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RESEARCH ARTICLE

Local volunteers respond to the *Rena* oil spill in Maketū, New Zealand

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Following the MV *Rena* grounding and oil spill in the Bay of Plenty, New Zealand in October 2011, the Māori community of Maketū were quick to respond to the arrival of oil on their beaches. They asserted their rangatiratanga by establishing their marae as a base and successfully coordinated a clean-up by more than 450 volunteers, feeding these volunteers every day. We interviewed 11 clean-up leaders and volunteers in Maketū to gather information about how the oil spill affected people in the community and how they ensured the success of their clean-up efforts. Many volunteers returned to help with the clean-up day after day over several weeks. Concepts of kaitiakitanga and manaakitanga underpinned the work of the Maketū clean-up organisers. Participants attributed the success of the Maketū clean-up to the speed with which they responded, the support they received from their community and local businesses, and their local knowledge.

Keywords: community action; disaster; local knowledge; Māori; MV *Rena*; oil spill; volunteering

The MV *Rena* grounded on Astrolabe Reef off the coast of the Bay of Plenty, New Zealand in October 2011. Approximately 350 tonnes of oil and marine diesel began to leak from the vessel and wash ashore along the coastline. The small community of Maketū, approximately 35 km east of the city and port of Tauranga, was one of the locations most affected by the ‘black tides’. When it became clear that oil spilt from the *Rena* would come ashore along a considerable length of coast, Maritime New Zealand—the government agency responsible for leading and coordinating oil spill response—held public meetings in a number of coastal communities, including Maketū. Following a meeting at the Maketū Fire Station at which authorities indicated that they would be organising a clean-up programme in the near future, several members of the Māori community decided not to wait for authorities to act, but to organise their own clean-up immediately. They held a meeting

that same evening, appointed a leadership team and, with backing from local tribal elders, set up their base at the local marae.¹

In this article we tell the story of the cleaning of oil from Maketū beaches and rocky shore from the perspective of the group who organised the clean-up. The two researchers who led this aspect of the study are both Pākehā (European) women who have close connections with Maketū. Kelly Smith grew up in Maketū and her children whakapapa to tipuna from Maketū. Heather Hamerton lives on the Bay of Plenty coast at Papamoa and has prior connections to several of the clean-up organisers. Our full research team were all personally affected by the *Rena* oil spill and investigated the experiences of volunteers who cleaned up many of the Bay of Plenty beaches following the *Rena* oil spill. As part of this study, we approached leaders of the Maketū clean-up team to hear their story of organising volunteers to clean their beaches and

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waterways. This story is compiled from the conversations we had with Maketū volunteers and organisers, and is not a definitive account of the Maketū clean-up.

Our research process

This research project was part of a wider study initiated to learn about people's responses to the *Rena* oil spill, and what motivated people to volunteer for the clean-up. The results of our online survey indicated that volunteers from Maketū were much more likely to have attended multiple clean-up events than those in other locations (Sargisson et al. 2012). We then approached leaders of the Maketū clean-up response and with their support conducted focus group interviews with clean-up organisers and volunteers.

We obtained ethical approval for this research through the University of Waikato Human Ethics Committee. We addressed our initial concerns about the ethicality of researching in a Māori community directly with the clean-up organisers at several points during the research process. Our established relationships facilitated their support and they gave us feedback at various stages. These relationships did not end after the focus group interviews were concluded, as we circulated our manuscript and met again with some of the group to gather further feedback.

Two members of our research team together with two research assistants talked to volunteers and people involved in organising the volunteer clean-up programme in Maketū. We wanted to learn more about what had motivated them to help, how their volunteering experiences affected their lives and how they had organised the clean-up so quickly with little help from outside. We gathered information from individual and focus group interviews with 11 Maketū residents who worked intensively for up to four months following the oil spill, either cleaning up the oil or providing support for those who volunteered. These participants were mostly of Māori ethnicity.

We analysed the data by identifying key themes in the participants' stories and used NVivo software to record our coding.² We asked some

participants to read and comment on the collated information and preliminary themes; we have incorporated their comments into this account. We then compared our themed analysis of the participants' narratives with the findings of other New Zealand researchers about community responses to disaster.

Participants told a series of stories about the *Rena* clean-up. Although the stories were complex, fragmented and at times divergent, we decided to use their narratives, and work collaboratively with them to ensure their voices were heard. We explored the personal and social impacts of the oil spill and clean-up on the Maketū community, so as to consider events in terms of the community's past, present and future. Julian Rappaport (2000) has noted that community narratives provide a useful way to understand culture and context, especially in times of social change. Using a narrative approach allowed us to begin with participants' stories, to explore the meanings they gave to their experiences of beach clean-up and to understand their experiences within a cultural frame (Hollway & Jefferson 2000; Striano 2012). It also provided us, the researchers, with a space to acknowledge who we are and our various connections to both Maketū and the *Rena* oil spill (Clandinin & Connelly 2000).

Maketū: a place of significance

Maketū is a place of historical and cultural significance as it was the landing place of the Te Arawa waka (canoe). The saying that begins 'Mai Maketū ki Tongariro ...' is used to describe the settlement of the descendants of the Te Arawa canoe from Maketū across the geothermal zone into the hinterland (Waitangi Tribunal 1989; Tapsell 2012). The Maketū coastline is still important for Te Arawa people regardless of where they live as they come to Maketū to fish and gather other types of food and for recreation and cultural activities (Hamerton 2014). In the report on the Kaituna River claim (Waitangi Tribunal 1989), the importance of the waterways and coastline of Maketū to the Te Arawa tribe was illustrated:

Kai Moana (food from the sea) has great significance for the Māori. It is almost as unthinkable for a Māori to entertain guests without seafood as it is for a European to offer a meal that has no meat. Maketū and the Kaituna River have been a rich source of fish, shellfish, eels, fresh-water crayfish (*koura*) and many other kinds of food ... for generation after generation (p. 13).

Our participants stated that many people (Māori and non-Māori alike) volunteered because they remembered holidays at the beach and days spent gathering seafood, confirming appreciation of Maketū as 'the food bowl' of the Te Arawa people (Environment Bay of Plenty 2009). When the oil from the *Rena* washed ashore at Maketū, participants said they felt the need to support and assist with the clean-up due to their historical connections:

[My cousin from Rotorua] she is a farm girl and they come here for their holidays ... and they said that they had invoked the gods to try and keep as much oil away from Maketū as possible. [Participant A]

Approximately 1047 people live in Maketū; 67.1% identified as Māori in the 2013 census (Statistics New Zealand 2013). Although only a small number of people live in Maketū, due to tribal affiliations from the Te Arawa waka, many Māori people feel a strong sense of belonging to, and responsibility for, Maketū. Therefore it was unsurprising that when the oil from the *Rena* began to wash ashore, people in the Māori community from Maketū and wider afield quickly responded to the unfolding environmental disaster. Their location 35 km from the headquarters of the Incident Control Centre (ICC) in Tauranga meant that the small and remote community felt the need to act independently in order to respond quickly.

One participant described the sequence of events:

So we had the meeting with Maritime New Zealand and then we called all the local iwi, hapu down to the marae that same night to have a meeting about it ... we said OK what are we going to do about this? ... and we decided we'd start the next day. No gear, no nothing, but you know ... let's all get together and do something. [Participant B]

Oil spill clean-up in Maketū

Participants described challenging conversations at the initial public meeting, and said they wanted to channel the grief and anger of the community into constructive action. Thus they formed a clean-up committee, asked community leaders for support and decided to use Whakaue Marae as their base.³ Initially they received no assistance from Maritime New Zealand or the ICC in Tauranga. However, on the first day that oil came ashore, 200 people, including children, turned up to help. Clean-up organisers attributed the speed of the Maketū response to the natural strengths and structures that already existed within the community. Fraser et al. (2012) also noted the immediacy of the Maketū response and the need for the ICC to modify its response system to fit with local requirements. Participants told us about those early days when they were dealing with toxic oil and waste without adequate protective clothing and using makeshift equipment:

The first two days everyone helped ... we had no gloves, just buckets and spades basically and whatever gloves people could find at home ... we were using supermarket bags on our shoes. [Participant C]

Our first help came from private people, local. Kai [food] came from our locals. Baking, every day somebody would drop in baking. [Participant D]

The community came together for this common cause. Local businesses donated equipment and food to support the volunteers and people found their own individual ways to contribute:

Some came down and brought sandwiches and cakes and things for volunteers, others came down and worked in the kitchen. Everyone contributed in their own way. If they couldn't get on to the beach and contribute in that way, they found some other way of contributing. [Participant D]

Although the clean-up group was led by Māori, both Māori and non-Māori (Pākehā) people participated. This same participant reflected that:

The European part of the population that didn't feel comfortable at the marae, by being part of this they became comfortable at the marae. They felt that

they could just come down and participate in whatever way they could. That was a real positive. [Participant D]

After the initial decision to organise their own clean-up, roles within the group evolved according to need and based on people's skills, experience and available resources. Because of the toxicity of the oil that was washing ashore, clean-up volunteers needed protective clothing and organisers established a decontamination unit at the beach exit. One of the group leaders received training from Maritime New Zealand, then came back and trained all of the people who volunteered at Maketū. Some people put their skills to use at the marae, providing food for volunteers when they returned from the beaches. One person compiled a newsletter containing information about clean-up events and progress so far; another emailed this newsletter out every evening to a growing list of volunteers. The local surf club provided their boats to ferry volunteers across the estuary. One person summed this approach up as follows:

We just integrated the best of the local culture (Pākehā or Māori) needed to ensure a successful clean-up and made decisions as quick as possible. That's the nature of emergency management—no time for seeking a consensus of different cultures and individuals. [Participant D]

Throughout the eight weeks of intense clean-up, one volunteer event was organised each day around the low tide. After training, volunteers were deployed to different locations around the beach, estuary and rocks to clean oil for four-hour shifts. At the completion of their time on the beach, they were carefully decontaminated and then went back to the marae for a meal. Meanwhile, at the marae, other volunteers prepared food to be available at the end of the shift. In March 2012, one of the organisers provided overall statistics compiled from information meticulously recorded by team leaders. Recorded outcomes from the Maketū clean-up effort included:

- 463 volunteers were trained;
- volunteers completed 3356 hours of beach clean-up;
- volunteers at the marae clocked up 698 hours preparing food and keeping the marae clean;

- 2855 bags of oily waste were collected for disposal.

Unlike many of the volunteers we interviewed at other Bay of Plenty locations, Maketū volunteers tended to return day after day to help with the clean-up. Some reported they took time off work in order to help, and some travelled from other places to be there. Several participants noted that they received a significant amount of practical, emotional and spiritual support from whānau (family) who lived elsewhere.

And some [volunteers] from the Gold Coast, they stood in a restaurant and cried and came home. [Participant E]

They also reported being heartened that overseas visitors came to assist.

We had some of the locals pick up a couple of hitchhikers from Texas ... brought them here to clean up oil and they loved it so much they stayed. [Participant F]

Participants spoke of how humbled they felt about the support that they received. They told stories to illustrate the lengths to which people who were not from Maketū went to support the volunteer effort, and stated that these gestures of support helped them through the tribulations of the clean-up. One example of this is illustrated in the quote below:

What about ... the German girl who by day three was leading a team; they all showed up because they had landed in NZ and they wanted to come and help with the oil and they wanted to find work in the Kiwifruit industry as well, and they needed a place to stay and all of a sudden one of the locals said 'come and stay with us for a couple of nights' and then by day three of volunteering one of the girls ended up being a team leader, taking teams out. [Participant A]

Their delight was evident in their mannerisms and facial expressions when they repeated these stories to us.

When we spoke to participants four months on from the *Rena* grounding, they told us that the clean-up was still far from over. People felt that the primary focus had been on restoring their beaches

and one group expressed a need to take time to conduct karakia (prayer) to cleanse the beach.

I think the first thing was that the food source was going to be affected, and we did not know just how long that was going to last. That was one of the major concerns, very, very major for our local people, the fisher people. It affected a lot of families because they couldn't actually just walk on the beaches, and be one with Tangaroa (god of the sea). [Participant E]

Researchers have found that technological disasters caused by human error create more long-term and enduring community disruption and stress than natural disasters, due to the indiscernible nature of toxic contamination that generates social and psychological tension (Gill et al. 2012). This was reflected in the research participants' statements as they described people's outpourings of grief and anger followed by apprehension and uncertainty about the future well-being of their community.

They told us that it was important to follow their cultural and spiritual protocols in order to sustain the mauri (life force) of the area and restore the balance. Below is an excerpt in which members reflect on Tangaroa, their customary role and responsibility as kaitiaki (guardians).

Participant E: I was praying and hoping ...

Participant G: But at the same time, hoping [Tangaroa] would recover, that people weren't going to get sick. But they did, man.

Participant D: I was just thinking, I hope this doesn't, because we haven't looked after Tangaroa ... that he takes it out on us. You've just got to do things so right, otherwise we're adding to the disrespect that's been done. So I was really careful about those things, I just didn't want more harm to happen.

Participant G: Thirty old people died during that period. Thirty! Now that says something. All these phenomena, all these cultural things happening, we had tangihanga [funeral] after tangihanga, we had whales stranding, unusual species of whales stranding, more than once, in areas that aren't common stranding areas, all of these, I don't like to call them phenomena ...

Participant E: All these tohu [signs/premonition].

Participant G: And sharks. That's a real tohu, you don't usually get sharks stranding here, well beached.

Participant E: We're talking about the hope, darling ... And the mistreatment of Tangaroa, and the greed of people, and all of that, taking more than they should, and not respecting him and giving back to him.

Participant D: And I don't want anything to happen to our kids, our future generations. I'd like to see us build on our strengths from being sea people at Maketū, that's my hope for the future, that this re-sparks that kaitiakitanga of the sea for us, that we regain our cultural knowledge, or revitalise it, that's what I hope.

This excerpt demonstrates how closely connected the people of Maketū are to the sea and how their grief about the *Rena* disaster impacted upon them spiritually and physically. This conversation corresponds with researchers' reports following the *Exxon Valdez* and Deepwater Horizon oil spills of social and economic disruption for communities and families alongside high levels of psychological stress (Gill & Picou 1997; Ritchie et al. 2011; Gill et al. 2012). These researchers also found that the impacts were most harmful for those with strong economic, social and cultural ties to the environment (Gill & Picou 1997; Ritchie et al. 2011; Gill et al. 2012), similar to the characteristics of the people of Maketū. We reflect further on the importance of kaitiakitanga in the next section.

Participants expressed pride about the large number of volunteers that initially came together on the beach and worked under their own initiative and using their own resources. The community chose to take financial responsibility for the clean-up, evidenced in the significant numbers of volunteer hours recorded and donations made by individuals and businesses. Some people reported that they took substantial amounts of time away from their paid work, willing to suffer possible financial hardship. Similar research on Australian bush fire volunteers (Webber & Jones 2011) found that some people who volunteered for significant periods of time had to make sacrifices and manage competing demands for their time. This was mirrored in the experiences of the volunteers in Maketū, as it was common for volunteers in Maketū to volunteer multiple times, sometimes resulting in disruption to their normal work and family life routines.

Rangatiratanga

We believe that the actions of the Maketū clean-up organisers were a clear assertion of their rangatiratanga, which Mead (2003) defines as sovereignty or self-determination. Participants told us that as mana whenua they had a comprehensive knowledge of the area. They were not prepared to let others make the decisions for their beaches, nor were they willing to be defined by others from outside their community, a close community connected by whakapapa (genealogy), geography and by the values of kaitiakitanga and manaakitanga (hospitality based on respect and caring). They advised experts on what was happening in Maketū and expressed frustration when their views about wildlife and their cultural and local knowledge were disregarded:

... Maketū was on top of their own stuff, our coast and we're the kaitiaki, [needing to have] input into signing off on the cleaning up of beaches. Those submissions took a lot of time, because they were urgent timeframes ... [we kept] an eye on their science, you know. [Participant G]

In order to be able to complete the beach clean-up in their own way, and to their own standards, clean-up organisers managed their relationships with other iwi groups and with Maritime New Zealand. One of the leaders reported: 'I think the hardest part about being a volunteer was having to deal with Maritime and all of their processes and their people' [Participant G].

Busby (2010) asserts that due to the strong spiritual connection that Māori have with their land and waterways they are likely to feel disempowered and victimised if their rangatiratanga is not acknowledged and acted upon. Similarly, Proctor (2010) argues that local authorities need to recognise the rangatiratanga of mana whenua as experts and therefore support their wisdom and authority in planning and decision making. Clean-up organisers expressed their rangatiratanga through the practice of kaitiakitanga and manaakitanga; we will demonstrate their enactment of each of these concepts in turn below.

Kaitiakitanga

I hope other iwi, other Te Arawa iwi, recognise what a magnificent job our locals, us tinpot Maketū did. True coastal kaitiakitanga! [Participant D]

The term kaitiakitanga encompasses both environmental and social dimensions of managing human and natural resources. Kawharu (2002) asserts that kaitiakitanga embraces ideas of hospitality, obligation, sustainable development and care for future generations. Kaitiakitanga is an important Māori value (Kawharu 2002; Mead 2003; Forster 2011). Through kaitiakitanga, Māori tribes associated with particular geographical areas of Aotearoa New Zealand still maintain their traditional authority and responsibility for ensuring human, material and non-material elements in those environments are kept in balance (Kawharu 2002). The Te Arawa people claim kaitiakitanga over the Maketū waterways, coast and environs (Bradford et al. 2001).

The research participants defined their actions in terms of kaitiakitanga. They saw it as their role and duty to clean up the oil and saw no need to wait for authorities to give direction or permission to undertake tasks. Their comprehensive knowledge of their coastline meant they were well placed to oversee the clean-up.

Local Māori fishers accurately predicted the pathway of the oil spill from their knowledge of coastal currents and wind patterns. Once the oil arrived, locals knew where to look for it because of their knowledge of the coast. In addition they were familiar with the nesting grounds and habitats of wildlife such as lizards and dotterels. Their knowledge came from living with the sea and estuary over many years, so that they were able to read the signs (tohu). In addition some had been involved in monitoring their taiapure (traditional fishing reserve) which was established in 1996 under Māori fishing regulations (1989). Some participants also trained in Western science were able to combine their scientific knowledge with mātauranga (traditional Māori knowledge).

We learned about the frustration that volunteers felt about the visits from outside 'experts'

making judgements about their beaches and telling them what to do:

The experts, coming out and ... walking in the wrong areas, riding a quad bike, not walking on foot, real bad practices, and so that information gets fed back to their managers, and their managers will contact me or someone and say 'there's no need to send help to you guys, because our assessment says there's no oil'. But I'd say, you come out here the next day and I'll show you where the oil is, but because we had a storm last night, it's buried. Bring a rake, bring a shovel and we'll show you. You don't know our beach, where the collection is, and please listen or give us some credit, that we know where the oil will be. [Participant G]

The volunteers said that they were committed to ensuring that the clean-up happened as quickly and as thoroughly as possible and were therefore willing to put their lives on hold until after the completion of the clean-up. One person reported that 'for the first six weeks I was there probably five days a week, around that, as it started to quieten down, maybe two days a week until it stopped' [Participant C].

Small rocks and stones are characteristic of some of the Maketū coastline; cleaning oil from these rocks and stones proved a difficult challenge for volunteers. Community members expressed pride in their decision to clean the rocks using a sphagnum moss product called Spill-Sorb which they described as an 'innovative natural product'. Because Maritime New Zealand was initially not willing to support the use of this product, the community financed this initiative and successfully trialled Spill-Sorb on their rocky shoreline (Gaborit-Haverkort 2013). Having demonstrated its effectiveness, they were then able to advise others on its use. One person reported:

We had a rock cleaning expert come three weeks after we had oil and once the oil was well baked on to the rocks and he came and had a look and saw a spot of oil on the rock and he said basically that you can't do anything to that and that you have to let it weather. So we put some Spill-Sorb on it and rubbed it off and he was amazed ... he was going to put it as a recommendation in his report that Spill-Sorb be used elsewhere. [Participant C]

Clean-up leaders reported that their roles within the community provided the basis for the governance

roles that they took on within the *Rena* oil spill clean-up. For example, the people who were involved in monitoring the taiapure liaised with the visiting scientists and those who had expertise in running the marae continued in that role catering to the needs of the large numbers of volunteers. Their well-established community roles meant that they were well placed to provide a local response with the support of their community. Research following the Canterbury earthquakes in 2010 similarly found that existing community relationships and infrastructure were critical factors for successful response (Thornley et al. 2013).

Participants told us that because they had a comprehensive knowledge of the area they were not prepared to let others make the decisions for their beaches, nor were they willing to be defined by others from outside their community, a close community defined by whakapapa, geography and by the values of kaitiakitanga and manaakitanga.

Manaakitanga

Manaakitanga is a term that refers to looking after, nurturing or feeding people and ensuring that they are treated well (Mead 2003). The Maketū clean-up organisers arranged the *Rena* oil clean-up so that volunteers could come to the marae afterwards to eat and be together. They saw their role as hosts who were obligated to support the volunteers, who had given hours of labour, equipment and a lot of kai. In the following excerpt, participants commented on this value:

Participant G: It was quite a natural process ... it wasn't to try and retain volunteers. It did that, it did work like that, but it was part and parcel of our duty.

Participant E: Yeah, feed the people who helped.

Participant G: And if you base yourselves out of the marae, you open that manaakitanga that comes from that marae, which is ... you've got to put on a kai, and it was hard.

Participant E: Just the natural process.

This sense of manaakitanga spread further than the marae; the people of Maketū opened their homes to the volunteers and some volunteers stayed on in

Maketū, continuing to help and even gaining employment in local industry.

Customarily, Maketū iwi draw on their local 'food bowl' to feed large groups that come to the marae, but because of the oil spill they were unable to use their natural and customary resource. Instead they had to rely on donated food from local businesses and individuals. Despite this added stress in a time of crisis they maintained their hospitality towards the volunteers throughout the clean-up.

In addition, the core organising group supported one another throughout and found that this support helped them to deal with their physical and emotional stress. As one person said:

The people who were prominent from the beginning and right through to the end, they supported each other, emotionally and physically, they just helped. Sometimes we'd just sit here (in the marae kitchen), just talking, and that's how I guess it relieved a lot of people, just sitting around in here. We didn't need counsellors or anybody like that to talk with us, or any professionals. [Participant E]

This demonstration of manaakitanga meant that people affected by the *Rena* oil spill received physical, emotional and spiritual support. This point is consistent with researchers' findings following the Canterbury earthquakes that Māori cultural values and practices such as manaakitanga are important in assisting recovery following disaster (Thornley et al. 2013). Proctor's (2010) research also demonstrated that whānau from out of the region will also respond to the needs of the community by contributing resources and helping out.

Using the marae

Due to the nature of the unfolding crisis, a quick decision was made to use Whakaue Marae as the main base for the clean-up operation. Participants considered the marae the natural place to run the clean-up in Maketū and attributed their success to its use:

This marae gave us the courage and the authority to control it from here. And look, it's right on the beach, I don't know if there's any other marae this close to the beach in those other areas. Controlling from the marae was a big part. [Participant D]

One important outcome was that the facilities available at the marae (kitchen, dining hall and toilet facilities) enabled the clean-up group to fulfil their manaakitanga obligations over a sustained period.

Our focus, it was to clean the beaches, we knew how to get our volunteers, and it was part of our kaupapa to feed the volunteers, to thank them for their work every day. [Participant D]

Other New Zealand writers have also attested to the beneficial effects of using marae in a time of disaster. Some researchers (Hudson & Hughes 2007; Thornley et al. 2013) found that using the marae for disaster response meant that people reported reduced stress and improved well-being due to the stability and certainty of tikanga and kawa and the emotional support available. Busby (2010) noted that marae 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.

Community outcomes

Leaders emerged within the Maketū community during the clean-up; as it was an emergency, people assumed roles that they may not normally have taken. The team leaders reflected on how they learnt the job as they went, supported each other, and through experience learned how to deal with different terrains and conditions. They were then able to share their knowledge with others, including visiting 'experts'. Over the clean-up period, they met with government ministers, the Navy, scientists and university personnel, who were all working together with Maritime New Zealand.

As the clean-up work progressed across Bay of Plenty beaches, some organisers of volunteers were paid for their work. The clean-up leaders in Maketū refused to accept payment for their work, contributing all payment received from Maritime New Zealand to a fund that was used later to buy a quad bike and other equipment. They considered themselves well placed to represent their community in an environmental oil spill, having two

scientists, a politician and ‘a magnificent co-ordinator and the Marae on board’. They represented the Maketū community in a number of forums to ensure that their people’s needs and views were represented in wider decision-making processes and reported they were referred to by other participants as ‘strong people who will go and fight, and not back down’.

In Aotearoa New Zealand, there are other reports of indigenous and community groups that have responded effectively to other natural disasters (e.g. Hudson & Hughes 2007; Busby 2010; Thornley et al. 2013). Māori are significant stakeholders in all communities, due to their ancestral knowledge of, and links to, tribal lands, and possess communication and social networks that can readily aid in disaster recovery (Hudson & Hughes 2007; Busby 2010; Proctor 2010). Because of their valuable local knowledge, ordinary citizens and indigenous groups are a useful volunteer workforce for a range of emergencies. Similar to our research in Maketū, these studies are about rural Māori communities who were able to take the initiative and provide a community response to natural disasters.

Conclusion

The Maketū clean-up group successfully removed all visible oil from their coastline and estuary. They attributed their success to the speed of their response, their use of Whakaue Marae as a base and the generous support they received from their community, including people who volunteered many hours of their own time to engage in the beach clean-up or help out at the marae, and local businesses who donated equipment and food. We also thought that organisers’ roles and existing relationships within the community were important, as these enabled them to assign roles appropriately according to recognised skills and expertise.

Because of their isolation and distance from the ICC in Tauranga, clean-up organisers had to be resourceful in getting training and procuring resources and equipment. However, they were also able to try innovative methods such as Spill-Sorb for cleaning the rocks before authorities were

willing to sanction the use of such methods. Their relationship with ICC personnel also contributed to their success and as the clean-up progressed, the support received from the ICC increased.

In organising their own clean-up, the people of Maketū enacted their rangatiratanga as mana whenua; their actions were underpinned by values of kaitiakitanga and manaakitanga. It was clear that the local and cultural knowledge that clean-up leaders and volunteers displayed because of their familiarity with the Maketū coastline was immensely valuable in ensuring the success of the clean-up effort. At times, they had to assert their knowledge and expertise in the face of outside ‘experts’ who wanted to advise them.

The actions of the Maketū clean-up group mirrored the responses of other Māori communities to crisis events; the positive outcomes participants reported from being actively engaged in the clean-up and from drawing on their cultural values were similar to benefits reported in other New Zealand studies of community response to disasters. We believe the oil spill clean-up in Maketū demonstrates how small local communities are well placed to respond quickly and successfully to crisis events and also attests to the effectiveness of Māori values as guides for action.

The implications of these findings are clear: authorities responsible for disaster planning, such as Maritime New Zealand in the case of oil spill response, need to include local communities, and in particular mana whenua, in planning and decision-making processes. Participatory processes that engage local communities and acknowledge the rangatiratanga of mana whenua as well as their considerable knowledge and inherent resilience would help to ensure that responses to oil spills affecting coastal communities are effective. Community participation in planning would also enhance community well-being and strengthen partnerships between communities and statutory authorities. In order to ensure participation, organisations charged with disaster planning and response clearly need to build relationships with communities prior to disaster events, so that participatory processes become part of their standard practice.

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Notes

1. The marae is a communal and sacred meeting place for Māori (the indigenous peoples of Aotearoa New Zealand) of a particular extended family group.
2. NVivo software was used to assist with qualitative data analysis.
3. This marae is situated directly beside the estuary.

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