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The dynamics of hapū research relationships

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The Whakaki Lake Trust has a long history of being an active kaitiaki of Whakaki Lake and has developed a hapū-based restoration and enhancement programme at the Lake property. Part of this programme has involved working with a range of external agencies and researchers. Research relationships have become an important part of the restoration process to build the capability and capacity of hapū to execute activities associated with restoration. In addition, relationships have provided an opportunity to strengthen and expand the knowledge base that hapū can draw upon to inform ecological restoration and resource management decisions. Some of these relationships have been adversarial and a source of much frustration. As a consequence the Trust has developed very clear expectations and policy around working with others. My experience of developing a doctoral research project with Whakaki Lake Trust is used here to discuss hapū expectations of research and resultant academic dilemmas.

Keywords: hapū-based research; research relationships; restoration; kaitiakitanga; research alliances

Whakaki Lake is the cultural and spiritual base of local hapū (subtribe), Ngai Te Ipu, Ngāti Hinepua and Ngāti Hine. Our tipuna (ancestors) settled around Whakaki Lake and successive generations were dependent on the lake and associated natural resources for survival. Over time the lake became a central feature of local hapū identity, highly valued, respected and admired (Tomlins-Jahnke 1993; Whakaki Lake Trust 2009).

Whakaki Lake is a large shallow wetland system located east of Wairoa. The lake is part of a series of lagoons including Ohuia Lagoon, Waihoratuna Lagoon, Wairau Lagoon, Te Paeroa Lagoon, Rahui Channel, and Patangata Lagoon. The wetland system is separated from the sea by dune lands on the southern shore. The raised embankments of State Highway 2 and the Napier-Gisborne railway line run along the northern shore. The bed of the Whakaki

Lagoon and some of the immediately adjacent lands are Māori owned.¹ A substantial part of the bed, and lake property from the eastern end towards the west is part of the Hereheretau B2L2 block and managed by the Whakaki Lake Trust. Lands at the western end of the Lake, including the lake bed are managed by the Whakaki 2N Incorporation (Iwitea). The lake property is 577 hectares. Approximately 117 hectares are sand dunes and swamp areas with the remainder made up of the lake.

The ecological transformation of the Whakaki catchment area, particularly through drainage and a range of agricultural activities, has decreased the area of the wetlands (Coombes & Hill 2005; de Winton & Champion 2008), has reduced native biodiversity and has negatively impacted on the quality of the ecosystem and associated natural resources (Parliamentary Commissioner for the Environment 1993a,

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1993b). Local hapū, lagoon recreational users and representatives of government agencies began to notice major ecological changes in the 1970s (Parliamentary Commissioner for the Environment 1993a). Whakaki Lake Trust on behalf of the local hapū, have been actively lobbying central and local authorities since 1973 to address environmental degradation and biodiversity issues at the lake (Parliamentary Commissioner for the Environment 1993a).

The Whakaki Lake Trust has a long history of being an active kaitiaki (guardian) of Whakaki Lake and its natural resources, particularly tuna (eel). The Whakaki Lake Trust was established in 1969 to manage Whakaki Lake property on behalf of the Māori owners. In 1996, the Trust began an ambitious and extensive hapū-based wetland restoration and enhancement programme that still continues today.²

Remnant wetland ecosystems are fragmented and highly modified or degraded and, as a consequence, restoration and enhancement are technically very complex and often a costly exercise. Engaging in restorative land and waterway practices can be difficult when for many hapū, there are limited funds, skills and expertise in restoration work and more pressing hapū priorities. Working with a range of local authorities and researchers has been necessary for the Trust to progress its ecological and environmental protection agenda.

This paper draws heavily on data used to develop a case study of kaitiakitanga (guardianship) at Whakaki Lake to explore the experiences of a hapū as they develop working and research relationships. The case study was compiled from a range of documented sources, site visits, hui, interviews and a research project that was completed for the Trust. The case study was part of a doctoral programme that considered how hapū can enhance their ability to be active kaitiaki and continue to express and integrate a contemporary Māori cultural environmental ethic in wetland ecosystem restoration and management. Initially, Whakaki Lake was to be the central focus of the

doctorate. However, identifying a research project for the Trust took longer than anticipated so a contingency plan was developed, just in case this part of the research did not eventuate.

The project employed three strategies to investigate contemporary kaitiakitanga. Firstly, a series of interviews with active kaitiaki involved in hapū-based wetlands or waterway enhancement programmes throughout the country were conducted to explore the factors that shape the contemporary practice of kaitiakitanga. Secondly, a research project was developed for the Whakaki Lake Trust. This project involved working from the Trust's office along side Trustees and employees to develop an electronic baseline database of information related to Whakaki Lake as well as an assessment of the Trust's informational requirements to develop research projects and inform current planting, pest control and environmental monitoring programmes. The third strategy involved a governmentality critique³ that explored the incorporation of Māori customary rights, Treaty rights and the practice of kaitiakitanga into state environmental policy. A key focus is the capacity of the state resource management system to facilitate the ability of hapū to execute their kaitiakitanga obligations and responsibilities. Together, these three strategies allowed an investigation into the nature of contemporary kaitiakitanga and the challenges that active kaitiaki face in their efforts to restore and enhance the ancestral landscape. For the purposes of this paper, a critical reflection is provided as a basis to discuss hapū expectations of research.

Research relationships

There are several examples within the literature of Māori engaging with others, including scientists and local, regional and central authorities, to address the complex and technical nature of environmental issues and how to progress Māori environmental interests (see, for example, Kāhui Tautoko Consulting 2009; Local Government New Zealand 2007, 2011; Pohatu &

Warmenhoven 2007; Smith 2007).⁴ Within the Aotearoa New Zealand environmental management sector, cooperative relationships are often conceptualized within a collaborative or co-management framework (Harmsworth 2004; Taiepa 1999). Co-management is a form of engagement usually between the state and a resource user group (or groups) including indigenous and local communities. Co-management refers to a range of activities for the sharing or transfer of authority and responsibility for resource management (Berkes et al. 1991; Notzke 1995; Wall et al. 1995). Effective engagement based on trust and respect that can facilitate cross-cultural communication and capacity building is a key factor for achieving beneficial and enduring co-management relationships and positive environmental outcomes (National Round Table on the Environment and the Economy 1998; Taiepa 1999). The broad values that characterize effective co-management relationships are consistent with the experiences of Māori researchers. Moreover, these values are reflected in guidelines that have been developed to facilitate engagement and research relationships with Māori by external agencies (see, for example, Cram 2001; Denzin et al. 2008; Health Research Council of New Zealand 2010; Local Government New Zealand 2004; Te Puni Kōkiri 2006).

Within an Aotearoa New Zealand context, developing cooperative relationships is often linked to acknowledgement of the Crown-Māori relationship as defined by the Treaty of Waitangi. Government agencies are encouraged to engage with Māori as part of the government's policy of giving practical application to the Treaty. Engagement with Māori therefore can be considered a social responsibility, to address issues of social justice and equity and to ensure the full participation of Māori within Aotearoa New Zealand society. An extension of this Treaty and social justice policy is that access to what has previously been called the Public Good Science Fund requires scientists to consider the relevance of their research to Māori and to develop research

relationships with Māori (Cunningham 2000; Ministry of Research Science & Technology 2005). As a consequence, there has been an increase in the number and types of research relationships with Māori in the science sector with varying degrees of contribution to Māori development (Harmsworth 2004; Moewaka Barnes 2006; Stephenson 2002).

A key focus of this paper is the experiences of a hapū as they engage in research relationships with scientists, local, regional and central government agencies and a doctoral research project. Most of the literature in this area is focused on the experiences of science practitioners. This paper builds on the current literature by providing an insight into the practices that hapū have developed to respond to increased demands from the science sector on their time and resources.

The research relationship

The doctoral research project for Whakaki Lake Trust had its genesis in some work on the Whakaki Lake Waitangi Tribunal claim completed by Huia Tomlins-Jahnke (Massey University) in 1993. In the course of that work, discussions began with Whakaki kaumatua and the Whakaki Lake Trust Tumuaki (leader, chairman) Huki Solomon that explored areas of potential research that would be of interest to the Trust. In 2005, at a hapū wānanga (traditional forum for learning tribal knowledge and histories), Huki Solomon and Huia Jahnke-Tomlins once again revisited the idea of developing a research relationship between the Trust and Massey University. Unfortunately, Huki Solomon passed away in 2006 before this came to fruition.

In accordance with his vision and wishes, in 2006 Huia Jahnke-Tomlins and I met with the new Tumuaki and Trust employees to continue the discussion of developing potential research projects. However, it was more an exercise in renegotiating access and support. It became clear that support in principle would be dependent on finding a Trustee willing to advocate

for the project. Kemp Solomon, son of Huki Solomon and cousin of Jahnke-Tomlins was approached and expressed interest in environmental monitoring in order to establish a baseline database of scientific and technical information to assist the Trust with enhancement and resource management decisions.

Developing a research relationship with Whakaki Lake Trust was facilitated by a prior research relationship and grounded in whakapapa (geneology, ancestral links). During the research process, the principle of whakapapa regulated my conduct and interactions with the community. Whakapapa is commonly exercised as a principle for gaining access to whānau, hapū or iwi, and for regulating research conduct that subscribe to kaupapa Māori and Māori-centred approaches to research (Graham 2009; Smith 1999; Te Rito 2007; Tomlins-Jahnke 2005). Both my supervisor and I affiliate to hapū around Whakaki Lake and are related to Trustees, Trust employees and others involved in kaitiakitanga of Whakaki Lake. The connection that whakapapa establishes to place and people invokes a cultural responsibility and a strong social motivation to contribute to the development aspirations of our own communities. In this respect, tikanga (custom, ethical conduct) that emerge in recognition of the principle of whakapapa can control where and how research should be undertaken and the types of research questions that emerge.

There is a tendency to look for opportunities to develop research projects relevant to—and of interest to—communities that one affiliates with and to develop research practices that reflect key concepts associated with whakapapa (genealogies, descent) and whānaungatanga (relationship), such as utu (reciprocity), āwhina (assist), manaaki (support) and tiaki (care). In this project, access to the Trust was facilitated by whakapapa connections to the tumuaki and other Trust members. The existence of prior relationships where trust and respect had already been established gave Trust members a confidence

in the researchers and this was demonstrated by a willingness to negotiate potential projects and sponsor or tautoko (support) the doctoral research project. However, whakapapa does not necessarily ensure access or a mandate for a research project. Rather, whakapapa can assist in facilitating the process. Gaining access to the Trust and the lake property for the purposes of research was also dependent on the relevance of the project and potential outcomes to the Trust.

The research project

At the end of 2006, an application for a Foundation of Science, Research & Technology, Te Tipu Putaiao doctoral scholarship was developed. The intent was to secure funding, particularly for the Whakaki Lake, research project so that the research was not dependent on Trust resources. The application was successful and in 2007, provisional enrolment in a Massey University doctoral programme started.

Gaining access to the Trust for the purpose of research began with a series of consultative hui (November 2006, February 2007, 2008, January 2009) where potential projects were discussed and the terms concerning the research were developed. Both the doctoral project and the research exercise for the Trust were discussed at these hui. Once the Trust had indicated a willingness to develop a research relationship, a written request to access the Trust for the purpose of research was sent to the Trust in December 2007. As a consequence I was invited to the April 2008 Whakaki Lake Trust General Meeting to formally request permission to undertake research related to kaitiakitanga of Whakaki Lake.

The meeting was held at Whakaki marae and was open to the whole community who were given the opportunity, in accordance with tikanga, to ask questions and endorse—or reject—the project. This practice facilitates community participation in decision-making associated with the lake. It also provides community members with a forum to raise

important issues. At this meeting, Kemp Solomon (Whakaki Lake Trustee) indicated his willingness to support the project and was given the mandate to work with me to develop a proposal for final approval by the Trust. However, not long after that meeting, a commercial fisher was caught illegally fishing tuna in the Whakaki Lake.

Commercial fishing is prohibited in the Lake to protect the sustainability of tuna stocks. The illegal fishing incident had a huge impact on the local hapū. Tuna is considered by the local hapū to be an iconic taonga (prized treasure) species and the incident seriously undermined the kaitiakitanga obligations and responsibilities of the local hapū. A decision was made by the Trust to prosecute the fisher. The incident and the resulting court case monopolized the community and Trustees' time and energy for the remainder of 2008 so the research project was postponed. This had some major implications for my doctoral research and was a key reason behind the development of a series of contingency plans. The Trust had other more pressing priorities. In 2009, I met again with Trustees during one of the court hearings where the possibility of resurrecting the research project was discussed. Within a month, a new research contract was developed and accepted by the Trust. The Whakaki Lake research exercise finally began and continued until December 2009. I spent time at the Trust office with Trustees and Trust employees and by the end of the year, after hui to discuss research findings were conducted with Trustees and Trust employers, the research reports were finalized (Forster 2009a, b, c).

Gaining access to the Trust for the purpose of research for a doctoral study was a lengthy process and commencement of the project was conditioned by local community commitments. These are among the challenges that face researchers when undertaking projects in whānau, hapū or iwi contexts.

Research contract

The research contract that was developed outlined the parameters of the project and established fiscal responsibility for research activities. The initial project involved a review of the environmental data and technical documents related to the lake. This material was developed into a baseline ecological database that summarized the condition and trends that exist in the Whakaki Lake wetland system.

The Trust gave permission for access to the data and technical reports stored at the Trust's Office, to speak to Trustees and Trust employees about Trust activities, operational practices, relationships with external agencies, and to clarify any issues that emerged in relation to the environmental and technical reports.

One of the conditions of the contract was that the database and reports were prepared for the Whakaki Lake Trust and that use of this material for other purposes, besides Whakaki Lake business, would require consent from the Trust. The purpose of this clause was to mitigate concerns from Trustees related to maintaining control of the research process and protecting the intellectual property rights of the Trust. In accordance with this principle, permission was obtained to use Trust photographs and information related to the restoration and enhancement programme for conference presentations, publications and the doctorate.

Although the research contract clearly outlined the research outputs, as the project progressed, regular meetings that involved Trustees, Trust employers and myself identified additional tasks. In this respect, the project resembled an action research approach. Action research is an applied research approach that is useful for introducing new policy and practice to improve existing operations and practices. The intent of this form of social research is to achieve social change (Mills 2007). In relation to this project, research outputs were continually reviewed and modified to ensure that the final product would be more relevant and

useful for the Trust's purposes. The review process meant that new strategies could be developed, in collaboration with the Trust, to resolve issues as they were identified.

The research project completed as part of the doctoral programme for the Trust found that over the years, a range of environmental projects have been carried out at Whakaki Lake. These projects have meant that a large amount of information related to the Lake's geology, cultural importance and management has been gathered. More recently, there has been an increase in projects that assess and monitor the ecological condition and trends of the wetland system.⁵ Despite the availability of a wide range of data, only a small proportion was used by the Trust to lobby for support for its restoration and enhancement agenda or to inform operational practices (Forster 2009a). There are several reasons for this. The application of the data is limited by issues associated with deciphering technical information. In addition, much of the data has little relevance to the core activities, interests and aspirations of the Trust. To address these issues, the Trust has developed a research strategy as part of its management plan (Whakaki Lake Trust 2008) and actively considers all opportunities to develop beneficial and enduring working and research relationships with external agencies. The research strategy clearly identifies the Trust's informational priorities and several of these priorities have been developed into research projects.

In their role as a kaitiaki of Whakaki Lake on behalf of the local hapū, the Whakaki Lake Trust has formed numerous working and research relationships with a range of central and local authorities, non-governmental organizations and scientists to progress the ecological and environmental protection and enhancement agenda (Forster 2009a, c). A local Māori land owner, Whakaki 2N Incorporation (Iwitea) along with Eastern Fish & Game, have actively supported the restoration work of the Trust.

Financial and technical assistance has also been received from local government authorities such as the Hawke's Bay Regional Council (Dickson 2006; Environmental Management Group 2006; Walls 2000a, b; Walls 2002; Walls 2004), the Wairoa District Council and from national agencies such as Ngā Whenua Rāhui (2005). The Trust has worked with scientists from the local and regional councils, Department of Conservation (Smith 1997; Smith & Hobson 2001) and the National Institute of Water and Atmospheric Research (de Winton & Champion 2008), geographers (Coombes 2005) and commissioned work from HortResearch (Northcott & Ponga 2008) and resource management and environmental consultants (Palmer 2004a, b; Palmer & Whakaki Lake Trust 2008a, b; Wilson & Palmer 2006).

Some of the relationships that the Trust has formed have been adversarial and a source of frustration. For example, while the Hawke's Bay Regional Council has been supportive and contributed towards the Trust's restoration and enhancement programme, council policies and practices continue to support low water levels in the lake and agricultural activities that contribute to environmental degradation and a decline in the quality of indigenous habitat and biodiversity. The diverging agendas of the Trust and external agencies have been a source of frustration. These types of experiences can influence a community's willingness to engage in new research projects. If the experience of developing a research relationship or engaging with external agencies is strained and unproductive, then there may be a reluctance to enter into another relationship with that or other entities. However, these experiences can also assist a community to determine their expectations of research and the types of arrangements they are willing to form as well as identify best practice. One result is that the Trust has developed very clear expectations and policy around working with others. This policy is not immediately obvious from an evaluation of the

Trust's operational practices. Rather, it is seen through the actions and tikanga that Trustees and Trust employees use when they encounter external agencies.

As owners of the lake property, the Trust can control access to the lake. When permission for entry is sought the Trust is able to thoroughly screen all research and is very selective as to what types of projects will receive support. The Whakaki Lake Trust experience indicates that it is critical that research relationships with external agencies are informed and take into account: the relevance of the project to the community, community aspirations, and develop appropriate outcomes such as best practice. In addition, although not a requirement, there is an increasing expectation that a project is able to reflect and incorporate Māori understandings of knowledge production and tikanga as this facilitates relevancy.

The Trust has developed several practices to protect its interests, including memoranda of understanding, confidentiality and intellectual property agreements and an insistence that a Trustee or whānau (extended family) member becomes part of the research team of all projects that require access to the lake property. Participating as part of the research team has a regulatory purpose (to monitor research and protect Trust's interests), allows the community to build research capabilities and provides opportunities for reciprocal knowledge transfer. The Trust is able to provide external researchers with a local perspective and external researchers have provided Trustees and Trust employees training in propagation, nursery development, ecological monitoring and pest management (Forster 2009a). Relationships with external agencies therefore helps build the capability of the Trust to engage in research and execute core business responsibilities associated with kaitiakitanga.

The Trust's experience's engaging in research relationships has produced a hapū-based research policy based on tikanga when working

with others. The Whakaki Lake Trust experience indicates that research relationships have become an important part of the restoration process. Relationships are useful for building the capability and capacity of hapū to address issues of cost, access to, and development of, skills and expertise required to execute activities associated with restoration. In addition, cooperative relationships have provided an opportunity to strengthen and expand the knowledge base that hapū can draw upon to inform decisions related to ecological restoration and resource management.

Access to the lake property and Trustees, or employees of the Trust, for the purpose of research must be negotiated and projects are more likely to be supported if there is a strong alignment to the core activities of the Trust. Where possible, the Trust has expressed a clear preference to either acquire knowledge and skills, so that they can undertake the research themselves or to commission work. Both of these mechanisms provide maximum control over the research process, knowledge exchange and transfer. This policy is also applied to projects being developed by people with whakapapa connections to the lake. Whakapapa alone does not guarantee a relevant and culturally appropriate research process.⁶ The screening process and presence of a Trustee representative is designed to ensure that the research intent aligns with the core business of the Trust and protects Trust interests. While whakapapa can facilitate access, it does not override a sound and rigorous research process. Therefore, access to the lake and the Trust for the purpose of research must be negotiated by all researchers, including those with whakapapa links to the local hapū.

Doctoral research with Māori communities

In my experience, gaining access to a Māori community for the purposes of research that contributes to an academic qualification is

often dependent on a student's connections (particularly whakapapa connections) and, to a certain extent, their own life experience. Consultative exercises and attaining permission from the *community* can introduce an added level of complexity to the research process that requires considerable skill, proficiency and a tenacity in navigating community dynamics and requirements. Negotiating access to a community is only the first step. If the project is to be cognizant of, for example, kaupapa Māori principles, then it will be necessary to build a research relationship and create the opportunity to develop the research proposal in partnership with the community. Convincing community members to invest their time and energy is critical. Therefore, the development of a research relationship is contingent on a number of factors, including the nature and strength of relationships with communities (prior relationships and whakapapa connections), community priorities and the skill set of the researcher. Whether a project eventuates is dependent on the ability of the researcher to align their skills with the community's interests and agendas. Even if this stage is reached, it would be unwise to assume that no other problems will emerge during the research process.

My experiences in developing a research relationship with the Trust emphasize the importance of contingency plans. These were a necessary part of the doctoral programme to ensure that the research exercise was completed within a specific and predefined timeframe to meet academic deadlines. A researcher cannot predict and—should never underestimate—the time required to attain support in principle for the research or to develop the aims and objectives of the research project.

Flexibility is critical. It is difficult to anticipate or plan for the multitude of unforeseen issues that emerge. During the course of this project, research objectives had to be redeveloped in response to the death of a supporter of

the doctoral research and a key driver of the enhancement agenda, to leadership changes and new Trustees with their own agendas, and an illegal fishing incident.

The uncertainty and complexity involved in the initial contact exercise and proposal development means that research with Māori communities is involved and challenging and can be an uncomfortable fit for academic assignment requirements and research exercises of short duration. However, if researchers are cognizant of the issues that may be encountered, it is possible to prepare for most eventualities. The key is developing a flexible and responsive research approach and contingency plans.

Opportunities to work beside Māori communities are a critical part of training future Māori scholars and researchers. Research with Māori communities to fulfil requirements of academic programmes needs to be achieved within very strict timeframes and be consistent with disciplinary conventions concerning scholarship and research. Projects that seek substantive involvement from the community from conception through to completion may struggle to achieve these requirements. However, if community expectations and priorities are built into the research design from the start, then it is possible to develop a research project that will be relevant and useful to the community and that can be used as part of a postgraduate degree programme.

Research priorities can change and other issues can eclipse that of the research project. Responding to these uncertainties and complexities can be exhausting, overwhelming and time-consuming. Academic research becomes an exercise in persistence and in negotiation: the negotiation of entry, the negotiation of kaupapa and the negotiation of process. Such challenges can jeopardize or at least prolong the completion of the doctorate. However, these challenges are an opportunity to be creative, innovative and push the boundaries of what counts as best practice in Māori

research. Working with communities is not easy, expectations are high but so are the rewards.

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References

- Berkes F, Geogre R, Preston RJ 1991. Co-management: the evolution in theory and practice of the joint administration of living resources. *Alternatives* 18: 12–18.
- Bevan-Brown J 1999. By Māori, for Māori, about Māori - Is that enough? Te Oru Rangahau: Māori Research & Development Conference, Massey University, Palmerston North, 7–9 July 1998. Pp. 231–246.
- Coombes B 2005. Reserving the colonial nature - Socio-cultural impacts and management of tourism, scenic and recreation reserves in the former Wairoa County. A report prepared for Crown Forestry Rental Trust. Auckland, School of Geography and Environmental Science, University of Auckland.
- Coombes B, Hill S 2005. Fishing for the land under water – Catchment management, wetland conservation and the Wairoa coastal lagoons. A report prepared for the Crown Forestry Rental Trust. Auckland, School of Geography and Environmental Science, University of Auckland.
- Cram F 2001. Rangahau Māori: Tono tika, tono pono – The validity and integrity of Māori research. In: Tolich M ed. *Research ethics in Aotearoa New Zealand*. Auckland, NZ, Pearson Education New Zealand. Pp. 35–52.
- Cunningham C 2000. A framework for addressing Māori knowledge in research, science and technology. *Pacific Health Dialog* 7: 62–69.
- Denzin NK, Lincoln YS, Smith LT eds 2008. *Handbook of critical and indigenous methodologies*. Thousand Oaks, CA, Sage Publications.
- de Winton M, Champion P 2008. The aquatic vegetation of Whakaki Lagoon: changes since 1992 and recommendations for future management. A report prepared for Ngā Whenua Rāhui. Hamilton, National Institute of Water & Atmospheric Research.
- Dickson R 2006. Whakaki Lagoon site specific control. Napier, Hawke's Bay Regional Council.
- Environmental Management Group 2006. Whakaki Lagoon ecological monitoring 2005. Napier, Hawke's Bay Regional Council.
- Forster M 2009a. Environmental research at Whakaki Lake. Palmerston North, Te Pūtahi-a-Toi, School of Māori Studies, Massey University.
- Forster M 2009b. Research at Whakaki Lake. Palmerston North, Te Putahi-a-Toi, School of Māori Studies, Massey University.
- Forster M 2009c. Whakaki Lake environmental database. Palmerston North, Te Pūtahi-a-Toi, School of Māori Studies, Massey University.
- Forster M 2010. Recovering our ancestral landscapes: a wetland's story. In: Selby R, Moore P, Mulholland M eds. *Māori and the environment: Kaitiaki*. Wellington, Huia; Te Wānanga-o-Raukawa. Pp. 199–218.
- Graham J 2009. Nā Rangī tāua, nā Tūānuku e takato nei: research methodology framed by whakapapa. *MAI Review* 1: 1–9.
- Harmsworth G 2004. Collaborative research with Māori groups as part of the Motueka integrated catchment management (ICM) programme, Palmerston North, Landcare Research, Manaaki Whenua. http://icm.landcareresearch.co.nz/research/human_dimensions/guidelines_for_engaging_iwi_hapū.asp (accessed 4 August 2011).
- Health Research Council of New Zealand 2010. *Guidelines for researchers on health research involving Māori*. Auckland, Health Research Council of New Zealand.
- Kāhui Tautoko Consulting 2009. *Māori participation and engagement with local government*. A report prepared for the Department of Internal Affairs, Local Government Information Series. Wellington, Kāhui Tautoko Consulting.

- Local Government New Zealand 2004. Local authority engagement with Māori. Survey of current council practices, Wellington, Local Government New Zealand.
- Local Government New Zealand 2007. Co-management: case studies involving local authorities and Māori. Wellington, Local Government New Zealand.
- Local Government New Zealand 2011. Local authorities and Māori: case studies of local arrangements. Wellington, Local Government New Zealand.
- Mills G 2007. Action research: a guide for the teacher research. Upper Saddle River. NJ Columbus, OH, Pearson Merrill Prentice Hall.
- Ministry of Research Science & Technology 2005. Vision mātauranga: unlocking the innovative potential of Māori knowledge, resources and people. Wellington, Ministry of Research Science & Technology.
- Moewaka Barnes H 2006. Transforming science: how our structures limit innovation. *Social Policy Journal of New Zealand* 29: 1–16.
- National Round Table on the Environment and the Economy 1998. Sustainable strategies for oceans: a co-management guide. Ottawa, Renouf Publishing.
- Ngā Whenua Rāhui 2005. Whakaki Lake Trust Wairoa: a report under Ngā Whenua Rāhui criteria. Wellington, Ngā Whenua Rāhui.
- Northcott G, Ponga H 2008. Investigation of pesticide residues in Lake Whakaki sediments. Hamilton, Horticulture and Food Research Institute of New Zealand.
- Notzke C 1995. A new perspective in aboriginal natural resource management: co-management. *Geoforum* 26: 187–209.
- Palmer M 2004a. Environmental education centre: feasibility report for the Whakaki Lake Trust. Gisborne, tairawhiti.info, Resource Management and Environmental Consultants.
- Palmer M 2004b. Indigenous bird breeding program: feasibility report. Gisborne, tairawhiti.info, Resource Management and Environmental Consultants.
- Palmer M, Whakaki Lake Trust 2008a. Te roto o Te Whakaki: ecosystem research report, December 2008. Whakaki, Whakaki Lake Trust.
- Palmer M, Whakaki Lake Trust 2008b. Te roto o Te Whakaki: Ngā mātauranga me ngā tikanga. Whakaki, Whakaki Lake Trust; Ngā mahi te taiao.
- Parliamentary Commissioner for the Environment 1993a. Investigation into the management of Whakaki Lagoon. Wellington: Parliamentary Commissioner for the Environment.
- Parliamentary Commissioner for the Environment 1993b. Investigation into the management of Whakaki Lagoon: background report. Wellington: Parliamentary Commissioner for the Environment.
- Pohatu P, Warmenhoven TA 2007. Set the overgrowth alight and the new shoots will spring forth: new directions in community based research. Alternative Special Edition: Developing Excellence: New Directions in Indigenous Research 3: 108–127.
- Smith LT 1999. Decolonizing methodologies: research and indigenous peoples. London, Zed Books; Dunedin, University of Otago Press.
- Smith M 1997. Whakaki Wetland enhancement: a report prepared for the Hawke's Bay Regional Council. Wairoa, East Coast Conservancy, Department of Conservation.
- Smith M, Hobson S 2001. Whakaki Lake: management requirements to protect and enhance 1999–2004. Wairoa, East Coast Conservancy, Department of Conservation.
- Smith SM 2007. Hei whenua ora: Hapū and iwi approaches for reinstating valued ecosystems within cultural landscape. Unpublished PhD, Te Pūtahi-a-Toi, School of Māori Studies, Massey University, Palmerston North.
- Stephenson J 2002. The management of a Māori-owned resource. In: Kawharu M ed. Whenua: managing our resources. Auckland, Reed Publishing. Pp. 169–191.
- Taiepa T 1999. Māori participation in environmental planning: institutional reform and collaborative management. *He Pukenga Kōrero* 5: 34–39.
- Te Puni Kōkiri 2006. Te kotahitanga o te whaka-haere rawa: Māori and council engagement under the Resource Management Act 1991. Wellington, Te Puni Kōkiri.
- Te Rito J 2007. Whakapapa: a framework for understanding identity. *MAI Review* 2: 1–10.
- Tomlins-Jahnke H 1993. Contemporary perspectives of the Treaty of Waitangi: the Whakaki Lagoon - a case study. Palmerston North, Tomlins-Jahnke.
- Tomlins-Jahnke H 2005. He huarahi motuhake: the politics of tribal agency in provider services. Massey University, Palmerston North, A Doctorate of Philosophy in Māori Studies, Te Pūtahi-a-Toi, School of Māori Studies.
- Wall G, Hallman S, Skibicki A 1995. Shared and cooperative management models of national parks and national historic sites between governments

- and aboriginal peoples. An international comparative review. A report prepared for Strategic Research and Analysis Corporate and Intergovernmental Affairs Department of Canadian Heritage, Quebec, Wall: Hallman & Skibucki.
- Walls G 2000a. Whakaki Lagoon ecological monitoring 1999. Napier, Hawke's Bay Regional Council.
- Walls G 2000b. Whakaki Lagoon ecological monitoring plan. Napier, Hawke's Bay Regional Council.
- Walls G 2002. Whakaki Lagoon ecological monitoring 2001. Napier, Hawke's Bay Regional Council.
- Walls G 2004. Whakaki Lagoon ecological monitoring 2003. Napier, Hawke's Bay Regional Council.
- Whakaki Lake Trust 2008. Whakaki Lake management plan. Whakaki, Whakaki Lake Trust.
- Whakaki Lake Trust 2009. Whakaki Lake Trust submission on illegal harvesting of tuna. Whakaki, Whakaki Lake Trust.
- Wilson TW, Palmer M 2006. Ngā tuna: Māori traditional management, harvesting and utilisation. Whakaki, Whakaki Lake Trust.