Ecomaps

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Abstract: Ecomaps are graphic depictions that provide an aerial view of the relationships and influences between individuals, families or collectives, and their ecological environment, including their social and support networks. They are used in family therapy and social work as an aid for organising material about family life to assist with assessment, planning and intervention as ecomaps demonstrate the nature of relationships, whether they are positive or negative; they highlight the flow or lack of resources; they convey the points of conflict to be mediated, and the resources required to do so. The development of ecomaps is carried out in collaboration in order to gain multiple perspectives, to support engagement and buy-in of others in the process, and to build rapport. The collaborative process assists in building awareness and strengths of relationships and influences, and may also provide insights leading to self-reflection, the volunteering of further information, and/or lead to the identification of unrealised potential. A Kaupapa Māori (Māori worldview) analysis of ecomaps shows they are a visual tool that can depict what what appa-Māori based connections. As a visual representation ecomaps are not a stand-alone tool; they involve story telling to provide context, and they encourage debate and discussion to ensure validation and affirmation of the information that has been shared. Ecomaps are a valuable tool for providing the bigger picture in terms of the connectedness of whanau (family). This article seeks to enable the reader to understand what an ecomap is, and to outline the potential value of ecomaps as a tool: (a) to depict the connectedness of whanau no matter the context; (b) to assist to inform policy about whanau more accurately than through the aggregation of individual data; (c) that is compatible with a Kaupapa Māori approach to research with whānau; and (d) that can be used by providers, agencies, researchers, individuals, communities and whanau to support whanau ora (wellness).

Keywords: ecomaps; Māori collectives; whakapapa framework; whānau collectives research

Introduction

The term ecomap is derived from the word ecology, originating from the Greek language, and is the study of the interaction of people with their environment. An ecomap is a graphical representation that was developed by Ann Hartman, a social worker, in 1975 as part of her practice in the Child Welfare Learning Laboratory, a project of the University of Michigan School of Social Work program for Continuing Education in the Human Services (Hartman, 1995). Hartman advised that originally the ecomap was used as a tool for helping to organise material about family life in making an assessment; then it became useful as an interviewing tool where both the client and worker cooperated in developing a picture of the client's life. It then became clear that the ecomap was useful for helping clients to view their situations from an outside perspective and, surprisingly, clients showed an emotional attachment to their ecomaps.

Ray and Street (2005) used ecomaps as a clinical tool to portray the makeup of family social relationships and resources. They also used ecomaps as a research tool to map the care giving networks available to families, as have Rempel, Neufeld and Kushner (2007). Hartman (1995) used ecomaps as a simple assessment, planning and intervention tool, which depicts nurturing relationships or conversely, conflict-laden connections between the family and the world. Ecomaps demonstrate the flow of resources, or the lack thereof; they highlight the nature of the connections; the points of conflicts to be mediated and therefore the bridges to be built;

and resources required to do so. Wright & Leahey (Ray & Street, 2005, p. 546) define the ecomap as "a visual representation of relationships through the depiction of the network that exists between members of a social group and their connections with larger social networks." Tracy, Whittaker, Pugh, Kapp & Overstreet (1994) assert that ecomaps also provide the researcher with evidence of the size, structure and function of their networks. Essentially ecomaps are a means of depicting connections between a family or individual and its ecological environment or social network (otherwise known as domains) such as family, neighbours, friends, service providers, employment, education, recreation and religious/spiritual contacts. Hartman (1995) aptly articulates the value of the ecomap:

No matter how the eco-map is used, its primary value is in its visual impact and its ability to organize and present concurrently not only a great deal of factual information but also the relationships between variables in a situation. Visual examination of the map has considerable impact on the way the worker and the client perceive the situation. The connections, the themes, and the quality of the family's life seem to jump off the page, and this leads to a more holistic and integrative perception. The integrative value of visual experience was aptly expressed by one twelve-year-old client when he said, "Gee, I never saw myself like that before!" (p. 117)

Another description of the usefulness of the ecomap, also noted by Hartman (1995) is that the perspective provided by the ecomap allows [social] workers to find out what it was like to walk in their clients' shoes. Once clients realise that was the intention rather than to look for defects in the family situation, they became less defensive. An advantage of ecomaps noted by Ray and Street (2005) is their ability to differentiate between emotional support and direct care.

Application

Ecomaps provide an aerial view of the external influences at play on people involved in a genogram hence they are a tool useful for depicting relationships of families and groups. (A genogram is a graphic depiction, not unlike a family tree, that provides information about familial, emotional and social relationships that occur within and across generations. Genograms have been used in therapy-based services as a tool for mapping repetitive patterns of behaviour, and to recognise hereditary tendencies. Refer to the Genograms article by the same author in this issue [Kennedy, 2010].) The person(s) about whom the ecomap is created is usually depicted in a genogram in a circle in the centre of the ecomap, with the various domains being shown in several circles around the circumference. The domains are connected by different coloured or patterned lines, which depict the quality of the relationships between connections. Typically, plain straight lines signify strong connections; dotted lines signify tenuous relationships; whereas slashed lines indicate stressful relationships; and arrows indicate the direction of energy flow or resources between the systems.

Ray and Street (2005) assert that three concepts are necessary to the development of ecomaps – relationships, social networks and support. They maintain that graphically depicting social networks and support provides insight for carers about what support is available and what resources are not being utilised, as well as providing a "visual trigger" for further discussion during interviews between the social worker and clients.

A consortium of nine counties in Ohio worked together for the improved development and integration of child protection systems, practices and processes (Ohio CLA, 2002). Their assessment processes included development of genograms and ecomaps. They contend that an

ecomap must be able to depict three separate elements of an individual or family's connections to persons or systems in their environment, being:

- Strength of connections (weak; uncertain or strong);
- Impact of connections (provision or draining of energy/resources); and
- Quality of the connection (stressful or not stressful).

These elements are depicted and explained in Figures 1 & 2.

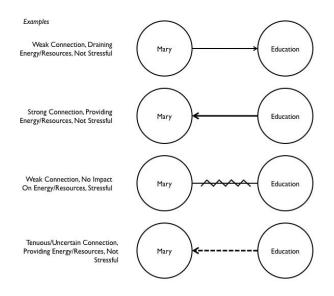


Figure 1. Strength of connection

Adapted from Ohio CLA, 2002

In developing a model they contend that criteria for usefulness of the tool are as follows:

- a. Easy to fill out and easy to read.
- b. Able to be filled out collaboratively with the family.
- c. Easy to understand for family and staff.
- d. Standardised for domains, colours, symbols, etc.
- e. Capable of begin used at the individual and/or family level.
- f. Flexible to accommodate counties' individual choices about whether every domain must be charted or only those where a connection is present.
- g. Include a key (legend) with whatever symbols, flags, colours, etc.
- h. Be accompanied by a guide explaining each domain and some typical questions to help elicit that info.

Construction

Development of the ecomap according to Hartman (1995) involves drawing the genogram for the collective in a large circle as the central component. Then circles drawn surrounding the central circle are labelled with the parts of the environment – systems such as work, school, extended family, recreation and so on. Connections are then made between the collective in the genogram and the various systems to depict the relationship of the collective to the

systems rather than individuals and the system. It is possible to depict individuals within the system to highlight their connections to the environment, as a contrast to that of the collective. Hartman (1995) suggests having templates on hand of ecomaps that include some of the most common systems in the lives of families such as schools, health care and recreation; leaving other circles undesignated so they can easily be individualised for families.

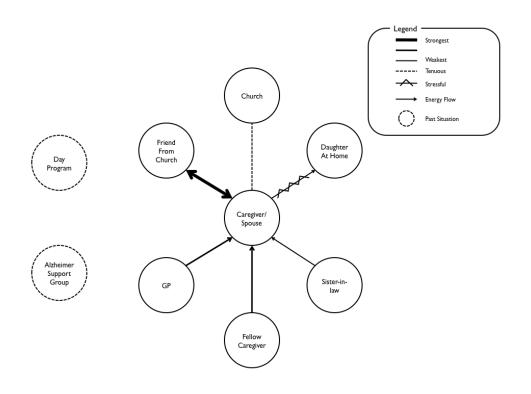
Figure 2 is an example of an ecomap used as a research tool to depict family structure and social networks in family care giving research. In their research Rempel et al. (2007) use the information from genograms and ecomaps together with qualitative interviews to provide a rich contextual basis for their research from which they gather and identify new information, such as shadow networks, that have the potential to provide further caregiver support within the participant's network of family, friends and professional support. The ecomap also depicts the nature of relationships such as whether there is a one-way or reciprocal energy flow; how tenuous or stressful relationships are, what relationships or care giving support were useful in the past or are relevant currently. This data provided a rich context for analysis of support networks, and enabled a comparison of the same and patterns of support over time.

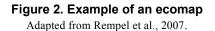
Collaboration

The ecomap may be prepared collaboratively with a client(s) and worker, or individually by either the client(s) or worker. It may also be developed solely by the interviewer but Ray and Street (2005) note that this method has limited validity as it does not allow participants to interact with their ecomap nor to explore the nature of their support networks for themselves. Collaboration during the process is preferable as it supports engagement by families in a dialogue that assists in building rapport and buy-in (Ohio CLA, 2002), whilst creating awareness for all involved of strengths that can be built upon and weaknesses that can be addressed. Collaboration also helps to ensure a fuller picture is provided, as the interviewer is able to prompt the client(s) to further explore matters where pertinent. This includes an awareness of the changing dynamics of support networks.

Ray and Street (2005) explain the process using two diagrams when working initially with a family. The first diagram was very simple so that it could be easily explained and understood. The diagram was then modified to show the primary carer and the person receiving care within the circle and all other support including other family members were drawn outside of the central circle. This gives a clear view of the support available. The next diagram is a detailed ecomap depicting the diversity of resources, whether they were being used or not.

A process described by Rempel et al. (2007) was that the interviewer drafted a genogram and ecomap following the first interview and these were then presented to the participant for verification and further development in a subsequent interview. The relationship that developed between the participant and the interviewer enhanced rapport, which sometimes led to self-reflection and the volunteering of in-depth information that would not otherwise have been shared or proffered. Holtslander (2005) also told of using ecomaps in conjunction with genograms for assessment of family nursing interventions. Holtslander describes the clinical assessment they do with postpartum families and the use of a 15-minute interview to gain the information required to develop an ecomap and genogram in order to ensure that the families are involved and their needs are met for the short period of their stay and that they have sufficient support once they leave the unit.





The Ohio consortium (Ohio CLA, 2002) lists a series of interview questions as a guide to ask individuals and families. The questions relate to each domain, and ask questions such as:

- Who is involved and how are you/they involved?
- How long have you/they been involved?
- How do you/they feel about this relationship/activity/service/involvement?
- What do you/they get out of this involvement?

The Ohio consortium then goes to describe the process they used in completing a first draft of the ecomap by ensuring the target family members are at the centre of the genogram, and that each member of the household is addressed. Domains for individuals may be addressed at a household level rather than being charted for each individual unless the individual or family is so complex, then a separate page may be required.

Team members of the Ohio CLA ILF (Ohio CLA, 2002) noted their Family Assessment process is comprised of three tools – risk assessment, the genogram and the ecomap. They used the ecomap to support assessment of families' needs and to assist decision-making regarding suitable family interventions. They found the genogram was also useful to families and those professionals working with families for creating awareness of the families' support systems and the influences (as to whether they were constructive or not) of the families' connections. A summary of the comprehensive list they provided follows as to why they perceive ecomaps are an essential part of the family assessment process:

- 1. Facilitates a structured process for gathering specific information related to the current state of a family or individual being assessed .
- 2. Facilitates rapport and buy-in whilst heightening awareness to the caseworker and family.

- 3. Identifies and illustrates strengths and weaknesses.
- 4. Summarises complex information into a visual, easy to understand format.
- 5. Illustrates the nature of connectedness and the impact of interactions that also highlights the resource and energy flow to and from a family.
- 6. Provides information to inform and support intervention decisions.
- 7. Allows objective evaluation of progress both on the family and on other elements of their environment.
- 8. Supports discussion of spiritual and value related issues in a constructive way.
- 9. Supports continuity should case workers and supervisors change.
- 10. Helps support integration of the concept of family assessment as an ongoing process.
- 11. Reduces the need for narrative in other parts of the family assessment process.
- 12. Integrates the values and concepts of System Theory in a practical way, facilitating an understanding of the dynamics between a family and its environment.
- 13. Builds capacity of staff regarding interviewing and other skills.
- 14. Supports effective presentation of families issues.
- 15. Facilitates standardised, thorough, objective documentation of important information.

Lastly the Ohio consortium utilises a checklist and rating system (as they do for the two other tools) to ensure quality standards and risk assessment quality. The rating scale is out of 3:

- 0 =not in accordance with agency standards and expectations
- 1 = Not to expectations, but will not seriously impact effectiveness
- 2 = Fully in accordance with agency standards and expectations

Items in the checklist include checks such as ensuring all target members are listed; their date of birth is included; ecomap is updated at every risk assessment; domains are illustrated only where a connection truly exists, the family participated in ecomap development; ecomap is clear and legible.

Shadow networks

Another benefit of a collaborative process and concurrent use of genograms with ecomaps is the discovery of unrealised potential in participants' support networks (termed shadow networks). These people were noted as being present on the genogram; however, they were not included on the ecomap, therefore the question was asked as to what had happened to these people, and what was the explanation for the presence or absence, for example, distance; illness; family dynamics? They are people participants know, but who they may not have considered as sources of support or whom they knew to be unavailable. A case illustration was provided that shows that many changes may occur within support networks, and that sometimes, all is not as it seems, therefore assumptions can never be made about who would naturally support whom. (Tracy et al., 1994) noted that ecomaps provide insight to carers about what support networks and assistance are available to them as well as identifying untapped resources. As Ray and Street point out, this information is also very important to informal caregivers, who are often in an isolating and complex role.

Limitations of ecomaps

Confidentiality is an issue when sharing information about other family members. Issues of confidentiality can be mitigated through involvement of families in development of the research design by asking for and/or negotiating agreement with family members to share data or genogram and ecomap material. Suggestions are to keep track of who provided what material by using a particular colour for each family member's contribution. Triangulation and further information for analysis can occur upon a comparison of findings.

Developing trust between carers and interviewers takes time so ensuring confidentiality is necessary to ensure open sharing of information, particularly if there are tensions in relationships between carers and participants.

Ray and Street (2005) noted that some participants felt the scope of diagrams were inadequate to describe the strength of some supportive networks. Whilst Ray and Street acknowledged that ecomaps are an excellent visual tool, they are not sufficient to stand alone as a research tool – the process requires qualitative interviews to be undertaken in conjunction with ecomapping in order to provide situational context. By the same token it is acknowledged that qualitative interview data alone would not provide as rich a picture in so short a period of time as can be captured with the visual graphics. Perhaps this is why (as acknowledged by Ray & Street, 2005) there is very limited literature discussing ecomaps and its value as a research tool in family support and family nursing assessment.

Notes on the Ohio CLA website (2002) state that there is some resistance to ecomaps, some of which they feel is due to a general lack of understanding of the value and purpose of the tool by staff and at an administrative (management) level. Further comment on the Ohio CLA website was:

We think the staff issues are addressable through the work done here and from developing a training program that really emphasizes the why, the value before it starts on the "How to". People must understand the big picture, and the interdependency between genograms and risk assessment.

The consortium contend that in order to assist administration to see the value in the process they would need to show how their agency is interconnected to its environment. They realise that if that management don't get it, then it is a waste of time trying to implement it at staff level.

Kaupapa Māori analysis

The purpose of this section is to examine the tool for its credibility and possible use within Kaupapa Māori (Māori worldview) for research with Māori collectives.

Hodge talks about spiritual ecomaps as being useful for assessment, planning and intervention, but more specifically are akin to notating a family history. The benefit of an ecomap is that the family history details can be organised into a graphical depiction so that one can immediately see the individual and family connections; and it can be used as an assessment tool. Interestingly spiritual ecomaps are discussed by Hodge (2000) as being:

...a new diagrammatic spiritual assessment tool for use with individuals, couples, and families. While a genogram portrays a family's history over time, a spiritual ecomap provides a valuable supplement by depicting a family's current relationships to critical ecological systems in space. The spiritual ecomap is based upon an anthropological framework conceptualized in the spiritual formation tradition and can be used with families from diverse spiritual traditions. I use a case study to familiarize the reader with the instrument, and offer suggestions for its application. (p. 217)

Bergen and Jensen (1990) stated that 72 percent of the public agree that their religious faith is the most important influence in their life. Māori spirituality plays an inherent part in tikanga Māori (traditional customs) from which Māori trace their connections back to the central core of their beginnings – whakapapa (genealogy) weaves the tapestry of ancestry and bloodlines,

which help Māori make connections to influences, and to understanding themselves and others. As ecomaps graphically depict external influences, so too they are applicable in explaining a sense of self in relation to others. Māori spirituality is derived from their connections to others, and ecomaps can visually depict whakapapa-based and kaupapa-based connections that help to sustain and nurture Māori culturally and spiritually as Māori. Hodge cites a description of spirituality by Elkins et al. (1988) as an inter-lapping concept with religion that fosters a sense of meaning, purpose and mission in life, and relates to rituals, beliefs and practices. In this sense this definition resonates with Māori holistic worldviews in that Māori are connected to all that there is, from ancient beginnings associated with the spirit world to their connections with the land, sea and air. Ecomaps can visually depict connectedness to those things that are tangible as well as intangible; they can differentiate between emotional and direct sources of support (Ray & Street, 2005). In exploring a family's spirituality, Hodge (2000) concludes that clinicians, therapists and social workers are exploring what may be a family's primary source of strength, and hence provide them with perspectives as to families' potential resources.

As with the process of genogram development, ecomap development is ideally a collaborative process requiring involvement of many people through story-telling to provide a holistic view of what is occurring for whānau and others closely involved. Whānau do not exist in isolation from their environment, and the ecomapping process is typically one of inclusiveness. The act of story telling relates to principles of whakamana – privileging our voices – and tino rangatiratanga – self-determination. Tribute is paid to the principle of whakamana – enhancing one's esteem as a guiding force. The ensuing discussion for development of ecomaps further supports Kaupapa Māori principles of whakaha – treating everyone with due respect – and whakawhiti whakaaro – encouraging debate/discussion from which arise validation and affirmation of what has been shared. These are just some examples of effecting Kaupapa Māori principles within a framework of whakapapa (Kennedy, Paipa & Pipi, 2009).

In terms of Māori collectives, improved policies that create awareness and ensure inclusiveness will result in the increased ability of whānau to achieve wellness for themselves. For a long time now the health system has placed reliance upon whānau to provide for their own, hence any tool that highlights identification of sources of support that will ultimately benefit whānau may be a positive move, or will it place more burden on whānau to try to do it all themselves and therefore alleviate the health system of more of its responsibilities? Consultation hui were held early on in the "Research With Māori Collectives" project in Auckland, Wellington, Christchurch and Whanagarei to tell people about the project and to ask them for their ideas and feedback. A comment from a participant at the Christchurch consultation hui was that "whānau are resilient, but an equity focus needs to be applied." Another comment from the same hui was to "identify the strength of delivering whānau and community health care", which is what the ecomapping tool does. Caution also came from a hui participant with the reminder as to Maui Pomare's successful model where responsibility was devolved to the community, but there was resistance to it for the reason that the burden was placed on community.

What ecomapping will do is highlight what is already known to be the resourcefulness of whānau and where their support comes from. It will highlight the importance of culture, tikanga, whakapapa and Te Ao Māori – all these things that are a rich source of nurturing and sustenance for whānau.

Pre-testing with whānau

Kai moana wānanga

The pre-testing process occurred over a period of time commencing with initial collection of information to develop the ecomap at a whānau reunion at which a few hundred whānau were gathered. A kai moana wānanga (seafood seminar) was held at the reunion at which half a dozen or so of mostly older whānau members formed a panel and told of their experiences of gathering and preparing kai moana locally. Each member of the panel spoke about how it was for them in days gone by; how they gained knowledge and experience of the fishing and seafood gathering grounds; of the traditions, values and beliefs passed onto them by others within the whānau, including how to look after the sea beds as a resource for future generations; how they prepared and even preserved kai moana; and lots more. Whānau of all ages and across four generations were present and they asked questions of the panel to clarify their understanding and to increase their knowledge.

Many days after the reunion the writer thought to develop an ecomap based on the information shared at the hui. The writer therefore based her information on her recollection of the discussion at the wananga as well as on her knowledge of the whanau and the locality, but with the thought in mind to draft an ecomap and discuss the contents with other whanau. Collaboration in the development of the ecomap is important to ensure multiple perspectives rather than one person's notion of whanau realities. Several ecomaps were drafted and amended until the writer was confident that the information presented generally portraved some of that which was discussed, and that which was known to be true in accordance with her historical knowledge of the whanau and the region. Another consideration in the latter stages of the ecomap development was that the writer acknowledged that the depiction did not need to be perfect, that is, it did not need to cover all of the information, and it did not need to be beautifully crafted or presented; that is, it did not have to have a professional look about it. The primary concern was that it clearly depict the ideas, leaving room for whanau to contribute to the process. It was the writer's understanding that the ecomap was to be a collaborative effort and therefore whanau needed to be able to provide input as well, hence the diagram was considered to be a work in progress.

Ecomap development

The next step was to contact whānau who had been present at the wānanga; two people were chosen as they were easily contactable and most likely to be available – both people had attended the wānanga. One person, the writer's sister, was in the audience, and the other person, the writer's father, was a member of the kai moana panel. The ecomap was scanned and emailed to the younger member of the whānau who was asked to take a printout of the ecomap to show the kaumātua (elder); then the writer would phone them to discuss and obtain their feedback. Because of the isolation and distance of the writer from whānau, this seemed to be the easiest way to obtain feedback from whānau on the method within a reasonably short time frame. The kaumātua consented to be involved and he was enlightened as to the process of involvement. Initially the kaumātua voiced some trepidation about being able to recall what was discussed at the hui; however, it was explained that the kaumātua did not have to try to recall anything – if he couldn't get the gist of the information depicted in the ecomap, then that was a failing of the method to effectively illustrate the talking points, and certainly not a failing of the kaumātua.

A meeting time was arranged; the writer phoned the kaumātua and his daughter and a discussion took place regarding the ecomap. The whānau members easily understood the information portrayed in the ecomap; they talked about what the ecomap portrayed well, what needed to be amended, and what information was thought to have been omitted and needed to be added. Input by all three whānau members occurred, which ensured voices from that of the older generation, and two from the next generation. One of those perspectives was from one

who had lived in the region for a while and had intimate recent knowledge of activities at a local level including that of the local council, the rūnanga, et cetera; and the other person's perspective was that of whānau returning home for infrequent visits.

Benefits of the ecomap development for whānau

Development of the ecomap generated discussion that was valuable because:

• It was a collaborative effort by whanau to consider matters pertinent to whanau

• It generated an awareness of what matters are relevant for whānau now as well as for future generations in terms of kai moana

• It created an awareness of the wider considerations for whānau relating to kaitiakitanga (guardianship) and the roles that many of our whānau have undertaken and are undertaking to ensure sustainability of kai moana resources; and

• It meant that we were thinking as a whānau about the future of our wider whānau.

The kai moana wānanga at the family reunion provided the impetus for the discussion and the ecomap was an avenue to continue that conversation and to portray the complexities and considerations for the haukāinga (local/home people), for example:

- The role locals and tohunga (holders of expert knowledge) have to ensure the "seafood cupboards" are looked after and replenished
- The impacts on the resources of continually providing seafood to ensure whānau functions/marae hui are well-supplied with local delicacies
- The impacts of legislation on the foreshore and sea beds
- The effects of erosion on the sea beds
- The repercussions of the rape/pillage/desecration of the seabeds; and many more.

The writer was then required to update the ecomap according to that which was discussed and to provide whānau with the updated version. In this respect the process was iterative as the whānau considered the information that was portrayed in the ecomap and discussed additions and amendments until they were sure the ecomap was an apt depiction of what was discussed and what they knew to be considerations in terms of kai moana in our rohe.

All in all whānau found the ecomap a suitable tool for depicting a situation at a glance, and for providing the impetus for further discussion around matters pertaining to whānau. The tool stimulated further discussion, which was an inclusive process that would easily allow any whānau of any age to participate, and it highlighted for us the resourcefulness of whānau, particularly the ahi kā (the people residing on the ancestral land) in keeping the home fires burning. The feedback regarding the method was positive; no negative aspects were highlighted. It was viewed as a method that was useful for the purpose of portraying matters relative to whānau.

Summary and discussion

The tool is excellent for providing a picture of what is occurring for whānau, no matter the size of the picture or whānau. The scope to portray many topics and issues relative to whānau is also huge. A collaborative process in the development of an ecomap ensures participation by whānau and buy-in leading to a general consensus as to the final product – the illustration of where things are at for whānau at a particular point in time. That collaborative process can be a learning mechanism or intervention in itself in that people learn about or learn more about the stated topic. However, it requires people with an interest in the subject matter to

participate. The ecomap is the tool and development is the process; the tool captures the realities of whānau but the tool alone is not sufficient to engage whānau – it merely illustrates and/or generates discussion.

Perceived benefits for the purpose of research with Māori collectives in terms of use are that of whānau involvement in the process and therefore a collective understanding of the realities for whānau; and that government and policy-makers are able to see at a glance the realities for whānau at a given point in time. In addition to ecomaps, further detail is required to support the tool in order to provide context to whānau realities, whether it be a summary of hui notes, interview notes, a representative talking to the diagram or other methods. In the development of ecomaps expertise may be required to facilitate the process particularly if many whānau members participate or if the subject matter is contentious; ideally it would be someone who is a leader, facilitator or who manages people or perhaps information.

A matter for consideration is that of ethics – who is involved; who has the right to say what; how much is told; what about information that people share that others do not know about; what happens with the information; how do you obtain consent from all whānau or do you only gain consent from those involved in the process; what if consent is not given by all whānau – what then? There are many considerations in terms of ethics. Ethical use of research tools with whānau is discussed in a paper entitled Ethics of Researching With Whānau Collectives in this issue (Cram & Kennedy, 2010).

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