Edgecumbe, 2017.
Chris McKeen, Fairfax, NZ, 2017..

The sub theme that corresponds with subsidiary Question II, positioned within the sphere of Mana Whenua is:

5.3.1 Climate - Global Warming.

5.3.1 Climate - Global Warming

Climate change also referred to as global warming, focuses on the rise in surface temperatures on the Earth's surface. When interview participants were asked what they knew about climate change many assumed it had to do with the weather (Figure 58). Interview participant TO10 (2018) spoke openly about observing what is happening in the local environment and remarked "…that's Mātauranga Māori versus Science I guess as far as climate, the changes that are happening and how we respond to it… I do believe that."

Phase 2: Recovery — **Semi-Structured Interviews**

Mana Whenua

Q6. What do you know about climate change?

ID	Sentiment ☺	Sentiment ☹	Comments
CHS8	●	●	*My academic answer to that is, not much. We need to look at that nationally… For us it's about transparency and understanding what our weather patterns are looking like and not fighting, that is actually- we need to accept it and say "OK, well these are the facts. This is the science behind it… How do we co-exist with it?"*
CH09	●		*The weather and how it was raining a whole lot more last year.*
TO10	●		*A lot of us, who are practitioners go out and we watch the water… It was the same up the bush when you went hunting…. I don't go to the calendar as often now. I use the one that my father used, the old Māori calendar because times have changed.*
KE11	●		*I'm still learning about climate change... Seeing how climate has changed, has really opened my eyes and to the seriousness of it. Not only in Aotearoa but throughout the world. It seems like indigenous cultures everywhere, they've made this aware to the world, many years before this even happened. I tend to pay more attention to it now.*
PM12	●		*I know that different types of weather can affect everything. How things grow, the temperature and the water levels rising.*

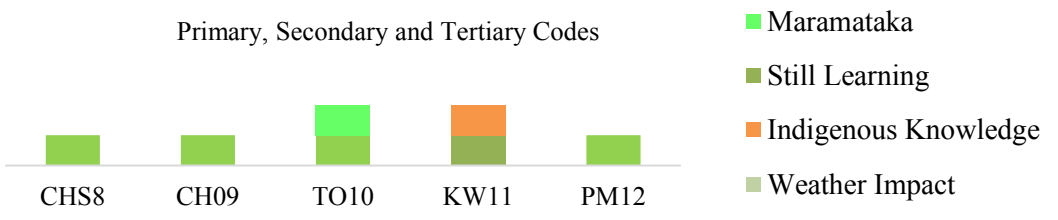


Figure 58: Semi-Structured Intervieews Responses to Question 6.
Hinerangi Eruera Murphy, 2020.

Like many local Maori, TO10 (2018) emphasised his concern for the Rangitāiki River: "I think our tīpuna awa is getting hōhā, getting tired of this, what we're doing to it and what was done to it over the years and every now and then our people down there are

catching the brunt of it. We've had the flood in 2004 and the 1987 earthquake." TO10 (2018) had talked extensively of environment tohu, hīnaki, fishing and the bush using the Māori calendar. He expressed one further view about climate change, Mātauranga Māori, and the Rangitāiki River:

> "There's a relationship between climate change and what the tauiwi see, but we must incorporate Mātauranga Māori in how we see it. Integrate the two and that's what we're doing now. How are we going to stop the stress that we're putting on our tīpuna awa, so it doesn't vent its frustrations on our people?"

At a time of great despair, the interviewees, like the Edgecumbe community, relied heavily on trusted communication, direction and leadership (Figure 59).

Phase 2: Recovery — **Semi-Structured Interviews**

Mana Whenua

Q9. What role did WDC and CDEM play for you in the disaster?

ID	Sentiment ☺	Sentiment ☹	Comments
CSH8		●	*I do not think that we were educated enough, around the effects of the dam… The District Council lacked in their collaboration… They were ill-prepared…. Civil Defence ran the defence programme, but Council should've been walking alongside them in some capacity, because at the end of the day, when that State of Emergency was lifted, they were handed everything.*
CH09		●	*I would imagine there would be forward thinking… The manual says 'relationships with key community' but it doesn't specifically name who they are… They've seen through this disaster that it is important to have iwi and community involvement.*
TO10		●	*They did the best that they could…They just weren't seeing what was happening on the ground and there was a lack of communication… The District Council and Regional Council should immediately get in touch with our people who have been there done that and say, we need your help. How do we mobilise the marae? How do we talk to the people on the ground? How do we mobilise the likes of NASH? How do we factor all these people in? But they still haven't yet.*
KE11		●	*I don't think the Council did that great of a job to be honest. It was very clinical, in the processes that happened and not a lot of respect for those affected.*
PM12	●	●	*The support from Council to me was always offered. I just don't think they really knew how to get that support out to the people.*

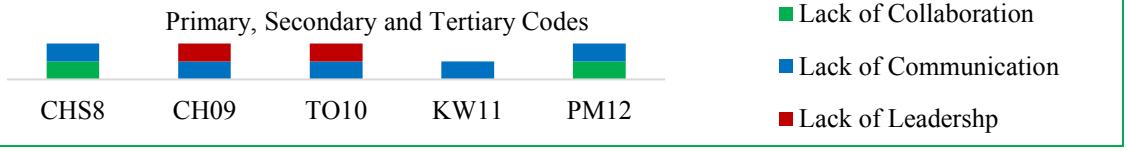


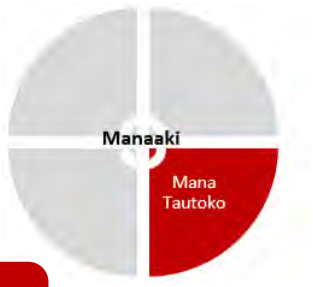
Figure 59: Semi-Structured Intervieews Responses to Question 9.
Hinerangi Eruera Murphy, 2020.

“A key component of an ecological approach is recognising the relationship between the environment/settings and people and how they influence each other” (Spee, 2008). Weather and weather forecasts affect people’s health and lifestyles, the economy, community and the local environment.

When questioned about the roles of the Whakatāne District Council (WDC) and the Civil Defence Emergency Management (CDEM) team at the time of the flood, the Semi-Structured interviewees, like the Focus Group participants, were unsure of local government leadership, what the plan ahead was for the community of Edgecumbe and when support would be forthcoming. “Engagement with iwi is a component of community engagement that requires particular consideration, given the traditional but often unrecognised capacity and capability they bring to responses in rural and remote locations” (Brunsdon & Hinton, 2017).

“Despite the negative effects that are present in times of crisis”, as mentioned by Deiroz & Kapuchu, (2012), “It is important to acknowledge the fact that crises generate a window of opportunity in which a leader has the chance to reform institutional structures and long-standing policies.”

5.4 Mana Tautoko



Ehara taku toa i te takitahi, he toa takitini.
My strength is not mine alone, but ours as a collective.

QI. What are the needs that present for whānau directly affected by disaster?

QII. How does disaster impact on and reshape, the whānau unit?

Mana Tautoko is a key theme central to the practice of Manaaki. It is defined in this research as, the support systems that displaced whānau need for physical, emotional, and spiritual wellbeing. Mana Tautoko also relates to the direction and leadership within associated groups.

Image 53: NAVA and Māori Wardens – Gumboots Issue.
Whakatāne District Council, 2017.

The sub themes that correspond with subsidiary Questions I and II, positioned within the sphere of Mana Tautoko are:

5.4.1 Post Flood Support

5.4.2 Community Recovery Plan

5.4.3 Te Manawa o Rangitāiki.

5.4.1 Post Flood Support

Disaster recovery involves policies and procedures that enable the support systems to continue. The following table outlines some of the co-ordinated tasks that occurred.

Disaster Assessment	
• Rapid assessment	• Victims' needs assessments
• Preliminary damage assessment	• "Lessons learned"
• Site assessment	
Short Term Recovery	
• Impact area security	• Emergency demolition
• Temporary shelter/housing	• Repair permitting
• Infrastructure restoration	• Donations management
• Debris management	• Disaster assistance
Long Term Reconstruction	
• Hazard source control and area protection	• Infrastructure resilience
• Land use practices	• Historic preservation
• Building construction practices	• Environmental recovery
• Public health/mental health recovery	• Disaster memorialization
• Economic development	
Recovery Management	
• Agency notification and mobilization	• Public information
• Mobilization of recovery facilities and equipment	• Recovery legal authority and financing
• Internal direction and control	• Administrative and logistical support
• External coordination	• Documentation

Figure 60: Disaster Recovery Functions.
Michael, Lindell, Carla. Prater, Ronald & Perry.

When interview participants were asked how the lives of whānau, or someone they knew had changed, there was an emphasis on the support services (Figure 61).

Phase 2: Recovery — **Semi-Structured Interviews**

Mana Tautoko

Q12. How has your life, the lives of your whānau or someone you know changed, as result of the flood?

ID	Sentiment ☺	Sentiment ☹	Comments
CHS8	•		*My partner and I are both are big believers in manaakitanga, tautoko and whanaungatanga and we always do that within our own whānau and hapū… This event has changed our own personal views. It's created not conflict in our household but, more robust discussion… I must also say that I've been blown away with and feel so humbled, when I think about those first few days and how we were able to tautoko.*
CH09	•		*What I've really loved about this community is they are tighter knit now. The neighbours are looking out for the neighbours, relationships have developed, and they are able to have more conversations over the fence…*
TO10	•		*It's been a huge learning for us. It's also made me appreciate how well we as Māori, look after each other… You are the community now. You are the leaders. You are the kaumātua. You are the people who can build this community into what you want it to be. You can build a marae.*
KE11	•		*Knowing the people that we have helped, who we touched base with and still do. I have allowed time and space for them to be able to settle down.*
PM12	•		*I don't think there's a lot of changes in ours… It's just offering, being there if our daughter needs us and other whānau members.*

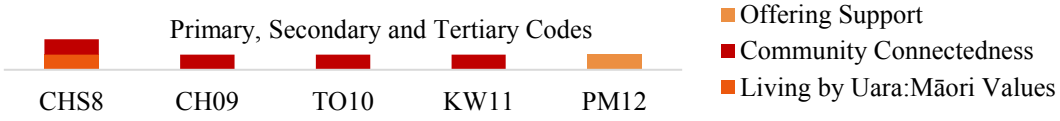


Figure 61: Semi-Structured Intervieews Responses to Question 12.
Hinerangi Eruera Murphy, 2020.

5.4.2 Community Recovery Plan

Five months following the flood, as the whānau of Edgecumbe moved from repair into the rebuild stage of recovery (Figure 62), a 'large scale' Community Workshop was organised. From the June Expo, conversations, thoughts and ideas of the residents and stakeholders were collated, a Community Recovery Plan drafted, consulted upon and strategies were put in place.

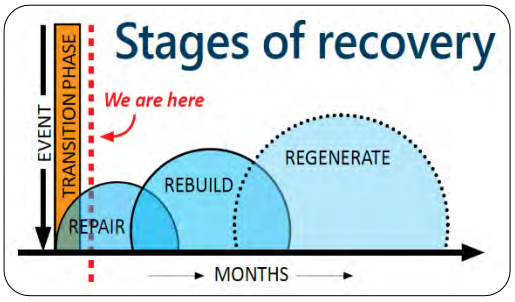


Figure 62: Stages of Recovery, May 2017. WCD Recovery Project, 2017.

Mr Peter Kenyon, who often worked alongside the Whakatāne District Council, facilitated the workshop. The Community Action Plan, underpinned by six guiding principles (Figure 67), was sought to provide direction for action in Edgecumbe and the surrounding rural hinterland, that restores community confidence, connections, pride, infrastructure and economic vitality (Whakatāne District Recovery Project, 2017). It is interesting to note that the guiding principles of the plan were inspired by three key themes that are also outlined in this research (Figure 63).

Six *Guiding Principles* have been identified for this Action Plan, inspired by Mana - Tangata, Whenua, Whānau, Hapori; namely:

- **Respect** – valuing all community residents for their wisdom, ideas and ongoing contributions and participation.
- **Inclusion and Participation** – creating community options that foster strong neighbour and community connections, pride, positivity and active participation.
- **Community Leadership** – encouraging community ownership of a positive future and active participation by Edgecumbe residents to provide the leadership and necessary community building.
- **Collaboration and Coordination** – fostering stronger partnerships, collaborative approaches, networking, and integrated programme delivery; aiming for the smarter use of resources and reduced fragmentation, duplication and overlap of efforts and services.
- **Asset and Opportunity Focus** – building upon local assets, creativity and existing resourcefulness, and especially facilitating opportunities that enable young people to contribute their passions, ideas, skills and opportunities.
- **Integrity and Transparency** – ensuring the highest ethical and professional behaviours in all activities and processes; building a strong sense of trust, openness, respect and reliability.

Figure 63: Edgecumbe Community Recovery Plan – Guiding Principles. WCD Recovery Project, 2017.

Over 90 ideas were collated that focused on what was considered priority and what community members aspired to retain, change, start or introduce. Under change the residents asked that the Civil Defence plan be revised and revisited, the traffic in the town be slowed down and that reassurances about the structural safety of the stop bank wall be

provided. New project ideas included a Night Market in the Mall, security cameras around the town, more activities for youth and further enhancement to the river walkway, (WDC Recovery Project, Newsletter 28, 2017). Based on the vision, guiding principles, feedback and the feed forward from the residents and stakeholders, five desired outcomes were identified. The Edgecumbe community wanted:

1. A rebuilt township and district that enables residents and businesses to return to a safe and fully functioning community.
2. An attractive and inviting township that attracts a growing resident population and become a significant tourist destination.
3. A place where residents experience social and neighbourhood connection and support, access to a wide range of local events, opportunities and facilities and feel a sense of community pride and security.
4. A vibrant and growing business community that offers both a diverse range of services and products and local employment opportunities.
5. A community that enables its young people to experience community connection, protection, respect and engagement in a wide range of educational, recreational and employment opportunities (WDC Recovery Project, 2017).

The Rangitāiki Board Chair Charelle Stevenson organised further hui to establish a committee, that would be committed to governing and taking the plan further.

5.4.3 Te Manawa o Rangitāiki

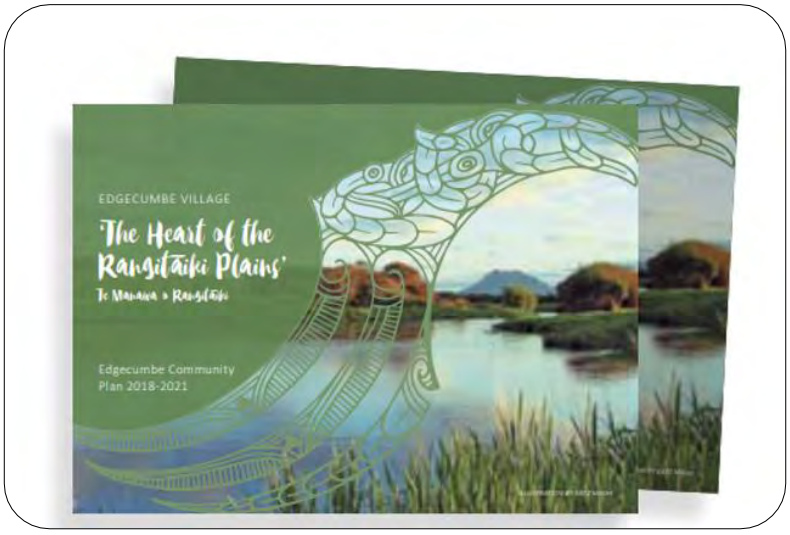


Figure 64: The Heart of the Rangitāiki Plains Community Action Plan. WCD Recovery Project, 2018.

Te Manawa o Rangitāiki is the 2018-2021 Edgecumbe community plan (Figure 64). Governance is provided by the Edgecumbe Collective, who are representatives from local groups and organisations. The document includes a mihi, pepeha and Edgecumbe history and details the key priorities and tasks to be actioned over four years. The goals are to:

1. Create destination facilities and parks.
2. Establish a town theme identity or point of difference.
3. Develop a strategy to promote local businesses.
4. Implement a beautification plan.
5. Develop a youth strategy.
6. Connect communities through events and activities.
7. Implement crime prevention initiatives.
8. Be prepared in the event of an emergency.

When participants were asked what problems whānau, or someone they knew had to deal with now, the responses varied based on location and personal circumstances (Figure 65).

Phase 2: Recovery — **Semi-Structured Interviews**

Mana Tautoko

Q14. What problems do you, your whānau, or someone you know, have to deal with now?

ID	Sentiment ☺	Sentiment ☹	Comments
CHS8	●	●	*I think that my whānau were lucky… that we adapt to change quite well… My brother lived opposite the breach and is never to return… Dad's wāhine of 25 years she died. At that time, they were living in another house and so she was away from her home… Then my brother-in-law, 2 months after that, he was killed in really unknown circumstances… I'm in a place where I'm allowing myself to be a bit hōhā with people.*
CH09			*No comment.*
TO10	●	●	*It's coming up to the Flood Anniversary and that's going to hurt people and everything. They're going to live it all over again… There are still whānau who aren't in good spaces… As long as we are there to support that.*
KE11	●		*The immediate families that live over in Edgecumbe, we understand that they're now okay. They've settled into back in their houses. We've all been keeping track of those families, that are our whānau.*
PM12	●		*Waiting for everyone to get back in the homes and get back to normal.*

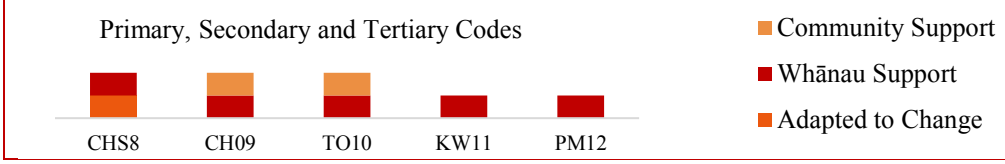
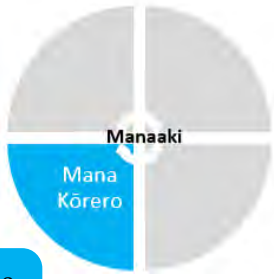


Figure 65: Semi-Structured Intervieews Responses to Question 14.
Hinerangi Eruera Murphy, 2020.

5.5 Mana Kōrero



Ko te kai a te Rangatira, he kōrero.

The sustenance of leaders is communication.

QIII. What is the role of communication technologies and social media for displaced whānau in a disaster situation?

Mana Kōrero is a key theme central to the practice of manaaki. It is defined in this research as, the digital information infrastructure that aids and supports both synchronous, real time and asynchronous, any time communication. Mana Kōrero also relates to technologies and the social networking sites that displaced whānau refer to in a disaster situation.

Image 54: Affected Homes of the Edgecumbe Community.
Eagle Technology, 2017.

The sub themes that correspond with subsidiary question III, positioned within the sphere of Mana Kōrero are:

5.5.1 Communication Technologies

5.5.2 Social Media.

5.5.1 Communication Technologies

During the days that followed the flood, many Edgecumbe residents were outraged and in need of answers. The media had become a direct platform to vent or publicly voice concerns and One News reporters were on site to do so. Politicians benefitted from the window of opportunity and Duncan Garner of the AM Show had a genuine interest in affected whānau views. Technologies were the ideal medium for disseminating and obtaining information.

When interview participants were asked what technologies they used at the time of the flood, all spoke of mobile phones (Figure 66). Two respondents preferred to talk in person.

Phase 2: Recovery — **Semi-Structured Interviews**

Mana Kōrero

Q16. What communication technologies did you, your whānau or someone you know use and why, during the flood event?

ID	Sentiment ☺	Sentiment ☹	Comments
CHS8	●		*Cell phone.*
CH09	●		*Mobile and Facebook is a biggie.*
TO10	●		*We use our phones. If there's one means of communication that worked best for us as Māori, it was kanohi ki kanohi, because then you can see taste feel. Feel the people and the wairua in the room and the taumaha and the pouri and all that.*
KE11	●		*Computer, cell phone and Facebook.*
PM12	●		*Most of the time I just used my cell phone and talked to people personally.*

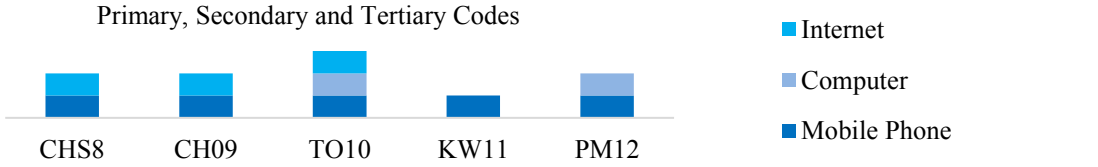


Figure 66: Semi-Structured Intervieews Responses to Question 16.
Hinerangi Eruera Murphy, 2020.

Kanohi ki kanohi or face to face contact is a preferred mode of communication, because as mentioned by TO10 (2018) and also Ngata (2016), "it allows one to not only see who or what one is communicating with, but also to hear, feel, and smell the relationship." Kanohi ki kanohi works well for Māori given it affords an opportunity to hongi and embrace, demonstrates the importance of the kaupapa or reasons for the hui, enhances credibility and trust, strengthens relationships and makes people feel valued. In this day

and age kanohi ki kanohi can also be achieved via technology and tools like FaceTime, Skype or Zoom video conferencing.

5.5.2 Social Media

When interview participants were asked what social media they, or members of their whānau used during the flood, Facebook was acknowledged and like the Focus Group interviewees, the Kia Kaha Edgecumbe social media page was often visited for local information and updates. It was also an online space where the community of Edgecumbe felt connected (Figure 67).

Phase 2: Recovery — **Semi-Structured Interviews**

Mana Kōrero

Q17. What social media did you, your whānau or someone you may know use and why, during the flood event?

ID	Sentiment ☺	Sentiment ☹	Comments
CHS8	●	●	*Full credit to Facebook. I've always been anti-Facebook, but I think if you want information out there instantly, you get it out. You use that… The Kia Kaha page needed to have an Administrator that comes down hard… I've seen the positive effects of the Kia Kaha page and I've seen the negative effects.*
CH09	●		*Facebook especially social media... The Kia Kaha page was very informative for Edgecumbe.*
TO10			*No comment.*
KE11	●		*Social media is really good if you know how to use it well. It was effective for getting the message out.*
PM12			*No comment.*

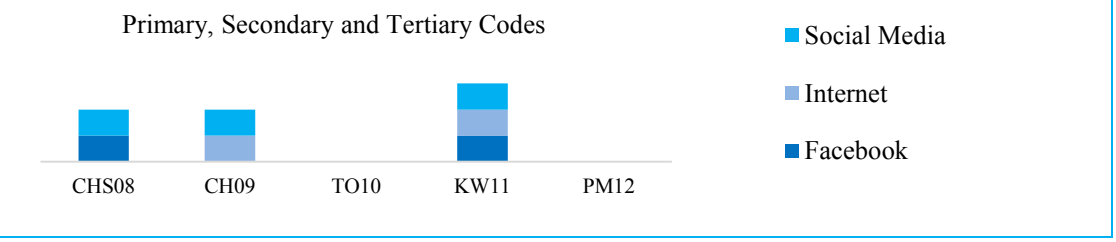


Figure 67: Semi-Structured Intervieews Responses to Question 17.
Hinerangi Eruera Murphy, 2020.

Social media usage played a critical role for both affected locals and local government officials. From warning whānau that the concrete wall was about to breach during the anticipatory phase of the flood event, to organising volunteers for the NAVA army in the aftermath, social media demonstrated its power in serving as an effective disaster response platform.

5.6 Ūpoko Whakarāpoto - Chapter Summary

The Semi-Structured Group participants were asked 13 questions based on the themes of Mana Whānau, Mana Whenua, Mana Tautoko and Mana Kōrero. The interviewees included five Māori, one male and four females, all over the age of 30, with affiliations to Ngāti Awa. One member had been affected by the flood, as were her immediate whānau. All participants have lived in the Mataatua region for more than 10 years and served on, or supported marae associated groups.

The questions and participants sentiments were collated. From that data, eight sets of comments with relevance to the research subsidiary questions, were selected for this chapter. As the responses were being compared, subject areas both new and common across the themes, transpired.

To systematically organise this data, the subject areas were entered into a spreadsheet under the key themes and sub themes as primary, secondary and tertiary codes. The codes that are highlighted below, indicate each of the key themes, areas and needs of most importance (Figure 68).

Chapter 5: Semi-Strctured Interviews

Korowai Manaaki – Key Themes, Primary, Secondary and Tertiary Codes

	Mana Whānau		Mana Whenua		Mana Tautoko		Mana Kōrero
2	Immediate Whānau Affected	1	Known to Community	3	Ngāti Awa Mobilised	1	Communication Gaps:WDC
3	Business Affected	3	Local Knowledge	3	Iwi Leadership	1	Communication Gaps:CDEM
		4	Hapū Support		Monetary Grants	1	Guidance Needed
	Māori in Leadership	2	Marae Opened				
	Principle Based Leadership Styles			1	Lack of Leadership	1	Lack of Communication
	Ngāti Awa Te Toko: The Iwi		**Climate – Global Warming**				
	-Collective Leadership	1	Māramataka		**Post Flood Support**		**Communication Technologies**
	Marae	4	Still Learning			3	Internet
	Te Whare Tapa Whā	1	Weather Impact	2	Community Connectedness	1	Computer
	KōKōhīnau Papakāinga Trust					5	Mobile Phone
		1	Lack of Collaboration		**Community Recovery Plan**		
1	Indigenous Knowledge				**Te Manawa o Rangitāiki**		**Social Media**
4	Community Support					3	Social Media
1	Offering Support			5	Whānau Support	2	Internet
				3	Adapted to Change	3	Facebook
2	Living by Uara: Māori Values						

Figure 68: Semi-Structured Interviews - Themes and Codes.
Hinerangi Eruera Murphy, 2020.

To show the commonalities at a glance, colour coded graphs were included in each of the interview tables.

The overall aim of this study is to identify the key understandings that emerge from the practice of manaaki for displaced whānau in a disaster situation.

Research Subsidiary Questions:

I. What are the needs that present for whānau directly affected by disaster?

II. How does a disaster impact on and reshape, the whānau unit?

III. What is the role of communication technologies and social media for displaced whānau, in a disaster situation?

The findings of the Semi-Structured interviews are indicative of the key themes, sub themes, primary, secondary and tertiary codes that weave together and interconnect like whenu and aho in a korowai. The following diagram illustrates the sum of many thematic parts and informs participants responses to the research questions. Four concepts that preceded the themes, namely Health and Well-Being (Hauora), Support Systems (Awhi Oranga), Communication (Whakawhitinga) and Leadership (Rangatiratanga) are included (Figure 69).

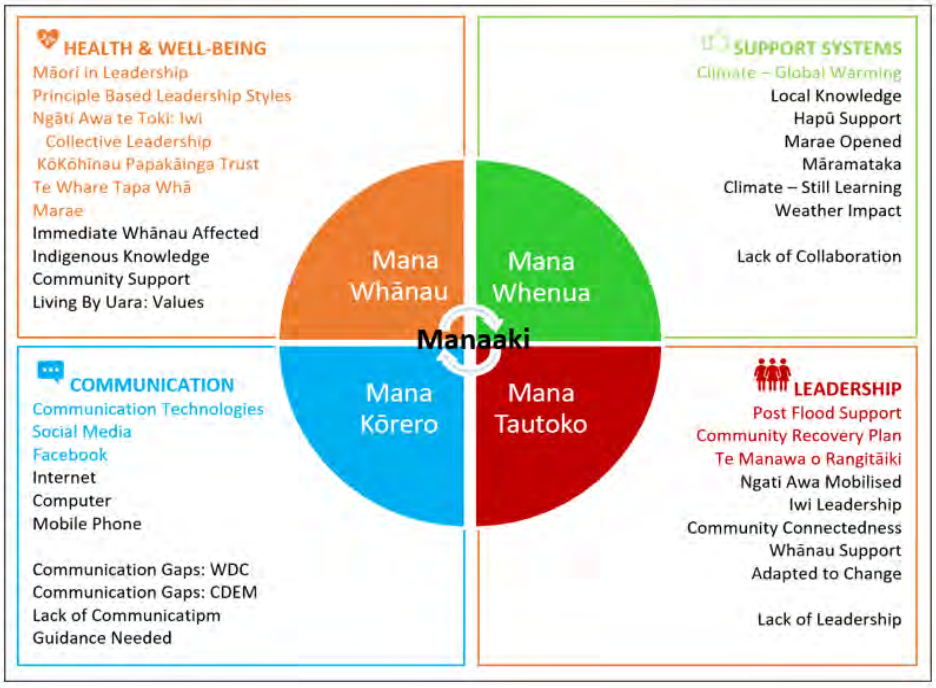


Figure 69: Semi-Structured Interviews: Summary of Key Concepts.
Hinerangi Eruera Murphy, 2020.

The findings have furthermore confirmed that, the (indirectly affected) participants were willing and able to support the community needs, especially during the early recovery

period. That personal support varied from donating supplies, scheduling hui, folding clothes, helping to cook food at the marae, to volunteering for NAVA, spading silt and organising cups of tea.

To conclude this chapter the excerpts that follow, briefly validate the concepts and give rise to some of the key understandings that have emerged from the practice of manaaki for displaced whānau, during the Edgecumbe flood.

Health and Well-Being (Hauora)

Ngāti Awa Te Toki - Iwi Collective Leadership: All interview participants have whakapapa connections to Mataatua. When asked how the flood had affected them, their whānau, or someone they knew, most participants spoke of general concerns, emphasising how Ngāti Awa had mobilised and the varied ways that support from the collective, was offered.

Support Systems (Awhi Oranga)

Lack of Collaboration: At a time of great despair, the Edgecumbe community relied heavily on trusted communication, direction and leadership. When questioned about the roles of the Whakatāne District Council (WDC) and the Civil Defence Emergency Management (CDEM) team at the time of the flood, the Semi-Structured interviewees, like the Focus Group participants, were unsure of local government leadership, what the plan ahead was for the community of Edgecumbe and when support would be forthcoming.

Leadership (Rangatiratanga)

Community Connectedness: When participants were asked what problems whānau, or someone they knew had to deal with now, the responses were varied. One interviewee spoke of the post flood effects on a number of whānau members, while another mentioned the community regeneration and event anniversary that was at the time, to occur.

Communication (Whakawhitinga)

Facebook: When interview participants were asked what social media they, or members of their whānau used during the flood, Facebook was acknowledged and like the Focus Group interviewees, the Kia Kaha Edgecumbe social media page was often visited for local information and updates. It was also an online space where the community of Edgecumbe felt connected.

Planning Ahead:

Over 90 ideas were collated for the Community Action Plan, that focused on what was considered priority and what the community members aspired to retain, change, start or introduce. Under change the residents asked that the Civil Defence plan be revised and revisited, the traffic in the town be slowed down and that reassurances about the structural safety of the stopbank wall, be provided. New project ideas included a Night Market in the Mall, security cameras around the town, more activities for youth and further enhancement to the river walkway, (WDC Recovery Project, Newsletter 28, 2017).

This chapter presented the findings whenu and aho of the Semi-Structured Group interviews. Similar to the previous chapter, Ūpoko Tuarima details the core subject areas grouped as codes and four important concepts that emerged.

ŪPOKO TUAONO - CHAPTER SIX
WHATU NGĀ KOHINGA MATAURANGA
WEAVE IN THE DOCUMENT COLLECTION FINDINGS

6.0 Ūpoko Whakatūwhera - Chapter Introduction

Ūpoko Tuarima presented the findings whenu and aho of the Semi-structured Group interviews.

This chapter weaves in and presents the findings whenu and aho of two document collections, relative to the key themes. Like the previous two chapters, Ūpoko Tuaono informs four very significant concepts that have transpired.

6.1 Ngā Kitenga - Findings

The purpose of this study was to identify the key understandings that emerge from the practice of manaaki for displaced whānau in a disaster situation. The documents that have been examined for this chapter include The Whakatāne Recovery Project Newsletters and an Online Survey. Bell (2010, p.5) advises that, "the methods of research approached can vary according to different styles and traditions of gathering data. Proper selection of documents is particularly important in content analysis, examination and interpretation of data."

6.2 Whakatāne District Recovery Project Newsletters

The Whakatāne District Recovery Community Plan was developed by the Whakatāne District Council with input and advice from organisations that included the Community Boards, Regional Council, Federated Farmers and iwi representatives, just to name a few. An important milestone under the goal of partnership, was to provide the Eastern Bay of Plenty community with newsletters that were regular and timely, with clear relevant messaging.

The bulletins were published twice a week in May 2017 and from February 2018 on, as whānau returned home, distribution continued fortnightly until May 2018 (Figure 70).

Thereafter the Edgecumbe Collective took over for the local community. The Recovery Project Facebook page reached 91,951 members and over 800 newsletters went out (Whakatāne District Council, 2017).

2017-2018 Project Newsletters – Monthly Publications					
May	8	Sept	5	Jan	2
June	9	Oct	4	Feb	2
July	5	Nov	4	Mar	4
Aug	4	Dec	3	May	2

Figure 70: Frequency of Recovery Project Newsletters. Hinerangi Eruera Murphy, 2020.

6.3 Online Survey

The medium used to collect data that focused primarily on question three, communication technologies and social media, was Survey Monkey, a survey creator software. Survey Monkey provides options for collecting responses that include email, embedding directly into a website or Facebook page, or via a weblink. The online software was chosen because of its simplicity and instantaneous results.

The intended target group were members of the Edgecumbe community. Generating an online survey five weeks after the flood, was one sure way, to reach this cohort. The Kia Kaha Edgecumbe Facebook public page was created in response to the severe flooding. An introductory post and survey link was posted there.

6.4 Mana Whānau, Mana Whenua and Mana Tautoko

Research Subsidiary Questions:

What are the needs that present for whānau directly affected by disaster?

How does a disaster impact on and reshape, the whānau unit?

The District Recovery Project newsletters were aimed at supporting the needs of whānau across the entire Eastern Bay of Plenty. The information was concise and easy to read. On closer examination of the first 3 months, the May 2017 newsletters focused on primarily on temporary accommodation, food and clothing donations, services and support

offered at the Awhina Hub, funding assistance that was available and The Liveable Homes Project. The 9 newsletters for June 2017 provided updates on the previously mentioned topics and included items about voluntary support, flood damage reports, health and wellbeing initiatives and the upcoming Recovery Expo.

The newsletters also documented a timeline of events for Edgecumbe (Figure 71). Many of the news items are categorised under one or more of the key concepts:

Health and Well-Being (Hauora) **Robust Support Systems (Awhi Oranga)**

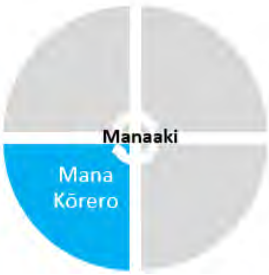
Leadership (Rangatiratanga) **Communication (Whakawhitinga)**

MAY 2017	
Small Business Assistance	Te Tari Awhina Hub Opens
Liveable Homes	Stages of Recovery
Updates: Mayoral Fund, EQC, Waste, Accommodation	College Road Footpath Update
Rates Postponement	Tzu Chi Foundation Donations
Liveable Homes Process Summary	Recovery Project Facebook Page
Temporary Accommodation	Te Tari Awhina Update
Pou Whakaaro	Riverslea Medicate Centre Update
Relocatable Homes in the Holiday Park	College Road Upate
EQC Update	Navigators
Stickered Homes Update	Police Update
Liveable Homes Update	Independent Review – Drop In Session
Te Tari Awhina Udate	Council receives Tohu
NAVA Award – Wini Geddes	College Road Temporary Seal
EQC Updates	
What's On Update	
JUNE 2017	
Waiver of Hall Fee	What's On?
Fitness and Wellness	Community Expo
Updates	Storm damage and Flood Impact on Rates
Insulation	Skip Bin Supply
Honouring Volunteers	Community EXPO Events
IAG New Zealand	Recovery EXPO
Fruit Trees for Riverslea Reserve	Community Out and About
Reminder about Waste	Community Questions
Patutaatahi Kohanga Reo Rebuild	Stop Bank Rebuild
Updates: Liveable Homes, EQC	Free Building Consents
Free Bus Service	
Volunteer Free Breakfast	
JULY 2017	
Saving Precious Memories	Recovery Process Reminders
Boot Camp Opportunity	Emergency Alerting System Update
Digital Photo Lab	Lions Club Vouchers
Change in Skip Bin Service	Riverslea Mall Repairs Underway
Pride Community Gift (Trees)	KōKōhīnau Papakaīnga Trust Housing
10 Relocatable Units	College Road Stop Bank Rebuild Update
Blue Light Holiday Programme	Stormwater Update
Skip Bin Update	More time: Independent Review
Newsletter Change	Four Months On (Infographic)
Wall Debris Fenced	Recovery Project Timeline
MPI Update	Welcome Navigators
EQC Update	Edgecumbe Police Back
Accommodation Upate	Free Wifi
Insurance Information Drop In	Peter Kenyon Business Wellness Hui
Holiday Programme Thanks	Meet the Navigators
Mayoral Fund Update	BOPRC River Drainage Update
	Red Zone Property Settlement
	Community Plan – Next Steps

Figure 71: Categorised Newsletter Items for May - July 2017.
Hinerangi Eruera Murphy, 2020.

6.5 Mana Kōrero

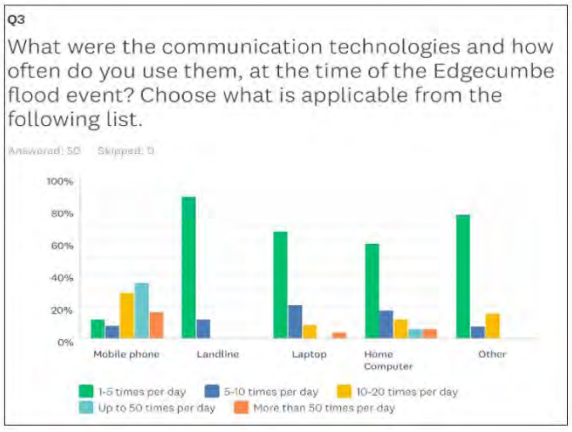
What is the role of communication technologies and social media for displaced whānau in a disaster situation?



The online survey comprised of 7 multi-choice and 2 optional responses, ie: one at the beginning of the survey for name and contact phone details and one at the end for any comments participants wanted to add.

Of the 5344 Kia Kaha Facebook page of diverse members, 50 people responded and question 2 confirmed that 30 were residents who were directly affected, 9 were not affected, 5 were residents of the Eastern Bay of Plenty, 3 were volunteers and 3 classified themselves as 'other'. Although ethnicity was not a factor, eight of the affected respondents were Māori.

Questions 3 and 4 centred around the use of communication technologies, as electronic devices that required the internet or a mobile network, to aid with human interaction (Figure 72).



Q4. What did you use the communication technologies for?

ANSWER CHOICES	RESPONSES	
Connect with family and/or friends	90.00%	45
Connect with family and/or friends who were displaced, as a result of the Edgecumbe flood event	80.00%	40
Provide information to family and/or friends	88.00%	44
Initiate support for the general public	34.00%	17
Obtain Whakatāne District Council updates	82.00%	41
Obtain Civil Defence Emergency Management updates	76.00%	38
Obtain Weather updates	70.00%	35
Obtain Local News updates	82.00%	41

Figure 72: Online Survey Results for Questions 3 and 4.
Hinerangi Eruera Murphy, 2017.

"Mobile technology can enable better access to and exchange of information among disaster responders, agencies and the affected public" Jensen (2012).

In terms of communication technologies, mobile phones were used the most, of up to 50 times per day. The devices as indicated in question 4, were utilised to:

- Connect with family and/or friends
- Provide information to family and/or friends
- Obtain Whakatāne District Council updates.

The main reasons respondents used technologies at the time of the flood as indicated in question 5 were to:

- Provide information to family or friends
- Obtain Whakatāne District Council updates
- Connect with displaced whānau.

The social media questions that followed in the survey, were based on three online sites, being Facebook, Twitter and Instagram (Figure 73).

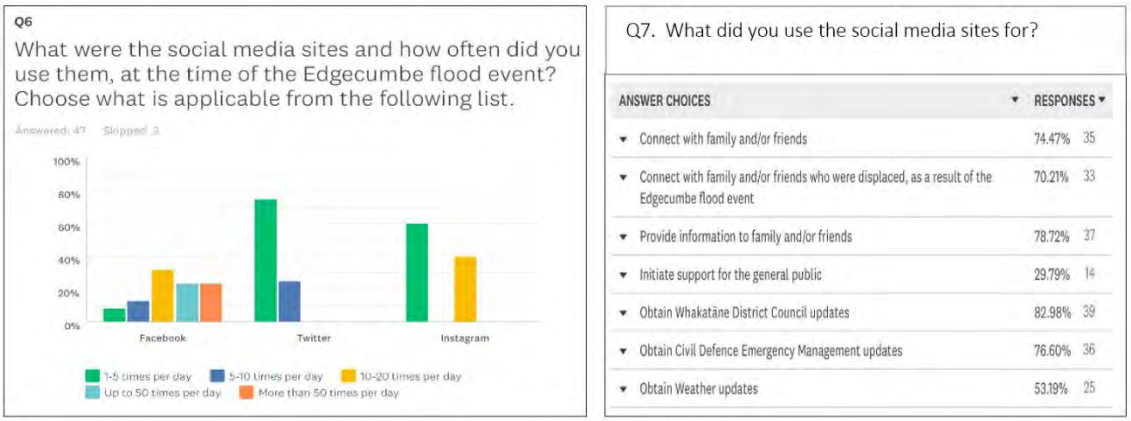


Figure 73: Online Survey Results for Questions 6 and 7.
Hinerangi Eruera Murphy, 2017.

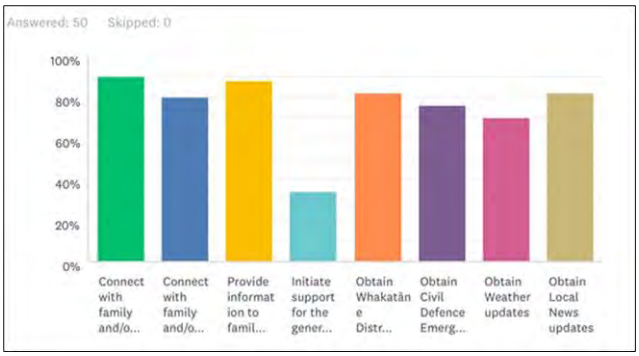


Figure 74: Online Survey Results for Question 8
Main Reasons for Using Social Media
Hinerangi Eruera Murphy, 2017.

The results had indicated that the most popular social media site used by the respondents, was Facebook and ranged in frequency of use, from up to 50 times per day, to, more than 50 times per day. The social media sites (Figure 74), were used mainly to:

- Obtain Whakatāne District Council updates
- Provide information to family and/or friends
- Obtain Civil Defence Emergency updates.

Question 9 was optional, where respondents shared any further comments (Figure 75).

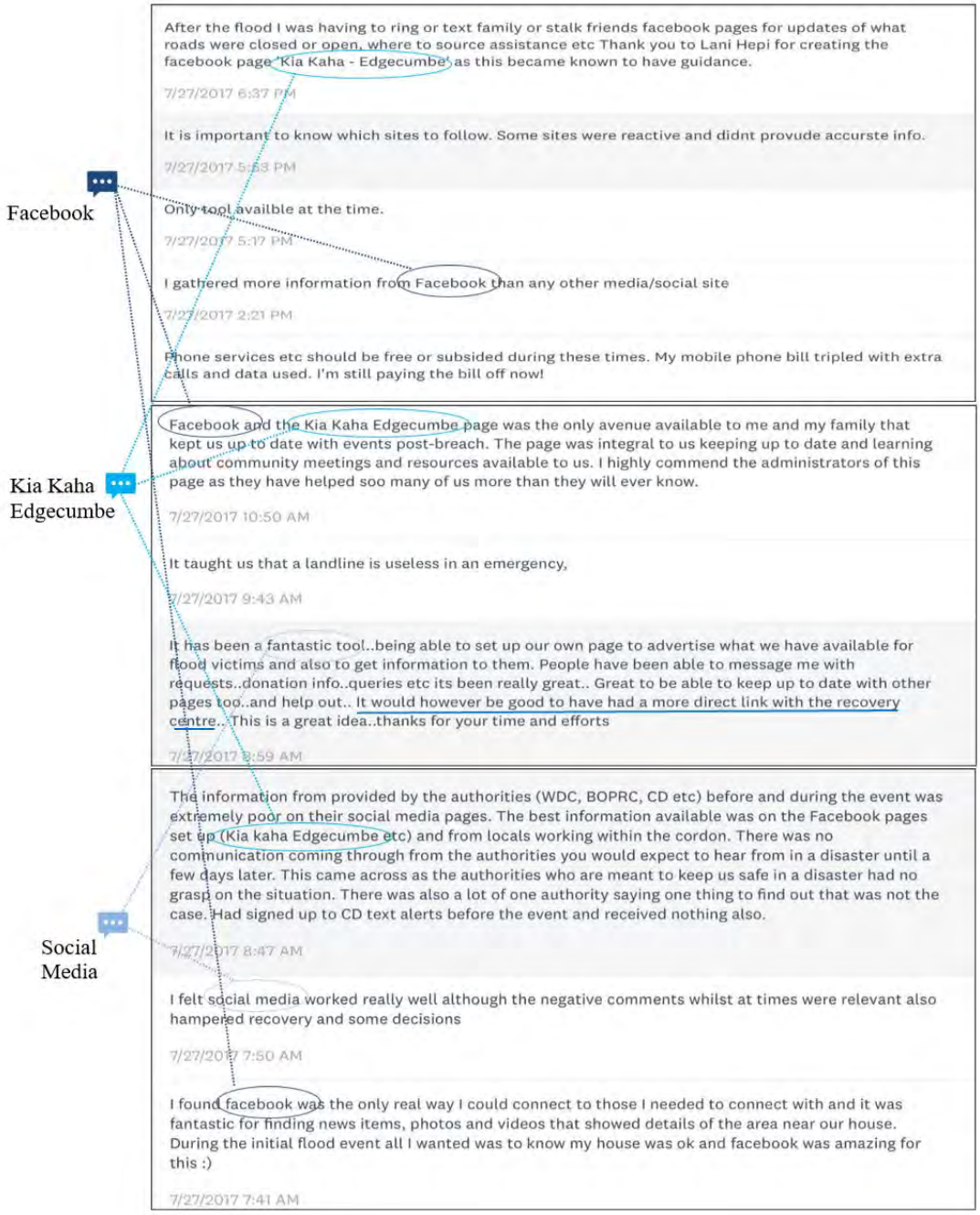


Figure 75: Online Survey - Respondents Comments.
Hinerangi Eruera Murphy, 2017.

The respondents comments advised that:

1. The Kia Kaha Edgecumbe Facebook page was an excellent information repository resource space at the time of the flood event and thereafter.
2. Facebook was used extensively to find updates and connect with whānau.
3. Social media worked well for accessing information.

> "One of the social elements that is changing in the field of emergency management is the way the public can now be viewed 'as a resource and not a liability'. For example, social media can be used to deliver warnings to users. In the most sophisticated cases, these may involve local information in the form of maps and data, as well as instructions on what to do during an impending crisis" (Alexander, 2013).

6.6 Ūpoko Whakarāpoto - Chapter Summary

The Edgecumbe community relied heavily on trusted communication, direction and leadership and this was echoed on several occasions by both groups of interview participants. The recovery newsletters were therefore a means of disseminating timely information to displaced whānau.

During the early stages of the repair and rebuild phases, the newsletters were frequent and the news items regarding support and services most important, as were the immediate needs for those affected. Over time the needs were being addressed and the newsletters continued to serve as an informative platform towards rebuilding and regenerating the community as a collective.

The online survey findings indicated that:

- The most preferred communication device in a disaster situation is the mobile phone.
- Information quality is crucial. Crowd sourcing too of validated information works.
- Social Media is powerful and imperative, in a disaster situation.

Communication technologies, social media and the Kia Kaha Facebook page, along with local government websites and social networking sites were used to source information

and keep up to date with friends and whānau. It was noted that mobile phone usage during a disaster is relatively high and that a land line as a permanent fixture, can be inefficient during an emergency.

The key themes of this study are Mana Whānau, Mana Whenua, Mana Tautoko and Mana Kōrero. The codes for this chapter have been categorised under the concepts of Health and Well-Being (Hauora), Support Systems (Awhi Oranga), Communication (Whakawhitinga) and Leadership (Rangatiratanga) (Figure 76).

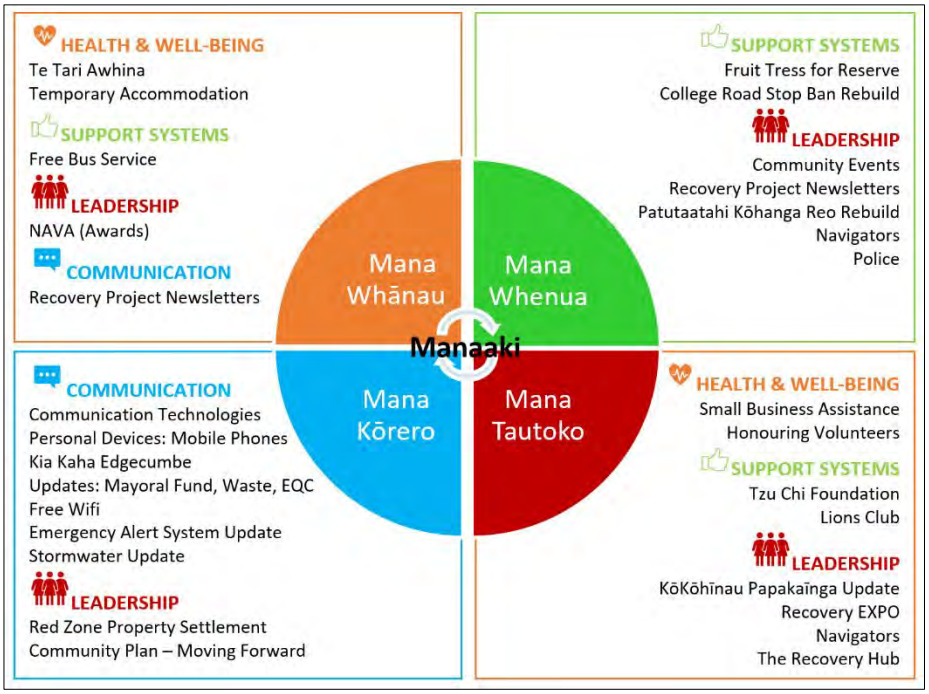


Figure 76: Data Collection: Summary of Key Concepts.
Hinerangi Eruera Murphy, 2020.

Both data collections reaffirmed the needs that presented and the use of technologies for displaced Edgecumbe whānau. The newsletter had served as a one-way communication tool, while the online survey gave displaced respondents a voice just five weeks after the flood event.

This chapter interwove and presented the findings whenu and aho of two document collections, relative to the key themes. Like the previous two chapters, Ūpoko Tuaono informed four significant concepts that have transpired.

ŪPOKO TUAWHITU - CHAPTER SEVEN
WHENU AHO WHAKAMUTUNGA - CAST OFF THE CONCLUSION

7.0 Ūpoko Whakatūwhera - Chapter Introduction

Me huri whakamuri. Ka titiro whakamua. Honouring our past. Planning for our future.

"I saw the water coming Nanny and I didn't know what to do."

Disaster disrupts lives and the chaos that follows can influence how individuals and families manage themselves, how relationships hold up and how the community behaves in the aftermath. The statement that begins this passage was shared, swathed in anxiety and fear. My mokopuna had courageously witnessed the floodwater rising. This child of my child who was just six at the time, occasionally recalls the event like it was yesterday. Yet all I can do is open my arms, offer my heart and listen.

This rangahau has focused on manaaki, the craft of care for displaced whānau and serves too as a kete tapa wha for my mokopuna and those who may one day come.

Ūpoko Tuaono presented the findings of two document collections, relative to the key themes.

This chapter casts off the whenu and aho for this research. Ūpoko Tuawhitu also provides an overview of the previous chapters, contrasts the key findings to relevant literature and then presents the conclusions and recommendations for future studies.

7.1 Tuhinga Whakarārangi - Thesis Overview

7.1.1 Ūpoko Tuatahi - Summary of Chapter One

Chapter One cast the first row of whenu on and introduced Edgecumbe as the centre of community misfortunate, where this thesis began. Located in the Eastern Bay of Plenty

just 19 kilometres west of Whakatāne, Edgecumbe also known as Riverslea, Patutātahi and Kaiwhakatere, was once marshland and prone to flooding. A synopsis of the micro events that occurred, leading into and on the day of the flood, gave insight on the extent of the deluge and the community that were affected.

To give more background context, Māori traditional knowledge relating to the Atua and creation, te awa o Te Rangitāiki, the whenua and local hapū settlements, was drawn upon and interwoven. Subsequently a timeline that briefed systematic colonisation, the New Zealand wars and the confiscation of māori land to develop urbanisation, was deliberated. Given obligation to execute protection, preservation and sustainability over the local environment, the concept of kaitiakitanga was also discussed and a brief passage regarding the Pacific Rim and Ring of Fire appended.

This rangahau has linked with Mātauranga Māori research and extended on the 2005 Matata disaster whereby Spee (2008) investigated recovery as a process and proposed best practice guidelines for working with whānau and the community affected by disaster. Through the participants perspectives and quotes from relevant literature, this study has also sanctioned contemporary views about risk management, cultural responsiveness, resilience, climate change and sustainability. An outline of the research methods used and an overview of the thesis chapters concludes the whatu piece for Chapter One.

7.1.2 Ūpoko Tuarua - Summary of Chapter Two

Chapter Two interwove and presented the literature whenu and aho that were examined, based on aspects of Tikanga Māori and the key themes central to the practice of manaaki, namely Mana Whānau, Mana Whenua, Mana Tautoko and Mana Kōrero. Access to readily available published and archived research that focused solely on the care of displaced whānau in a disaster situation within Aotearoa, New Zealand, was limited.

This chapter began with a monochrome image of the four themes that as an analogy, collectively forms the wairua, or inner circle of this research. An excerpt that defined Tikanga Māori followed. Tikanga based concepts that underpinned and intwined this korowai rangahau have included whakapapa, tika, pono, aroha, mauri, tapu (and noa), whanaungatanga, kaitiakitanga and kotahitanga.

The literature topics were categorised under the research themes and then discussed in some detail:

- Mana Whānau - whānau definitions, types and modern views, te pā harakeke, hapū, hapū roles, iwi, whakapapa.
- Mana Whenua - whenua, maramataka.
- Mana Tautoko - tautoko, Mātauranga Māori, resilience, Emergency Management.
- Mana Kōrero - kōrero, Internet, social media and social networking sites.

Various topics corresponding to each of the chapters emerged and were further extended on in this research. An illustration of the literature thematic parts and a brief summary concluded the whatu for Chapter Two.

7.1.3 Ūpoko Tuatoru - Summary of Chapter Three

Chapter Three interwove and presented the research framework whenu and aho, information about my background, why I started this journey and how the thesis purpose and intention was crafted.

This chapter commenced with pātai informing Kaupapa Māori research and led into my think piece that affirmed growing up at Otamaoa, whānau connections, influence by Te Taiao and reasons for writing this rangahau. I was genuinely interested then to find out more about whānau care, how individuals and families manage, how relationships hold up and how the community behaves for others and the environment, following a flood event. Working for the tertiary at which I am enrolled to study with a researcher in the research lens, had also presented a raft of personal challenges. The strategies that I undertook to overcome those hurdles were explained further.

The methodology subchapter followed wherein I shared my views on critical theory, emancipation and the purposeful mind shift of 'freeing ourselves from the conditions that colonise us'. Kaupapa Māori implicates the cultural, economic and social relationships between groups of society who have power and those who do not, through kanohi māori. Concurrently it involves a reform in thinking. Smith (1997) identified eight key principles within the Kaupapa Māori framework and four of them are recognised succeeding the Edgecumbe flood event namely:

- Te Tiriti o Waitangi, the Treaty of Waitangi
- Tino rangatiratanga, self-determination
- Whānau, family
- Kaupapa, collective philosophy.

The Koru of Māori Ethics (Henare, 1998) and Five Tests of Tikanga Māori (Mead, 2003) as ethical frameworks, serve to identify the practice of manaaki, ascertain the environment impact of the flood and reflect on Māori positioning.

The following subchapter provided a precis of the qualitative research methods, the all important ethics and the Kaupapa Māori themes. The data gathering approaches used to collect whānau experiences before, during and after the flood were interviews, (both Focus Group and Semi-Structured) and document collection. The Focus Group interviewees comprised of residents who were issued yellow or red zone placards and directly affected by the Edgecumbe flood event. The Semi-Structured interview participants were those who had whānau affected, or who supported community members. A brief summary concluded the whatu for Chapter Three.

7.1.4 Ūpoko Tuawha - Summary of Chapter Four

Chapter Four wove in and presented the findings whenu and aho of the Focus Group interviews. This chapter began with demographic information about the interview participants. The group comprised of seven homeowners, who had lived within a two-kilometre radius of the College Road breach for more than 10 years and included three sets of couples. All members had raised two or more children and owned pets. Of the group three participants had their homes demolished and four were temporarily displaced.

Each of the four subchapters that followed introduced a whakataukī pertinent to the key theme and the findings information that was discussed. The colour coded themes varied, as did the events and the time phases of response and recovery during and after the flood. Twenty-one questions were asked of the Semi-Structured interview participants with thirteen chosen and presented as tables in the colour coded findings. The remaining responses are in the appendices section.

The Semi-Structured Interview findings have confirmed that, the directly affected participants were faced with multiple personal challenges during the flood recovery period. In addition to finding temporary accommodation and restoring their own and whānau wellness, residents were tasked with rebuilding, insurance claims and replacing household goods. As time passed, so did the stages of recovery. Moving forward many supported the needs of others and planned collaboratively to regenerate the community.

Indicative of the key themes, sub themes, primary, secondary and tertiary codes that weave together and interconnect like whenu and aho in a korowai, four significant concepts transpired and preceded the themes namely:

Health and Well-Being (Hauora) **Robust Support Systems (Awhi Oranga)**

Leadership (Rangatiratanga) **Communication (Whakawhitinga)**

Excerpts were further included to validate the four pou concepts and a brief summary concluded the whatu for Chapter Four.

7.1.5 Ūpoko Tuatahi - Summary of Chapter Five

Chapter Five interwove and presented the findings of the Semi-Structured Group, relative to the key themes. Much like Ūpoko Tuawha, this chapter began with demographic information about the interview participants. The group comprised of five Māori, one male and four females, all over the age of 30, with affiliations to Ngāti Awa. One member had been affected by the flood, as were her immediate whānau. All participants lived in the Mataatua region for more than 10 years and served on, or supported marae associated groups.

Each of the four subchapters that followed introduced a whakataukī pertinent to the key theme and the findings information that was discussed. The colour coded themes varied, as did the events and the time phases of response and recovery during and after the flood. Thirteen questions were asked of the Semi-Structured interview participants with eight chosen and presented as tables in the colour coded findings. The remaining responses are in the appendices section.

The findings have confirmed that, the indirectly participants were willing and able to support the community needs, especially during the early recovery period. That personal support varied from donating supplies, scheduling hui, folding clothes, helping to cook food at the marae, to volunteering for NAVA, spading silt and organising cups of tea.

Like the previous chapter, and indicative of the key themes, sub themes, primary, secondary and tertiary codes that weave together and interconnect like whenu and aho in a korowai, four pou concepts transpired and preceded the themes namely Health and Well-Being (Hauora), Support Systems (Awhi Oranga), Communication (Whakawhitinga) and Leadership (Rangatiratanga). Excerpts were further included to validate the four concepts and a brief summary concluded the whatu for Chapter Four.

7.1.1 Ūpoko Tuaono - Summary of Chapter Six

Chapter Six interwove and presented the findings of two document collections, relative to the key themes, i.e. a community newsletter and an online survey.

This chapter began by explaining that a District Recovery Community Plan was developed by the Whakatāne District Council. To provide clear and timely information for the Edgecumbe community, the creation of a regular newsletter had been agreed upon. The newsletters were printed, published online and/or emailed twice a week in May 2017 and from February 2018 on, as whānau returned home, distribution continued fortnightly until May 2018. Thereafter the Edgecumbe Collective took over for the community. The Recovery Project Facebook page reached 91,951 members at that time and over 800 newsletters were distributed (Whakatāne District Council, 2017).

The subchapter that then followed confirmed the newsletter was a reliable means of disseminating timely information to displaced whānau. The pānui that focused primarily on questions one and two of this research, were frequent and the news items regarding support and services offered most important, as were the immediate needs for those affected. Over time the demands were being addressed and the newsletters continued to serve as an informative platform towards rebuilding and regenerating the community as a collective. The newsletter items also documented a timeline of events for Edgecumbe that

could be categorised like the interview findings, under the concepts of Health and Well-Being (Hauora), Support Systems (Awhi Oranga), Communication (Whakawhitinga) and Leadership (Rangatiratanga).

The next subchapter discussed the online survey used to collect the data that focused primarily on research question three, communication technologies and social media. The survey target group were members of the Edgecumbe community. Through the Kia Kaha Edgecumbe Facebook public page that was created in response to the severe flooding, an introductory social media post with a direct link to the online survey was posted.

The survey comprised of 7 multi-choice and 2 optional responses. Of the 5344 Kia Kaha Facebook page of diverse members, 50 people responded. The findings indicated that:

- The most preferred communication device in a disaster situation is the mobile phone.
- Information quality is crucial. Crowd sourcing of validated information works.
- Social Media is powerful and imperative, in a disaster situation.

Communication technologies, social media and the Kia Kaha Facebook page, along with local government websites and social networking sites were used to source information and keep up to date with friends and whānau. It was noted from the findings that mobile phone usage during a disaster is high and that a land line as a permanent fixture, can be inefficient during an emergency.

Both data collections reaffirmed the needs that presented and the use of technologies for displaced Edgecumbe whānau. The newsletter had served as a one-way communication tool, while the online survey gave displaced respondents a voice just five weeks after the flood event. Ūpoko Tuaono informed four pou concepts that transpired, and a brief summary concluded the whatu for Chapter Six.

7.2 Ngā Kitenga Motuhake - Comparing and Contrasting the Key Findings

The four data gathering modes that were used for the purpose of this rangahau are briefly defined as follows:

1. The Focus Group interview is as a data gathering approach whereby a selected group of respondents are collectively interviewed. A set of questions in the form of an interview schedule is prepared. The interview moderator will take time to establish rapport, pose the set questions, ensure the members interact with each other and gage when to delve or probe further.

2. A Semi-Structured interview is a guided conversation between the researcher and an individual participant. This less formal approach affords the interviewer the opportunity to draw out or reveal personality aspects of the respondent, which would not normally occur in a formal structured interview.

3. A newsletter is a public document used to cull information from a desired source. The document can provide (i) background information, (ii) a coverage of data, (iii) information that has been overlooked and (iv) track changes or, (v) inform new developments.

4. An online survey is a structured questionnaire used to collect information from a target audience for a specific purpose. The survey is often created as a web form with an informed due date, using software capable of storing answers and providing analytics.

For the duration of this subchapter the findings of the data gathering approaches will be discussed, compared and then contrasted in two groups. The first set involves the interviews, ie: Focus Group and Semi-Structured. The second set refers to the data collection methods namely the community newsletter and the online survey.

Set 1: Interviews

Both interview modes afforded the participants time to voice themselves openly. The kupu and language chosen, the mātauranga or knowledge drawn upon and the tone that respondents used to share their narratives, indicated a fluctuating level of uncertainty and emotional stress triggered by the flood event.

It became obvious too whilst conducting the couples' interviews, that one member or both in some instances, would on occasion intervene, dominate, agree or finish the response of the other, seemingly noted as partner behaviour. Both face to face interview modes had further afforded that the respondents body language and facial expressions be observed by the interviewer.

The Focus Group interviews findings confirmed that the displaced whānau, faced multiple personal challenges. Post the flood they were (i) in desperate need of care and (ii) compelled to activate within their own spheres of control (Te Pā Harakeke). The affected members focused first and foremost on themselves and their families (Mana Tangata).

Amidst finding temporary accommodation, attending to a raft of needs that included access to food and clothing, restoring their own whare tapa wha and maintaining whānau wellness, the displaced residents were also tasked with insurance claims, rebuilding and reconnecting with their home and land (Mana Tangata, Mana Tautoko and Mana Whenua). As time progressed on and various needs were being met, the displaced members and their families, amalgamated to support the needs of others and help regenerate the community of Edgecumbe (Mana Tangata, Mana Tautoko and Mana Kōrero).

The Semi-Structured interview findings asserted that, indirectly affected participants were willing and able to support the community needs, especially during the early recovery period. That personal support varied from donating supplies, scheduling hui, folding clothes, helping to cook food at the marae, to volunteering for NAVA, spading silt and organising cups of tea. All interview participants had whakapapa connections to Mataatua and emphasised how Ngāti Awa had mobilised and the varied ways that support from the collective, was offered.

Set 2: Data Collection

Although the two data collections used in this research conjointly served the purpose of gathering information, the modes were targeted differently. The community recovery newsletter, initiated by the Whakatāne District Council and the Community Boards, provided Eastern Bay of Plenty residents, in particular the Edgecumbe folk, with pertinent information regarding the support services available, the town rebuild and regeneration

projects. As a local government initiative that centred largely on and around whānau care and research questions I and II, the newsletter was backed by welfare services and local organisations, of whom reliable associated content was similarly obtained.

The online survey on the other hand was prepared and executed by the researcher. Launched just five weeks after the flood event, the questionnaire that focused primarily on and around communication technologies and social media as research question III, was purposely intended to gather the views of affected and indirectly affected whānau who followed the Kia Kaha Edgecumbe support Facebook page.

The Edgecumbe community had relied heavily on trusted communication, direction and leadership. The recovery newsletters in comparison, were a means of communicating and disseminating timely information to displaced whānau and the community (Mana Tautoko and Mana Kōrero), while the online survey affirmed that local and government social media sites were imperative and mobile phones were the most preferred communication device at the time of the flood event (Mana Kōrero).

7.3 Ngā Kitenga Whakarāpoto - Summarising the Key Findings

I. What are the needs that present for whānau directly affected by disaster?
II. How does a disaster impact on and reshape, the whānau unit?
III. What is the role of communication technologies and social media for displaced whānau, in a disaster situation?

The research findings were indicative of the themes Mana Tangata, Mana Whenua, Mana Tautoko and Mana Kōrero. The sub themes and codes that were captured have outlined the many individual, social, cultural, physical, economic and environmental needs that presented for whānau directly affected by the flood.

Conversely four significant concepts, ie: Health and Well-Being (Hauora), Robust Support Systems (Awhi Oranga), Communication (Whakawhitinga) and Leadership (Rangatiratanga) emerged and like pou or pillars, have clearly overarched this korowai rangahau. The concepts present too as the key understandings that emerge from the multi-faceted approach and practice of manaaki, for displaced whānau, in a disaster situation (Figure 77).

Figure 77: Summary Outlining the Key Findings
Hinerangi Eruera Murphy, 2020.

This rangahau Korowai Manaaki, the craft of care has essentially:

1. Captured the narratives and needs of whānau and community members affected by the 2017 Edgecumbe flood, a significant disaster for Aotearoa, New Zealand.
2. Summarised the key themes Mana Tangata, Mana Whenua, Mana Tautoko and Mana Kōrero central the practice of manaaki and informed the impact of the disaster on the whānau unit.
3. Extended on the Spee (2008) report with reference to the pou concepts, namely Health and Well-Being (Hauora), Robust Support Systems (Awhi Oranga), Communication (Whakawhitinga) and Leadership (Rangatiratanga).
4. Offered contemporary views regarding risk management, resilience and sustainability.

7.4 Mutu Rā - Limitations

Having researched the care required of displaced whānau following the Edgecumbe flood, methodological limitations were evident. The table below briefly highlights:

- Each data collection limitation
- Context regarding each data collection limitation
- Implications of each data collection limitation, in relation to this study.

Data Collection Methodological Limitations			
	Limitation Description	**Context**	**Implications**
Focus Group Interviews	○ Promoted sharing of personal narratives ○ Less individual pressure ○ Generated genuine answers ○ Researcher could read body language and non-verbal cues ○ Schedule of set questions	○ 7 directly affected respondents ○ 3 couples + 1 known; selected by Researcher ○ All participants were temporarily displaced ○ 21 questions asked; 13 presented in findings	• Inconsistent size to population ratio • Social acceptability bias • Not advantageous for sensitive flood issue • Dominant behaviours • Researcher present • Displacement posed time and meeting constraints • Additional responses included as appendices
Semi-Structured Interviews	○ Guided conversation that promoted honest responses and rapport ○ Researcher could read body language and non-verbal cues ○ Schedule of set questions	○ 5 Māori respondents known to Researcher ○ 4 respondents involved in local hapū affairs ○ 13 questions asked; 8 presented in findings	• Inconsistent size to population ratio • Power differences • Culture/gender variances • Researcher present • Additional responses included as appendices • Time constraint
Newsletter	○ Community focused, local government communication initiative	○ Informed by needs of the community and support of local organisations ○ No target group	• Size to target group ratio • Aimed at QI, Needs of displaced whānau and QII, Effects on whānau as a unit
Online Survey	○ Targeted specific research topic ○ Quick to disseminate online and collate ○ Cut off date included	○ Target group 5344 Kia Kaha Facebook members; 50 responded	• Size to set group ratio • Restricted by cut-off date • Anonymous contributions • Aimed at QIII, Technologies and social media

Figure 78: Data Collection Methodological Limitations
Hinerangi Eruera Murphy, 2020.

The data collection interview methods necessitated respondents of the Mataatua region who were either affected by the flood or knew of whānau that had been. The disaster was deemed a highly sensitive, emotional, and contentious issue for all. Given the selected Focus Group members were displaced, three of whom had lost their homes, trying to bring them together proved very challenging. It was decided after several consultations, attempts and phone calls, to interview them as three separate couples and one individual at venues, days and times most suited. That decision (which in hindsight might be considered partial), had ensured that the participants were not identifiable, as would have happened in a group situation.

My personal interpretation and lens of how the respondents felt about the disaster and the Edgecumbe community, what was important to them and their families at any given time, the support they were provided and how they interacted with others, may be biased and thereby have affected the overall results of this research. Other subjective factors have included the:

- Lack of resources and access to readily available published and archived research focused solely on the care of displaced whānau within Aotearoa, New Zealand
- Limited knowledge of every local, national and international organisation that contributed to assisting and supporting the community of Edgecumbe
- Cultural predisposition, ie: the inclusion of content that involves both English and Māori languages, associated contexts, theories, principles and practices
- Longitudinal effects of displacement and time, for both myself as the inside researcher and the respondents.

7.5 Ngā Tutohu - Recommendations

The overall aim of this study was to identify the key understandings that emerge from the practice of manaaki for displaced whānau in a disaster situation, based on the:

I. Needs that presented for affected whānau
II. Impact that the disaster had on the whānau unit and
III. Roles of communication technologies and social media.

Extended exploration is therefore needed to understand what and where the complexities of manaaki, the craft of care lie.

The pou concepts of this study and the tools that follow, inform four of the recommended areas that I conclusively pose, for further research:

Health and Well-Being (Hauora)

Aim: To aid whānau wellness during disaster response and recovery

- Displaced Needs Assessment (with a holistic/tapa wha focus)
- Community Databases and Marae Welfare Centres
- Mobilisation Management
- On-going Psychosocial and Change Management support.

Robust Support Systems (Awhi Oranga)

Aim: To respond effectively and provide co-ordinated support

- Manaaki and Management of Volunteers
- Impact area – Hauora Support and Security
- Koha/ Donations Management
- Parakore/ Debris and Waste Management.

Communication (Whakawhitinga)

Aim: To inform and increase knowledge of disaster response and recovery processes

- Public Advice, support and trusted information available via multiple platforms
- Disaster Management plan - Community understanding and preparedness
- Climate Change plan – Community understanding and preparedness
- Social Networking plan - Community understanding and preparedness.

Leadership (Rangatiratanga)

Aim: To provide clear leadership and ensure partnerships, responsibilities and expectations are understood and known by the impacted community

- People, policies, principles and practices assessment
- Whakatāne District Council (WDC), Regional Council, Te Rūnanga o Ngāti Awa (TroNA) partnership to work collaboratively together
- Team Recovery plan and Community Regeneration Package
- Te Taiao/ Environmental Recovery.

7.6 Tuhinga Whakamutunga - Thesis Closing

Disaster disrupts lives and the chaos that follows, can influence how people manage themselves and their families and how they behave as a community, in the aftermath. Since the Edgecumbe flood event of April 2017, there was growing concern that affected members of the town, need on-going care, support and assistance. The principal aim of this thesis was to identify the key understandings that emerged from the practice of manaaki, for displaced whānau, in a disaster situation.

The following objectives were identified:

i. The needs that had presented, for whānau of Patutātahi, Edgecumbe directly affected by the flood event.
ii. As a result of the flood, temporary displacement had reshaped the whānau unit.
iii. Information communication technologies and social media were integral for displaced whānau, during the Edgecumbe flood event.

Defining what manaaki has meant as a practice and how that ideal interconnected to the key themes namely Mana Whānau, Mana Whenua, Mana Tautoko and Mana Kōrero, was imperative, for this study. Related to that effort was the need to better understand whānau recovery demands, how environmental conditions affected human relationships and the role that information communication technologies and social media assumed, in disaster and emergency management for the community of Patutātahi, Edgecumbe.

Tāku wero a te hinengaro: Herein are my final words, intended to stimulate and challenge reflective thinking, whilst I close this rangahau and continue forward.

Ko te oranga te kaupapa mō te katoa. – How might we better prepare and transform our disaster management practices of:

- *Health and Well-Being (Hauora)*
- *Robust Support Systems (Awhi Oranga)*
- *Communication (Whakawhitinga) and*
- *Leadership (Rangatiratanga), for the future of our tamariki/mokopuna?*

He muka kotahi. We are all weaved in this together.

KARAKIA WHAKAKAPĪ

E te Atua
Kia tau ngā manaakitanga a te mea ngaro
Ki runga ki tēnā, ki tēnā o tātou
Kia mahea te hua mākihikihi
Kia toi te kupu, toi te mana, toi te aroha, toi te Reo Māori
Kia tūturu, ka whakamaua kia tīna! Tīna!
Hui e, Tāiki e!

Creator
Let the strength and life force of our ancestors
Be with us all
Guiding us forward now
To ensure what has been achieved, our words, love and our language is upheld
Joined together
Bound together
Continuing on.

PĀTAKA KUPU - GLOSSARY

aho	horizontal strand weft	ahi kaa	home people
Ao Māori	Māori worldview	Atua	supreme, creator, God
Hahi Ringatū	Ringatū religion	hapū	sub tribe home people
huruhuru	feathers	iwi	tribe
kaitiaki	carer, protector	karakia	prayer, offering
kōrero	talk, speech, chat	korowai	cloak with tassels
kuku	mussels	kupu	words, vocabulary
maara kai	vegetable garden	mahi	work, task
maramataka	Māori lunar calendar	mātauranga	knowledge
mauri	life force	mawhitiwhiti	crossed whenu
mōteatea	lament	ngā uri	descendants, kin
muka	prepared flax fibre	ŌKōrero	Thornton
pou	pillar	pūrākau	story, tale
rangahau	research, knowledge	raranga	weave
reo	language	rohe hapū	subtribe area
tapu	sacred	tāniko	woven pattern
taniwha	mythical river guardian	tautoko	support, assist
tangata whenua	people of the land	Te Ao	The day
taonga Māori	Māori treasure	Te Kore	The Nothingness
tipu	grew up	Te Pō	The night

PĀTAKA KUPU - GLOSSARY

tipua	guardian spirit	tohi	rite, passage
tikanga	custom, rule, habit	tohunga	Priest, wise person
tohu	sign, gift	taonga Māori	Māori treasure
tuhinga	writing, thesis	tutū	touch, give a try
tūrangawaewae	place of standing	waka	canoe
wai	water, liquid, tears	wānanga kōrero	chat sessions
wairua	spirit, spirituality	whānau	family, group
whakapapa	genealogy	whakatauākī	proverb – originator known
whakataukī	proverb – originator unknown	whānau katoa	all families or parties
whānau	family, group	whenu	vertical strand warp
whenua	homeland, place human placenta	whiri	twist, plait, braid

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Academic Education (2015). Retrieved from https://www.academia.edu/23544140/Historical_analogies_as_tools_in_understanding_transformation

Adger, W. (2000). Social and Ecological Resilience: Are They Related?. Progress in Human Geography. 24. 347-364. 10.1191/030913200701540465.

Alexander, D.E. (2013). *Social Media in Disaster Risk Reduction and Crisis Management*. Science and Engineering Ethics, 20 (3) pp. 717-733.

Anderson, R. (1969). Archives New Zealand. *Rangitāiki River Drainage Scheme area*. Retrieved from https://www.flickr.com/photos/archivesnz/33174167233/in/photostream/

Anderson, R. (1969). *Aerial View of Edgecumbe*. Archives New Zealand. [Photograph]. Retrieved from https://www.flickr.com/photos/archivesnz/33174167233/in/photostream/

Angus, L. (2004). 'Our Direction for Recovery in New Zealand' in NZ Recovery Symposium 04 Proceedings, Sarah Norman (ed), Wellington: Ministry of Civil Defence and emergency Management.

Australian Disaster Resilience Knowledge Hub. (2017). Retrieved from https://knowledge.aidr.org.au/resources/edgecumbe-floods-new-zealand-2017/

Bay of Plenty Regional Council. (2019). *Status of Treaty Claims and Settlements in the Bay of Plenty Region 2019.* [Map]. Retrieved from https://atlas.boprc.govt.nz/api/v1/edms/document/A3241142/content

Bay of Plenty Regional Council. (2017). *Rangitāiki River Scheme Review, Final Report, 18 September 2017*. Rangitāiki River Scheme Review. Bay of Plenty Regional Council. Whakatāne.

Bay of Plenty Regional Council. (2017). *College Road Floodwall, Edgecumbe, 06 April 2017 at 08.14 hrs.* [Photograph]. Retrieved from https://maps.boprc.govt.nz/datasets/b3e4fdc75ff043079c65c1347566dde4

Bay of Plenty Regional Council. (2017). *Rangitāiki River stop bank breach, 06 April 2017 at 11.00hrs*. [Photograph]. Retrieved from https://maps.boprc.govt.nz/datasets/b3e4fdc75ff043079c65c1347566dde4

Bay of Plenty Regional Council. (2017). *Rangitāiki River stop bank breach, 08 April 2017*. [Photograph]. Retrieved from https://maps.boprc.govt.nz/datasets/b3e4fdc75ff043079c65c1347566dde4

Bay of Plenty Regional Council. (2017). *Rangitāiki River catchment*. [Map]. Retrieved from https://cdn.boprc.govt.nz/media/770636/appendix-b-proposed-change-3-Rangitāiki-river-to-the-bay-of-plenty-regional-policy-statement-version-73c-clear-copy.pdf

Bay of Plenty Regional Council. (2017). *Rangitāiki River Scheme – April 2017 Flood event. Final Report.* Retrieved from https://www.boprc.govt.nz/media/681909/2017-10-03-rrsr-final-report-public.pdf

Bay of Plenty Regional Council. (2017). *Ex-Cyclone Debbie April 2017 Flood Event.* Retrieved from Bay of Plenty Regional Council, Whakatāne.

Bay of Plenty Regional Council. (2007). *Improved Hazard Mitigation in Whakatāne District.* Retrieved from https://www.boprc.govt.nz/media/33028/Report-0710-EdgecumbeFINALv424907.pdf

Bay of Plenty Regional Council. (2004). *Flood Inundation of Edgecumbe and the Rangitāiki Plains, 2004.* Retrieved from https://www.boprc.govt.nz/media/33028/Report-0710-EdgecumbeFINALv424907.pdf

Bay of Plenty Regional Council. (1998). Retrieved from: https://riversgroup.org.nz/wp-content/uploads/2018/10/6.2_EBOP_RANGITĀIKI-DRAINAGE-SCHEME-ASSET-MANAGEMENT-PLAN.pdf

Bell, J. (2010). *Doing Your Research Project*. Open University Press: McGraw-Hill Education.

Berryman, M. & Ford, T. (2014). *Connecting with Māori communities: Whānau, hapū and iwi.* [Unpublished Te Kotahitanga professional development E-book]. The University of Waikato, Hamilton

BOP Civil Defence. (2017). *Community Meeting at Rautahi Marae, Kawerau, 08 April 2017.* Retrieved from:https://twitter.com/BOPCivilDefence/status/850575900307406849

Britten, N. (1999). *Qualitative interviews in healthcare*. In Popo C, Mays N (eds) Qualitative research in health care 2nd ed. Pp 11-19 London, BMJ Books.

Brunsdon, D., Hinton, C. (2017). *Review of the Actions Taken by the Whakatāne District Council in the Response and Early Recovery Phases of the District's Flooding Events of April 2017.* Kestrel Report retrieved from: https://www.Whakatāne.govt.nz/sites/www.Whakatāne.govt.nz/files/documents/kestrel_report_on_Whakatāne_district_council_april_2017_flood_response.pdf

Busby, E. (2010). The response to recovery from 2004 Eastern Bay of Plenty flood event. Unpublished thesis. Palmerston North: Massey University.

Clark, B. (2015) *Edgecumbe Heart of the Plains 1914-2014.* Whakatāne: Simply Graphics.

Doherty, W. (2012). Ranga Framework – He Raranga Kaupapa. In *Conversations of Mātauranga Māori* (pp.15-36). Wellington: New Zealand Qualifications Authority.

Durie, M. (2001) Mauri Ora: The Dynamics of Maori Health, Oxford University Press, Auckland; Cram, F. & Pitama, S. (1998) 'Ko toku whanau, ko toku mana' in Adair, V. & Dixon, R. (eds) The Family.

Eagle Technologies. (2017). *Managed IT Services.* Retrieved from: https://www.eagle.co.nz/gis-solutions/case-studies/whakatane-state-emergency-flooding-incident-april-6-2017

Edwards, S. (2012). Nā te Mātauranga Māori ka Ora Tonu te Ao Māori: Through Māori Knowledge Te Ao Māori will Resonate. In Conversations on Mātauranga Māori (pp. 37–58). Wellington: New Zealand Qualifications Authority.
Retrieved from http://www.nzqa.govt.nz/Maori/te-rautaki-Maori/conversations-on-matauranga-Maori/

Gibbons, W.H. (1990). *Rangitāiki River and ŌKōrero, Thornton.* [Photograph]. From The Rangitāiki 1890 – 1990. Settlement and Drainage on the Rangitāiki. Whakatane: Whakatane & District Historical Society.

Gibbons, W.H. (1990). The Rangitāiki 1890 – 1990. Settlement and Drainage on the Rangitāiki. Whakatane: Whakatane & District Historical Society.

Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). *Methods of data collection in qualitative research: interviews and focus groups***.** British Dental Journal**,** 204(6), 291 - 295.

Google Maps. (2010). 64-68 College Road, Edgecumbe, Feb 2010. Retrieved from 64 College Road - Google Maps

Hahipene, T. (2017) *Truck to Transport Evacuees.* [Photograph] New Zealand. Edgecumbe.

Hahipene, T. (2017) *Evacuees Being Transported out of Edgecumbe.* [Photograph] New Zealand. Edgecumbe.

Hahipene, T. (2017) *Day one ends. NAVA Volunteers at Ruaihona Marae.* [Photograph] New Zealand. Edgecumbe.

Hahipene, T. (2017) *Domestic Contents Litter the Streets of Edgecumbe.* [Photograph] New Zealand. Edgecumbe.

Hahipene, T. (2017) *Truck to Transport Evacuees.* [Photograph] New Zealand. Edgecumbe.

Hahipene, T. (2017) *Approximately 2500 tonnes of silt was removed from Edgecumbe.* [Photograph] New Zealand. Edgecumbe.

Heifetz, R. A., & Linsky, M. (2002). Leadership on the line: Staying alive through the dangers of leading. Boston, Mass: Harvard Business School Press.

Henare, M, (1998). *The Koru of Māori Ethics*. Retrieved from https://www.pmcsa.ac.nz/topics/rethinking-plastics/motivation-for-rethinking-plastics/

Henry, E. Pene, H. (2001). *Kaupapa Maori.* Locating indigenous ontology, epistemology and methodology in the academy, 8(2): 234-242.

Hetet School of Māori Art TOI TV (2015). *Māori weaving technique with Māori weaver and teacher, Veranoa Hetet* [Video]. You Tube. Retrieved from https://www.youtube.com/watch?v=Iu_RXjwNqOc

Jefferson, T. L. (2006). *Using the internet to communicate during a crisis,* VINE, Vol. 36 No. 2, pp. 139-142. Retrieved from https://doi.org/10.1108/03055720610682933

Jensen, G.E (2012) *Key criteria for information quality in the use of online social media for emergency management in New Zealand.* Victoria University, Wellington.

Johal, S. and Mounsey, Z. (2016). *A research-based primer on the potential psychosocial impacts of flooding.* Disaster Prevention and Management, Vol. 25 No. 1, pp. 104-110.

Katene, S. (2013). The Spirit of Māori Leadership. Huia Publishers. Wellington.

Kenney, C., & Phibbs, S. (2015). *Whakaoranga Turangawaewae; Whakaoranga Iwi Whānui: Understanding factors that build tribal resilience*. Christchurch, New Zealand: Te Rūnanga o Ngāi Tahu.

Kenney, Christine. (2015). Community-led disaster risk management: A Māori response to Ōtautahi (Christchurch) earthquakes. Australasian Journal of Disaster and Trauma Studies. 19. 9-20.

Kenney, C.M., Paton, D., Johnston, D., Reid, J. & Phibbs, S. (2012). Addressing risk and resilience: An analysis of Māori communities and cultural technologies in response to the Christchurch earthquakes. In *IDRC Davos 2012 Integrated Risk Management in a Changing World – Pathways to a Resilient Society Conference Papers Compendium* (pp. 373-376). Davos, Zurich: Global Risk Forum.

Kenny, G. (2006). Biotic Effects of Climate Change in the Bay of Plenty: Earthwise Consulting Limited. Hastings, New Zealand.

Lambert, S. (2016). Post-disaster indigenous mental health support: Tangata whaiora networks after the 2010-2012 Ōtautahi/Christchurch earthquakes. *MAI Journal: A New Zealand Journal of Indigenous Scholarship.* 5. 76-91. 10.20507/MAIJournal.2016.5.1.6.

Lambert, S. (2014). Indigenous Peoples and urban disaster: Māori responses to the 2010-12 Christchurch earthquakes. Australasian Journal of Disaster and Trauma Studies, 18(1), 39–48.

Lambert, S. (2012) Māori and the Christchurch earthquakes: the interplay between Indigenous endurance and resilience through urban disaster. *MAI Review.* Lincoln University, Christchurch.

Lambert, S., & Mark-Shadbolt, M. (2012). Māori experiences and expressions of leadership through the Christchurch/Ōtautahi earthquakes. In H. Ross (Chair). *Nga pae o te māramatanga.* Presented at the meeting of the Traditional Knowledge. Retrieved from http://www.māramatanga.ac.nz/sotes/default/files/NPM%20Conference%20Proceedings%202012.pdf

Lindell, M., & Prater, C & P. Ronald & Nicholson, William. (2006). Fundamentals of Emergency Management. Retrieved from https://www.researchgate.net/publication/265494805_Fundamentals_of_Emergency_Management/citation/download

McKeen, Chris. (2017). *Matahina Dam spillway operating during the April 2017 flood*. [Photograph]. Fairfax NZ. Retrieved from https://www.stuff.co.nz/national/91275516/in-pictures-edgecumbe-evacuated-in-500year-event

Mckenzie, Sarah & Carter, Kristie. (2010). Measuring Whānau: A review of longitudinal studies in New Zealand. MAI Review.

McKerchar, A and Pearson C, Factors causing flooding to be New Zealand's Number One Hazard, in Tephra. February 1991. The IPO has an approximate 30 year cycle of 'benign' and 'active' phases. Retrieved from .https://www.boprc.govt.nz/media/33028/Report-0710-EdgecumbeFINALv424907.pdf

Macmillan Dictionary Blog, 2021 https://www.macmillandictionaryblog.com/leader

Marsden, M. (2003). *The woven universe*. Otaki: The Estate of Rev. Māori Marsden.

MAS Foundation (2019). Retrieved from https://www.mas.co.nz/hub/whenua/

Mead, H, (2003). *Tikanga Māori: Living by Māori Values*. Wellington: Huia Publishers.

Mead, L. T. (1996). Nga aho o te kākahu mātauranga: The multiple layers of struggle by Mäori in education. Unpublished PhD Thesis, Education Department, University of Auckland.

Merriam, S. (1998). Qualitative Research and Case Applications in Education.

Ministry of Business, Innovation & Employment. (2015). Māori me te Ao Hangarau 2015. *The Māori ICT Report 2015*. Retrieved from http://www.mbie.govt.nz/publications-research/publications/economic-development/maori-ict-report-2015.pdf

Museum of Te Papa (2015). *Maramataka Guide.* Retrieved from https://www.tepapa.govt.nz/sites/default/files/maramataka-poster.pdf

Mutu, M. (2000). Maori issues in review. *The Contemporary Pacific*, 12(1), 227-231.
National Disaster Resilience Strategy Rautaki ā-Motu Manawaroa Aituā. (2019). Wellington: Ministry of Civil Defence & Emergency Management. Retrieved from https://www.civildefence.govt.nz/assets/Uploads/publications/National-Disaster-Resilience-Strategy/National-Disaster-Resilience-Strategy-10-April-2019.pdf

New Zealand Herald. (2018). *Residents and Volunteers clearing up the Flood.* Retrieved from https://www.nzherald.co.nz/rotorua-daily-post/news/edgecumbe-flood-anniversary-a-year-of-highs-and-lows/TF4S6OM47MGNQ63H2NCMXK6NQI/m

New Zealand Herald. (2017). *Watching the College Road Stop Bank breach.* Retrieved from: https://www.nzherald.co.nz/nz/amazing-images-of-flooding-devastation/EUEKGWH2MZNKNMCUZWON5OCJ3Y/

Ngā Tuara. (1992). *Ngā Toka Tū Moana, Maori Leadership and Decision Making.* Te Puni Kokiri, Wellington.

Ngaropo, P.(2003). Retrieved from Raupatu – Te Rūnanga o Ngāti Awa (ngatiawa.iwi.nz)

Ngāti Awa Deed of Settlement to Settle Ngāti Awa Historical Claims. (2003). Retrieved from https://www.ngatiawa.iwi.nz/cms/CMSFiles/File/Settlement%20Documentation/NgatiAwaDoS-Schedules.pdf

O'Carroll, A, D. (2013). Virtual Whanaungatanga: *Māori utilizing social networking sites to attain and maintain relationships.* MAI Journal Vol 2 (1), pp. 46 – 59.

Pihama, L., Cram, F and Walker, S. (2002). Creating methodological space: A literature review of kaupapa Māori research, Canadian Journal of Native Education, 26 (1):30.

Palen, L. Liu, S. (2007). Citizen Communications in Crisis: Anticipating a Future of ICT-Supported Public Participation. Conference on Human Factors in Computing Systems - Proceedings. 727-736. 10.1145/1240624.1240736.

Paton, D, (2007). 'A Conference Report on Disaster Psychology Symposium, New Zealand Psychological Society, 1997. Retrieved from http://www.massey.ac.nz/~trauma/confrnce/nzpss97d.htm

Patton, M. (2002). Qualitative Research And Evaluation Methods. Retrieved from http://lst-iiep.iiep-unesco.org/cgi-bin/wwwi32.exe/[in=epidoc1.in]/?t2000=018602/(100)

Rangitāiki River Forum. (2015). *Te Ara ō Rangitāiki. Pathways of the Rangitāiki February 2015*. Whakatane: Bay of Plenty Regional Council. Retrieved from https://cdn.boprc.govt.nz/media/415902/4417-pathways-of-the-rangitāiki-river-document-final-web-version.pdf

Ratahi-Pryor, E. (2017). NASH Kia Kaha Facebook Page. *Kaimahi of Te Tohu Ora o Ngāti Awa, 2017*. [Photograph]. Retrieved from https://www.facebook.com/NgatiAwaSocialandHealthServicesTrust/

Rennes, Jason. (2017). *Wini Geddes directs the NAVA operations at Ruaihona Marae*. [Photograph]. Spinoff NZ. Retrieved from https://www.stuff.co.nz/national/91507851/how-to-help-edgecumbe-and-other-flooddamaged-eastern-bop-areas

Reuters. (2019). *Pacific Rim and the Ring of Fire*. Retrieved from: https://www.reuters.com/article/us-newzealand-volcano-factbox/factbox-previous-volcanic-eruptions-in-new-zealand-idUSKBN1YD0DT

Roche. (2019). Retrieved from https://www.waikato.ac.nz/news-opinion/media/2019/five-key-values-of-strong-maori-leadership

Royal, C. T. (2008). Te Ngākau. Mauriora-ki-te-ao/Living Universe Ltd. Pōrirua: Wellington.

Ruwhiu, D., Cathro, V. (2014). *Eyes-wide-shut: Insights from an indigenous research methodology. Emergence: Complexity & Organization.* University of Otago: Dunedin.

Science Learning Hub. (2020). *Maramataka – The Māori Calendar*. Retrieved from: https://www.sciencelearn.org.nz/resources/2961-maori-ways-of-knowing-weather-and-climate

Shanks, K. (2019). *Volunteers Breakfast, Rangitaīki Cosi Club*. [Photograph]. New Zealand, Edgecumbe.

Simon, T., Goldberg, A., Adini, B. (2015). Socializing in emergencies—*A review of the use of social media in emergency situations,* International Journal of Information Management, 5 (5) pp. 609-619.

Skyview Photography. (2017). *Photos: Edgecumbe flood as seen from the air*. New Zealand. Edgecumbe.

Smith, G. (2012). Kaupapa Māori: The dangers of domestication. *New Zealand Journal of Educational Studies.* 47 (2).

Smith, G. (1997). *The Development of Kaupapa Māori theory and praxis.* Unpublished Doctoral Thesis, School of Education, University of Auckland.

Smith, L.T. (1999). *Decolonising Methodologies: Research and indigenous Peoples*. University of Otago Press: Dunedin, New Zealand.

Smith, L.T. (1992). The dilemma of a Māori academic. In G.H. Smith & M.K. Hohepa (ed), *Creating space in institutional settings for Māori*. Monograph No. 15. Auckland, NZ: RUME Auckland University.

Spee**,** K**.** (2008). *Community recovery after the 2005 Matata disaster: long-term psychological and social impacts*, Report No. 2008/12, GNS Science, Lower Hutt.

Strauss, A., Corbin, J. (1998) *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Sage Publications Inc. California.

Statistics NZ. (2013). Household: Use of Information and Communication Technology: 2012. Retrieved from http://www.stats.govt.nz/browse_for_stats/industry_sectors/information_technology_and_communications/hhold-use-of-ict/household-ict-2009-tables.aspx

Taylor, M., Wells, G., Howell, G., Raphael, B. (2012). A Facebook study from 'Cyclone Yasi Update': The role of social media as psychological first aid as a support to community resilience building. Australian Journal of Emergency Management, 27(1), 20–26.

Te Aka, Māori Dictionary. (2011). *Mana.* Retrieved from https://maoridictionary.co.nz/word/3424

Te Aka, Māori Dictionary. (2011). *Kōrero.* Retrieved from kōrero - Māori Dictionary (maoridictionary.co.nz)

Te Ara, The Encyclopaedia of New Zealand. (2012). Te Taiao: Māori and the Natural World. New Zealand: David Bateman Ltd.

Te Ara, The Encyclopaedia of New Zealand. (2015). *Rangitāiki Plains and Surrounding Communities.* [Map]. Retrieved from https://teara.govt.nz/en/map/7322/towns-of-the-rangitaiki-plains

Te Ara, The Encyclopaedia of New Zealand. (2015). *The Rangitāiki Swamp.* [Photograph]. Retrieved from https://teara.govt.nz/en/photograph/5710/swamp-drainage-rangitaiki

Te Ara, The Encyclopaedia of New Zealand. (2015). *Whakapapa.* Retrieved from https://teara.govt.nz/en/whakapapa-genealogy/page-1

Te Ara, The Encyclopaedia of New Zealand. (2015). *Whare Tapa Wha Model (Mason Durie, 1982).* Retrieved from: https://teara.govt.nz/en/diagram/31387/maori-health-te-whare-tapa-wha-model

Te Ara, The Encyclopaedia of New Zealand. (2007). *Harakeke Plant.* Retrieved from https://teara.govt.nz/en/diagram/13162/harakeke-plant

Te Papa Collections Online. (2006). *Whenua.* Retrieved from https://collections.tepapa.govt.nz/topic/1437

Te Puni Kokiri. (2020). *Whānau Ora Commissioning Model.* Retrieved from https://www.tpk.govt.nz/en/whakamahia/whanau-ora/about-whanau-ora

Te Rūnanga o Ngāti Awa. Retrieved from https://www.ngatiawa.iwi.nz/about-te-rununga-o-ngati-awa

The Timing Team Blog (2019). *Te Whenua o Matahina.* Retrieved from https://www.thetimingteam.co.nz/index.php/blog/13-travel-notes/250-matahina-dam

Tuhi Stationery, (2020) Ngā Mata o Te Mārama. The Faces of the Moon. Retrived from https://www.tuhi.co.nz/collections/journals?sort_by=manual

Tumeke FM. (2017). *Te Kupenga-a-Taramainuku*. Retrieved from http://tumekefm.co.nz/wp-content/uploads/2015/10/IMG_3702.jpg

Waitangi Tribunal. (1999). *Ngāti Awa raupatu report*. Wai 46. Wellington: GP Publications.

Webber, C (2008). Maori issues for remediation of bio-hazards, chemo-hazards and natural disasters. Unpublished thesis. Retrieved from http://hdl.handle.net/10179/1005

Whakatāne District Council (2017) *Bay of Plenty Flood Facts Sheet*. Retrieved from https://www.Whakatāne.govt.nz/recovery-project

Wharewera, K. (2017). Te Hokowhitu a Tū Marae. Whakatāne dropoff point. [Photograph]. New Zealand. Whakatāne.

Whites Aviation. (1955). *Aerial Photograph of Mount Pūtauaki and the Rangitāiki River*. Retrieved from https://natlib.govt.nz/records/23530588

Williams, H. W. (1975). *A Dictionary of the Māori Language.* Wellington: Government Printer.

Williams, K. (2004) Te Pā Harakeke in New Zealand. Ministry of the Environment. Toi te Taiao: The Bioethics Council (2004-08) Retrieved from:

Zapata, Dominic. (2017). *Jet Boat and some of the Rescue Crew at Edgecumbe*. [Photograph]. Fairfax NZ. Retrieved from https://www.stuff.co.nz/national/91308451/inside-the-edgecumbe-cordon-we-saw-a-guy-latched-on-to-a-fence

Kupu Apitihanga: Appendix Tuatahi - Copy of Ethics Approval Letter

Te Whare Wānanga o Awanuiārangi

EC2017/01/038
ECR2017/01/038

11th December 2017

Hinerangi Murphy
17 Puriri Cresent
EDGECUMBE 3120

Tēna koe,

Re: Ethics Research Application EC2017.01.038

At a meeting on 7th December 2017, the Ethics Research Comittee of Te Whare Wānanga o Awanuiārangi considered your application. I am pleased to advise that your submission has been approved.

You are advised to contact your supervisor. The Ethics Research Committee wishes you well in your research.

Ngā mihi nui

Professor Nathan Matthews
Chairman
Ethics Committee
Te Whare Wānanga o Awanuiārangi

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Francis st
Whakatane 3158
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Kupu Apitihanga: Appendix Tuarua - Copy of Focus Group Interview Questions

Korowai Manaaki
The Craft of CARE for Displaced Whānau in a Disaster Situation

Research Aim: To identify the key understandings that emerge from the practice of manaaki for displaced whānau in a disaster situation.

Subsidiary Questions:

I. What are the needs that present for whānau directly affected by disaster?
II. How does a disaster impact on and reshape, the whānau unit?
III. What is the role of communication technologies and social media for displaced whānau, in a disaster situation?

Mana Whānau (Question I)

1. How did the Edgecumbe flood affect you?
2. How did the flood affect your whānau?
3. What support did you need at the time?
4. What role did the local hapū and iwi play for you, in the disaster?
5. What would you say to your own family to help them prepare for a similar disaster in the future?

Mana Whenua (Question II)

6. What do you know about climate change?
7. What do you think climate change has to do with the flood event?
8. If another flood occurred, would you be prepared and know what to do?
9. What role did WDC and CDEM play for you, in the disaster?
10. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future?

Mana Tautoko (Questions I and II)

11. Who helped you through the flood event (in terms of external support)?
12. How has your life changed, as a result of the flood?
13. What has made it easier for you to get through the disaster?
14. What problems do you have to deal with now?
15. What would say to the local health organisations to help them prepare for a similar disaster in the future?

Mana Kōrero (Question III)

16. What communication technologies did you use and why, during the flood event?
17. How important were communication technologies at the time of the flood?
18. What social media did you use and why, during the flood event?
19. How important was social media at the time of the flood?
20. What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?

21. Do you have anything else that you would like to add?

Korowai Manaaki - The Craft of CARE for Displaced Whānau in a Disaster Situation

Research Aim: To identify the key understandings that emerge from the practice of manaaki for displaced whānau in a disaster situation.

Subsidiary Questions:

I. What are the needs that present for whānau directly affected by disaster?
II. How does a disaster impact on and reshape, the whānau unit?
III. What is the role of communication technologies and social media for displaced whānau, in a disaster situation?

Mana Whānau (Question I)

1) How did the Edgecumbe flood affect you?
2) What role did the local hapū and iwi play for you, in the disaster?
3) What would you say to your whānau or someone you know, to help them prepare for a similar disaster in the future?

Mana Whenua (Question II)

4) What do you know about climate change?
5) What role did WDC and CDEM play for you, in the disaster?
6) What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future?

Mana Tautoko (Questions I and II)

7) How has your life changed, as a result of the flood?
8) What problems do you have to deal with now?
9) What would say to the local health organisations to help them prepare for a similar disaster in the future?

Mana Kōrero (Question III)

10) What communication technologies did you use and why, during the flood event?
11) What social media did you use and why, during the flood event?
12) What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?

Kupu Apitihanga: Appendix Tuawha - Focus Group Interview Questions, Additional Responses

VIR1(2018)	Focus Group Interview – Additional Responses
Q5. What would you say to your own family to help them prepare for a similar disaster in the future? Definitely have a plan. We kind of had a semi-plan, but not for anything like this. Our plan was for earthquake. It wasn't for flood. So I'm saying to whānau, "Be prepared. Have a plan for any possible scenario that you think," and the other part is 'know where everyone is at that time' and 'your first port of call' from progress into the next day.	
Q8. If another flood occurred, would you be prepared and know what to do? Yes. I can honestly say, that I would be a lot more prepared.	
Q10. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future? There's always learning so obviously there were good things they did and there were not so good things. The not so good thing that really come down for me personally was communication. Yes, they put strategies in place, but it was bit slow coming forth. They need to mobilise a team a bit better. It felt like it was, ad hoc. This is actually just "learn from what we went through, next time have those resource people talk to the business. We've got Fonterra that have it, they've got a team that most of the fire brigade come out of there. Talk to them. Talk to the marae. They should be your first people that you call up, as well as Civil Defence nationally. Have a plan.	
Q13. What has made it easier for you to get through the disaster? Not being a victim. Making that mental decision that we weren't going to make this about being victims. We've got disasters that happen and really, we just have to look at one step up from the other. Helping each other and making it. Look at the positives.	
Q14. What problems do you have to deal with now? Our process of having to deal with insurance companies like everybody else, EQC in particular, we had a little bit of different scenario where we were dealing with Regional Council. The issue that we deal with now is displacement and trying to find a new whare, because that's our next mission. We've now entered into the possibility of something new.	
Q15. What would say to the local health organisations to help them prepare for a similar disaster in the future? Yea, I think it was quite important to have the health service available like immediately, just to help people deal with that emergency. When things started to get a little bit more settled, we saw a number of people stressing and health issues started to escalate as well. We're over a year later and we still need it.	
19) How important was social media at the time of the flood? Huge as we were on it all day, since the event happened right through. For a good couple of weeks we were constantly looking at what's happening, where are we at, especially for the first 3 or 4 days of panic ***20) What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?*** If a District Council website is set up, utilise that for facts, but you'll also have the other one, cos they're quite official. It'll be just stating the facts. But you actually need on the ground information too, in terms of needing contacts. We know each other locally and you need that local connection. The Kia Kaha page was quite good to inform what was happening at the time and who was where.	
21) Do you have anything else that you would like to add? One of the other things that has been quite good in terms of a disaster, is that we are more connected now. People know where to go to get things and if they don't, neighbours know, or someone knows. The other part to that is people are more engaged in wanting to know, whereas before the flood, it was the same old handful of people, volunteers doing everything under the sun. Now everyone's putting up their hands to want to help more in the area to be more resilient, not to have to rely the outside always coming in	

DEM2(2018)	Focus Group Interview – Additional Responses
Q5. What would you say to your own family to help them prepare for a similar disaster in the future? What we do now is important, We are very alert to climate events in all sorts of ways. Pay attention to weather events. Take them seriously, if you're getting warnings. The other thing we would say is, don't get attached to stuff. One of the things that we've learned as older parents was that we made it our mission not to have our kids being worried about us when they couldn't access us, because they were really worried.	
Q8. If another flood occurred, would you be prepared and know what to do? I am very worried in terms of climate change that you can have real estate agencies and everything else (making the most out of this as a killing thing) making a profit from something, which to me is is highly dangerous to be talking up when they haven't even sorted it out yet.	
Q10. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future? I would say, cut all your arrogance. Stop being arrogant people and stop lying, because the dishonesty shows and everybody knows it. They think that the locals who know their stuff and who have lived there the longest have nothing to offer. They should think again. That's the whole thing. The arrogance of the Council which has to do something to do with power.	
Q13. What has made it easier for you to get through the disaster? I suppose it's a form of counselling. We try not to discuss flood to too many people. You learn who your real loyal friends are and the people who have kindness overall and to do amazing stuff because they don't know you but they'll do it anyhow. Every time when we get low we remember those people and we try to go through the things of what they did for us and what they've done for other people.	
Q14. What problems do you have to deal with now? That's given us an education actually and to me, it has also given us a form of activism because now we've got involved in one of the action stations. There was a whole thing on the rental market in New Zealand. They wanted stories so that they could present it to Parliament, which they did because they were trying to change the whole culture of how landlords behave.	
Q15. What would say to the local health organisations to help them prepare for a similar disaster in the future? Empathy. I would say the least empathetic persons we ran across during that time where our health professionals. My doctor, did the classic thing of when I said, he said, "I haven't seen you in a while". I would say from health point of view there should be more people available to listen. The Memorial Hall became that for a short time – a hub of people. Being able to just sit down and have a cup of tea with each other was great and kind of process to help us deal with what was going on.	
19) How important was social media at the time of the flood? No comment. ***20) What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?*** I think that's another thing is, is we're you know, we're still in a society where there are a lot of people who don't cope with that stuff. Yet, that's the only option they're being given to get information. Unless they have a radio and the radio information is good.	
21) Do you have anything else that you would like to add? I remember the radio during the flood in 2004. I remember how 1XX was superb. They were telling you what road was closed. They really didn't this time around. They didn't do that so much. They told you bits. There were big gaps of information and I thought, well, why is that broken down? Because that's really what people need is a radio station that gives information constantly and helps out.	

REC3(2018)	Focus Group Interview – Additional Responses

Q5. What would you say to your own family to help them prepare for a similar disaster in the future?
What we've done practically is informing them in writing as well If you take time to sit down and read what someone's written, you're giving it a little bit more thought, hopefully. As we've had certain experiences, we've told them these experiences, with the express reason. To let them understand that these are the kinds of things that do happen, can happen and this is where it leads, and this is how we dealt with it.

Q8. If another flood occurred, would you be prepared and know what to do?
What is very hard to believe is why the people who say it's not man made still don't see that even if it's a natural thing, you have to do something about it. It's like those volcanoes going off in Hawaii, right. It's quite stunning that Alaska in February this year, (which is their winter), in the middle of the winter, their temperature was 25 degrees higher than they expected. More gases were coming out of the ground because of that.

Q10. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future? No comment.

Q13. What has made it easier for you to get through the disaster?
It's people, who've also been interested in this story like yourself. Because hearing what's happened to you, you also are listening to what's happening to us and that sort of thing. It does begin to put it in perspective. Even reporters who come to interview you, on the phone or whatever ...who say, "Can you tell me blah, blah blah about it, even if they only use one sentence of what you've said".

Q14. What problems do you have to deal with now?
There was a particularly negative thing that we hit, which was the rentals. It wasn't a matter of saying why don't you accept our dog? It was the condition of the places we were offered. Just because people are so desperate they're willing to take on you know, some substandard and to a great extent substandard, unhealthy places and stuff like that which was really bad.

Q15. What would say to the local health organisations to help them prepare for a similar disaster in the future?
The Health Service has degenerated over the years. So for us personally, we don't have that great expectation out of the health service.

19) How important was social media at the time of the flood?
A lot of business -when we got to the stage where we needed to buy things again. That was a strange thing, as we became consumers and we didn't want to be consumers. So we got some secondhand stuff and all that. But there's other things, which because of the urgency, we just said, we have to buy one, then you'd go on the Web and we'd look for this and look for that in a certain time

20) What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?
This firm has got no web presence and Whakatāne had a lot of that. Or this district had a lot of that, that there was no web presence. So you had to keep looking around, which is fine.

21) Do you have anything else that you would like to add?
I kept thinking people didn't have cars. A lot of people escaped from their cars. It was really quite difficult at times working without technology. That surprised me because we don't rely heavily on technology anyway. Well, I think we do, we don't realize it. Now I remember when I was at school, of course, I did a lot, constantly at the computer working out, whatever.

KAD4(2018)	Focus Group Interview – Additional Responses

Q5. What would you say to your own family to help them prepare for a similar disaster in the future?
I guess stay insured. Make sure your insurance is up to date. Touching base with other people who are in the same boat as you. If you are faced with a disaster or removed from your home or whatever, try not to isolate yourself from others. Keep some contact with other people in the same position.

Q8. If another flood occurred, would you be prepared and know what to do?
I kept wondering where the Regional Council were. They didn't have a person up front initially. And what role did they play?
Civil Defence, they were all caught on the hop. They weren't ready. So, once they got through that, it was a good 48 hours maybe. It wasn't that long before things really kicked in. But there was a lot of cross site miscommunication. Then down the track, they were doing the best that they could do. They definitely improved down the track, but it was more once they got into the recovery process. The initial part I feel though is, they were blindsided themselves. So, they were confused.

Q10. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future?
I don't understand why there was no warning. They'd stopped running the buses, because that river was so high, that they were concerned. They didn't want kids travelling to school and if something happened, the buses couldn't get home. The kids would be trapped. It's hard to believe that 24 hours ago, nobody thought that there was a significant level of water to have been given some kind of warnings. Bottom line don't mess with the rivers. Don't move them. Don't change the path for a town. Shouldn't have happened in the first place probably. So, warning systems.

Q13. What has made it easier for you to get through the disaster?
For me, it's just what I've just said. Working in Edgecumbe, working with people, working with families in the kindergarten. People sharing the same struggles and others who you know, their lives we're carrying on. So, there's heaps of different focuses. The children were amazing. They're so resilient at that age they make you laugh. So my really supportive colleagues, they helped hugely.

Q14. What problems do you have to deal with now?
We've got a few things that need to be done. At this stage we don't know how long it's gonna take, or we'll see how it goes.

Q15. What would say to the local health organisations to help them prepare for a similar disaster in the future?
Cover the basic needs obviously first, housing and clothing and food and all those things as best they can help and support that needs to be in place for people's well-being. Once that's sorted, esnure that people are listening to you. Just people being around. Having that hall there where you could go for a cup of tea. Emotional support really.

19) How important was social media at the time of the flood?
If there's going to be a page open like Kia Kaha, you need really good administrators. Sensibly, you want to say thank you. If you're using social media really think about what you're posting. When something like that happens your emotions tend to take over.

20) What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?
Administrators have got to be good as they can stop things getting out of hand. Be careful what you say on social media.

21) Do you have anything else that you would like to add?
Just good to be home. I'm just so grateful that no lives were lost directly from the disaster really. As a representative of EDIT I have been asked to go on to the steering committee. We've just given ourselves a new name. I can't remember the name. So I'm on that steering committee. There's a representative from many of the community groups. VR steers it. We help guide where money is spent and the changes. People have got loads of ideas and that's helpful.

DAD5(2018)	Focus Group Interview – Additional Responses
Q5. What would you say to your own family to help them prepare for a similar disaster in the future? You can't prepare, it happens. I think this one happened so quickly. You've got no time. No time to prepare for anything. Obviously different disasters you can prepare for, but this one you couldn't. You might have a disaster pack - well that's floating down the river. That's a waste of time. So for this one you can't prepare or be giving advice to whānau about how to prepare. I think you need to find out support to stay strong after it's happened.	
Q8. If another flood occurred, would you be prepared and know what to do? There was nothing at the War Memorial. People tuned up there, but there was nothing at all.	
Q10. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future? I can't think of any advice to give them. The process and the warning systems. They need to sort that out because it's a flood, it's a hard one. You don't know when it's going to happen. Especially in this case, the river bank breaking. You just can't just say, Oh, that looks like it's gonna break. Get everybody out now. Because it might not. Maybe they should have done that, the night before.	
Q13. What has made it easier for you to get through the disaster? For me its just carrying on with work and having the support of work mates and they're all good. I'd come home and mow the lawn once every two weeks. Borrow a lawn mower, but come inside and I couldn't stay inside too long. Just wanted to get out and carry on. The Whakatāne Darts Club were awesome support with donations to the Edgecumbe flood victims. They'd ring me up and say, come on you need to come to a tournament. Some sort of normality. That was great, but like I say, I couldn't stay too long with the house been stripped out. Doing the garden outside was fine. I just mowed the lawn.	
Q14. What problems do you have to deal with now? The builders know they need to come back and finish a few things. It will happen and the workmanship being good and all of that stuff. So we're not concerned in that respect.	
Q15. What would say to the local health organisations to help them prepare for a similar disaster in the future? No comment	
19) How important was social media at the time of the flood? No comment ***20) What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?*** No comment	
21) Do you have anything else that you would like to add? No comment	

IAP6 (2018)	Focus Group Interview – Additional Responses
Q5. What would you say to your own family to help them prepare for a similar disaster in the future? Listen to the weather forecast and then, the media. Get somewhere high and people will get to you.	
Q8. If another flood occurred, would you be prepared and know what to do? Move to higher ground.	
Q10. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future? Get to wherever the problem is. Listen to the locals. Get people into town and into the War Memorial Hall and some of the marae. Older members and that, they know what Edgecumbe's like. But the Council just don't want to listen to it.	
Q13. What has made it easier for you to get through the disaster? With everybody, friends, family. Talking to strangers and that who are going through the same thing. Just talking to members of the community. Our insurance company's pretty good. He discovered that tit-for-tat, we'd have to pay for something but he'd make it up somewhere else for us. Compared to a lot of people, they've been really good.	
Q14. What problems do you have to deal with now? We are probably the lowest point of Edgecumbe down that end. The water sat around here for a long time. We're really left with only the builder and the insurance assessor to work it out. The car shed has to be replaced. We're not stressing about it too much. We want to do things to it but the Council is playing hardball again. Saying tha, "We had to be 3metres above sea and we're only 2.2 ms". But it was a stop bank that broke, it wasn't ah, overflow on the stop bank. It's man-made. It's not natural disaster.	
Q15. What would say to the local health organisations to help them prepare for a similar disaster in the future? Get people into town to get their medications. Our neighbour went to Whakatāne and saw a nurse. She pulled up his name and said, "Here's your medication" and gave it to him straight away. That was pretty good. The health professionals around this area are great as far as I'm concerned.	
19) How important was social media at the time of the flood? ***20) What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?*** If you find that your family's out of the house, you don't need to get on your cellphone. Go use a landline somewhere else. If the news gets involved, tell the right information. Make sure it's correct. Telling people…to be heading down College Road to Thornton. Don't say "head towards…Whakatane", Well people when they're down College Road head to Whakatane, they'll come down College Road. Get it right. Head towards Thornton, go across the Thornton bridge and go out.	
21) Do you have anything else that you would like to add? We've had good support by the local community, friends, family and people like the Kawerau Trust. Yea, it was 14 days and they prepared food for the army, police, us. Preparing 150 meals a day for breakfast, lunch and tea. That's pretty -good effort from the volunteers. Just don't let it happen again. I don't want to go through that again.	

JOP7 (2018)	Focus Group Interview – Additional Responses
Q5. What would you say to your own family to help them prepare for a similar disaster in the future? One thing I'd say is "put your valuables, your photo albums up high" for a flood yes and probably not stress about the small stuff. My partner rung me that morning and said "it doesn't look good at the river bank," but he tends to panic very quickly.	
Q8. If another flood occurred, would you be prepared and know what to do? If I couldn't get out, I would probably stay inside cos there's no point going out. You wouldn't want to go out down the driveway and suddenly hit the water current. Yep, stay in the house and know that someone's going to come eventually for us.	
Q10. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future? The only good thing they did was, put the rates on hold. It's not fair to go and charge people for the rates.	
Q13. What has made it easier for you to get through the disaster? The support. I remember that first weekend, running into so many people from Edgecumbe, in K-Mart. We saw just about everybody. You could tell the ones from Edgecumbe because everybody looked like zombies. Even people in houses that hadn't been affected but they couldn't get back to their homes. There was quite a few in there getting clothes cos they couldn't get back to their houses. Having a good insurance company like ours. We've been quite lucky with ours that they didn't question our contents/ Early May the'd rung to say "Oh look, we've done the figures. We're just gonna pay you contents", and…they hadn't really raised questions.	
Q14. What problems do you have to deal with now? Just waiting for our shed. We're not completely settled back in. Our outside's a bit of a shambles. We're not going to look into it until the shed's done. At the moment the shed is serving its purpose. It's still water-tight, but ithe foundations are all cracked.	
Q15. What would say to the local health organisations to help them prepare for a similar disaster in the future? It was good how the doctors set up in Te Teko. They were not charging people if they weren't back in their homes. I think there was a period there where people were able to get all their medications through them for free (iIf they weren't able to get back to their homes). Our neighbour went to Whakatane and saw a nurse. She pulled up his name and said, "Here's your medication" and gave it to him straight away. That was pretty good. The health professionals around this area are great as far as I'm concerned.	
19) How important was social media at the time of the flood? ***20) What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?*** Leave the mobiles for emergencies, like people stuck in homes. If someone's trying to contact you and they can't contact you, they start to panic.	
21) Do you have anything else that you would like to add? Even in the brigade had members from Ngaruawahia turn up. They stayed at the station.	

Kupu Apitihanga: Appendix Tuarima - Semi-Structured Interview Questions, Additional Responses

CHS8(2018)	Semi-Structured Interview – Additional Responses

Q2. What role did the local hapū and iwi play for you, your whānau or someone you many know, in the disaster?

So yep, I'm Ngāitamawera and Te Pahīpoto, but probably spend more of my time with Ngāitamawera. Quite early on in the piece after the shock of the flood and the enormity of what had happened, I started looking to my Rūnanga for help. I could not see that presence in the first 48 hours and so, I rung up and spoke with my uncle, the Deputy Chair about how concerned I was that there was no visibility at those early stages. So I kind of was looking for some strength there and guidance. I feel quite proud about that when I reflect back on that time. That phone call to my uncle and saying "help" and how that got the ball rolling

Q3. What would you say to your whānau or someone you may know, to help them prepare for a similar disaster in the future?

That's an interesting question which I'm actually doing some work on myself, under some mahi for TPK, around a toolkit or toolbox, on how we respond. I see there being some real collaboration around keeping important phone numers and contacts that could be housed with the Rūnanga for its hapū members. So I think that, our minds should be set on, how can some of our organisations support us in how we prepare for disasters and I think that holding, what they call ICE numbers; in case of emergency numbers, under high security within the Rūnanga.

Although we love to surround ourselves with our whānau and we do, but the detail, I found, quite stressful. Over that time, having to regurgitate all the detail constantly to all the different whānau members.

Q5.What role did WDC and CDEM play for you, your whānau or someone you may know, in the disaster?

I do not think that we were educated enough, around the effects that the dam. The general public, or the community doesn't know enough about that. The District Council lacked in their collaboration, or involvement with Civil Defence. I think that they were ill-preparedMy belief from coming from a disaster, is that person has to be from Mataatua, has to be, can be from Ngai Tuhoe or Ngati Awa but they have to be from here cos then they are connected and they've got the networks. This is no disrespect to the iwi liaison at the time, that was bad management from the District Council. Then we have the Regional Council in the preparedness. Again, ill-prepared in terms of the physical nature of the event and the resource that they had to deal with it. I think that the District Council dropped the ball. They let Civil Defence run the defence programme but they should've been walking alongside them in some capacity, because at the end of the day, when that, State of Emergency was lifted, they were handed everything.

Being connected to my marae and understanding the mechanics of how a marae, especially a marae kitchen works. You do have a chief, but everybody supports that person,

Then if we look at the actual recovery. So, where we're at now? I think the District Council has been fantastic. While they stepped into that recovery, they've had regular meetings with me.

Q6. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future?

I think that Civil Defence, were pretty koretake. They've just stepped out and we don't really know much apart from, that they had a review on after that. What I feel quite sad about is that. When they did that review that they never actually approached people on the ground. That they kept that review in-house and really it was the people on the ground that could tell them where they went wrong. They selected a few people from the District Council and a few people from Regional.

Then Regional Council and I've made this known to them. I feel really disappointed in their communication. So that engagement factor and that's something I'm actually working on, as we speak, with Regional Council.

Q8. What problems do you have to deal with now?

I think that my whānau, we're lucky that we adapt to change quite well. Obviously, my brother opposite the breach, never to return.

I'm in a place where I'm allowing myself to be a bit hōha with people because I'm saying "Ohh, in actual fact…your year has been very, very challenging" and it goes far beyond the waipuke. It goes beyond in all these different areas and what I have seen in my own whānau is that, for my Dad for example, with what's happened for him, I think that was his breaking point. He's broken from it. I can see amongst a lot of people his age and I don't know why that is. What I see is people of around 60, Māori and Pākeha that they've worked hard their whole lives. They've got their dream homes or they were happy with their lives. They're coming close to retirement and the idea of what's happened and what they've had to go through, has just really broken the camel's back and it's just been so challenging. It's changed my whānau, because of numerous reasons.

Q9. What would say to the local health organisations to help them prepare for a similar disaster in the future?

I think that NASH did an awesome job, when they were able to get on-board. The most awesome thing was assisting those, 5 minute, 15 visits with whānau. That was really, really good and there's a lot to be learnt from that for different health organisations.

Alot of people love to help and when they are able to help and see that they're making a difference and be part of that change.

Q11. How important was social media at the time of the flood?

Q12. What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?

I would like to see a collaborative page. I don't know if it's a Facebook or a website. I would like to see there be a central point of information that is to be, is true and correct. A collaboration between Civil Defence, Regional Council and District Council so our people, if something happens, they can go on there and see "what's happening". You're not hearing it differently. . That empowers people to go on there and get the information themselves.

Do you have anything else that you would like to add?

From a Chair Person point of view for the Rangitaiki Community Board I feel quite proud that I've managed to come through it to be honest because it's been very, very challenging. I hope that it encourages more of our people to be on community boards because you have the ability if you're affective to be, to actually, get things through Council and make things happen. I feel really humbled that I've had the opportunity to feed into the Regional Council and Civil Defence and to have the District Council actually listen to .

Don't remove yourself from the hapori, stay within it, because the amount of strength you can get from the people that are in it is amazing.

The last thing I want to add is that I am really happy that we've had momentum with our Kaumatua group. It was something I discussed with you when I had that idea, way back and I was driving. It was when the Peter Kenyon workshop was going to happen. It was…let's pay this expensive person to come over from Australia and let the community you know, guide the community with a plan and I thought "what about our old people?" Good things can come from adversity.

CH09 (2018)	Semi-Structured Interview – Additional Responses

Q2. What role did the local hapū and iwi play for you, your whānau or someone you many know, in the disaster?

On a professional level, at the time I was working for an iwi organisation. I could see that the Rūnanga were trying to be a part of the main support system and that was quite hard as professionals. I was pleased when they did, because I was able to come over and support that way. On a personal hapu level, Ruaihona marae opened its doors to the Māori wardens and so during the day, I was doing work stuff and then in the evening, I'd go back and just be a ringawera. I was pleased that I was able to help our hapu and our iwi support the families that were flooded. We had a couple of open dinners out at Ruaihona, that weren't taken up and that was alright. Then Kokohinau did the big butcher's thing, where everyone donated meat. The local butchers all came and helped. Those MPs were involved in to help promote that. That was huge. So, quite proud of the way that the iwi came together. Especially our Kawerau township. Without even waiting for the Civil Defence, they said "Here we are. The door's open. Come." Firman Lodge was opened by the Council, which was lovely for a few days before they asked them all to move back over to the marae.

I went down there a few times and it was just so packed. So, I left them to it. When they started the NAVA up I just stayed at the marae as a ringawera. I didn't feel the need to try and be part of the committee crews, having spent my days out here in my professional role, so that was…that was good. Very, very proud of the way that the hapu and the iwi came together.

Coming out here and seeing people that we know, they found it much more reassuring to see a familiar face and a local face. Somebody who knew the locals because the Civil Defence was there and the Red Cross and they brought people in from all over the place who, who weren't familiar and weren't local. We were a little bit removed. That was feedback from some of people that we know.

Q3. What would you say to your whānau or someone you may know, to help them prepare for a similar disaster in the future?

I think that these families have their emergency packs ready on the go. I remember myself way back in the earthquakes and I was only in primary school then. For almost ten years I slept with a bag under my bed, with my spaghetti in it and my can opener, in case we had to get up and go. I just imagine that the families here get weary and stressed when it starts raining quite heavily. They've all learnt especially from the floods about having things higher up off the ground. Having that emergency pack ready to go because it's a reality. For us, who haven't been hit directly by disaster, we're like "I know where everything is in the house if I need to get it". You're ready to go. You know what's important for you to take. You have your escape routes and your family that you can go to. I imagine that the families have re-evaluated who they'd check on get out sooner rather than later.

Q5.What role did WDC and CDEM play for you, your whānau or someone you may know, in the disaster?

I would imagine there would be forward thinking. What's going to happen or what are we doing to fix things up? Re-evaluating when it rains heavily now. Releasing the water a little bit better, so that we don't have the what happened the last time…which is probably avoidable-was probably avoidable. I don't know how the dams work and how the water releases. But they had to g abck and look at that.

The manual says "relationships with key community" but it doesn't specifically name who they are. They've seen through this disaster that it is important to have iwi involvement and community involvement. Who they should've had at that table sooner…to support them… from the iwi… having to go back and give feedback. Some of that's just from submissions from the locals you know Did they do enough? Did they do well enough? And what can we do the next time? People always say, "Not if but when…the next time?".

Q6. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future?

I know that they're developing a tool kit of what they've done in all the different areas. Not response but recovery. So I guess that's different In that response time, it's really just having iwi at the table sooner Straight away and not just in a token position either. Not just having the darkie at the table so that we can say that we've ticked all those boxes. That's really listening to their input, with their ear on the ground…with their communication back to hapu and . Yea that's not really anything different to what I was saying before.

Q8. What problems do you have to deal with now?

Q9. What would say to the local health organisations to help them prepare for a similar disaster in the future?

People need to be open and willing to to receive information. We have got very strong families out there who, now know what they should do, would do and will do next time.

Q11. How important was social media at the time of the flood?

Q12. What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?

It was the way to go because it's what everybody is using. If we're talking about the Civil Defence and the District Council, they would be fools not to jump onto the Kia Kaha page. It was community built and driven but it was the widest platform. They know that and they have looked at it. The good thing about the Council is that..they say can you put this message out?" So…so that's good.

In this day and age you need those strong administrators who will…cut off conversations, cut off commenting, be able to stand up to, like we've seen, we've seen that on the Kia Kaha page… "Do you work for the Council?" Somebody…Katie Shanks, being strong enough to, to be able to take that cos that's a huge role and that page was so, so important in those early days.

That page in particular had thousands and thousands of people in it. I think that there was a time, not long before the anniversary where it seemed that it had, for me, it had run its course. It just started putting on the negative things, that kids were running on the road and doing wheelies (clearing throat) and whether it was still…um…whether it was still worth while. The purpose of it had not changed but it had gone away from that urgency.

Do you have anything else that you would like to add?

TO10 (2018)	Semi-Structured Interview – Additional Responses

Q2. What role did the local hapū and iwi play for you, your whānau or someone you many know, in the disaster?

So we rallied our people up from Ngāti Awa our mangai from each hāpu. We called a hui on the Sunday and we brainstormed, what's happening, what's not happening, and how can we best help our whānau, at Patutaatahi. EOC, the Emergency Ops Centre wasn't, or didn't have enough māori input. They didn't have enough of our people on the ground communicating between the two, between Patutaatahi and what was happening up at CDEM. So first things first. We said okay how can we help you? Enid was there with Ngāt Awa Social and Health Services. Let's get you guys in NASH. There's obviously some problems with our people not having our own on the ground, to be able to go and tautoko, communicate with our people who already hurting. What they didn't need was tauiwi going in there that they didn't know - they couldn't relate to - they couldn't whakapapa to asking them some real hard, not very nice questions. All they wanted was somebody there from whānau whānui, that could go and help them go back into their houses, karakia, spend that little bit of time there.

We decided to get our people mobilised and this is where the name Ngāti Awa Voluntary Army came up. Let's mobilise these people. Let's get them together and let's see what we can do to help. We had Social Welfare at Rautahi and that was providing well. But Rautahi wasn't close enough to Edgecumbe for a lot of our people who didn't have vehicles, who didn't have transport. They were disillusioned. They were frustrated. They were angry and they needed answers. But they needed to get somewhere close. We thought Awakeri would be a better place. But it didn't become an Ops Centre. They had Whakatāne and they had Social Welfare in Whakatāne. What we thought they needed was somebody close at Awakeri that could coordinate. So HS went in there but we still pushed on our Department of Social Welfare.

Then it was call on the people like Uncle Hemana and our kaumatua who we knew could go in and awhi - manaaki and go in and karakia these houses with our whānau. Enid picked up her crew and they went in and they started going in with the whānau. Meanwhile, we were on the doorstep of Whakatāne District Council hammering them saying you need to communicate better with our people on the ground. Here we are and we stationed PK out there. She was our voice and ears out there.

Q3. What would you say to your whānau or someone you may know, to help them prepare for a similar disaster in the future?

We could see all those frustrations. All we could do is as a hāpu and whānau was to support, to be there, to manaaki. To have space for you guys to try and understand. What immediately do they need and how can we as whānau support that? How can we try and help with those frustrationsMena kei te pirangi koe ki to kōrero ki tetahi tangata, anei ahau. He whānau. He whānaunga.

So, how would I prepare others for the future? I don't know. I'd probably tell them to go and sit down with people that have been been there and done that and listen to them. I wouldn't gripe, but this is what I've been trying to, or we have, instil in Regional Council and District Council.

You need to get those people that actually witnessed it - Māori - because a big part of the population that was and you need to understand how māori whakaaro and how they need whānau around them and to implement something within your Civil Defence emergency management plan that incorporates taha māori.

So yeah, lots of questions. We shot out and saw things were already happening, at Lor Lor's place. Her whakaaro was, put some portacoms around our places in our paddocks, or by her, to house these people in the interim.

We bullied our way into to that EOC meeting and we insisted that they listen, then we bullied way and said, Now you need to listen to Enid because she is, she's got people on the ground. But until you, you bully your way in to these organisations, to be a part of it, even though our people were doing all the mahi. All the mahi was being done on the maraes, all the mahi was being done by our people to try and make things better, for those fellas coming out of Patutaatahi, but to get Civil Defence and those fellas at the EOC to understand that, gee it took a long time. Heoi anō.

Q5.What role did WDC and CDEM play for you, your whānau or someone you may know, in the disaster?

They did the best that they could. They called in the people from Kaikoura and the people from Christchurch, slightly different dynamics, but those people sort of. But those guys were used to operating to a plan. They weren't seeing what was happening on the ground and there was a lack of communication. All our people wanted to do was be provided for, to be warm, to know what was happening with their houses and how they're going to mitigate the problem. Nobody was there to communicate.

Those fellas at the District Council, Regional Councils should immediately get in touch with our people who have been there done that and say, we need your help. How do we mobilise the marae? How do we talk to the people on the ground? How do we mobilise the likes of Nash? How do we factor all these people in? But they still haven't yet. Work in progress.

Q6.. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future?

I do believe that they need to talk to people like you. Hated what was happening at NAVA. You were the leaders and also cleaning up your own places and your tamariki places. You were all totally immersed in it. Get people like you fellas to sit with them and pass that question. So they can co-create a Civil Defence Emergency Management plan. Build it around our people, because at the end of the day, the earthquake, the past three, three floods were over there.

The go to people and the people that mattered the most or the people that did the most work were our marae. Because they're right there. They know how to cater for hundreds and hundreds and hundreds of people. They know that you can get them up and running within one phone call and they're there. You've got the kai. You've got the places and the people, and they whānau.

So, build your Civil Defence plan around us. Don't get us to come and build ourselves around you because it's not gonna work. We will do what we do, whether you include us or not. But if you want to learn come and talk to these people so you can build a plan around them. Because they, they learnt it firsthand. And they're no tommy's. Like you have all this technology, have all these people that that know how to do this stuff. Utilise them.

Have they come to you people yet? I don't know. I can't answer that. But, they can learn. Hopefully Council will learn from their mistakes and these learnings and this kind of thing. Dave Brunsden came me to do that study. I talked with him and I gave the same kōrero, the same whakaaro and he put it in his report. It's about utilising māori and listening to māori. Those other people on the ground who did all of the mahi, who do all the mahi. Like our volunteers. Day one was a huge part of our volunteers. Don't take that away from your people, from all over the place too. That's a learning for the WDC.
Q8. What problems do you have to deal with now? it's coming up to Anniversary and that's gonna hurt people and everything. They're gonna live it all over again. As long as we're there to support these people. Like I said they're still ngāwe, as far as you know, providing housing and stuff. That stuff I'd like to sort out. I have my hapū hat on as well as my, my Ngāti Awa hat.
Q9. What would say to the local health organisations to help them prepare for a similar disaster in the future? That's a different space. They have a good handle on that and I've no doubt that they will be doing what's best. Te Puna Ora and all of those health organisation were on the scene. Well, that's all like our māori community. We've got our māori practitioners and our nurses and stuff and they just react. They'll always be, there. How they figure that into the CDEM I didn't notice. We're pretty healthy in that space, as far as our people are manaaki tangata.
Q11. How important was social media at the time of the flood? ***Q12. What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?*** It was interesting because what was being said down there and found out there is a communication breakdown, I'm not sure and conveying that to the fellas up at the EOC. We'd get back up there and listen to the morning meetings and it was totally, totally different to what's happening on the ground.
Do you have anything else that you would like to add?

KE11 (2018)	**Semi-Structured Interview – Additional Responses**
Q2. What role did the local hapū and iwi play for you, your whānau or someone you many know, in the disaster? The role that our hāpu played was, opening their doors instantly. As soon as we found out that there were affected whānau, not only just those that were related to us but anyone. That's what we do as whānau. We want to help and manaaki others. Hāpu wise, that's what we did at Ngati Hokopu ki Te Hokowhitu atu. Then a couple of days later, the iwi kicked in. We had to really just keep contacting them because, it was, what was our iwi going to do? What are they going to initiate first off? We didn't hear, we just did it, without any hearsay	
Q3. What would you say to your whānau or someone you may know, to help them prepare for a similar disaster in the future? Always make sure that you have an emergency kit tucked away. You never know when these disasters are gonna happen. It's made us more aware on how we need to be ready for anything. Not just a flood but things like earthquakes and stuff like that. It's really opened our eyes as a whānau and to make sure that we have those emergency things put in place.	
Q5.What role did WDC and CDEM play for you, your whānau or someone you may know, in the disaster? The Civil Defence acted as the emergency care for those affected. Did they do an OK job? It could've been handled a lot better, the processes that happened. I don't think the Council did that great of a job to be honest. It was very clinical, in the processes and not a lot of respect for those affected In terms of the manaaki for our people, I don't think it happened but not only for our people but other cultures as well. We ended up with a lot of them at our marae because of the traumatised processes that happened. Once our iwi kicked in, we had our own people at the hall. They were able to feed back to us instantly about certain people that went there, not only māori, but chinese, indian and pākeha as well. They referred them to us, as the next point of call.	
Q6. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future? I would say, "have more of our people on board with those that are at grass-roots level, because they're the ones that make those connections with the community and are in touch with the people. That would give them a better understanding on how to form those relationships and the communication, in catering for those needs. Moreso, hear them out and not treat them like a number.	
Q8. What problems do you have to deal with now? The immediate families that live over in Edgecumbe, we understand that they're now okay. They've settled into back in their houses. We've all been keeping track of those families, that are our whānau. That's helped a lot of us , to normalise our own lives, to know that they're ok.	
Q9. What would say to the local health organisations to help them prepare for a similar disaster in the future? Please provide for the mental health side of it, for the counselling, for all that to be initiated first off. We know what the trauma is like when you've been affected. We could gauge entirely what they were going through. It would've been good if those kinds of organisations kicked in. I'm still not sure if that is actually happening for those people we recommended that get someone to talk to, counselling etc. Follow-up on those that needed equipment, such as those that have apnea machines and stuff like that. It was a bit of a slow process.	
Q11. How important was social media at the time of the flood? ***Q12. What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?*** Social media is really good if you know how to use it well.. It was effective for getting the message out. If you are a key person and people rely on you, they're gonna look to you for that trust, for that communication and I guess forming those relationships with others that way too.	
Do you have anything else that you would like to add? The need first and foremost things people need when they are stressed is a hug.	

PM12 (2018)	Semi-Structured Interview – Additional Responses

Q2. What role did the local hapū and iwi play for you, your whānau or someone you many know, in the disaster?
With 'E' applying for grants through the hapū, the land blocks that we're associated with. Maraes always offered there for them if they wanted to use showers. She just wanted to come to us for any support.

Q3. What would you say to your whānau or someone you may know, to help them prepare for a similar disaster in the future?
I don't think you can really prepare anyone for it. With 'E' "I just hope it doesn't happen again!" and just sort of just brush it, keep it in the back of their heads. Because you can prepare for one thing and something else would happen.

Q5.What role did WDC and CDEM play for you, your whānau or someone you may know, in the disaster?
I think just listening. The support from Council was always offered. I just don't think they really knew how to get that support out to the people. It's about the rules and the process they have before they can even start doing anything, which was time consuming. They can just drop everything and just say, "OK. You need to do this, health and safety, all of those things affect it.

Q6. What would you say to the WDC and CDEM to help them prepare for a similar disaster in the future?
Listen to hapū, iwi, māori on how to just drop everything and manaaki for everyone, without having to get someone else, a highest permission to do things, to start anything.

Q8. What problems do you have to deal with now?
I think it's just waiting. Waiting for everyone to get back in the homes and get back to normal. As normal as can.

Q9. What would say to the local health organisations to help them prepare for a similar disaster in the future?
It's just going through what support can be offered to people in times of emergency. Advertising that there are services and have them available to the people when they need it.

Q11. How important was social media at the time of the flood?
Q12. What do you have to say about communication technologies and social media to help people prepare for a similar disaster in the future?
I think it's very important. Personally for our family, we want to be face-to-face which could be too slow. Where as, just ringing up and making contact through phones works. Listening to television too. Sometimes you've got to...decide what's true and what's not because there's a lot of people get on there and make up their own little stories.

Do you have anything else that you would like to add?
For me the only way I could help was sorting clothing donations and stuff like that. I couldn't do very much else. I knew That people needed things. So when Te Teko was set up, people were just coming in...and they only had the clothes that they had on their backs. Through the generosity of a lot of people, donations came in.
We were there from the first weekend of the-after the flood and packed everything up by the end of January. It was all voluntary. In the beginning there was a lot of whānau from all our mare coming in, even some coming over from Whakatāne. The Edgecumbe were looking for somewhere to go and something to do.