

The Legacy of Ngatoroirangi

Maori Customary Use of Geothermal Resources

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THE UNIVERSITY OF
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Pakeha Tourists at Whakarewarewa 1938.

Introduction

Geothermal activity has always been regarded as a significant traditional resource among Maori communities of the Bay of Plenty, Rotorua and Taupo districts. The principal settlements of the tribes of Te Arawa, Ngati Tahu and Ngati Tuwharetoa were associated with geothermal areas. Outside the Taupo Volcanic Zone there were numerous other hot springs which were also highly valued by Maori. Areas of surface geothermal activity all have some traditions, cultural and historical associations for local tribes. Geothermal resources were used in various ways. Hot pools (ngawha, puia, waiariki) provided hot water for cooking and bathing. Hot ground was used for cooking holes and ovens. Mud from some pools had medicinal properties, especially in the treatment of skin infections such as ngerengere which was endemic in the Taupo district. Many hot pools had well-known therapeutic qualities in the treatment of muscular disorders, and rheumatic and arthritic ailments, as well as skin conditions. Some had other qualities and were known as wahi tapu, for example a place for ritual cleansing after battle, or having other spiritual qualities linked to medicinal or therapeutic use, and/or incidents of the past. Some have a particular tohunga associated with them. Some were burial places. Many hot pools are for one reason or another still regarded as wahi tapu, sacred places.

Most Pakeha travellers in the nineteenth century noted the strong Maori associations with geothermal areas. Hochstetter, who visited in 1859, provided the first detailed geological description of the surface geothermal activity in the Rotorua Taupo region, “in which hot steam issues forth from the earth at more than a thousand points and produces all those phenomena of boiling springs, fumaroles, mud pools, and solfataras for which the North Island... is so famed”. He also commented, “the natives have (quite rightly) long connected the ngawha and puia with the centres of volcanic activity that are still active even if they clothe their idea in the form of a strange legend” (Hochstetter 1959 pp. 139-141). Hochstetter was referring to Ngatoroirangi, freezing cold on Tongariro, and calling on his sisters to send him warmth. A review of traditions about the origins of geothermal activity in Chapter 2 indicates a sophisticated Maori understanding of the complex relationships between areas of surface geothermal activity, active volcanoes and earthquakes. Geothermal areas were lived in, utilised and respected. The focus of this paper is to provide an understanding of Maori relationships with this particular kind of environment, and the tikanga associated with customary uses of the geothermal resource.

The distribution of hot springs in the North Island is shown in Figure 1a. The largest concentration of geothermal activity is in the Taupo Volcanic Zone, and much of this study is concerned with this region. Within the Waikato-Hauraki region there are numerous small hot springs, many little more than a small upwelling of warm water in swamp or hillside. Some, such as Te Aroha, were developed as a spa in the late nineteenth century. Others are now developed com-

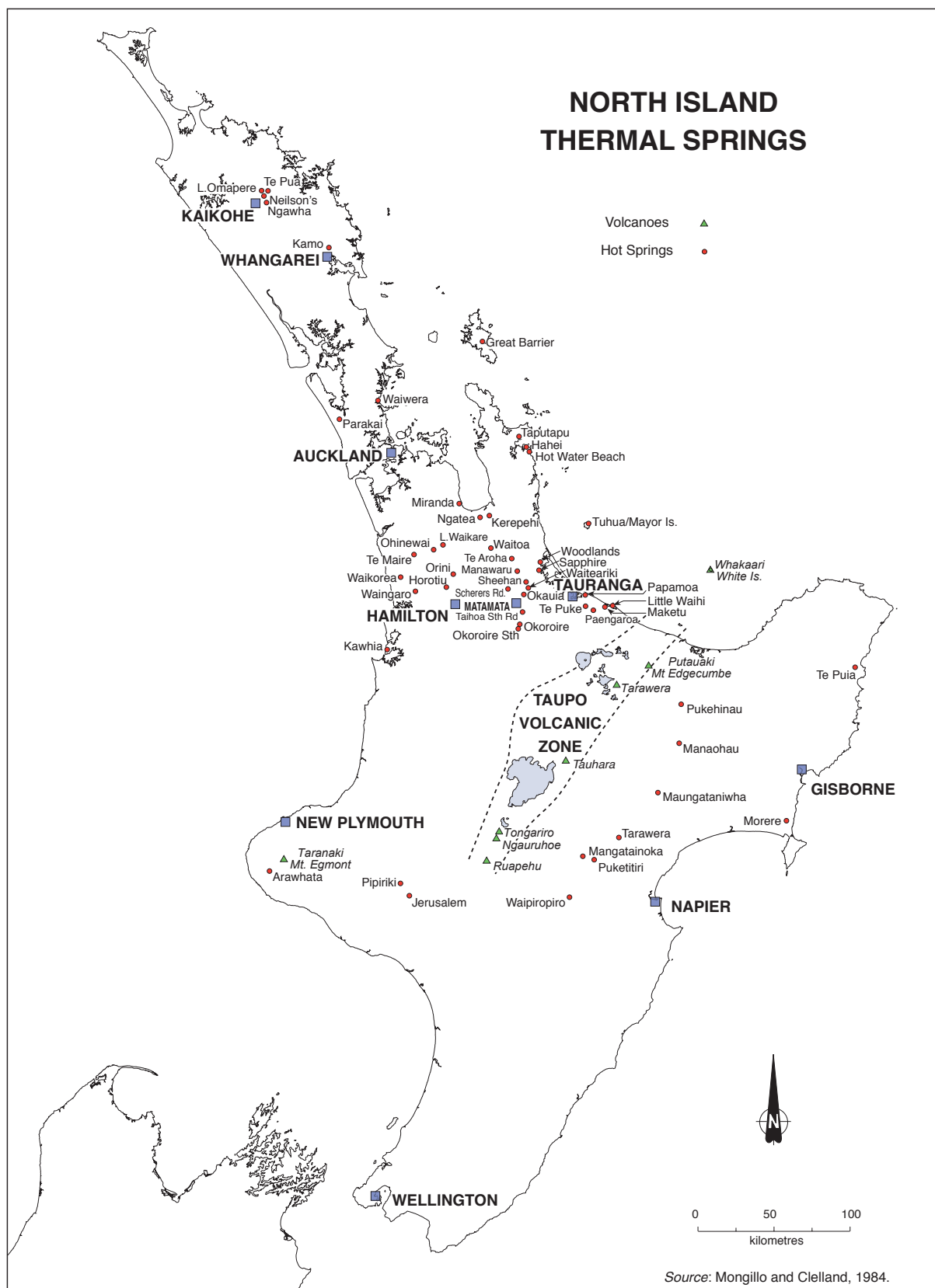


Figure 1a. North Island Thermal Springs

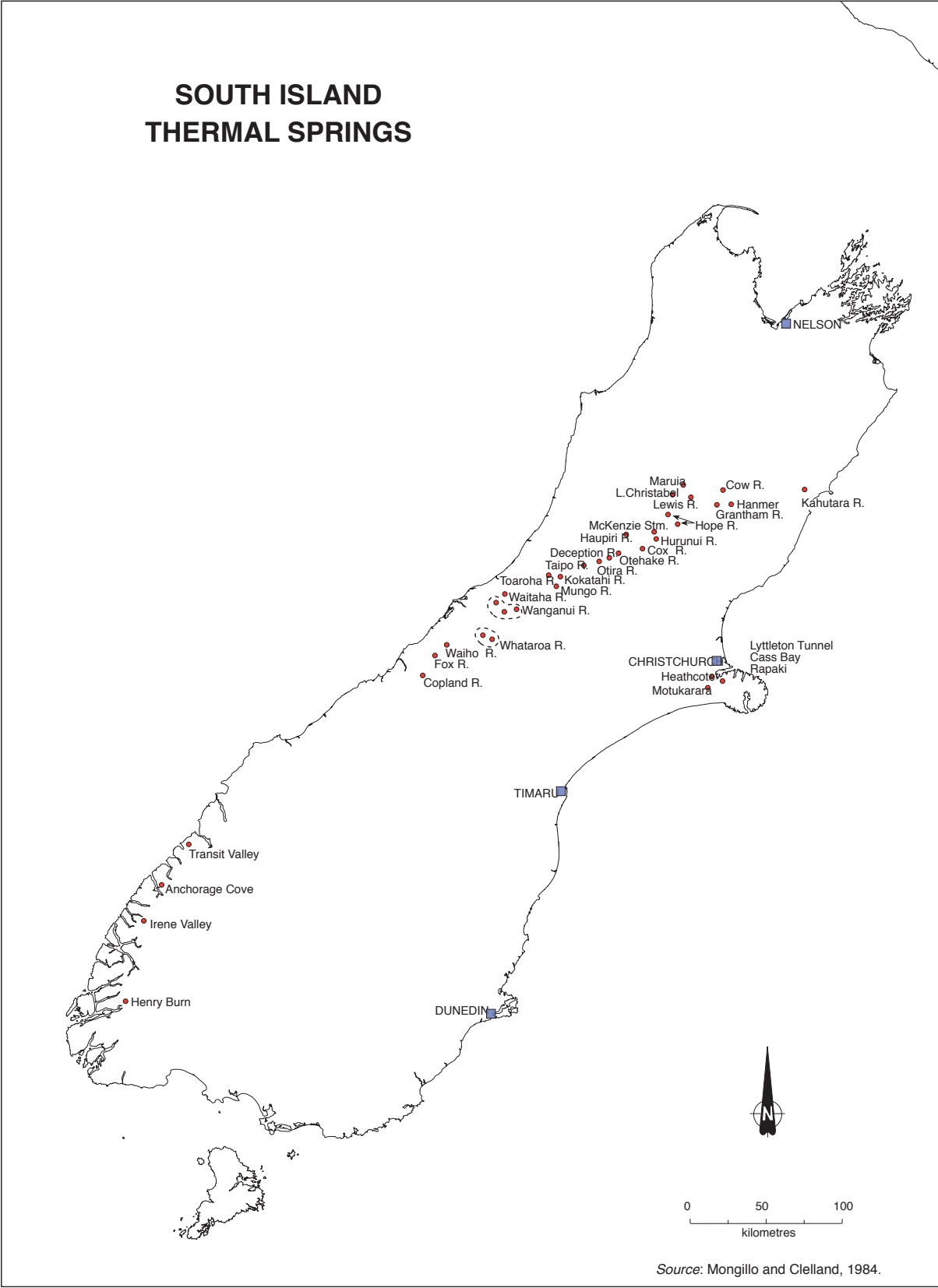


Figure 1b. South Island Thermal Springs

mercially as swimming complexes, at Waingaro, Miranda and Okauia. At Hot Water Beach in the Coromandel Peninsula, visitors dig their own bath in the sand. Local people do the same on the open beach west of Kawhia township. Further north the hot springs at Waiwera and Parakai also support commercial bathing complexes. In most of these the former Maori associations are little remembered. At Ngawha, however, there has been retained a strong Maori presence and oral tradition about the geothermal resource.

Many isolated hot springs were important stopping places for Maori and Pakeha on travel routes, for example Okoroire in the Waikato, Tarawera on the Napier-Taupo road, and Morere and Te Puia on the East Coast. In the South Island there were a few hot springs, mainly associated with the major fault lines of the Southern Alps (Figure 1b), which were known and valued as stopping places in significant travel routes, such as Maruia Springs near Lewis Pass, Hanmer Springs, Waiho in the southern West Coast and the springs near the Copland Pass. This study does not cover every one of these. The main focus is on Maori custom within Te Arawa and Mataatua traditions in the Taupo Volcanic Zone, and selected examples from outside this region, particularly Ngawha and Te Aroha.

1.1 Geothermal Systems

The occurrence of geothermal activity in New Zealand is related to its location along the colliding edge of two tectonic plates, the Pacific and Indo-Australasian (Figure 2). The Pacific Plate is being pulled under the Indo-Australasian Plate at a rate of about 50mm per year, a process known as subduction. The earth crust above has buckled and broken along a series of fault lines, forming the Eastern Ranges of the North Island. Between 80 and 100 km deep the Pacific Plate begins to melt. Molten rock, magma, from the earth's interior rises into this melt zone and provides the heat source for volcanoes and hot springs of the Taupo Volcanic Zone. Smaller hot springs are associated with faults in the Eastern Ranges in the North Island and in the Southern Alps. Surface hot springs are also associated with older volcanic structures and fault systems in the Coromandel-Kaimai Ranges, and the Waikato, as well as fault lines from Waiwera to Parakai, and around Kaikohe-Ngawha.

Geothermal activity is associated with areas of active or recently active tectonic movement. Deeply circulating ground waters are heated by the magma, and the fluid is trapped within porous rocks (usually rhyolites and ignimbrites in the Taupo Volcanic Zone) which are capped by less porous rock. Some of this heated water rises naturally along fault planes and fractured rock to produce hot springs, geysers, mud pools and fumaroles (steam vents). The nature of geothermal systems was explained by Dr D.S. Sheppard to the Waitangi Tribunal hearing the Ngawha geothermal claims:

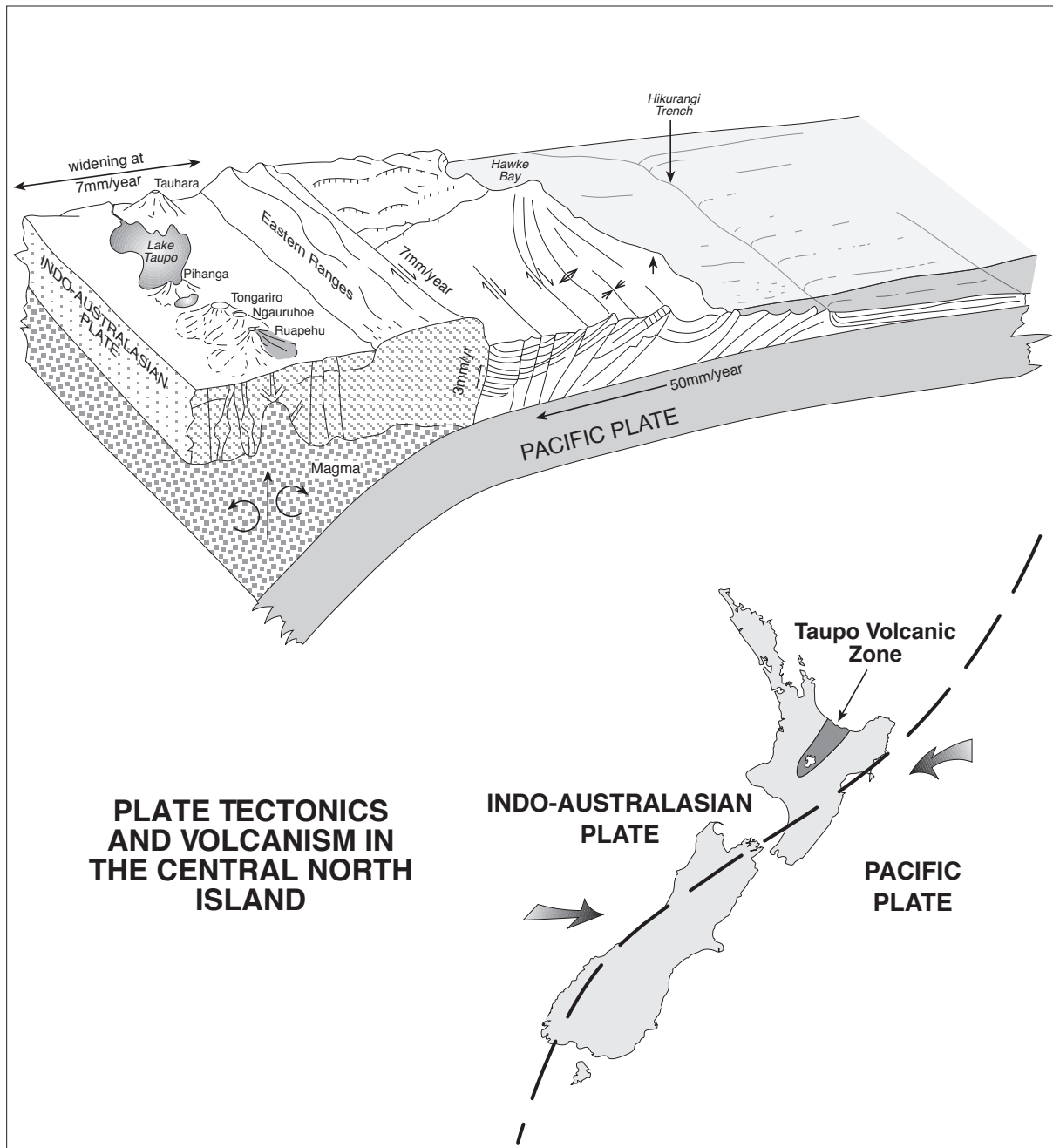


Figure 2. Plate Tectonics and Volcanism, Central North Island.

Geothermal systems are a part of regional hydrological systems. The water in geothermal systems is derived mostly from outside the immediate geothermal system, and ends up outside the system. Geothermal systems may or may not discharge water, steam, gases and minerals to the ground surface. They differ from the usual subsurface hydrological system in that they are at higher temperatures than the waters around them. The heat is derived more or less directly from the hot sub-crust or upper mantle deep beneath them. In some places, the waters are warmed by general conductive heating from below, and because they are warm and less dense, they rise toward the earth's surface. On the way they react with rocks through which they are passing, and carry away some of the components of the rocks. Hot waters react more rapidly with the rocks than cold waters.

In some places the heat is carried from depth by rising molten material (called magma) which can penetrate right through the crust to form volcanoes and lava flows during volcanic eruptions. The heat carried by these rocks is dispersed in part into the crust and can be carried away by the waters that are able to circulate there. This is why many geothermal systems are associated with volcanoes: that at Ketetahi on Tongariro is a good New Zealand example.

These connections of geothermal systems with magma (liquid or solidified after cooling) are not always obvious. Quite often, the magma body does not reach the surface. In this situation, the heat is transported at least in part by the circulation of groundwaters, which in addition to picking up heat, may leach volatile and soluble chemicals from the magma. This is the situation at Ngawha. Because the waters are hot and have dissolved chemicals in them which help attack the rocks, these waters react with the other rocks through which they travel, and lose and gain chemicals in a complex way which we only partially understand. The end results are the waters which are discharged at the surface and are encountered by wells at depth. The chemical composition can be characteristic of the depth at which the water is encountered, and different systems have different chemical compositions.

The water which saturates the upper few kilometers of the crust is, in most places, derived from rainwater. The rainwater may have fallen some distance away, and travelled on the surface and underground in response to gravity. Once water is underground (hence “groundwater”), it can travel through the cracks and pores in the rocks, and in some places, caverns and tunnels. It can become trapped and be under pressure, giving artesian waters; it can emerge at low points as springs; and it can be heated and rise to the surface or circulate, in response to heating, for instance. Movement of water in groundwater systems can be very slow, and timescales of thousands or tens of thousands of years are usual for the waters to flow through geothermal systems.

For water circulation in a system to occur, as well as a heat source, waters must be able to pass through the rock pores and channels. This is called permeability, and while virtually all rocks are permeable, some are more permeable than others. This can be related to the material of which the rocks are made (a coarse sandstone will be more permeable than a fine mudstone, all other things being equal), and by how many cracks there are.

Cracking in rocks occurs by many mechanisms, for instance, because they are being bent, because they are being heated, because they are being sheared. In some places in the surface layers of the earth, forces are at play which cause rafts of rock to move around, causing earthquakes, and as they do they can be torn apart or pushed together, with resulting fractures. When these are large enough, they are called faults. Regions where this happens can become weakened and the crust can become thin as well as weak. When this happens, volcanic activity is frequently found. A good example is the Bay of Plenty-Rotorua-Taupo area. There seems to be a similar situation, on a smaller scale, around Ngawha....

A geothermal “resource” does not stand alone, [it] is a part of much larger systems which involve as essential components the climate of a region, the hydrology and the types of rocks in a region, the regional and even the global geological processes that result in the way the geology of a region has formed, and not least, that this is a continuous and dynamic process, that is changing and evolving.

With such a concept in mind, the definition of the limits and boundaries of a geothermal system becomes somewhat difficult. The system as a whole is more than, for instance, the surface features, and in the same sense, the system is more than the hot water and rock reservoir. While a “resource” may be able to be defined in terms of the volume of water which is hot enough to be exploited, and that will depend on engineering criteria as much as anything else, this bears little relation to the physical realities of the system itself in terms of sources and influences (Sheppard 1992, pp. 2-4).

1.2 The Taupo Volcanic Zone

The region extending from Whakaari/White Island in the Bay of Plenty to the volcanoes of the central North Island contains the largest concentration of surface geothermal features and active volcanoes (Figure 3). Within this Taupo Volcanic Zone there is a large number of Maori communities whose homes are within or adjacent to geothermal areas (Figure 4). These communities, particularly around Rotorua and to a lesser extent Taupo, were influenced most by Pakeha tourism and spa development in the late nineteenth century. More recently, this is the region most impacted by geothermal energy development, for power stations at Wairakei, Ohaaki, Rotokawa and Mokai in the Taupo district, and for use in the pulp and paper mills at Kawerau. In Rotorua the exploitation of geothermal energy for hot water bathing and heating of homes led to serious deterioration of geyser activity at Whakarewarewa and potential loss to the tourist industry which, in turn, meant regulation of exploitation. Wherever geothermal power stations have been commissioned, the extraction of steam for deep wells has been followed by surface changes, frequently loss of hot springs and geysers, subsidence of ground, hydrothermal eruptions and other surface activity in new areas. Some of these changes are noted in passing in the following chapters but the primary focus is on identifying the nature of customary Maori uses of the geothermal resource, and the regional variations, and continuity of tradition.

Hochstetter noted the main Maori terms for different types of surface activity: puia, ngāwhā and waiariki. The term puia “is chiefly used in the Taupo district” to “distinguish, for example, the intermittent geyser-like springs of Tokaanu on Lake Taupo, of Orakei-Korako on the Waikato and of Whakarewarewa on Lake Rotorua... In addition, however, puia has also the general meaning of crater or volcano and is employed not only for active volcanoes but also for extinct ones”. Springs of clear water were called papa puia, and mud pools uku puia. The term ngāwhā applied to hot springs “which have no intermittent qualities, no periodic eruptions; they are mud and sulphur springs in which a blue-grey mud is continually bubbling activity... and especially solfataras interspersed with hot springs”. The third category “is a spring of which the water level remains at rest and never gets into an upwelling boiling condition; such springs suitable for baths, or natural warm baths, the Maoris call waiariki” (Hochstetter 1959, pp. 139-141). These terms are defined in Williams’ *Dictionary* (1971) as follows:

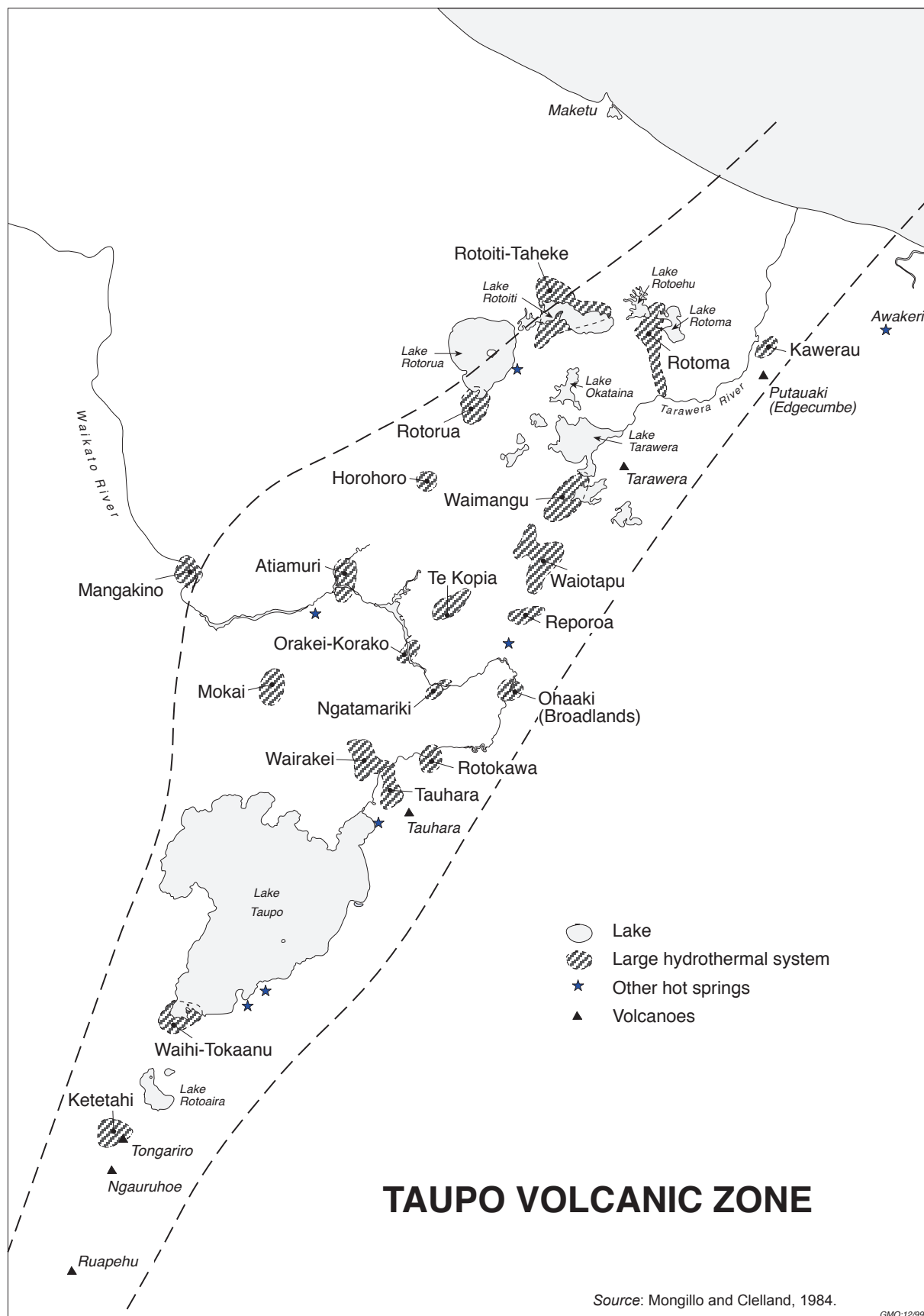


Figure 3. Taupo Volcanic Zone.

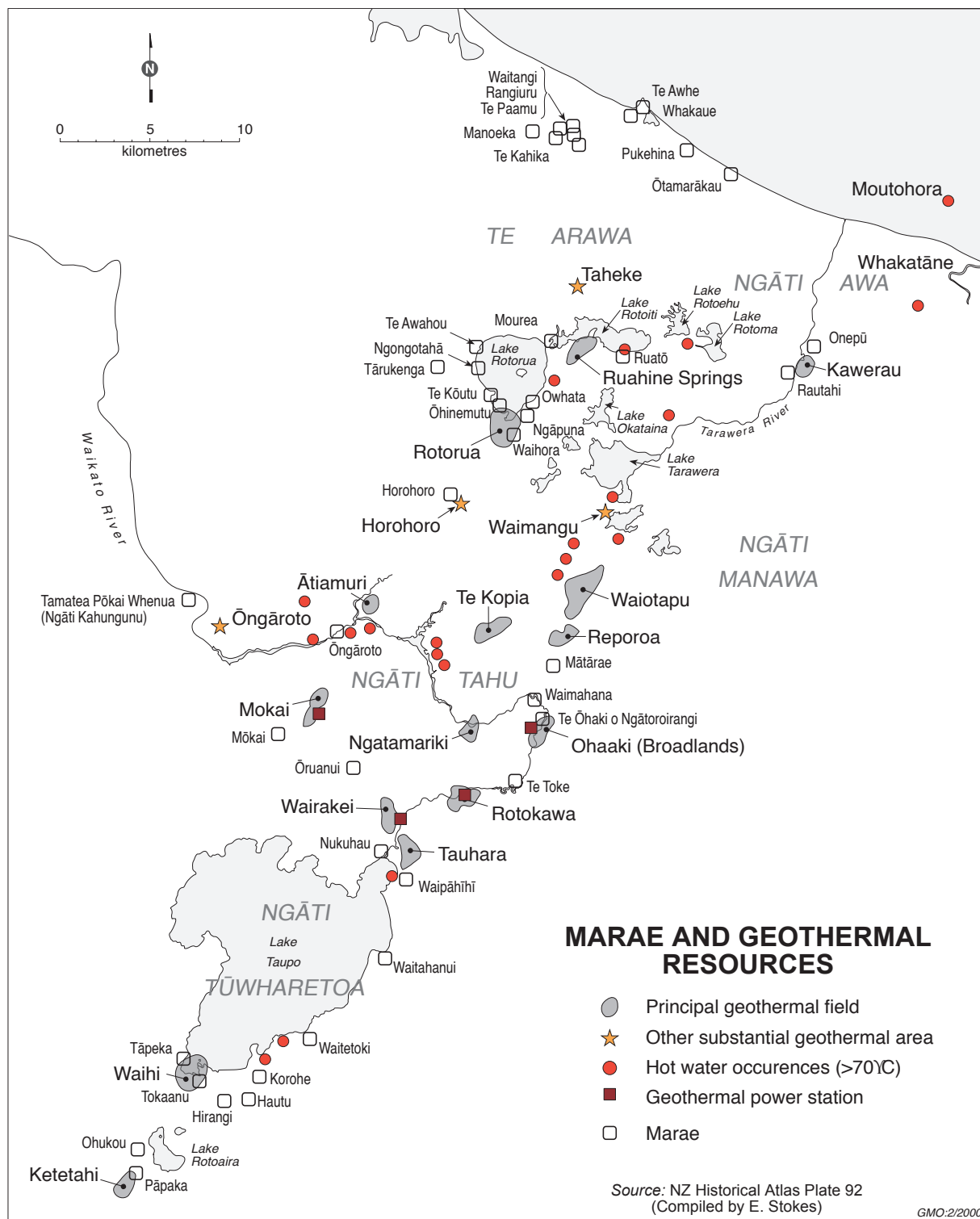


Figure 4. Marae and Geothermal Resources.

- Puia: volcano such as Whakaari (White Island), hot springs such as those of Rotorua.
- Ngāwhā: boiling spring or other volcanic activity and quotes Ngauruhoe as having a ngāwhā at the summit of the mountain.
- Waiariki: hot spring, one which is a place for bathing in.

In Appendix 1 Professor Pat Hohepa has explored linguistic aspects of the use of Maori terms in geothermal areas.

Nineteenth century Pakeha visitors were also interested in the therapeutic qualities of hot pools and this formed the basis of the development of the Rotorua and Taupo tourist industry. Alongside the scenic wonders of geothermal areas were “picturesque Maori villages perched precariously on the very brink of a Medieval Hades” (Herbert 1921, p. 61). Herbert, the Government Balneologist at Rotorua, also commented on the many “natural baths, generally of Maori origin” throughout the district:

Many a humble whare has alongside an open-air bath that a millionaire might well envy, and in the tea tree scrub are hidden sequestered baths where family parties spend many happy hours with a “korero” and a pipe (ibid p. 64).

Lieutenant Meade described the kainga and geothermal activity at Orakei Korako, a Ngati Tahu settlement, in 1865:

There is also here a large natural warm swimming bath with a bottom like glazed porcelain, and the natives of the village, which is within two minutes walk, spend half their day in it (Meade 1871, p. 65).

The social role of these baths was as important as the medicinal or therapeutic value.

Geothermal resources are the legacy or gift (ōhākī) of the tohunga Ngatoroirangi, and are regarded as taonga, highly-prized ancestral resources under Article the Second of the Treaty of Waitangi. There are several claims to Maori ownership of geothermal resources and related issues lodged with the Waitangi Tribunal. Among Ngati Tahu it is said that if this legacy is not treated with respect, Ngatoroirangi has ways of answering back, often at unexpected times and places. This is a recognition that geysers, hot springs, mud pools, fumaroles and hot ground are but the surface manifestations of an ancestral legacy of earth heat, and the earthquakes and volcanic eruptions that may occur from time to time.

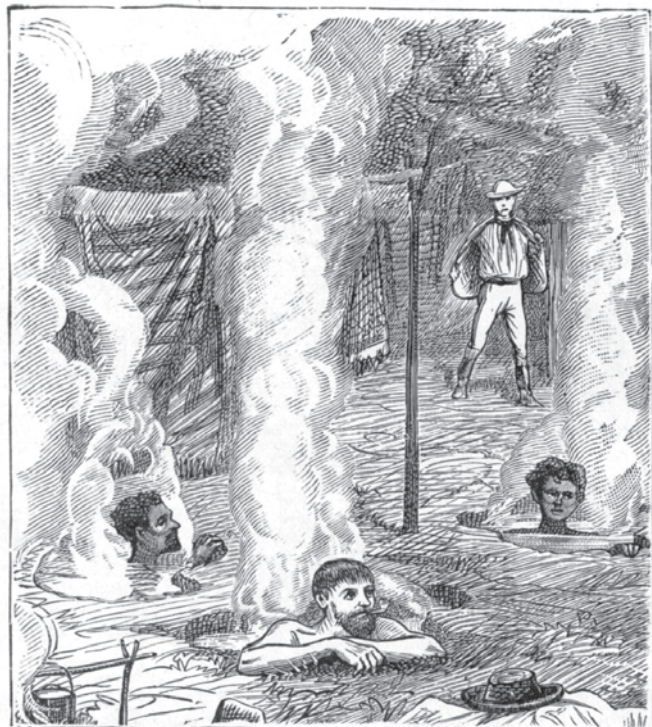
1.3 Interpretation of the Sources

The evidence of Maori customary uses of geothermal resources has been compiled from a range of sources, including local Maori informants and field observation, Maori Land Court records and other written sources, both published and unpublished. The written documentation has to be treated with caution. The Native Land Court minute books provide records of competing claims to the resource, itself an indication of its significance to Maori. Hot springs, mud pools, hot ground and fumaroles, and kokowai (red ochre) places were among the many *tohu*, signs of past occupation that were argued over in court, and provide useful clues to past use of surface geothermal features. The records of Pakeha observers are also useful, provided the context of the making of the record and any mind set of the writer is taken into account. For example, Archdeacon Brown, the CMS missionary at Tauranga, made numerous pastoral journeys in the Rotorua-Taupo region but recorded little detail. The reason lies in a comment in his Journal of 12 May 1841:

Crossed the lakes [Tarawera and Rotomahana]. The hot springs, exhausted craters and botanical productions of this neighbourhood would afford a rich treat to the naturalist. It is but a hasty glance that a missionary can give to these things. Sterner yet more delightful duties are always forcing him onward.

In other words, he passed by the Pink and White Terraces (destroyed in the Tarawera eruption in 1886) without comment, while later visitors regularly waxed lyrical over these great geysers and sinter terraces, and the bathing pools in them.

One way of analysing different cultural values and potential conflicts is to explore the records of culture contact. One example is the narrative of J.H. Kerry-Nicholls, who was among the more perceptive and literate of nineteenth century visitors to New Zealand. He also went to more trouble than most to seek out informants who could tell him something of Maori ways. His book *The King Country*, is a record of the journey in 1882 of one of very few Europeans who entered the region before it was “opened up” to the Pakeha by the construction of the Main Trunk Railway Line. On his way there he passed through Rotorua:



Brett 1896

The township of Ohinemutu occupies one of the grandest situations in the whole of the Lake district. It is built on a slight eminence called Pukeroa, which rises with a gradual slope from the shores of Lake Rotorua, whose bright blue waters add a romantic charm to the surrounding country...

The native settlement Te Ruapeka is situated on a long peninsula, about 100 yards wide at its broadest part, narrowing gradually towards its end, where it terminates in a sharp point, as it runs flatly out almost on a level with the waters of the lake.

Every part of this strip of land, from one end to the other is dotted about and riddled with thermal springs, some of which shoot out of the ground from small apertures, while others assume the form of large steaming pools. They are of all degrees of temperature, from tepid heat to boiling-point; and while you may cook your food in one, you may take a delicious bath in another, and get scalded to death in a third.

In former times a pa stood at the further end of the peninsula, but one stormy night a rumbling noise was heard, then a sound of hissing steam, the trembling earth opened, and the pa with all its people sank bodily into the depths of the lake.

All the whares of the settlement are built, after the native fashion, of raupo, with large recesses in front of the doorways, the woodwork of which is curiously carved, and forms a very good specimen of the Maori order of architecture. The whares are clustered promiscuously about the springs, and it is no infrequent occurrence to see a stalwart savage, a buxom woman with a baby in her arms, a sprightly youth, or a dark-eyed damsel come out from the carved portals of a hut in the primitive costume of our first parents, and jump into one of the many square stone baths dotted about, and with no other regard for their neighbours who may be standing or squatting than if they were so many carved images.

The natives use these baths at all times of day and even at all times of the night – that is to say if a man feels chilly in bed, he gets up and makes for his bath in order to get warm again. Bathing here seems to be second nature, and the women and girls arrange afternoon bath-parties just as we might assemble our friends at afternoon tea...

Not only do the natives use the springs for bathing and curative purposes, and not only do they warm their houses by their means, and perform all their culinary duties by their aid, but they actually bury their dead among them. I went down to the further point of the native settlement, where there is a small graveyard situated among boiling springs and steaming fissures that crop up everywhere over the ground, as if the volcanic fires below were just ready to burst forth and swallow up the living with the dead. Portions of curious carvings, old canoes, and grotesque figures in wood lay scattered about in every direction, and one was apt to wonder how it was that they had not long since been destroyed or carted off to grace some antiquarian museum as relics of a rude art which is fast falling into decay. But these remnants of native industry were all tapu, and were as sacred in the eyes of the Maoris as would be a piece of the “true cross” on the altar of a cathedral in Catholic Spain. There was a small, dilapidated hut here filled with coffins containing the remnants of several celebrated chiefs, and as I gazed upon it and then upon the grotesque figures lying around, it seemed as if the darkness of heathenism had grappled here with the light of Christianity... It appeared strange that the dead should be buried in so singular

a spot (unless they had done something very naughty when in the flesh), and as the hot water bubbled up and hissed through the fissures of the rocks, it seemed to whisper forth the sighs of those below (Kerry-Nicholls 1884, pp. 57-60).

This account can be interpreted differently within the two cultural frameworks – Maori and Pakeha. First the Pakeha: a “professional gentleman-explorer” finds himself in a picturesque environment of lakes and hills, a scenic wonderland of geysers, hot pools and steaming ground, inhabited by dusky savages, sufficiently civilised by Christian missionaries to provide amiable guides to this curious village where the open-air life-style presents such a contrast to accepted English standards of public behaviour. All the elements of Victorian romanticism are there, all the ingredients of an ideal narrative for the Victorian armchair traveller: picturesque scenery complete with noble savages, wonders of nature in the geothermal activity, with overtones of Christian hellfire and brimstone, and the hint of danger in this hazardous environment. A Maori interpretation of this account is that it documents a Maori village in the 1880s, the close association with geothermal areas as all-purpose living places, the combination of land uses where the dead are accommodated alongside the living, an open-air, communal lifestyle which is closely related to the physical environment and makes maximum use of geothermal resources.

The incongruities of Kerry-Nicholls’ account soon emerge because he really tells us more about Pakeha attitudes to Maori than about Maori values. For example, he described the burial-ground and alludes to “volcanic fires below”, with implications of the Graeco-Roman Hades and the hellfire and brimstone of Christianity. This is an incongruous image in a place where water and steam are dominant. Kerry-Nicholls did not understand that in the Maori view of things, death is part of life, that the past is part of the present, and there is nothing incongruous about burying the dead alongside the living in a place where they can be looked after. The spirits of the dead have travelled to Te Reinga but can return or be recalled at any time.

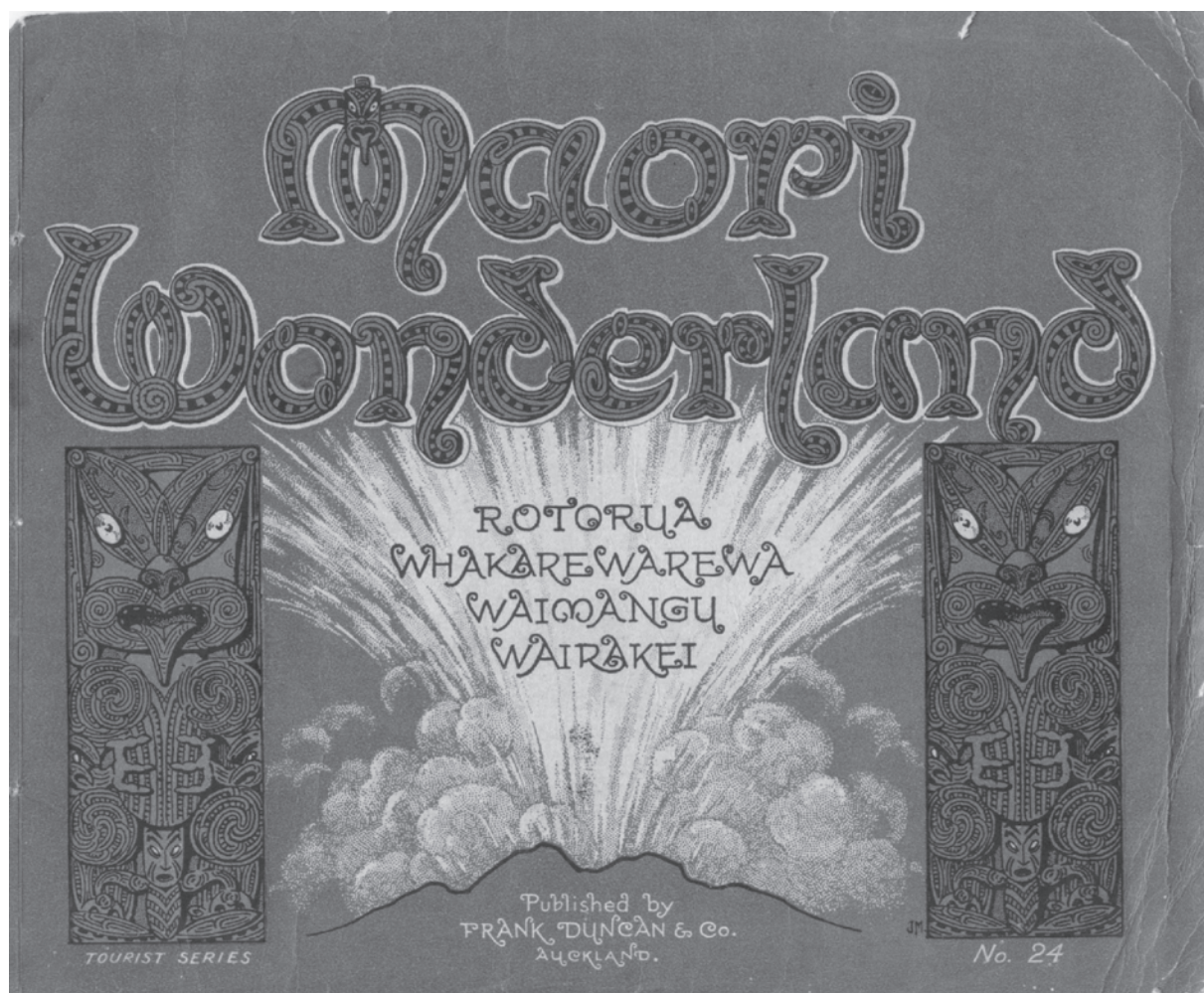
Kerry-Nicholls tried to equate the concept of tapu, or at least the apparent emblems of it, with the role of relics in the Roman Catholic Church. He immediately finds himself in difficulties (leaving aside the possible feeling of superiority of an Englishman toward Catholic Spain). Such parallels imply some sort of equality between cultures. This is impossible, because all good Victorians believed in the superiority of Christian civilisation and the British Empire and the obligation this carried to spread the gospel, light a candle in the darkness and carry Anglo-Saxon civilisation to benighted savages throughout the Empire. The fight of Christians against the pagan forces of darkness and heathenism is deeply embedded in Christian teachings, particularly as interpreted by Anglo-Saxons. If one accepts this Christian viewpoint, then how can one acknowledge equality of an indigenous non-European culture, or allow significance for its cultural values outside a museum or the tomes of academic anthropology.

It is no coincidence that the tangihanga, the rituals and tapu associated with death and burial, are still central in Maori life. There are also Pakeha who still interpret the wailing of the women

around a dead body on the marae as a survival of Maori “pagan” rites. Kerry-Nicholls and other Victorians, like many Pakeha these days, did not understand the dual concepts of tapu and noa, sacred and profane; that both aspects of life, the spiritual and day-to day survival in this world co-exist, and must be catered for. Kerry-Nicholls’ description of Te Koutu at Rotorua illustrates this:

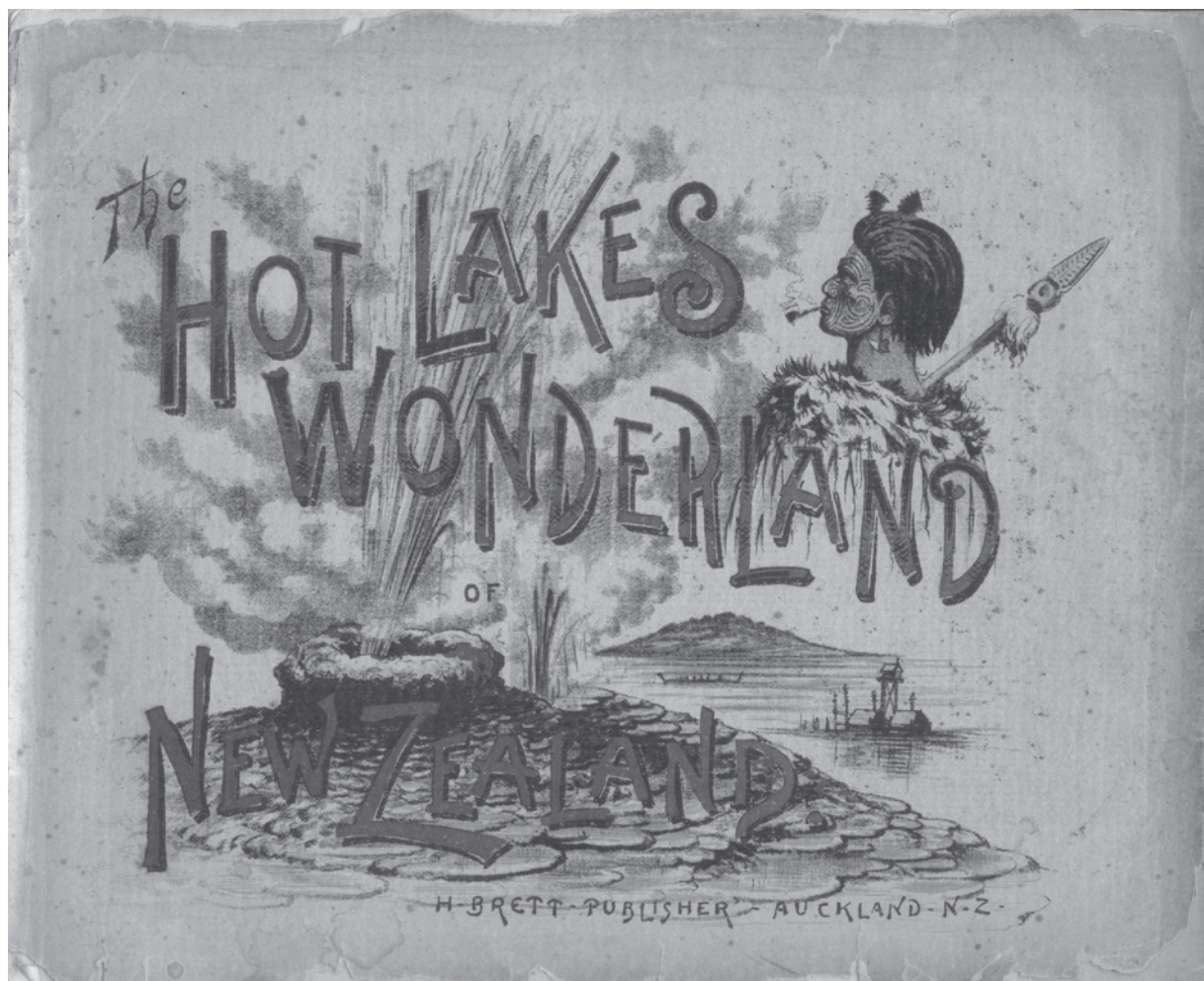
I was shown this locality by a native guide, who took me to a large hole where a warm spring called Kahotawa, bubbled up in a mixture of greenish mud and scum. Its black sides were overgrown with ferns, and a few sticks were placed across it in a mystic, cabalistic kind of way. When we got near to it, I noticed that my guide drew back, and when I motioned for him to follow me, in order to explain the mystery, he informed me in the most solemn way that it was tapu for the Maori but not for the Pakeha. He afterwards stated that it was sacred to an aged chief or rangatira, who had been buried in it. I did not envy the old man his last resting-place, for I had never seen a grave that looked so much like a cauldron of hot turtle soup (Kerry-Nicholls 1884, p. 66).

A murky hot pool was an ideal place to conceal and protect the bones of ancestors from desecration by enemies. Many ngawha are still tapu for this reason. Other tribes chose inaccessible caves in the sides of cliffs or rugged mountain tops for the same reasons.



Duncan, 1920

The hellfire and brimstone images of geothermal areas have been imposed by the Pakeha. Names like Devil's Cauldron, Dragon's Mouth and the like have replaced traditional Maori names. Tikitere has been renamed Hell's Gate. The original name referred to the floating tiki, all that remained of the unfortunate lady who met her death there. Thus the local Maori associations have either been erased or survive in garbled form among Pakeha, but still flourish in Maori oral tradition. Much of the imagery is not appreciated by the Pakeha. The volcanic mountains were personified and venerated. Tongariro won the favours of the lady Pihanga who lives near Turangi. Her unsuccessful suitors took themselves off, each to become in due course sacred mountains in their tribal areas – Taranaki (Egmont), Tauhara, Putauaki (Edgecumbe). Ngatoroirangi, the tohunga of the canoe Te Arawa, the ancestral canoe of Te Arawa and Tuwharetoa tribes, journeyed south from Maketu, past Tarawera and climbed Tauhara to search out the land. Tia, who had also arrived in Te Arawa, was in the region exploring and did not want to be found just yet. He spread a cloak of mist over the region – Taupo nui a Tia, the great cloak of Tia. The imagery is carried further as the colours of the woven taniko border of the cloak, red, yellow, white and black, are likened to the colourings of the clays and sinter found in the geothermal areas of the region.



Brett, 1896

The origin of geothermal activity in the Rotorua-Taupo district is ascribed to Ngatoroirangi. He continued his exploration around Taupo and decided to climb the high mountain Tongariro and claim the land around for his people. As he climbed he felt the increasing cold of a gathering snow storm. There were rival claimants to the land but Ngatoroirangi summoned his powers and destroyed them as they approached the mountain. This place was called Rangipo, dark or night sky, now called the Desert Road. It is probably a tradition of an eruption of an ash shower in the Taupo area.

Ngatoroirangi, and his slave Ngauruhoe, were near freezing to death on the mountain Tongariro. Ngatoroirangi summoned his sisters in Hawaiki to bring him warmth. They heard his call and assisted by the atua Te Pupu and Te Hoata carried heat to the region. Their first stopping place was Whakaari (White Island) and then they travelled south through Kawerau, Rotorua, Waiotapu, Orakei Korako, Te Ohaaki, to Taupo and so to Tongariro, where the warmth burst out in a crater on the mountain. The slave Ngauruhoe had died of cold, and his body was thrown into the new crater where he became enshrined in the mountain Ngauruhoe. Wherever the sisters stopped in their search for Ngatoroirangi, the warmth remained in the many ngawha, puia and waiariki. Tongariro itself stands also as the stern of the canoe Te Arawa in the saying, “Mai Maketu ki Tongariro”, an expression of the tribal area of Te Arawa and Ngati Tuwharetoa, from the prow of the canoe at Maketu, to Tongariro.



Ngauruhoe in eruption.

2. The Ancestral Legacy

The surface activity of geothermal areas was recognised by Maori as a gift, a valued resource, taonga, inherited from the ancestors. Earth heat was brought from Hawaiki by Maui and brought to the surface in the central North Island following the call of Ngatoroirangi from Tongariro to his sisters to bring him warmth. Maori recognised the connections between the geothermal phenomena of the region identified by geologists as the Taupo Volcanic Zone. This chapter provides a brief review of the origin myths in Te Arawa and Mataatua traditions.

2.1 The Origins of Heat in the Earth

The origins of volcanic fire or heat were in the separation of Ranginui, Sky Father, and Papatuanuku, Earth Mother, by Tanenuiarangi. Because Papatuanuku and Ranginui pined so much for each other, producing clouds, rain, mist, frost and snow, their children turned their mother's face away from Rangi towards Rarohenga, the underworld:

The youngest child of these parents, named Whakaru-ai-moko was at that time a child at the breast. They left this child as a comfort for their mother. Now, hence [through Whakaru-ai-moko] are the earthquakes, and volcanic phenomena that constantly war against us in every age (Smith 1913, pt. I, p. 135).

And so the youngest brother, also known as Ruaimoko, or Ruaumoko, was given volcanic fire, te ahi komau, to provide warmth and comfort to his mother Papatuanuku. This fire was also sometimes called te ahi tawhito, the ancient fire.

Tanenuiarangi took a wife Hinehauone (or Hineahuone), whom he had fashioned from clay, and she bore a daughter, Hinetitama. Later Tane took her as his wife but when Hinetitama found out that he was also her father, she fled to Rarohenga. Henceforth she became known as Hinenuitepo, the great goddess of the night, and she stayed in the dwelling place of Whakaruaimoko and became his wife. They had 21 children whose names “are emblematical for all kinds of volcanic phenomena, earthquakes etc” (ibid p. 147).

There were battles among the children of Rangi and Papa, and after his defeat, Whirotetipua descended to Rarohenga to the dwelling place of Whakaruaimoko and Hinenuitepo:

Now the thought grew in Whiro and Whakaru-au-moko, that they should have but one object in common to avenge the ill treatment of their mother (the Earth) and their father (the Sky). Whakaru-au-moko consented to this proposition, and then Whiro proposed they should operate above in the Ao-tu-roa [the world of light (sic), this ordinary world] and make war on Tane and his elder brethren. Whakaru-ai-moko replied to him, “Ye are all from above; carry on your warfare above. I am from below, and here I will engender

my warfare”. Whiro asked, “Where will you find weapons”? The other replied, “I will make use of Puna-te-warō [volcanic forces, earthquakes, eruptions, hot-springs], for in it is contained the *ahi komau* [volcanic fires]”.

Hence is the origin of the eruptions, the earthquakes, of Hine-tuoi [emblematical for hot-springs], which agitate both land and sea – even from those ancient times of strife down to the present. And, now was given the third name to the ‘Ahi Komau’ (first), the ‘Ahi-tawhito’ (second), the ‘Ahi-tipua’, (third) of Whakaru-au-moko, which cause the landslips, and the fall of rocks and trees, of man, of all things, which Tane and his brethren had made.

And thus it is that the ill treatment at Rangi-tau-ngawha [the name for the separation] when Rangi was separated from Papa, is constantly avenged (ibid p. 149).

The notes in square brackets were put in by the translator, S.P. Smith. The original Maori version follows:

Kia mate a Whiro-te-tipua me ma ona i Te Paerangi, ka heke i te ara i Taheke-roa ki Te Muriwai, ki Raro-henga; ka tae ki te kainga i a Whakaru-au-moko raua ko Hine-nui-te-po, ki nga kainga i kiia ake ra. Ka tipu te whakaaro i a Whiro ki a Whakaru-au-moko, kia kotahi ta raua whakaaro ki te takitaki i te mate o to raua hakui me to raua hakoro. Ka whakaae a Whakaru-au-moko; ka mea a Whiro, kia tikina mai ki runga nei ki te Ao-tu-roa pakanga ai ki a Tane me ona tuakana. Ka ki atu a Whakaru-au-moko, “No runga koutou; haere ki runga ta koutou pakanga. No raro nei au, hei raro nei au whakatipu i taku pakanga”. Ka ui atu a Whiro, “Kei whea hei rakau mau?” Ka ki atu Whakaru-au-moko, “Maku e tiki i roto i a Puna-te-warō; kei reira te Ahi-komau”.

Koia tenei te putake o te puia, o te ru, o Hine-tuoi, e ngaoko nei i te whenua me te moana – o reira mai taua pakanga tae mai ki naia nei. Ka kiia i konei te ingoa tuatoru o te Ahi-komau, ko ‘Te Ahi-tahito’ ko te ‘Ahi-tipua’ a Whakaru-au-moko e horo nei i te whenua, i te kohatu i te rakau, i te tangata me nga mea katoa na Tane ratou ko ona tuakana i hanga.

Ka ea te mate o nga matua i Te Rangi-tau-ngawha, i wehea ra a Rangi raua ko Papa (ibid p. 55).

In his study, *Maori Religion and Mythology*, Elsdon Best explained:

In Maori myth we meet with the idea that the original fire was the *ahi komau* or subterranean fire concealed within the earth and in stones; hence the wise old man of old said “*Na Rakahore te ahi*” – fire emanated from Rakahore – the personified form of rock. We have seen that when Sky and Earth were separated, Ruaumoko, their youngest child was still suckling the Earth Mother, hence it was arranged that he should remain with his mother when she was turned face down to Rarohenga, to warm her breast and serve as an objective for her mother love. Then Tu said: “She will suffer from cold; give her the *ahi komau* as a boon”. Even so the *ahi komau* was procured from Rakahore, who was its guardian, and given to Papa the Earth Mother, with the remark: “Here is fire for you”. When Papa and Ruaumoko had been turned down to the underworld then that subterranean fire became the origin of earthquakes. Whiro joined with Ruaumoko in using subterranean fire as a weapon in assailing mankind in the world of life, hence we ever have Hine-puia, the

Volcano Maid with us in the upper world. These beings are enabled to shape the earth because it became somewhat loose and unstable when turned over at the command of Io-nui, an occurrence known as *Te hurihanga i a Mataaho*. This Mataaho is a colleague of Ruaumoko and is associated with him, they are the cause of earthquakes and all volcanic action. (*Ko Mataaho, ko Whakaruamoko, ko nga tangata era i a raua te mana o te ru, o te puia*) (Best 1982, pp. 248-249).

Best also quoted Te Matorohanga, listing names of personifications:

Papa-tioi (the swaying earth), Papa-tiraha (Papa facing upward), Te Kuku, Pumairekura, and the Po ka taka i runga o Waowaonui are names or expressions that denote different phases of volcanic activity and earthquakes; Papa-tioi, Hine-oi and Papa-tiraha are specially connected with earth trembling.... The destructive powers of Ruaumoko are occasionally referred to in song, as in the following line – “*Me ko te rua au o te Whakaruamoko e horo nei i te tangata ki te Po*”.

Another version of the origin myth pertaining to volcanoes includes the names of Ioio-whenua, Hine-tuoi, Hine-tuarangaranga, Te Kuku, Te Wawau and Tawaro-nui as those of mythical beings connected with earthquakes and volcanoes. Hine-tuoi is probably the same as Hine-oi, Hine-ori, and Papa-tioi or tuoi, for the latter form appears in one version (ibid pp. 249-250).

In summarising the personification of volcanic phenomena Best listed the following names: Ruaumoko, Hine-oi, Hine-ori, Oiroa, Hine-Tuoi, Hine-puia, Hine-tuarangaranga, Tawaronui, Ioiowhenua, Te Kuku and Te Wawau:

Here we have a number of mythical beings connected with volcanic action and earthquakes. The first named, Ruaumoko, is the best known personification of such phenomena.... In some cases it is by no means easy to distinguish between personified forms and origin myths, mythical being credited with originating natural phenomena, products etc.... In one recital Ruaumoko is associated with Tahupara, Turumakina, Takahuriwhenua, Te Oiroa and Puhoronuku, all beings connected with earthquakes and volcanic disturbances. Two others so mentioned are Taitawaro-nuku and Taitawaro-heketua. The Hine-oi (both oi and ori denote shaking, swaying) mentioned was, we are told, a daughter of Ruaumoko and Hine-nui-te-Po” (ibid p. 323).

In her study of female atua, Aroha Yates-Smith quoted the following extract from a waiata tangi from Ngati Kahungunu of the Wairarapa district, composed by Nukupewapewa for Ohangaitua and Te Rangitakuariki who fell in battle against Ngati Tama. This moteatea mentions six atua wahine in the second stanza (the full version is in Ngata 1980, vol. III, p. 346):

Haere ra, e Tama ma e!
I te ara ka takoto i Tāheke-roa,
Kia karangatia mai koutou
Ki te Muri ki te Wai-hou,
I to koutou tipuna, i a Rua-i-moko,
E Whakangaoko ra i Raro-henga,

Ka puta te hu ki te tai-ao;
Koia Hinepuia i Hawa-iki,

E tahi noa mai ra i te kauhika
Ki waho i te moana.
Ka tere Hine-uku, ka tere Hine-one
Ka tere Para-whenua-mea
Ki a Hine-moana e tū mai ra,
I Tahora-nui-ātea.
Ka whakapae ki uta ra
Koia Hine-tapa-tū-rangi,

E haere atu na kōrua,
E Tama ma! E

Yates-Smith explained the allusions to atua wahine in this waiata:

The two men are being farewelled down the path which lies along Tāhekeroa (the long migration to Rarohēnga), that they may be welcomed into Te Muri and Waihou (otherwise known as Te Muriwaihou) where their ancestor Ruaimoko (god of earthquakes and volcanoes) is moving around in Rarohēnga, producing volcanic activity in the physical world. Hinepuia of Hawaiki is named, being the female deity of volcanoes. She is said to be releasing her waste into the sea resulting in the entities Hineuku (white clay), Hineone (soil or sand), Parawhenuamea (silt, or pure fresh water) drifting out to Hinemoana (the sea) on Tahoranuiātea (the great expanse of water). The entities come ashore, where Hinetapatūrangi is, to the place where the fallen warriors are journeying

Hinemoana and Parawhenuamea are not new to this study, except that in this context Parawhenuamea connotes silt or alluvial deposits rather than virgin water appearing from underground. Nevertheless there is some connection between the two, with silt being produced by the movement of that water, particularly when in flood. Parawhenuamea is connected with a great flood, according to a Ngai Tahu tradition, although in this instance Parawhenuamea appears to be male; a Bay of Plenty river also bears the name because of its tendency to flood. Hinepuia, Hineuku, Hineone, and Hinetapatūrangi... have been identified as connected with volcanic activity (Hinepuia) and soil types (Hineuku and Hineone): all are female, symbolise the earth and have been considered worthy of note by the chief, warrior and composer, Nukupewapewa (Yates-Smith 1998, p. 214).

The references in this waiata from Ngati Kahungunu, outside the Taupo Volcanic Zone, are also indicative of a universality in these stories, although there are also numerous regional variations on the same theme.

Best also hinted at the broader Polynesian parallels with Ruaimoko and Hinepuia, referring to the same waiata tangi composed by Nukupewapewa:

In an old lament we find the following:
I a Ruaimoko, e whakangaoko ra i Rarohenga

Ka puta e hu ki taiao; koia Hine-puia i Hawaiki.

This alludes to the activities in the subterranean world, which cause the earthquakes felt in this world, and which are represented by Hine-puia at Hawaiki. This Hine-puia is the personified form of volcanic disturbances, volcanoes. The song from which I quote continues:-

Ka tere Hine-uku, ka tere Hine-one, ka tere Para-whenuamea

Ki a Hine-moana e tu ra i Tahora-nui-atea.

This is curiously suggestive of the effects of volcanic disturbance, the flowing of mud and water, the fall of pumiceous sand, to the ocean. Hine-uku personifies clay or mud, Hine-one sand, and Para-whenuamea water; while Hine-moana is the Ocean maid, and Tahora-nui-atea is her plaza, the vast expanse of open ocean. Para-whenuamea is considered by Mr S. Percy Smith to be the same as Pele-honuamea of the Hawaiian Isles, who is there the goddess or personified form of volcanic fire. In our Bay of Plenty district the Awa folk state that one Hine-i-Tapeka was the origin of subterranean fires, and that she was a sister of Mahuika, who personifies fire in this world (Best 1976, pp. 187-188).

Volcanic fire or heat is not the same as the fire that burns wood, or can be kindled by friction of certain kinds of wood. Best described the three kinds of fire or heat identified by his Mataatua informants:

One is the *ahi maori* (common or ordinary fire), as seen in this world. Another is the *ahi tupua* (supernatural fire or volcanic fire). The third is the *ahi a te atua* or electric fire, as represented by the lightning. The first of these fires burns in timber, in trees... The second burns in the earth, and is seen at Whakaari [White Island], Tongariro... and elsewhere. The third of these fires is seen during thunderstorms (Best 1925, p. 792).

Maui stole fire from Mahuika, the personified form of ahi maori, ordinary fire, and the sparks were stored in trees. The friction of certain kinds of wood rubbed together can reproduce those sparks to provide cooking fires. Mahuika was a descendant of Ra, the sun, whom Maui also ensnared to ensure the perpetual cycle of night and day. Lightning (*uira*, *koha*, *kanapu* or *hiko*) was personified in Tupai and Whaitiri, descended from Ranginui, the Sky Father, through Tumatauenga (ibid pp. 872-873).

These two forms of fire are separate from what Best calls “volcanic fire” which is identified with “Hine-i-Tapeka among some tribes, but with others Te Pupu and Te Hoata take her place” (ibid p. 792). The two latter were the atua of Kuiwai and Haungaroa, sisters of Ngatoroirangi, significant in Tuwharetoa traditions. Best described Mataatua tradition:

The Ngati Awa tribe of Whakatane assert that the three sisters, Hine-nui-te-Po, Mahuika and Hine-i-tapeka were children of Makara, and grand-children of Pu-te-hue. Also that Hine-i-tapeka had offspring, viz. Motumotu-o-rangi and Ngarahu-o-ahirangi, terms signifying firebrands and charcoal.

The *Ahi o Tapeka* (Fire of Tapeka) then is the fire which burns in the earth. The masses of charcoal and charred trunks of trees found in local deposits of pumice were burned by

the Fire of Tapeka, and Tapeka is sometimes said to have burned the world. “The Fire of Mahuika”, says my informant, “is a small matter compared with the Fire of Tapeka” (ibid pp. 792-793).

This appears to be a clear indication that destruction of the forest was associated with the heat and pumice deposits of a volcanic eruption. “The *ahi a te tupua*, or supernatural fire, says old Pio, of Awa, is seen in volcanoes. That fire sprang from Rongo-ma-tane” (ibid p. 793).

Hochstetter recorded from Tuwharetoa sources another version of the origin of geothermal activity in the North Island, Te Ika a Maui:

when Maui stepped upon the island fished out of the sea, he took through ignorance some of its fire into his hand, and horrified, flung it into the sea, where subsequently the volcano Whakaari arose. The ashes of the volcano, Maui scattered about with his feet, and thus the fire vomiting mountains of the island and the numerous hot springs originated (Hochstetter 1867, p. 391).

In Mataatua oral tradition ancestral connections are maintained with Ra, the sun, Mahuika and her fire children who were destroyed by Maui. The whakapapa vary, but within this ancestry are included the atua, or tupua (tipua), Te Pupu and Te Hoata. Joe Mason of Ngati Awa described their ancestry to Paora Maxwell:

Me kii penei na i tonono a mai e te Ra i tana tama Auahi-tu-roa ki te haria mai te ahi hei whakamahana i nga tangata o te motu nei. Na Auahi-tu-roa, a ka moe i a Te Kapu-o-te-rangi, ka puta ki waho nga tupuna ahi nei, a Te Hoata raua ko Pupu. Te tahi korero ano, tenei Ahi, te Auahi-tu-roa i heke mai i to tatou tupuna a Mahuika.

Na Auahi-tu-roa raua ko Mahuika, ka puta mai nga tamariki o te ahi, te whanau o te ahi, ko Pakuroa, ko Mapere, ko Manawa, ko Toiti, ko enei nga matimati engari, ko enei nga tamariki o te ahi, i whiua nei e mana ki te wai, tana kimihanga i te ahi hei whakamahana te iwi Maori.

It is said that Ra [the sun] sent his son Auahi-tu-roa to bring warmth to the people of the land. Auahi-tu-roa lay with Te Kapu-o-te-rangi, and their children were these fire ancestors Te Hoata and Te Pupu. Another story about fire is that it comes from Auahi-tu-roa and Mahuika.

From Auahi-tu-roa and Mahuika come the children of fire, the family of fire, Pakunui, Pakuroa, Mapere, Manawa and Toiti. These are the names of the fingers of the hands, but they are also the children of fire, thrown by Maui into the water in his search for fire to warm Maori people (Maxwell 1991, p. 11).

Makereti Papakura of Te Arawa told the story of how fire came to the earth:

When a comet is seen above, a Maori will say, “Ko Auahi-turoa, nana i karemai te ahi,” That is Auahi-turoa, who brought us fire. The old Maori belief is that Tama-nui-te-ra

(Honorific name of the Sun), the father of Auahi-turoa, thought that he would like to do a great thing for the people who lived in the world below. He tried to think of something that would be of great use to them, and would bring them comfort. He thought and thought, and decided that fire was the very thing which they needed, for it was not only useful in cooking, but also gave warmth and light.

Tama-nui-te-ra spoke his thoughts to his son Auahi-turoa (personified form of comets) and said, “I want to send something very important to the people below on earth, and I want this gift of fire to go through you”. And his son consented: Auahi-turoa then took the fire with him, and presented his father’s gift to the people on earth, who thus became possessed of this wonderful thing, ahi.

While Auahai-turoa was on earth, he took as his wife Mahuika, the goddess of fire. They had five children, and they were named after the five fingers of the human hand, Takonui, Takoroa, Mapere, Manawa, and Toiti. They are known as the five fire children (Papakura 1986, pp. 274-275).

Makereti then went on to tell the story of Maui, the grandson of Mahuika, who put out all the cooking fires one night, and then went to Mahuika for more fire, which she supplied by pulling off her fingernails, one by one. Makereti also noted: “A sister of Mahuika called Hine-i-tapeka has the fires of the underworld in her care. These fires sometimes break out in volcanic eruptions” (ibid p. 279).

2.2 Ngatoroirangi and the Origin of Geothermal Resources

Most of the traditions from Mataatua, Te Arawa and Tuwharetoa sources ascribe the origin of geothermal activity in the Taupo Volcanic Zone to the exploits of Ngatoroirangi, and his sisters Kuiwai and Haungaroa, aided by the atua Te Pupu and Te Hoata (or Te Haeata). There is a clear connection made in these traditions between the volcanic mountains and areas of surface geothermal activity, the hot springs, geysers, mud pools, sinter terraces and steam vents. These were believed to be connected by underground passages by which the local taniwha travelled and met together occasionally. These same taniwha were sometimes associated with earthquakes too.

Most Pakeha travellers in the nineteenth century noted the strong Maori associations with geothermal areas and volcanism. Hochstetter provided the earliest detailed geological description of the Rotorua – Taupo region, and spent some time in 1859 with Te Heuheu at Pukawa and Tokaanu:

Even the natives have very correctly brought the hot springs directly in connection with the still active volcanoes, though they have clothed their conceptions in the garb of a legend. I here recite the legend such as I heard it from Te Heuheu.

Among the first immigrants who came from Hawaiki to New Zealand, was also the chief Ngatoroirangi (heaven's runner, or the traveller in the heavens). He landed at Maketu on the East coast of the North island. Thence he set off with his slave Ngauruhoe for the purpose of exploring the new country. He travels through the country; stamps springs of water from the ground to moisten scorched valleys; scales hills and mountains, and beholds towards the South a big mountain, the Tongariro (literally "towards South"). He determines on ascending this mountain in order to obtain a better view of the country. He comes into the inland plains to Lake Taupo. Here he had a large cloth of Kiekie leaves tattered and torn by bushes. The shreds take root and grow up into kowai-trees [kowhai]... Then he ascends the snow-clad Tongariro; they suffered severely from the cold, and the chief shouted to his sisters who had remained upon Whakari [White Island], to send him some fire. The sisters heard his call and sent him the sacred fire they had brought from Hawaiki. They sent it to him through the two Taniwhas (mountain and water spirits living underground), Pupu and Te Haeata, by a subterranean passage to the top of Tongariro. The fire arrived just in time to save the life of the chief, but poor Ngauruhoe was dead when the chief turned to give him the fire. On this account the hole, through which the fire made its appearance, the active crater of Tongariro, is called to this day after the slave Ngauruhoe; and the sacred fire still burns to this very day within the whole underground passage between Whaikari [sic] and the Tongariro; it burns at Motou-Hora, [Moutohora, Whale Island], Oka-karu [near Kawerau], Roto-ehu, Roto-iti, Roto-rua, Roto-mahana, Paeroa, Orakei-korako, Taupo, where it blazed forth when the Taniwhas brought it. Hence the innumerable hot springs at all the places mentioned. This legend affords a remarkable instance of the accurate observation of the natives, who have thus indicated the true line of the chief volcanic action upon the North Island (Hochstetter 1867, p. 391).

In the lines of the waiata "Ka eke ki Wairaka..." (Ngata 1988, vol. I, pt. I, pp. 150-151), composed by Rihi Puhīwahine of Ngāti Tuwharetoa, Te Hoata and Te Pupu are described symbolically as sisters of Ngatoroirangi, responsible for the boiling pools of the region:

Kati au ka hoki ki taku whenua tupu,
 Ki te wai koropupu i heria mai nei
 I Hawaiki ra ano e Ngatoro-i-rangi,
 E ona tuahine Te Hoata-u-Te Pupu;
 E hu ra i Tongariro, ka mahana i taku kiri.

But now I return to my native land;
 To the boiling pools there, which were brought
 From distant Hawaiki by Ngatoro-o-rangi,
 And his sisters Te Hoata and Te Pupu;
 To fume up there on Tongariro giving warmth to my body

A Mataatua tradition acknowledged "Te Pupu and Te Hoata, descendants of Tu, and also of Ra (the sun), through Parawhenuamea", a personification of floods (Best 1977, p. 793). Best also quoted a whakapapa which made Te Pupu and Te Hoata ancestors of Ngatoroirangi of Te Arawa:

When that famed ancestor landed on the shores of the Bay of Plenty, he went off on a trip of exploration to inland parts. On ascending Mount Tongariro he was chilled by a snow-

storm, hence he invoked the aid of his ancestors, Te Pupu and Te Hoata. Those beings came to his aid in the form of volcanic fire. They first appeared at Whakaari (White Island), which still burns. Then they came to the mainland and finally reached Tongariro, hence the volcanic fires of that mountain and elsewhere. When the two sisters of Ngatoro-i-rangi, Kuiwai and Haungaroa, came from far Hawaiki in search of the wanderer, they saw their ancestors Te Pupu and Te Hoata burning out on the ocean. Then, going inland they found the imprint of the foot of Ngatoro on a rock and so followed him. Where they rested on a hill the spot has since been known as Te Hemo. So fared they on across Kainga-roa, so named because Haunga-roa took a long time over a meal there, its full name being Kainga-roa-a-Haunga-roa, and on past Te-whakaawe and Te Puna-takahi-a-Nga-toro-i-rangi, until they came to their brother (ibid pp. 793-794).

In another version, Best explained these place names on the Kaingaroa Plains in more detail:

Ngatoro went inland exploring, and a spring of water known as Te Puna takahi a Ngatoro-i-rangi was caused to appear by his stamping his foot on the ground. The enchanted *ti* trees (*Cordyline australis*) on Kainga-roa, known as Ti whakaawe, which ever recede as a traveller advances, owe their strange powers to Ngatoro. He ascended Tongariro, where he almost perished, so intense was the cold on that mountain. Hence he called upon his ancestors to send fire to him, lest he perish. One of his vocations was –

“E Para E! Tikoko o te au marama
Tukua au kia puta ki tawhangawhanga nui no Rangi, no Papa
He aio; tu atu te makariri
Haramai te werawera
Hika ra taku ahi ki a Kautetetu
Hika ra taku ahi ki a Te Pupu
Hika ra taku ahi ki a Te Hoata
Ki a Te Moremore-o-te-rangi”.

The *tipua* fire was sent hither from Hawaiki in answer to his request. The fire came first to Whakaari, or White Island in the Bay of Plenty, where it still burns, as all may see. Then it came to the mainland where it originated the boiling spring, also named Whakaari, near Te Tiringa, on the Whakatane-Te Teko Road [Awakeri Springs], and in fact all the volcanoes and hotspots were caused by that fire of the *tipua* known as Te Pupu and Te Hoata (ibid p. 977).

Other versions of the story say that Ngatoroirangi's sisters, Kuiwai and Haungaroa gave place names on Kaingaroa and carried the warmth to Ngatoroirangi on Tongariro. Some say they travelled underground and wherever they came to the surface to see their way, some of the warmth remained. Others say they travelled over land, but in their haste they dropped burning sticks from the fires they carried and this warmth has remained in the hot springs, mud pools and fumaroles of the region.

The background to Ngatoroirangi's journey to Taupo was rivalry with Tia who had also travelled to Aotearoa on the canoe Te Arawa, which landed at Maketu. Both were searching for places to settle (Figure 5). The following account is from Grace's history of Ngati Tuwharetoa:

Shortly after leaving Rotorua, Tia and his party came to a village, situated on the gentle slopes of the flat-topped mountain range extending from the Hautere-Mamaku plateau. From that village they viewed the extremely picturesque tableland with its perpendicular cliffs towering above the forest, which sloped away to the open ground along the banks of Pokaitu stream. They noted, standing at the extreme southern end of the plateau, a tall pillar of basaltic rock which many generations later was named Hinemoa in honour of a beautiful maiden and heroine of Te Arawa people.

During their sojourn at that village Tia unintentionally touched the dead body of one of the principal chiefs of the local tribe during the ceremonies connected with his burial. He immediately came under the influence of tapu. He was compelled to wait until a tohunga was found who possessed powers sufficient to free him from the prohibition, and his journey was accordingly delayed.

An old priest from a neighbouring village essayed the performance of the required ceremonies. Specially prepared food was cooked in the sacred forest and given to Tia to swallow. The rite of whakanoa was performed and then Tia, with appropriate ceremony, washed his hands in a stream. He became freed from the dreaded spell and the incident was known ever afterward as Horohoroinganu o Tia (the great cleansing of Tia). The place where the ceremony was performed bears that name today, but in the abbreviated form Horohoro.

It was a tribe called Ngati Kahupungapunga which offered the hospitality that Tia and his followers enjoyed. This tribe had occupied Horohoro and the surrounding country for many generations. It was a large tribe and, like many of them that Tia and others of the Arawa migration had seen on the coast in the Bay of Plenty, was not anxious to share its lands with strangers. So Tia and his followers continued their journey to Taupo in search of land on which they could settle without being molested by the aboriginal tribes.

When they reached Waikato River they found the water very muddy. Tia studied it and concluded that someone had already reached the source of the river and had discoloured the water purposely to show those journeying to the interior that the district was already occupied. Even though disappointed, Tia continued his journey. The spot where he crossed the river he named Atiamuri (Tia who follows behind), signifying that he was not the first in the land. He followed the river that he might meet, at its source, the intruder of his intended domain. He came to the Aratiatia rapids and, after studying the manner in which the water rushed down, believed that it came out of a hole in the high ground above. He observed, too, that the rapids were a series of steps. As he found his way up the right bank he called the rapids Aratiatia (the stairway of Tia). He continued his journey and arrived at Taupo.

At that place another disappointment awaited him and his followers. They discovered a large tribe, Ngati Hotu, in occupation of the district. His party being small and not able to get assistance – if such was required – Tia did not remain long in the land immediately bordering the lake. He and his men continued their journey without attempting to disturb the occupants. They travelled round the eastern shore of the lake passing Te Rangiita, Tokaanu and Pukawa and arrived at Titiraupenga. This place is situated at the foot of a mountain of the same name that stands to the northwest of the lake. This part of the country was unpopulated and under Tia's chieftainship, the party made it their permanent home.

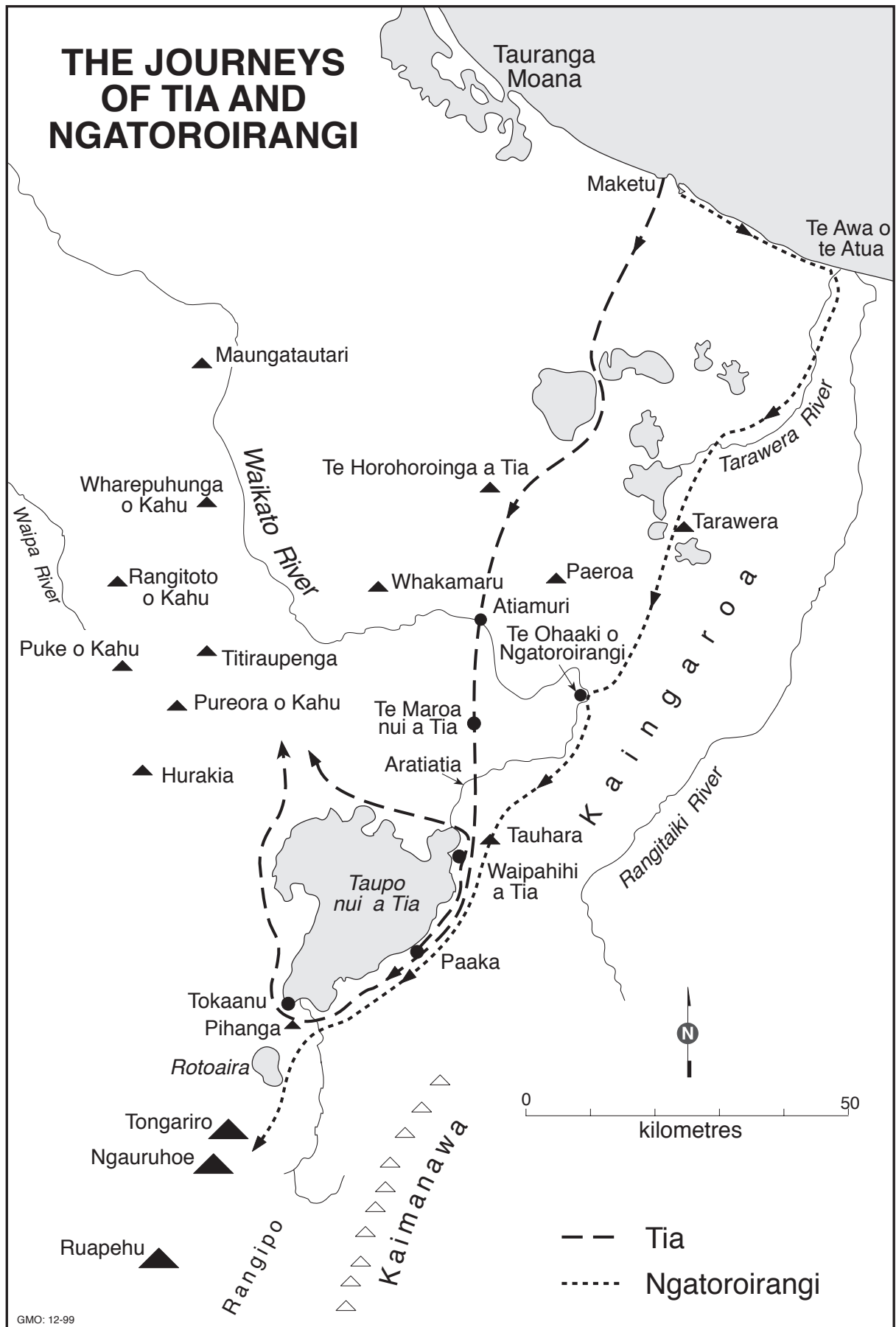


Figure 5. The Journeys of Tia and Ngatoroirangi.

Maka, who had accompanied Tia from the Bay of Plenty, also established himself at Titi-raupenga. Of these two chiefs it is said that after their deaths their skulls were taken by their descendants to the kumara grounds during the planting season and set up on posts to ensure bounteous crops.

Tia had been unsuccessful in establishing himself and his followers in the various districts through which he had passed. To enable his own descendants and those of his followers to make claims during the years to come to the lands in Taupo, he built altars and temporary dwelling places as he passed through as signs of his occupation. He thus bespoke the territory for his people.

As the party travelled along the eastern shore of the lake it came to a place named Paka, but now known as Hamaria or Samaria, a name that missionaries later gave it [now known as Halletts Bay], and there Tia built an altar and a temporary dwelling. The party's journey was broken for a while and excursions were made to the forest immediately above the lake to snare birds and replenish the food supplies needed for the rest of the journey.

While Tia was at Hamaria, he noticed standing some distance away a high, rocky cliff which faced the lake. He observed the peculiar formation and colouring of the laval rock. It appeared to him to resemble the cloak that he wore about his shoulders. The cloak was called a taupo (a word that is now obsolete) and was made of closely woven material with a covering of flax leaves, coloured yellow and black. It was used as an outer garment to shed the rain. Tia went toward the cliff and under it made a post of sacrifices that he named Hikurangi. There he recited the incantations considered needful to propitiate the local deities. Rising up he removed his cloak and fastened it to the post and named the great cliffs Tauponui a Tia (the great cloak of Tia).

The name Tauponui a Tia, during the occupation of the tribes that followed, was given to the lake itself and then to the vast tract of land surrounding it, extending from the eastern watershed of Hauhungaroa range to the western watershed of Kaimanawa mountains, and from the northern slopes of the Tongariro group to the country about the Atiamuri district.

Shortly after Tia's departure for the Taupo district Ngatoroirangi also journeyed to those parts from Maketu. He travelled by way of the Tarawera River and Ruawahia. He reached Paeroa mountain and then continued his journey to a place between the township of Taupo and Taharepa on the northern shore of Lake Taupo. There he erected a shrine before which he could recite his incantations. With the aid of Ikatere, a god brought from Hawaiki, he produced the fresh water whitebait that was seen in large shoals in the lake and streams until recently. Tradition says that he tore his garments to shreds and, casting the pieces into the lake, produced this fish. The post of incantation was called Te Tuahu a Ngatoroirangi. While on the lake shore he caused heavy clouds of dust to discolour the water to prove his ownership of the lake. It was this dirty water that Tia saw at Atiamuri.

From the lake shore Ngatoroirangi climbed Tauhara and at the summit set up another altar. Ikatere was installed as its guardian. It was while he was there that he saw Tia's arrival in Taupo. He tried to turn him back, but not being able to do so, decided to follow him. He bespoke the great expanse of water for his descendants and, to make his mark, he cast his

spear, called Kuwha, into the lake. It landed close to the shore off Wharewaka, about four miles from the present Taupo wharf. It is now a tree trunk standing upright in the water.

Ngatoroirangi travelled round the eastern shore toward Tokaanu, and en route erected three more altars. The first was built near Rotongaio, a large lagoon situated close to the lake and about ten miles from Taupo, and he named it Hawaiki. The second was erected at Te Hatepe and named Ihuporo. When he arrived at Hamaria he discovered the temporary shelters and the post of incantation set up by Tia. He noticed that they were recently built and, desiring to establish beyond doubt his claim to Taupo, he set to work to build an altar which, when complete, would have the appearance of having been built long before the one he found.

The next day he met Tia, who had just returned from the forests situated toward the mountain ranges, and asked him, "What brings you to these parts"? Tia replied, "I have journeyed to these parts to claim the territory for my people. I have built altars, and I have made my peace with the spirits of the land. Observe my clearings and my shelters"! Ngatoroirangi then said, "When our celebrated canoe Te Arawa stood off the shores of Maketu I heard you bespeak land for yourself on the coast. This is not your domain. It is mine. I have already made my mark in this Great Inland Sea. I have examined your clearings and find that they were done very recently. Accompany me and I will show you my clearings, my altar and my shelters, and you will observe that they are old and so will prove to you that my occupation of this land is longer than yours"!

Tia accompanied him and inspected his clearings and saw that they were as Ngatoroirangi had said. He realised, with some disappointment, that he had been outmanoeuvred in his bid for the territory, and so continued his journey round the lake with his followers to Tokaanu. He remained at that place for a while and then travelled on to Titiraupenga.

Ngatoroirangi a little later also travelled round the lake and arrived at Motutere, a promontory situated about fourteen miles from Tokaanu. He built another altar which he named Mahuehue. He observed the mountain Tongariro in the distance and decided he would ascend it as he had done Tauhara. He went to Tokaanu and then travelled to Rangipo. There he met a man called Hapekituarangi and said to him, "What brings you to this cold and barren country where there is nothing to eat"? Hapekituarangi, while looking toward Kaimanawa range, replied "My breath is my food"! The range to this day is known by that name (kai, meaning eat; and manawa, in this case, breath).

Hapekituarangi then informed Ngatoroirangi that he had come to claim the land for himself and his descendants. Ngatoroirangi, seeing the danger of being outdone of the vast domains that he had travelled so far to obtain, immediately began to climb Tongariro in order to bespeak the land from its summit. When he was well above Hapekituarangi, and in a position sufficiently high to get a commanding view of the land, he said, "E Hape e! Kaua koe e piki ake. Ki te piki mai koe, ka heke te po o te rangi"! (Do not dare climb this mountain. If you do I will cause the darkness of the heavens to descend upon you!) Hapekituarangi at the time was standing in the heart of the Rangipo desert at a place called Onetapu, or the Sacred Sands, which was avoided and dreaded by the Maori in those days. In answer to the rebuke he raised his voice and shouted up to Ngatoroirangi, "Kaua koe e heke mai, ko te wahi e tu nei au ko te Onetapu"! (Do not come down to where I am standing, for it

is the Sacred Sands!) The place has been known by that name ever since.

Hapekituarangi, however, paid no heed to the threats and started to ascend the mountain. Ngatoroirangi, observing him, immediately called upon his gods and upon Ruaimoko, god of volcanoes, to destroy the trespasser. The traditions of the tribes of Taupo say that the gods responded to the appeal, and in the skies great banks of dense, black clouds rolled by and all became dark as night. Snow fell and sleet swept the desert, and in the intense cold Hapekituarangi and his company perished.

Rangipo desert is situated in the windswept, tussock plateau that lies to the eastern side of Mount Ruapehu and through which the Tokaanu-Waiouru main highway now wends its way. On it once stood a forest which has long since been destroyed by volcanic action and the continual fall of showers of steaming pumice. The charred remains of the one-time forest can still be seen in the road cuttings and the gullies. Because of the absence of the forest and the cold winds that continually sweep the desert, the only form of vegetation that is found is tussock, stunted shrubs and mat and cushion plants.

The desert was so dreaded by the Maori that whenever they travelled through its fastness, no-one was permitted to speak. It was forbidden to ask questions about the stunted vegetation or its peculiar appearance, in case the gods, as they believed, became offended and loosened the darkness of the heavens as they had done with Hapekituarangi. Those that passed through wore wreaths made of large leaves to confine their view to the track and to shield from their gaze the mountain of the gods. At intervals they recited Karakia to pacify the spirits that looked down from the heights.

After destroying Hapekituarangi, Ngatoroirangi continued to ascend the mountain. He encountered the snow and sleet and the cold winds that had destroyed his countrymen. The black clouds that darkened the sky enveloped him. He turned his face to the south and looked down on the plains below and, as the clouds blotted out his view, he named the expanse Rangipo (the plains of the dark sky). He struggled on. His strength was failing him and he was almost frozen. With great difficulty he reached the summit. He looked out across the land below and claimed it for himself and his descendants. Weakened by the cold and the strenuous climb he cried aloud to his ancestral spirits and to his sisters, Kuiwai and Haungaroa who were in Hawaiki, to come to his assistance and send him fire. He exclaimed, "Kuiwai e! Haungaroa e! Ka riro au i te tonga, tukuna mai te ahi"! (O Kuiwai! O Haungaroa! I am seized by the cold wind from the south. Send me fire!) They heard him and, with the assistance of Pupu and Te Hoata, the fire gods, heat was sent him from Hawaiki. It came underground and passed White Island, Moutohora, Okakaru, Rotoehu, Rotoiti, Tarawera, Paeroa, Orakeikorako, Taupo and Tokaanu. He then threw down on the mountain the fourth of the five ara (sacred stones) brought from Hawaiki. Where it struck, a burning volcano burst open. The fire and heat revived him and he was saved.

While appealing to his sisters for fire, Ngatoroirangi killed his slave Ngauruhoe as an offering to his gods so as to give greater mana to his request, and when the volcano broke out he threw him into the yawning crater. The volcano today bears the name of the unfortunate slave.

The fire that travelled underground from Hawaiki came up through the earth at all the places already mentioned above. The localities have remained active thermal areas to this day, and the name Tongariro is derived from two words that were in his appeal – tonga (south wind) and riro (seize) (Grace 1959, pp. 58-64).

Ngatoroirangi did not settle in Taupo but returned to the Bay of Plenty and made his home on Motiti.

Tia is an important ancestor for people of north Taupo and he was responsible for the region's name, as Grace explained:

There are two versions given by the Taupo people as to the origin of the name Taupōnui a Tia. The one given earlier is the more popular one. The other states that when Tia arrived in Taupo and saw Ngatoroirangi's post of incantation, he knew that the chief was on Tauhara and he, therefore, hurried on round the eastern shore towards Tokaanu. As he passed a spot beyond Taharepa water squelched up from under his feet. That place became known as Waipahihi a Tia (the squelching water of Tia), and is where the present road turns from the lake in the direction of the Terraces hotel.

Ngatoroirangi watching him from his lookout on Tauhara, endeavoured to turn him back by incantations, but Tia continued unperturbed. When he had gone a few miles, Ngatoroirangi again attempted to halt him, this time by throwing his spear, Kuwha, from the top of the mountain. It, however, fell harmlessly into the lake off the shore at Wharewaka, and Tia's protectors shook off the effects of Ngatoroirangi's incantations.

Tia continued his journey, but by the time he reached Hamaria he began to feel Ngatoroirangi's supernatural influence. The latter chief by then had called the most powerful of his gods to his aid. As Tia walked beneath the coloured lava cliff that stands back from the lake shore at that place, the fury and might of Ngatoroirangi and his gods descended upon him. He was enveloped in darkness and not able to proceed. He knew he was defeated and so he turned back. He crossed the Waikato River by the present Taupo township and journeyed to Titiraupenga. There he and his relative Maka, with their respective followers, established themselves. From Hamaria, Ngatoroirangi travelled to Mount Tongariro, and the rest of the story is as told in the preceding version.

The name Taupōnui a Tia, according to this version, originated as the result of the blotting out of Tia's view of the surrounding country (the great envelopment of Tia by darkness) (Grace 1959, pp. 66-67).

Te Arawa versions of the journeys of Tia and Ngatoroirangi compiled by Stafford (1967 pp. 20-23) are essentially similar, but with the important local addition relating Ngatoroirangi to the volcano Tarawera:

Travelling east [from Maketu], he went down the coast until he reached what is now known as the Tarawera River, but which he named Te Awa-a-te-Atua. He turned inland at this point and followed the river until he reached Ruawahia. (This is the mountain that erupted in 1886, although at the stage under discussion it was triple peaked). Here Ngatoroirangi

had a remarkable experience. He met a spirit in the form of a person named Tama-o-Hoi, who objected to Ngatoroirangi trespassing over what he claimed as his country. He tried with his sorcery to destroy Ngatoroirangi, but his power was no match for the tohunga from Hawaiki, and with a superior spell Ngatoroirangi caused Tama-o-Hoi to sink into the ground thus leaving him free to continue his journey. It is interesting to note that the great eruption of 1886 was blamed by some on Tama-o-Hoi who, it was claimed, was so enraged at having been confined so long in the ground that he gave vent to his feelings by causing the Tarawera eruption (Stafford 1969, p. 21).

Probably the earliest written account in Maori was that of Wiremu Maihi Te Rangikaheke of Te Arawa, in 1849, when he was explaining why bathing pools were called waiariki. This translation is by Professor Bruce Biggs:

The origin of the term chiefly water is this. The phenomenon of thermal water did not come here because of any other chief or priest. Ngaatoro-i-rangi alone called for it to be brought from Hawaiki and his sisters fetched it. So it extends throughout this island.

Tonga-riro, the snow-covered mountain at Taupoo, was where Ngaatoro' called for the hot water from. Let me explain. Soon after crossing to this land and performing some rituals, Ngaatoro' went to Taupoo.

He saw the many mountains rising there, set in a row. Their names were Tonga-riro, Ngaauru-hoe, Pare-te-tai-tonga and Ruapehu. They are high mountains covered with snow.

Now, this hero's task was to climb to the summits of these mountains. When he and his servants came to the base of the mountains, he said, 'Stay here. I must climb these mountains lest no one else is able to, and lest the strength of their iciness remains supreme and men are increasingly overcome by them. If I tread the summits of these mountains and mark them with my sign, man and his crops will flourish. If I do not reach the tops, man and crops alike will perish.'

He instructed his companions, 'After I leave, do not eat until I have reached the top of the first mountain, when you will see my sign suddenly appear over it. The sign that I have reached the top will be thunder, lightning and rain. When you see the snow disappear from these mountains you will know that their power has been expended and my *mana* has triumphed.'

He finished speaking and off he climbed.

He left early in the morning. When the sun was high, he was halfway up. When the sun was at the zenith, most of the mountain was behind him and only a small part lay ahead. His companions became hungry and thought, 'Oh, our companion has been killed by the power of the mountain.'

His servants looked up to the sky. It seemed as if snow was falling from the sky above the mountains, and all was dark. So his servants deduced that their lord was dead. They ate food for their bellies. At the very time they were eating, Ngaatoro-i-rangi reached the

peak of Tonga-riro. When he did so, he was struck hard by the cold. Because his servants were eating their food, the cold intensified and was most severe on him; he was lost from sight in the snow beneath him. His heart was troubled because his companions had not been attentive to his first words. Because his words had been trampled on by his servants, the wrath of the god came down on him.

Soon his head was buried beneath the snow and the god felt compassion for him, causing his heart to turn towards life.

He stood up, and turned his heart and his face towards Hawaiki, speaking to his grandmothers, 'Old ladies, bring me some fire. I am dying of cold!'

He spoke once, then twice; finally the old ladies came across the surface of the water. They took breath only at White Island. There the fire of the old ladies is still burning. Then it spread on to the island like this, the old ladies coming to him and bearing fire for him. He saw it appearing from within the mountain, steaming. Well, the power of the frost diminished and he was revived. Now, if his friends had not eaten, cold would not be severe in this country. It is from these circumstances that hot-pools are called chiefly water, because the thermal water was called here by the high chief, and so it arrived here and spread. That is why it is called chiefly water and not hot water (Biggs 1997, pp. 112-114).

The following account was published in Sir George Grey's *Polynesian Mythology* in 1855, and was probably derived from Wiremu Maihi Te Rangikaheke:

At this time Ngatoro[irangi] again went to stamp on the earth, and to bring forth springs in places where there was no water, and came out on the great central plains which surround Lake Taupo, where a piece of large cloak made of kiekie-leaves was stripped off by the bushes, and the strips took root, and became large trees, nearly as large as the Kahikatea tree (they are called Painanga, and many of them are growing there still).

Whenever he ascended a hill he left marks there, to show that he claimed it....

Ngatoro went straight on and rested at Taupo, and he beheld that the summit of Mount Tongariro was covered with snow, and he was seized with a longing to ascend it, and he climbed up, saying to his companions who remained below at their encampment, "Remember now, do not you, who I am going to leave behind, taste food from the time I leave you until I return, when we will all feast together". Then he began to ascend the mountain, but he had not quite got to the summit when those he had left behind began to eat food, and he therefore found the greatest difficulty in reaching the summit of the mountain, and the hero nearly perished in the attempt.

At last he gathered strength, and thought he could save himself, if he prayed aloud to the gods of Hawaiki to send fire to him, and to produce a volcano upon the mountains; (and his prayer was answered) and the fire was given to him, and the mountain became a volcano, and it came by way of Whakaari, or White Island, of Mau-to-hora, of Okakaru, of Roto-ehu, of Roto-iti, of Roto-rua, of Tara-wera, of Pae-roa, of Orakeikorako, and of Taupo; it came right underneath the earth, spouting up at all the above-mentioned places,

and ascended right up Tongariro, to him who was sitting upon the top of the mountain, and thence the hero was revived again, and descended and returned to Maketu, and dwelt there (Grey 1855, pp. 155-157).

Samuel Locke recorded the following version of the journey of Ngatoroirangi, from informants in the Taupo district:

This is an account of one of our renowned ancestors who visited the sea of Taupo and the open country, the forests, and the plains around. He came to this island from Hawaiki in the Arawa canoe, which landed first at Whanga-paroa (near East Cape), then sailed on to Whakatane and Maketu. After Ngatoro-i-rangi had resided on the coast for a time he travelled inland by way of Kanakaua, Ruawahia, Te Puna-takahi. After crossing the Kaingaroa plains he reached Tauhara Mountain, which he ascended, and from thence looked down on the Sea of Taupo and at the snow-capped Tongariro in the distance. From the top of Tauhara he threw a large tree into the lake, a distance of four miles, which is still to be seen by this generation; it is sticking up at the bottom of the lake near Wharewaka. The name of Ngatoro's spear is the "*kuwha*". Ngatoro-i-rangi then descended to the shores of the lake, near the Waipahihi, and performed incantations, and erected a *tuaahu* and named it Taharepa. When he discovered there were no fish in Taupo Lake he scattered the threads of his mat on the waters and performed religious rites, and the lake at once contained fish, viz., the *inanga* and the *kokopu*. He then travelled along the shores of the lake and ascended Tongariro, and was there benumbed with the cold on that snowy mountain. (His companion Ngauruhoe died here from the cold). So Ngatoro commenced calling out to his sisters to bring him fire from Hawaiki, for they had been left behind at Hawaiki. The sound that proceeded from his mouth was like thunder. His sisters heard him and came at once bringing fire. Their canoe was a *taniwha*. The names of the sisters were Kiniwai, Haungaroa, and Pupu-a-te-Hoata. The sisters landed at Whakaari (White Island, Bay of Plenty), and there lit a fire (geyser). They then came on to the mainland at Umapokapoka (a geyser), and then travelled on by the Kaingaroa Plains. This name (Kaingaroa—long at food) was given through Haungaroa being so long over her food at a place named Whakaaweawe, so-called through Haungaroa following some of her companions to chastize them for remarking on her being so long over her meal. They turned into cabbage trees, which are still to be seen by travellers, but they always recede as you appear to approach them. The sisters lit a fire (geyser) at Tarawera Lake, then ascended a hill and looked down on Rotorua Lake; one of them slipped down here, so they called the place Te Hemo, and lit a fire (geyser) there, and then proceeded on to Paeroa and Orakeikoraka[sic], where they lit another geyser, and shortly after arrived at Taupo. But Ngatoro-i-rangi had returned to Maketu, so the sisters determined to join him there (Locke 1882, pp. 435-436).

Some further variations appeared in the story of Ngatoroirangi in the version of the arrival of the canoes Tainui and Te Arawa, and subsequent journeys of the immigrants, told by Takaanui Tarakawa and translated by S. Percy Smith:

Ko Ngatoroirangi, i haere tonu ma tarawera awa, ka tae ki raro o Ruawahia; ka kite ia i tetahi tangata i reira e noho ana, Ko te ingoa ko Tama-o-hoi. Ka ki atu a Ngatoro', "No nawhea i tae mai ai koe ki konei?" Ko roto i te ngakau o Tama-o-hoi kua riri rawa, kore rawa i hamumu te waha. Kua mohio tonu a Ngatoro', kua makutu i a ia. Ka ki atu ano;

‘E mohio ana ahau kei te patu mai koe i a maua ko taku hau; e kore taku hau e riro i to karakia. No te Hapuoneone koe; no Te Heketanga-rangi ahau”. Katahi ka haere tuara te tupua ra – a Tama-o-hoi – me makutu, me te karakia haere. Katahi a Ngatoro’ ka mohio atu ki nga kupu o te karakia-makutu; ka karanga atu ia; “Mate tata koe i ahau i naia tonu nei. Noku te mana kei runga i nga tangata o toku wahanga”. Kua wehi te tangata ra, kua mohio he pono, he mana nui kei runga i a Ngatoro’; katahi ka toremi ki te whenua. Ka haere tonu a Ngatoro’, ka mahue mai a Paeroa, ka titiro atu ki Taupo, me te titiro atu ki Tongariro; ka mea ia kia tae ia ki taua moana, a, kia eke hoki ia ki te tihi o Tongariro. Kua rongo koutou i tenei korero pea? Otira, me tuhi tonu.

Ka tae a Ngatoro’ ki te take o Tongariro, ka piki ake, ka taka waenganui e piki ana, kua rongo tona tinana i te matao. Piki tonu, ka eke ki runga, kua mate rawa i te huka. Katahi ka kowhakina tetahi wahi o tona Kohatu kiripaka – ko tetahi taha i mahue atu i Moehau. Katahi ka hoaina e ia ki te kupu karakia. Wiri ana te haerenga ki raro ki te whenua.

A, i a Ngatoro’ e piki ana i te maunga ra, i tae ano te awangawanga ki ona tuahine i noho atu ra i Hawaiki i te hoenga mai o Te Arawa. I haere atu a Kuiwai ka ki atu ki a Haungaroa; “To taua tungane kua pangia e te mate, me haere taua”. Ka eke mai raua i runga i te pungapunga, a, i u ki Te-matau-a-Maui, i te takiwa o Nepia, ka tika mai ma Titi-o-kura, ka puta mai ki Kaingaroa. Whakamau tonu te haere ki Tongariro; rokohanga atu, kua hu ke te ngawha ki te tihi o Tongariro – a Ngauruhoe (Tarakawa 1893, pp. 223-224).

Ngatoroirangi went by way of the Tarawera River until he arrived underneath Ruawahia [old name of Tarawera] mountain; there he found a certain man dwelling whose name was Tama-o-hoi. Said Ngatoro’ to him, “At what time did you arrive here?” Within him, the heart of Tama-o-hoi, was full of anger – not a word did he say in reply. Ngatoro’ at once divined that the other was trying to bewitch him. So he said – “I am well aware that you are trying to kill me and my spirit (hau), but my spirit will not succumb to your incantations. You are of the Hapu-oneone [the earthly tribe], I am of Heketanga-rangi [descendants of heaven]”. Then the demon (tupua) retreated backwards, plying his sorcery and repeating his incantations as he went. Thus Ngatoro’ learned the words of the incantations and spells (and was able consequently to counteract them); he called out – “Thou shall die by my hand immediately; the power is mine that rests on all the people of my side”. The man was alarmed at this, for he recognised the truth that great power rested with Ngatoro’; so he disappeared into the ground. Ngatoro’ then proceeded on his journey. After he had left behind him the Paeroa Mountains, he beheld before him Lake Taupo and Mount Tongariro, and he was seized with a desire to visit the lake and ascend to the summit of Tongariro. You have all heard this story before perhaps? Nevertheless I will continue.

When Ngatoro’ arrived at the base of Tongariro, he at once commenced the ascent, but had only reached half way up when his body began to feel intensely cold. He however climbed on, and eventually arrived at the top, where he was nearly frozen to death in the snow. He then broke off a portion of his flint-stone – the other portion having been left at Moehau – and charmed it with a prayer; it bored its way into the earth.

Now, as Ngatoro’ climbed the mountain, his sisters, who had remained in Hawaiki when the Arawa left there, were troubled with anxiety on his account. Kuiwai went to Haungaroa and said, “Our brother is stricken with some calamity, let us go”. So they embarked on

a block of pumice-stone, and after a time landed at Te-matau-a-Maui, or the Fish-hook-of-Maui [Cape Kidnappers], in the district of Napier, and thence travelled by way of the Titi-o-kura saddle and came out on to the Kaingaroa plains. Thence they went straight to Tongariro; arrived there the volcano had already burst forth on the summit of Tongariro – i.e. Ngauruhoe (ibid pp. 236-237).

In this version the sisters of Ngatoroirangi travel by a different route, from Hawkes Bay district to Kaingaroa, not from Whakaari inland to Rotorua and Taupo. Ngatoroirangi causes the volcano Ngauruhoe to erupt and give him warmth by striking a “flint-stone” brought from the Hawaiki on the ground. In his notes on the translation Percy Smith commented:

The word *ara* used here is explained to mean a stone. There are other traditions that Ngatoro left a carved stone in the neighbourhood of Moehau. *Ara* in Tahiti means “a hard block stone”, possibly identical with the Maori *Kara*, a black basaltic stone. It is the only case I have heard of this word being used for a stone (ibid p. 235).

The traditions about the journeys of Ngatoroirangi and Tia, and the way geothermal energy was brought to the Taupo Volcanic Zone are still told in oral form on suitable occasions. For example, Tamati Wharehuia told the Waitangi Tribunal, in the hearing of the Pouakani claim, of the journey of his ancestor Tia (this was recorded and transcribed in Appendix 4, pp. 335-336 of the *Pouakani Report*, Waitangi Tribunal 1993). In 1991 Paora Maxwell interviewed a number of kaumatua of Te Arawa and Ngati Awa about their history and traditions relating to geothermal resources. The following is the account told by Hiko Hohepa of Te Arawa:

Ara, ko Ngatoroirangi, i tae tuatahi atu ki reira ki Tongariro ka kite ia i te maunga ra, a Ngauruhoe, ana ka piki a ia ki runga kia pai ai tana tiroiro haere i te whenua.

Ana ka tae a ia ki te tihi o te maunga ana ka pa mai te makariri, te matao te hukapapa te hukarere ki runga i a ia, ko raua hoki ko tana mokai i piki ki runga i te maunga ra. I reira ka mate e ia i te matao, ka karakia atu ano ki nga atua kia tukuna mai o ana tuahine e noho mai ana i Hawaiki ana ki te hari mai te ahi i te wai mahana ki te whakamahana i a ia.

Tae rawa tana inoi, i ana karakia ki ana tuahine i Hawaiki. Ana, i haere nga tuahine ki reira ki te tiki i te ahi ka haria mai e raua....

Ko Kuiwai tetahi ko Haungaroa, tetahi, nga ingoa o nga tuahine. Haere mai ai raua, haere mai ana i te ahi, ana, i raro i nga moana... Te Moana-nui-a-Kiwa. Ka rere mai nga tuahine na.

Ka puta ake ki te motu o Whakaari, ka puta mai ana ki reira, koia tonu te wa i te tau ai nga ngawha me nga waiariki ki reira, ki taua motu. Ana, ka haere mai ano raua nga wahine nei, ka puta ake ki Whakatane ra i waenganui o Whakatane, Te Teko, kei reira ano etahi waiariki nga wai mahana. Nga wahi katoa, kei reira nga waiariki, nga wahi mahana, koira nga wahi i putanga ake o nga kuia nei, ki te tiroiro to raua huatahi, i tae ai raua ki to raua tungane ki a Ngatoroirangi.

Haere pene mai ki Tikitere nei ra, na puta ake ki reira ana nga waiariki i reira, nga ngawha, nga wahi katoa o Rotorua nei a i Whakarewarewa, Ohinemutu, Tarawera, koinei ra ta raua

nei haere, kimi haere ta raua tungane.

Ana, rere pera atu ki Reporoa kei reira ano, nga wai wera nga ngawha, a haere atu ki Taupo. Ka tae atu raua ki Tongariro ki Ngauruhoe puta ake i reira nga waiariki nga ngawha, te ahi i roto i nga maunga, ana, i ora ai to raua tungane, ki a Ngatoroirangi.

Nga korero, hei utu mo te whakarongotanga mai o nga atua ki nga karakia o Ngatoroirangi. Ara, nana i porowhiu, ka porowhiu atu e ia i tana mokai ki roto i te ahi, Ngauruhoe, koira.

It was Ngatoroirangi who first arrived at Tongariro and the mountain Ngauruhoe. He ascended those mountains so that he might see the surrounding lands.

He arrived at the summit and he was afflicted with the cold, the snow falling on him and his servant at the peak of that mountain. He thought he might die from this cold, so he prayed to the gods to send his sisters from Hawaiki to bring fire and warm water so that he might live.

His prayer reached his sisters, and they went to get the fire and then they started their journey.

Their names were Kuiwai and Haungaroa. They came below the sea [with the fire], the great ocean of Kiwa.

They first appeared at Whakaari Island, leaving the boiling hot pools there. They continued, stopping at Whakatane, Te Teko, there again hot pools and warm waters were left by these old ladies stopping at these places, to rest and see the pathway to their brother, Ngatoroirangi.

They travelled like this to Tikitere, Rotorua, Whakarewarewa, Ohinemutu and Tarawera still searching for their brother.

They travelled to Reporoa, where again there are warm waters and boiling pools. They proceeded to Taupo, eventually arriving at Tongariro and Ngauruhoe, bringing warm waters, boiling pools and fire to the mountain, to give life to their brother, Ngatoroirangi.

It is said that the repayment to the gods for answering Ngatoroirangi's prayers was the sacrifice of his servant Ngauruhoe, by hurling him into the crater where the fire was burning (Maxwell 1991, pp. 7-10).

The story of Ngatoroirangi and his sisters is well known throughout the Rotorua-Taupo region. Translated into a modern context, the legacy of Ngatoroirangi was referred to, for example, in hearings on the designation of land for the Ohaaki Geothermal Power Project in 1978-79. Among Ngati Tahu who owned this land it is often said that if this gift of geothermal resources is not respected, Ngatoroirangi has a way of answering back, that geothermal activity and volcanic eruptions are unpredictable, and a reminder of the strength of the heat within the earth. The principal marae of Ngati Tahu on the power project site is called Te Ohaaki o Ngatoroirangi, the gift or legacy of Ngatoroirangi.



Tongariro and Ngauruhoe under snow.



Ngauruhoe in eruption c.1846: Drawing by Richard Taylor (Alexander Turnbull Library F50386)

3. Taupo nui a Tia

The region described as Taupo nui a Tia is that surrounding the lake, south to include Tongariro and Ngauruhoe, east to Kaimanawa and west to Tuhua and the west Taupo ranges to Pureora and Titiraupenga, the Waikato River valley downstream to Whakamaru and across to Reporoa and southern Kaingaroa plains. The many tribes and hapu of this region acknowledge the ariki line of Te Heuheu and are collectively known as Ngati Tuwharetoa. This relationship is expressed in the pepeha:

Ko Tongariro te maunga
Ko Taupo te moana
Ko te Heuheu te tangata

Tongariro is the sacred mountain, and the lake is Taupo, and the leader of the people is Te Heuheu. There are, of course, some close kin connections with Ngati Maniapoto to the west, Ngati Raukawa and Te Arawa tribes to the north, Ngati Manawa, Ngati Whare, Tuhoe and Ngati Kahungunu to the east, and Ngati Apa and Whanganui tribes to the south.

Ngatoroirangi is an important ancestor, although Ngati Tuwharetoa can claim descent from both Mataatua and Te Arawa ancestors:

The ancestor to whom Ngati Tuwharetoa traces descent for rank and prestige is Ngatoroirangi, the high priest of Te Arawa canoe. Tuwharetoa, the tribe's eponymous ancestor, was his direct descendant and eighth in line. The ancestors to whom the tribe trace descent for rights to land in the Taupo district are Tia and Kurapoto, who both came in Te Arawa, and the sons and certain grandsons of Tuwharetoa. Through Tia occupationary rights were obtained, hence the name Taupounui a Tia. Through the others the tribe obtained rights by conquest (Grace 1959, p. 29).

Among the original inhabitants of the north Taupo area was a tribe named Ngati Kahupungapunga. They have been described as aboriginal tangata whenua who came from the Kawhia area and were driven up the Waikato valley under pressure from Tainui migrants who were spreading out into the lower Waikato valley between Putaruru and Atiamuri, including the Horohoro and Whakamaru ranges with their forests and bird snaring places. However, it is likely too that Ngati Kahupungapunga were of Te Arawa descent, a lower ranking group who were pushed to the outer margins of the tribal territory (Stafford 1967, pp. 75-76).

Whatever their origins, the destruction of Ngati Kahupungapunga as a tribe was achieved by Ngati Raukawa conquest, with the aim of acquiring access to the bird snaring places of the Whakamaru Range. To this end a war party advanced up the Waikato valley from Maungatautari to the Waotu area, into Tokoroa and the Atiamuri district. At this stage an Arawa war party arrived from Rotorua and attacked Ngati Raukawa, and killed their chief Wairangi at Whakamaru.

This sparked off a series of fights between Te Arawa of Rotorua and Ngati Raukawa, which were part of a continuing rivalry between Te Arawa and Tainui people (Stafford 1967, pp. 76-81). Ngati Raukawa continued to harass the remnants of Ngati Kahupungapunga who were finally destroyed following a siege of their pa on Pohaturoa at Atiamuri. The few survivors of Ngati Kahupungapunga fled to Rotorua and they ceased to exist as a tribe (Stafford 1967, p. 78).

Other early tribes of the Taupo region were Ngati Hotu and Ngati Ruakopiri, who had moved from the Bay of Plenty up the Rangitaiki valley to the Reporoa-Taupo region. Ngati Kahupungapunga were pushed into the Titirapenga-Atiamuri area, as a section of Ngati Hotu occupied

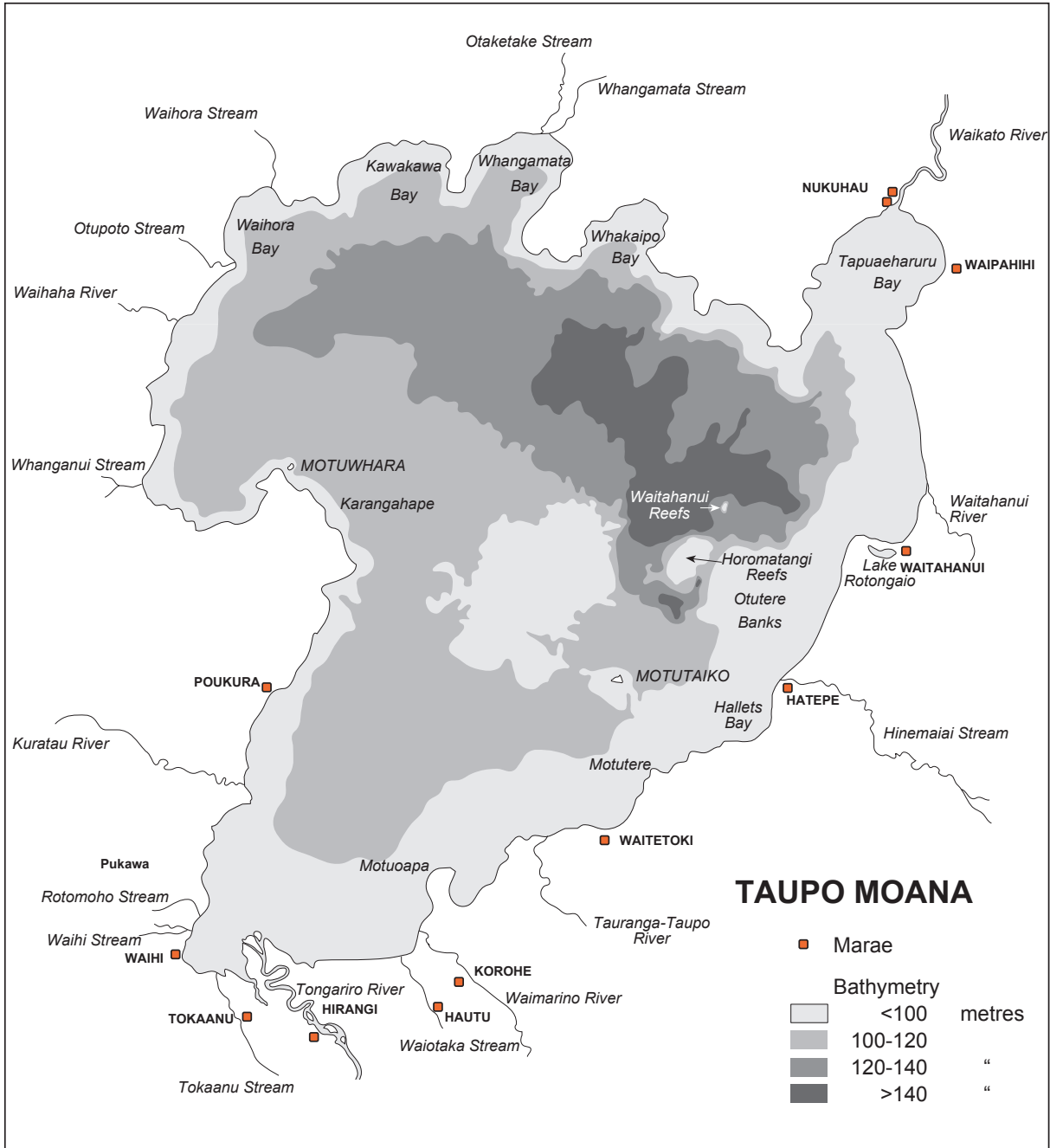


Figure 6. Taupo Moana.

west Taupo. Other migrants from Te Arawa, including the descendants of Kurapoto who moved into east Taupo, also drifted into the region. Ngati Tahu were established along the Waikato River from Atiamuri to Aratiatia and east into the Reporoa district and Kaingaroa. The descendants of Tia, under the leadership of his grandson, Ha, consolidated their occupation of the area east of Titiraupenga, the sacred mountain where the ancestor Tia was buried. While land was fought over, there were also strategic marriages between migrants and local people which established kin relationships and rights of occupation over many generations (Grace 1959, pp. 113-120).

Tuwharetoa lived in the Kawerau district, and was descended from both Te Arawa and Mataatua ancestors and the aboriginal peoples of the Bay of Plenty. The sons of Tuwharetoa led the war expedition up the Rangitaiki valley against Maruiwi people in the upper Kaingaroa region. This was followed by an attack on Ngati Kurapoto who lived on the eastern shores of Taupo, and Ngati Hotu. There followed a long series of battles, and in due course some strategic marriages were arranged between Tuwharetoa people and Ngati Kurapoto (ibid pp. 127-135). In due course the mana of Ngati Hotu was destroyed by descendants of Tuwharetoa in eastern and southern Taupo and they retreated to West Taupo. From here they were also dispossessed and either retreated to the Taumarunui district to be absorbed among the people there or were assimilated among the Tuwharetoa migrants, and so lost their identity as a tribe (ibid pp. 118-120). Thus through many generations and many migrations, conflicts over land and strategic marriages, the complex kin relationships of the land and people of Ngati Tuwharetoa have evolved.

3.1 The Environment in the Nineteenth Century

A picture of the Taupo landscape and patterns of Maori settlement can be derived from the accounts of nineteenth century Pakeha travellers in the region. Bidwill described patterns of settlement around Taupo in the late 1830s:

I should think the population of the pas on the lake could not be less than 5000. The country around I do not think can be populous; it is too mountainous and bare of wood, and the Mowries [sic] only grow potatoes in land which is just cleared, and after about three crops abandon it, and clear another portion of forest (Bidwill 1841, pp. 40-41).

Bidwill pondered the cause of so much grass and scrub land around Taupo in contrast with the luxuriant forest growth elsewhere in the North Island. He did not believe it was all the result of human activity. Potatoes had only been introduced less than fifty years earlier, and few other crops were grown:

Although I do not think the growth of potatoes sufficient to account for the absence of forest over a great part of the country – perhaps more than half – yet it is certain the wood had decreased, from some cause or other, within no great distance of time; as I constantly found logs and roots lying in the wet ground of barren moors, where they could not have been brought by any natural causes; and they were too distant from any place where they

grow at present, as well as too useless, to have been conveyed there. The natives now yearly destroy large quantities of land, by their wasteful system of agriculture and in time there will be no timberland left: but this cause has not been long in operation, and is inadequate to the visible effects on the face of the country (Bidwill 1841, pp. 41-42).

In April 1841 a party of travellers including Ernest Dieffenbach, the naturalist employed by the New Zealand Company, Ensign Best, a naval officer on leave from his ship, and two others, Mr Merrett and Captain Symonds, travelled through the Mokai area. Dieffenbach and Best left written accounts of their journey which provide the most detailed descriptions of the land and people. From Maungatautari, the party travelled upstream, along the west bank of the Waikato River. Best described the view on 5 April from a hill near Mangakino, and the route to Horaaruhe, a kainga near Mokai:

On attaining the top of the hill a thick mist prevented my seeing the Wai Kato which rolled betwixt precipitous cliffs perhaps two hundred feet high I could hear the roaring of the waters but could not distinguish the rapids described by my friends. On the opposite side of the river a most extraordinary scene presented itself: mass upon mass of Pumice stone and volcanic ashes lay piled in the utmost confusion a picture of Chaos and utter desolation not a tree or green thing was to be seen... we stopped an hour to breakfast and then resumed our route through a country broken and fissured in every direction the soil was nothing but pumice stone and ashes on which nothing grew but some miserable Tufted grass crossed the Wai Papa [a tributary stream below Mangakino] over which there was a very romantic bridge suspended on ropes the road way was very narrow and made of a kind of long basket woven out of brushwood immediately under the bridge the river dashed down a precipice of thirty or forty feet. We now crossed two high and very steep ranges and these passed the scene changed into a succession of ravines, the largest of which appears to have been the ancient bed of the Wai Kato we walked until five and then halted. Weather threatening.

6th. Under weigh soon after eight our road still lay through ravines of a similar nature to those we travelled through yesterday and the country was still dreary in the extreme. We crossed Monga Kino [Mangakino] a fine mountain stream taking us above our middles. All these rivers were evidently low and must be utterly impassable in a fresh. At twelve a party of Mauries [sic] met us with a present of Potatoes the finest I had ever seen in New Zealand these we stopped to roast and then walked until about five when we reached a frontier Pah called Oraruhe [Horaaruhe], here we were welcomed by shots and the Iremai [Haere mai]. I am not inclined to form a very good opinion of the Inhabitants who are the wildest Mauries I have yet seen but much allowance must be made. This is a frontier Pah....

8th. A threatening morning with a light rain falling.... We passed through a beautiful wood principally Totara and Kikatea [kahikatea] and in this were the potato grounds which produced the fine potatoes I have mentioned. The wood grows on the summit of a ridge of hills. After passing the wood we descended into the vallies or plains and were again in the region of scoriae and stunted grass about three miles walk brought us to the Pah which was even more strongly situated than that we had left. It was on the top of a

very steep high conical hill defended on two sides by a very deep ravine. It also was in a state of repair contained very few people and was very clean all which made our situation somewhat better but they would not let us have a pig and our whole store of food now consisted of some damaged rice and mouldy biscuit.

Sunday 9th. Blowing a gale of wind and nothing to console us for the heavy rain and the detention occasioned by bad weather and Mauri indolence except a few potatoes....

10th. Dieff [Dieffenbach] went to visit some more mineral springs and we with much trouble got our party to start. About eleven we were under weigh our road was as dreary and barren as usual. No People no Birds no Beasts utterly desolate. It rained heavily and we waded through swamps and creeks sometimes nearly up to our middles. Symonds & I contrived to get separated from the rest of the Party and lost our way we had much difficulty in regaining the track again.... About five we reached Tutuku Moana [Tutakamoana Pa] the strongest position I had yet seen the hill on which it was built rose abruptly with a rapid river running at its base and the path leading up it was in some places over the bare rock and so steep as to require the use of both hands & feet. Sometime ago the Natta Kahounuies [Ngati Kahungunu] attacked the Pah but could not take it....

11th. At 1/2 past nine started on our road in spite of all objections on the part of our people. The Morning was fine though cloudy. We walked about four hours through ravines similar to those I have described excepting that on either side the cliffs were higher and more precipitous.... At length we left the ravines and ascending a steep hill came in sight of Taupo (Taylor 1959, pp. 302-307).

Dieffenbach's account also began with a description of the view of the Waikato Valley from a hill near Mangakino:

On ascending the hill which separated us from it [Waikato River], a novel scene opened before me. Looking to the eastward the land appeared as if the waves of the sea had suddenly become petrified: on the declivities of the low undulations the white and naked clay appeared; in other parts the hillocks were covered with a stunted fern and a coarse discoloured grass; and the brown tint which these imparted to the whole gave it a barren and desolate aspect. The river was not visible from the hill; and in order to see it I was obliged to descend into the deep channel which it had dug out of the soft tufaceous and leucitic lava. The banks which form its channel during freshes are about 150 yards distant from each other, but now the river was confined between banks of six feet high, and within much narrower limits, not being more than fifty yards broad. Its course was from S. by E. to N. by W. In some parts it was deep, and at others it formed rapids; the water was bluish and clear, and marked the near neighbourhood of the snows and glaciers of the Ruapahu [Ruapehu], in which it takes its rise.

We had a distant view of Horo Horo, a mountain in which the river Thames [Waihou] has its source; it bore S. 80°E. We also saw Titiraupena [Titiraupenga], a pyramidal mountain, with naked black rocks heaped upon its pointed summit, and bearing S. 20°E.

On the 5th and 6th we passed through a country in the highest degree curious to the geologist. It was broken into a number of hillocks, most irregularly dispersed over the perfectly

level surface of the original table-land. On the hillocks themselves most regular terraces were visible in some places, and it was plain that they could have only been produced by a gradual fall of the waters. All these hillocks consisted of tufa, or the before-mentioned lapilli of pumicestone, cemented together. Everywhere flowed little streamlets, and we passed two deep creeks, the Maunga Wio [Mangawhio] and the Waipapa tributaries of the river Waikato. The Waipapa presented a very wild scene. The river, here about forty yards broad, lost itself in successive falls in a deep fissure which it had corroded out of the soft rock. The country now became more desert; as the level land, consisting of the same materials as the hills, was as yet but little decomposed, and nourished only a stunted vegetation of grass and fern, and a plant of the family of the Compositae.

Near the river-courses the soil was better, and bore a good many shrubs. Of animal life nothing was visible, with the exception of the *Cigale Zelandica*, which filled the air with its chirping note, and a brown ground-lark very common in New Zealand. We passed a number of deep holes in the ground, apparently produced by the water infiltrating into the porous substance, and carrying off a quantity of it by forming a subterraneous rivulet. Here and there I found pieces of obsidian, and everything proved that we were fast approaching a great centre of volcanic action (Dieffenbach 1843, vol. 1, pp. 323-330).

Grange (1937, pp. 9-10) also speculated on the reasons for so much land cleared of forest in the Taupo district. He noted the extensive patches of forest in the Mokai and Oruanui areas (Figure 7). “Totara logs strew the ground at many points in the open country, a fact suggesting that the forest was formerly more extensive”. Reports of “charred totara stumps at the base of Tauhara”, patches of “hummocky ground” and “abundant logs of charred wood” in pumice or ash deposits “remote from existing forest areas” all indicated more extensive forests in the past:

The eruption of this ash probably destroyed much of the forest cover. The tendency of forest patches to occupy hill-tops and steep slopes from which ash would be quickly removed, and the occurrence of the chief areas of woodland west of Taupo, where the prevailing wind would reduce the amount of ash, support this hypothesis (Grange 1937, p. 10).

Whatever the reasons – ash deposited from past volcanic eruptions, fires which raced out of control through the fern into forests, deliberate clearing of forest – all these were factors in the destruction of forest cover around Lake Taupo.

The Taupo environment provided a range of ecological situations – forest, fern, tussock, swamp and river – which provided a range of resources for successful Maori occupation of the region. In addition, in some localities there were areas of surface geothermal activity which provided warmth in a harsh climate, heat for cooking and the therapeutic qualities of healing muds and hot pools. Such areas with a range of resources on the margins of the forest areas were centres of permanent settlement. The open tussock areas in between patches of bush were also resources as hunting and foraging grounds, but not permanently occupied.

Some places had particular strategic significance or were refuges. Kerry Nicholls (1884, pp.

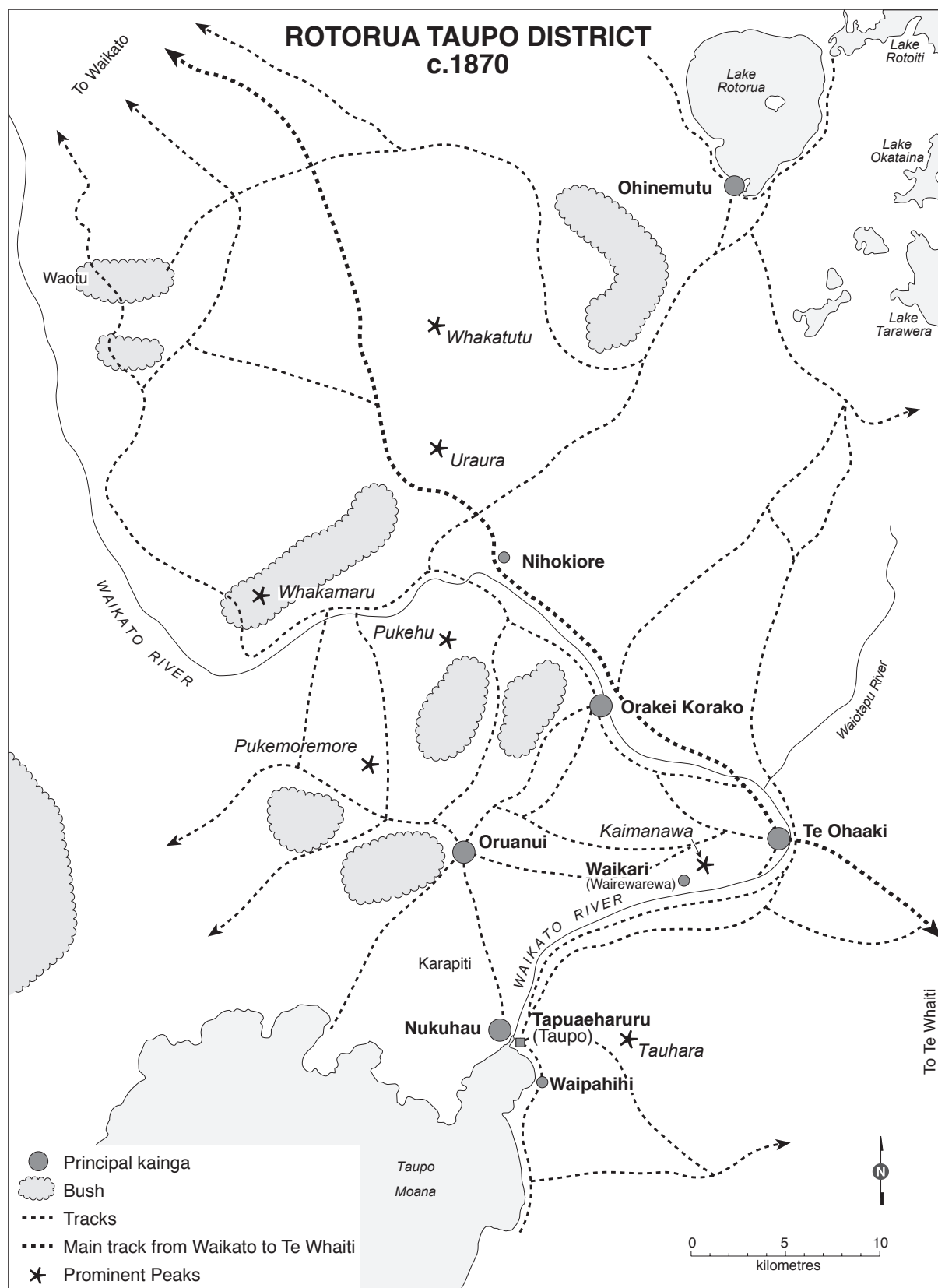


Figure 7. Rotorua Taupo District c.1870.

316-317) travelled from West Taupo, known as the “Tihoi Plains”, to the Mangakino River. He noted a pa called Kahakakaroa on the Pikopiko Stream. “At the time there had been a considerable native settlement here, but now the whole place was nearly abandoned”. He described it as “a very wild, dreary-looking place, situated in a rock-bound inaccessible spot, right at the base of the Hurakia Mountains”. From people at Kahakakaroa he was told about “a tradition among all the tribes of the existence at one time of a gigantic lizard, which is said to have inhabited the caves and rocky places of the North Island”. However, he could not determine whether “this was in fact a real or fabulous reptile”. The “Tihoi Plains” were described as “a magnificent tract of open country, extending around the mountains of Titirāupenga as far north as the banks of the Waikato River” and “clothed with a rich vegetation of native grasses... To the north-east high, forest clad mountains rose up one above the other in the direction of Ouranui [Oruanui] and the valley of the Waikato, while to the west were rugged forest-clad ranges crowned by the towering form of Titirāupenga” (Kerry-Nicholls, 1884, pp. 319-320). He did not note any habitation on the route to the Mangakino Stream. His map of the region described the Mokai area as “broken forest”.

There were several extensive patches of bush north of Lake Taupo. Meade described the area of Tutukau–Oruanui as being “much richer and more wooded” than land he had crossed from the north on his way from Rotorua. The kainga where he stopped, including Puna, Puke Tarata and Oruanui, were at the margins of the bush areas:

Slept in a large whare at Puke Tarata – the Maoris on one side and we on the other, with a blazing fire in the middle, but which went out and left us miserably cold...

The natives about here keep neither pigs, poultry nor livestock of any kind, and the difficulty of transport from the coast is so great, that with the exception of an occasional pigeon, he does not taste meat more than two or three times a year.

The pah [Oruanui] is strongly situated on the crest of a small hill, surrounded by a high stockade consisting of a double row of slab stake fencing, with flanking angles; and lined with a chain of open and covered rifle-pits.

There being no raupo to be had here or at Puke Tarata, the whares are built of wood, and roofed with the bark of the Totara tree. It is difficult to keep these wooden whares warm as we found to our cost last night.

At Puke Tarata and in the pah the inhabitants have consequently built most of their dwellings in the style of a “wharepuni”... the whole of the house below ground except the roof, and even that plastered over with earth to the thickness of a foot or more; and having no communication with the open air save through the narrow door, which fits quite closely. Hot, stifling and abominably unwholesome.

The hills surrounding Oruanui pah are covered with forest. There is plenty of open land in the valley which is watered by a small stream. But the natives plant all their potatoes in the woods where the soil is much richer (Meade 1871, pp. 67-70).

While Pakeha travellers may have seen the north Taupo region as wild, dreary, desolate, waste land, to the Maori every place had meaning and significance:

When travelling with them, another interesting fact was that they seemed to take a pride in being able to define thoroughly all the natural features of their country. Each mountain and hill had its special name, and every valley and plain and river down to the smallest stream, each being called after some characteristic feature or legendary tale connected with it; whilst every tree, plant, bird, and insect was known by a designation which betokened either its appearance or habits (Kerry-Nicholls 1884, p. 323).

It was not only natural features but also practical knowledge of places where food, fibre and other resources were obtainable that were significant. There were also spiritual qualities of places that had special significance as wahi tapu (sacred places), including burial grounds (urupa), places associated with past battles or other incidents involving important ancestors, or places where the mauri (life force or essence of a place and its people) was said to be preserved. Such things were not usually discussed in detail with Pakeha travellers, although occasionally some references to wahi tapu were made.

Meade (1870 pp. 115-6) also commented on social aspects of Maori settlement patterns in north Taupo when he discovered “that my guide has a failing common amongst even the best of Maori warriors – a childish fear of darkness and solitude”. He noted, “though few in numbers, the Maories are an eminently sociable and gregarious race. They are never found living alone”. He contrasted the isolation of many European colonists, shepherds and trappers living in situations which a Maori would not tolerate, “their superstitious fears, barely scotched – not killed – by the teaching of the missionaries, would people each overhanging rock or lonely cave with some fresh horror to be feared, some malignant spirit of evil”. Meade, the British military man, failed to appreciate the spiritual qualities, taha wairua, of the land, the wahi tapu, sacred places, and the associations with ancestors and the mauri, life force of a place, which underlie Maori attitudes to land and identity with a place. Such spiritual dimensions and protective spirits are qualities to be respected and feared, because if the taha wairua is not acknowledged appropriately things will not go well with traveller or local resident.

Some Pakeha travellers did pick up part of a story, but few put such accounts into any kind of Maori context. For example, the following accounts refer to an unnamed taniwha, who was probably Horomatangi, and the Horomatangi Reef in Lake Taupo. In his diary of a journey through the Taupo district in 1860 Alex St Clair Inglis described the taniwha:

The Natives say there is a Taniwha in the middle of the Lake the Water there being very red (all the rest of the Lake a very deep blue) and that he has his den only a few inches below the surface. They never cross the lake, but skirt along the shores being afraid of the Taniwha (Inglis Diary, Alexander Turnbull Library Ms 3784).

Lieutenant Bates travelled with Inglis but his account of the “gentleman” taniwha varied slightly:

In the centre of the lake this gentleman has his den and round it the water is said to be of a deep red hue and immediately over his den of a bright blue; the den itself is only a few feet below the surface. This Taniwha is said to destroy all canoes venturing near his den and consequently no native dares to cross the centre of the lake (Bates 1969-70).

Horomatangi is referred to again in the next chapter, but these brief descriptions illustrate the superficial nature of most Pakeha travellers' accounts. As Te Rehina (wife of Te Kohika of Ngati Ha) explained in her evidence before the Native Land Court in the Pouakani Block investigation, knowledge of some things about the landscape remain the property and heritage (taonga) of local people resident in that area:

In his time Ngawheo had the keeping of the mauri at Titiraupenga; Ngahika had that of Tuaropaki. Te Arawaere was also one of the holders of it. This mauri is at Te Tarata. Persons non resident of a district would have nothing to do with the mauri of that district, nor would they see it (Waikato MB 26/134).

The mauri is the life force of a place which is enshrined in a stone, rock or other feature which is tapu because of the presence of the mauri.

Wahi tapu were not usually marked, and only occasionally identified to a Pakeha traveller. Meade noted a form of wahi tapu near Oruanui pointed out by his guide, Poihipi "a cairn of earth and stones which marks the death-place of his last and favourite wife, who died last year whilst on a journey with him to the coast". Such monuments were not unusual, it seems:

We have at different times passed many of these monuments, often marking a battle-scene where some warrior chief had fallen in savage strife in the good old days of spear and mere.

Some of them were surmounted by a grim-looking head, carved out of wood or stone; others had merely a post and flax mat. They serve only to "tapu" the actual death place of the deceased – the graves themselves are neatly fenced in on the top of a hill near a settlement (Meade 1871, pp. 72-73).

Urupa (burial grounds) were also wahi tapu. The influence of Christianity in the nineteenth century encouraged the fenced graveyards described by Meade. Traditionally, burials were made and after a year or so, the bones were exhumed (hahunga) and deposited in a safe place. Around Taupo, such repositories were usually in a cave, in a cliff, or other secluded and inaccessible place, often deep in the forest, and not revealed to outsiders, Maori or Pakeha.

3.2 Population and Settlement

In general, the favourite site for permanent Maori settlement was one within easy reach of forest, water in river or lake, cultivable land and geothermal heat. This pattern of settlement is shown clearly in Rev. A.N. Brown's sketch map of kainga he visited on his annual pastoral round in the 1840s (Figure 8). This map shows only the kainga that were more accessible and permanently occupied. There were numerous others, particularly round the margins of the bush away from the lake. Figure 9, compiled by Gerard Ward (1956) is a composite picture of kainga occupied at various times over the period 1830 to 1880. Many of these kainga were small, and may have been occupied seasonally, or for some reason abandoned, or perhaps re-occupied later. A number of known kainga are not shown on this map, but it does provide a picture of typical settlement patterns on lakeshore and bush margins in Taupo nui a Tia.

There were various estimates of total population in the 1840s, ranging from 1500 to over 3200 (Walton 1986). Rev. Richard Taylor (1855, p. 468) estimated about 2000 and this figure seems to have been accepted in the lists compiled in the late 1850s. The migratory pattern of settlement made it difficult to estimate accurately the numbers of people in each settlement, but there is a pattern of larger concentrations in the geothermal areas of Tokaanu, Nukuhau-Waipahihi, and Orakei Korako, in particular, and smaller numbers in the Mokai and Te Ohaaki areas. In the Maori Census 1881 (AJHR 1881, G-3, p. 24) the total population of Ngati Tuwharetoa was 1538. Of these 282 were in the Tokaanu area and 150 at Waipahihi, and 96 at Orakei Korako, but no separate list for Te Ohaaki. There were 32 at Waipapa and 61 around Titiraupenga in the Mokai area. The remaining places of residence listed were mainly around the shores of Lake Taupo and Rotoaira. It is not known how accurate this census was but the figures were supplied by the Resident Magistrate Major Scannell.

In the following chapters the major geothermal areas of Taupo nui a Tia will be examined in more detail, and focus more specifically on local Maori uses of the geothermal resources in their physical environment.

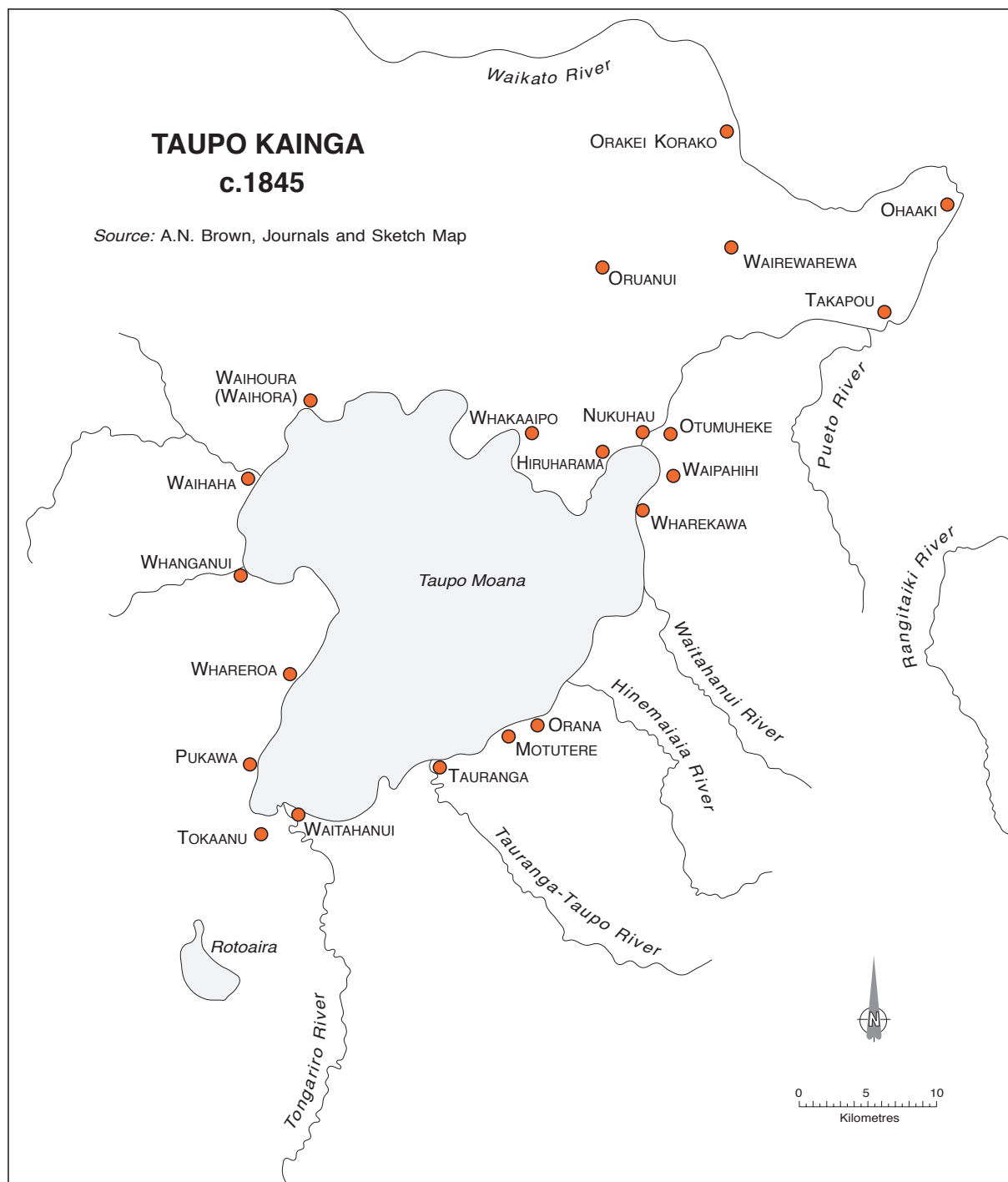


Figure 8. Taupo Kainga c.1845.



Figure 9. Maori Settlement, 1830 - 1880.



Paintings by George French Angus in 1844 of a bathing pool on the lakeshore at Te Rapa (above) and cooking areas above the village (below).

4. Tokaanu and Tongariro

The Tokaanu geothermal area has long been an important centre of Maori settlement. Te Rapa, on the shores of Lake Taupo, between the modern village of Waihi and Tokaanu township, was the home of the ariki Te Heuheu. In 1846 Te Rapa, with Te Heuheu Mananui and many others, was buried in landslide debris from Hipaua, the geothermal slopes above. Thenceforth Maori settlement concentrated in Waihi and Tokaanu. In this chapter the mountain Tongariro is also considered because, in Tuwharetoa perspective, the ariki family of Te Heuheu, the paramount chief, and the mountain Tongariro are inextricably linked.

4.1 Pakeha Visitors in the 1840s

Among the earliest recorded descriptions of geothermal activity in the Tokaanu area was that of the botanist John Carne Bidwill who camped at Te Rapa in late February 1839:

[Te Rapa] is a small place surrounded by boiling springs. The whole side of the mountain at the back is enveloped with steam, escaping from innumerable crevices in the soil. The bushes of Veronica [Hebe] and fern-plants grow close to these places, and do not seem to be affected by the heat, unless they are absolutely touched by boiling water. The portion of land on the side of the mountain where the springs are most numerous is about two miles square, and a great part of it is so covered with springs that nothing grows on it, and it looks as bare as a ploughed field.... I found here, that the action of the hot water, which was nearly tasteless, (although the vapour smelt of sulphuric acid), converted the compact black lava into clay of different colours; some of it being quite white, other parts mottled with red and yellow. The stones which overhung the hot places were half converted, while the others were as hard and fresh as if they had been formed only yesterday; the lava is hard, black, compact with white grains, strongly resembling greenstone in general appearance and weight (Bidwill 1841, p. 42).

Although he mentioned prescribing medicines for several local people, Bidwill did not describe the village itself, being more intent on the botany of the region and his proposed ascent of Tongariro. He reached Rotoaira:

One great peak of Tongadido [Tongariro] slopes up from the lake; but while I was there, I could never see the top of it, in consequence of the quantity of vapour always rolling up the side of this mountain from a great many hot springs which are visible on its sides (ibid p. 46).

Bidwill, with a few local people from Rotoaira and two men who had travelled with him from Tauranga, spent a day botanising and “skirted the base of the mountain” and probably camped somewhere in Mangatepopo valley:

I found out that the road we had travelled was one which formerly led to some part of the Waikato country, but now disused, and that it was the only place where the base of the cone [Ngauruhoe] could be seen; that nobody had ever approached nearer than we now were; and that the reason was, they were afraid. They said that formerly when they passed this point of the road they used to cover their heads with their mats, because it was “taboo” to look at the mountain or at least the peak (ibid p. 48).

Bidwill climbed this “cone” alone next day, not identifying it by the name Ngauruhoe, but regarding it as one of the peaks of Tongariro. The volcano was erupting but Bidwill did reach a lower edge of the crater between eruptions and stayed only a few minutes.

Bidwill returned to the shore of Lake Taupo and while he was negotiating a canoe to cross the lake he was summoned to the presence of “the chief of Taupo”, Te Heuheu:

I accordingly went to a place where they pointed out three men sitting very gravely; the one in front was the chief. He was a remarkably fine man, upwards of six feet high, and very strongly built — a complete giant. He was also very handsome.... He did not appear in a particularly good temper, and after about five minutes’ talk he suddenly arose from his seat, and began to walk up and down, and stamp, talking all the time with great animation. He at last worked himself into a most terrible pitch of fury, at which I only laughed. The cause of complaint was my having ascended Tongadido [sic]. I said that a Pakiha [sic] could do no harm in going up, as no place was taboo for a Pakiha; that the taboo only applied to Mowries [sic]; and finally, that if the mountain was an atua, I must be a greater atua, or I could not have got to the top of it, and that it was all nonsense to put himself in a passion with me, as I did not care for it; but if he would see that the people made haste with the canoe, I would give him some tobacco. I then took out one fig for each of his companions, who sat still all the time without saying a word, and gave him three figs. It proved a most astonishing sedative. He quite changed his tone in a minute and sat down again. He could not help saying, however, that if he had thought I could have gone up the mountain, he would have prevented my ever trying it, and requested me not to tell any other Pakihas of it on any account (ibid pp. 57-58).

There is no record of what Te Heuheu actually said apart from Bidwill’s cavalier account. Other incidents on this journey, as related by Bidwill, also indicated his unwillingness to acknowledge Maori concepts of tapu. Te Heuheu’s prohibition on climbing Tongariro lasted until a Mr Dyson “evaded the native cordon of sanctity” and ascended Ngauruhoe in 1851 (Cowan 1927, p. 28). In 1859 the geologist Hochstetter, like other Pakeha visitors, was dissuaded from the attempt, and also deterred by the weather:

I have never heard of any native having been at the top. The dread of the demoniac powers of the lower regions seems to have kept them from such an undertaking; and the mountain was tapu (Hochstetter 1867, p. 373).

Ernst Dieffenbach, the naturalist for the New Zealand Company, travelled in the Taupo region in May 1841 and was welcomed at Te Rapa:

The natives one after the other welcomed us with displays of their native eloquence; but they threw a blight over our prospects of ascending Tongariro, by telling us that the chief [Te Heuheu], who was absent, had laid a solemn “tapu” on the mysterious mountain. From this difficulty, however, I hoped to be relieved by a little negotiation (Dieffenbach 1843, vol. 1, p. 337).

Dieffenbach was allowed to botanise freely around the smaller volcanic peaks between the lakes Taupo and Rotoaira:

But here, after having reached the foot of Tongariro, to ascend which we had come so great a distance, we met with an obstacle which quickly put an end to all our gratification. We could not persuade the natives to allow us to ascend the principal cone, which we might have accomplished in four hours. The head chief of the Taupo tribes, Te Heuheu, was absent on a war expedition to Wanganui and before he went he laid a solemn “tapu” on the mountain, and until his return they could not grant his permission to ascend it. This “tapu” was imposed in consequence of a European traveller of the name of Bidwill having gone to the top without permission which had caused great vexation, as the mountain is held in traditional veneration, and is much dreaded by the natives, being, as they tell you, the “backbone of their Tupuna”, or great ancestor, and having a white head, like their present chieftain (ibid pp. 346-347).

Dieffenbach had to be content with quoting Bidwill’s published account in his description of Tongariro and Ngauruhoe.

Dieffenbach was particularly impressed with the geothermal activity around Te Rapa but did not describe the village itself in any detail:

Behind it the hills rise to about 100 feet above the lake. In ascending, the ground is found to be of a high temperature; the surface is often bare, or is scantily covered with mosses and lichens; it is formed of red or white clay of a soft and alkaline nature, which the natives use instead of soap, and sometimes eat [a footnote identified this as carbonate of magnesia].... Vapours issue from hundreds of crevices, and in most of these places are shallow springs, the bottom of which is a soft mud, into which a stick can be driven ten feet. The temperature of the water is from 200° to 212° Fahrenheit [100°C]. In some springs it has an argillaceous, and in others a sulphurous taste. A subterranean noise is continually heard, resembling the working of a steam-engine, or the blast of an iron-foundry. By placing some fern over a crevice, and their food (potatoes, kumeras, or pork) upon it the natives have a ready and convenient oven.

The shore of the lake at Te-rapa is rocky.... Close to the water’s edge there are ponds of hot water, which, formed either by nature or artificially by the natives, are used as bathing places. The temperature in them ranges from 95° to 125° Fahrenheit (ibid pp. 339-340).

Dieffenbach also described, as a scientist, the variety of geothermal features around the Tokaanu River, ranging from “a large boiling spring” which “is in a state of continual ebullition, and after a repose of a few seconds it is thrown up with violence to a height of four or five feet”, to calm

pools of various temperatures and colours, and a variety of mud pools and coloured clays. He noted that “dreadful scaldings not unfrequently occur” when someone falls through the fragile crust:

It will be readily imagined that the impression which this assemblage of volcanic waters makes upon the mind of the beholder is one of no ordinary kind; knowing as he does that only a thin and frangible crust, spreading over an immense area, separates him from a heated mass, the source of whose heat is still a mystery (ibid p. 343).

Ensign Best, who travelled with Dieffenbach to Te Rapa, also recorded that they “were welcomed with the usual salutations” and set up camp:

We now visited some hot springs which are situated in a steep hill rising immediately behind the Pah [sic]. The springs which are innumerable and none of any size flow from a Basaltic Rock the soil in their immediate neighbourhood being charged with oxide of Iron they have a ferrugineous taste and slight Sulphuric smell. The Mauries [sic] cook in them and strange to say they impart no perceptible taste to the food. Their temperature is 205 [degrees Fahrenheit] and they envelope the hill in a perpetual cloud of steam. Pipe clay abounds the Mauries eat it I tasted some & found it agreeable to the taste sweet and unctuous [sic = greasy] (Taylor 1966, p. 309).

The next day Best explored the geothermal area around Tokaanu:

We now went to examine the principal Mineral waters at this end of the Lake. They are in considerable numbers... The largest boils in Jets with great fury throwing out a great body of water which runs from basin to basin finally discharging itself in a considerable stream into the lake the water retaining a high temperature. The temperature of the hottest [sic] we could not ascertain one we measured reached 185° Faht. The waters are a fine blue and contain Sulphate of Iron, Silex and Sulphuric gas. The Natives use them as cooking places and baths and are well aware of their Medicinal qualities. About them is red earth which lathers like soap and is used as such its qualities are very cleansing and softening. The afternoon was rainy. I must not forget to add that the ground in the neighbourhood of the springs is very treacherous and rotten yesterday I scalded my foot in one of the springs on the hill (ibid p. 311).

Best also commented on the tapu of the mountain Tongariro, discussed at a “Korero” he attended at Te Rapa:

From the general tenor of the conversation I apprehend that my companions will have much difficulty in ascending the Mountain. The Principal Chief of the Taupo tribes Te Heuheu is at present absent.... Tonga Redo [Tongariro] is a Tabooed or sacred mountain I heard two reasons assigned one is that it is sacred because its head is white like the head of Te Heuheu the other that it is the backbone of the great ancestor of all the Mauries [sic]. Memo The Hair of a Mauri [Maori] is sacred. Be this as it may Te Heuheu on his departure gave strict orders that the Taboo of the Mountain should not be broken in his absence and intimated that if it was the heads of those whom he left in charge would be the payment he would exact on his return. He also ordained that if any white man attempted to ascend he

should be stopped and robbed. This law he made when enraged at Mr Bidwell's attempt (ibid pp. 309-310).

Best had the impression from local people that it was "doubtful" that Bidwill had reached the summit of Tongariro (Ngauruhoe) and certainly had not ascended Ruapehu. Best also noted that on their way to Te Rapa along the western side of the lake his party had been shown "the burial place of a slave who ascended [Tongariro] in order to fetch the berries of the Remu [*remuremu*, *Selleria radicans*] and returning died in one or two days of the cold". After the korero, Best's party "were presented with a pig cooked whole in the hot springs and a quantity of vegetables" (ibid p. 310).

Edward Jerningham Wakefield, who had met Te Heuheu on his visit to Whanganui the previous year, asked Te Heuheu about Tongariro when he visited Tokaanu in November 1841:

I asked his permission to ascend Tongariro on my way back [to Whanganui River]; knowing that he had been very angry with Mr Bidwill for doing so during his absence. But he steadily refused; saying, 'I would do anything else to show you my love and friendship; but you must not ascend my *tupuna*, or "ancestor"'. He told me that he had for the same reason refused the same request when made by the two white men who had come from the Governor to buy his land; referring to Dr Dieffenbach and Captain Symonds, who had been here two or three months before.

This was a curious illustration of the enforcement of the custom of *tapu*, as used to support the dignity of the chief. Te Heuheu constantly identified himself with the mountain, and called it his sacred ancestor.

This legend of an hereditary descent from an object, majestic in itself, and naturally productive of awe, had doubtless been handed down from father to son in the chief's family; and was wisely calculated to maintain the aristocratic position of the leader, by appealing to the weak and superstitious imaginations of the crowd. When I remembered the strong effect produced on my self by the mere sight of the pass in 'The Place of Cliffs', I inwardly admired the wisdom of the ancestors of these people, who had so contrived to weave up their own precarious dignity with legendary superstition and the venerable testimony of nature's most kingly works.

Like the first rulers of young Rome, who proclaimed their descent from gods, and imposed laws advised by a celestial nymph, so Te Heuheu backed his other claims to empire by maintaining inviolate the mysterious *tapu* of his mountain ancestor (Wakefield 1955, p. 221).

Wakefield had journeyed from the Whanganui River, up the tributary Manganui o te Ao and then around the lower slopes of Tongariro to Rotoaira, and over the Pononga route to Tokaanu, so had already seen for himself the majesty of the volcanoes. Unlike Bidwill, he made some attempt to understand the nature of the relationship of local Maori, their chief Te Heuheu and their sacred mountain. He did not climb it on his return journey to Whanganui which took him across Onetapu, east of the volcanoes.

Wakefield spent several weeks in the Tokaanu area in November – December 1841. He described the geothermal activity:

A space of about 10 acres on either side of the Tokaanu stream is perforated with holes and cavities of various sizes, from which steam issued in large quantities. Some parts of this space is barren and whitened by the sulphureous exhalations from the hot springs; but in other places, *manuka* and rich grass grow to the very edge of a boiling cavity. In some places, a small hole only imperceptible, from which issues a stream of steam: here the natives form their ovens, and cook food very nicely and with great expedition. In other spots, cavities from ten to thirty feet in diameter are filled with water of various temperatures; some nearly boiling, others tempered by the cold stream which runs through one part of them. In one of the latter we all had a delicious bath.... In all directions steam or hot water issues from the ground; and the clouds of steam which cover the spot, and the gurgling of different hot fountains around you add to the wonder excited by the strange sight....

It is from this and similar spots, which abound between Lake Taupo and the Bay of Plenty, that the denizens of this volcanic region have assumed the generic name of Waikoropupu, or 'Boiling water' (ibid pp. 216-217).

While the Pakeha visitor may have wondered at the strange sights, for local Maori this was home and familiar surroundings. Wakefield commented: "The terraced flat between a steaming gorge at the western extremity of Kakaramaea and the lake is covered with plantations and isolated houses" (ibid p. 217). Kumara grew well in this geothermal microclimate, and other visitors had recorded crops of taro and maize and potatoes. Wakefield also enjoyed bathing in the hot pools:

Close to my house was a warm spring, so shallow that you could lie down on the sandy bottom, holding your head out of water. In this bath all the natives assembled, morning and evening; and, indeed, I never found a time, late or early, that there were not some in the water. I soon learned to join them; and used to remain there for hours, smoking and playing at draughts, at which game all the natives have learned to be extremely expert. To their frequent use of these baths I attribute the cleanliness and good health of the natives of this part of the country; who are totally free from the cutaneous diseases so universal among the coast tribes, and generally a cleaner and handsomer race (ibid p. 219).

The artist, George French Angas, arrived at Te Rapa in late October 1844, travelling overland from the upper Whanganui River via Tuhua. His party emerged from the forests onto "a grassy tract of open volcanic land, strewn everywhere with lumps of pumice" where they beheld the volcanoes:

Magnificently did Tongariro and Ruapahu [sic], with their snow-streaked sides, burst upon our sight, as we looked over the open country beyond us. The summits of these vast mountains were enveloped in clouds; the steam rolling in volumes from the crater of Tongariro is condensed by the cold of that exalted region forming a canopy of vapour that, in calm weather conceals the head of the sacred mountain: for, by the New Zealanders, it is considered as strictly *tapu* (Angas 1847, vol. 2, p. 106).

A day later they saw Lake Taupo:

a lovely and cheering sight; open fern-clad hills and heathery knolls were spread around, with the evening sun shining over them and lighting up the white cliffs on the opposite shore of the azure lake. At the eastern extremity of the lake rose the lofty mountain of Tauhara; and a pumice islet added to its beauty (ibid p. 107).

Next day they descended “amongst beautiful evergreen shrubs” to the lake shore and the kainga at Te Rapa:

Below lay a settlement of the Taupo natives: some were busy at work in their little corn and kumera beds, whilst others were cooking food. Their maze [maize] plantations were exceedingly neat, and the light pumice soil was turned up into little heaps very carefully where their *taro* was planted (ibid pp. 108-109).

They were greeted and welcomed by Te Heuheu, who had been “superintending his people who were at work in the potato grounds”, and were duly welcomed into the kainga:

Te Heuheu is a fine old man; he stands nearly seven feet high and is very corpulent. His hair is silvery white, and his people compare it to the snowy head of the sacred Tongariro; there being no object, except this *tapu* mountain, of equal sanctity to permit of its being mentioned in connection with the head of their chief (ibid p. 110).

Angas did several water colour paintings (with the permission of Te Heuheu) of people and carvings at Te Rapa, Waitahanui (at the mouth of the Tongariro River) and at Rotoaira, where he was forbidden to ascend Tongariro but secretly made a couple of sketches. He also described the geothermal features and completed two paintings of a hot pool on the edge of the lake at Te Rapa and on the steep hill above:

I visited the boiling springs which issue from the side of a steep mountain above Te Rapa. There are nearly one hundred of them; they burst out, bubbling up from little orifices in the ground, which are not more than a few inches in diameter, and the steam rushes out in clouds with considerable force; the hill-side is covered with them, and a river of hot water runs down into the lake. The soil around is a red and white clay, strongly impregnated with sulphur and hydrogen gas: pyrites also occur. Several women were busy cooking baskets of potatoes over some of the smaller orifices; leaves and fern were laid over the holes, upon which the food placed: I tasted some of the potatoes and they were capitally done (ibid pp. 113-114).

The next day he explored the geothermal activity on the swampy flat along the Tokaanu River:

In many places in the bed of this river, the water boils up from the subterranean springs beneath, suddenly changing the temperature of the stream, to the imminent risk of the individual who may be crossing. Along whole tracts of ground I heard the water boiling valiantly beneath the crust over which I was treading. It is very dangerous travelling for if the crust should break, scalding to death must ensue.... Some of the ponds are ninety feet

in circumference, filled with transparent pale blue boiling water, sending up columns of steam. Channels of boiling water run along the ground in every direction, and the surface of this calcareous flat around the margin of the boiling ponds is covered with beautiful encrustations of lime [sinter] and alum, in some parts forming flat saucer-like figures. Husks of maize, moss, and branches of vegetable substances were encrusted in the same manner. I also observed small deep holes or wells here and there amongst the grass and rushes, from two inches to as many feet in diameter, filled with boiling mud, that rises up in large bubbles, as thick as hasty pudding: these mud pits send up a strong sulphurous smell.... The steam that rises from these boiling springs is visible at a distance of many miles, appearing like the jets from a number of steam engines (ibid pp. 114-115).

Angas also commented on the use of kokowai: "The houses here are coloured with bright red clay from the adjoining hot springs" (ibid p. 117). He was also impressed by the therapeutic qualities of bathing in hot pools:

Upon the beach of the lake, near Te Rapa, there is a charming natural hot bath, in which the natives, especially the young folks, luxuriate daily. Sunset is the favourite time for bathing; and I have frequently seen, of an evening, at least twenty persons squatting together in the water, with only their heads above the surface. Boiling springs burst out of the ground, close to a large circular basin in the volcanic rock, which, by the assistance of a little art, has been rendered a capacious bath: the boiling stream is conducted into this reservoir gradually, and the temperature of the water is kept up or decreased by stopping out the boiling stream with stones, through which it trickles slowly, whilst the main body runs steaming into the lake. The medicinal properties of these hot mineral springs preserve the natives in a healthy state, and render their skins beautifully smooth and clear (ibid p. 118).

Donald McLean kept a journal of his travel in the central North Island in November 1845 and his reactions to the geothermal activity at Tokaanu are typical of a European overwhelmed by the noisy forces of nature:

we visited the Hot Springs where nature is to be seen in active operation exhibiting at one of them a most wonderful phenomenon, the spring throwing up a fountain of boiling water which gushes forth about every five minutes from a pond 3¹/₂ fathoms in depth... whilst a great trembling and rumbling sound is heard underneath as if the earth was going to open and swallow up the unwary spectator. It gave me the idea of being the very gulph of perdition itself; and awakened a long train of reflections on the subject (McLean Papers).

McLean was accompanied by Rev. Richard Taylor, who in his Journal on 14 November 1845, commented on how they both bathed in "one of the puias or hot springs" and noted how all the local people bathed regularly. "I counted 12 sitting in one". Taylor provided a much more matter of fact account of the geysers at Tokaanu:

Yesterday we ascertained the depth of three of the boiling springs one was 20 feet the other 2 about forty two, in two the water boils up every other minute about a y[ar]d high with great

violence, and then subsides in none does the water run over... the general shape is that of a funnel, the sides are covered with siliceous incrustations some are opaque as chalcedony others transparent as crystal and in many specimens I found pure white feldspar. Some of these pits are filled with cold water others with water of a moderate temperature and I am told that they are constantly changing, one year the same being a boiling, another year a cold spring and again a hot one, the whole surface of the ground is covered with siliceous incrustations presenting the appearance of a pavement (Taylor, Journal).

Taylor also described the geothermal activity on the hillside above the kainga at Te Rapa, which he visited the next day:

we took a walk to see the steam jets on the adjacent mountain, there must be near a hundred, some large others almost imperceptible, indeed the ground is so full of them that it was quite dangerous walking amongst them as the ground was very uncertain, in winter I fancy when there is more rain then they overflow with boiling water but at present they are little more than steam jets, around them there is a large deposit of various kinds of ochre — fine red yellow white and blue, which show that formerly they were more active, there is also some sulphur (ibid).

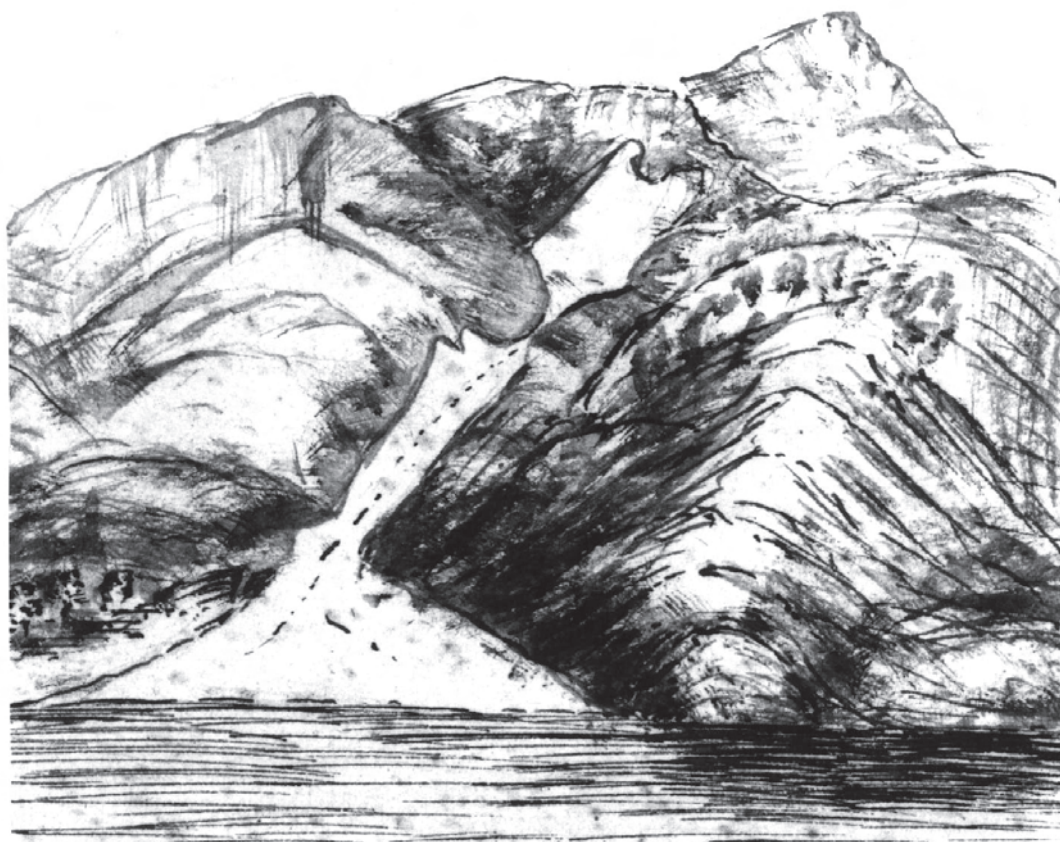
Taylor commented that in this geothermal activity “I saw the Laboratory in which nature had formed most of the geological formations of this Island”. He also visited Te Heuheu:

In the afternoon we had a long conversation with Heuheu, his acquaintance with their ancient traditions, waiatas, karakias and the number of them is surprising. I only regretted I could not more fully understand what I heard and he spoke so rapidly it was quite out of the question to write what he said (ibid).

4.2 Taniwha, Earthquakes and Landslides

In May 1846 the kainga at Te Rapa, the “principal residence” of Te Heuheu, was destroyed in a huge landslide which killed Te Heuheu, most of his immediate family and nearly 60 other residents. Rev. Richard Taylor, who conducted the burial service there soon after, described what happened:

An unusually rainy season occasioned a large land slip on the side of the Kakaramea, the mountain at the back of the Rapa, about two miles’ distance from his residence. This took place nearly 2000 feet above the level of the lake, at the gorge of a little Alpine valley, through which a considerable stream flowed, which, being thus dammed up, in three days formed a large and deep lake, which burst its barriers, and, with irresistible force, swept rocks, trees and earth with it into the lake. The little settlement was buried with all its inhabitants, excepting a few solitary individuals, who, aroused from their sleep by the warning roar of the approaching avalanche, fled to the neighbouring hills and escaped. One of the survivors states, that Te Heuheu arose from his bed, (it was about three in the

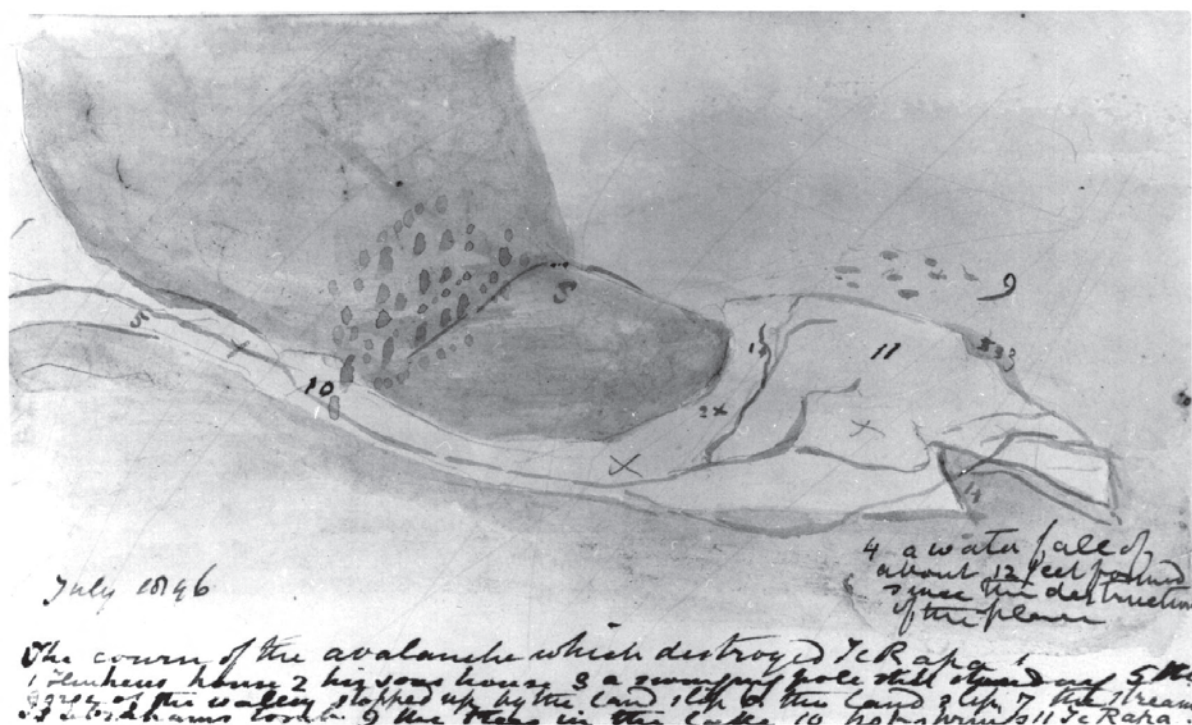


Te Rapa from the lake apr 22. 1847.



*July 2nd The Land left which overhung 1846
Te Rapa May 7. 1846*

Te Rapa Landslide 1846: drawings by Richard Taylor. (Alexander Turnbull Library, F50673 and F50678)



Sketch of Te Rapa Landslide 1846 by Richard Taylor. (Alexander Turnbull Library, F50676)

The caption reads:

The crown of the avalanche which destroyed Te Rapa (1) Te Heuheu's house, (2) his son's house, (3) a swinging pole still standing up, (4) a water fall of about 12 feet formed since the destruction of the place, (5) the gorge of the valley stopped up by the land slip, (6) the land slip, (7) the stream, (9) the trees in the lake, (10) hot springs, (11) Te Rapa.

morning) and exhorted a Chief who was his guest to flee, but both remained. He said it was a *taniwa* [taniwha] who was angry with him for having omitted his usual offerings. He, therefore, immediately made an offering of food, and commenced a supplicatory prayer to the angry god, and whilst thus engaged was overwhelmed. The once fruitful valley of Te Rapa was buried, in many places more than twenty feet deep; its houses and groves were swept away, and nothing was left to mark that it had been once the abode of man, but a solitary swinging pole, called a *morere*, which, with a few feet of green sward around it, singularly enough escaped.

Te Heuheu's brother caused the body of the Chief to be exhumed. Nearly one hundred natives were thus employed, but the task would have been hopeless, had not the flood formed a deep channel near his house, under the ruins of which he was found.

When I read the burial service over the spot where the pa stood, accompanied by Wiremu Tauri, my head teacher, even then the mud was so soft that we sunk in it nearly ankle [sic] deep. It was a solemn moment; an entire village laid buried beneath us, with all its inhabitants – the young, the old, the infant, and the hoary-headed—all in one awful moment were deeply entombed. It was night when the accident occurred and from one sleep they passed into another – the sleep of death (Taylor 1855, pp. 321-322).

Two of Te Heuheu's brothers, survived: Tokena Te Kerehi and Iwikau, and one of his sons,

Patatai, who was away in Waikato at the time, and was later renamed Horonuku to commemorate the landslide that destroyed so many of the Te Heuheu family. Iwikau's house was at Waihi, outside the path of the landslide. Tokena was in Te Rapa:

He heard a rumbling noise and went to investigate and when he saw what was coming, called out to others to run for their lives. Te Heuheu came out of his house and, discovering

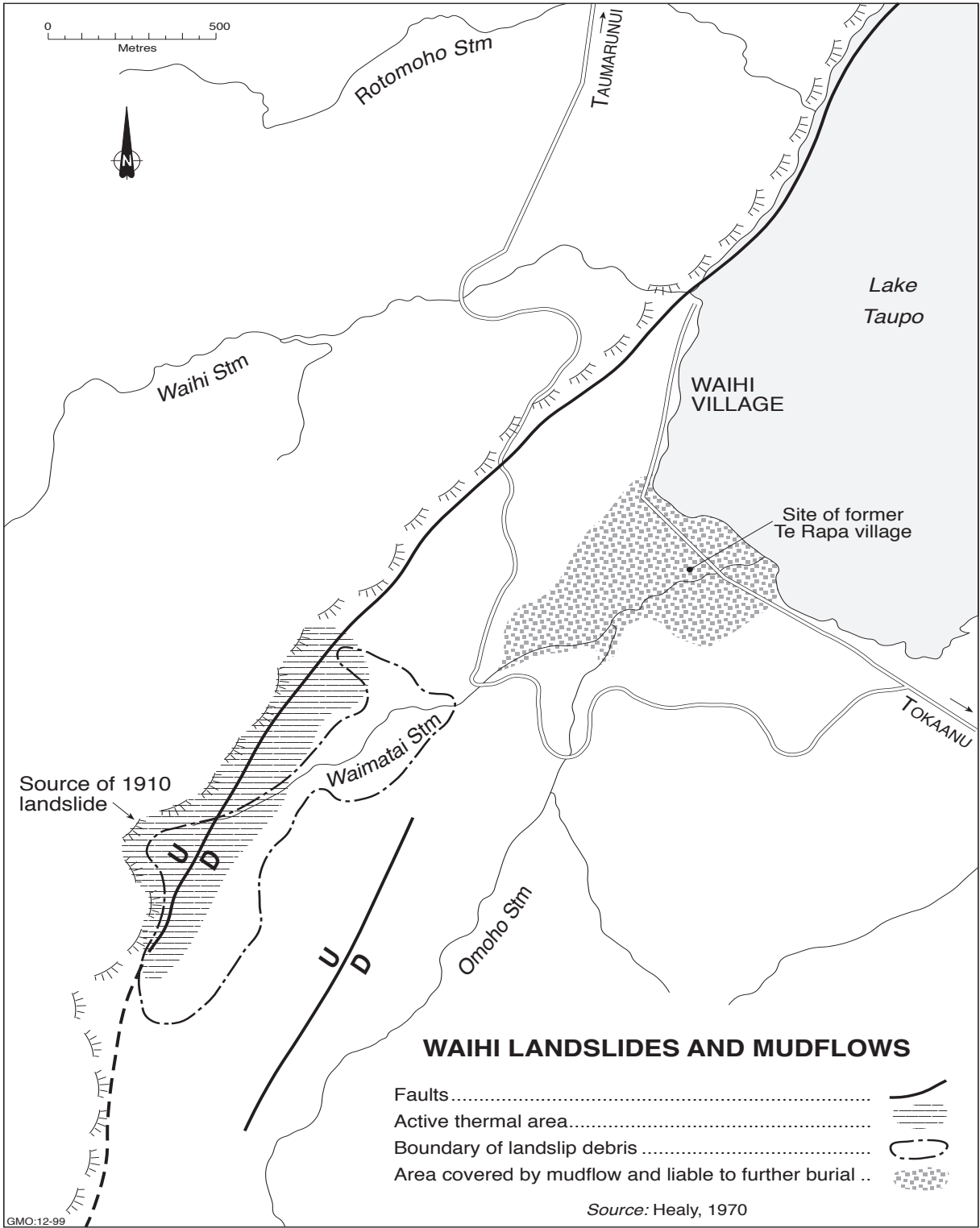


Figure 10 Waihi Landslides and Mudflows.

that his son Te Waaka was missing went back to look for him, but before he could get out the great mass of earth and rock thundered down and overwhelmed the settlement. Tokena ran toward the lake and when nearing climbed a strong supple tree used by the people as a morere or swing and escaped the terrible death of his fellows....

It is said that during that tragic night there was a thunderstorm and at midnight Te Heuheu arose and went outside and recited incantations to his gods to pacify the elements. But because of his having offended his ancestral spirits, the Maoris say they heeded him not and instead invoked Ruaimoko, the subterranean god to destroy him (Grace 1970, p. 240).

Catastrophic events such as the landslide at Te Rapa in 1846 were not unusual in this region. In the second edition of *Te Ika a Maui*, Taylor added this comment to his earlier descriptions:

There are traditions of two previous landslips in the same neighbourhood, one at Opotuka, when a hundred persons with their houses and fences disappeared in Rotoaira Lake, the other at Omohu, a pa near Tokanu not far from Te Rapa, when the pa with one hundred and forty souls in it, was swallowed up (Taylor 1870, p. 254).

Another substantial landslide from the slopes of Hipaua occurred in 1910 (Healy 1970 and see Figure 10).

Cataclysmic events such as landslides and earthquakes, that produced landscape change and loss of life, were usually attributed to taniwha. This was the explanation of uplifted land, a fault scarp, and changing river courses of the Tokaanu and Tongariro Rivers given to the Waitangi Tribunal hearing the Turangi Township claims (Figure 11):

The Tokaanu River was described as 'he taonga tapu, he awa tapu' by Bill Asher in his submission to the tribunal. The Tokaanu is a sacred river, a highly valued resource, and a taonga in the perception of local people. Te Matapuna is the source in the springs below the headland named Kohatu Kaioaraora. There are also springs, or puna, which feed the Tokaanu on the left bank in the vicinity of Te Reporepo. The ultimate source of the river is said to be Rotopounamu, a lake high up on the mountain Pihanga. The lake waters flow underground and reappear in the several springs that flow out of the broken and faulted andesitic rocks of old lava flows.

Te Matapuna is the abode of two taniwha, Tikatakata and Tihorehore (Tioreore). These taniwha sometimes travelled to the springs downstream at Te Reporepo. The taniwha are protective beings and are closely associated with healing and with the tapu quality of the waters of these springs. Tikatakata and Tihorehore are also the names of the stars which Pakeha call the Magellan Clouds. In this form, they also have a protective role. Their relative positions in the sky were used to predict the wind and bad weather.

The Tokaanu River once flowed to the east of Maunganamu, past Te Waiariki into the lagoon in the swamp known as Te Awa o Taringa. The river was turned from its course by another taniwha, Kohuru Kareao, later known as Huri Kareao, who now dwells in the hot springs near the present Tokaanu village. This taniwha caused the earth movement that diverted the river. The Tongariro River was also diverted by a taniwha; it once flowed westward

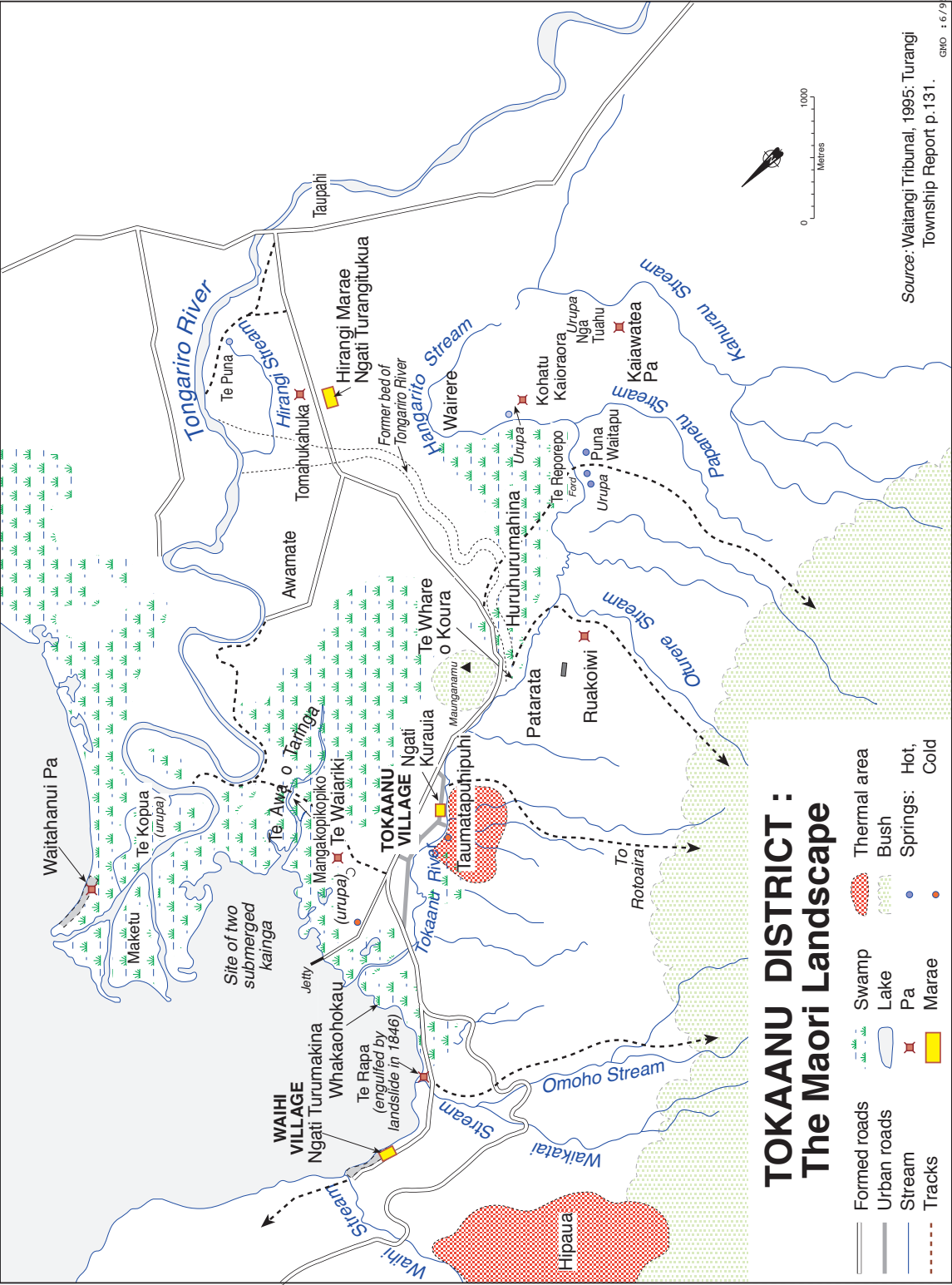


Figure 11 Tokaanu district: The Maori Landscape

into the Tokaanu River, but was turned to its present course by Huruhurumahina, a name which is still used by local people for the area south of Maunganamu where the two bodies of water once joined. Once settled in its present course, the Tokaanu River became the main highway for canoe traffic between the many kainga along its banks.

The volcanic origin of the mountains south of Lake Taupo meant that periodic earthquakes and associated earth movements occurred, which were recorded in traditional accounts and usually ascribed to a taniwha. Huruhurumahina was responsible for the uplift that created the waterfall, or wairere, on the Hangarito Stream. Earth movements also caused some former settlements to be submerged under the waters of Lake Taupo. There are two old kainga beneath the lake waters near where the water from the tailrace [of Tokaanu power station] flows into the lake. Their submergence is also ascribed to a taniwha. A woman tohunga named Aratukutuku had been disturbed at her tuahu by a man, who had thereby broken the tapu tikanga. He had been on his way to the lake to go fishing but he did not return. Aratukutuku was beaten to death by his relatives for allegedly causing his death. Before she died, she was able to call on her taniwha to submerge the land and engulf the two kainga and their inhabitants in the lake. In the 1930s, local elders stated, the pallisades of the old kainga were still visible on the lake bed (Waitangi Tribunal 1995, pp. 130-132).

The most powerful taniwha of the region was Horomatangi, as Hochstetter was told when he visited in 1859:

Horomatangi is said to be an old man and as red as fire. Thus the natives assert to have seen him. He lives in a cave on the island Motutaiko in the lake. There he watches the passing canoes, dashing forth from his lurking-place as soon as he espies one. He churns up the water in mad surges bubbling up like the big spout Pirori near Tokanu; together with the water he throws up large stones, which falling upon the passing canoes upset them. He devours whatever comes within his reach; carrying on his work of treachery and destruction both in fine and bad weather. The natives point out a place, situated almost in the centre of the lake between the island Motutaiko and Te Karaka Point, as chiefly dangerous, avoiding even in the finest weather to venture here too close to the heart of the evil spirit. Even when the general surface of the lake appears smooth, the water on this spot is in boiling commotion; in stormy weather it appears as one large patch of foam. The canoes passing over it are said to be turned from their course. These phenomena being real matters of fact, the observer might be tempted to suppose the existence of a spouting submarine spring at that place, or even of submarine volcanic eruptions (Hochstetter 1867, p. 331).

Only recently, active fumaroles have been identified and photographed on the bed of Lake Taupo in the vicinity of Horomatangi Reef, which is thought to be the main vent for the great Taupo eruption about 200 AD:

Horomatangi has moreover special relatives, the Kaukapapas, distinguished by peculiar attributes, and on that account held in great esteem. Te Toko of Oruanui, a village north of Lake Taupo, is said to be such a Kaukapapa, often disappearing suddenly, reappearing at Lake Rotorua, and returning with equal suddenness. In like manner Te Ihu at Tapuaiharuru is reported as being able to live with Horomatangi under water in the cave on the Island Motutaiko.... Such and a great many similar stories are in vogue about the lake (Hoch-

stetter 1867, pp. 381-382).

Hochstetter's description of his visit in 1859 to Waihi and Tokaanu provides a good example of how local people conducted their lives within an area of surface geothermal activity:

A small creek, the Waihi, plunges quite close to the South-end of the cove in a magnificent fall about 150 feet high over this bluff of rocks. At this cascade the mountains recede somewhat from the lake; and here already, from the conglomerate layers forming the beach, hot water, of 125° to 153° F is seen bubbling forth. By conducting this water into artificial basins, the natives have prepared several bathing places, the water in which showed a temperature of 93°F. Above these springs on the side of the mountain, probably 500 feet above the lake, steam issues from innumerable places. The whole North-side of Kakaramea mountain seems to have been boiled soft by hot steam, and to be on the point of falling in. From every crack and cleft on that side of the mountain hot steam and boiling water are streaming forth with a continued fizzing noise, as though hundreds of steam engines were in motion. Those steaming fissures in the mountainside, upon which every stone is decomposed with reddish clay, the natives call Hipaoa, i.e. the chimneys, and it was at the foot of that mountainside, that in the year 1846 the village of Te Rapa was overwhelmed by an avalanche of mud, and the great Te Heuheu perished. The inhabitants of the Pah Koroiti upon the mountain terrace near the Waihi-falls use those steam holes for cooking their victuals over them. The little cold brook which empties into the lake at Te Rapa is called Omohu. The chief range of springs, however, is on the South-side of that cove near the Maori village Tokanu at the river of the same name. From the small mountain-cone Maunganamu to the mouth of the Tokanu river it comprises an area of about two square miles. It is, impossible, to describe every single point; I will therefore mention only the principal springs.

The powerful column of steam visible far over the lake-shore, which is seen to ascend at Tokanu, belongs to the large fountain Pirori. Pirori signifies fountain eddy. From a deep hole on the left hand bank of the river Tokanu, a boiling-hot water column of two feet diameter, always accompanied by a rapid development of steam, is whirling up to a height of six to ten feet. The natives, however, told me, that the water was frequently thrown up with a booming noise to a height of more than forty feet. At a few paces from it there is a basin eight feet wide and six deep, covered with a siliceous deposit resembling chalcedony; it is called Te Korokoro-otopohinga, the jaws of Topohinga, in which the water is continually boiling. Farther-on we come to a warm creek Te Atakokoreke with a temperature of 113° F, a favourite bathing place of the natives (ibid, pp. 367-368).

Hochstetter described several other hot springs and mud pools, noting the continual changes. In particular “an immense geyser” was recorded that had played during March and April 1846, “throwing out a spout of hot water to a height of nearly 100 feet, so that the village was completely flooded by it”, although the behaviour of some springs changed with a more regular periodicity:

A crust of siliceous deposit, three feet thick, under which fine clayey mud is bedded, covers the larger portion of the spring region. In smaller apertures, from which nothing but hot steam emanates, the thermometer rises to 208°F. Here also they have special huts

for the winter, erected upon warm ground. They call the hot springs Puia, distinguishing Papa Puia, springs with clear water, yielding siliceous deposits, and Uku Puia, the boiling mud-pools and small mud cones (ibid p. 369).

Volcanic eruptions and associated earthquakes occurred periodically. Traditions of some of the greatest upheavals of the past are contained in the various versions of the story of the quarrelling mountains. Dieffenbach suggested that in Taranaki “natives have no historical account of any eruption of Mount Egmont” and that there were few earthquakes:

They have, indeed, tales which, if divested of their figurative dress, might be referred to the recollection of former volcanic activity: such as their account that the Tongariro and Mount Taranaki are brother and sister, and formerly lived together, but quarrelled and separated....

The natives of Taupo and Rotu-Aire [sic], at the base of Tongariro, told me of slight shocks, which proceed from the mountain, and which have occurred from time immemorial, but they have never been sufficiently important to impress a trace on their traditionary legends, unless we assume that some of their myths are records of events which have really happened: such, for instance, as the tale that the two wives of the Tongariro, Pihanga and Hauhungatahi, were formerly united with him, but quarrelled, and removed each to a distance. That in like manner Mount Egmont and Tongariro were once united but the two had a dispute, and separated (Dieffenbach 1843, vol. 1, pp. 357-358).

Edward Wakefield also recorded a version of the same story:

On quarrelling with his friend Tonga Riro about the affections of a small volcanic mountain in the neighbourhood, which is described as a lady mountain of most fascinating appearance, old Taranaki is said to have torn up his rocky foundations from this basin, and left the ragged and splintered edges to it, which are pointed out as proofs of the fact. He then clove a path through mountain and wood to the sea-coast, and the Whanganui sprang up in his ancient site, and followed his footsteps to the sea. So runs that native legend; and the basin is called to this day Rua Taranaki, or Taranaki's Dyke. It most likely refers to some tremendous eruptions of nature which have doubtless torn these islands at some distant date (Wakefield 1908, p. 416).

Rev. Richard Taylor also recorded a version:

The tradition is that Tongariro became jealous of Taranaki, and accused him of being too intimate with Pianga [Pihanga], another neighbouring mountain; they fought, and Taranaki being worsted, set off one night going down the Wanganui, thus forming the channel of the river; he crossed over by Wai Totara, leaving a fragment there, and then fixed himself in his present position. The spot where he formerly stood is now occupied by a deep lake, which still bears the name of Taranaki, and is supposed to be a kind of Pandemonium, the grand abode of all the New Zealand gods: this is probably a fable, founded on fact (Taylor 1855, p. 225).

The connectedness of the volcanic phenomena of the Taupo Volcanic Zone is also recognised

in other versions of this story that after this great fight several mountains moved north. These include Tauhara, the forlorn lover at the north end of Lake Taupo, still pining for his love Pihanga, visible at the south end of the lake behind Turangi. Others include Maungakakamea (Rainbow Mountain), Tarawera, Putauaki (Mount Edgecumbe) and several lesser volcanic cones. All these volcanoes are prominent landmarks and have become sacred mountains for local hapu. The mountains speak to each other, metaphorically expressing the connections between people and land in the Taupo Volcanic Zone. Some versions of the story also include the volcanic islands of the Bay of Plenty: Tuhua (Mayor Island), Whakaari (White Island), Te Paepae o Aotea (Volkner Rocks) and Moutohora (Whale Island).

4.3 Pakeha Tourism at Tokaanu

By the 1890s Pakeha tourists had discovered Tokaanu, which became the jumping off place for excursions into the mountains, as well as a tourist attraction in the local geothermal activity. In his 1874 report to the Premier on “Hot Springs District of the North Island”, Hon. W. Fox identified the tourist potential in “a very largely developed group of active and quiescent springs” at Tokaanu:

The Native village which bears that name is erected in the midst of them, and they are used for the various purposes of bathing, cooking, and other domestic uses, by a population of two or three hundred souls....

A fine clear creek of cold water [Tokaanu River], five or six yards wide, runs through the settlement, on both shores of which are many *puias* and *ngawhas*, some violently boiling and others of various degrees of heat and ebullition. Some of these already mingle their waters with the cold creek, rendering it for a few yards a pleasant warm bath, and in many more places the hot and cold water could easily be led into each other, so as to provide an almost unlimited number of baths of any temperature which might be desired.

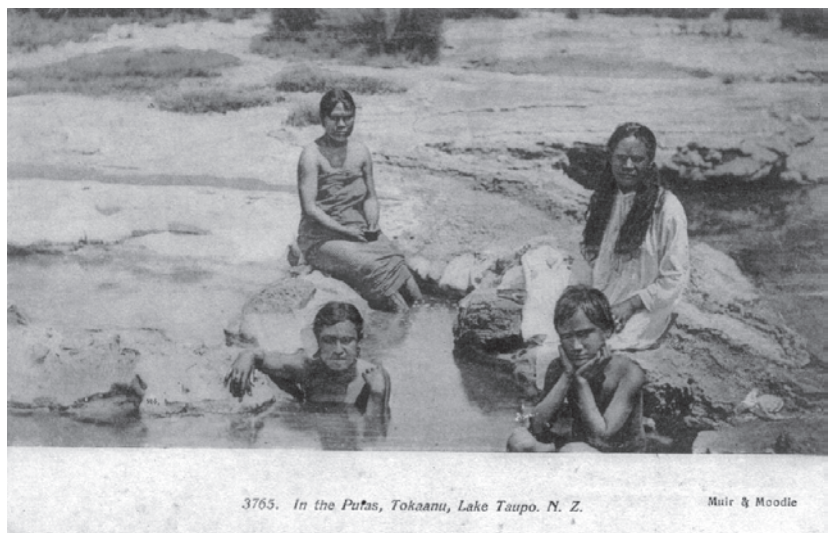
Tokano [sic] has a special importance relating to the settlements of Wanganui and other places on the West Coast, from which it will be easily accessible when the road now under construction is finished. The bathing facilities, however, at present, can only be used in common with the Natives, who morning and evening resort to the principal bath in such numbers as often to completely fill it. If they should continue to occupy Tokano, it would be necessary to utilize some of the other springs or cisterns in the neighbourhood for those who might prefer privacy to the communistic lavatory system of the Natives.

Besides the existence of great bathing facilities, Tokano offers many other objects of interest to the tourist or valetudinarian. Yachting on the lake; excursions to the falls of Waihi, and the place of Te Heu Heu’s sepulture, beneath a vast landslip which engulfed his village and a large number of his people; the ascent of Tongariro, and possibly of Ruapehu (a feat yet to be achieved, and not unworthy of the foremost members of the Alpine Club), – such



Tokaanu River and adjacent hotpool, the abode of the taniwha Huri Kareao.

*Bathing Pool at Tokaanu
c.1900.*



Tokaanu Township 1954 (Alexander Turnbull Library, National Publicity Studios Collection, F30041).

features confer attractions on Tokano which ought some day to establish it as one of the most favourite resorts of the district (AJHR 1874, H-26, pp. 1-2).

Tourism was slow to develop at Tokaanu, however. Gordon's guide to the "Hot Lakes, Volcanoes and Geysers" described Tokaanu village in the late 1880s:

The settlement is situated on the banks of the Tokaanu stream. The European residents are few in number—somewhere under twenty. The native houses are built in more than the usual regularity, and generally the people and the place have a clean and orderly appearance. The hotel, which is conducted by Mr. George Blake, a most attentive host, is comfortable without being luxurious. Mr. Blake is well up in all the peculiarities and beauties of the surrounding country, and is always ready to place his information at the disposal of his visitors. The hot springs, or *puias*, are of course the first and chief attraction. The tourist who has been travelling the greater part of the day, and feels the fatigues of a somewhat tiring journey, will find five or ten minutes in one of these natural baths sufficient to completely banish all sense of fatigue, especially if the warm bath is followed by a plunge in the cold water of the river. The *puias* are within two or three minutes walk from the hotel. They are as nature made them, open to the blue sky of heaven. There are no pegs whereon to hang your garments, and no walls whereon to place a peg. One of the *puias* is somewhat more retired than the others, but it is frequently of a temperature which forbids bathing. These baths are contained in natural basins covered with a silicious deposit, and having in several cases curious rims of peculiarly twisted wormlike excrescences having the appearance of polished coral of a flinty colour. The scientific tourist will find it interesting to account for this odd formation. In some cases one runs over into another, and in the case of two of those situated nearest to the road it will frequently be found that although there is a space of only about twenty-four inches between them the one may be boiling while the other is at proper bathing temperature....

These springs are each distinguished by characteristic names given them by the natives. There is a large column of steam visible from any point near Tokaanu called "Porori," signifying "rolling along as a ball"; Tekorokoro o Topohinga, meaning "the jaws of Topohinga"; Atakokoreke and Te Puia-nui, "the large pool." The natives call the clear water springs *papa puia* and the mudpools *uku puia* (Gordon 1889, pp. 36-37).

By the mid 1890s Tokaanu was served by a regular ferry service across the lake from Taupo township and coaches connected with Pipiriki on the Whanganui River where tourists could continue their scenic journey downstream by steamer. *Willis's Guide Book* emphasised the comfortable accommodation available in this outpost on the "new" tourist route in 1894, as well as the geothermal wonders to be seen:

Tokaanu is a village on the Tokaanu River about a mile from where it discharges into Lake Taupo. It consists of a Courthouse, Government store, and a dozen cottages, some inhabited by Europeans and some by Maoris. "The Tongariro Hotel" (William Strew) is a new building next the Courthouse. It has a good diningroom and other sittingrooms. Some of the bedrooms are arranged on the "Cottage system" (as at The Spa, Taupo), thus securing privacy. The hotel stands in three acres of ground the back of which is bounded

by the Tokaanu River. On the bank of the river, in the hotel grounds, are several *ngawhas*, of which Mr. Strew has made use to supply his Hot Baths. Some of the cooking for the hotel is done at the hot springs and steam jets, and the hot water for washing the clothes is drawn from the *puias*. Parts of the grounds are covered with *manuka* and other shrubs, and are already pretty, and the garden is rapidly getting into shape under the tasteful superintendence of Mrs. Downy, the housekeeper. Attached to the hotel is a store, at which Mr. Strew prides himself on selling goods at "Town Prices." Horsefeed is also cheap. Mrs. Downy, the housekeeper, and her staff have an excellent reputation for making their guests feel thoroughly at home, and the table at "The Tongariro" is always good.

The "Tokaanu Hotel" (George Blake) stands in pretty grounds, planted with pines and European trees, and extending to the Tokaanu River. There is a large diningroom, with drawingroom, smokingroom and good bedroom accommodation. Mr. Blake is an old resident and a Maori Scholar. He can give good information about the volcanoes, and spin no end of interesting yarns about the Maoris and the old fighting days. Mrs. Blake and her husband are musicians, and musical visitors will appreciate an evening spent with them round the piano. There is a billiardroom on the hotel premises, also a well supplied store and good stabling.

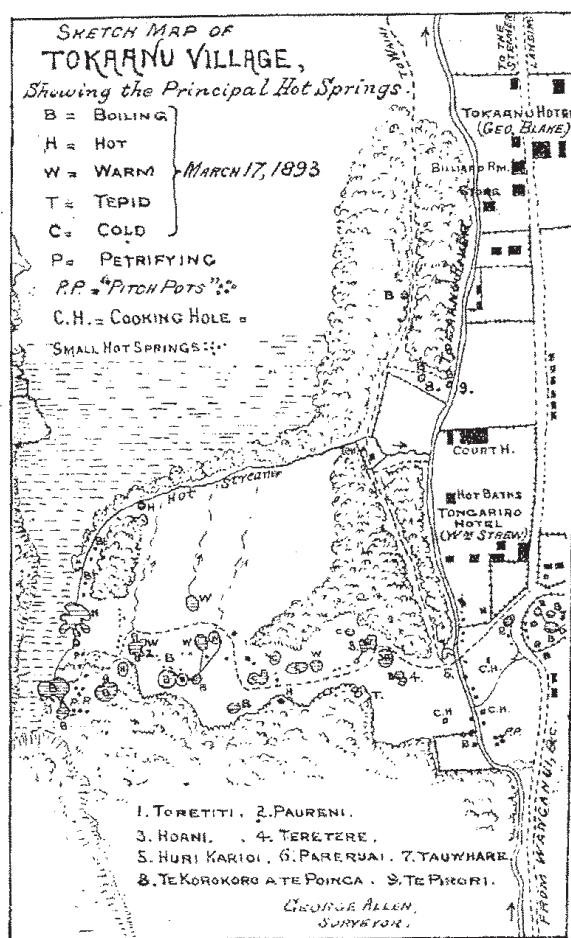
The chief local attraction of Tokaanu of course consists in its Geyser, Te Korokoro a Te Poinga, its *puias*, *ngawhas*, and mud volcanoes.

Te Korokoro a Te Poinga (The Throat of Te Poinga) — which Dr. Hochstetter calls Te Korokoro o Topohunga — is a caldron of constantly-boiling water of about ten ft. in diameter at top. The sides, which are formed of pink sinter, are undermined; and the caldron extends a considerable distance under its banks, but how far cannot, of course, be ascertained, as the boiling water is always rolling in and out of the cavity. At intervals of about a minute, the water bursts up in a great dome the whole width of the caldron, from three to five ft. high. It is said that formerly this Geyser has thrown a jet 30ft. high. If this be so, it must have afforded a grand sight, as the diameter of the vent exceeds that of any of the great geysers of the Thermal District, and the column of water would be in proportion. The Korokoro a Te Poinga is just opposite the back of Mr. Strew's hotel, and its greater outbursts can be seen from the grounds. The columns of steam which attend them are visible at Mr. Ross's hotel at Onekeneke, Taupo, with an ordinary field-glass.

The Tokaanu hot springs are mostly grouped E. and W. of the river, S. of the "Tongariro Hotel."

Close to the E. side of the road are a dozen *ngawhas*, *puias*, and boiling mud caldrons. Two of them are named Tauwhare and Pareruai. Several others are immediately W. of the road. Into one of these one of the Armed Constabulary, who had been indulging too freely, rode his horse. Both were exempted from further duty. Since then these hot springs have been railed in. Several cooking-holes and other hot springs lie between the road and the river.

The river is crossed from the R. bank to the L. bank by a footbridge hewn out of a long tree. Here a notice is posted by the Maori committee, stating that a fee of 1s. per day or 2s. per week is charged for bathing in the *puias*.



[See pp. 117-120.]

Tokaanu.

THE HOT SPRINGS, BATHS, HOTELS, AND VILLAGE.

Tokaanu Hotel, TOKAANU, LAKE TAUPO SOUTH.

FROM the situation of the Hotel, the ascent of Tongariro Mountain (whereon is Kotorahi Hot Spring, and Te Maru, an Active Volcano) is easily made, even by ladies. Close by is Ngauruhoe, the largest Active Volcano in New Zealand, where can be seen ridges of Lava Beds. The magnificent Mountain Scenery, Volcanic Wonders, Hot Mineral Springs, Pools and Baths around Tokaanu are unsurpassed in any part of New Zealand.

Coaches from North and South meet at Tokaanu Hotel.

TO SPORTSMEN.—The Game about here is as plentiful as in any part of the Colony.

Best Brands of Liquors only kept.

A WELL-SUPPLIED GENERAL STORE ON THE PREMISES.

ANY HOME & EVERY HOME COMFORT & ATTENTION GIVEN TO TOURISTS.

First-class Billiard Table.

GOOD STABLING & HORSE FEED.

G. A. BLAKE,

Proprietor.

The first *puias* arrived at are five intermittent springs, three of which are named Teretere, Hoani, and Hamoki. [The largest of these, Hoani, is called by Hochstetter "Te Puia-nui." This, however, only means "The big hot pool."] These five springs "work in succession" as Hochstetter expresses it (though he mentions only three). When one is full the others will be empty or half empty; when one is boiling another will perhaps be only warm and the third cold. The fifth spring, called "Piri" is sometimes dry, and at other times boils up four or five times a day and runs over into "Hoani."

The following tragic tale is told of these *puias* in Murray's "Handbook of N.Z."

"Some natives from Wanganui once came to visit their friends here. On the evening of their arrival they were taken for a bathe in the warm water. The following morning they started out alone for another swim, not knowing the peculiarity of the *puias*. They jumped in and were boiled to death."

Proceeding westward along the track, numerous *ngawhas* and fumaroles bubble and spirt on both sides. To the R. are four large *puias*, two warm and two cold. The fourth which was formerly cold, has, lately, had the hot water led into it by a drain from three constantly boiling *puias*, which also, by means of little drains, supply two other bathing pools. These three boiling *puias* are beautiful specimens of their kind. They are formed of pure white

sinter, and are full to the brim of pale blue water, down through which a stone thrown in is six or eight seconds before it disappears. The largest is about sixteen ft. diameter, the second twelve ft., and the third eight ft.

W. of these is a warm pond named Paureni, a small hot *puia*, and a large boiling *puia*. Again, about a chain W., is a boiling Petrifying Spring. This is a circular basin about five ft. diameter and about a foot deep in the centre, in which is a small hole. Sometimes the basin is full of boiling water; at other times it is empty, or the water is cold. Articles put into it become encrusted with silica in a few days.

All the pools so far described are on the *papa-kowhatu* (stone flat) on the W. side of the Tokaanu; and they are all in open ground, except the two *puias* S.W. of Paureni, which are in the *manuka* scrub.

About two chains S.W. of the Petrifying Spring, surrounded by *manuka* scrub, is a hot pond called Toretiti, which is about two chains long and one and a half chains wide. Boiling springs rise in this pond, and the overflow from them forms a hot stream, called Atako ko reke, which takes a north-easterly course, and (fed by several other springs on its way) falls into the Tokaanu near Te Korokoro a Te Poinga Geyser.

This completes the description of the principal *puias* near the Tokaanu village; but there are numerous others for a mile or two in every direction, and important groups at Waihi and Hipaua, one M[ile] N[orth].

Hochstetter says that there are at least 500 *puias* at Tokaanu.

In the scrub E. of the Toretiti hot pond are a number of little pitch pots and mud volcanoes, of some of which sketches are here given. Care must be taken in visiting these, as the ground is undermined in places, and generally very treacherous (Allen 1894, pp. 117-119).

Tokaanu was taken over by the Crown under the Native Townships Act 1895, but it remained a minor tourist centre. The tourist industry was largely controlled by a few Pakeha hotel-keepers and mountain guides, with little Maori involvement. Maori life in the kainga at Waihi and Tokaanu among the geothermal activity continued largely unaffected by tourism. In 1910 another disastrous landslide from Hipaua affected Waihi, with the loss of one life, and people temporarily moved to Pukawa (Healy 1970). The home marae of the Te Heuheu family remains at Waihi.

While Pakeha visitors, tourists and scientists, have described the geothermal phenomena in detail, for Maori the *puia* at Tokaanu and the mountain Tongariro symbolised the role of Te Heuheu. This is expressed in waiata such as “He Tangi mo Te Wano” composed after the battle at Orakau in 1864, when Ngati Apakura fled toward Taupo. Te Wano died and was buried at Titiraupenga. The rest settled at Waihi and Tokaanu, where many succumbed to an epidemic and were buried near Turangi (Ngata, 1988, pt. 1, pp. 236-239, lines 19-28):

Tenei matou kei runga kei te
Toka ki Taupo

Here we now are cast upon
The rocky shores of Taupo,

Ka paea ki te one ki Waihi,	Stranded upon the sands at Waihi,
Ki taku matua nui.	Where dwelt my noble sire,
Ki te whare koiwi ki Tongariro,	Now placed in the charnel-house on Tongariro,
E moea iho nei.	Like unto the abode wherein we sleep.
Hoki mai e roto ki te puia	Return, O my spirit, to the thermal pool
Nui, ki Tokaanu.	Of renown, at Tokaanu,
Ki te wai tuku kiri o te iwi	To the healing-waters of the tribe
E aroha nei au, i.	For whom I mourn.,

The Tokaanu Township, an area of 490 acres, was set apart as a Maori township in 1897 under the Native Townships Act 1895 (*New Zealand Gazette* 1897, p. 695). In 1899 an area of some 135 acres was vested in the Crown as reserves under Section 12(2) of the Native Townships Act (*New Zealand Gazette* 1899, p. 1563). A contemporary tourist guidebook explained:

The Government has quite recently completed arrangements with the Native owners of Toka-anu to lay out and offer for sale a township of considerable size, which includes, with few exceptions, the hot springs in the neighbourhood. This township will shortly be offered to the public. It is contemplated also, within the next few months, to improve the bathing facilities at the hot springs; so that those seeking these springs, either for pleasure or health, will be able to make use of them with some degree of comfort. It is believed that Toka-anu will, in the near future, be a place of considerable resort by people living in the southern half of the North Island (Bullock 1899, p. 21).

Tokaanu at the turn of the century had remained largely undeveloped as a tourist resort:

The coach arrives at Toka-anu Village in good time for a hot mineral bath before dinner. A hundred yards or so from the hotel is a sinter flat (*papa-kowhatu*), where numerous steaming *puias* invite the dusty traveller to disrobe. The modest stranger glances furtively round in search of a dressing-box, but this is a luxury deemed superfluous hereabouts.

Toka-anu is a very active thermal region. There are baths of pure hard silicate of iron, mud-holes, and boiling springs all over the flat. The village is situated on the banks of the Toka-anu River, about a mile from the shores of Lake Taupo. It possesses an excellent hotel, and also a good accommodation-house, and was formerly, a large Native settlement (ibid, pp. 19-20).

In 1903 the Native Land Court determined title for the township in 235 owners. In 1909 administration of Tokaanu Township was vested in the Aotea District Maori Land Board under the Maori Land Laws Amendment Act 1908. A meeting of owners called in 1911 to consider a proposed sale failed to reach agreement and the proposal lapsed. In 1920 the registrar of the Aotea Board concluded:

The position is that the Board does not consider the time opportune yet for the putting of Tokaanu sections on the market – its experience of previous sales showing that certain residents picked out the best sections and have done very little to improve them (quoted

by Sheehan, O'Regan and Te Heuheu 1975, p. 245).

A valuer's report in 1920 was pessimistic about the prospects for town or resort development at Tokaanu:

The Township as a whole during my acquaintance for the past 40 years has improved but little, on account of the bad access by road, partly on account of a large area periodically becoming flooded and remaining wet for a length of time but to my mind the real reason is the inferior accommodation to travellers (ibid).

In 1952, following the abolition of the Maori Land Boards, Tokaanu Township was vested in the Maori Trustee who, subsequently, administered these lands under the Maori Reserved Land Act 1955. In 1919 and 1927 there had been a number of partitions. In 1975 there were 25 titles to an area totalling 21 acres, and the total number of shareholders was 2742 persons. The Crown held over 183 acres, including an area acquired as part of the "Swamplands Exchange" negotiated as part of the Tongariro Power Development. Including the Maori Trustee leases, there remained over 127 acres in Maori ownership in 57 titles, and a small area had been sold (ibid, pp. 245-246).

The Crown desire to establish a township at Tokaanu had a good deal of local Maori support in the 1890s:

In this instance Maori played a significant role in allowing their land to be used as a township, and in the identification of public reserves, native allotments and the naming of streets. Indeed they earned the Surveyor General's displeasure when they claimed all the 'best blocks' for themselves. Following a visit to Tokaanu by a surveyor, who explained to Ngati Tuwharetoa how the Native Townships Act could be applied to their land, a further four meetings were held and a deputation from Tuwharetoa visited Wellington to discuss the matter with officials from the Lands and Survey Department. Despite the meetings, Te Waaka Tamaira told Government officials that some of the principal hapu of Taupo were anxious about their cultivations being incorporated into the township. Others, too, were not entirely happy to have the land used as a township... Tuwharetoa attached conditions to allowing their land to be used as a township including the reservation of several urupa and the return of a particular thermal spring which was being used by Europeans. It was Tuwharetoa's intention to charge fees for the use of these baths, indicating that Tuwharetoa saw economic benefits accruing from the town's formation. Tuwharetoa also aimed to play a significant role in the administration of the township (Woodley 1996, p. 15).

However, there was little development of Tokaanu as a tourist resort or spa and it remained largely a Maori community.



Geyser at Tokaanu c.1950 (National Publicity Studios Collection, Alexander Turnbull Library G10374)

5. Pouakani - Mokai

The geothermal resources of a region were but one element in a physical environment which the Maori occupants came to know, understand and utilise fully, in ways not perceived by Pakeha visitors. The minute books of the Native Land Court provide a good deal of evidence, often fragmentary and anecdotal, of how Maori perceived, occupied and utilised their physical environment. In this chapter the minutes of the investigation of title to the Pouakani Block in 1887 and 1892 have been used to build up a detailed case study of settlement patterns. A history of land transactions and related matters is outlined in the *Pouakani Report* (Waitangi Tribunal 1993) but the focus here is on understanding the relationship of local Maori with their whole environment, including geothermal resources, in the late nineteenth century.

5.1 Maori Settlement on Pouakani Block

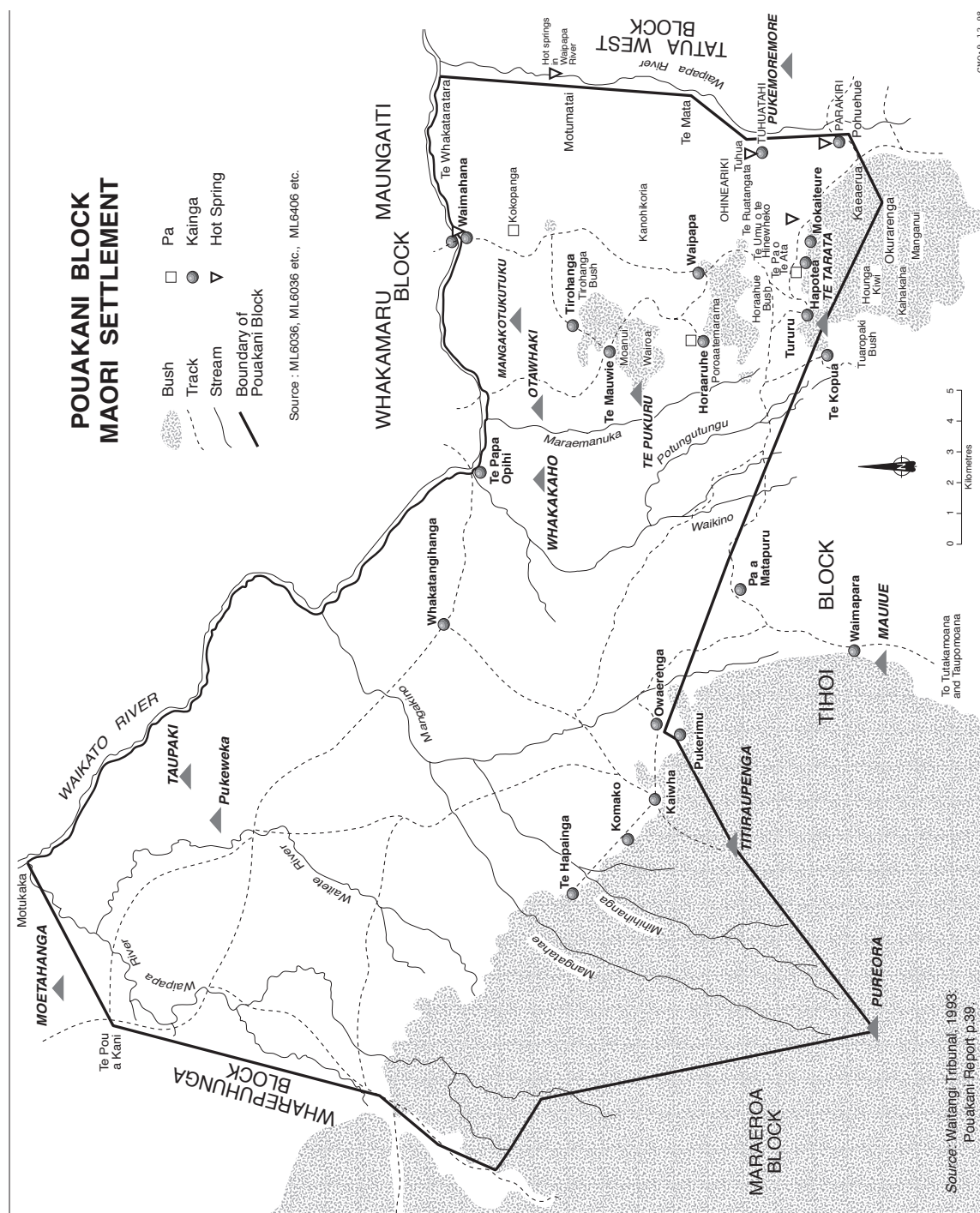
Lawrence Cussen, surveyor, appeared before the Native Land Court and described the land between Titiraupenga and the Waikato River in the 1880s:

I know the land well, on the edge of the bush and mountain side there is a great deal of good land – but towards the Waikato river it is very poor pumice country – some good land at Waipapa – the bushes are good land – totara timber there – the land is not first class but it is good land for Taupo country (Waikato MB 27/165).

Hitiri Paerata commented, “Nothing will grow in the open country at Taupo” (Waikato MB 27/135). Werohia Te Hiko commented, “The soil of Pouakani [Block] is uniformly of one kind, pumice gravel and rock (stones). The land immediately around the swamps is better” (Waikato MB 27/145). With its proximity to forests, swamps, cultivable land and geothermal resources, clearly the Mokai area in the south-eastern corner of the Pouakani Block was an attractive place in the relatively harsh climate and sterile pumice country of North Taupo. The pattern of settlements also shows a close relationship with the areas of bush around Titiraupenga (Figure 12).

The evidence given to the Native Land Court during the investigation of the Pouakani Block suggests a good deal of mobility in settlement patterns. Te Waiti Hohaia commented that “we had so many kaingas we travelled from place to place” (Waikato MB 27/8). The evidence of Werohia Te Hiko is indicative:

I lived at Waimahana first before Kaiwha, the former is a kainga mahinga kumara [a settlement for kumara cultivation]. My father and all Ngati Wairangi planted at the latter before Te Ariki [1851 or 52]. After that fight all moved to Hapotea and Horaaruhe and Tahataharoa. Kaiwha was deserted for a time, till after Hinana [1856] when Te Mete,



Rangitoheriri te Kawao and Paora went back there. There were two houses there then, a wharepuni [a substantial building for sleeping in, principal house] and a kauta [cooking shelter or shed], the property of Te Mete and Te Kirimate.

I lived at Tahatahara and Hapotea and Horaaruhe after Potatau was made king [1858]. I was at Orohina at the time of Orakau [1864] and after the fall of that pa returned to Hapotea etc. and was living there when Te Kooti came from Taupo, but was at Kaiwha when the fight took place at Tapapa [1870].

One wharepuni one kauta and one wharau [temporary shelter made of branches] were the only buildings at Kaiwha when Potatau was made king; these were the only houses till N'Apakura came [after Orakau, 1864] (Waikato MB 27/24-25).

The Waikato River was a food resource but this was not a place for permanent settlement. Werohia Te Hiko described the area between Maraemanuka and Waipapa streams. Along the river bank were “koura [fresh water crayfish] fisheries and duck snares... The kainga mahinga manu [bird snaring camps]... belonged to our matuas and tupunas [parents and ancestors] down to ourselves. No cultivations there along the river bank, the plantations were all near the bush away from the river” (Waikato MB 27/152). Although some claims were made that kumara had been grown at other places than Waimahana, Werohia Te Hiko denied this and said that potatoes were grown at Opahi and Maraemanuka. Perhaps the hot springs at Waimahana provided sufficient warmth to allow kumara growing here but not elsewhere. This site is now flooded by Whakamaru hydro lake. There were also places along the river bank where pohue was collected. This is a name given to several climbing plants and it is not clear which one is referred to here. “There were no tuturu kainga [permanent settlements] on the Waikato River... the houses were only temporary, used when fishing or catching birds” (Waikato MB 27/152).

The importance of the settlements close to the bush is also borne out in the evidence of Eru Te Rangietu who described Ahirara:

A kainga [village] and mahinga [cultivation], crops of potatoes, corn and tobacco were here planted. I think the fences are still standing. Bird snaring localities are here. At Po-roatemarama which is near Ahirara are the tutus [bird snaring trees] Te Kohi and Te Rimu belonging to Natana and Te Poutumoa respectively (Waikato MB 26/90).

This evidence also indicates how people of each kainga had their own places to go to obtain food. Important places, such as bird snaring trees, were given distinctive names. Hitiri Te Paerata described the kainga in the Tirohanga area:

Te Waimahana... is situated on both banks of the Waikato River. I lived there and my father before me. The houses of this settlement were not wharepunis but wharetoetoe [ie. not substantial buildings but thatched huts], it was merely a kainga for cultivation purposes... the cemetery of this kainga is on the Whakamaru Block... at this settlement crops of potatoes were planted and birds were snared...

Horaaruhe was a kainga and a pa... At this kainga were two large wharepuni one of which was called Wairangi... Te Muna was the name of the second house... In connection with this settlement were extensive plantations... The bird snaring places of this kainga were at Waipapa. Ngawhakawhitiwhiti, a matai tree, was owned by Te Paerata Kaiawha. Ngamataiturua, two matai trees, belonged to my father. Hamutira a waitahere manu (bird snaring water) belonged to my father. Te Waipopotea belonged to Paora Ngamotu. Since the Hinana feast [1856] no game has been snared at these places... There are two burial grounds in connection with this settlement [Waipapa] one at Kanohikorio and the other at the settlement itself. At this Kainga was one large house, Kaingaroa, it is my house. There are extensive cultivations. Mine is the only large house of this settlement (Waikato MB 26/44-45).

The northern margin of the Tuaropaki Bush around the present Mokai Village was a particularly attractive site. Sheltered from cold southerly winds by the forested slopes to the south, and close to swamps which were a source of flax and raupo as well as water fowl, this seems to have been an area for permanent settlement. Although a number of kainga were named in the evidence, the main settlement from the early 1840s was Hapotea. Other kainga such as Mokaiteure, Tuhua-tahi, Tururu, Te Pa o Te Ata and others were small outlying clusters of houses. The kainga were usually unfenced, although fences were constructed around the cultivations.

There was one fortified site, Te Pa o Te Ata, which was periodically occupied. Hitiri Te Paerata stated in his evidence:

Te Pa o Te Ata belonged to Te Atainutai, he built it. It is the oldest pa on that part of the block (Waikato MB 26/52).

Te Pa o Te Ata was the pa of N'Te Kohera and N'Parekawa... (Waikato MB 26/57).

Te Pa o Te Ata is at Hapotea; in it were two large houses... Formerly the place was wooded. N'Ha and N'Parewhete Wairangi felled it and planted crops. Hapotea was first occupied at the introduction of Christianity [early 1840s]. Tahataharoa was occupied at the same time... There were two principal houses at Hapotea, three small houses and three kauta (Waikato MB 26/39).

The evidence given in the Minute Books in the investigation of the Pouakani Block is at times contradictory. This is understandable because it has to be understood in the context of competing claims for ancestral rights to the land and its resources among several hapu whose mana was at stake. However, it is clear, as the following extracts will indicate, that there was considerable interaction between various kainga because of the kin linkages. There was considerable mobility among people moving from one to another, and kainga were periodically abandoned and reconstructed:

Wereta Hoani: It was when the Rev. Mr Whiteley and Takerei came to bring the Gospel that I saw the first clearing at Hapotea, this was before the death of Te Heuheu [1846] – that was the first clearing made there. There were some small clearings before that for crops to feed bird snares. There was a kainga at Hapotea before the first clearing I have spoken

of was made. I did not see the clearings made which existed before the large clearing which I saw being made.

I saw one clearing being made at Te Wairoa before the death of Te Heuheu; there were some other clearings made since (Waikato MB 27/115).

Hitiri Te Paerata: Te Paerata was the first to occupy Hapotea and make it a kainga, before the building of Wairangi [meeting house] at Horaaruhe. Other kaingas, Tahataharoa, Waitutu, and Matatu, were established also before the building of that whare.

When I say Te Paerata and others were first to occupy Hapotea, I mean that they reoccupied them; they had been old kaingas of the ancestors (Waikato MB 27/67).

Werohia Te Hiko: Hapotea was a large kainga – whares there for various purposes. One was weather board outside and kakaho [thatched] overhead; it was not a whare puni, but a whare kopai [walled house, cf. house with dug out floor and roof to ground level – wharepuni]. It was built as a whare karakia [church] (Waikato MB 26/255).

Hitiri Te Paerata: I saw the building of the pallisaded pa at Tahataharoa, it was only a break wind and to operate as a bar against pigs. I was young it was since Christianity. It was no pa at all, only a kainga and was not in a defensible position... Hapotea was fenced in the same manner, no carvings (Waikato MB 26/263-264).

Poni Peita described bush clearing and settlement at Hapotea:

We were the first to occupy and make bush clearings, from these we moved to Hapotea proper and made a kainga there, this was the first settlement of Hapotea. Te Paerata objected to our first kainga (because it was close to the forest and he objected to women going and cooked food being taken into the bush, as it was tapu and it would not do for food or women to be in the forest in the winter time when birds were being snared etc) and that is how it was we shifted to Hapotea (Waikato MB 26/265).

Te Rangikaripiripia described Hapotea: “At the time of Hinana [1856] there were three wharepunis, three kauta, one house with a chimney, one church and one pataka (food storehouse)”. He also stated that “Hapotea took its name from miro tahere”, a bird snaring tree which was a miro (Waikato MB 26/277). Hitiri Te Paerata denied the statements of Te Rangikari-piripia and others:

As to Hapotea and the houses: There are two whare punis, two kautas, one wharau, two small whares and one house belonging to Ponino Pataka.

The owners: One wharepuni belonged to Te Paerata, Ngahiku, Ngakau, Te Awaiti and Wereta.

The second wharepuni to Te Hapimana, Roto, Te Oneroa, Te Awaiti, Karapehi, Poni and Matawaia Te Momo.

The wharau was Pita's and Te Wharau's, his father in law.

The house said to have been Poni's belonged to Poni and which is said by the other side to have been a church.

The two kautas belonged to the owners of the wharepunis.

These wharepuni fronted on the same marae, the wharau (Pita's) stood upon a slight rise. The others all stood upon flat land – no hollow or anything of the sort. There is a gully runs round behind the whares.

There was never any pataka at Hapotea nor was there any whare with a chimney. There were no other wharau at Hapotea other than the ones I have mentioned. A plum tree there was planted by Poni (Waikato MB 26/279-280).

The two whare puni were built in the period between 1846 (death of Te Heuheu) and 1856 (Hinana), and remained through the 1860s. By 1884 when Hitiri Te Paerata had left Hapotea to live at Waipapa, the houses had been removed, most of the timber being taken to Waipapa. Oriwia Ngakao claimed that "Hapotea became unoccupied at the time or shortly after the Orakau fight [1864]; the residents moved to Waipapa" (Waikato MB 26/250).

5.2 Resources of the Forest

The patches of bush in North Taupo were regarded as an integral part of the living environment. Hitiri Te Paerata described his claims to Tuaropaki Bush:

A large part of the bush at Tuaropaki is called Paengawhakarua... a very ancient name... I say the totara timber belongs to me only, because they grow on the land which I know belongs to me, and because they grow in the vicinity of my kaingas. I occupied the land and snared the birds of the bush (Waikato MB 27/124).

With regard to the totara timber at Tuaropaki it was our privilege to split up the fallen timber for fencing or posts for whares, and also to use the outer bark of the standing trees for roofing of houses etc. (Waikato MB 27/135-136).

Nineteenth century Pakeha travellers were impressed by the bush but saw it rather differently. J.C. Bidwill, the naturalist, travelled north from Taupo toward Oruanui in 1839 – "our course ceased to be over the barren moor" – and then entered a belt of bush:

At the part where we now crossed, there was the finest forest I had seen in New Zealand; the trees were chiefly Totara of gigantic size, and grew closer together. The land also was very rich and level. Here I saw some of the largest Fuchsia trees I had met with in the country; they were at least a foot in diameter (Bidwill 1841, p. 63).

Lieutenant Meade described the Oruanui Bush in January 1865:

The woods we traversed were not nearly so grand or gloomy as in many other parts which we had visited, but there is a silence peculiar to the New Zealand forest which must be felt to be understood. I cannot call to mind any tropical forests which excel those of New Zealand in beauty, for here there is magnificent timber, without the jungle of undergrowth which obstructs the view in more humid climes.

Brilliant parasites and creepers hang from the uppermost boughs of the loftiest trees, straight as bell-ropes, or, winding from stem to stem with fantastic curves, interlace distant trees, in the very extravagance of their luxurious beauty. The lofty Totara, and the rimu with its delicate and gently weeping foliage, and the shade loving tree fern, the most graceful of all forest trees. Wild flowers are few and rare, but the ferns are more numerous and varied than in any other country.

It is the absence of living things that renders the silence and solitude of the woods so oppressive. Occasionally a pair of Kaka parrots may be seen wheeling high above the hill tops with harsh discordant cries, or the melancholy note of the great New Zealand pigeon comes booming through the woods; but except at early morning, the traveller may often wander for hours, I had almost said days together, through the gloom of these woods where the sun's rays can scarcely penetrate, and the breeze passing over the tree-tops through the uppermost whispering boughs may be seen and heard, but cannot be felt. Not a sparrow – not a mouse to be seen; it seems the silence of death, or more properly the stillness of the yet unborn. (Meade 1871, pp. 116-117).

Hitiri Te Paerata described the bird snaring places in the neighbouring Tuaropaki Bush within the Pouakani Block:

The hapus to which I belonged hunted and caught birds in the forests. Paiakapuru, a Rimu tree at Hapotea, was one of snaring trees, it belonged to Ngakao. I have seen this tree. Te Purapura was a bird trough (waitahere manu) belonging to Te Paerata. Another bird trough was near Mokaiteure, it belonged to Makawaiatemomo. At Paengawhakarau were other bird troughs elevated on trees belonging to Wereta Te Hikapai. A great snaring place (waitahere manu) was at Otanepai, this belonged to Te Arawaere and Ngahiku and Hoani Karapehi. At Moanui was a tutu manu, this belonged also to Te Arawaere and Hoani Karapehi. Te Tarata on a ridge was also a tutu (bird snaring tree) owned by Te Arawaere. Te Matai snaring place belonged to Rota and Taurakumekume to Te Oneroa. Te Aramahoe (a tutu manu) belonged to Te Paerata. Te Puwharawhara tutu belonged to Ngakao. The last four were all on Te Tarata ridge. I know of another tutu called Te Whakapahi, this belonged to Rota. A bird snaring water (waitahere manu) below Moananui was called Kopuatahi, was the property of Te Awaiti, Te Haeana, Te Arawaere and Hoani Karapehi. At Matatu was another waitahere manu, this was owned by Ngahiku, Te Awaiti and Rota, it is just over the boundary [of Pouakani Block]. I now speak of bird snaring places in Otamairi bush; they are situated on a ridge called Poroatemarama, the first of which bears the same name as the ridge; it is a totara tree and was owned by Te Paerata; another tutu was called Te Rimu, this was the property of Te Poutunoa. The Ruakaka belonged to Ngakao. Te Kohiwi was owned by Natana Pipito... At Waiwharangi was a waitahere manu owned by Te Paerata and Hoani Karapehi... a great meeting [was] held at Pukawa Taupo, and birds caught at the snaring places I have named were sent as food for that gathering. Since then

birds have become scarce and in consequence the troughs etc. have fallen into disuse. Formerly there were no disputes as to the ownership of this land, trouble has arisen only recently (Waikato MB 26/41-42).

Eru Te Rangietu described a special wahi tapu, associated with bird snaring at Tuaropaki Bush, a mauri located in a special tree:

The owners or custodians of it were Te Arawaere and Te Monuao, my father. The magic tree is at Te Tarata (the mauri was a piece of wood tied up in a peculiar fashion with thongs and supposed to possess some magic influence on birds causing them to flock in great numbers to any desired locality). I know the spot where the mauri was kept in a hollow rimu tree (Waikato MB 26/90).

The mauri I mentioned was a stick two or three feet long. I never approached very near it, as it was tapu. I have seen it in my fathers' hands, and have heard him repeat incantations to it. It was very ancient. I don't know which of the ancestors made it. This is the prayer. Takina mai i Hawaiki nui te manu. Tioro Tioro. Takina mai te urungatapu te manu. Tioro Tioro. Takina mai i Raukawa i Tuhua i Hurakia i te Rongoroa etc etc. Tioro Tioro (Waikato MB 26/96).

A free translation of this chant is: Entice hither the birds from Hawaiki nui, Call, Screech (i.e. imitate bird calls). Entice the birds hither to the sacred resting place, Call, Screech. Entice them from Raukawa, Tuhua, Hurakia, Rongoroa and other places, Call, Screech.

Werohia Te Hiko described the importance of birds for important ceremonial gatherings, including tangihanga:

I remember the funeral gathering of Te Taumati son of Tini Wata. These birds [were] got from Paora, Te Roha and Kaiaruha had also preserved birds. These were required by N'Te Kohera to do honour to Rewi. My husband Te Rangikataua bore one of the papas himself, the birds were taken to Waipapa for the feast. They had been preserved for the house warming of Wairangi whare, when the old house of that name was intended to be rebuilt (Waikato MB 26/257).

The term papa used here was a vessel made of totara bark used to contain preserved birds.

A variety of birds were snared both in the swamps and forests. The most important forest species were kereru (pigeons) and kaka (parrots). The main methods of catching birds included use of a bird spear from a perch in a tree, fixed snares which were collected later, or use of a running noose at the end of a long rod held in the hand. Certain species of tree were known to be favourites for birds in fruiting season, including tii (cabbage tree), miro, kahikatea and tawa. The miro was a particular favourite of pigeons and had the added quality of making them very thirsty. One technique was to provide a bird trough, waka manu or waka kereru, a wooden vessel up to 1.5 metres long and sometimes carved. Either snares were set over it or the snarer would conceal himself nearby with his tahere, noose on a rod. The term waitahere was used to

describe either a patch of water or a bird trough above which this method of snaring was used. A waituhi was a pool of water or bird trough with fixed snares over it. Because both techniques were often used in the same place both terms were used. Miro trees were scattered in the bush and did not grow in single stands, but were sometimes located at intervals along a ridge. A series of bird troughs would be set up, known as ara waka, path or route of bird snaring troughs, or ara waituhi. The process of preserving birds was known as huahua manu, and preserved birds were often described simply as huahua.

Elsdon Best (1977) collected a great deal of information, mainly from Urewera sources but also included two descriptions of bird snaring techniques in the Taupo-King Country region before 1880:

“Pigeons are snared in this way: An open dish, canoe-shaped, is placed in the boughs of a tree and filled with water, while its sides are set with snares. The pigeons stand on the side to drink, and get their heads or legs into the snare, in which they are suspended”.

“Spots with pigeon-snares were passed; they consisted of a hole, square or round, cut into some broad surface root of a large tree, filled with water and surrounded by snares attached to an adjoining little upright frame” (quoted by Best 1977, p. 246).

The evidence given to the Native Land Court during the investigation of the Pouakani Block also included information about bird snaring techniques in the Tuaropaki Bush. Takiwa Te Momo noted waituhi in the Paengawhakarau section of Tuaropaki Bush: “I pointed out the one at the edge of the bush which was the one for drinking purpose... Then we went a distance into the bush to where a waituhi was suspended on poles, lodged in the forks” of the tree (Waikato MB 26/239). Werohia Te Hiko described a place called Mahanateahi as a whenua rata, a place or land where rata grow. “Mahanateahi is not a tutu, it is a rata tree on which kaka were speared” (Waikato MB 26/235). Wereta Hoani corroborated this: “Mahanateahi is a rata (wero, takiri) [place where birds were attacked by spearing, as in battle]. I have seen it, also the remains of the ladder (pikinga) up into the tree” (Waikato MB 26/249). Wereta Hoani also described this tree as rakau wero and mentioned several other places: “Otanepai (wai tahere) Te Rangihopu (miro tree). There were bird snares also at Te Tarata, some of which are Te Maikara (matai) (a tutu). There are many other bird snaring places at Poro a te Marama” (Waikato MB 26/248).

Hitiri Te Paerata described a waitahere called Kopuatahi, on a small stream:

The water comes out of the ground and flows along for about the length of this building... and then goes underground again. There is very little water there in the summer. There used to be sometimes ten sets of snares across the stream, some years there would be more if the birds were plentiful. There were some plantations close to the hollow where the water comes. This water is below Moanui and the same stream supplies Moanui. This waitahere belonged to Te Arawaere, Te Awaiti, Ngahiku, Hoani Karapehi and others of their party (Waikato MB 26/259-260).

Hiriti Te Paerata also noted that Kopuatahi had been used as a waitahere in the 1840s. “Urewera were visiting us and we went over and snared birds at Kopuatahi” (Waikato MB 26/262). It was important to retain local mana by being able to produce quantities of birds at feasts provided for visitors. Birds were a highly valued special food, which were scarce in some areas and required a great deal of skill to catch.

The great hui called by Te Heuheu at Pukawa in 1856, known as Hinana, put considerable strain on the bird resources of Tuaropaki and other bush areas. The numbers of birds to be snared seem to have been related to production of berries from certain trees, and such trees did not always produce fruit every season. Various interpretations were also made about the effectiveness of the karakia, rituals, used in bird snaring. The following extracts from the minute books of the investigation of Pouakani Block provide some indication of factors affecting bird snaring. The context and significance of Wharepapa’s “curse” is not explained, but for some reason, birds did not return to Tirohanga Bush as quickly as they did to other bush areas:

Hitiri Te Paerata: My elders ceased to catch birds [after] the Hinana, but latterly game has become more plentiful and snaring has resumed (Waikato MB 26/233).

Takiwa Te Momo: After the Hinana meeting birds were scarce at Tuaropaki and Tirohanga. And it was only in 1886 when Te Piwa came birds became more plentiful at Tuaropaki, brought there by Te Piwa’s works of magic. He was a great tohunga. The famine still continues at Tirohanga. I heard that Te Wharepapa cursed those places and the trees not bearing fruit caused the places to be deserted by game (Waikato MB 26/239).

Karangi Tamaki: Te Roera lived at Hapotea before Hinana [1856] and was still there at the time of that feast and after. He helped prepare the huahua to purchase gunpowder with. He lived in Pita’s whare wharau. I am unaware he had a house of his own. He helped prepare the birds for Hinana, his tutu was Te Tarata; he used this tutu when snaring birds to purchase powder also.

Hapeta and Te Roera were the first to occupy Waitutu, this was before Hinana. There were no tutus there then, they whakamoed the birds (ie. caught them at night).

Te Roera married Te Ngiha when the huahua were taken to Te Awa o te Atua [Matata, Bay of Plenty] to buy gunpowder.

Te Roera went to Kapiti at the time of the feast at Tongariro awa and came back at the Hinana meeting, for which he assisted to prepare food (Waikato MB 27/53).

Werohia Te Hiko: I only know of one bird snaring, when the birds were taken to pay for gun powder, since Hinana. I don’t know how long after Hinana this bird snaring was, but it was before the war [1863-64]. There has been no bird snaring, food preserving, on a large scale since, as the birds are much less numerous. It was Hitau who destroyed the birds. Wharepapa also did so on his own portion. I am not sure that the compelling force of his incantation would have any effect beyond his boundary (Waikato MB 26/255).

Whatever the reason for the decline in bird numbers, traditional bird snaring practices were also being used less frequently by the end of the nineteenth century. Timber milling and the subsequent clearing of much of the bush makes it almost impossible now to identify particular places where bird snaring activities were carried out.

5.3 Mokai Geothermal Area

A kuia at Mokai described the hot springs there as “the children of Kuiwai and Haungaroa”, sisters of Ngatoroirangi, thus connecting them with other areas of surface geothermal activity around Taupo. Ensign Best and Ernst Dieffenbach visited the hot springs at Mokai in April 1841. They were staying in the Waipapa area, held up by bad weather and short of food:

As I was walking round and round in the Pah I saw something like steam arising from a hill about two miles off I enquired what it was and to my great delight was answered Wai Korebooboo [wai koropupu] (boiling water) I communicated my discovery to my companions we procured a guide necessary on account of the dangerous ground surrounding such places and in spite of the rain went to examine our first boiling spring [Ohineariki]. Arriving within a quarter of a mile of the spot where I had seen the steam a strong smell of Sulphur was perceptible a few minutes more brought us to the spot where we found four large and three smaller Tufas. The largest was about forty feet in diameter and twenty five feet deep forming an irregular funnel the mud in the bottom was in a boiling state bubbling up in jets to the height of three or four feet with great violence clouds of steam arising which encrusted the sides or walls of the funnel with chrystals of pure Alum and small deposits of Sulphur. We could not get down to the bottom owing to the slippery and treacherous nature of the sides but having provided ourselves with a Pannikin we lowered it with a thermometer in it into the mud and brought it up full of the boiling matter the Thermometer at the time it reached us standing at 216° Fahrenheit. The mud forming the banks of the Funnel is a kind of Pipeclay very greasy tough and tenaceous. With one of the smaller Solfataras we were more successful descending into its very bottom and here we collected the Chrystals abovementioned. The Funnels appear to be connected and run nearly north and south they are situated on a ridge of low rounded hills. All the ground immediately surrounding them was warm the temperature increasing very sensibly at the depth of a few inches Steam escaping on thrusting a stick one or two feet into the ground. I found also two Hangis or ovens which had shortly before been used for cooking food without the usual process of heating stones. Having satisfied our curiosity we returned to the Pah drenched with rain to dine off Potatoes. Night very wet (Taylor 1966, p. 305).

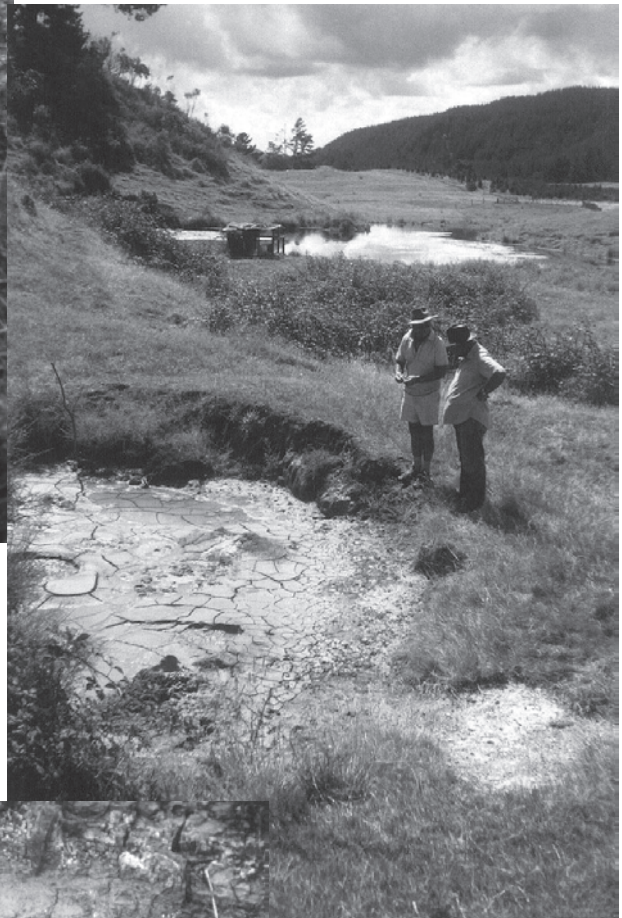
The next day Dieffenbach went along “to visit some more mineral springs”, the Tuhuatahi group. The following is Dieffenbach’s account of both groups:

About three miles from this place I saw masses of white vapours rising in jets, and the natives told us that they were caused by the hot-springs (puhia) [puia at Ohineariki]. The way to them leads through a valley, on the sides of which I again observed the curious

terraced appearance which I have lately mentioned. The springs, at the base of a range of low hills, of a conical shape, and consisting of scoriae. They ranged in a linear direction from north-west to south-east. The larger ones are formed in the shape of a funnel, with a diameter of about twenty-four feet. The water, which was not easily approached, had a milk-white, clayey appearance, and was continually in a state of ebullition, or thrown up in jets: it had a slightly acidulous taste. Steam issued from a number of crevices at the sides of the funnel; the gas was sulphurous, and efflorescences of sulphur and alum lined the rock; there were also some traces of sulphate of iron. The temperature of this milky and muddy mass was above the boiling-point of water, as the mercury rose to 216° Fahr., the highest gradation on the scale of my thermometer. The margin of the funnel was much altered in its chemical composition, and formed a yellowish or reddish clay. The *Leptospermum scoparium* clothes the margin of the springs; and although continually exposed to the rising steam, the verdure is little altered....

I started in the morning of the 10th for some other hot-springs [Tuhuatahi] which I had descried at a distance. They are about a mile to the southward of those above described, but on the opposite slope of the hills, and are arranged in the same direction of the compass, that is, from north-west to south-east. They are situated in a ravine, bounded on the other side by a range of steep and precipitous cliffs. I was alone; but met three natives, who were going back to Taupo, and who offered to be my guides. The first springs I came to were four in number, and close together. They issued through gravel, and were two feet and a half deep, and about two feet in diameter. The thermometer, when its bulb was brought to the bottom of the spring, rose to the boiling-point. The water was nearly clear, and had an agreeable acidulous taste and a slight smell of hydro-sulphurous gas; a thin crust of alum and sulphur was deposited at the brink of the spring. The taste of the water, however, was not quite the same in all the springs. At a little distance were boiling mud-ponds, or stufas; and still farther, steam and sand were thrown up, and constituted a complete volcanic range of miniature hills. The mud and sand had formed regular truncated cones, of which one was about fifteen feet at the base, and ten feet high; inside this cone was a funnel, about two feet in diameter, and filled with clear hot water, in the centre of which the bubbles rose continually. In one large pond there were eight such cones. In seeing these cones one would almost be inclined to think that those regular craters which are found close together in Waitemata and Waimate have been formed in the same way – namely, as immense stufas, which have been elongated, and have subsided in that direction in which the water overflowed. The external appearance of the small and large craters is perfectly alike, although the latter are on an infinitely larger scale.

The most stupendous of these boiling ponds was about a quarter of a mile farther on. Here a steep cliff, about sixty feet high, white, oxidized, corroded, and undermined, presented itself. At its base was a large pond, continually boiling, with a white foam; throwing out jets of fluid eight to ten feet high, with great violence and noise. The temperature of this pond was likewise above the point of boiling water. The pond, round which was deposited a white clay, was apparently very deep; but I could not sound it, being unable to find amongst the light volcanic materials which covered around it a stone of sufficient weight to attach to my line. I returned to the place full of the impressive scene I had just beheld (Dieffenbach 1843, vol. 1, pp. 327-329).



Tuhuatahi ngawha and mud pools at Mokai

The evidence in the minute books of the Native Land Court in the investigation of title for Pouakani Block is also an indication of the close relationship between local Maori and these areas of surface geothermal activity. When Hitiri Te Paerata was stating his claim to Mokai lands in response to Werohia Te Hiko's claims on behalf of Ngati Wairangi, he was emphatic that the hot springs were just as much part of the resources and living space of his people as the forest and cultivations. Werohia Te Hiko considered 3000 acres was enough for Hitiri's people. Hitiri Te Paerata responded:

I have a very strong objection to the 3000 acres. My heart is very pouri [sad, upset] about it...

My objections to the three thousands are, that the land is poor, crops will not grow on it – it does not include any kaingas and bird snaring places – my hot springs and totara bushes are not within it. One of the hot springs Hineariki is near a swamp close to Waipapa, another spring Tuhuatahi is near the boundary of Pouakani and Te Tatua West, and another Parakiri is on the road from Waipapa to Oruanui. I wish these springs to be included in the land awarded to me. The totara bush is in Tuaropaki i.e. the portion of Tuaropaki included in Pouakani (Waikato MB 27/132).

Although Hitiri Te Paerata claimed the hot springs, this was not a personal claim. "All bathe in the hot springs I have named, but I am the owner of them" (Waikato MB 27/134). Werohia Te Hiko responded by repudiating this claim:

I know of the hot springs at Tuhuatahi. Those springs [belong] to N'Wairangi of my side, from the ancestors downwards. Hitiri did not see those springs till he came to live at Waipapa (Waikato MB 27/145).

The matter of ownership of the hot springs was settled by negotiation which is not recorded in the minute books. Te Heuheu reported to the Court that the parties "had come to an arrangement about the two hot springs, Ohineariki and Parakiri – which was that each party should have an equal interest in each of the springs". These two springs were to be set aside as separate reserves "each to contain 10 acres and to be square" (Waikato MB 27/174). The Tuhuatahi springs were included in the Tirohanga portion which was awarded to Ngati Wairangi and not set aside as a separate reserve.

There were various references to kokowai places and the hot springs in other evidence given to the Court during the investigation of the Pouakani Block. Makuini Te Whakarehu stated:

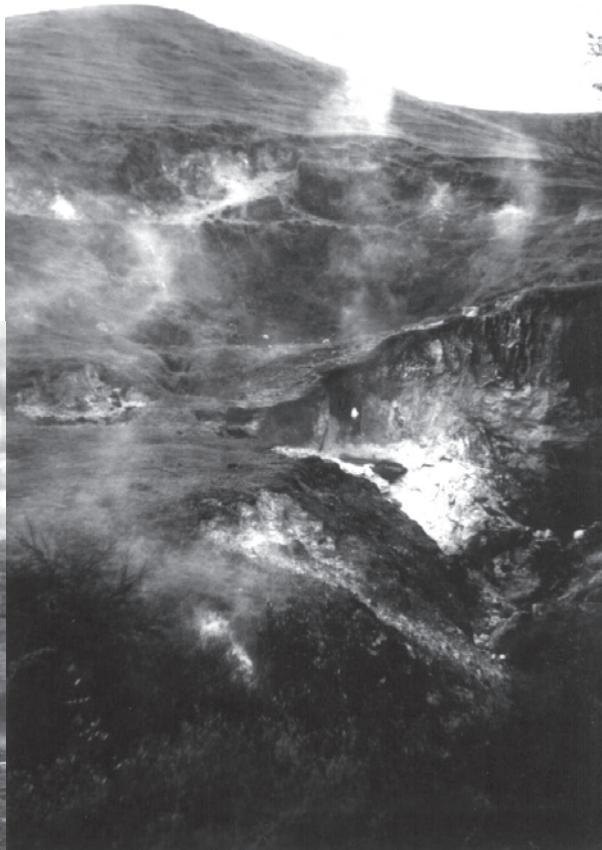
Tuhuatahi is a hot spring, from here red ochre was obtained. There were whares [houses] at this place, the sites are still visible. At Otakau there are hot springs... The principal business carried on here was scraping flax and koura fishing in the Turangaohinewheko stream...

Parakiri was a kainga – hot spring – urupa (Waikato MB 26/78-81).

Te Rangikaripiripia claimed that Tuhuatahi was not the source of kokowai. “Matakatau and Parakauwae are the only places where red ochre is obtainable” (Waikato MB 26/162). The locations of these places are not known but quite likely are specific names for the kokowai collecting places in the Tuhuatahi group of hot springs, as there are several likely spots in the vicinity. Ngaraka Ngamanu stated: “One of the industries in which my parents and elders were engaged in was procuring red ochre” (Waikato MB 27/44). Unfortunately, no specific locations where this occurred were given.

The hot springs at Mokai were (and occasionally still are) certainly used for cooking purposes. In 1841 Ensign Best recorded that in hot ground at Ohineariki there were “two Hangis or ovens which had shortly before been used for cooking food without the usual process of heating stones” (Taylor 1959, p. 305). The evidence of the minute books contains no references to cooking places, and few references to other uses. For example, Hitiri Te Paerata stated “Before Te Kooti came my wife and self took our child to hot springs” but he does not say why. An explanation of this lack of detail is the assumption by local people that hot springs were part of the living areas and did not need specific explanation. The disputes over “ownership” of the hot springs are sufficient to indicate the significance of this resource to local people.

The land containing the hot springs at Ohineariki, Tuhuatahi and Parakiri remained in Maori ownership. In 1903 a sawmill and village were established at Mokai, by the Taupo Totara Timber Company. Much of the Tuaropaki Bush was felled for timber, the land cleared, and transformed into pasture. The Taupo Totara Timber Company removed its operations from Mokai in 1946, although a sawmill was still in operation there until 1958. At Mokai today remnants of the sawmill village remain, Mokai Marae and school, and it remains a Maori community (see Waitangi Tribunal 2000, *Mokai School Report*). During the 1970s a number of geothermal wells were drilled by the Ministry of Works on the farm land administered by the Tuaropaki Trust on behalf of more than 1200 Maori beneficial owners. The trustees embarked on a joint venture to develop the geothermal field and in March 2000 the Mokai geothermal power station was formally opened.



Cooking places at Mokai

6. Ngati Tahu Lands

The eponymous ancestor of Ngati Tahu was Tahumatua, the name given to the wharenui at Te Ohaaki Marae. Ngati Tahu elders recite a whakapapa in which Tahumatua precedes Toroa by two generations in a Mataatua line, and say that he came in his own canoe, Puaharangi. Others have said that Tahu was of Te Arawa, perhaps confusing Tahumatua with Tahuwhakatiki, son of Hei, who quarrelled with his brother Waitaha and left the canoe Te Arawa at Whangaparaoa in the eastern Bay of Plenty (Stafford 1967, pp. 40-41). There are also strong kin links with Ngati Whaoa of Te Arawa descent in the Reporoa area.

Ngati Tahu were probably part of an early migration inland from the eastern Bay of Plenty, displacing the original tangata whenua in the Reporoa district. Their territory once extended down the Waikato River to Atiamuri where their main pa was on Pohaturoa. There was a series of fights with Ngati Raukawa, a section of the Tainui people who were moving up river. The Raukawa chief Rahurahu led a campaign against Ngati Tahu who retreated to the Paeroa range, but with the assistance of other hapu, Ngati Raukawa were repulsed at Maungakakaramaea (Rainbow Mountain). Peace was made and cemented by the marriage of Tamamate, son of Rahurahu, to Whakarawataua of Ngati Tahu.

Ngati Tahu abandoned Pohaturoa and consolidated their territory in the Waikato River valley above Whakaheke rapids, at Orakei Korako, the Reporoa area where the Waiotapu River joins Waikato, the land in the great bend of the Waikato on Tahorakuri Block, upstream to just below Aratiatia, including Rotokawa and part of the Kaingaroa Plains (Figure 13). This “boundary” was on open pumice country, a region which was not occupied permanently but shared and fought over with other hapu to the east. The principal settlements were on the geothermal areas at Orakei Korako and Te Ohaaki, with other kainga along the banks of the Waikato River, or adjacent to the patches of bush at Waikari. The geothermal area at Rotokawa was an integral part of the resources of Ngati Tahu, who migrated there seasonally to get ducks. The riverbank sites were restricted to lower terraces of the Waikato which were more fertile and well watered for cultivations. Much of the region was poor pumice land, covered in scrub and fern, although the patches of bush were also highly valued as a timber resource and for birding. Outside the main geothermal areas, Orakei Korako, Te Ohaaki and Rotokawa, to be described in following pages, there were smaller hot springs near the Waikato River at Ngatamariki and Orangimānuhea, on the track from Wairewarewa kainga to Orakei Korako, and at Orangikereru (Golden Springs) on the Waiotapu River near Reporoa. There were also kokowai places, red ochre, including the place name Te Kokowai downstream from Mihi on the Waikato River, and also nearby at Ohineparahaki and Waipororua. As Hare Matenga stated in the Native Land Court in 1899: “a wai kokowai was an important property to the Maori of those days” (Taupo MB 12/297). Another important kokowai place was at Te Kupenga on Kaingaroa No. 2 Block, opposite Te Toke

(Taupo MB 13/60). Kokowai was often used by inland tribes of the Taupo Volcanic Zone as items for gift exchange, to maintain relationships with their neighbours.

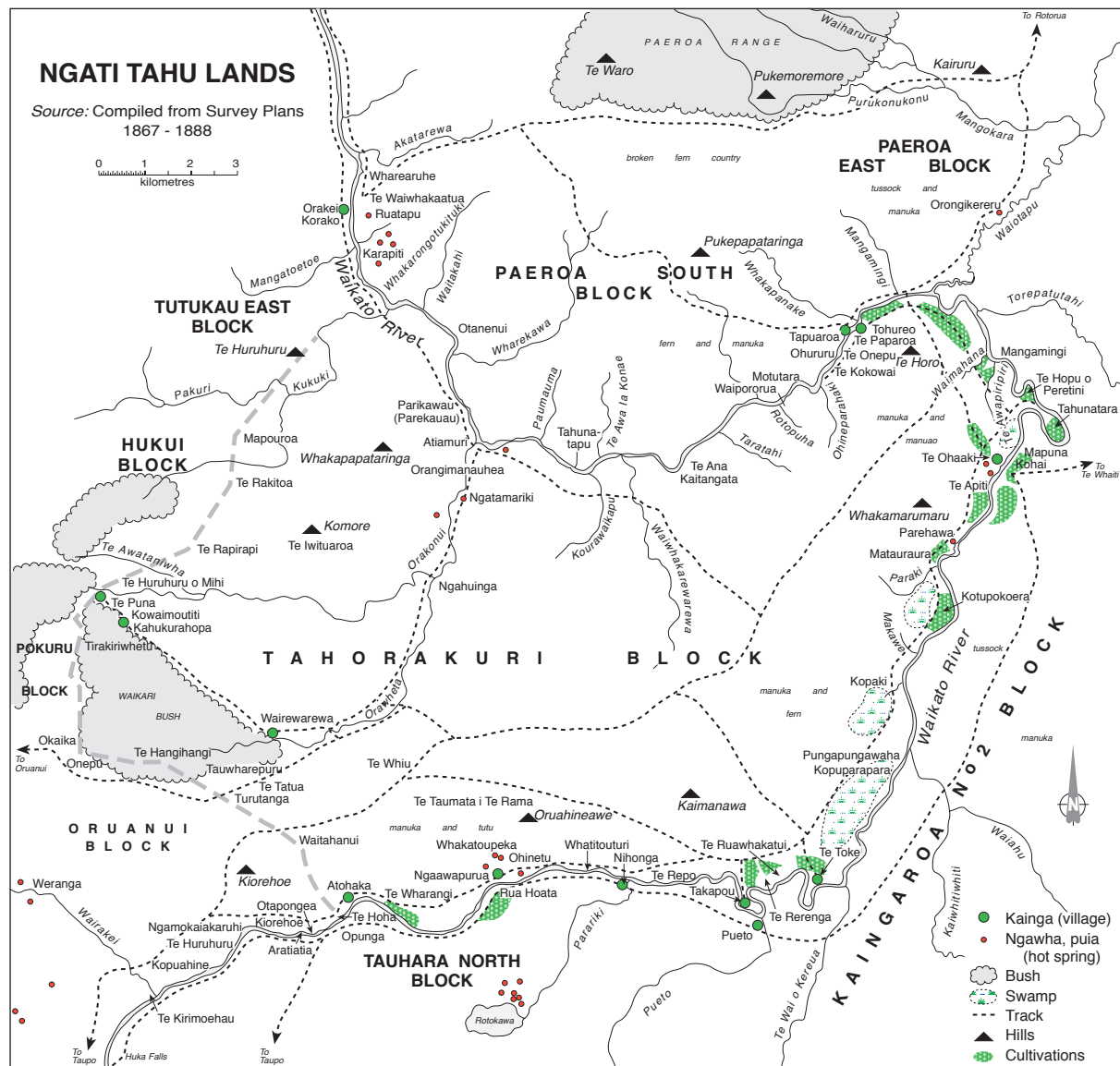
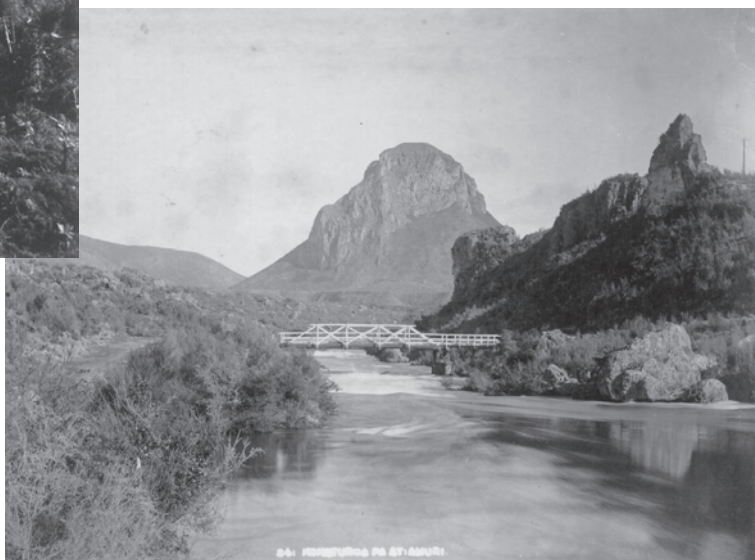


Figure 13. Ngati Tahu Lands.



Ngatamariki Hot Springs



Pohaturoa, Atiamuri c.1880



Ngati Tahu kainga at Wairewarewa, 1853: Drawing by Richard Taylor (Alexander Turnbull Library F50430)

6.1 Orakei Korako

Orakei Korako has been an important settlement site of Ngati Tahu for many generations. The missionary Richard Taylor described it in the early 1850s:

At Orakei Korako, on the Waikato, the boiling springs are almost innumerable; some of them shoot up a volume of water to a considerable height, and are little, if at all, inferior to the Geysers of Iceland. A village is placed in the midst of them; the reason assigned for living in such a singular locality was, that as there is no necessity for fires, all their cooking being done in the hot springs, the women's backs are not broken with carrying fuel, and further, from the warmth of the ground they were enabled to raise their crops several weeks earlier than their neighbours; but as a counterbalance for these advantages, many fatal accidents occur from persons, especially strangers and children, falling into these fearful caldrons [sic], and being boiled (Taylor 1855, pp. 223-224).

The settlement of Orakei Korako consisted of a fortified pa on the left bank above the river and a living area on the flats beside the river amidst the geysers and hot pools. Hochstetter visited Orakei Korako in 1859 and noted that the terraced pa had been newly fortified with pallisades. He described the view from the pa:

In the morning a dense fog lay upon the Waikato; but it soon vanished; the sun shone brightly into the valley – what a sight! In swift course, forming rapids after rapids, the Waikato was plunging through a deep valley between steep-rising mountains; its floods whirling and foaming round two small rocky islands in the middle of the river, were dashing with a loud uproar through the defile of the valley. Along its banks white clouds of steam were ascending from hot cascades falling into the river, and from basins full of boiling water, shut in by a white mass of stone. Yonder a steaming fountain was rising and falling; now there sprung from another place a second fountain; this also ceased in its turn; then two commenced playing simultaneously, one quite low at the riverbank, the other opposite up on a terrace; and thus the play continued with endless changes, as though experiments were being made with grand waterworks, to see whether the fountains were all in perfect order, and whether the waterfalls had a sufficient supply. I began to count the places, where a boiling water basin was visible, or where a cloud of steam indicated the existence of such. I counted 76 points, without however being able to survey the whole region; and among them there were numerous, intermittent, geyser-like fountains with periodical water eruptions. The sketch which I drew on the very spot, can be but a faint illustration of the grandeur and peculiarity of the natural scenery at Orakei Korako (Hochstetter 1867, pp. 395-396).

Lieutenant Bates described bathing in a pool at Orakei Korako in 1860 while their dinner cooked:

Having placed the kit of potatoes and hues [gourds] over a small puhia [puia] to be steamed, we went on to a large plateau or flat of stone about fifty yards long and twenty-five yards wide overlooking the Waikato which flows deep and rapid at one extremity of but below the level of the plateau; and at its other extremity a cloud of steam hung over a puia which

was boiling noisily up in the centre of a large basin of water. The water which in the first basin was at boiling heat, then flowed in little channels along the plateau into other rocky basins. Into one of these which our guide selected we entered.... Our guide told us that formerly the boiling water used to rise in a column... By the time we left the bath we found that our vegetables were cooked... At this Pa all the food is cooked in a similar way and indeed at all the Pas near the puias, the inhabitants are spared the trouble of carrying firewood and making fires....

We again bathed in the hot bath while our breakfast was cooking in the neighbouring puia. The hole in which we bathed was a smooth rocky basin varying in depth from one foot to three; on the sides of the bath were placed lumps of the red and blue ochre-like clay which the natives use as a substitute for soap and it seemed to be a very good one. There were stones placed in the hole to serve as seats and pillows and the natives lie in these baths for hours (Bates 1969-70).

J.E. Tinne (1873), who stopped there on a journey from Rotorua to Taupo, described the hospitality offered to visitors at Orakei Korako:

The whole of that day I did not see a human being or animal of any kind, nothing but a lifeless expanse of fern and flax; so that I felt glad at dusk to see the mighty Waikato again rolling at my feet, while on the summit of a neighbouring hill, across the river, the “pah” of Orakei-Korako promised me food and shelter for the night. A loud “cooe” brought the natives down to the ferry, and I soon found myself seated in a genuine Maori accommodation house, eating bacon and potatoes with a real ivory-handled knife and fork, and drinking tea from a china tea-cup and saucer which the hostess produced with pardonable pride, in lieu of the tin pannikin which I had already laid on the table for my own use... I was favourably impressed with the moderate charges of my Maori landlord; he charged me only “five heringi” (shillings) for my tea, bed and breakfast, everything, though simple, being very clean (Tinne 1873, pp. 22-23).

In 1874 Hon. W. Fox wrote a letter to the Premier on the “Hot Springs District of the North Island” with the aim of encouraging government to “carry out my former suggestion of utilizing the springs for sanitary purposes”. Of Orakei Korako he wrote:

It presents one of the most remarkable groups of hot springs and fumaroles in the lake country or anywhere in the world, and is capable of varied adaptation to sanitary purposes... The principal waiariki, or bath, is a very remarkable one. It lies immediately beneath a Native village which crests the high bank on the top of extensive old fortifications. A strong geyser some 100 yards back from the river has created a siliceous terrace, called by the Natives Pahu Kowhatu [Papa Kohatu], constructed in much the same manner as those in Lake Rotomahana, but of less extent and elevation, and less curiously carved or terraced. At the top of this structure which is at right angles to the river, are three principal puias or ngawhas... [One of these hot springs] the temperature being reduced to bearable heat contains a most perfect natural “Sitz bath”, with elbow rests and a polished seat, let in as it were into the shallower and wide cistern which surrounds it. One peculiarity of this bath is, that in a very few minutes of immersion it covers the body with a most exquisite varnish or coating, quite invisible to the eye, but as smooth as velvet and which gives the bather the

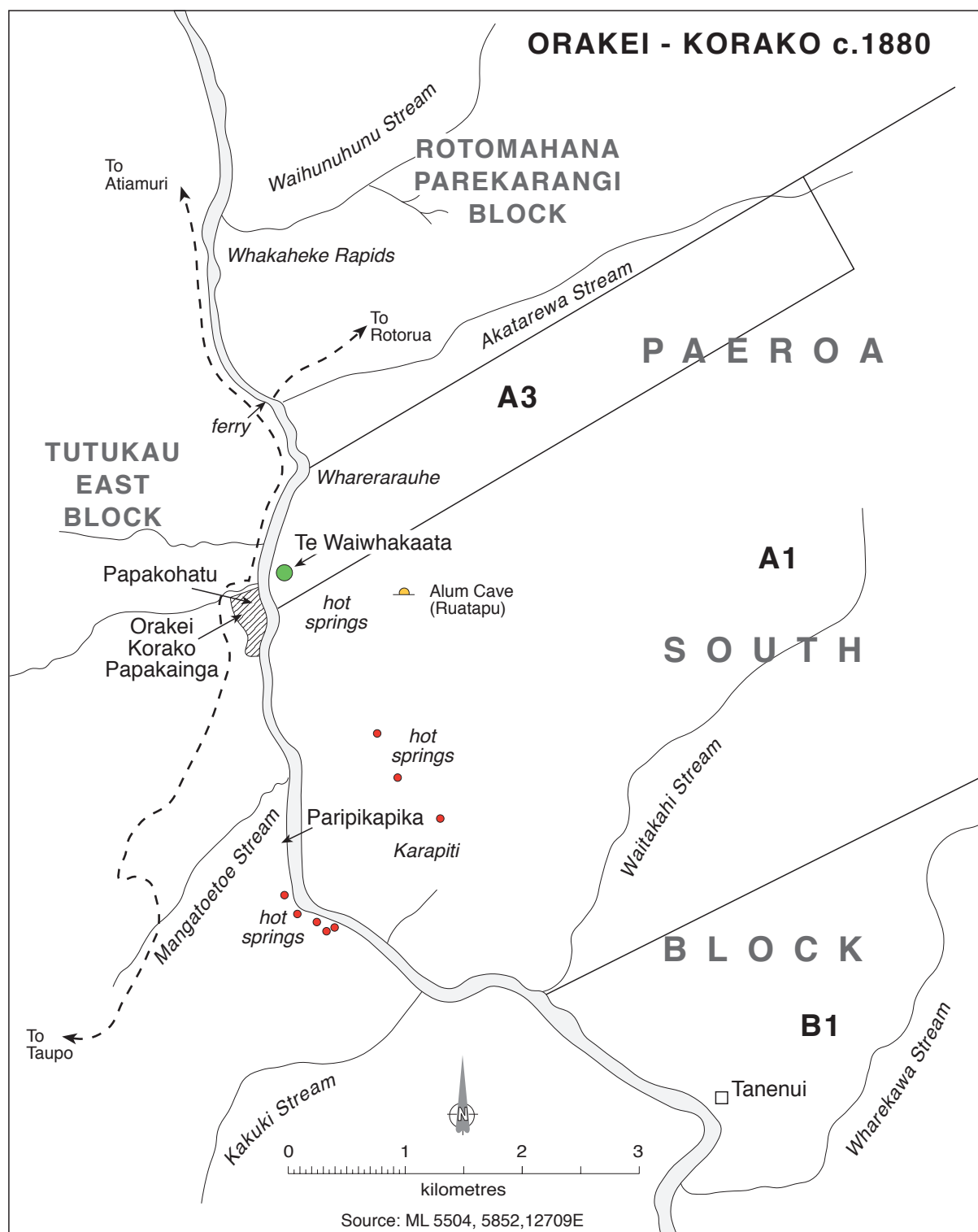
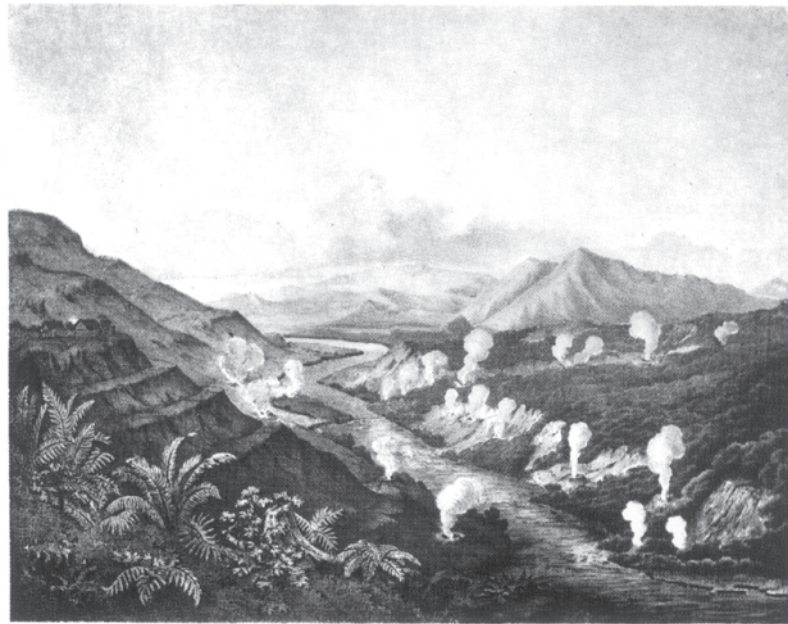


Figure 14. Orakei Korako c.1880



Dr. F. Hochstetter del., Grefe lithogr.

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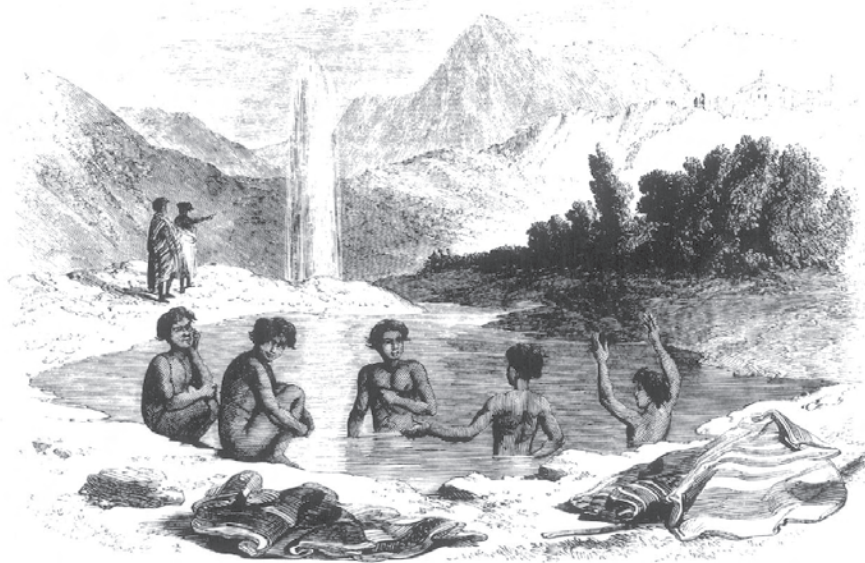
Orakei Korako: Hochstetter's 1859 drawing



Orakei Korako c.1880



Orakei Korako: the geothermal area and Waikato River in 1961, before flooding by Lake Ohakuri.

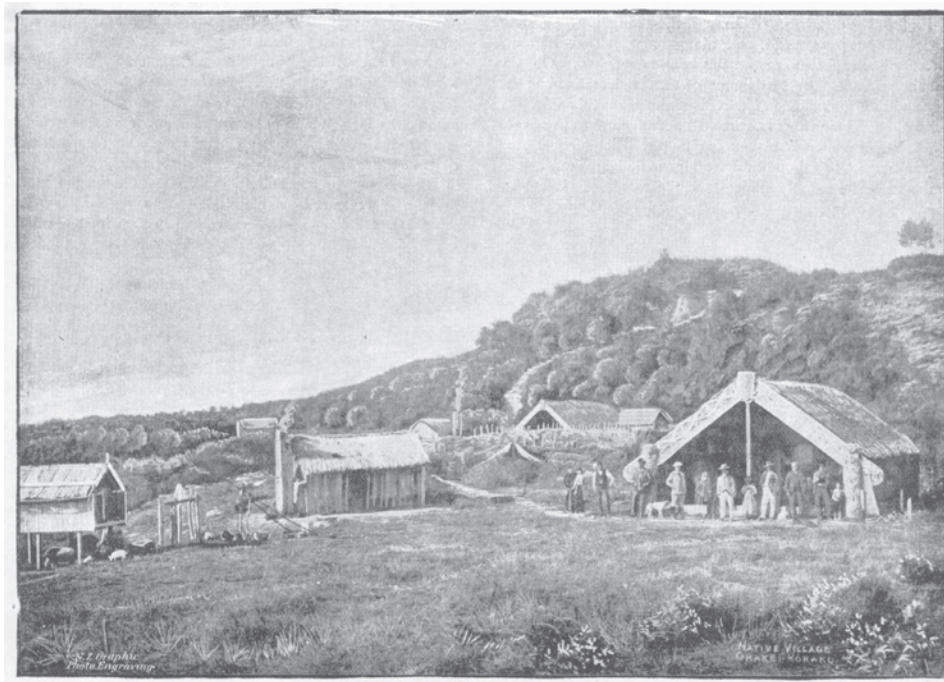


THE GEYSERS OF ORAKOKORAKO.

Taylor 1855



Allen 1894



Papakainga at Orakei Korako (Brett 1896).



Orakei Korako: members of the Wharekawa family outside their home in 1961 (centre) and the same spot in 1986 after flooding by Lake Ohakuri (below)

feeling of being the most “polished” person in the world. This I do not remember to have perceived in any other of the hot springs in which I bathed. It was a sensation of Paradise to sit in this bath after a long and hot day’s travel watching the full moon rising above the crazy ridge of the lofty river banks, and gradually dispersing the dark shadows of the cliff which lay all along the deep eddying river below (AJHR 1874, H-26, p. 3).

By the 1880s, the village and geothermal activity of Orakei Korako were a regular stopping place for travellers between Rotorua and Taupo. The main horse track then was along the Paeroa Range to Te Kopia and a ferry crossing at Orakei Korako:

Here both sides of the stream were thickly studded with countless steam-jets and hot springs, which produced a singular and beautiful effect as they bubbled and hissed above the sparkling course of the clear rolling river, whose banks were fringed with thick, clustering masses of pure white silica. Here, too, every foot of ground told of a fiery subterranean heat. The very rocks around were coloured with the most delicate tints, formed by the chemical deposits of the hot mineral waters, while the great geyser Orakei-Korako, from which the village derived its name, just as we were leaving, threw up a column of boiling water to a height of fifty feet, as if to salute our departure. It burst forth without any previous warning, from a funnel-shaped aperture within a few feet of the margin of the river (Kerry-Nicholls 1884, pp. 111-112).

Chapman’s tourist guide, *The Natural Wonders of New Zealand*, provided an enthusiastic description of geothermal activity at Orakei Korako and the papakainga:

There is a ferry here, and the tourist can camp on either side of the river as he pleases. The scenery in this locality is eminently picturesque, the beautiful river winding its headlong course at the bottom of the valley, enclosed on both sides by high, irregular, partly bush-clothed ranges...

On the further side of the river, a walk of about a mile along the bank, in which numerous holes of boiling mud may be found, brings the traveller on to a small flat plateau of silica encrusted rock about forty yards square around which are numerous boiling pools, while little clusters of Whares are scattered about on the mounds around. Having completed his arrangements about board and lodging, the tourist will be at liberty to look around him, and he will admit a more extraordinary sight has not met his eyes since he left Ohinemutu... but if the tourist wishes to see the largest display of jets [geysers] that is to be seen in the country, or most probably in the world, he must come to Orakei Korako (Chapman 1881, pp. 125-126).

There followed another ten pages of detailed description of the geothermal features and scenery of the Orakei Korako area. Other tourist guides were similarly eloquent, emphasising the relationship between the geothermal features and the Maori village and hospitality offered there:

Orakei Korako is the site of an ancient pa, as well as of thermal phenomena. The pa stood about 200 feet above the river on a terraced mound further up the river than the pools but close to them. There is now a residential pa standing lower down with a very complete wharepuni, or sleeping house, ornamented by the tattooed figure of the renowned Rahurahu.

At Orakei Korako the Waikato flows between two ranges of lofty hills with a somewhat rapid current. On either side its banks are studded with hot springs, geysers and steam-holes, so thickly that from some points there may be counted no fewer than 80 of one kind or another. Of these many alternate in their action in the most curious manner. Some act with great regularity, others are spasmodic, and several appear to be frequently interrupted in their course by eruption of others... Those most attracting attention are at Papa Kohatu, a large flat covered with a crust of grey, siliceous deposit. There, close by the river, is the famous and delicious puia Te Mimiahomaiterangi. This and a neighbouring pool derive supplies from an intermittent geyser which sends its waters when active to a height of twenty feet. The water has properties apparently similar to those of Madame Rachel's Bath at Rotorua. It imparts to the skin a feeling so smooth as to give the impression of a fine enamel. It is probably the most luxurious and enervating bath in the whole district. To remove any lassitude resulting from the use of this bath, and in deference to the tastes of European visitors, the natives have constructed a basin in a stream of cold water running close by, large enough to admit one bather with difficulty. While you are by means of these baths getting rid of the stiffness induced by your ride, your native guide... will cook for you a kit of potatoes in one of the many adjacent steam holes. These you will eat, Maori fashion, without knife fork or plate and if properly cooked a la Maori you will think them finer than any previous potatoes (Gordon 1889, pp. 59-60).

The significance of the papakainga to Ngati Tahu was described by Te Whiwhi in 1886 in his evidence to the Maori Land Court on Tutukau Block:

it is a very large kainga; there are two pahs [sic] at Orakei Korako; there are also houses and cultivations there – dead are buried there – there are two very large houses there, one called Rahurahu, and the other Tahu. There are many smaller houses there; there are a great many dead buried there...

The kaingas and the cultivations began before my father's time and are used by us up -to the present time (Taupo MB 4/75-76).

The houses at Orakei Korako were described by Phillips (1955, pp. 190-196) and are shown in photographs of Orakei Korako taken in the 1880s. The main telegraph line from Rotorua constructed in 1870 passed through Orakei Korako and through the 1870s and 1880s the ferry was operated by Ngati Tahu with a government subsidy. Te Whiwhi went on to explain:

When the Telegraph line was made N'Tahu and N'Rahurahu received the money, and also receive the money for the ferry at present. Nobody contests their right to receive this money. This ferry is where the road joins the River (Taupo MB 4/76).

By the late 1880s Ngati Tahu were well-established in the tourist industry, as indicated in the following extracts from *Willis' Guidebook*:

Waiotapu

The fee for each visitor is 6s. payable to Aporo Apiata, the Manager and Guide. This is considered by some to be a heavy charge, but unlike what is the case at some other "sights"

in possession of Maoris, the natives here have done, and do, something for their money. They have built the Visitors' Whare, and have cleared away scrub, and formed paths and bridges. Aporo himself is an intelligent and obliging fellow, whose manners would be creditable to many a Pakeha who considers himself a gentleman (Allen 1894, p. 78).

Orakei Korako

Here there is a neat Visitors' Whare with a fireplace possessing a chimney... The traveller may sleep at the Visitors' Whare, in which bundles of raupo will be laid down for bedding, and covered with several layers of clean flax mats. He should bring a blanket or rug, a day or two's provisions, including tea, sugar etc. The Maoris will "boil a billy" for him, and provide crockery. With a tin dish of hot "spuds" (which the Maoris will supply), and perhaps another of eels there will be no need of starvation.

The evening may be spent in listening to the legends and songs of the district. The Maori Guides both speak English and will interpret the yarns of Hoani te Whatarangi and the other tattooed old gentlemen of the kainga.

Visitors wishing to bathe are recommended to inquire for a puia called Te Mimi-a-homai-te-rangi...

Behind the Visitors' Whare are two whare-punis with elaborately carved fronts... (ibid, p. 86).

During the 1890s, two events occurred which affected the village at Orakei Korako. One was the eruption during 1892-1893 of the geyser known as Rahurahu, labelled "The Terrific" by Pakeha visitors (Malfroy 1894 and Lloyd 1972). Bullock (1899, p. 58) in describing this eruption commented that its "volume sound and force were so appalling that the Natives fled the place". Bullock also commented on changes in the pa and papakainga since Hochstetter described it in 1859: "Now scrub covers the terraces, the stockade has vanished, and the Natives also, save one family, while a dilapidated runanga house and one or two huts are all that remain of the village". Nevertheless, the remaining Ngati Tahu continued to provide services to visitors. Bullock advised:

An excellent plan is to leave Wairakei late in the afternoon, and spend the night at Orakei Korako where the kindly Natives will provide shelter and tea... Watene the resident Native of today (who is also salaried caretaker of the place), will take you safely over [the Waikato River] and guide you to sights more wonderful than the great scientist [Hochstetter] even dreamed of (ibid, pp. 57-58).

A much more significant event in the life of the village at Orakei Korako was the government decision not to choose the Orakei Korako route for the main road from Rotorua to Taupo. In the 1870s there were three horse tracks in use, one via Atiamuri and Oruanui, the Orakei Korako route, and a third through the Reporoa Basin east of the Waikato River. By 1873 the Atiamuri route had been upgraded to a road, and a coach service from Tauranga to Napier via Rotorua and Taupo inaugurated. The Orakei Korako route remained a horse track. In 1895 a decision was

made to construct a road from Waiotapu, where there was now a tourist hotel, to Taupo with a river crossing either by bridge or ferry at Mihi on the Waikato River, near the Ngati Tahu village at Te Ohaaki. Work proceeded in spite of disputes with land owners over surveys and location of the ferry landing places. In 1899 a bridge was constructed at Mihi (Stafford 1986).

Many Ngati Tahu sought work on the road construction and on Pakeha farms such as Vaile's Broadlands Estate in the Reporoa Basin. The papakainga at Te Ohaaki became in the 1890s the principal settlement of Ngati Tahu. The meeting house Tahu was shifted from Orakei Korako to Te Ohaaki around the turn of the century. The present house at Te Ohaaki Marae, Tahumatua, was built in 1916. The other house at Orakei Korako, Rahurahu, was still standing in 1899:

Somewhere about the turn of the century this house fell into disrepair and was later acquired by the Dominion Museum. In the year 1906, when erecting a superior house in the Maori Court at Christchurch Exhibition, the carvings of this building were used by Augustus Hamilton, together with certain other carvings in the Dominion Museum.

As far as can be ascertained, two maihi, a pare, and two amo are now in the Dominion Museum, but the koruru is missing. There is today no carved house at Orakei Korako (Phillips 1955, pp. 194-195).

The circumstances surrounding Dominion Museum acquisition of the carvings of Rahurahu are not known. However, at Waimahana Marae, which is almost adjacent to Mihi Bridge, the name Rahurahu still stands in the meeting house there.

It has been suggested at various times that Ngati Tahu abandoned Orakei Korako. This is certainly not so, because, until it was flooded by Lake Ohakuri in 1961, there has always been a kaitiaki family, guardians of the papakainga and the geothermal area:

It is believed that there was no mass exodus of the Ngati Tahu from Orakei Korako, but that economic reasons caused their gradual departure between 1890 and 1900. Watene left Orakei Korako about 1903, but [Rameka] Henare lived there until his death in 1951, and his daughter Herapeka Wharekawa and her husband Pairama stayed until Lake Ohakuri was filled (Lloyd 1972, pp. 9-10).

For Ngati Tahu, Orakei Korako has remained an important place, with ancestral burials on both sides of the Waikato River, the papakainga on the west bank, and the geothermal resources which were closely associated with the lives of Ngati Tahu there. It is a source of grievance that Ngati Tahu lands were taken under the Public Works Act and the geothermal area flooded by the Ohakuri hydro-electric power scheme. Part of the old papakainga has now been returned to Ngati Tahu, but subject to an existing Crown lease to a tourist operation on the remaining geothermal area. The most spectacular geysers along the riverbank described by nineteenth century visitors have been irrevocably destroyed by the hydro lake.

6.2 Te Ohaaki

The full name of the marae located in this geothermal area is Te Ohaaki o Ngatoroirangi, the gift or legacy of Ngatoroirangi, who caused the geothermal activity to be brought to the region. Another meaning of the name Te Ohaaki signifies the pact or agreement between the two brothers, Matarae, the elder, and Te Rama. This agreement established that in the area to the north of the Waikato River, Matarae took precedence in speaking on the marae, while south of the river Te Rama was the chief speaker in marae ceremonial. This arrangement still stands in the names of the meeting houses at two other Ngati Tahu marae: Matarae near Reporoa to the north, and Te Rama at Te Toke to the south. These two brothers were the children of Tamamate, son of Rahurahu, and Whakarawataua, whose marriage cemented peace between Ngati Raukawa and Ngati Tahu. The other Ngati Tahu marae in this area is at Waimahana and the meeting house is Rahurahu, the name which was moved from Orakei Korako in the late 1890s.

The title to the Tahorakuri Block, which comprised all the land within the great bend of the Waikato River from Aratiatia to a point about 5 kilometres upstream from Orakei Korako, was first investigated by the Land Court in 1887 (Taupo Minute Book 6/289-355 and 7/30-31). There was some debate about the location of the western boundary of the block but all counter claimants acknowledged the claims of Ngati Tahu. The judgment in this case dismissed the counter claims and awarded the whole block to Ngati Tahu on the basis of their long occupation of this land. In 1899, in a lengthy hearing, an application for partition was heard and the Tahorakuri Block was divided into four sections: Waimahana, Te Ohaaki and Kaimanawa in the east and Waikari in the south-west corner (Taupo Minute Book 12/264-382 and 13/1-223). It was agreed that all owners in each section should have equal shares.

Across the Waikato River, on the east bank the Ngati Tahu lands on the plains stretching from Reporoa through Broadlands were purchased by European land speculators in the 1880s. The several large estates passed through various hands with little development until well into the 1900s. In 1907, E.E. Vaile took up over 22,000 hectares on the east bank opposite Te Ohaaki and spent the next 25 years developing the Broadlands Estate (Vaile 1939). In 1912 the area of Tahunatara (now called Hardcastle Lagoon) was added to the Broadlands Estate following a boundary dispute occasioned by a change in the course of the Waikato River which formed the boundary between the Broadlands Estate and Ngati Tahu lands at Te Ohaaki.

At Waimahana, as its name meaning warm water implies, there was also some geothermal activity. In his evidence in the Native Land Court in 1899 Hare Matenga stated:

[Te Waimahana is] a stream from a ngawha, a waiariki – a warm stream running out from the base of the hill... there was a large tuahu belonging to N. Tahu at the source of that stream it was the tuahu of that land, it was the place where Rangipatoto, Te Rama etc. used to hold their karakia (Taupo MB 12/296).

... the river falls from a height into Waikato that was how it was when I was young but

now it runs in another direction and the old bed is dried up – the stream runs into Waikato higher up (Taupo MB 13/173).

... at the source of the Waimahana where it bubbles up out of the ground, it was a tuahu in Te Rama's time, in Rangipatoto's down to Te Tua down to Wharewhiti and down to Whawhati – it ceased in Whawhati's time, he was the last tohunga who used it. On the establishment of Christianity, this was dropped. Whawhati was living then (Taupo MB 13/176).

The tapu was removed from the Waimahana tuahu, an altar or place for karakia, prayers, according to Hare Matenga, after the arrival of Christianity (Taupo MB 13/188). There is no trace of the warm stream now, although warm seep has been reported. A search by Ministry of Works geothermal engineers in the early 1980s indicated no surface activity, probably because of clearance of the land for farming and related changes to subterranean water pressures as a result of geothermal exploration and testing of wells.

There are few descriptions of the geothermal area at Te Ohaaki in the nineteenth century. Rev. A.N. Brown recorded it in his map of kainga in the 1840s but did not describe it in his journals. Rev. Richard Taylor passed through Te Ohaaki on a journey from Taupo to the Rotorua district in 1845:

We came to a place abounding in hot springs puas whose deposit is so great as to be forming a siliceous stratum, here there is a pa Kowhaki [Ko Ohaaki] but we found no one within it (Journal 21 November 1845).

Te Ohaaki remained off the beaten track for nineteenth century tourists, and indeed few outsiders took any interest in this geothermal area until the Ministry of Works began exploration and leased much of the area in 1971.

The earliest survey plan of Te Ohaaki was dated 1888 and showed a cluster of buildings on the papakainga between the Ohaaki Pool and the Waikato River. By 1905 there was a road connection through the area. Figure 15, Te Ohaaki in 1930, is based on the series of survey plans (ML 5601/1-8, 1888-1905 and ML 15116/1-4, 1930, and Field Book No. 4294, 1931) produced for various Native Land Court proceedings. Vaile's book *Pioneering the Pumice* included comments on Maori settlement in the area:

There is not much evidence of a Maori population resident upon Broadlands, but in several places there still exist ditches and banks indicating where their cultivations had been fenced off from wild pigs. Tahunatara used to yield great crops of potatoes and the large number of potato pits in the banks surrounding "The Island" provide proof of the former fertility of this plot of land. The Maoris say that in the olden times it was dry, but the growth of weeds in the bed of the Waikato and consequent silting up with drift pumice subjected it to floods and rendered it unsafe for crops...

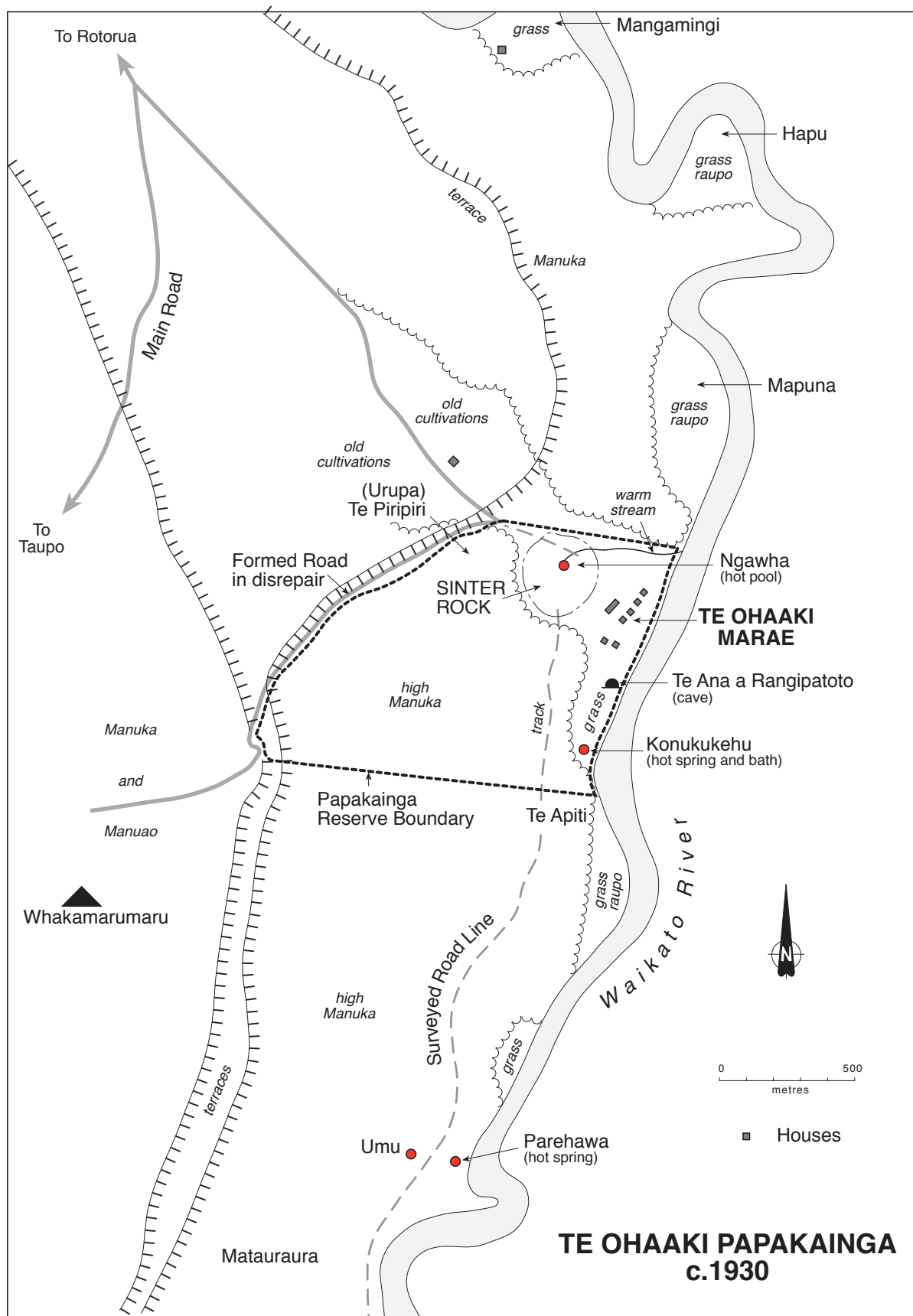


Figure 15. Te Ohaaki Papakainga c.1930

Te Ohaaki: Te Arawa group performing at the re-opening of the marae, 1988.



Te Ohaaki Marae: Wharenui 1978

Te Ohaaki: Ngawha Reserve and sinter area from marae



Te Ohaaki Marae and former geothermal area on Waikato river flooded by Lake Ohakuri.

The head settlement of the Ngatitahu from ancient times was Ohaki, just across the Waikato River from my homestead paddocks. At one time this kainga contained thirty inhabited houses – now [late 1930s] it seldom has more than three or four, sometimes only one. The rest have disappeared or are empty. This does not mean that the numbers of the hapu have diminished. The individual Maori instead of having one large piece of land has little pieces here, there and everywhere within the tribal territory. So he moves about from kainga to kainga as the means of subsistence (wages, timber for sale, fish, rabbits, pigs and other wild animals) offer (Vaile 1939, pp. 51-52).

Ngati Tahu have always been a migratory people, but, as with many nomadic groups, there are certain places to which they return periodically because of a special significance attached to them. Te Ohaaki is one of these places. Hare Matenga, in presenting the claims of Ngati Tahu to the Tahorakuri Block in 1887 stated “We are a travelling people, we have lived continuously on this land” (Taupo MB 6/351). Evidence given to the Native Land Court in 1899 indicated that some Ngati Tahu “were in the habit of going to Auckland to work for Europeans” (Taupo MB 12/279). Vaile (1939, p. 7) noted that when he arrived in 1907 there was “a wandering population of Maoris, from fifty to one hundred all told, living sometimes in one village, sometimes in another”. This is probably an under estimate of the Ngati Tahu population as the Native Land Court in 1899 recorded a list of 250 names of people who were awarded interests in the Tahorakuri Block (Taupo MB 13/216-223).

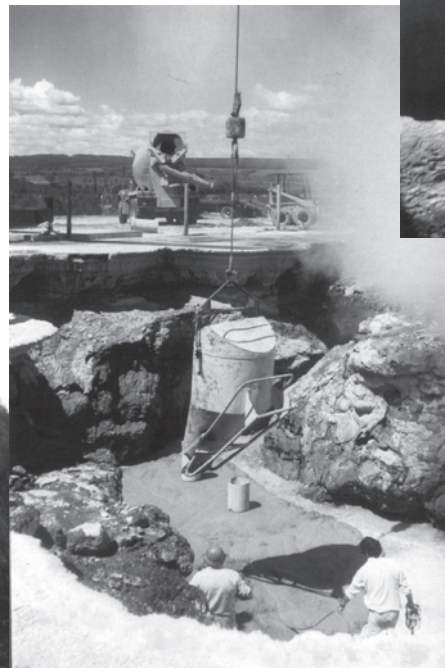
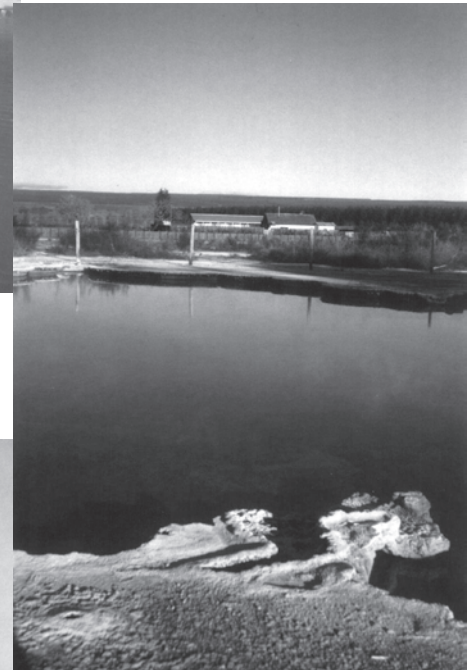
The main settlements of Ngati Tahu in the nineteenth century were at Orakei Korako and Te Ohaaki. In the late 1880s a number of Ngati Tahu who had been living at Tarawera returned to Te Ohaaki, following the eruption of 1886. Te Ohaaki emerged as the chief settlement. A new carved meeting house, Tahumatua, was erected in 1916. There were cultivations both sides of the Waikato River on river flats from south of Te Toke to Waimahana. The main cultivation areas at Te Ohaaki were to the north-west and south of the marae and across the river, and at Te Apiti, Tahunatara and Mangamingi. There were several named fishing grounds and eel weirs in selected places on the river. In the swamps by the river, birds were snared. Near Te Ohaaki there were two raupo grounds, “mahinga putere”, at Mapuna and Te Hapu o Paretini. The raupo roots were dug up and baked in the hot ground for food, putere.

The evidence given to the Native Land Court in 1899 about the geothermal resource at Te Ohaaki was at times confusing and contradictory, although there was no argument that this was an ancestral legacy belonging to Ngati Tahu. Nepia Matenga argued that the mana of the ngawha vested in Te O and was derived from the ancestor Matarae who lived there permanently, hence the name Te Poho o Te O given to one of the hot pools near the large Ohaaki Pool. Te Ohaaki had been permanently occupied from Tahu’s time “because of the ngawhas there” (Taupo MB 13/18) and likewise there had been a smaller kainga at Parehawa (Parehaoa). Nepia Matenga also tried to establish a particular mana in Tukumarū and Takiri, that if they were away, no one could use the ngawha except surreptitiously, but agreed that all Ngati Tahu had rights to bathe there. He was



Ohaaki Pool

Ngawha Reserve and Marae: with (top left) and without (bottom right) water, and grouting in an attempt to preserve it (centre).



Sinter terrace near marae (above)



Cooking holes in sinter (above)



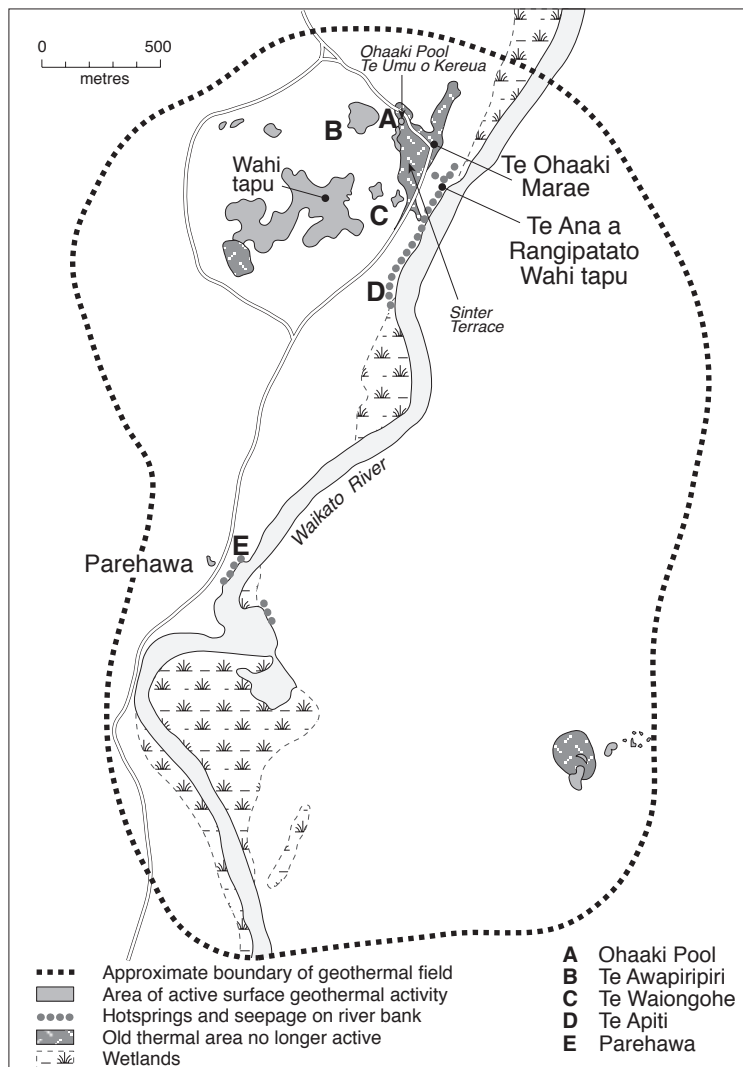


Figure 16. Te Ohaaki Geothermal Area

ML plans as hot spring and bath, rather than an umu or earth oven. He described the ngawha Te Poho o Te O as a place where cloaks were steeped to soften them (Taupo MB 13/23). This was close by the ngawha Te Korokoro o Tawharangi: “the sides of the latter are steep, one side of it is approachable, you can get down by a rope” (Taupo MB 13/29).

Hare Matenga in his evidence denied that the mana of the Ohaaki ngawha vested in Takiri. “That was not so, all N. Tahu had mana to that ngawha, the N. Tahu who lived at Ohaki” (Taupo MB 13/36). He went on to state that Te Poho o Te O was really called Te Poho o Whakarawataua, who “was the mother of Rama and Matarae. I deny the name Te Poho o Te O”. He also questioned Te Korokoro o Tawharangi:

Not that name, that name was created in this Court. I know the ngawha. Te Waipatu Kakahu was its name. It is not at the place Nepia says, it is near the ngawha at Ohaki about three chains or less distant; that he calls Te Poho o Te O is half a mile from Ohaki ngawha. [Te Waipatu Kakahu belonged to] N. Tahu who lived at Ohaki – if a man had a korohunga (a mat with a fancy border) he would beat it there to soften it. No other garment would be so beaten.

questioned by the Court whether the ancestors “looked on a waiariki as such a valuable thing as we look on it?” The reply was: “Oh yes they knew its value, on a cold day to get in and sit in it, and to clean dirt – there were many ngawhas at Ohaaki... Other ngawhas were owned by others” (Taupo MB 13/21).

Nepia Matenga went on to describe three ngawha at Te Waiongohe which belonged to Te Ipu and Te Arai and their descendants. The ngawha called Otutepo belonged to descendants of Hinewai, and was used for cooking. There were also cooking places at Te Awapiripiri. “Above Te Waiongohe it is a steam hole, cooking place. Te Umu o te Whakakehu is on the bank of the Waikato” (Taupo MB 13/22). This is possibly the place labelled Konukukehu on the old

[Te Waiongohe belonged to] N. Tahu who lived at Ohaki – that was where they cooked their food. [It did not belong to Hinewai who] went there to cook her food, so did other women, it didn't belong to Hinewai more than to any one else (Taupo MB 13/36-37).

Hare Matenga also denied that there were cooking places at Te Awapiripiri, unless some had been made recently. Later, when cross-examined Hare reiterated that the ngawha were not owned by anyone in particular. “All the N. Tahu who lived at Ohaki owned the Ngawha there” and denied any personal rights of Te Tua to Otutepu as well. When questioned about rights to steep korohunga in Te Waipatu Kakahu, Hare replied: “Any one who had any; in those days those who had them went there, those who didn't didn't go” (Taupo MB 13/676).

Te Whiwhi Matatahi also gave evidence at the same hearing and, in response to a question by the Court, stated:

There were many ngawhas at Ohaki – some for bathing, some for cooking, some for steeping [mats etc].

Who had mana of these – A. The descendants of Rama and Matarae who lived there permanently (Taupo MB 13/49).

Many of the old names and locations of hot pools and cooking places are forgotten now, although in 1980 kaumatua did identify Te Piripiri (the urupa reserve area) and Te Awapiripiri (the stream below it), Te Ana a Rangipatoto, Te Apiti and Parehawa (Parehaoa). The large pool in the Ngawha Reserve was called Te Umu o Kereua, but several kaumatua said they preferred to use the name Ohaaki Pool, not wishing to publicise the incident that gave rise to the old name. All the riverbank springs were flooded by the hydro lake Ohakuri in 1961. The destruction of much of the surface area by Ministry of Works bulldozers in the process of drilling geothermal wells has made it very difficult to reconstruct the original sites. On Figure 16 the area of surface geothermal activity is shown, derived from an unpublished DSIR plan compiled in the early 1970s. In summary, differentiated use areas can be derived from the evidence in Native Land Court minute books and kaumatua as follows:

- A. Ohaaki Pools: The principal pool is Ohaaki Pool (Te Umu o Kereua) which provided the main source of hot water for bathing in pools dug out of the sinter terrace between this ngawha and the marae. Immediately to the south are two substantial hot pools: Te Poho o Te O, or Te Poho o Whakarawataua, and Te Waipatu Kakahu or Te Korokoro o Tawharangi. The latter was used to steep mats and cloaks to soften them.
- B. Te Awapiripiri: This was an area of mud pools and hot ground, drained by a small stream, which may or may not have been used for cooking. The modern urupa, Te Piripiri, is on much higher ground to the north.
- C. Te Waiongohe: This extensive area contained a number of hot pools, steam vents and hot ground and was the principal cooking area for Te Ohaaki, including a pool called Otutepo.
- D. Te Apiti: On the riverbank, now flooded was an alum hot spring of this name. Nearby

was a “paruparu place”, an area of dark mud used for dyeing flax fibre, according to kaumatua.

- E. Parehawa: This was a small kainga with a bathing pool on the riverbank and cooking holes (umu) away from the river in an area of hot ground.

Two wahi tapu areas in the vicinity of Te Ohaaki Marae were the sulphur cave, Te Ana a Rangipatoto, which was a tuahu, and the cave of the taniwha, Makawe, on the riverbank, which was said to be connected to Ohaaki Pool. Away from the river, in a large area of hot ground containing numerous deep holes, some containing mud or hot water, was an area difficult of access, and dangerous to enter, that was used as an old burial place. The modern burial ground is at Te Piripiri, the gazetted Urupa Reserve.

The geothermal activity in the region is part of the ancestral heritage of Ngati Tahu, the legacy of Ngatoroirangi. At Te Ohaaki the main thermal area is near the marae. The big ngawha, now known as the Ohaaki Pool, is of considerable historic significance to Ngati Tahu. Although the ngawha itself was set aside in 1971 as a Maori Reservation under Section 439 Maori Affairs Act 1953, there was still a good deal of concern over the long term effects of geothermal development on this ngawha. In spite of efforts by the NZ Electricity Corporation in the 1980s to maintain water levels in the ngawha, the changes in subterranean water pressures from the production wells nearby have destroyed the Ohaaki Pool. There were also ochre beds in the thermal area here. Mud and hot water from selected spots in this area had special curative powers, particularly effective in the treatment of sores and other skin complaints. One place of special significance was Te Ana a Rangipatoto, from which a white substance was extracted and mixed with water from the Ohaaki Pool:

The Ohaki natives possess a wonderful great boiling pool with a beautiful lacework pattern around the edges – the most handsome pool in the whole thermal area. They have led the overflow into two useful baths in which the temperatures can be controlled. It is a peculiar fact that a heavy southerly wind causes the water to fall below the outlet and the overflow ceases. When first I saw this I thought something was about to happen, but the Maoris assured me there was nothing unusual about it. They also have a “champagne” pool (that is one which will effervesce when sand is thrown into it), numerous small cooking pools, and a beautiful sulphur cave (Vaile 1939, p. 16).

This cave is probably Te Ana a Rangipatoto. Vaile also remarked on “a valuable hot bank” at Te Ohaaki where “they cook their bread. It saves the trouble of making a fire”(ibid p. 52). The geothermal activity had not only a practical usefulness to the people, but also a traditional historical and cultural significance in this marae community which is difficult to define in Pakeha terms. A similar comment can be made about several other wahi tapu, sacred places, the burial grounds, both the gazetted Urupa Reserve and others on the site, the sacred rock which has been gazetted as a reserve, the cave in the Waikato River near the marae (now flooded by the upper reaches of the hydro lake Ohakuri) which is the abode of Makawe, the protective taniwha of this

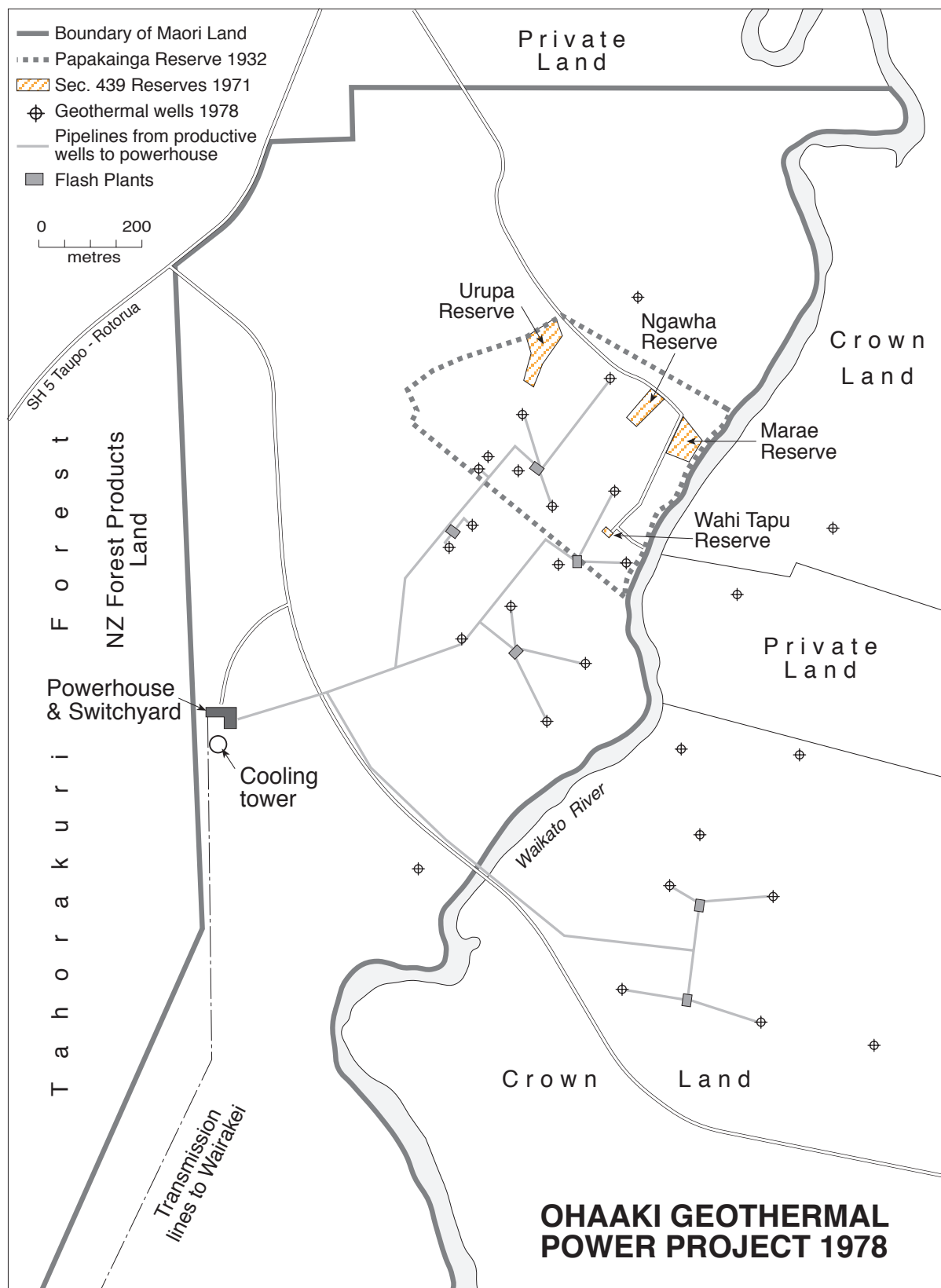


Figure 17. Te Ohaaki Geothermal Power Project 1978

papakainga, and the wahi tapu associated with this taniwha.

It is because of the special associations of this thermal area and the papakainga here that the land around Te Ohaaki was not sold. The year 1930 saw the beginning of a series of partition orders on the Tahorakuri A Block beginning with the division into A1 and A2. Much of the higher pumice lands of Tahorakuri A2, which had never been permanently occupied, were sold to Perpetual Forests Ltd. (later reorganised as N.Z. Forest Products Ltd.) and the area planted in pine trees to form the Tahorakuri Forest. A number of subsequent partitions were made on Tahorakuri A1 during the 1930s and 1940s. In 1932 a papakainga reserve at Te Ohaaki was established by the Native Land Court (Taupo MB 31/268-269 and 292-300). The following is extracted from these minutes:

Tahorakuri A No. 1 Partition Application

Tamatekapua te Raihi: It is suggested that the old papakainga area of 255 acres be cut out and awarded to all.

After a short discussion it was unanimously agreed that this decision be given effect to.

Order made to all owners – 210 in number – for an area of 255 acres to be called A No. 1A (Ohaki Papakainga Reserve).

This reserve was never gazetted as such, but comprises the present Tahorakuri A1 Section 1. The papakainga in the 1930s is shown in Figure 15.

Since the 1930s many Ngati Tahu families drifted away from their home region to seek employment in the cities. This pattern of Maori urbanisation is typical of many Maori communities in rural areas where local employment is limited. A number of families moved to Rotorua, encouraged by housing loans from the Department of Maori Affairs and jobs with higher wages than anything obtainable locally. The last family left Te Ohaaki Marae in 1975. Meanwhile, because owners were scattered, a rate debt accumulated on the land. Taupo County Council applied to the Maori Land Court to have the land vested in the Maori Trustee in the late 1960s. The Ministry of Works and Development wished to extend geothermal exploration and the land was leased by the Maori Trustee for this purpose in 1971. At the same time the reserves on Tahorakuri A1 Section 1 (“Ohaki Papakainga”) – Marae, Ngawha, Urupa, and Sacred Rock – were gazetted as Maori Reservations under Section 439 of the Maori Affairs Act 1953.

In the late 1970s Ngati Tahu were confronted with a proposed geothermal power project on their lands at Te Ohaaki (Figure 17). The marae was in a dilapidated state and they had lost control of their lands through the Maori Trustee leases to Ministry of Works, but at a meeting at the marae called to consider the proposal, they unanimously opposed sale of their lands to the Crown. The land was designated for geothermal power purposes under the Town and Country Planning Act. The Crown proposal to purchase was referred to the Maori Land Court which appointed trustees, the Ngati Tahu Tribal Trust, to take over the Maori Trustee leases, and negotiate on all matters related to the proposed geothermal development, but no power of sale. In due course

a long-term lease to the Crown was negotiated and the Heads of Agreement signed in 1982. The Ohaaki Geothermal Power Project was constructed and commissioned in 1988. As part of the negotiations the trustees retained rights to use lands not needed for the project for other purposes, including forestry, rights to steam and hot water supply to the marae, and substantial funding for the refurbishment of the meeting house, and construction of a new dining hall and ablution block. The power project, originally constructed by Ministry of Works for the Electricity Division of the Ministry of Energy, was transferred to the Electricity Corporation under the State-Owned Enterprises Act, and subsequently transferred to Contact Energy, when ECNZ was broken up in 1999.

6.3 Rotokawa

The lake and surrounding lands of Rotokawa and the Waikato River below Aratiatia comprise the southern end of the tribal lands of Ngati Tahu. Rotokawa (Bitter Lake) was a particularly important resource, both for its geothermal activity and the bird life. In 1868 while giving evidence to the Native Land Court, Hare Reweti Te Kume stated, “I have a settlement now at Rotokawa, not a permanent settlement but a place we use when duck shooting at the Lake” (Taupo MB1/27). In the evidence given in 1869 in the investigation of Tauhara Block, Aperahama Werewere described settlement patterns as “a pa and cultivations at Nihoroa, at the mouth of the Parariki. Otamarauhuru is another cultivation. We also catch birds at Rotokawa” (Taupo MB1/96).

A Pakeha visitor’s account of Rotokawa was provided by Dieffenbach who commented on the “remarkably barren appearance” of the landscape of “wiry grass and manuka” and the “blighted” appearance of the area in the vicinity of surface geothermal activity:

After we had passed the base of the Maunga-Tauhara, we slowly descended towards a lake which was situated on its north-eastern slope, and around which the vegetation appeared much fresher. As the rain continued, and we were already wet to the skin, we halted about a mile from the lake. It is about three miles in circumference. At its northern end are cliffs of a white colour, and thick white vapours which issued there enveloped that end almost continually. We had pitched our tent about a mile from the lake, but, as we had no water near us, we had to send the natives to the lake for it. On their return we found, to our great annoyance, that the water was strongly impregnated with alum; but we were obliged to use it, as the rainwater which was washing down the tent had a smoky taste still more disgusting. This was the most miserable night I ever passed in New Zealand...

On the 30th of May [1840] a warm and sunny morning restored our spirits. We dried our clothes and started through a country which gradually improved. In some places it was a moor land, in others covered with fern and flax. We passed several creeks and after two hours walk arrived suddenly at the shores of the Waikato. The river had hollowed out a deep bed, and its banks were formed of high cliffs. It was apparently very deep. On its left shore were some Maori houses, but nobody was to be found in them. Our call was only answered by a remarkably distinct echo (Dieffenbach 1843, vol. 1, pp. 376-378).

This settlement was probably either Takapou or Te Toke. It was not unusual for settlements to be temporarily abandoned when people moved away to other places to snare birds in the forest, ducks at Rotokawa, or go to fishing and eeling places along the Waikato River. Within the Ngati Tahu tribal territory a semi-nomadic subsistence was practised, with some larger settlements that were normally permanently occupied, such as Orakei Korako and Te Ohaaki. When Dieffenbach visited Rotokawa he found “some ducks which were the only living creatures visible”.

In evidence given to the Native Land Court in 1897, Nepia Matenga described the settlements:

I can give the permanent kaingas – Takapou was a large kainga – it is outside the [Tauhara North] block down the Waikato river, it was one of the big kaingas on the Waikato river. There were many lesser ones along the river – kainga mahi – for taking fish – up to Nihorua, which was one of the big kaingas of this hapu N’Maru [sub tribe of Ngati Tahu]... Potatoes were cultivated at that kainga by these people and kokopu [native trout] taken from the Waikato river. Those were the principal kaingas from which they went to kill ducks at Rotokawa... [reference here to some disputes settled amicably between Te Kape and Takiri]. In Takiri’s time he set up a rahui post for Rotokawa Lake... it was called Parekai – it was between Rotokawa Lake and Otamarauhuru. This post stood on the track leading from Nihorua and other kaingas to Tapuaeharuru [Taupo]... The rahui was to prevent the people going wrongfully to kill the birds on Rotokawa, for strangers going along the track... There was a kainga at Otamarauhuru but it was not a permanent kainga like Nihorua and Takapou, it was used while cultivating... the people who lived permanently at Nihorua, they have dead buried just outside this block [Tauhara North] on both sides of the Waikato. They have dead at Te Kupenga about half a mile or less from the block... There is another burial place at Nihorua, at Parariki (Taupo MB10/104).

A kainga consisted of a cluster of houses described as *whare manuka*. The sites are impossible to trace on the ground as they were not dug out as a *wharepuni* built of timber would be. Hemopo Hikarahui explained:

In a *whare manuka*, the floor is not sunk therefore the sites are not traceable – the framework was *manuka* and the thatching *raupo*; if the framework had been *totara*, the floor would have been sunk and the sites therefore traceable (Taupo MB10/76).

The term *wharau* was used to describe temporary *manuka* and thatch structures that were constructed for birding expeditions. *Wharau* were described by Pitiroi Mohi as “small houses, open at one side, not at the end as in a *wharepuni*” (Taupo MB10/185).

The caves at Rua Hoata were regularly used as temporary shelter and described by Hera Whata Peka as a “kainga, a cave used as a sleeping place... situated at the tail of the rapid called Kakiherea” (Taupo MB10/212). This portion of the river was called *Ngaawapurua* and, as the name implies, was the head of navigation where the river divides and breaks into rapids. This name was also given to the kainga on the north bank of the river.

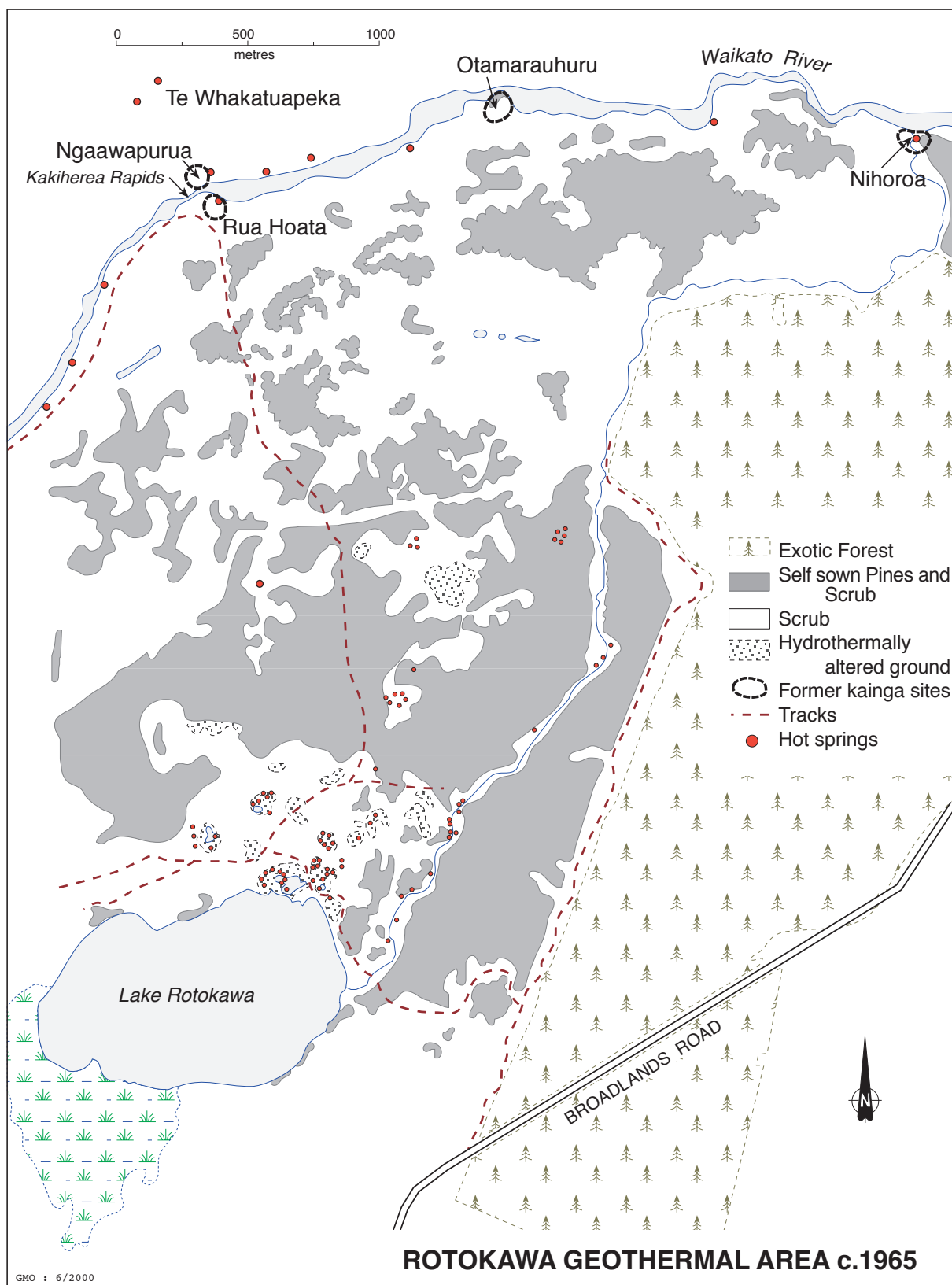


Figure 18. Rotokawa Geothermal Area.

The Lake and the Birds

Rotokawa was well known for its bird life, particularly parera, ducks. Hera Whata Peka described expeditions to Rotokawa. Her first trip was from Te Ohaaki with seven of her relations:

We went there to burn kokowai [red ochre] and take ducks at Rotokawa. We stayed at Takapou and from there we went to Te Ripo, a kainga where kokowai was prepared. We came by canoe from Ohake [Ohaaki]. When we got to Te Ripo, Parekawa and Perekawa stayed burning kokowai. The kokowai was got at Te Kupenga. We left them there and came on to Ngaawapurua, then the canoe was dragged overland to Rotokawa and in the morning the lake was worked [to catch ducks], it was always worked in the early morning. Having finished working the lake we went to Ngaawapurua to make huahua [preserved birds in calabashes]. Whilst there we lived on putere (raupo root). Te Pou was the putere ground there. Te Whakatuapeka was the ngawha (hot spring) in which the putere was cooked – it is close to Ngaawapurua – from there we came to Takapou and on to Ohake, and from there after some time to Hapua in the Tutukau Block – it is a large kainga. My grandfather Parekawa died there, and we came from there to Rotokawa to get birds for the funeral feast. We came by Ohake and Takapou and Ngaawapurua – and from Ngaawapurua was the road by which the canoes were dragged overland to Rotokawa...

There was another getting of birds – my mother's sister Whata came up from Kapiti to Ohake – it was her first visit. We came up to Takapou and stopped there... went to get birds at the lake as food for us at Takapou (Taupo MB10/227-228).

Preserved birds (huahua) were presented as gifts to other tribes and also offered to guests as food on special occasions such as tangihanga (funeral rituals) or other hui (gatherings). Lieutenant Meade visited the area in 1864, and described a birding expedition:

According to the account of the natives, the ducks repair at certain seasons to the neighbourhood of Roto-Kawa (bitter lake) (whose waters are highly impregnated with sulphur and other mineral substances), not far from here [Taupo], where they moult their wing feathers, and are thus for the time unable to fly. At this lake are held periodical grand battues, the ducks being hunted with dogs only and sticks (Meade 1871, p. 81).

Maori accounts indicate that snares were also set although later in the nineteenth century guns were used to shoot ducks. Meade joined a group on “a grand duck-hunt” at Rotokawa:

Besides the natives of our settlement [Tapuacharuru], we were accompanied by Rewiti [Hare Reweti Te Kume], the chief whom we met at Puna [Te Puna, village on the northern edge of Waikari Bush], and in whose “mana”, or right of preserve, the lake and its ducks are held.

The lake is very strictly preserved, the ducks being allowed to be killed twice or thrice a year, at stated times; and a very heavy bag is expected for tomorrow, when the battue is to come off. This evening, for fear of disturbing the ducks, we bivouac about half a mile from the lake in the midst of a tea-tree scrub... Rewiti very indignant at finding fresh tracks – where tracks should not be – leading to the lake...

On approaching the preserve early this morning it became clear that poachers had forestalled us, and spoilt the battue. In one clearing in the bush, where they had plucked the stolen birds, not an inch of the ground could be seen, for though the feathers had mostly blown away, the down had become matted with the grass, and covered a large extent of ground to the depth of many inches. Imprecations loud and deep were heard on all sides against a neighbouring tribe of Kingites accused of being the authors of the mischief.

This is the lake to which the ducks resort annually and molt their wing feathers. No guns are allowed to be used within sound of the lake, to avoid unnecessarily disturbing more than what are killed.

One party in a canoe drove ashore all the ducks whose loss of feathers prevented them taking wing, and they formed about five-sixths of the flock. They landed, however, only to find half-a-dozen men, armed with sticks, and dogs in leash, ready to hunt them down among the bushes.

But the birds had been scared from their usual haunt by the raid of the freebooters, and in the course of half an hour, only ten having been bagged, the battue was discontinued for fear of permanently depopulating the lake. A miserable failure, for the poachers must evidently have killed several hundreds, Rewiti vowing every sort of vengeance against the said poachers – when he can catch them.

The ducks were soon cooked in a “hangi” or native oven, and still more speedily devoured for breakfast by the whole company... (Meade 1871, pp. 98-100).

Harris (1878) in his *Guidebook* also referred to the bird life at Rotokawa and annual birding expeditions:

The lake is noted as a rare breeding place of wild ducks, and swarms of those birds haunt it. It is strictly preserved by the natives, no European being permitted to shoot there except by express permission of the chief [Hare Te Reweti Te Kume].

The taking of birds was strictly controlled in order to protect the resource. A rahui post was set up on the track from Otamarauhuru to Rotokawa to indicate when the season was closed. Hemopo Hikarahui explained when parties of up to a dozen people, including women and young people, would go to the lake: “If the birds were plenty, three times, if not twice; the first would be just after Christmas, the next at the end of January, and the third at the beginning of March” (Taupo MB10/72).

There were formal rituals involved before killing of birds. Poihipi Te Kume described a place named Te Tuahu on the lakeshore near where the Parariki Stream flows from the lake, as “the place where people used to go and get the moulted feathers which showed whether the birds were fit to kill... It was a tuahu or sacred place” (Taupo MB10/43-44). Hemopo Hikarahui described the significance of this place in more detail:

I have heard from the old people the practice in connexion with the “Tuahu” there – another name by which places of this kind are known is a “Mauri” [imbued with a life force, spiritual quality]. People would not go and kill the birds on this place till they had gone to inspect the “tuahu”. There they would find the features which showed the birds were moulting and not till they returned from seeing that sign would they give instructions that the birds were to be killed (Taupo MB10/66).

The people entrusted with this role were those individual chiefs who held the mana over the bird lake. They were the kaitiaki, the guardians of the lake and its resources. The first birds killed were also taken to Te Tuahu and a karakia, a ritual chant, performed.

A number of place names for sections of the lake were referred to in the minute book in 1897, but which cannot be located precisely now. Some of the names are descriptive, such as Whangaraupo, and Whangamatau, a bay or stretch of water with raupo and sedges (*Uncinia* sp.) respectively. Te Koko o Hapenui is a bay described as “a bend in the lake into which the birds were driven from lake and caught” (Taupo MB10/43). These three places, with another called Korakonui, were on the “swamp side” south and west of the lake. By the 1890s this was where most birds were found but in past times the birds were all round the lake; “it is only recently since the cattle have broken down the cover that they gather at the swamp” (Taupo MB10/220). Birds were snared wherever there was cover. Other times canoes were used to drive birds onto a shore where people could then grab them. Dogs were also used to flush them from the undergrowth. Another place on the north side was Whakapaiairiki and next to it Ngoingoi, a sandbank, so named “because the ducks crawl about there”. Te Puau o Parariki was the area where the Parariki Stream drained Rotokawa.

The Geothermal Resources

The main area of surface geothermal activity is on the northern shore of the lake, but there are also hot springs to be found along the Waikato River. The lake shore area has been massively disturbed by sulphur mining activities. In 1960 DSIR mapped over 150 hot springs and pools in this area (Figure 18). On the basis of descriptions written by nineteenth century visitors, there was considerable variety in the geothermal features at Rotokawa. Mongillo and Clelland (1984, p. 121) described the “natural features” of Rotokawa as “sulphur deposits, hydrothermal eruption craters (at least 25), acid lake (Lake Rotokawa), surface alteration, sinter deposits, warm and steaming ground, mud pools, hot and warm springs”. Lieutenant Meade described the geothermal activity at Rotokawa in 1864:

The lake we have just left is ugly enough in point of scenery, its shores being flat, and either barren or covered with stunted manuka, its waters of an opaque dull-green hue, and sour to the taste (whence its name, Roto-“Kawa”); but its other natural peculiarities repay the traveller for the want of landscape beauties, for, besides the eccentric habits of its

myriads of winged inhabitants, the shores offer an interesting study, being covered in most places with either sulphur or crystallized alum, the latter encrusting great quantities of the driftwood and pebbles, while most of the phenomena to be found in the country, resulting from the effect of subterranean heat on minerals and on water, find some representation on the shores of the lake (Meade 1871, p. 101).

A Ngati Tahu view was provided by Pitiroi Mohi who described the area in 1917 in giving his reasons for opposing the sale of the area to the Crown:

I want to explain about this land. I worked at Te Tarata (Rotorua) at the sulphur. This land at Tauhara is far before the land at Te Tarata. This land is rich with sulphur. There is 100 acres that is all sulphur. The ngawha (hot springs) are above those at Wairakei for sightseeing. The lake is also beautiful, like unto greenstone (quoted in Chief Judge's Minute Book 1981/119).

Geothermal areas were the important living places for Ngati Tahu. Unlike Orakei Korako and Te Ohaaki where the papakainga were in areas of surface geothermal activity, there was no kainga at Rotokawa itself. One reason was the lack of potable water which made the Waikato River a more attractive location. The other was that the birds were such an important resource. Hemopo Hikarahui explained:

No one would build a kainga near the lake lest they should frighten the ducks. The practice is that a fire must not be lighted in the neighbourhood of that lake or the ducks would leave – that was rule always and still exists that no fires should be lit near the lake until the birds were killed. N'Tuwharetoa know this rule that is why no kaingas are built near the lake (Taupo MB10/66).

Although fires were not lit, hot ground was certainly used for hangi, cooking ovens. Pitiroi Mohi explained, "There are hangi on the banks of Rotokawa used when the birds from the lake were cooked" (Taupo MB10/178). He noted that the birds cooked in these hangi were for consumption by the birding parties who did not stay longer than necessary, for fear of being surprised by war parties. Birds intended for preservation (huahua) were taken back to the kainga for processing.

The cooking place for the kainga at Ngaawapurua was the hot springs called Whakatuapeka which were used for cooking putere, raupo root. However, this cooking place was "not strong enough" to use "at all times – putere would have to be cooked from morning to next day". A ngawha (hot spring) called Turuturutanga, located somewhere along the route between the lake and Otamarauhuru, was also used for cooking putere (Taupo MB10/244). The putere was collected from a swamp on the left bank of the Waikato river just below the rapids at Ngaawapurua. Downstream there were several other small swampy bends in the Waikato where raupo grew well. Pohipi Te Kume explained:

Better, more succulent roots were obtained from some raupo than others... raupo growing

on stones and on hard ground would not have an edible root but raupo growing on swamps would (Taupo MB10/203).

Fern root was also dug and cooked in the area. The principal fern grounds were on Oruahineawe, on the north bank of the Waikato River, at Otamarauhuru, and along the banks of the Parariki Stream. The Waikato River was a source of fish – kokopu (native trout), inanga (whitebait) and koura (freshwater crayfish). Kokopu were a particular speciality of the section of river below Ngaawapurua. Poihipi Te Kume also referred to kerewai, green beetles found in manuka scrub. Foods were conveniently cooked in hangi, in holes dug in hot ground and covered with mats and earth.

Ngati Tahu distinguished two kinds of hot springs – ngawha and waiariki. Poihipi Te Kume explained in respect of Rotokawa:

all the land is ngawha – a ngawha is water that is too hot to bathe in – a waiariki is water hot enough to allow it to be used for bathing – ngawha is a natural formation. Waiariki are generally formed baths – artificially... On the hillside among the manuka on the Parariki Stream there are ngawha – no waiariki (Taupo MB10/203).

Waiariki were highly valued among Ngati Tahu. If there was a suitable hot spring near a kainga, a pool would be made for people to bathe in. There are several references to a waiariki associated with the kainga at Nihoroa, on the Parariki Stream, just above the junction with the Waikato River. There are several hot springs on the south bank and bed of the Waikato River in this vicinity but there is no visible evidence of any bathing pool now. There are also references to other waiariki formed on the riverbank in the vicinity of Rua Hoata and Otamarauhuru. Again there are several hot springs on the river bank which could have been used. Erosion of the riverbank, especially about Rua Hoata, will have destroyed such pools.

Some hot springs well up from the bed of the Waikato and can be detected by bubbles of gas and moving pumice fragments. These are associated with rua taniwha, homes of taniwha, protective beings, who can be found in most rivers. The taniwha of Te Ohaaki, for example, has his home in a cave, now flooded by Lake Ohakuri, beside the marae. He travels to the ngawha, Ohaaki Pool, and on occasion joins other taniwha of Taupo Moana, the Tuwharetoa relatives of Ngati Tahu. Several rua taniwha are associated with the rhyolite outcrop and Waikato river bed, upstream of Nihoroa. One was associated with an ancestor who was drowned there and became a taniwha. Hemopo Hikarahui stated:

I have not seen him but I saw the original place where he is said to occupy now, the water is constantly bubbling up. The old people say it did not bubble up previously – everybody knows he is there (Taupo MB10/67).

Another spring was described by Whata Hera Peka: “there is a rua near the river where the water is bubbling up and falls into the river. We used to go there to cut flax” (Taupo MB10/87).

Kokowai places were included as *tohu*, evidence of occupation, in the investigation of titles by the Native Land Court. Most such places were given specific names although it is almost impossible to locate these now. For example Nihoroa was a name for a kokowai place as well as a *kainga* (Taupo MB10/242). The name for another kokowai place at Rotokawa was Haututu (Taupo MB10/245). The rock drawings and carvings in the cave, Rua Hoata, are unique in that they were coloured with kokowai. Rua Hoata was destroyed when a large section of the riverbank collapsed in 1987 (Stokes 1994, pp. 112-113). Kokowai places came under the *mana* of particular chiefs, and rights to them and the role of guardian, *kaitiaki*, was handed down over the generations. For example, Poihipi Te Kume stated, “Whitianga owned all the kokowai places and left them to Rangiwheke” (Taupo MB10/87). The rights of extraction of kokowai were bound up with the *mana* of chiefs who controlled who was permitted access to this resource. Kokowai was also used, on occasion, as a ceremonial gift to other tribes who did not have such resources.

Sulphur was separately identified and valued. Among Ngati Tahu it was called *kupapa*; sometimes the term *kupapapapa* was used. The medicinal and therapeutic properties of certain hot pool and muds were well known and can be ascribed to the sulphur contained in them. This was particularly so in the treatment of skin infections. Particular pools acquired other qualities as *wahi tapu* because of their therapeutic value. For example on the north shore of Rotokawa was a ritual bathing place for warriors after battle. This place was associated with a particular incident in tribal history. There is embodied in this association both the medicinal, possibly in the treatment of infected wounds, as well as the ritual cleansing of a warrior before he returns to normal life.

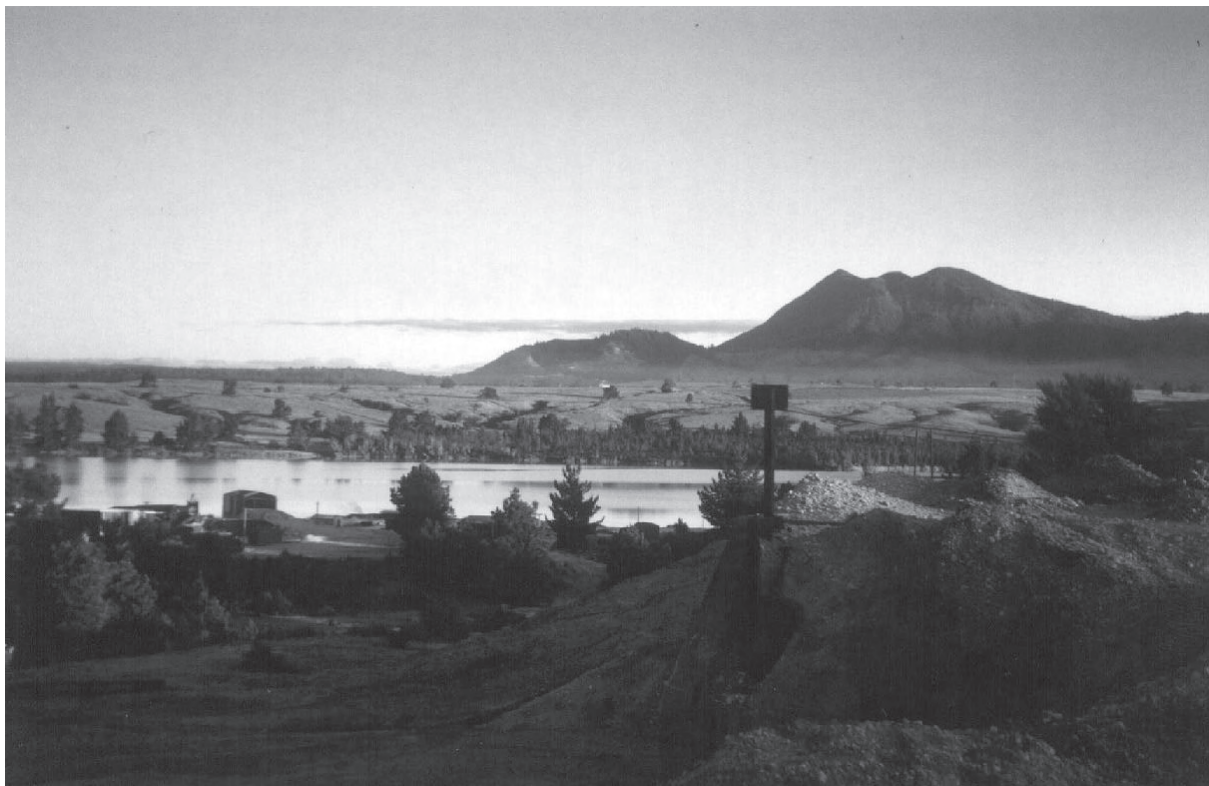
Some Maori medical practices have continued, alongside European medicine. In 1979 an elderly woman of Ngati Tahu, Kurupai Whata, in evidence given to the Maori Land Court, described expeditions to Rotokawa:

But the sulphur was the main thing there. It was thick in this area. We used to dig out big blocks which we carried off in sacks and pikau bags. It was because of the sulphur that it was called Lake Rotokawa a Sour Lake. We burnt the sulphur and bathed legs and skin in the smoke. It was used for the treatment of skin in this way. The smoke was also inhaled for the cure of asthma. It was a Maori form of medicine. In just the same way we used *tutu* and *koromiko*. The *tutu* was for broken bones. The *koromiko* in the little leaves at the top – was for dysentery and stomach ache. The *tutu* was boiled and used for bathing (Taupo MB60/97).

Within living memory, regular use of certain muds and water from geothermal areas for treatment of skin complaints has been practised among Ngati Tahu. The use of hot pools for relief of rheumatic and arthritic conditions, as well as relaxation and relief for muscular disorders continues.

Most of the land around Rotokawa was acquired by the Crown and transformed into a land

development scheme (including the two remaining Maori blocks, Tauhara North 2 and 3 B) by the Department of Lands and Survey in the 1960s. Much of the surface geothermal area around the northern end of the lake has been severely modified by sulphur mining activities (see Stokes 1994). Several geothermal wells were drilled by the Ministry of Works in the 1960s and more in the 1980s proving a considerable potential for Rotokawa geothermal field. The trustees of Tauhara North 2 Block have joined in a joint venture to construct a power station which was formally opened in 1998.



Rotokawa and Tauhara Mountain, sulphur mining area in foreground.

7. Taupo District

A large geothermal field extends from Wairakei, north of the town of Taupo towards Tauhara Mountain. It is separate from the smaller Rotokawa geothermal field to the north-east (Figure 19). Maori settlement in this area was closely related to the Waikato River and the shores of Lake Taupo. Kainga were associated with geothermal surface activity at Patuiwi, Otumaheke, in Taupo township where the Spa Hotel was later built, and at Waipahihi on the shore of Lake Taupo. This pattern of settlement is illustrated in the distribution of place names shown in Figure 20, compiled from survey plans 1867-1888 (see note in bibliography for list of ML plans).

Taupo Township had its genesis in the establishment of an Armed Constabulary station in 1869. During the early 1870s the road from Taupo to Napier was constructed by Maori labour. The township site and parts of Tauhara North and Tauhara Middle Blocks were acquired by the Crown in the 1870s. Apart from an occasional Pakeha visitor in the 1870s there was little to encourage Pakeha settlers in a region still perceived as a remote interior of the North Island. In 1881 Robert Graham, who also owned tourist hotels at Waiwera hot springs and Rotorua, acquired Wairakei Block and built a tourist hotel there. Other hotels were built: the Spa in Taupo, and The Terraces at Onekenekene, near Waipahihi. Taupo began to develop as a small tourist centre based on the local geothermal resources, but it never attained the status of a spa like Rotorua.



Taupo Township c.1880 and Tauhara Mountain

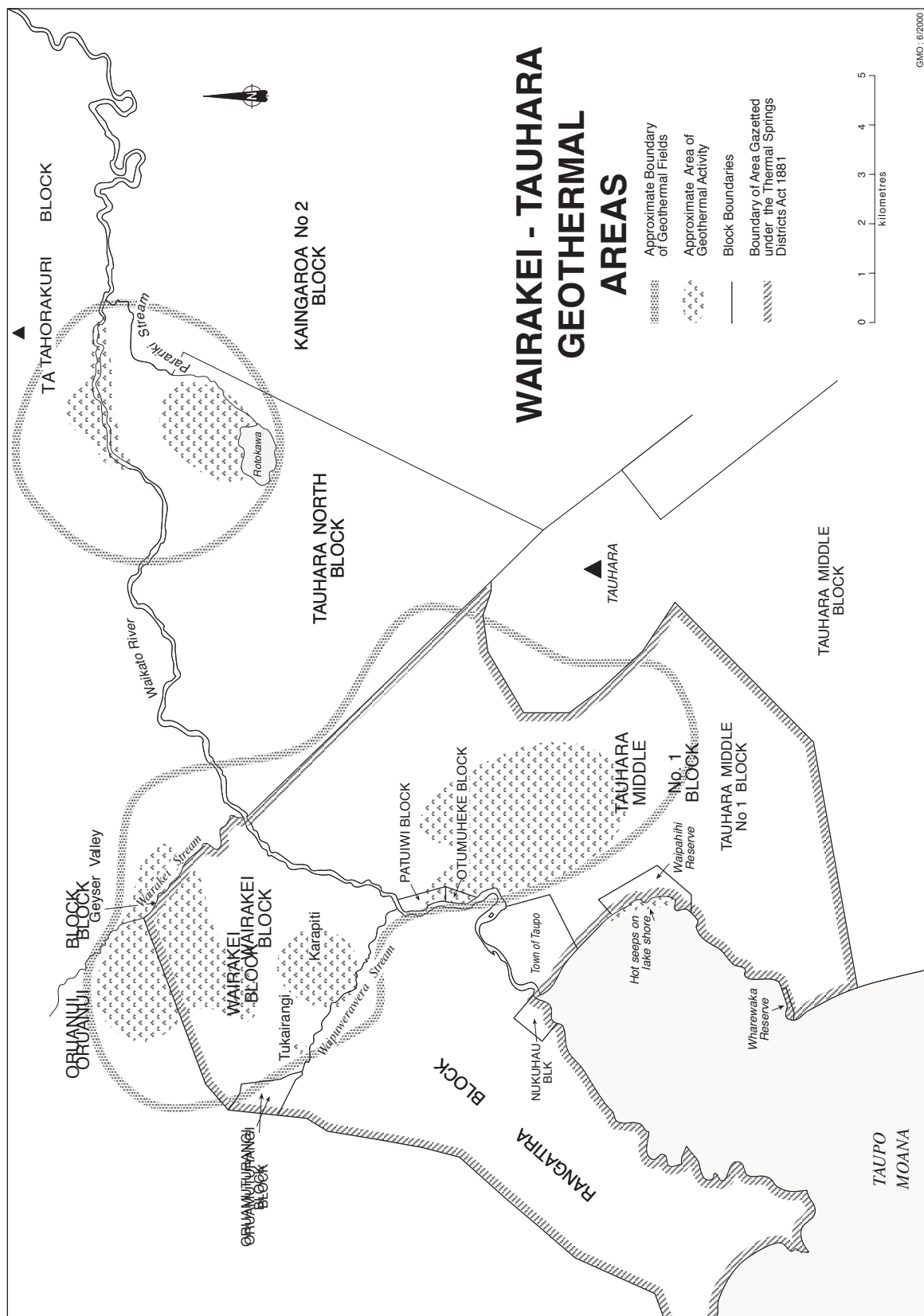
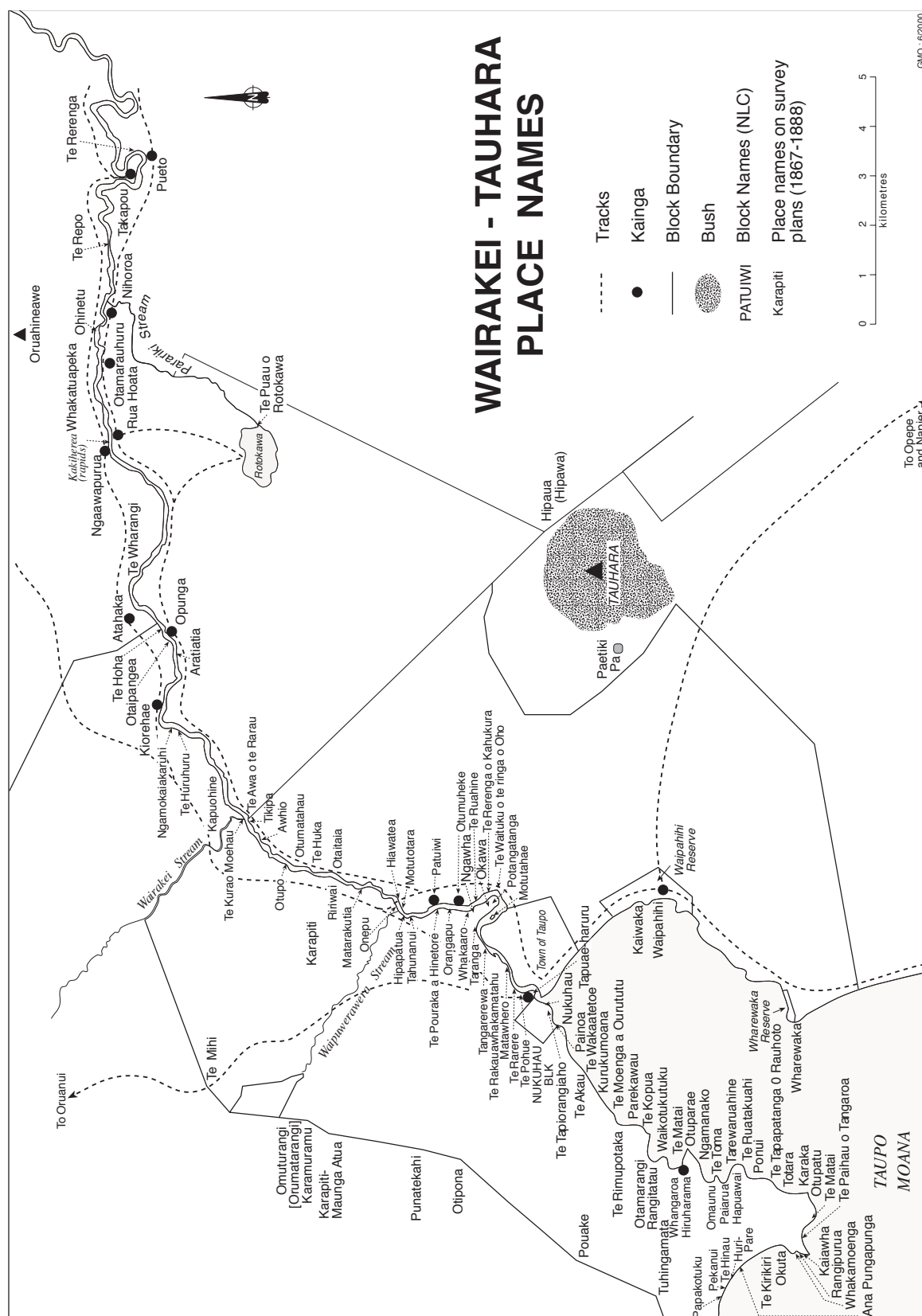


Figure 19. Wairakei - Tauhara Geothermal Areas



7.1 Wairakei

Wairakei was one of the areas of surface geothermal activity created by the actions of the tohunga Ngatoroirangi and his sisters' journey from Hawaiki. A sequel to this story has the sisters, Kuiwai and Haungaroa, travelling across the Kaingaroa Plains toward Tauhara, in search of Ngatoroirangi who had by now returned to Maketu in the Bay of Plenty:

Now, one of the gods that Ngatoroirangi brought from Hawaiki was Horomatangi. It came to this god's notice that Kuiwai and her sister were in the vicinity of Tauhara Mountain so this deity decided he would go to Taupo and direct the new arrivals to the Bay of Plenty. He dived into the sea off White Island and, travelling underground, emerged from the waters of Taupo. As he came to the surface he blew pumice and water high into the air. From above the lake he saw Kuiwai and her party in the distance... In order to advise Kuiwai and her sister where Ngatoroirangi could be found, the god went back into his tunnel and exhaled his breath with such force that he caused the Karapiti blowhole. The white steam rose straight and high into the heavens and then turned in the direction of Maketu. Kuiwai observed this and knew where to find Ngatoroirangi (Grace 1959, pp. 75-76).

The various ancestral claims in the Wairakei-Aratiatia area were set out by Hare Reweti Te Kume when he gave his evidence during the investigation of title of Oruanui Block before the Native Land Court on 13 April 1868:

I belong to the Ngatitahu and reside at Te Puna and Oruanui and sometimes at Waitahanui on this block. I claim a portion of this land which we have called the Oruanui block from my ancestors Tahu and Meremere... Tahu owned the land from Te Onepu eastward as far as Atahaka and extending north. He owned it up to the time of the conquest by Rahurahu. He conquered the Ngatitahu and took possession of the piece of land I have just named, they (the 2 tribes) afterwards intermarried and conjointly owned it. Meremere owned the land south of that boundary. As I have before stated I am descended from Rahurahu and Ngatitahu. Meremere's boundary commenced at te Onepu thence to Waitahanui, Atahaka, Waikato, up Waikato to the north of Wairakei at te Kirimoehau thence to Kaiwaewae thence to te Onepu the commencement. Meremere belonged to Ngati Kurapoto. I trace my descent from Kurapoto... Meremere's descendants have always held the land. In the time of Meremere's daughter Hinewai, [against] Tuwharetoa a battle was fought at Kiorehae [near Aratiatia] and Meremere's people were defeated and Kawhe killed. Tuwharetoa took possession. Peace was afterwards made and Tamamutu, Tuwharetoa's son married Rangiwhanake, Hinewai's daughter, their son was Te Kume, my grandfather. Te Kume had the 'mana' over all the land. His pas were Opunga and Te pa o Te Waira inside this boundary.

The places where my father used to cultivate reaching down to my time were Kiorehae, Matarakutia, near Te Kiri o Moehau, I have crops there at the present time. At te Iringaa-manu where there was a pa and cultivations I have turnips growing now. At Koru Mamaku I have a potato plantation. There are no cultivations further west as the land is not good. At Wairakei I had houses where I used to stay when getting red ochre.

Ngatituwharetoa gained the mana over this land at the battle of Okurawi [Okurawai on Wairakei

Block] where they defeated the Ngatitama, Tamahou a chief of Ngatitama was killed then. The battle was not within these boundaries [of Oruanui Block]. My grandfather Te Kume, when the battle was fought, was living at his pa at Opunga; being connected with Ngatituwharetoa he was not molested. Another battle gained by the Ngatitu-wharetoa was at Te Hukui. The Ngatimoeiti were defeated there and Ngatituapani, and Tamahou killed – not the Tamahou previously mentioned. Kokoreke was the Chief of Ngatituapani who was there killed...

The piece of land in the forest just north of te Onepu (Te Hangehange) was given by Te Rangipatoto of Ngatitahu to the Ngatimaionui on account of Rawheura who married his son, it was given as a marriage portion, it is only a small piece. The land of Ngatimaionui is at Te Waro, they have no land near this boundary (Taupo MB1/64-66).

The title to the Wairakei Block (Figure 21) was not investigated by the Native Land Court until 1881. The applicants were Poihipi Tukairangi and others of Ngati Rauhoto who were described in Court minutes as claimants. Counterclaimants included Ngati Te Rangiita, represented by Hare Reweti Te Kume, who based his claim on descent from Kurapoto. Poihipi Tukairangi based his

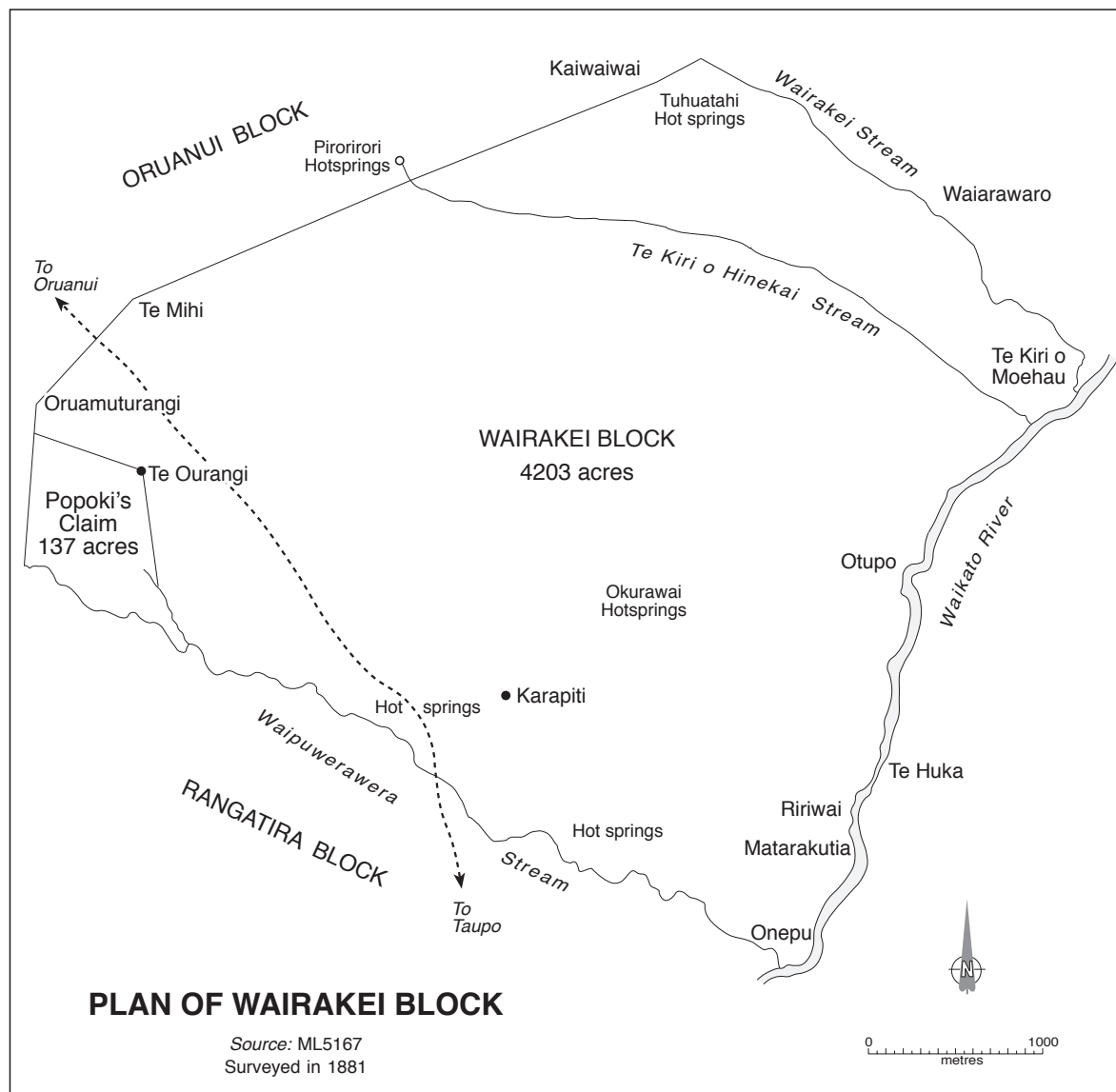


Figure 21. Plan of Wairakei Block

claim on Karetoto, his hapu being Ngati Karetoto, a section of Ngati Rauhoto and their main pa was at Nukuhau, on the left bank of Waikato River where it leaves the lake, Taupo Moana. Other hapu claiming interests in Wairakei Block included Ngati Tuapani, Ngati Rangihiroa, Ngati Te Urunga and Ngati Tuwharetoa.

The following extracts from evidence given to the Native Land Court in 1881 indicates the nature of Maori use and occupation of the Wairakei area:

Poihipi Tukairangi: I claim the land through ancestry, through Karetoto. I have houses on the land. Karetoto had a pa there. They lived on koura [fresh water crayfish] kokopu [native trout] and fern root. They got fern root at Poromango, Karapiti, Te Hereatengana, Kaiwaewae. They caught kokopu at Te Onepu, Te Karo, Te Waikau to the mouth of Matarakutia, Ririwai and the Ngatokahuihui below the Huka Falls, also at Otupo the mouth of Te Hineokiriwai [Te Kiriohinekai] and Te Kuramoehau... There is a part called Te Pahi on this land. It was named after an ancestor of mine... We got red ochre from Oruanui [Block on northwest boundary of Wairakei Block] and burnt it on this land. We made reserves on this land to protect the fern root and timber (Taupo MB2/223-224).

Hare Te Kume: I claim the whole block through ancestry. Rongomaitutaiaka is the ancestor we claim through... Rongomai defeated the Ngatihotu and took the land. Kurapoto his father defeated them... his descendants have ever since occupied the land. I myself have occupied it from childhood and have cultivated potatoes there. I have also had a weir in one of the streams at Te Kiriohinekai. We had a plantation at Te Apunga and at other places. I had a house near the same place but it is now rotten. It is about four years since I planted there. I then went to live at Oruanui and at Kiorehae nearby... Kurapoto divided the land between his son and daughter... The Waipuwera Stream was the dividing line (Taupo MB2/225-226).

He went on to explain that there had been a pa on an island in the Waikato River below Huka Falls called Te Pa o Te Waira. There were no pa on Wairakei Block; fortified settlements were on islands in the Waikato River. The area called Te Mihi was so named after a fight involving Kurapoto, and that “a post” (a rahui sign) had been put at Opuwai nearby to protect the fern root (Taupo MB2/228). Later in the same hearing, Te Hemopo Hikarahui claimed that “Te Mihi was so named because Uenuku Kopaka died there” (Taupo MB2/234).

Hare Reweti Te Kume explained the importance of kokowai, red ochre, a valuable commodity used in ceremonial exchanges of goods which cemented tribal relationships:

Ngatiterangiita gave red ochre to Ngatiteau and the latter gave a feast in return. The ochre was burnt on this land, the feast was given at Hiruharama... Our houses on the block were temporary residences where we went to catch fish and dig fern root. We had no permanent residences. We planted potatoes in some places... Karapiti was so named because a number of people who had gathered together to dig fern root quarrelled there. Karapiti is a hill, also a hot spring (Taupo MB2/229-230,232).

Kokowai, red ochre (iron oxides, the product of hydrothermal alteration in geothermal areas), was



Cooking at Wairakei : Richard Taylor, 1850 (Alexander Turnbull Library F50759)



COOKING AT A BOILING SPRING.

Taylor 1855, p.250.

the source of red colouring used as paint or dye, although its use diminished as European paints and dyes were introduced. J.C. Bidwill travelled in the Taupo district in 1839 and described the processing of kokowai in the Wairakei area:

The natives are fond of daubing their heads with a sort of red paint which they call “cocoli” [kokowai]; I saw a large manufactory of it on the banks of the Waikato; a double circle of matwork was formed around a large spring of rusty water, and the curdy carbonate of iron was by this means strained off. After this preparation, it is burned and mixed with oil (Bidwill 1841, pp. 35-36).

In his evidence Erueti Tarakainga stated, “We got red ochre from this land... Te Kiriohinekai and Pirorerore were the places at which we obtained it” (Taupo MB2/240). Tukorehu also gave evidence that he went to Wairakei “to get red ochre”, to visit the hot springs and dig fern root at Karapiti. He also commented that Tuhuatahi, the Maori name for the Champagne Pool, was the original name of the block. Wairakei was the name of an ancestor (Taupo MB2/244).

Te Hemopo Te Hikarahui corroborated the evidence of Hare Te Kume, indicating that there were cultivations on the Waikato River bank near the mouth of Te Kiriohinekai Stream and Huka Falls (Taupo MB2/232-233). People also came to the river bank in the vicinity to catch kokopu and dress flax. Hohepa Tamamutu also corroborated earlier evidence and added: “Tukairangi died on this land, was buried at Parikawau. Tamamutu died at Wairakei and was buried in a cave there. His bones are not there now” (Taupo MB2/236). Other burials around the Huka Falls and elsewhere on Wairakei Block were also mentioned in the evidence. The road through Wairakei from Tapuaeharuru (Taupo town area) to Oruanui was called Te Papa o Tamamutu, after this ancestor who was a descendant of Tuwharetoa. The evidence of Enoke Te Aramoana, 24 January 1882, at the rehearing of Wairakei Block, also indicates a long history of Maori use and occupation at Wairakei:

I am of the Ngatirangihira, and I live at Te Hatepe... I know a part of the land shown on the plan, viz. from the Wairakei Stream to Karapiti, on the ridge, but not quite down to the Waikato river. There was no fixed boundary, no ancestral division, across or inside the block, like the external boundary lines; we lived anywhere we chose upon it...

One of my claims is ancestral; there are ancestral marks on it. Another is by cultivation. I have an old landmark on it: a stone south of Kiriohinekai; it is called Te Pou o te Rangihiawea. My whares are on this block; they have belonged to my forefathers and to our family down to the time of my father and brothers. This Kiriohinekai stream was so named from our ancestress, Hinekai... The Wairakei stream is also named from one of our ancestors. We came to dig fern root on Karapiti; also near the main road to Taupo, on a small spot which we visited for that purpose. Our whares are on the land but near its edge, so placed to be convenient to the place where we dug kokowai, just outside the survey line on the N.W. It was all one block but the kokowai pits and our ancestral cultivations are within the present Oruanui block, being so included by the Surveyors when they drew the line of that block...

Rurupuku, the eldest child of Te Rangihiroa the elder, married Wairakei of N'Maniapoto and when she came to live here, the stream was called Wairakei in her honour (Taupo MB2/260-261).

In summary, the resources in the Wairakei geothermal area which were most highly valued were kokowai, and the therapeutic properties of hot pools, in particular Matarakutia and Kiriohinekai. One of the old names for the valley of the Kiriohinekai Stream is Waiora which survives now in geological reports as the Waiora Fault and Waiora Formation. In Maori terms, Waiora refers to waters that have ritual significance, reinforcing the health giving qualities of these waters. The geysers in Geyser Valley were all separately named by Maori. Karapiti was a special place. So too were the Huka Falls and Aratiatia Rapids. Other valued resources of the area were the fishing places on the Waikato river, the cultivable soils close to the river, the fern grounds and birding places.

It was inevitable that the variety of geothermal activity, spectacular geysers, and pools with reputed therapeutic qualities should attract Pakeha tourists. Rudyard Kipling, in a short story first published in 1892, chose a bathing pool of Te Kiriohinekai as the setting for *One Lady at Wairakei*:

All tourists who scamper through New Zealand have in their turn visited the geysers at Wairakei, but none of them have seen there what I have seen. It came about with perfect naturalness. I had wandered from one pool to another, from geyser to mud spout, mud spout to goblin bath, and goblin bath to fairy terrace, till I came to a still pool, where a wild duck sat bobbing on the warm green water, undisturbed by all the noises of the wonderful gorge. A steam jet hidden in the brushwood sighed and was silent, a tiny geyser gobbled, and a big one answered it with snorts. I thrust my stick into the soft ground, and something below hissed, thrusting out a tongue of white steam. A wind moved through the scrub, and all the noises were hushed for an instant. So far there had been nothing uncommon — except geysers and blowholes to catch the eye. Therefore I was the more astonished when from the depths of the pool, and so quietly that even the wild duck was not scared, there rose up the head and shoulders of a woman...

"To whom have I the pleasure of speaking"? I said desperately — for it is not seemly to stand on a bank and talk to a woman who is swimming in the water. Besides, I felt sure that she was laughing at me.

"They call me all sorts of things," was the reply, "but my real name is Truth. Haven't you heard that I live in a well? That is it. It communicates directly with the other side of the world, but I generally come here for peace and quiet on a Sunday. I have some friends here". She nodded casually up the gorge, and I heard the geysers bellow... "Shall I go away"? she said.

This pool is private property, I've paid to see it. You haven't. What do you think yourself?

"From your point of view you're quite right, but — you wouldn't care to see a fresh geyser

break out just under your feet, would you? or a mud volcano? or a rift in the earth? My friends would be happy to oblige me. Shall I ask them”?

“Truth”, I said, jumping up, for the ground was shaking like a boiler-plate, “you know as well as I do that you’re making me say unpleasant things, and now you propose to boil me alive for saying them. You’re illogical because you are a woman, and I’m going back to the hotel”

“Wait a minute”, said Truth, laughing. “I want to ask you a question, and then I won’t be rude any more. How do you like New Zea_____”?

The ensuing conversation and social commentary in this story need not concern us here. What this extract does evoke is an atmosphere and attitude of a Victorian male tourist, in a strange physical environment, linked somehow to the “underworld”, but provided with a safe and secure retreat in a tourist hotel.

The Wairakei Block was acquired by Robert Graham in 1881 with the intention of developing a health and tourist resort. By the early 1900s this object was partially achieved as the Baeyertz *Guide to New Zealand* stated:

Wairakei... is one of the most interesting spots in New Zealand. The Geyser House Hotel is picturesquely situated and is admirably conducted. There are hot swimming baths, a tennis court, and a croquet lawn in the grounds, which abound in beautifully cool sequestered spots, where guests may “in sweet seclusion seek the shade” (Baeyertz 1912, p. 33).

In 1910 the Wairakei property was offered to sale to the Government for £30,000 but this offer was declined. In 1915 there was concern about the possibility of American ownership (Rockel 1986, pp. 89-90). In 1919 the property was sold to Wairakei Ltd. In its brochure *Wonderful Wairakei* (1938) the company reviewed development since the 1880s, which illustrates the Pa-keha tourist-promotion view of geothermal resources:

What a contrast to conditions as they existed half a century ago, when Wairakei was described as a barren waste in the midst of a great volcanic belt; wild horses made the only tracks along its fern-clad ridges; and the great expanse, in its stillness typically primeval, was as Nature made it. Then came the surveyor and the energetic pioneer: Grounds were laid off; hotel, post office and baths built, and a stagecoach service instituted, followed in our progressive age by an established motor car service.

The estate itself was purchased by the late Mr Robert Graham, one-time Superintendent of the Auckland Province, and remained in the hands of the family until 1919, when it became the property of Wairakei Limited, a company formed to develop the estate and improve the facilities for the comfort and pleasure of the many visitors to it, by the provision of more up-to-date accommodation and the addition of required amenities. Present-day popularity of Wairakei eloquently attests the wisdom of the policy followed by the Directors since the reconstruction of the Company in 1935.



484 P. GRAHAMS ACCOMMODATION HOUSE, WAIRAKEI Muir & Moodie



GEYSER HOUSE HOTEL, WAIRAKEI, N.Z.

"TOURIST SERIES"
8185.

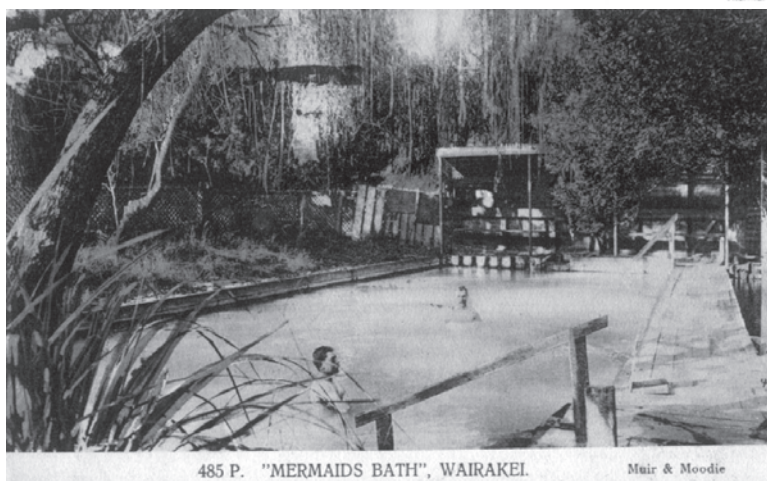


A BATHING POOL, WAIRAKEI, N.Z.

"TOURIST SERIES" R 4461.



Thermal Bathing Pool, Hotel Wairakei, N.Z. 7334. "National Publicity Studios Photo"



485 P. "MERMAIDS BATH", WAIRAKEI.

Muir & Moodie

*Wairakei Hotel and hot pools
1900 - 1930s.*



Wairakei postcards c.1900



Wairakei, Bore Valley 1964

Wairakei never developed into the spa town that Graham intended, although early advertisements portrayed it as a “hydropathic establishment”. The range of medical treatments catered for in Rotorua was not developed at Wairakei, but Geyser House remained a tourist hotel with the hot pools as the chief attraction. The health-giving properties of the Wairakei climate and geothermal resources were emphasised, and it was a convenient centre for excursions to the thermal wonders of Geyser Valley, Karapiti “blow hole”, and the Huka Falls and Aratiatia Rapids on the Waikato River. The virtues of the waters of Te Kiriohinekai were extolled in Graham’s *Guide to the Hot Lakes*:

This wonderful spring, the name of which signifies “new skin” flows by the Blue Lake [Pirorirori], through the whole extent of the property at a temperature averaging from 90° to 110° [F=32-37°C]. Along its course are the “Waterfalls”, “Fountain”, and “Cascade Baths”, under the falls of which the bather may stand whilst the whole volume of warm water flows over him in a continuous stream. The water of this spring, which is of a greenish-blue colour, has been long known to the natives as possessing marvellous curative properties, beyond those of almost any other spring in the country. In several of these baths at Wairakei, the bather may swim from hot into cold water, and *vice versa* (Graham 1884, p. 23).

The description found in the Wairakei Ltd. guide book of 1938 was similar:

The Kiri-o-hine-kai which flows through the wooded grounds of Wairakei Hotel had its source in the Pirorirori, a Blue Lake, the most famous and picturesque of the several hot lakes found in the Wai-Ora Valley. Along its course and in close proximity to Wairakei Hotel, are the Fairy Baths, the hot Swimming pool and the Avenue Bath. The Fairy Bath is formed by hot waterfalls, offering the most perfect form of massage, with hot pools beneath them. Bending under the falls the water pours with equal force upon the body and limbs of the bather and acts upon the skin as a cleanser and invigorator. The waters... are all mineralised... At the end of the warm bath where the whole contents of the hot stream overflow, a douche has been provided for water massage treatment similar to that which makes the Fairy Bath so invigorating and enjoyable (Anon 1938, pp. 7, 11).

Willis’s Guide Book provided a description of the Geyser House Hotel in the 1890s:

Near the Geyser Valley is a capital hotel (The Geyser House) kept by Mrs Robert Graham. This is situated close to the banks of the Kiriohinekai, a hot stream which flows from Pirorirori (the Blue Lake) to the Waikato River with a temperature ranging from 110° to 90° [Fahrenheit]. The hotel stands in a pretty garden surrounded by well laid out lawns and shrubberies. There are a number of bedrooms, with drawing room, dining room, smoking room, etc. The site is 1,350ft. [412m] above sea level, and the climate is invigorating, while the hotel itself is sheltered from strong winds by the plantations around it.

There is a fine swimming bath, within a few yards of the hotel, supplied by the Kiri-o-hine-kai Hot Stream. It is very prettily situated, being surrounded by banks of overhanging ferns and shrubs. There are also various hot baths supplied by the waterfalls of the hot stream. Kiri-o-hine-kai has been translated, “Food-for-the-skin-of-a-woman”. It may be presumed

therefore, that the use of this bath should (like the famous Madam Rachel) render ladies “beautiful for ever”. It contains alum in solution, sodium, free sulphuric acid, and iodine. It’s waters are said to be beneficial for eczema. The natural douches from the waterfalls are useful for sciatica. Some of the pools also in the Geyser Valley are recommended for obesity and other ailments. There is no extra charge for baths to guests residing at the Geyser Hotel (Allen 1894, p. 99).

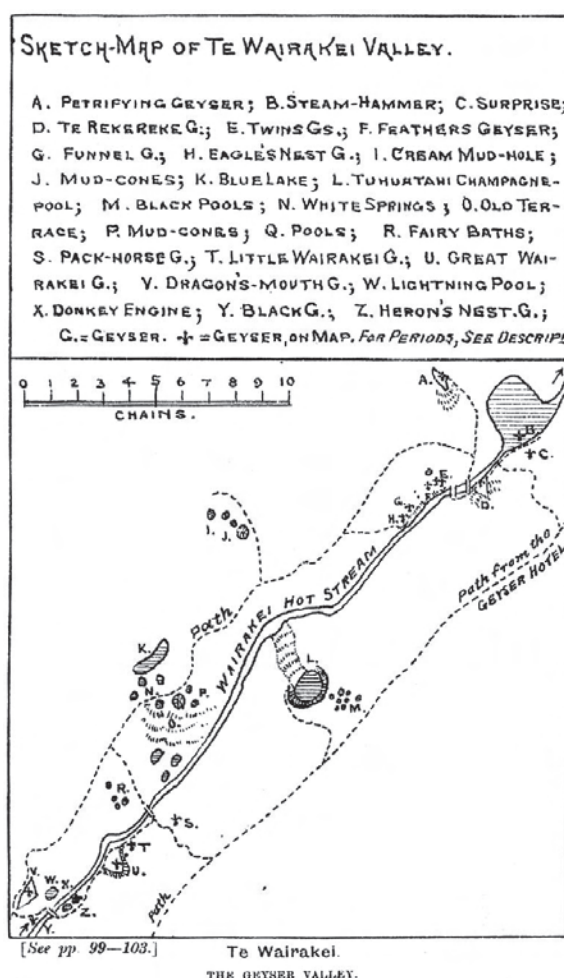
It was confidently expected that the tourist trade would increase in the Taupo district. (Alpers 1891, p. 29) described the improvements carried out at Wairakei and predicted that “when tourists are numbered by thousands instead of by hundreds” it would become “one of the finest private properties in the world”. In 1885 Robert Graham had died and his widow and two sons carried on. Mrs Graham later remarried, but continued for some years to manage Geyser House as Mrs Grierson. The hotel operated until 1942, became a temporary mental hospital for several years, was taken over by the Tourist Department, refurbished and re-opened in 1949. In the late 1980s it was sold to private interests. By this time the construction and operation of Wairakei geothermal power station since 1960 had destroyed most of the geysers and hot pools that had been a tourist attraction (Stokes 1991).

Advertisements. vii.

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Allen 1894



7.2 Nukuhau-Tauhara

The principal centres of Maori settlement on the northern shores of Lake Taupo were at Waipahihi (where there were hot springs), at Nukuhau (the outlet where the Waikato River leaves the lake), and on the riverbank at Patuiwi and Otumuheke, also a geothermal area. On the slopes of Tauhara Mountain, on the bush margins there were better soils than on the pumice lands. Cooper (1851, p.252) commented in 1850 that Tauhara, “being the only piece of really rich land for some distance is covered nearly to the top with patches of cultivation cleared from amidst the timber”. The only other places where there were cultivable soils were the lower terraces and tributary valleys of the Waikato River.

Nukuhau was the place where the Waikato River flowed out of the lake, the cliff top vantage point, and a place of considerable significance to local people. Tapuaeharuru was described by Hochstetter in 1859 as “Poihipi’s Village” and appears to refer to the settlement on the left bank of the Waikato below Nukuhau (Hochstetter 1867, p. 388). When the Armed Constabulary post was established in 1869 (on the site of the present town of Taupo on the right bank) this was called Tapuaeharuru and for a few years the township alongside carried this name. Kerry-Nicholls described this Tapuaeharuru in the early 1880s:

Situated far from the centres of population, this settlement is not an important place, beyond its being one of the principal strategic positions of the armed constabulary. The flat elevated plain on which the township is situated, is formed entirely of pumice, and has a hollow, cavernous-like sound when riding over it, a circumstance which no doubt gave rise to its native name, which signifies “the place of sounding footsteps.”

From time immemorial Tapuaeharuru [sic] has been the centre of a large Maori population, and all around this portion of the lake may yet be seen the remains of old pas and other evidences of the fast-decaying native race. There is still a considerable number of natives living in the vicinity, and the township is usually full of them (Kerry-Nicholls 1884, pp. 136-137).

On his journey south from Tapuaeharuru, Kerry-Nicholls commented on “the magnificent and varied scenery”, of the lake and mountains, and the forested ranges to the west. “To the north was a level plain, above which the crater-shaped cone of Tauhara rose in rugged grandeur. To the east rolled away the wide expanse known as the Kaingaroa Plains, clothed in a mantle of waving tussock grass” (ibid, p. 150). Waipahihi was described as “a small native settlement, composed of a runanga house and a few whares, in front of which some half-dozen natives were sunning themselves, while several laughing, dusky children paddled about in the clear water” (ibid, p. 154).

Away from the Waikato River the land east toward Tauhara Mountain was described by Kerry-Nicholls as “a wide pumice plain... this level tract of weird pumice country where nothing could be seen but stunted manuka and tussock grass”. Where the plain was cut by tributary valleys of the Waikato river the contrast in vegetation was striking:

Now, although on the hard dry plain over which we rode the vegetation was sparse and stunted, down in this chasm there was a beautiful and varied growth of mosses, trees, and ferns, all growing in unsurpassed luxuriance upon the hard pumice soil. A small stream, which came out from under the ground at the head of the deep valley, wound down its centre; and as we gazed upon the varied growth below, it looked like a veritable oasis in the wilderness (ibid, pp. 128-129).

It is not surprising then, that Maori settlement was concentrated in the sheltered, well-watered valleys of Patuiwi and Otumuheke. Colonel St John described a ride on horseback from Tapuaeharuru to Otumuheke Stream and then by canoe to the rapids above Huka Falls:

... we took it easy and jogged along quietly in single file, carefully following the track. This is a precaution not to be neglected; for here and there on either hand, a slight depression over which hovers a thin mist-like steam denotes rotten ground with underlying heat which would play the very mischief with man or beast who had the ill-luck to roll into it... After a couple of miles we struck the river [Waikato] where it makes a sharp bend between two high cliffs, those on our side receding from the brink and forming a small amphitheatre around a diminutive flat. The steep left bank was covered with luxuriant ferns, but that on the right looked exactly what it was, bare, burnt, crumbling earth, presenting the most desolate aspect; one could almost imagine it to be a fire-ruin. Scrambling down a slope not much affected by the internal heat, we reached the river's edge, and halted opposite a queer looking funnel-like cone sticking a few feet out of the ground, apparently comprised of sticks cemented together by a sinter deposit similar to that of Rotomahana...

Another mile's ride brought us to a stream and a small cascade of water rather too hot to be pleasant, and here we left our horses and took a waka [canoe] this was decidedly pleasant travelling... The banks as we passed them presented a perfect contrast: that on the right, rising gradually towards low hills was clad in verdure, though that was only fern, tutu, and koromiko or cabbage trees, with here and there a patch of cultivation surrounding a Maori whare or two; a few creeks bordered by stumpy peach trees opened out to the river, and in them the aboriginal population, male and female was diving about in great glee. The other side was different: a narrow strip separated the river from a steep but not high rise forming a plateau cleft at intervals by a series of ravines running inland, and the whole was covered with low parched scrub fern. Slowly and lazily we drifted down till a murmur gradually increasing in intensity warned us of the proximity of rapids; but just as our pace was becoming faster, a sweep of the paddle turned the nose of the waka into a little creek, and we jumped ashore (St. John 1873, pp. 110-111).

Even on the empty pumice country, a geothermal area offered a convenient site for a temporary kainga. Lieutenant Bates was travelling from Opepe to Taupo when he described some cooking holes in an old kainga near Tauhara in 1860:

We passed on our right Tauwhara [sic], a volcanic looking hill or rather mountain rising from the plain. We here for the first time saw some puia or jets of steam issuing from the ground near the remains of some whares which had been built there for the convenience of cooking by the steam. Those of the puia which had been used for cooking and most

of which were only a few feet from the doors of the whares consisted of a hole in the rock about one foot deep and two feet square, from the lower part of which the steam was rising; on the loose soil which was at the bottom of them lay some large specks of sulphur and the whole place had a strong sulphurous smell. There was a good deal of manuka scrub growing around (Bates 1969-70).

Aperahama Te Werewere, in his evidence in the Native Land Court on 16 March 1869, set out the various claims in the Tauhara Block.

The hapus to whom this land belongs are N.tu, N.hineure. These hapus live on the Tauhara [Mountain] side. They all live on the land. They have a pa at Paetiki, also at Opepe and at Tapuaeharuru at the mouth of the Waikato river. The hapus on the southern side of the block are: N. whanaurangi, N. terangiita, N. rua, and N. puru. These are all the hapus that claim. The last mentioned hapus have a pa at Hatepe, on the outside of the river [i.e. across the river, the boundary of the block], the cultivations being on the block. Another [pa] at Aratawa and cultivations and another at Te Patehe with cultivations outside the block. All these are on the southern end of the block. The hapus living at the north end at Parariki are N. tahu, N. te kume, and N. teranginui. They have a pa and cultivations at Nihoroa at the mouth of Parariki. Otamarauhuru is another cultivation. We also catch birds at Rotokawa. Hohepa has a small cultivation at Otumuheke, on Waikato river. Te Reweti has also a cultivation at the same place, but further from the mouth of the Patuiri [Patuiwi] river. Hemopo also has a claim a little lower down called Te Huka. Poihipi also has a claim at Tapuwaeharuru [sic] – a pa and cultivations. Hamuera Takurua has also a claim with Poihipi at Tauhara. These men belong to the tribes named (Taupo MB1/94).

An agreement was reached to divide Tauhara Block into three parts which were called North, Middle and South. Tauhara North which includes Rotokawa was acknowledged to belong to Ngati Tahu and vested in two people, Hare Reweti Te Kume and Hare Matena Taua. A small block of 150 acres called Otumuheke was vested in Hohepa Tamamutu and Popoki Kurapae, on the basis of a “gift from N. tutetawha and N. teurunga, who gave it to my relative Te Rangikakua for assistance rendered in war” (Taupo MB1/98). Hohepa was a descendant and his family had cultivations there. However, when the survey plan was drawn up, Otumuheke comprised only 23 acres and Poihipi Tukairangi refused to concede the balance up to 150 acres out of Tauhara Middle Block. After some discussion “Hohepa Tamamutu said he would be content with the 23 acres as described in the plan” (Taupo MB1/220). The large Tauhara Middle Block, about 100,000 acres, including the mountain was vested in six hapu representatives for Ngati Tutemahuta, Ngati Tutetawha, Ngati Rauhoto, Ngati Hineure, Ngati Hinerau and Ngati Te Urunga (Taupo MB1/199).

In 1870 the Crown purchased the “Town of Taupo” (534 acres) and the “Township of Opepe” where there was also an Armed Constabulary redoubt. The Tauhara Middle No 1 Block was leased and subsequently purchased by the Crown in 1880. The Tauhara Blocks were investigated by the Native Land Court under legislation which allowed land to be vested in ten or fewer owners,



494 P. MAORI HOUSE DINING ROOM, SPA TAUPO. Muir & Noodie

x.

Advertisements.

THE "SPA," TAUPO,

Contains the finest Hot Mineral Baths in the whole Lake District.

The Spa is conducted on the Continental Spa systems.

The grounds are the finest in the district, and consist of Rose Gardens, Shrubberies, Lawns, Tennis Lawn, and Orchard; Fruit is abundant.

THE SIGHTS OF INTEREST INCLUDE:

The Giant Crow's Nest (the largest Geyser in N.Z.), Satan's Glory, Paddle Wheel, Witches' Caldron, Hannah's Geyser, Little Crow's Nest, Champagne Pool, Porridge Pots by the hundred, and other sights too numerous to mention.

The Coaches running between Taupo, Tokaanu, Napier and Rotorua are met by the "Spa" Coaches.

VISITORS TO THE "SPA" SHOULD GIVE NOTICE, IF POSSIBLE, IN ORDER TO SECURE ROOMS, AS THE ESTABLISHMENT IS GENERALLY CROWDED IN SUMMER.

The Huka Falls, Wairakei, The Arotiatia Rapids, Karapiti, &c., are all close to the "Spa" and visitors can either walk or ride as they please.

SPECIAL NOTICE TO VISITORS TO TAUPO DISTRICT.

The "Spa" is private property and any person or persons trespassing upon the sights, by whomsoever accompanied, render themselves liable to prosecution and detention and all expenses attaching thereto.

Visitors can obtain Guides at the "Spa." The charge is 1/6 for each person.

The Maori Carved House is the Wonder of the District.

Horsemen are notified that they can have First Class and Secure Paddocks at the "Spa" Farm.

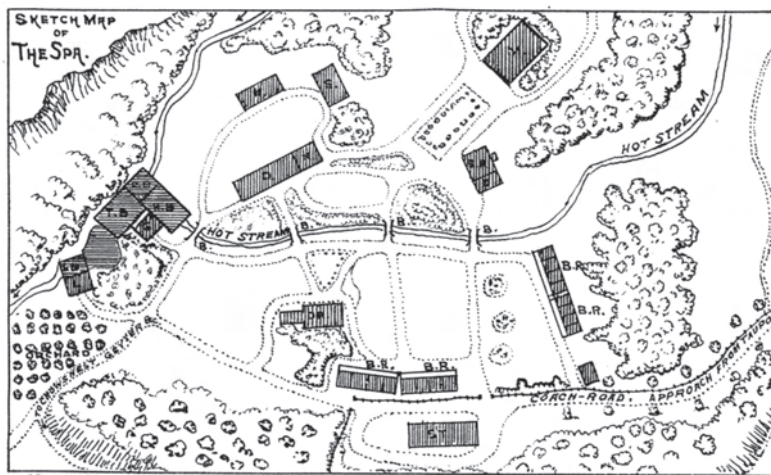
GOOD SHOOTING IN THE DISTRICT.



493 P. THE SPA TAUPO.

Muir & Moodie

Allen, 1894



[See pp. 96-98.]

The Spa, Taupo.

THE HOT STREAM, BATHS, HOTEL, AND GAUDENS.



Onekeneke Valley and Tauhara Mountain (Alexander Turnbull Library, Auckland Star Collection. G3176)

Advertisements. ix.

The Terraces Hotel

AND
TAUPO SANATORIUM.

Hot Water Mineral Baths provided free to visitors staying at the Hotel. Two of the Baths are covered in, including the

SPOUT BATH.

Large hot water Swimming Lagoons. Grand views of Lake Taupo. The burning Volcano, Tongariro, and surrounding scenery.

FREE PADDOCKS.

THE TERRACES HOTEL

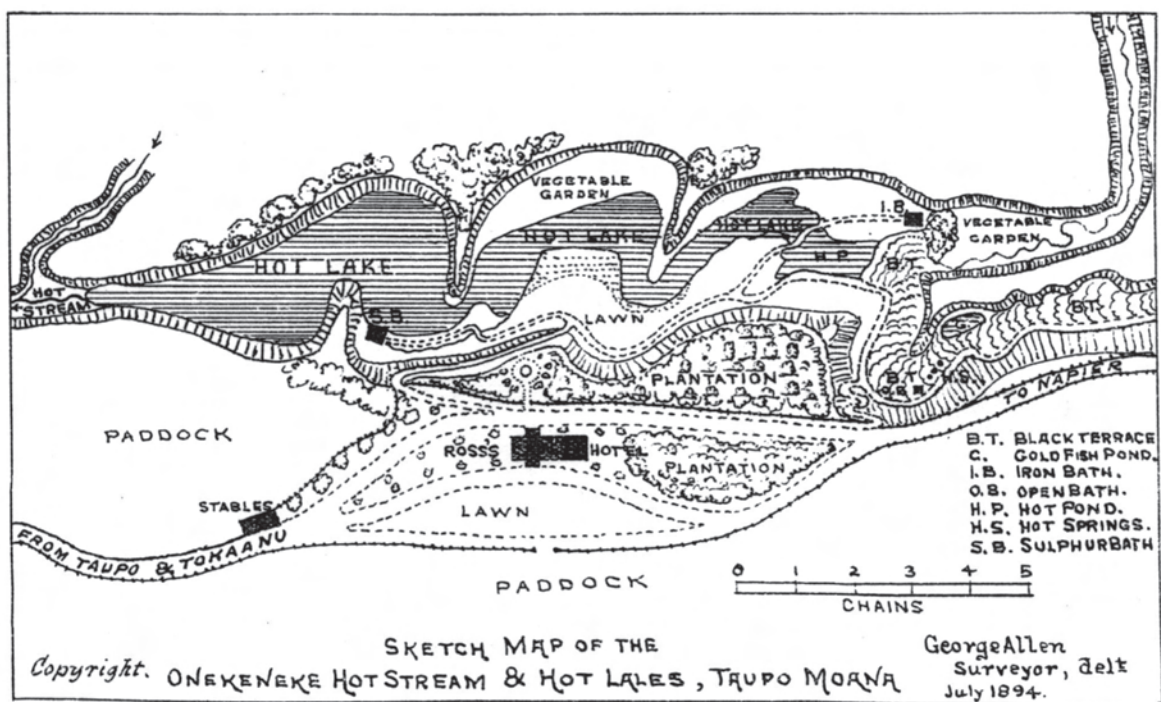
Possesses exceptional advantages as a Sanatorium, being situated 1,500 feet above the sea level. No offensive smells from the waters. A clear atmosphere and remarkably bracing climate.

Families will find this Hotel the best in the District, and the curative properties of the Springs, miraculous. Indeed, they were famed throughout N.Z. amongst the Maoris, who used to bring their sick to this place to be cured.

The water supply comprises a Hot Creek of considerable dimensions, fed by the innumerable Hot Springs existing on the Hotel property.

Passengers conveyed to the door by Mail coaches, or by steamer to Waipahihi, which is a quarter of a mile from the Hotel.

TERMS - - VERY MODERATE.
ROSS & MCKINLEY,
PROPRIETORS.



Allen, 1894

and there was no detailed evidence presented to the Court recorded in the minute books. A large part of the Tauhara North Block was also purchased by the Crown, but Ngati Tahu successfully petitioned Government for a new investigation of the title to the residue of the block in 1897. Thus a good deal of information about Rotokawa was recorded. Of the Crown purchase areas there is little detail. However, out of the Tauhara Middle No. 1 purchase, reserves were made at Waipahihi and Patuiwi which were areas still occupied by Maori. Otumuheke Block was not part of this purchase and remained for the time being in Maori ownership. All three were geothermal areas where there were old kainga.

Taupo township was perceived as having the potential to develop into a spa town. In a report to the Premier in 1874, Hon. W. Fox outlined proposals for government encouragement of tourist and spa development:

On the western bank of Waikato, where it leaves the lake, stands on a jutting promontory an old Maori pa [Nukuhau], with some rather fine but rapidly decaying remains of ornamental gateways and barge boards. On the eastern bank is the Constabulary post, and the surveyed site of a township, which consists at present of a single public-house and store.

The bright waters of the lake – green, transparent, and cool, and the eddying stream of Waikato, afford excellent opportunity for cold water bathing, while at no great distance are hot springs which might be easily turned to account. Of these there are three principal groups.

1. About two miles below Tapuaeharuru is a group of *puias* and *ngawhas*, the chief of which is an intermittent one known as the crow's nest. It occasionally throws up a column of hot water 10 or 15 feet high, but was formerly more energetic and may be so again. Close to it are several less violent but very hot *ngawhas*, close to the edge of the river, affording great facility for intermixing and regulation of temperature. A person of the name of Mac – something erected a bath here, with appliances for mixing the hot and cold water, but the number of bathers was not remunerative, and “Mac's' bath”, as it was called, has gone out of repair.

2. About half a mile eastwards from the river is a small swampy flat [Otumuheke], at the foot of an irregular cliff of 30 or 40 feet high, through which flow two small streams of a yard or two wide, one barely tepid, the other too hot to handle. At the point where the two unite, a tolerably good bath has been erected by John Loffley, formerly an A.B. sailor in Her Majesty's Navy, who served in the Naval Brigade during the Waikato war. A dressing-room is annexed, and Loffley has a small house in the neighbourhood, where he occasionally receives an invalid boarder. He has made attempts to clear and plant the six or eight acres of adjacent swampy land, and generally shows a creditable degree of energy in endeavouring, with very limited means, to develop the hygienic resources of the two streams over which he presides as a sort of river god. I understand that the Government has extinguished the Native title to the locality, and that Loffley only occupies on sufferance. I think it would be a good plan to give Loffley a lease, on condition that he should erect a certain number of cottages and baths within a given time. I believe he

would be able to raise the necessary capital for such operations on a moderate scale. The proximity of the two streams affords the opportunity for the erection of several baths, both with Loffley's "domain" and lower down the valley.

3. At the distance of a mile and a half from the Constabulary post and township, along the eastern shore of the lake, a warm stream a yard or two wide crosses the road and meanders into the lake [Waipahihi]. Following it inland by a Maori track, a narrow gorge is reached, in which the small stream expands into two considerable pools [Onekeneke], varying in depth from a few inches to several feet. They are both a considerable temperature, and a favourite resort of neighbouring Natives, who, however, are few in number. These pools are not at present very accessible, and their banks are encumbered with raupo and rushes, presenting no very pleasant accommodation for bathers. The water has also a dingy and unattractive hue; and though capable of containing many bathers at a time, would require a good deal to be done to make them a place of general resort. The water, also, is probably much diluted and less charged with alkaline and medicinal substances (AJHR 1874, H-26, p. 2).

Curiously, Fox did not refer to the "Geyser Valley" at Wairakei, although he did suggest that there were "numerous fumaroles and steam jets in the surrounding country". He singled out Karapiti: "This fumarole and the surrounding fissures might probably be utilized as steam baths" (ibid). By the late 1880s there were two hotels based on geothermal resources: the Spa near Taupo township, and the Terraces, at Onekeneke, near Waipahihi. As with Wairakei, there was little Maori involvement in running any of these tourist operations at Taupo.

7.3 Tarawera Springs

The road over the eastern ranges from Taupo to Napier was constructed along a major Maori route, and mainly by Maori labour, in the 1870s. By 1878, when Harris described it, there were several stopping places at strategic locations. One of these was Tarawera, which comprised "a decent accommodation house, store, butcher's shop and constabulary station, and also a telegraph station". There were two hot springs in the vicinity, beside the Waipunga River. "One of them is much used by the inhabitants. It is a sulphur spring, and its temperature is about 112 degrees [Fahrenheit]" (Harris 1878, p. 8).

Alpers and his friends also stayed there: "The Tarawera Hotel is an excellent wayside house. It has no pretensions to architectural beauty, it is true; but the rooms are airy and comfortable". The travellers washed off the dust with a swim in the Waipunga River below the hotel:

After dinner we lit our cigars and strolled to the Tarawera Springs, guided by one of our host's sturdy boys. It is about a mile and a-half from the hotel, an agreeable walk by moonlight. About 600 yards off the road, reached by a narrow track through the bracken, we came upon the spring of hot water issuing from the hill side. A large wooden trough has been erected for the convenience of anyone wishing to take a bath. There is a strong

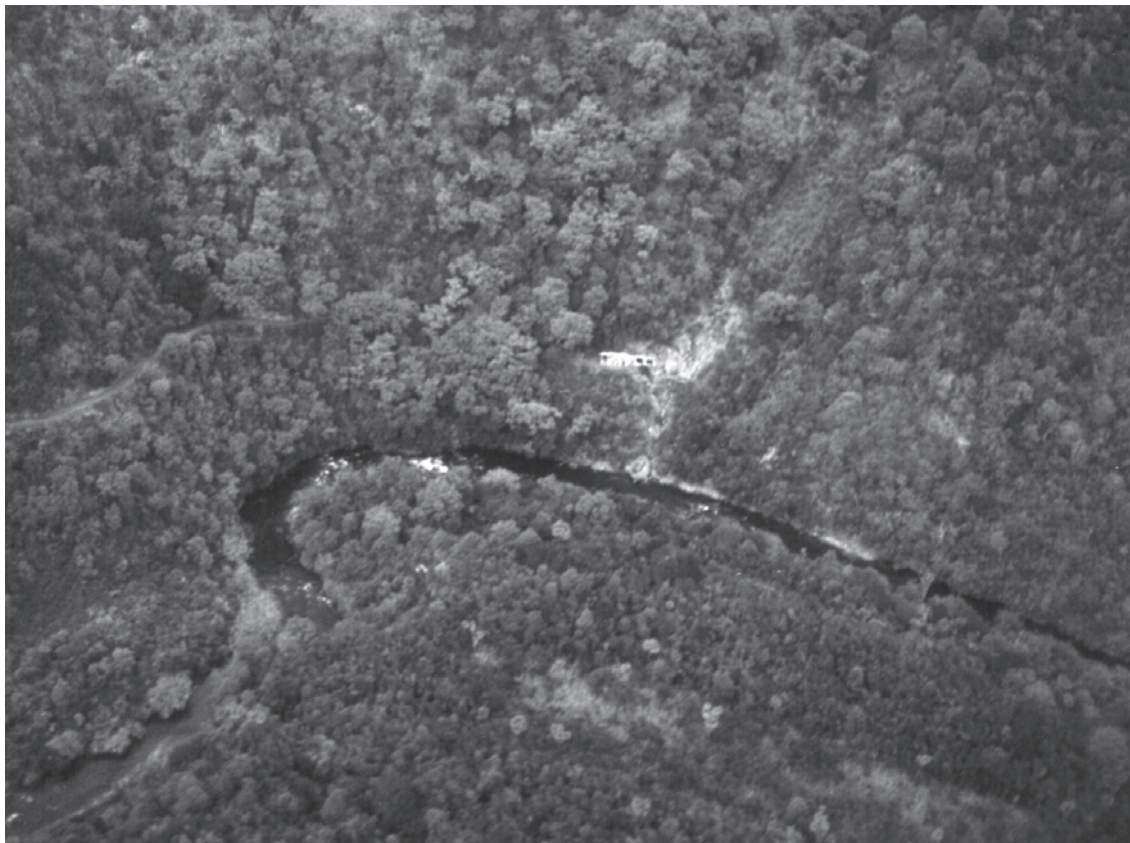
smell of sulphur about the place; and the spring is remarkable for the amount of iodine it contains (Alpers 1891, pp. 9-10).

The Government Balneologist included the springs in his review of *Mineral Waters and Spas in New Zealand*:

Tarawera, on the Napier-Taupo road, has hot springs of no great magnitude, simple immersion baths, and hotel accommodation. The waters are of the muriated [saline] type, and contain 0.25 grains of sodium-iodide to the gallon. No balneological appliances or medical supervision are available (Wohlmann 1914, p. 143).

The Tarawera hot springs were a highly valued resource for local Ngati Hineuru, a tribe with connections to both Ngati Tuwharetoa and Ngati Kahungunu. There were several pa in the vicinity and in the harsh climate of the ranges the warm springs were much appreciated. The Tarawera Block was part of the Mohaka-Waikare confiscated lands, but when these lands were returned to Maori in 1870, a block containing the springs, called Tarawera Township, was retained by the Crown. Ngati Hineuru were allocated land for their kainga at Te Haroto, and the springs remained Crown land. Rockel summarised the subsequent history of Tarawera Springs:

After being a bathing area for the local Ngati Hineuru people for several hundred years it became a place of interest for the residents of Napier from 1870 and particularly so 2 years



Tarawera hot springs on the Waipunga River bank.

later when a regular coach service to Taupo began. J. Ernest Tinne described Tarawera in that year: “There is a snug little inn for visitors, and a hot spring, to which one ought to be acclimatised, for I came out of the rough wooden tub on the hillside as red as a lobster, and with a disagreeable tightness about the forehead”.

When the Tourist Department was created [in 1901] Sir William Russell of Flaxmere and Sherenden estates in Hawke’s Bay, helped to persuade the superintendent of the new department to make the spring accessible. The hotel was on a different site from the present tavern – more like 4km from the spring – and the track was narrow, steep and precarious as the spring is on a steep slope above the Waipunga River.

Arthur Warbrick, the Rotorua guide, oversaw the construction in 1907. A site was blasted out of the rock cliff and a narrow bathhouse perched over the river but the distance from the hotel became less of a problem when, shortly before the opening of the bathhouse, the hotel burned down and its replacement was resited. A large party of guests from Napier and the department celebrated the opening in October 1907.

It was the only celebration of any size to take place at the Tarawera Baths. Since 1909 its history has been one of slips, corrosion and abandonment. In 1935 an enormous boulder went through the roof and the bathhouse was locked up at the end of the year. The Lands and Survey Department took over control of the spring in 1962 and in 1963 it was leased to the proprietor of the hotel and, since the second hotel burned down in the 1960s, the owner of the tavern. At present 2 tubs, open to the sky, provide facilities fairly similar to those Mr Tinne experienced in 1872 (Rockel 1986, pp. 169-170).

Mongillo and Clelland (1984, p. 170) described the springs as “dilapidated bathing facilities” within the “Tarawera Hot Springs Reserve”, under the Reserves Act 1977. There are two groups of springs, the southern group about 49°C and the northern group 38°C. The open air baths are still used by local people.

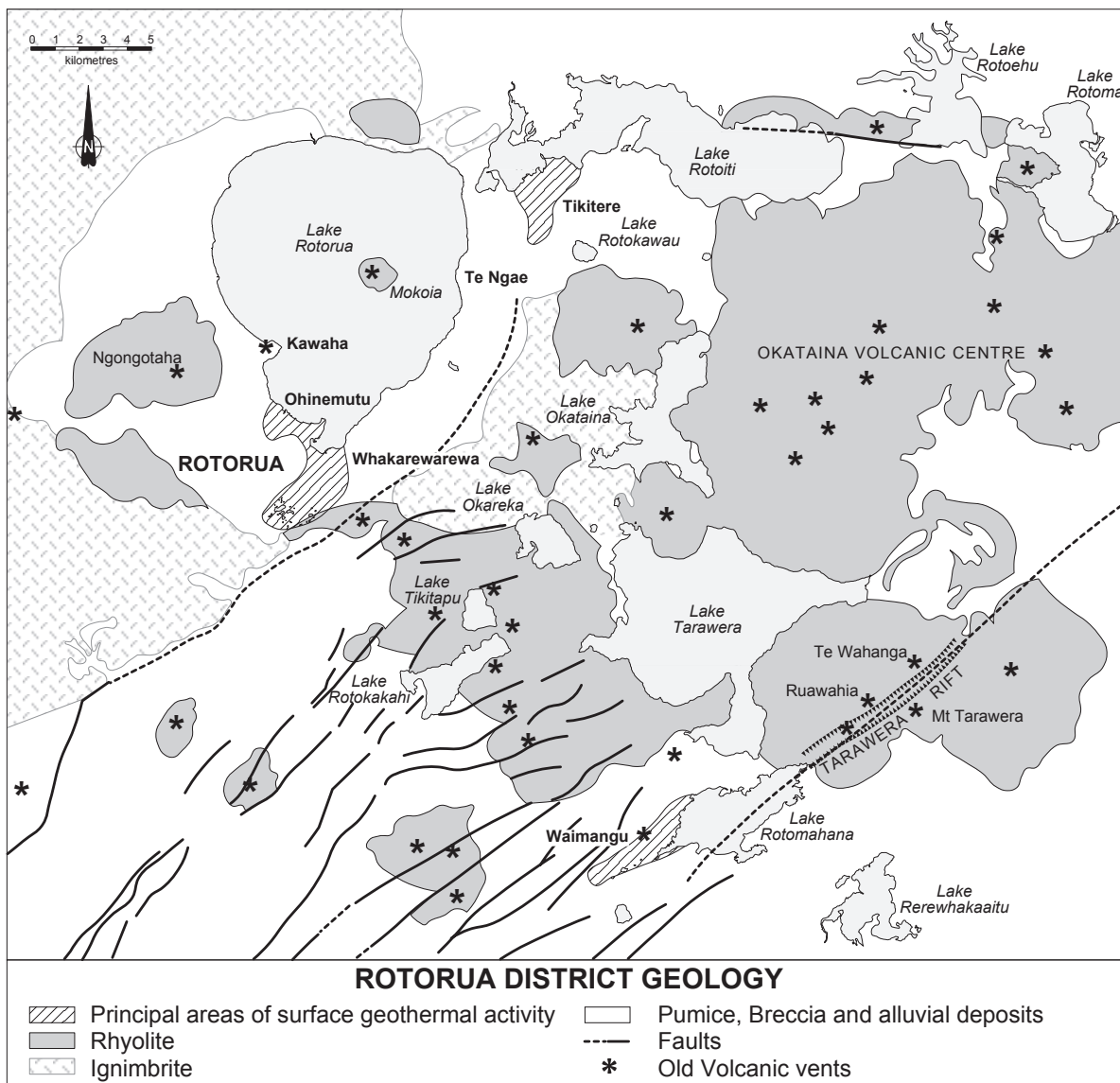


Figure 22. Rotorua District Geology

8. Rotorua District

The numerous puia, ngawha and waiariki of the Rotorua district are synonymous with Te Arawa tribes who lived among them for centuries. An example of identification of people and geothermal places is the “Waiata Aroha mo Petera Pukuatua” (Ngata 1988, vol. 1, pp 186-187):

Koangi hau-raro i tuku mai i te hiwi	The gentle north wind comes off the hills
Ki Ngongotaha ra, te hoha noa	At Ngongotaha yonder, and all the while unwearied
Taku nei titiro te puia i Whakahinga.	My longing eyes rest on the steaming pools of Whakahi-
nga.	
Tu mai i kona, ma te hautonga koe	Tarry there, and let the south wind
E whiu ki te rae o Tahere ra ia.	Bear you onward to the summit of Tahere afar.
Whai noa atu ana, ka huri atu na koe, e.	Alas, these are vain thoughts, for you are gone.

This extract refers to Ngongotaha mountain in the Rotorua district, to Whakahinga, a geyser west of Utuhina Stream at Ohinemutu, and Tahere, a hill west of Kawaha Point, Lake Rotorua.

The Rotorua district has a complex volcanic history (Figure 22). The main elements in the landscape are the old rhyolitic volcanoes such as Ngongotaha, Horohoro, Mokoia, Tarawera and those of the Okataina volcanic centre. To the west are layers of ignimbrite flows on the Mamaku Plateau. In between are layers of pumice, breccia and alluvial deposits derived from volcanic materials. The numerous old and dormant volcanic vents, fault lines and areas of surface geothermal activity indicate a long history of earthquakes and volcanic eruptions in the district.

For more than a century and a half Te Arawa people have been closely associated with tourism and geothermal areas. This chapter is concerned primarily with customary uses of the geothermal resource before tourism became significant, although Maori living among hot springs, mud pools and steam vents also became a tourist attraction. The Waitangi Tribunal in a *Preliminary Report on the Te Arawa Representative Geothermal Resource Claims* (Wai 153, 1993, p.33) recognised the geothermal resource as a taonga, guaranteed under Article Two of the Treaty of Waitangi, and that the respective tribes of Te Arawa have rangatiratanga over their hot pools and springs and other geothermal manifestations, and they act as kaitiaki of them. In this chapter a selection of extracts from the accounts of Pakeha visitors in the 1840s and 1850s have been compiled to illustrate the range of customary uses of geothermal resources. The geothermal areas reviewed include Tarawera and Rotomahana, Tikitere, Mokoia, Ohinemutu and Whakarewarewa, but this is not a comprehensive list as there are numerous others in the Rotorua district. No attempt has been made to provide a history of Maori and tourism, but some aspects of the impacts of tourism on Maori are reviewed at the end of the chapter.

8.1 Tarawera and Rotomahana

Few Pakeha visitors in the 1840s commented on Tarawera mountain. Cooper (1851, p.214), for example, described it as “three table-topped hills of Ruawahie [Ruawahia], Te Wahanga, and Parawera [Tarawera]”. Hochstetter described Tarawera mountain and lake in 1859:

The scenery of Tarawera lake surpasses in wilderness and grandeur that of any of the lakes in the lake district. The word signifies burnt cliffs The lake is probably very deep; for its shores are mostly rugged, rocky bluffs, shaded by Pohutukaua [sic] trees. The chief ornament of the adjoining landscape is the Tarawera-mountain with its crown of rocks, divided into three parts by deep ravines (Hochstetter 1867, p. 405).

In a footnote Hochstetter name the three peaks of Tarawera: “The northern portion is called Te Wahanga, the middle Ruawahie [Ruawahia] and the southern Tarawera” (ibid). He then described the ngarara said to live there:

It is an imposing table-mountain, consisting of obsidian and other rhyolitic rocks; and it is not to be wondered at, that its dark ravines and vertical sides have given rise to many an old story in vogue among the Maoris. Among others, a huge monster, 24 feet long, resembling a crocodile, is said to haunt the cliffs between the rocks, devouring every one who dares to scale the mountain (ibid).

Hochstetter also noted that the CMS missionary Chapman had ascended the mountain, “despite all the remonstrations of the Maoris”. He brought back a small lizard to demonstrate there was no huge ngarara. Nevertheless, Maori belief in ngarara, taniwha and the spirit of Tamaohoi who resided in Tarawera mountain persisted. Tarawera was a maunga tapu, where Tuhourangi and Ngati Rangitihi placed the bones of their ancestors for safe keeping and not to be intruded upon by outsiders. The lake was an important waterway:

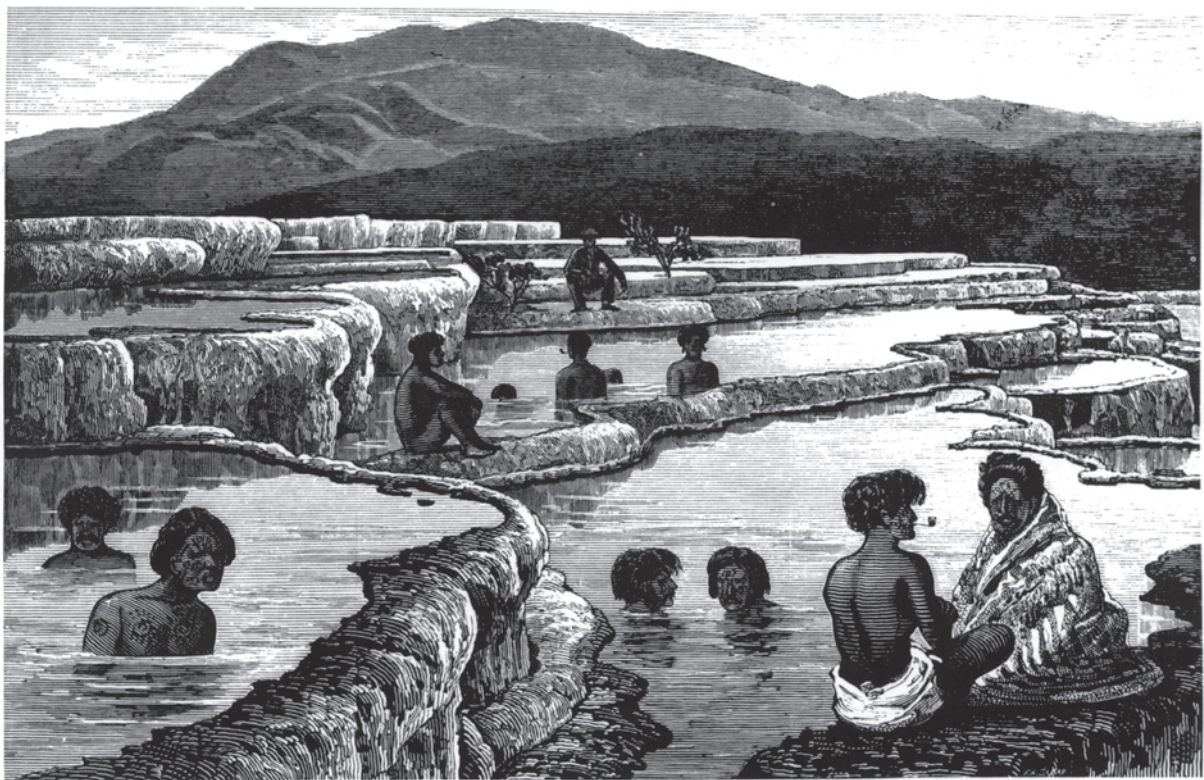
At the shore of the lake there are various Maori settlements, the original names of which, were changed into biblical appellations, such as Ruakeria into Kariri (Galilee), Te Ariki into Piripai (Philippi). A large portion of the land about the lake is still densely wooded; the cultivated portions on the other hand are said to be very fertile (ibid p. 406).

The geothermal areas were located at Te Ariki and around Rotomahana which could be reached via Kaiwaka stream draining into Tarawera lake, by track from Te Wairoa, or by track from the south. Dieffenbach briefly visited the Rotorua district on his journey north from Taupo in 1839. He described his first view of Rotomahana:

When we arrived at the crest of these hills, the view which opened was one of the grandest I ever beheld. Let the reader imagine a deep lake of a blue color, surrounded by verdant hills; in the lake several islets, some showing the bare rock, others covered with shrubs, while on all of them steam issued from a hundred openings between the green foliage



Drawing by Richard Taylor, 1849. (Alexander Turnbull Library F28653)



Bathing on the White Terraces, Rotomahana c.1880.

without impairing its freshness; on the opposite side a flight of broad steps the colour of white marble with a rosy tint, and a cascade of boiling water falling over them into the lake (Dieffenbach 1843, vol. 1, p. 381).

Dieffenbach also commented on the number and variety of waterfowl that inhabited the lake. He also described a village on the shore of Lake Tarawera which was probably Te Ariki:

We came to a small native settlement in a nook of the rocks, which hung over it on all sides. In this little bight were several warm springs, which the natives had surrounded with stones and have thus formed basins, in which they were continually sitting. These warm waters served them in the place of fires, as they jumped in as often as they felt cold, and this mode of treatment did not seem to do them any harm, as they looked remarkably healthy. I imitated their example in the night, and found the bath very agreeable (ibid pp. 384-385).

There were also kainga on the shores of Rotomahana, the warm lake, amid the active geothermal area. John Johnson visited in 1847 and described one kainga on the eastern shore of Rotomahana: “a more extended piece of ground, comparatively free from springs, and the Natives had erected some huts, and formed *waiariki*, and *hot plates*, as at Ohinemutu, for their use when they reside here in the winter, which they do for the sake of warmth” (*The New Zealander* 27 November 1847). The Pakeha visitors found the houses uncomfortably hot, but noted that there were no fleas, nor sandflies, nor mosquitoes, as “it is too hot for them”. In the next valley south of this kainga, Johnson was shown “masses of mud, of which the natives eat and considered wholesome. It had a slightly bitter taste ...”. He also described the “two islands a short distance from the shore, which, though covered with shrubs and small-sized trees, are subjected to the same action as the mainland, as steam issued from various parts”. These islands also “had a number of huts upon them, which the Natives inhabit in the winter” (ibid).

George Cooper, secretary to Governor Grey, visited Rotomahana in 1849. With the Governor’s party he travelled across Lake Tarawera to Te Ariki, a kainga consisting of “a few huts, and stands on a bank overlooking the lake”. He also noted at certain seasons local Maori moved to live at Rotomahana, “where they have kilns of flat stones placed over some of the boiling springs for the purpose of drying the kernels of the berries of the Tawa tree, which are considered by them a great delicacy”. He also reported that the lake was a breeding ground for a variety of birds:

They are preserved by a most rigid tapu, until the young are quite fledged, when such of the tribes in the neighbourhood as have an acknowledged proprietary right in Roto-Mahana assemble at Piripai [Te Ariki] for the purpose of having a feast, when the number of young ducks, pukekos and other birds killed is described as being enormous (Cooper 1851, pp. 218-220).

Cooper described the Rotomahana geothermal area:

All along the south-east shore of the lake, where the soil is of a nature resembling a mixture of pipe-clay and red ochre, are innumerable puias, or boiling springs, which constantly

emit dense volumes of steam. On this side of the lake are several huts, which are inhabited by the natives at certain seasons of the year, but which during our visit were temporarily abandoned on account of the birds (ibid pp. 228-230).

Cooper noted there were huts on the two rocky islets in Rotomahana which he called Pukuia (Pukura) and Puai (Puwai) and which were also “abounding in hot springs”. He then described Te Tarata, an “immense and beautiful hot spring”, later known as the White Terraces:

To convey, by mere words, an accurate idea of the beauties of this truly wonderful and magnificent sight, would be quite impossible. It may with truth be said that it beggars description.... With the reflection of the blue sky overhead, it has exactly the hue of opal, and is semi-opaque; so thick is it [the water] that it is impossible to see the bottom of any of the basins (ibid p. 230).

The Governor’s party camped in the vicinity, probably at the kainga Te Takapo. Cooper complained that he had trouble getting to sleep, “owing to the tremendous noise kept up by our natives, who were in great delight amusing themselves in the warm baths, or wai arikis, during the greater part of the night” (ibid p. 234). The party also visited the springs around the kainga at “Owhana” (also referred to by others as Ngawhana or Ohana), where there were more “kilns for drying tawa berries”. Cooper noted that one of the ngawha here was tapu, because two young children had died after falling in it. He also commented on the variety of geothermal features:

all of which are more or less interesting, as nearly every one possess some peculiar characteristic distinguishing it from the others close by; for instance one may see a puia of black boiling mud, one of white mud, and one perfectly clear water, within the distance of perhaps a yard between each (ibid p. 238).

Cooper noted some names of these ngawha: Te Korokoro o Te Tupua, Whata Poho and his wife, Taitaia on a promontory. The party also crossed the lake to “Te Wakatarata” which he erroneously applied to the Pink Terraces, Otukapuarangi. Whakataratara was a large sulphurous cauldron on the lake shore, on the north side of the terraces of Otukapuarangi which he also described:

it is at the bottom white as marble, a little higher up it becomes pinkish, then a beautiful salmon colour, which deepens to a roseate hue as the spectator casts his eye upwards from terrace to terrace; near the top it gradually becomes mingled with a yellowish tinge, until at the upper range of all, the rock is of a delicate primrose colour (ibid p. 240).

He described the water as a “light sky-blue colour, and the water “transparent”, not “semi-opaque” like Te Tarata.

When Colonel Russell visited Rotomahana in 1850 the kainga were occupied. Among the many geysers and hot springs he described was:

Roto Kanapanapa, a very curious lake of a perfectly pea-green colour, surrounded by hills of red and white calcareous stone There are many hot springs of steam and mud near

it. The natives eat the mud in small quantities and seem to like it. I tasted it and found it was like slate pencil in taste as well as colour A white earth, which is extremely soft and smooth, seemed to be used by the natives for soap. I observed them while in the baths send their children to a distance for it, and cover their hands and bodies with it. Some of the stone here has been quarried out in slabs and removed to where the ground is hot to make tables on which to dry their taua [tawa] berries (Russell 1850, pp. 29-30).

In 1858 S.P. Smith (later to become Surveyor-General), and four companions travelled from Taupo north to Rotomahana. He described the view from a hill overlooking the lake:

from which clouds of steam were rising from the innumerable hot springs that surround this lake. We were rather disappointed in the lake as to prettiness, it being encompassed by high hills, with dead-looking fern growing on them, and in some places a little manuka on the edge of the lake In the middle of the lake are two pretty Chinese-looking islands of Puwai and Pukara [Pukura], covered with houses and manuka. The lake must be a very Paradise for ducks, which breed in immense numbers in its tepid waters, covering it in some places like a black cloud (Taylor 1959, pp. 373-374).

The party descended to the lake, “crossed a warm stream and swamp, through some manuka scrub and passed many boiling springs”, where it was “dangerous” to leave the path:

In many places the crust of the earth over the boiling cauldrons below is so thin that it shakes as you walk across it. Everything about has a boiled look, with the exception of the manuka trees, which seem to flourish well.

After crossing a delightfully warm stream We put on our boots and scrambled through some scrub to a few houses, used by the Maories [sic] when they come here to catch ducks. The houses about Rotomahana seem to be all very cosy little places, often built over a hot spring which always keeps them warm. Scattered about amongst the houses are an immense number of large square slabs of white stone, laid in a horizontal position over hot springs, and are used by the natives for drying tawa berries; this I believe, being the only place in New Zealand where they can be done (ibid, p. 374).

This account was derived from a published version of Smith’s diary which first appeared in the *Taranaki News* in 1919, and later as a separate pamphlet which was reprinted in 1954 by the Taranaki Herald Coy. Ltd. In her edited version, Taylor (1959, p. 374) included a footnote:

The manuscript diary describes the drying process: ‘they [the tawa berries] are put over a hot spring and steamed for 48 hours, then taken out and the pulp taken away, then steamed again and spread out on the stones I mentioned before and dried. They are sometimes eaten raw but have very little taste, but when boiled and eaten with sugar are very good’.

This kainga was Ngawhana, or Ohana as Smith called it. His party moved on “to another deserted settlement called Takapu [sic]; and stopped to have some breakfast, which we spread out on some of the hot slabs, but found them uncomfortably warm, so had to shift our quarters”. Through some more manuka scrub, the party came upon “a large boiling pond The water

from it ran by a channel cut in the rock into some baths which were well paved and sided with large flat stones". Next "we turned a corner, and the beautiful Tarata [White Terraces] burst upon our view. We seemed all at once to have entered fairyland; we walked upon what appeared to be white marble, before us were dozens of marble baths and terraces". The Maori guides "immediately immersed themselves in them, and seemed to enjoy it exceedingly" while the Pakeha travellers explored the terraces (ibid, pp. 374-375).

Hochstetter, in 1859, walked to Rotomahana from Te Wairoa (now known as the "Buried Village") on "a much frequented foot-path, but very tiresome, because the traveller has continually to climb up and down over broken ground". It was late April and such a gale was blowing that canoes could not be used on Lake Tarawera, which was the easier route to Rotomahana:

I do not think, that the impression the traveller receives at first sight of the small, dirty-green lake – with its marshy shores, and the desolate and dreary-looking, treeless hills about it, covered only with a dwarfish copse of fern – corresponds in any degree with his previous expectations conceived from hearing so much about the marvels of this lake. So it was at least with us. The lake lacks all and every beauty of landscape scenery; that which makes it the most remarkable of New Zealand lakes, – indeed we may well say, one of the most wonderful points of the world – must be observed quite closely, it being mostly hidden from the eyes of the traveller on his first approach. It is only by the steam clouds ascending everywhere, that he is led to suspect something worth seeing (ibid p. 407).

Hochstetter and his Maori guides crossed by canoe to Puai (Puwai) one of the small islands in Rotomahana (Figure 23):

Puai is a rocky cliff in the lake, 12 feet high, 250 feet long, and about 1000 feet wide. Manuka, grass and fern grow upon it, and for occasional visitors of the lake small raupo-huts have been erected in which we made ourselves at home as well as circumstances would admit. I believe, however, that if we had not known that others before us had lived for weeks at that place, we would hardly have been induced to spend a single night there after a close examination of the spot. It is almost the same as living in an active crater. Round about there is continual seething and hissing and roaring and boiling, and the whole ground is warm In reality the island Puai is nothing but a torn and fissured rock, which, boiled entirely soft in the warm lake, threatens every moment to fall to pieces No fire is required here for cooking; wherever we dug but a little into the ground, or cleared the existing crevices of the crusts formed on them, there we could cook our potatoes and meat by steam East of Puai and separated from it by a channel only 40 feet wide, is a second island Pukura (red lump). It is of the same description as Puai, smaller in circumference, but higher by several feet, and has likewise several huts, which some of my Maoris chose for their dwelling place (ibid pp. 407-408).

Hochstetter spent the next couple of days exploring the hot springs, terraces, fumaroles, and mud pools around Rotomahana, noting too the abundant birds which were hunted seasonally, but tapu the rest of the year:

In former years, natives are said to have constantly dwelled about the lake; but, of late, they seem to shun more and more this dismal laboratory of subterraneous forces, where rocks are dissolved in water, and rocks again are solidified from the water; and consequently the shores of the lake are usually uninhabited. Numerous observations lead to the conclusion, that constant changes are going on at the Rotomahana, that some springs go dry; others rise; and especially the earthquakes, which are felt here from time to time, seem to exercise such a changing influence (ibid p. 410).

Hochstetter described the various geothermal features around Rotomahana. At Ngahapu (Ohapu), a large boiling pool, about 10 feet above the lake, local Maori “had constructed an artificial outlet, conducting the water to several bathing basins” (ibid p. 414). Nearby, to the south, was Te Takapo, another hot pool where there were some “deserted huts” the remains of a former kainga. Hochstetter described the numerous springs in some detail, and carefully noting the Maori names of each (Figure 23):

From the Waikanapanapa valley, opposite the two islands Pukura and Puai, the shores of the lake become steep and rocky; hot springs gush out from below, under the surface of the lake, while above on the side of the hill the huts of the deserted settlement Ngawhana (or Ohana) lie scattered by the side of the spring bearing the same name. Here the natives, probably for bathing-purposes, have constructed square-basins of sinter plates and connected them by gutters with the springs on the hill-side. The flat stones, which are laid across hot places, are said to have served for the drying and roasting of Tawa-berries (ibid pp. 415-416).

Hochstetter was more careful than most in recording the Maori names of geothermal features. The following names of hot springs at Rotomahana are listed in order around the lake, beginning in the north and following the eastern shore:

- Te Tarata: “the tattooed rock from the peculiar forms and figures formed by the siliceous deposits of the terraces” (The White Terraces).
- Ngahapu, or Ohapu: two springs, great and small, also the name of a kainga nearby.
- Te Takapo: hot spring/geyser, also the name of a kainga nearby; “numerous smaller springs, bubbling mud-pools and tabular, lightly incrustated holes along the shore between Te Tarata and Te Takapo bear no special names”.
- Waikana-panapa: “coruscating water”, a ravine with mudpools and fumaroles.
- Rotopunamu [Rotopounamu]: “green lake”, warm water.
- Ruakiwi: “Kiwi hole”, boiling spring.
- Te Kapiti: small boiling spring.
- Ngawhana or Ohana: group of hot springs and name of kainga nearby.
- Koingo: “the sighing”, intermittent erupting hot spring
- Whatapoho: hot spring, intermittent steam eruptions said to alternate with Koingo, sometimes a geyser.
- Wakaehu: “water in motion”, group of bubbling hot springs on shore of Rotomahana.
- Rangipakaru: “broken sky”, a small warm lake, also the name of a hill with “a crater from which a powerful solfatara steams forth, depositing great

quantities of sulphur”.

Te Ruahoata: “the hole of Hoata”, one of the atua who brought heat to Ngatoroirangi, a small lake.

Wairake: a small lake

Otukupuarangi: “cloudy atmosphere, from the continually ascending steam-clouds” (The Pink Terraces).

Whakataratara: “the great solfatara a crater-shaped hole a real sulphur lake” on the shore of Rotomahana beside the lower terraces of Otukupuarangi.

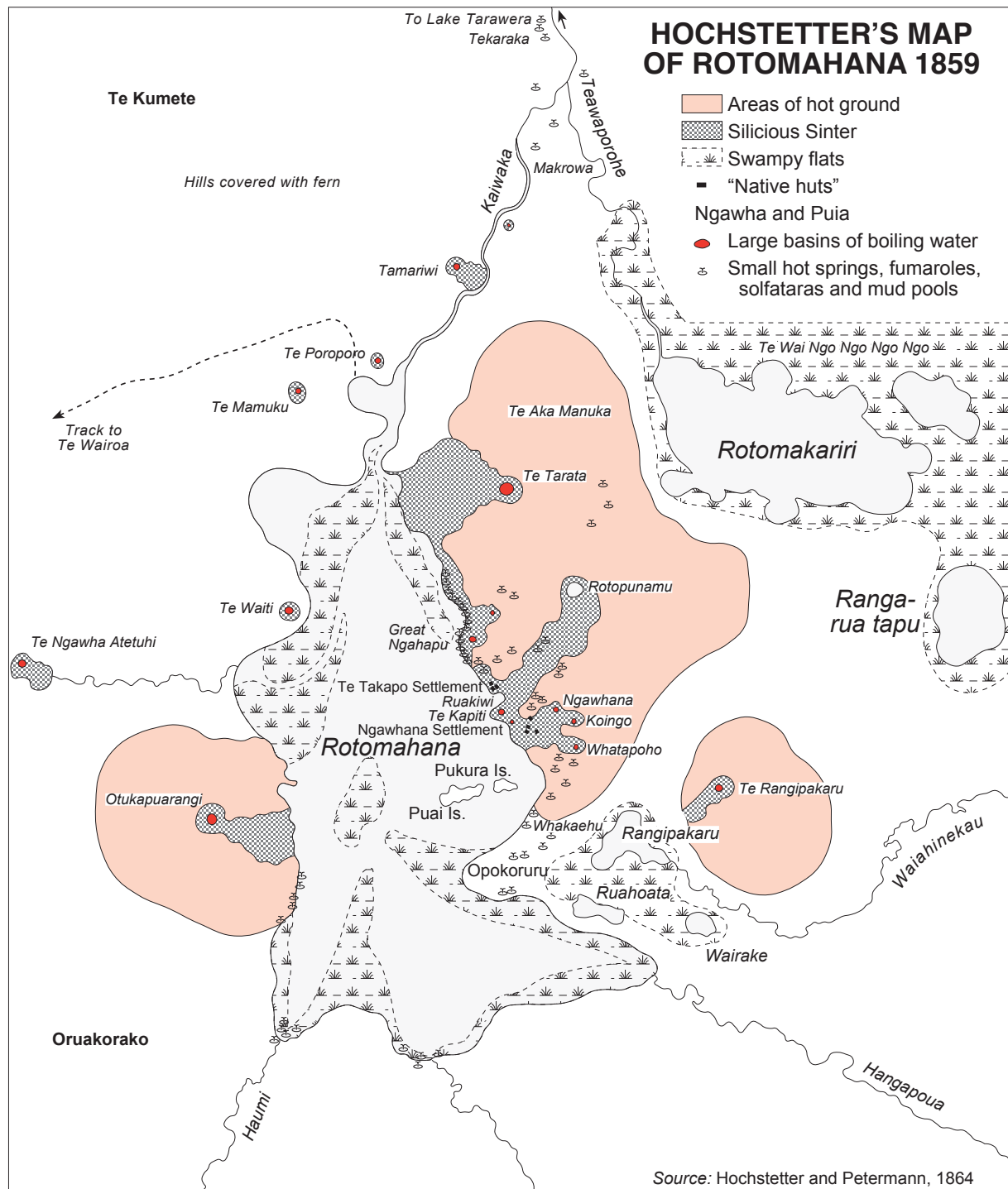


Figure 23. Hochstetter's Map of Rotomahana



F. T. SERIES. NO. 2332 THE LOST PINK TERRACES.



SITE OF LOST PINK TERRACES, ROTOMAHANA LAKE
W. Beattie & Co. — Auckland N. Z.



Rotomahana and Lake Tarawera 1986

Most of the geothermal activity was around the eastern shore of Rotomahana, the exceptions being Otukapuarangi and Whakataratara, and also Te Ngawha Atetuhi, a small boiling spring up a small tributary stream, and Te Waiti, another boiling spring “in the marshy flats at the N.W. end of the lake”. Many of these boiling springs around the lake occasionally erupted as geysers. At the north end of Rotomahana, along the Kaiwaka, the stream draining into Lake Tarawera, there were “numerous Ngawhas observed, which have special appellations such as Te aka manuka, Te mamaku, Te poroporo, Tamariwi, Makrowa [sic], Te Karaka etc.” which Hochstetter was unable to examine closely:

Altogether about 25 large Ngawhas may be counted on the Rotomahana; the number of smaller springs coming to light at innumerable places upon an area, occupying about two square miles, I do not even dare to estimate. As those hot springs according to the experience of the natives have proved very effective in the curing of chronic cutaneous diseases and rheumatic pains, I have no doubt, that, at no very distant period, this remarkable lake will become the centre of attraction not only for tourists of all nations, but also a place of resort for invalids from all parts of the world (ibid p. 418).

By the early 1850s local Maori were feeling the impact of Pakeha contact. Missionaries had arrived in the mid 1840s and soon after Pakeha flaxtraders. There was an influenza epidemic and other introduced diseases took their toll. Disputes over land rights led to fighting between Tuhourangi and Ngati Rangitihi in 1855. However, as Peter Waaka commented:

The 1850s were not entirely gloomy for the people of Tarawera. Almost overnight, they inherited a business so lucrative that, less than a decade later, Tuhourangi were being hailed as the most affluent tribe in the country. At a time when the tourist industry in New Zealand was beginning to boom, the world became aware of an unsurpassed geothermal spectacle situated on the shores of Rotomahana. On one side of the lake lay seven acres of silicated terraces, formed by the cascading waters of the Te Tarata geyser. On the other side lay a five and a half acre expanse of indescribable beauty known as the Pink Terraces, the smooth steps of which had been formed over the years by the water of Otukapuarangi geyser.

Tuhourangi, under their chiefs, Rangiheuea and Rangipuawhe, held complete authority over Tarawera, Rotomahana, and the Terraces, controlling both the tourist traffic and the accompanying recompense (Waaka 1986, p. 12).

On 10 June 1886, Tarawera mountain erupted, destroying the Rotomahana geothermal area and its terraces, and depositing a thick layer of ash over the landscape, burying the kainga at Rotomahana, Te Ariki, Moura (on the western shore of Lake Tarawera) and Te Wairoa. There were some survivors at Te Wairoa and 153 people are known to have died (see Keam 1988). This was a traumatic event for Tuhourangi survivors, bereft of their homes and families, many of whom subsequently settled at Whakarewarewa.

8.2 Tikitere

John Johnson described a visit to Tikitere in 1847:

Over its whole surface, which was nearly level, boiled up springs of various sizes and quality – some clear and transparent, others muddy and discoloured, on whose surface rose large bubbles While others again were of pure mud, lazily rising up with that Stygian aspect which characterizes them. The spaces between the different springs were either formed of clay or aluminous rock, variously coloured, sometimes by incrustations of sulphur, which indeed often lay about in heaps, at others the clay was burnt perfectly red like a brick, as the rock was blackened by the smoke of some internal furnace. Clouds of steam rose from every part of the plateau, and mingling with the dense fog that hung around, gave a vivid idea of the fabled kingdom of Pluto. It required considerable caution in moving over the treacherous crust that covered the beds of burning sulphur, and boiling fluid below, for from the little spiracles [fumaroles], of which there were numbers in every direction, pure, sulphurous acid gas was emitted, that formed beautiful crystals of sulphur round the edges, and showed the near approach to the surface of the burning material itself and thin coating of clay that covered it.

The natives often resort here for the cure of rheumatism, and other diseases with which they are afflicted. They form on these occasions, a steam-bath, over the spiracles, by means of layers of manuka branches, which they so dispose as to prevent themselves from being burnt or scalded, yet to have the benefit of the vapour, and they cover them with rude sheds, many of which we saw in various parts of the plateau. They make use of these sulphureous steams for another, although not a very delicate, yet an equally necessary purpose, for they spread their garments on the manuka, and thus destroy the vermin with which they are usually covered

The valley I have described would appear well situated for the site of the hospital which His Excellency the Governor proposes to erect in this part of the country, as it would not interfere with the Natives who do not live near it: there is sufficient space for the necessary buildings, and the various waters might be conducted from the plateau into the baths by means of earthenware or even wooden pipes, when Europeans were patients, for their efficacy in obstinate rheumatic affections, have been tested by several settlers from Tauranga and other parts in the Bay of Plenty who have received great relief, and in one instance I was informed, a perfect cure was completed by their use – and the Natives, though making the hospital their residence for internal treatment, might use the steam-baths after their own fashion (*The New Zealander* 8 December 1847).

George Cooper visited Tikitere in 1849 and commented that the Governor had promised to set up a “hospital for the benefit of the natives who visit this part of the country in great numbers for the benefit of the warm sulphur baths for the cure of scrofula and other cutaneous diseases”. The local reaction to this proposal was initially positive, but rivalry with other hapu led to disputes and the scheme never materialised (Cooper 1851, pp. 184-186 and Stafford 1967, pp. 320-321).

In 1859 Hochstetter travelled north-east from Te Ngae:

for the purpose of visiting the great Ngawhas or solfataras situated upon the pumicestone-plateau between the lakes Rotorua and Rotoiti. They are a peculiar group for themselves. Comparable to hideous carbuncles on the surface of a body, those solfataras – holes, rotten more or less deeply into the ground, surrounded with yellowish-white crusts, and diffusing an offensive odour – lie bedded among the green fern-lands. Their list opens with Tikitere, not merely a single pool of sulphur, but a whole valley of solfataras, bubbling mud-pools and hot springs. In the middle is a water-basin, 50 to 60 feet in diameter, called Huritini; it seethes and boils and bubbles in all corners, the turbid and muddy water sometimes rising to a height of 12 to 15 feet. Pumicestone sand cemented with siliceous deposits, sulphur-crysts and black mud form a very suspicious soil around, which can only be stepped upon with the greatest caution. The atmosphere is impregnated with sulphuretted hydrogen and sulphurous acid; dense clouds of steam whirling up from the dismal haunt. North of Tikitere are the solfataras Karapo, Te Korokoro, Te Waikari and Te Terata; next, Harakeke-ngunguru, Tihipapa and Papakiore; and finally Ruahine.



Tikitere c.1900 above and 1938 below.

Ruahine (from rua, hole, and hine, wife) has the appearance of an active crater. The crater-shaped basin lies on a declivity sloping towards lake Rotoiti; at its bottom black mud may be seen boiling, which by the rising and bursting steam-bubbles is sputtered up into the air to a height of several feet. The column of steam ascending here is designated by the natives Te Wata-Kai-a-Puna-kirangi, meaning the place where the meal is hung up for Puna-kirangi. Yellow masses of sulphur are sticking to the many-coloured clay-soil. Black, muddy water flows out of the mud-basin; the valley in front of the basin is covered with sulphur and sinter-crusts, emitting steam from more than hundred perforations. Here also great care is to be taken by the traveller, lest he breaks through into boiling mud. The apertures emitting pure steam the natives use for cooking (Hochstetter 1867, pp. 429-430).

The geothermal areas around Tikitere and Ruahine remained undeveloped for tourism or medical purposes, but still used by Maori in customary ways. In the 20th century Tikitere was leased for tourist viewing, and renamed Hell's Gate. At Ruahine Springs, geothermal wells have been drilled to investigate the potential of this geothermal field.

8.3 Mokoia

The island is a remnant volcanic cone in the Rotorua caldera, now surrounded by lake waters, which long served as a refuge pa for Te Arawa people. Wade described "the large pa, which was thickly populated" on Mokoia in 1838. It was also the temporary residence of the CMS missionary Rev. Chapman, whose station at Te Koutu on the south shore of Lake Rotorua had been destroyed in a fight between Ngati Haua and Ngati Whakaue. Chapman re-established his mission at Te Ngae, on the eastern shore of the lake in 1840. Wade was particularly impressed by the availability of geothermal heat on Mokoia:

Just below the settlement there was a hot spring, affording at all times a supply of boiling water, without an expenditure of fuel, so that for clothes washing, pig scalding, house cleaning, and other purposes requiring hot water, you could always have as many pails full as you pleased to send down for. The natives had ingeniously divided the pool of water into two compartments, connected with each other by a narrow channel, and each having an outlet to the lake. It was so contrived that they could always keep the larger compartment as a constant warm bath, regulating its temperature by letting in hot or cold water, as required. I only saw one old woman comfortably sitting in it; but Mr. Chapman informed me that he had seen it crammed full, with about fifty naked natives, men, women, and children, thus keeping up their animal warmth on a cold evening (Wade 1842, p. 149).

Johnson described the settlement on Mokoia in 1847:

There is a considerable extent of flat ground on the southern side, which was covered with kumera gardens, cultivated with all the care which the Natives bestow on that plant, and which seemed to thrive well in the light volcanic clay of the island. The sides, for a third of the way up are cut into terraces, similar to those seen on all their strongholds There were a good many huts scattered over them, and on the flat below



N.Z. Graphic Series

A MAORI WHARE AT MOKOIA ISLAND, ROTORUA.

Mokoia c.1910



WHARE ON MOKOIA ISLAND, LAKE ROTORUA.

(New Zealand Tourist Department Photo)



HINEMOA BATH, ROTORUA, N.Z.

There are several boiling springs at the foot of the hill, of a lightly acid, but not a strong sulphurous taste. They bubbled up from rock of the same descriptions as at Ohinemutu, and as at that place, were conducted into a number of *wai ariki*, or hot baths, in which the Natives were enjoying themselves. Indeed the use of these hot baths seem to occupy a great portion of their time (*The New Zealander* 8 December 1847).

Cooper visited in December 1849 and recorded there were houses, several acres in cultivation, some “fine specimens of ancient carving”, and hot springs on the southern shore:

Several warm baths in which the natives spend much of their time, and which form their places of refuge in rainy weather, when they leave their clothes indoors and run into the Waiariki by scores, men, women and children altogether, immersed up to their necks in the water, with the never-failing pipe in their mouths, chatting away in their usual lively manner, and adding to the density of the steam from the baths by infusing into it copious additions of tobacco smoke. The baths are of various sizes, the largest, which is on the south-west shore, being about twenty feet by eight, with a depth from two to five feet. It is called Kaikimihia, and is the scene of a very romantic story (Cooper 1851, p. 188).

He then recounted the love story of Hinemoa and Tutanekai which had been told to Governor Grey in 1847. Hochstetter (1867, p. 426) reported 40 people living on Mokoia in 1859.

8.4 Ohinemutu

Among the earliest descriptions of Ohinemutu, the principal pa of Ngati Whakaue, was that of the CMS missionary W.R. Wade who visited in 1838. Wade travelled through the bush from Tauranga but was not impressed with the landscape around Lake Rotorua. “The soil at Rotorua, and for many miles around, is generally of a pumice character, the appearance of barrenness increasing as you recede from the woods, till the land assumes the aspect of the completest sterility” (Wade 1842, p. 146). He was, however, impressed with the benefits of the geothermal micro-climate at Ohinemutu:

Oinemutu [sic], the largest of the Rotorua pas, is situated on a peninsular projection, which may be said to be the very seat of the principal boiling springs. The houses of the natives stand on ground which is almost everywhere warm, and in some places hot: and the springs at their doors, or just at hand, serve as ever-boiling pots, in which they easily cook their food. Indian corn has been seen, placed with care in a calabash, quietly stewing in a still corner: and potatoes or kumaras are readily let into or drawn out of the boiling water, by means of baskets constructed for that purpose. From some of the springs there flow small running streams, of steaming, scalding water, which make travelling awkward. Slight scalds are too frequent to be noticed, and it is surprising that the children at all escape severe and even fatal scaldings.

If you go into the houses erected on warm spots, after the doors and windows, or apertures so called, have been shut, you are instantly reminded of the highest temperature of English

hot-houses. This warmth is both grateful and useful to the natives, particularly in the winter season. Early in the spring, they place their kumaras in baskets, in these natural hot-houses, leaving them for a month or six weeks to grow out. The weather by that time being sufficiently warm to allow of their being planted out in prepared beds, the plants are then put into the ground in rows, and sheltered from the winds and morning frosts, by broom twigs, about three feet long, placed upright, so as to form a screen along the rows. In removing the kumaras, great care is taken not to injure the young shoots. By this method they gain a month or six weeks in the growth of the plant, the losing of which time would so shorten its summer advantages, as frequently to prevent its coming to perfection. The kumaras grown in the neighbourhood of the hot springs are very fine in quality and flavour. They seem to grow best in a soil almost entirely composed of pumice-stone sand, no kind of manure being used, except early turning in the grass and weeds of the previous year's fallow.

Many remains are to be seen of the hot springs of former days, all indicating a great extent of subterranean fire, or of plutonic action. Earthquakes now and then occur. The native account of them is, that "The high fences shake, and move from one side to the other, for a short time, with a strong tremulous motion" (Wade 1842, pp. 144-145).

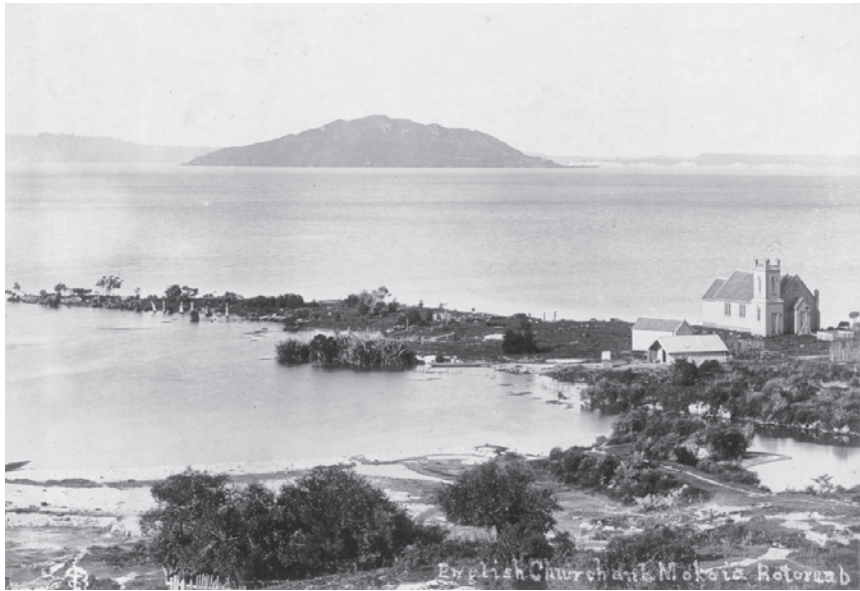
Wade, the missionary, was not impressed with some of the carvings in the pa:

The high fence of Oinemu exhibited a variety of hideous figures, as carved tops to the posts. The larger carvings of the New Zealanders are of the rudest cast, and often highly indelicate; but their smaller and more finished pieces of workmanship display much ingenuity. Their carved spear heads, and club handles, their tinder boxes, and boxes for carrying their feathers, the head and stern posts of their canoes, their best paddles, the elaborate work in front of some of their houses, as well as their efforts in a variety of other ways, both in wood and stone, all shew their capabilities.

In the pa, a large elaborately carved pataka, or kumara store, supported on four strong wooden pillars, attracted my attention. The broad boards which formed the upper angle, and most conspicuous part of the verandah of the pataka, were curiously wrought, and surmounted at the angular point by a small uncouth figure. The inner front and small doorway, also abounded in grotesque carvings (Wade 1842, p. 151).

Colenso visited Ohinemutu in the summer of 1841-42, and described it as "a large fenced town on the banks of the lake, celebrated for its boiling springs" and acknowledged as the principal settlement of Ngati Whakaue:

In the smaller springs, of which there were several, the natives cook their food, merely tying it up in a rude basket made of the leaves of *Phormium tenax* woven together, and placing it in the boiling water, where it is soon dressed. For this purpose and for that of bathing, they have made a number of holes through the crust, a scoria, on which this village is principally built; so that it may truly be said, that this people dwell in houses built over subterranean fires. The sulphureous stench which abounded here, was almost insupportable (Colenso 1844, p. 57).



Ohinemutu, Lake Rotorua and Mokoia c.1890.

Most visitors found the food cooked in hot springs very acceptable fare, but Bidwill, who had been held up at Ohinemutu by contrary winds preventing him being taken across Lake Rotorua to Chapman's mission station at Te Ngae, commented:

I was uncommonly angry at being kept there so long, and the having nothing to eat all day had not improved my temper: although very hungry I did not like eating what was dressed in the hot springs; and there was no wood to be had in the whole Pa for love or money (Bidwill 1841, p. 65).

Colonial Surgeon John Johnson estimated a population of about 500, including "about two hundred fighting men", when he visited Ohinemutu in January 1847. He was fascinated by this principal kainga of Ngati Whakaue and the communal bathing on the southern shore of Lake Rotorua:

We rose at day-break, and on going out found the whole pa enveloped in vapour, which was rising from the numerous Ngawha, and we could hear the voices and the splashing, though we could not see the persons, of a number of people in the lake below, who were enjoying the luxury of a bath, in the common bathing-place – thither we descended and found it nothing less than an arm of the lake, occupying at least an acre in extent, which was heated to a temperature of 96°, both by the streams that flow into it from the Ngawha, as well as from a large boiling spring in its centre, by approaching, or keeping at a distance from which, the temperature may be varied at pleasure, but in the summer season it is never below what I have stated.

On reaching the edge of the basin, a scene, certainly unique of its kind, presented itself. About a hundred and fifty people of all ages were engaged in bathing, all in a state of nature, with the exception of the women, who, beyond a certain age, wore the bouraki [rapaki], a species of kilt made of flax, reaching from the waist to the knee. In one corner might be seen a group of young people with dripping tresses, like so many Stygian Naiads – in another, a swarm of young urchins, sporting about like so many imps in Dante's Inferno. Here were a party of the seniors of the pa, seated in the water, quietly enjoying their morn-

ing pipe – and there, a family from grand-father to grand-child, and mothers with infants at the breast, enjoying this agreeable luxury; but the strangest scene of all was a row of young men sitting up to their necks in water, in front of whom was squatted a man who was asking questions, which were answered by the posse in full chorus. I found, on enquiry, that these were a set of young noviciates, aspiring to an entrance into the Christian fold, who were repeating the ten commandments to their teacher, as an initiatory rite.

The water had not a very inviting appearance, being of a muddy green color, and on entering, our feet sunk in a slimy mud, when one could scarce do away with the impression, but that at each step some horrible reptile, bred in this Avernian lake, would seize upon the rash intruder on his domain. We soon, however, reached a hard bottom, and then plunging in, swam and revelled in the delightful temperature of the water. We were soon followed by a crowd of boys who are half amphibious, shouting and playing all sorts of antics around us, and one young wag set the whole party in a roar by shouting out – “Look at the Pahkea [Pakeha], with a skin like a pig!” alluding to the colour of that animal after it has been killed and scalded (*The New Zealander* 20 November 1847).

Johnson also commented that he had some difficulty getting wood for a fire “to prepare our breakfast after the English fashion” because “the inhabitants of the pa cook their food by immersing it in the boiling springs, which are so numerous near the lake, that almost every house possesses a natural kitchen, and those who live higher up the hill, make use of several, common to all who choose to take advantage of them as public property” (ibid). Johnson described the domestic arrangements in some detail:

The pa occupies the steep sides of the hill I have before described, as rising from the edge



Ohinemutu Geyser, Mokoia Island and Lake Rotorua (Meade, 1871).

of the lake, to the height of perhaps two hundred feet – its base, and a long point, jutting out, which forms one side of the common bathing-pool. The foot of the hill and the point are composed of a whitish rock, a deposit from the springs, which seems to be an impure alumina, the chemical *base* of clay. It is indeed a mere crust, covering an immense reservoir of boiling water, for every part of it is perforated by circular apertures to the edge of which the water rises in a state of ebullition. Each family has managed to secure two or more of these, in the square fenced enclosures, common to Native pas, which as I have before mentioned, they use as a cooking-place, but they also make use of them for other purposes of domestic convenience, one, being that of private baths called *wai ariki*, which are hollowed out of the rock or shaped with flat slabs, and are heated to a suitable temperature, by means of channels, which convey the necessary quantity of boiling water from the spring that is constantly overflowing, into the bath, or it can be turned into the lake at pleasure, and the family, by a little management, can always keep the *wai ariki* at the same heat. Another, and very singular employment of these springs is, their use as fire-places, and this is managed by covering the apertures with smooth slabs of rock, which, becoming thoroughly heated, impart an agreeable warmth to the family seated on them. They are in fact hot plates, which are never cool. The weather was too warm for the Natives; to use them, consequently the dogs of the pa were permitted the sole enjoyment of a station which, in the winter, they only participate with their masters. Cats there are none, as rats can find no hiding holes, without a risk of being boiled or roasted alive. Even sand-flies find the soil too hot for them, and mosquitoes cannot stand the effect of the sulphurous steam. The people of Ohinemutu are thus delivered from three of the pests which afflict other parts of the Colony (ibid).



Moonlight Bathing at Ohinemutu, 1883.

Johnson also noted that water from one particular boiling pool was diverted into “a rocky basin” and “used as a washing place” for clothes. “The natives find, that the other springs do not cleanse their greasy garments, and consequently have recourse to the one in question.”

Johnson, a medical doctor was also interested in the therapeutic uses of the various springs, and was frustrated that he had inadequate equipment to test the chemical composition of the waters:

There is no doubt however, but they possess valuable medicinal qualities both for internal use, and external application, as the Natives cure many diseases by simple immersion in them, but I should imagine that their uniform heat is the most active agent in the cure. However, an accurate analysis of their individual composition, which I had not the power of making, would throw light on their use in specific diseases, and it would be desirable that such should be made under the auspices of Government (ibid).

Johnson did report that local Maori used the waters of a particular spring “as if instinctively, for the cure of diarrhoea and dysentery” (ibid).

George Cooper described his visit to Ohinemutu with Governor Grey in December 1849:

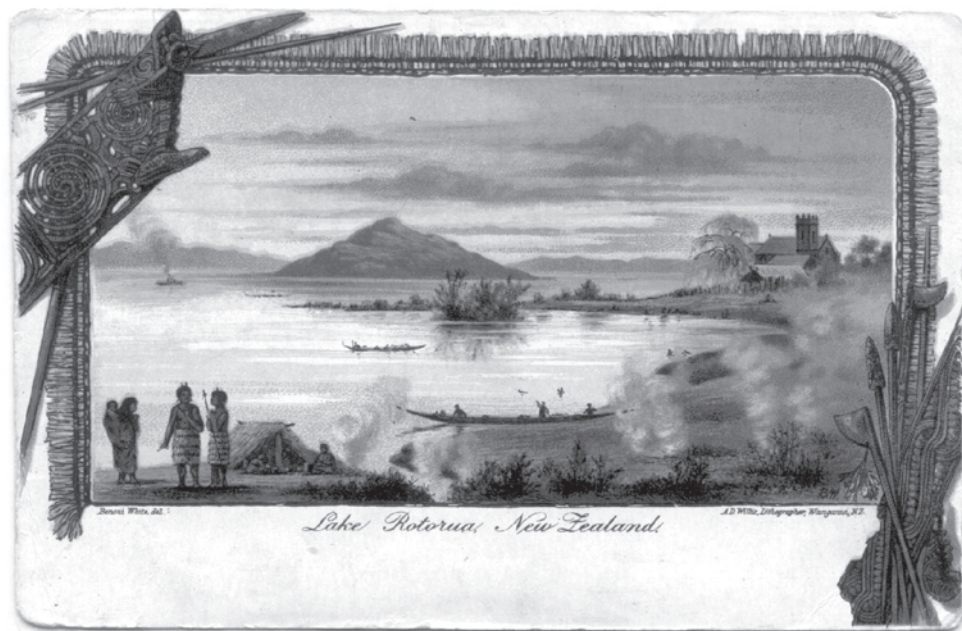
We walked around the pa this morning, and found a great number of fine ancient carvings in the shape of gateways, posts of houses &c., &c. We then went amongst the boiling springs of which there are immense numbers close to the pa. They are like those at Tikitere, except that they contain very little sulphur, and the water in most of them is much cleaner; some are, however, nothing but cauldrons of boiling mud. The ground around these cauldrons is very dangerous to walk on without a guide, as in most places it is nothing but a thin crust under which is a tremendous depth of mud and water, generally of a temperature far above boiling heat. The natives cook all their victuals in these springs and use fire only for lighting their pipes (Cooper 1851, p. 208).

Colonel Russell was also impressed by the geothermal bathing and cooking facilities when he visited Ohinemutu in 1850:

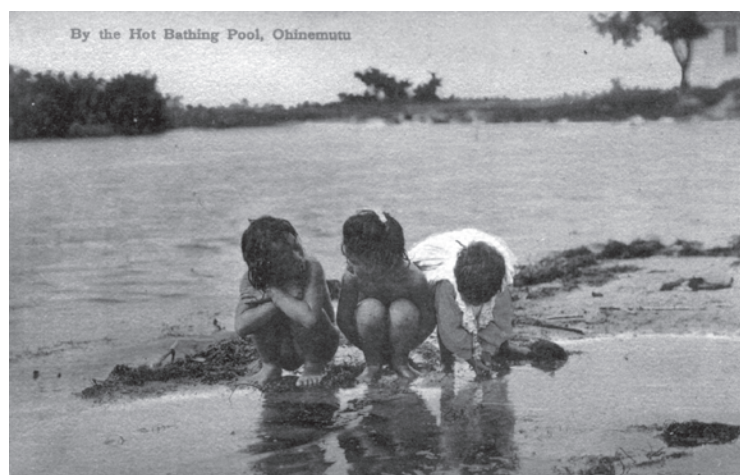
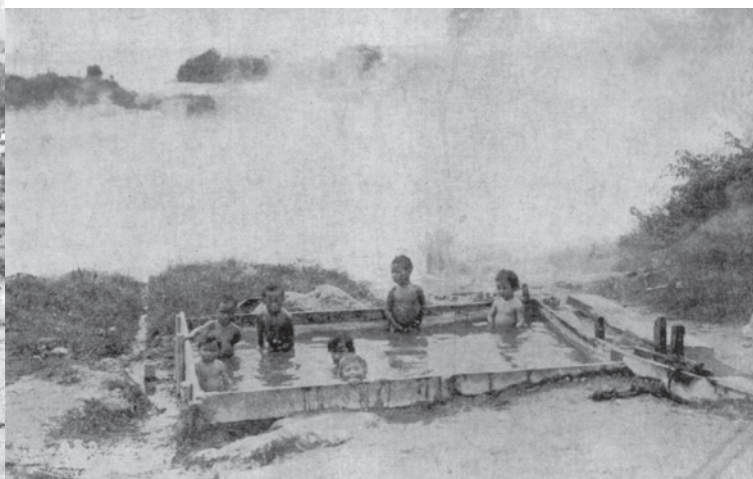
The Pah is singular in being built amongst a number of hot springs, a few yards from the shore which formed into baths and basins amongst which the wharries [whare] are built, and the hot water runs in small streams in all directions and at all temperatures. Some of the springs are used as baths, and others are cooking places. We had a basket of potatoes cooked for us, and I found they were done in twenty minutes. I observed the children bring down their basket of potatoes, and tying them by a string to a fence which surrounded the boiling spring, leave them there for the necessary time, when, drawing them out by the string they carried them away to their wharries (Russell 1850, pp. 15-16).

Hochstetter described Ohinemutu in 1859:

Ohinemutu still bears to some degree the features of an old Maori Pah. The dwellings of the chiefs are surrounded with enclosures of pole-fences; and the Whares and Wharepunis, some of them exhibiting very fine specimens of the Maori order of architecture, are or-



Ohinemutu c.1900



Ohinemutu c.1900

named with grotesque wood-carvings The human figures are no idols, but are intended to represent departed sires of the present generation. The huts of the village are scattered over a considerable area on both sides of the Ruapeka Bay and on the slope of the hill Puke Roa arising to about 150 feet above the lake. Ohinemutu has a protestant and a catholic church. The place is noted far and near for its hot springs and for its excellent warm baths (Waiariki).

Ruapeka Bay forms the centre of the hot springs. There it seethes and bubbles and steams from hundred places. The principal spring is the Great Waikite at the South-side of the bay. The basin of the fountain communicates with the lake, and it is to the immense quantities of hot water issued forth here, that the whole bay becomes warm and forms an excellent bathing-place Little Waikite, a few yards above, forms a basin four to five feet wide

From the Ruapeka Bay the hot springs continue in a south-western direction on the foot of the Pukeroa, along the Utuhina Creek as far as the small settlement Tarewa. In this direction there are moreover two small warm ponds, Kuirau and Timara, fed by hot springs, both favourite bathing places of the natives. Also on the South- and East-sides of the Pukeroa steam is seen to ascend from various places. Tabular blocks of siliceous deposit, two to three feet thick, of a mass resembling milk-opal, lie scattered about over the slope and the base of the hill, indicating, that the activity of the springs in former periods especially on the East-side of the hill was still far more extensive than now, or that the springs changed their place from time to time. The natives have special springs for bathing, for cooking and also for washing. On places, where only hot vapour escapes from the ground, they have established vapour-baths, and upon heated ground they have warm houses for the winter season, of which it is said, that no vermin of any kind is able to exist in them (Hochstetter 1867, pp. 423-426).

By the 1870s Ohinemutu had become the centre of the developing Rotorua tourist industry, and the departure point for excursions to the Pink and White Terraces at Rotomahana. Pakeha settlers had begun to drift in and several accommodation houses were established. Ohinemutu was still a Maori township and that is how it has remained, while Rotorua township was established in 1880 and grew around this old Ngati Whakaue kainga.

8.5 Whakarewarewa

In the 1840s Whakarewarewa does not seem to have been permanently occupied and few Pakeha visitors described this geothermal area. Johnson visited Whakarewarewa in 1847 but did not record any permanent kainga there. "The Natives resort here occasionally in the winter, I presume for the sake of enjoying a higher temperature than at Ohinemutu" (*The New Zealander* 8 December 1847). Governor Grey was taken to visit Whakarewarewa in 1849 and others in his party regretted not going with him to see the geysers: "He described them as being beautiful jets of water, which rose sometimes to the height of twenty-five or thirty feet, and the ground all round covered with an incrustation of lime [sic] deposited by the water" (Cooper 1851, p. 210).

Again, there was no comment on a kainga there. However, there is evidence of long occupation in the three pa sites: Whakarewarewa, where the present cemetery is located; Te Puia, overlooking the geothermal area; and Rotowhio, where the model pa has been constructed.

Hochstetter visited in 1859 and provided a brief description of the geothermal activity:

Two and a half miles distant from Ohinemutu in a south-easterly direction is the native settlement Whakarewarewa. Lying at some distance off the direct road from Ohinemutu to Tarawera, it is generally skipped over by tourists, but the springs here exceed those of Ohinemutu in variety and extent. The principal springs are on the right bank of the Puarenga Creek. Seven or eight of them are periodical geysers, having, however, their own, as yet unexplored caprices, as they are not always obliging enough to satisfy the curiosity of visiting travellers. It is said to happen now and then, that they play all together; the natives assert, that such is generally the case during heavy easterly gales. I was not fortunate enough myself, to witness such a grand spectacle (Hochstetter 1867, pp. 426-427).

Hochstetter did not describe the “native settlement” itself, and only briefly referred to the geysers Waikite and Pohutu. “Parikohuru and Paratiatia are the names of the springs supplying the large bathing-basins of 50 and more diameter, in which the natives, men and women promiscuously, bathe for hours, all cosily smoking their pipes and chatting together” (ibid p. 428).

The development of Whakarewarewa as a permanently occupied kainga and tourist attraction was boosted by the settlement there of Tuhourangi survivors of the Tarawera eruption. Both Tuhourangi and Ngati Wahiao who lived there became involved in guiding tourists around the geothermal area. One of the best known guides at Whakarewarewa was Makereti (Maggie) Papakura, who described Whakarewarewa or “Wonderland” in her 1905 *Guide to the Hot Lakes*:

Many of the most interesting sights in the district are to be found here. The Oil Bath and the Spout Bath (“Turikore”), both so well known for their curative properties, are close to the [Geyser] hotel. The spout bath relieves many sufferers from their rheumatism, sciatica etc., and the Oil, apart from being a pleasure bath, cures any irritation of the skin and makes one sleep, often effecting a cure in the case of those suffering from insomnia when taken the last thing before going to bed. Here are found the principal geysers

The pa, or village, is about three minutes’ walk from the hotel, across the Puarenga stream, and is covered with every kind of hot spring and mud hole of every colour. From the bridge also the children jump into the stream from a height of almost 30 feet and dive for pennies. The village is owned by the Maoris, and it is very interesting for visitors to see them at home

All the cooking is done in the boiling and steam holes. The Maoris live chiefly on potatoes and meat and are very fond of tea. The tribes who live in Whaka are Tuhourangi and Ngatiwahiao. Most of the Tuhourangi are survivors of the Tarawera eruption of 1886. There is a Maori Council in the village (Papakura 1905, p. 18).

Maggie Papakura also described the principal geothermal features at Whakarewarewa in her *Guide to the Hot Lakes* (Figure 24):

Parekohuru – In the native settlement just across the bridge, Parekohuru, the cooking hole, is a picture worth taking. Usually, there are several kettles round the edge, and Maori wahines doing their cooking. It is a beautiful large boiling hole, and, as far as is known, quite bottomless. The minerals do not taste the food. Parekohuru flows out in three places. The food can also be steamed in boxes. Bread is put into a camp oven and steamed after it has risen. When cooked, the crust is a creamy colour, and very nice to the taste.

All the washing is done in pools set aside for that purpose and the clothes are boiling a few feet away. Everything is handy even to the rinsing water, which is got at the tap where the water is laid on by the Government. The water which supplies the washing pools flows from Parekohuru.

Korotiotio is a furious boiling spring not far from Parekohuru and is the source of the wonder Oil Baths. It was originally a cooking hole till about thirty years ago when a woman, Iriaka, slipped into it and died. The pool has since been sacred. A few feet away is the Champagne Pool. It is a beautiful colour and when earth is thrown in effervesces: while not a foot away is another clear pool that will not fizz.

Leaving the native portion and passing through the village and the cemetery on the hill, you go through a gate to the Government sights, the first one being Wairoa.

Wairoa, like a human being, has to be soft-soaped before it will play and it is often soaped for the visitors, permission first coming from Sir J. Ward and Mr. Seddon. When soaped, it goes up from 100 to 150 feet. On a fine day, with no wind, it is a beautiful sight.

Waikorohihi is a geyser continually playing. Sacks of sand were put round it a few years ago, which have all become petrified, but the seams of the sacks show plainly. The water from Waikorohihi is forming a pretty terrace formation. Some of the water flows into a cave. The geyser goes up from 10 to 20 feet. The name Waikorohihi means “hissing waters”.

Pohutu Geyser, The Cauldron (Te Horu), and The Prince of Wales' Feather combine to form another wonderful sight. Pohutu generally rests a few months, then comes into action again. When in action, the Feather plays off and on all day, and an hour or so before Pohutu begins the Feather stops, and the Horu rises till the Cauldron overflows, then Pohutu plays to a height of about 100 feet. It is a magnificent sight to see the large cauldron throwing about twenty or thirty feet, Pohutu one hundred feet and the Feather twenty feet. Pohutu means “thumping sound”.

Te Puia, close by, was an old pa, where the Ngatitaoi lived.

On the borders of the Puarenga stream there are many boiling holes, and one can catch fish, or koura, and cook them straight away. In places the boiling and cold water are not a foot apart.

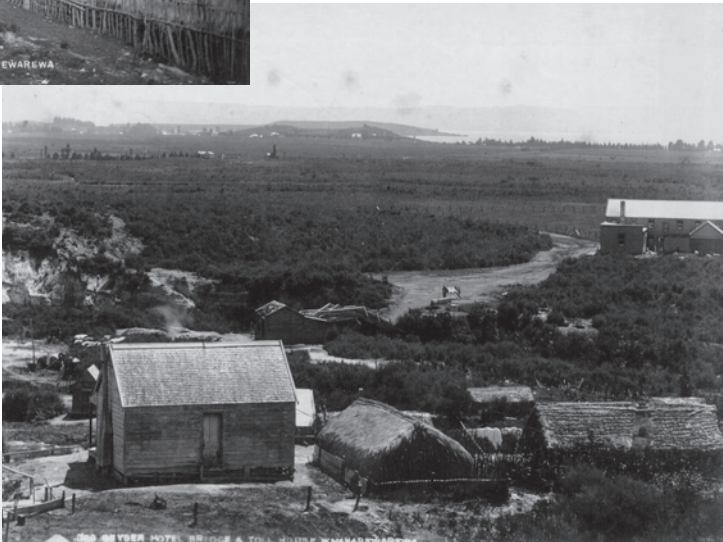
Kereru – This pretty geyser plays continually every two or three minutes all day, and is very interesting. It is the only geyser which makes a dark terrace formation. Kereru means pigeon.

Waikite is a geyser long extinct. The eruption of 1886 started it playing again, and it went on till about ten years ago. It stopped playing, however, the same day as the railway was opened in Rotorua [1894], and the people say that Mr. Seddon stopped it. This geyser,

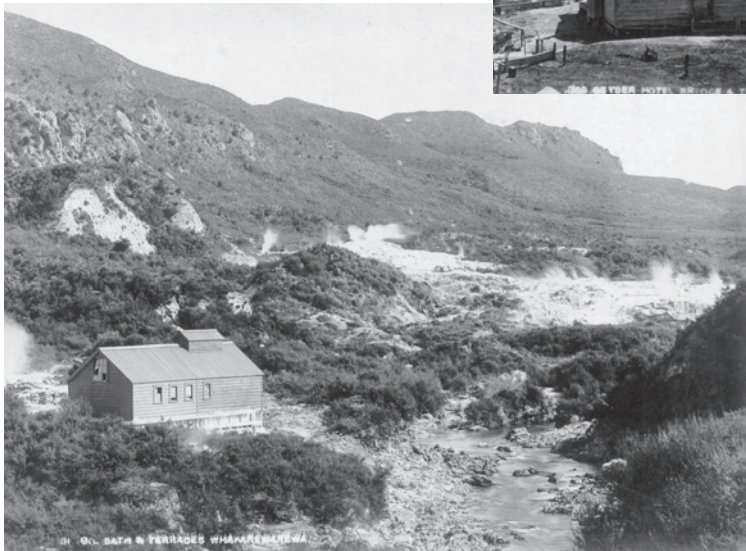
Arrival of visitors at the Marae



Arrival of visitors at the Marae



Geyser Hotel, bridge and Toll



Oil Bath and Terraces

Whakarewarewa c.1880



161. WHAKAREWAREWA.



Hot Pools
WHAKAREWAREWA.



General View Whakarewarewa.

Whakarewarewa c.1890.

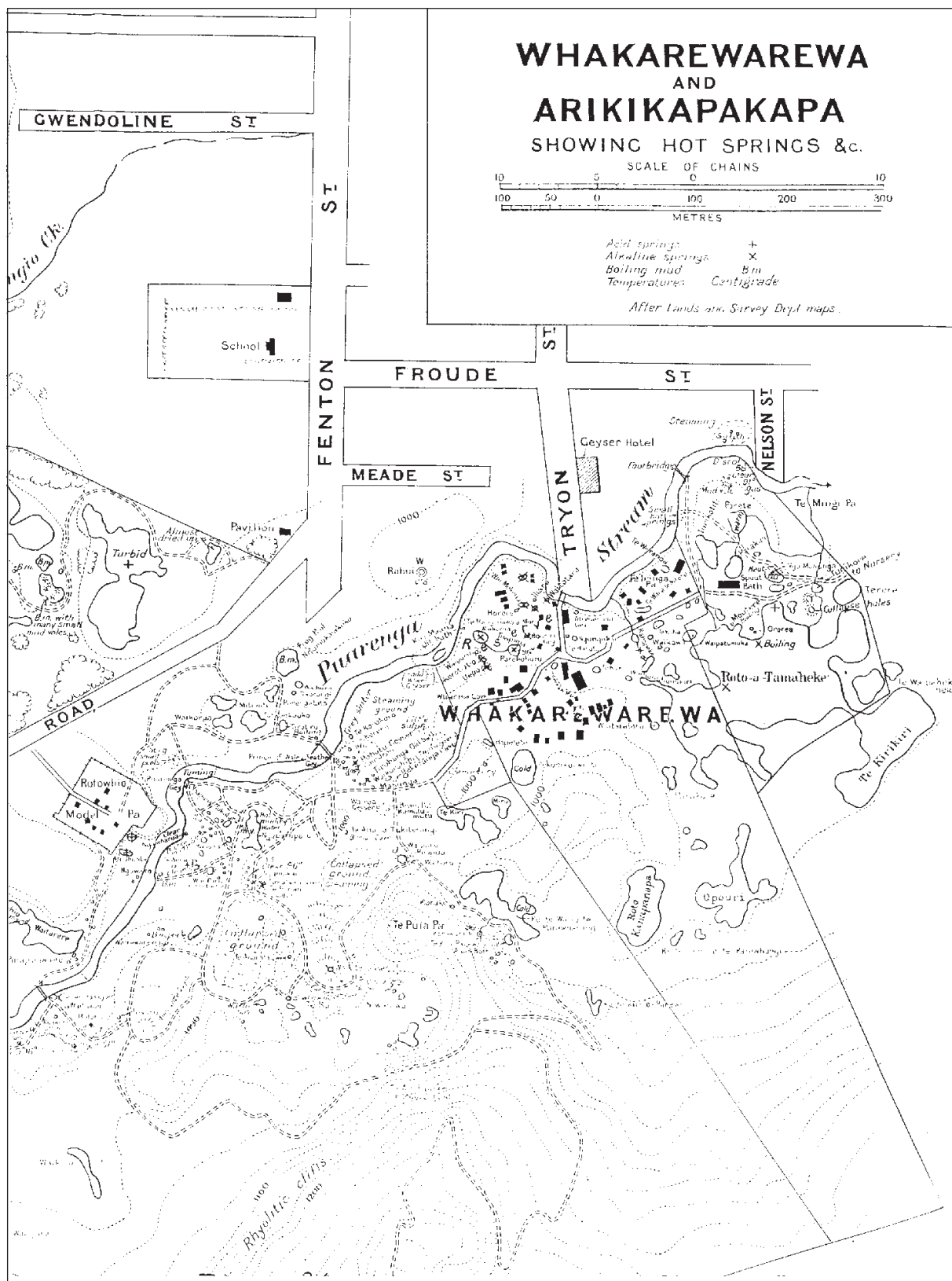
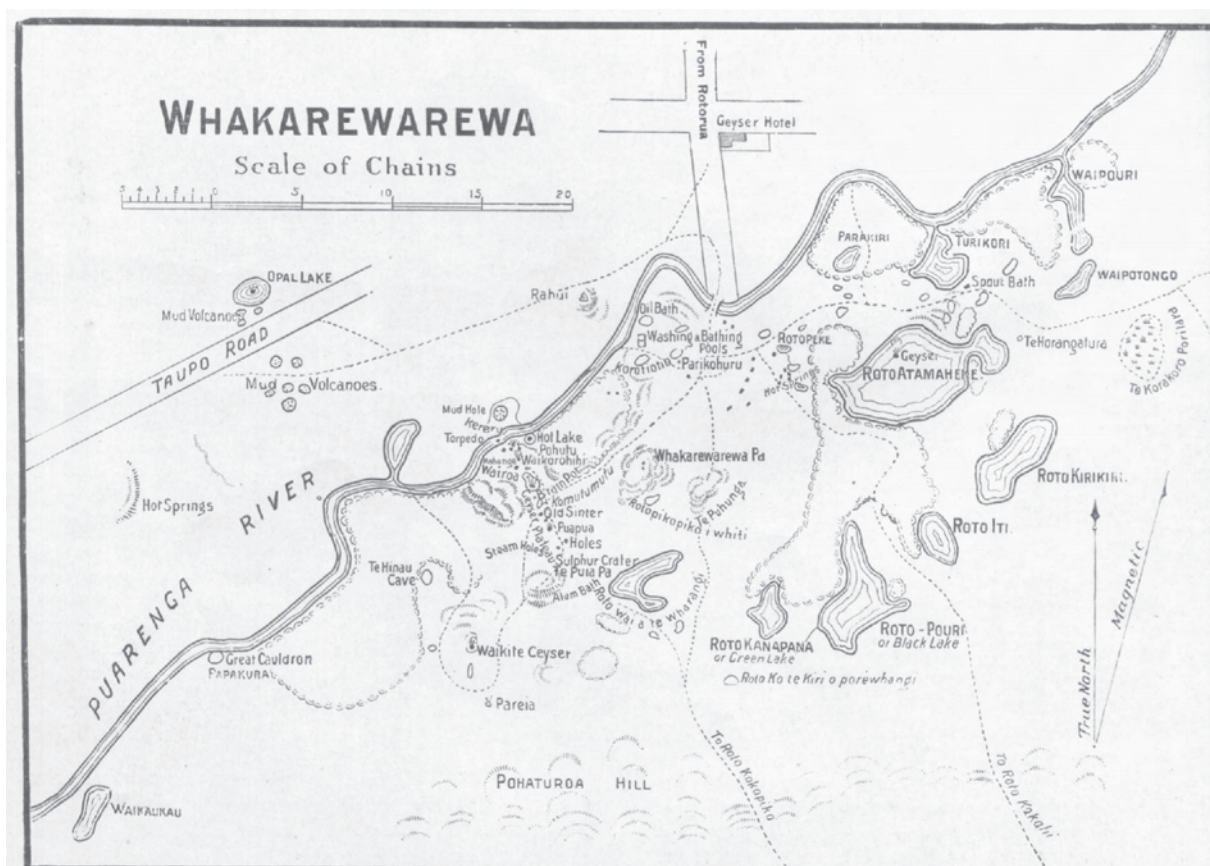


Figure 24. Whakarewarewa.

Grange, 1937.



(Brett, 1896)

which occupies a commanding position, formed pretty terraces all round it, and when in action could be seen playing a great distance off. The water from this geyser had strong properties for petrifying. Anything put into it, such as fern, manuka, cats or dogs was petrified in a month.

Hinau Cave, not far from Waikite, was the home of Te Tukutuku, who had brains cooked in the Brain Pot.

The Torpedo, in the river close to Kereru, is another weird sight. It is an explosion caused by the boiling mud and the cold water meeting. The mud sometimes is thrown up a foot, and sometimes fifteen feet. The best view of the Torpedo is from the opposite side of Kereru.

A Big Mud Hole - Crossing the foot-bridge at this point you follow a little path to a large mud hole, or porridge pot, the largest in the district. Mud is thrown up in all directions, never twice alike, and one never tires of watching it. This mud hole is the finest in the district.

The Pa - A little further on is the model pa, which the Maoris are building for the Government under the supervision of Guide Warbrick. This is to show the tourist what the Maoris used as a fortification years ago. The site is an old pa called Rotowhio, owned by an old chief, Pikirangi.

Te Komutumutu, or the Brain Pot, was where old Te Tukutuku had his brains cooked very many years ago.

Te Puapua, not far from the Brain Pot, is a beautiful clear blue pool, and was used as a

cooking hole when the Maoris lived there. A few feet from it is the Coffee Pot, so called from its brown colour. Any silver coins put into it turn black in a very short time.

Papakura is a cauldron always boiling in the Papakura Valley, at the extreme end of the Whaka sights. The water has formed a pretty terrace round it of various colours. There are many porridge pots and boiling holes in the Papakura Valley and a little walk will bring you to a little waterfall, where one can pass a pleasant hour reading under the tawhero (tree).

Arikikapakapa, about half a mile from the Whaka sights, across the Puarenga stream, is a reserve in which are many boiling holes and porridge pots, as well as some coloured cold lakes. This area is more generally known as “Jack’s Bath”.

The manuka (ti-tree) grows plentifully in Whakarewarewa, and the place would look barren without it. It makes a nice hedge for the paths. When in flower, it is very pretty. There are several different kinds within a small area.

A caretaker is always in the grounds to keep the paths clean and to see that visitors do not destroy the silica formation or soap the geysers on the sly.

A guide to the sights of Whaka can always be obtained to show visitors over the same – Pipi, Sophia, Bella, Mary, Ngana, Tare, Miriama, others, and myself. It takes from an hour to two hours to look round properly, and to give visitors ample time to admire the boiling cauldrons, porridge pots, and various sights. Visitors should never sit where sulphur steam issues through, as it will eat the clothes through in ten minutes. A band rotunda stands on the Te Pukeateruahine, a small hill, and from here one gets a good view all round, including Wairoa when it plays (Papakura 1905, pp. 30-36).

Makereti Papakura provided the best account of Maori customary cooking methods at Whakarewarewa:

In parts of the thermal district, food was cooked in the boiling or steam holes. At Whakarewarewa where I lived with my koroua Maihi te Kakauparaoa and his sister Marara who brought me up, we never had any fires at all. All the food was either boiled or steamed. Kumara, potatoes, or taro would be placed in a tukohu, a basket made for this purpose from the leaves of the toetoe, and the plaited string at the top would be pulled, so closing its mouth. This would then be placed in the parekohuru (boiling spring), and the end of the string would be tied to a peg in the ground near the edge of the hole. After a quarter of an hour or so, the tukohu would be lifted out and placed in a hangi, or natural steam oven dug and prepared in the ground, and left for about ten minutes to steam. The basket of kumara or potatoes could also be rinsed through the boiling hole and put into the steam hole straight away without boiling. Food cooked in these hot springs was very nice to taste. Meat, birds, or fish were generally steamed and tasted good (Papakura 1986, pp. 165-166).

Makereti explained that nothing was grown at Whakarewarewa itself, but that the families who lived there walked regularly to their cultivations at Parekarangi, about 10 km distant, to plant, weed and harvest kumara, potatoes and other vegetables, including “puwha” (puha, sow this-tle). When she was a child the principal cooking place at Whakarewarewa was “Parekohuru, a bottomless pit of clear boiling mineral water”. It was roughly circular, about 6m across with a small outlet to take away the overflow. Makereti explained that potatoes (riwai) took longer



*Guide Sopia at
the cooking hole
1880s. (Burton
Brothers photo)*

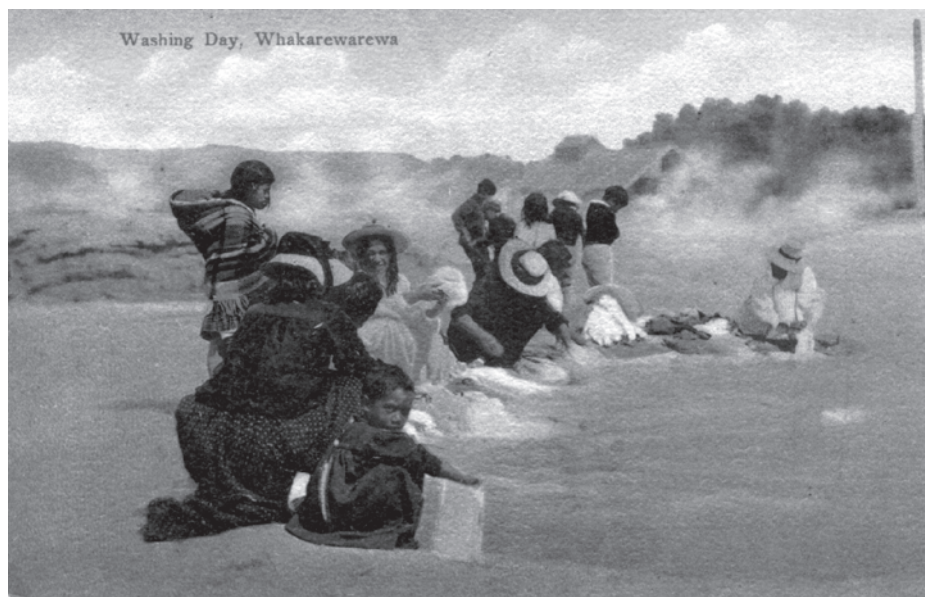


Maori Kitchen, Whakarewarewa, Rotorua, N.Z.

Cooking at Whakarewarewa



MAORI COOKING OVEN.



Doing the washing at Whakarewarewa: a selection of post cards 1890 - 1910.



Doing the washing at Whakarewarewa: a selection of post cards 1890 - 1910.

to cook than hue (gourd) and so they would be put in separate tukohu, or kits, and dropped into Parekohu. Each family knew its own tukohu, and quite often several families would be cooking their meals in the pool at the same time:

The basket might also be put straight into a steam hole a few feet away. In the old days the sides of these hangi, or natural steam cookers, were made of slabs of wood, and the bottom of the hole had a plank or two with holes between to let the steam through. They were very hot, and one had to be careful of the steam. The holes were covered over to keep the steam in while cooking, and potatoes would cook in twenty to twenty-five minutes. The boiling spring was a little quicker. Puwaha would be left in the boiling water for about ten minutes. It could be steamed, but boiling was preferred. Hue was cooked either way. Meat could be steamed and would take longer than vegetables. Koura [fresh water crayfish] would be placed in a tukohu and dropped into the boiling water for a few seconds, then taken straight out and eaten, or the crayfish might be put into the steam hole for two or three minutes. Koura cooked in this way were beautiful. Fish was generally steamed in a hangi, either in a tukohu or in a vessel, and meat or birds were also cooked in these steamholes. Koeaea (whitebait), like koura needed very little cooking, and might be put for a minute or two in the boiling water, or steamed in a tukohu, or put into a vessel and stood in the steamhole, or in the shallow part of Parekohuru, the boiling hole, close to the edge (ibid pp. 170-171).

Makereti emphasised that the cooking baskets, tukohu, were always made of toetoe:

Flax was not used because it gives a taste to the food. Baskets of flax were used only when pork was being cooked at a meeting, when the very large parts were cooked in one piece. Pork would be placed in a large but *old* flax kete (basket). Green flax would seldom be used, as it gave food a bitter taste (ibid p. 175).

8.6 The Impact of Tourism

The association of Maori people with tourism in the Rotorua district dates from before mid nineteenth century when overseas visitors began arriving in New Zealand to view such scenic wonders as the Pink and White Terraces and other geothermal phenomena. In the Maori communities associated with geothermal areas on tourist routes there is now another “layer” of cultural connections developed out of servicing and guiding tourists over several generations. The tourist industry has been and still is an important means of livelihood for many Maori families.

By the early 1870s there was already considerable official interest in the tourist and therapeutic potential of geothermal resources. In August 1874 Hon. W. Fox, a former Premier, wrote a report on the “Hot Springs of the North Island”, mainly on the Rotorua-Taupo district. He indicated he had already left “a memorandum, intended for the incoming Ministry ... and I made suggestions relative to the acquisition of that country by the Government” (AJHR 1874, H-26). He concluded his report:

I have endeavoured in this imperfect sketch ... to draw the attention of the Government to the great value of the sanitary provision which nature has made in the district described. I think the time has come when something practical might be done to utilize that provision. At present, the difficulty of travelling in the hot spring country, and the almost entire absence of accommodation for invalids, prevents more than a very small number of persons from visiting it either for health, recreation or curiosity. Yet it might be, and is probably destined to be, the sanatorium not only of the Australian Colonies, but of India and other portions of the globe (ibid).

He went on to write of the wealth that such visitors might bring to the colony, the role that Government might have in setting up “public hospitals, asylums for the insane or the inebriate”, and that “private enterprise” might be encouraged to set up “hydropathic resorts” with Government aid. “The essential first step would be to obtain, by purchase from the Natives, the ownership” of the geothermal areas. Fox also recommended the appointment of an overseas expert, “acquainted with the bathing establishments of Europe” to advise Government on how best to achieve this object.

Over the next few years chemical analyses were made of hot and some cold mineral springs around the North Island, and comparisons made with the mineral content of European equivalents (see AJHR 1879, H-13). There was, therefore, informally at least, a policy of Crown acquisition of hot spring areas with potential for a spa. However, private enterprise had already become involved. Robert Graham owned several hotels in Auckland, as well as Waiwera, and by 1880 had established Lake House at Rotorua and Rotomahana Hotel at Tarawera. About this time he began investigating Wairakei as another potential spa. He succeeded in persuading the five Maori owners who were put into the Wairakei Block title on 4 June 1881, following a Native Land Court investigation, to sell the block to him. There were objections to the five owners but a rehearing by the Native Land Court in 1882 only confirmed the original title order, and the transfer to Graham, also dated 4 June 1881, was eventually registered late in 1882 (Stokes 1991, pp. 21-63).

Meanwhile, legislation had been introduced to Parliament on 26 August 1881 with the intention of validating an agreement made with Ngati Whakaue about government control over the lands and geothermal resources of Rotorua. There was considerable debate over details but there was general support in Parliament for government control of hot spring areas. On 24 September 1881 the Thermal Springs Districts Act was passed into law. On 13 October 1881 two areas in the Rotorua and Taupo districts were proclaimed under this Act. Because the Te Aroha Hot Springs Reserve was already Crown land, it was not necessary to gazette this area. By insisting at the rehearing in 1882 that the Native Land Court title order for Wairakei Block retain the original date of 4 June 1881, the same date as his transfer was signed, Robert Graham was able to circumvent the Thermal Springs Districts Act 1881. However, from the early 1880s Government played an important role in developing spas at Rotorua, and Te Aroha, and at Hanmer in the South Island. In the early 1900s these three spas were taken over by the newly established

department of Tourist and Health Resorts.

One of the main tourist attractions in Rotorua was the fascinating spectacle of people actually living among the hot pools and fumaroles. Kerry-Nicholls described dinner preparation at Ohinemutu in 1882:

When walking around the whares, and noticing the various phases of Maori hot-spring life, I saw half a dozen members of the porcine tribe come quietly along with an easy, self-satisfied air, as if they had just gone through their morning ablutions in the warm bubbling fountains, and were going to root round for steamed potato, boiled cabbage and other delicacies. Suddenly a half-naked Maori slunk out of his hut, with a long knife between his teeth. Quick as thought, and with the skill of a champion assassin, he seized the foremost pig by the hind leg. A prod from the knife, and the crimson blood of the murdered animal mingled with a rill of boiling water, which was running past in a hurry, as it were, to cool itself in the lake. A twist of the wrist, and the pig was jerked into a steaming pool, where the heated waters twirled and hissed as if in a red-hot cauldron. Out again in an instant, and then he set to work to scrape off the bristles, which came away in flakes, as if they had simply been stuck on by nature by the aid of a little glue, and the skin of the porker gleamed white as snow beneath the sun. In two minutes more he was disemboweled, and then he was placed over a steamhole, with a couple of sacks over him to be cooked for the

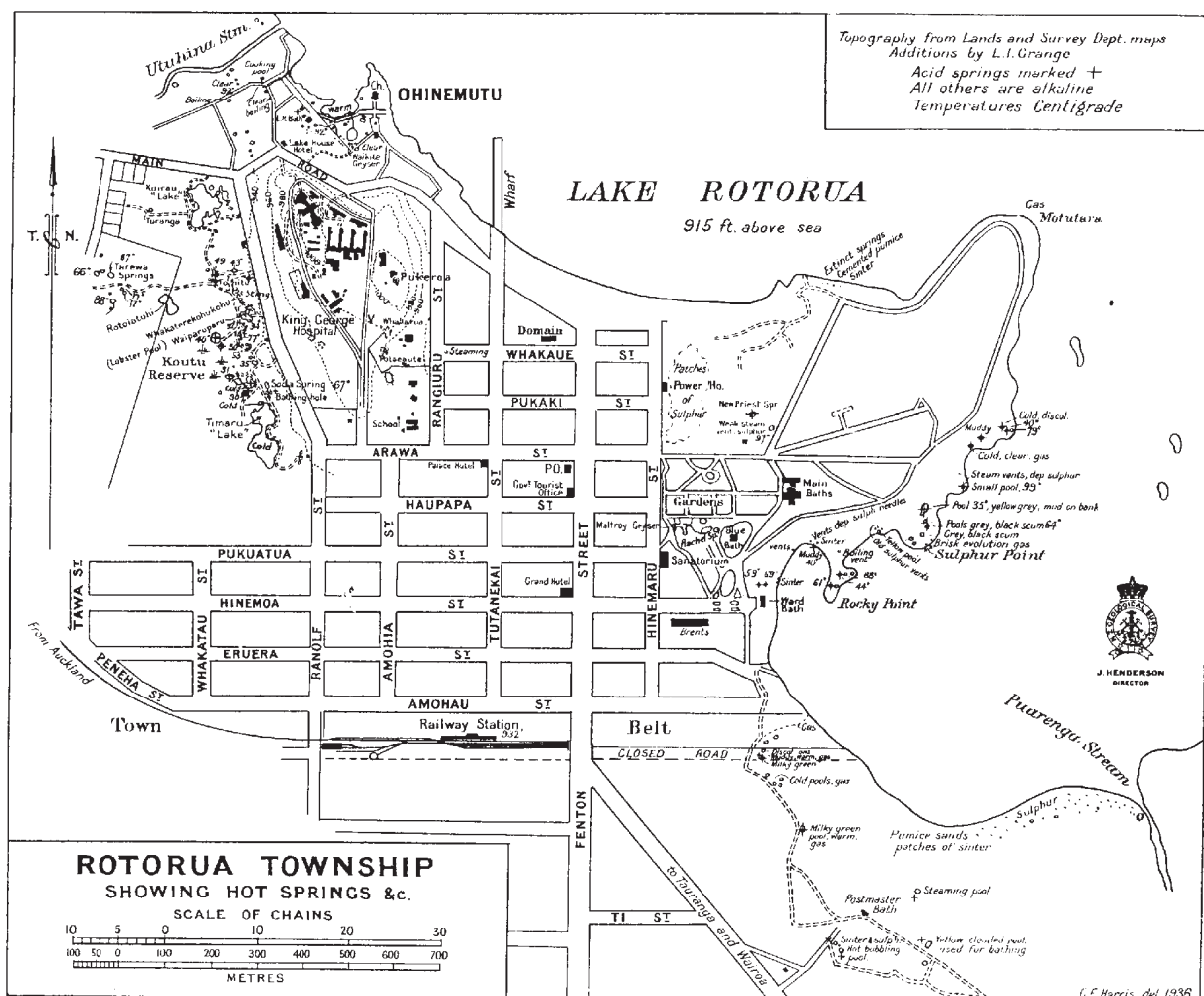


Figure 25. Rotorua Township (Source: Grange, 1937).



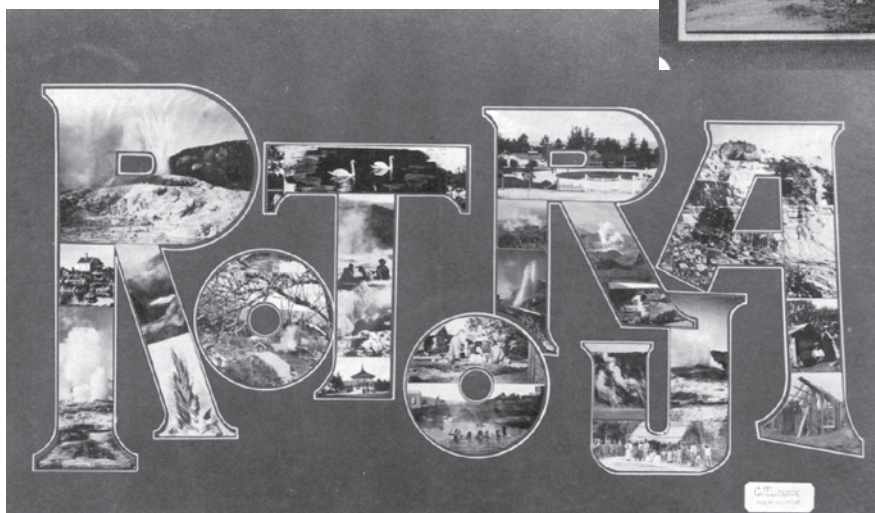
Whakarewarewa Guides c.1910



Pohutu Geyser at Whakarewarewa in the 1950s.



Rotorua postcards



evening meal. From the time that pig gaily walked the earth until the end of that terrible process, about fifteen minutes expired (Kerry-Nicholls 1884, p. 61).

By the early 1900s Ohinemutu was incorporated on the margin of Rotorua, the spa town (Figure 25). The following description is from Maggie Papakura's *Guide*:

Ohinemutu – better known as the old township – is situated on the eastern shores of the Lake, at the foot of Pukeroa Hill. It was here tourists stayed – at Lake House – when they visited the famous pink and white terraces in days gone by, before Rotorua as a township was formed. Ohinemutu is about half a mile from the present Post Office. Here are to be found every kind of hot spring and mud hole. The natives do their cooking by steaming and boiling in natural or artificially prepared holes. Tama-te-kapua, the big meeting-house, stands here, a wonderful house with old carvings called after one of the old chiefs who came to New Zealand in the canoe Arawa from Hawaiki. Close by is the Queen's statue, which stands on a carved pillar.

Pukeroa Hill, where the flagstaff is, is an old fighting pa. It is now a reserve with paths all round and beautiful trees growing. A football ground is also on the top. From here is obtained a lovely view of Rotorua and all the surrounding district (Papakura 1905, p.14).

Later a hospital was built on Pukeroa, the hill behind Ohinemutu.

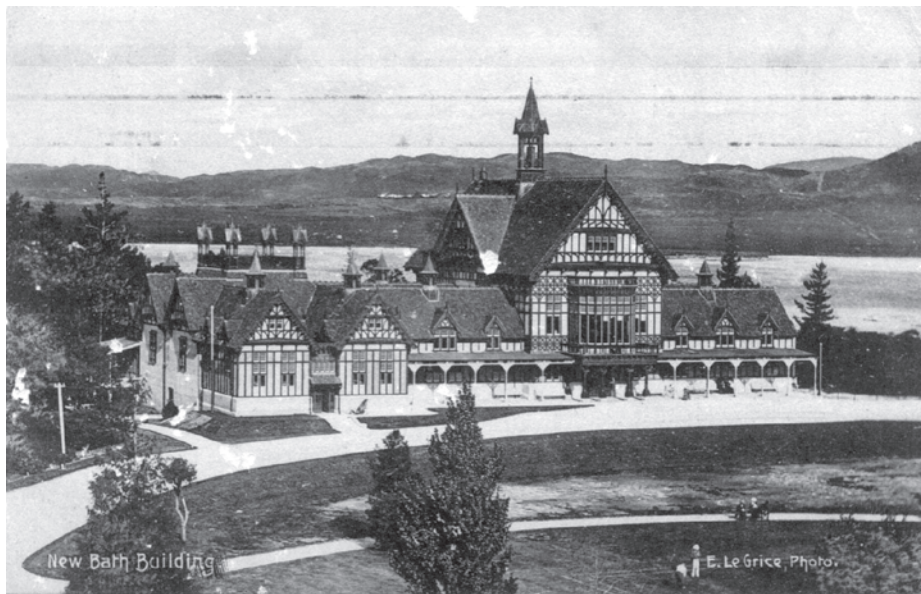
An important feature of the new spa town was the Government Sanatorium. The following description is also from Maggie Papakura's *Guide* (see also Rockel 1986, Stafford 1986 and Steele 1980):

The Sanatorium Grounds are a sight not to be missed. The gardens are laid out with winding paths, where people can walk all day admiring the beautiful flowers, which contrast strangely with the mud and boiling water holes which occur unexpectedly in the grounds. On the borders of the Lake are several boiling holes. In the grounds is a tea kiosk, where visitors can obtain tea and light refreshments at all hours of the day. The attendants are Maori girls in native costumes. Close by are the tennis court, bowling green, croquet lawn, and quoit pitch, and one is never at a loss for amusement during the summer months. The band plays several evenings a week in the season, and every now and then the gardens are lit up with Chinese lanterns and electric light, when an open-air concert is held.

The Government Sanatorium is situated in these grounds, and patients view the gardens from the verandah. There is a Government balneologist in the Sanatorium, whom visitors can consult regarding the baths, etc.

The Blue Bath (for gentlemen only) is only a few yards away from the Sanatorium, and is fed from the water from the Malfroy pool, where there are two or three artificial geysers, the height varying up to 20 feet. A few yards away are collected many specimens of native birds – the kiwi, weka, kea, pukeko, etc...

In the Sanatorium Grounds are the Government baths – the Rachel, Priest and Duchess – all well known for their medicinal properties. There are others close by – the Postmaster, the Painkiller, and the Lobster – which have relieved many sufferers.



The Government Sanatorium, Rotorua c.1910

All patients should consult the Government Balneologist before taking the baths. He is to be found at the Sanatorium (Papakura 1905, pp.10-12).

In a review to mark the centennial of the Tarawera eruption in 1886, Paula Savage commented on the relationship between local Maori and Pakeha tourists at Rotomahana in the decade before the eruption:

For Tuhourangi, owners of the land and custodians of its thermal wonders, the growing impetus of tourism brought unprecedented wealth and trauma. It accelerated the disintegration of their traditional culture. They became increasingly dependent on a cash economy and European goods. Contemporary accounts, diaries and letters of Pakeha tourists, although providing valuable information, betray the racial and cultural biases of the times. Few Pakeha questioned the morality of European nations colonising and subjugating indigenous peoples. This 19th century European assumption of racial superiority and lack of commitment to the preservation of Maori culture, was an irritant to Maori sensitivity and pride and potential source of tension between the two races.

Accusations of excessive use of alcohol, extortion and debauchery at Te Wairoa were exaggerated by racial intolerance, ignorance and prejudice. Maori art was dismissed as “grotesque and indecent”, carved representations of ancestors “horrible goggle-eyed monsters”... The haka was “gross and demoralising”, “the horridest thing Satan ever invented”.

The entrepreneurial assertiveness of Tuhourangi, who retained total control over access to the Terraces, seemed to irritate many tourists intensely (Savage 1986, p.17).

It could also be argued that Tuhourangi showed considerable flexibility and adaptability in developing their entrepreneurial skills in a new social and economic environment. Waaka (1986 p.12) estimated Tuhourangi had an annual income of £6000 from guiding and boat fees alone, no mean sum in the early 1880s.

Nor were nineteenth century visitors to Rotorua complimentary after the Tarawera eruption. Many commented on the “grotesque and indecent” carvings in Maori villages. There were frequent complaints about “exorbitant” prices charged by the locals for various services. Cowan commented on a local belief that the Tarawera eruption in 1886 was just retribution for “the ruin of Tuhourangi demoralised by the Pakeha’s grog, the women debauched; a tribe fast going to perdition to make the Pakeha tourists’ holiday” (quoted by Steele, 1980). The following description of Whakarewarewa was written in 1894:

Sitting, squatting, lying, all about on the hot ground, are men, women and children, dogs, cats and pigs. Those of the more energetic inhabitants, who are not squatting in their puia (hot springs), or lying asleep, are probably playing euchre, with a pack that you wouldn’t



Children in the hot pools at Whakarewarewa: a selection of post cards, 1890 - 1910.



Copyright. MAORI CHILDREN, HAKA, ROTORUA, N. Z.



A HAKA FOR



HAKA BY MAORI CHILDREN, ROTORUA, N. Z.

The penny-haka at Whakarewarewa: post cards c.1910



Diving for pennies at Whakarewarewa: post cards c.1910

like to touch with a pair of tongs. A few may be amusing themselves at draughts, of which the white men are slices of potato, and the black men flat stones. Here and there a woman or a girl is plaiting a mat or a basket; but sloth, laziness, and ennui hold a tight grip on all the men, old and young... (quoted by Steele 1980, p.19).

What most Pakeha visitors to these Maori villages failed to appreciate was the cohesion of a close-knit, kin-based community which provided security and a strong cultural identity for those who were brought up in them. There was poverty; and drink and disease introduced by the Pakeha were problems not unique to Whakarewarewa and Ohinemutu. At the same time local people were criticised for charges made to tourists, which were used to help maintain traditional buildings, an important part of the tourist attraction, and improve services. It appears many visitors felt that the locals should not only suffer this invasion of their privacy, but also provide services for nothing, or at best a mere pittance. Such criticisms are still made.

Ohinemutu and Whakarewarewa geothermal areas are unique because of their Maori associations. Guide Rangi was concerned about the image of Maori at Whakarewarewa, and challenged whether Pakeha would have looked after the place better:

It is a good thing for the tourist that we Maoris have still retained some of our tribal ownership of the lands at Whakarewarewa. I am sure that if we had sold it all to the Pakeha there would be nothing left worth seeing by now. He'd have ruined the lot with progress (quoted by Steele, 1980 p.27).

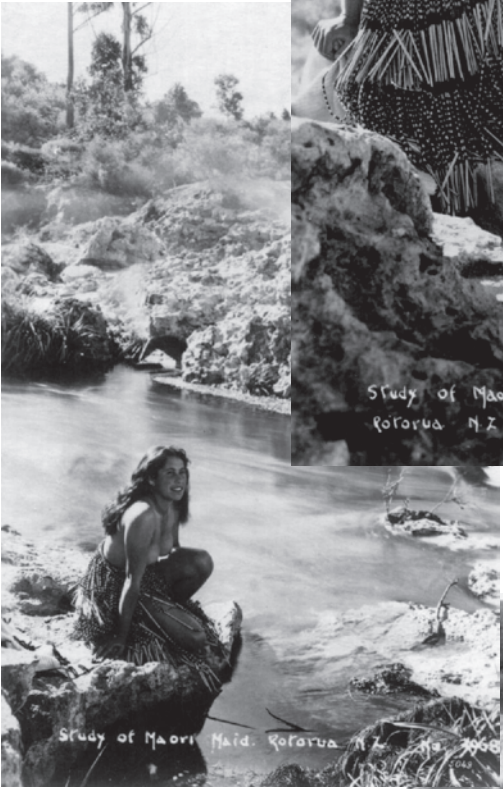
Many Maori at Whakarewarewa, reviewing the decline of geothermal activity in their village in recent years, feel that Pakeha "progress" had almost ruined the place anyway. Guide Rangi's words were prophetic:

[Whakarewarewa] must never be allowed to become a ghost village... Tourists want to find Maori people living in the steam, cooking in the hangis, bathing in the open air as they have at Whakarewarewa for centuries. Take the people away from Whakarewarewa and you will attract few tourists. It won't live as it does now (ibid).

Maori and tourism in geothermal areas are inextricably inter-related. But the economic control of tourism passed very rapidly into Pakeha hands in the nineteenth century. Ngahuia Te Awekotuku (1980, p.38) commented on Rotorua:

Most of the thermal resorts are government owned and operated, and other attractions within the district involve primarily Pakeha business interests. The two aspects of the industry which have remained solely within Maori – and Te Arawa – control are quality artisanship, and entertainment, phenomena drawing from a cultural base so far inaccessible to Pakeha entrepreneurship. In more recent years, the Maori business sense has sharpened considerably, and the city boasts a number of tourist-orientated Maori enterprises that have fared well.

*Images of Maori women at Whakarewarewa:
a selection of postcards.*





Cooking Kumurus in Hot Pool, Rotorua, N.Z. 4334



Māori woman cooking in Hot Pool, Rotorua, N.Z. 5191

*Geothermal cooking at Whakarewarewa:
postcards 1930s and 1940s.*

The essential ingredients of tourism in geothermal areas appear to be hot pools, Maori carvings and concert parties. What sort of image of Maori people and Maori culture was created from this? Here is a typical nineteenth century example from Kerry-Nicholls' encounter at a hot pool at Te Koutu:

A warm spring filled it, and then ran over its side into the lake. I should not have taken any notice of this simple contrivance, had it not been for the fact that a maiden of some seventeen summers was reclining at full length in it, in the simple yet attractive costume of Eve, and with a short black pipe in her mouth. I had stepped round the corner of the hut, and was within a foot of going head first into the bath before her well-rounded form met my gaze. She was, however, in no way disconcerted by this contretemps, but, fixing her dark eyes upon me, said in the most unconcerned way imaginable, "Tena koe, Pakeha". There was not the slightest tinge of immodesty in her manner; she simply lay shining beneath the sun, with all the grace with which nature had endowed her, looking like a beautiful bronze statue encased in a block of crystal (Kerry-Nicholls 1884, pp.66-69).

Here is a vision of the youthful, female species of noble savage enjoying the bounties of nature. Elements of this image survive in the piupiu-clad women (they are more discreetly covered these days) twirling pois, or posing beside steaming hot pools and geysers, whose pictures grace the promotional literature of the Rotorua tourist industry. More incongruous is the vision of ladies decked in full concert party regalia delicately dangling kits of potatoes in a ngawha, inappropriate attire for getting the family dinner. In her study of Te Arawa women and tourism, Ngahuia Te Awekotuku commented on pictorial images of Maori women created for tourists:

Costuming was often highly elaborate and ceremonial, and the poses often coy and even silly. One incongruous image that has been repeated several times, and never questioned, is the cooking scene. Women bedecked in ornate regalia, kiwi feather cloaks, long piu piu, and rich taniko, pensively suspend a basket of raw food into a steaming pool. No one, not even the models, pause to reflect on how they are play acting at ethnic cooking, clad in the extremely rich and splendid garb used only on exalted tribal occasions.

Another favourite in the maiden delicately drinking the grey graphitic water of a thermal spring or waterfall, with a prettily cupped palm (Te Awekotuku 1991, pp.91-92).

It is beyond scope of this review to consider the Rotorua tourist scene in any detail. However, in a consideration of customary uses of geothermal resources it must be acknowledged that the past 150 years of tourism in Rotorua has had considerable impact on Te Arawa people.



Tuhua / Mayor Island, an ancient volcano and principal source of obsidian (Alexander Turnbull Library 90572).

9. Bay of Plenty

Within Mataatua traditions the interconnectedness of scattered occurrences of geothermal activity was well understood. The active volcano Whakaari/White Island was the first stopping place of the sisters of Ngatoroirangi, Kuiwai and Haungaroa and their atua. Tuhua/Mayor Island and Moutohora/Whale Island in the Bay of Plenty were also recognised as volcanic in origin, with their residual hot springs. The other significant geothermal resources were at Kawerau, now much modified by the development of pulp and paper mills and geothermal steam extraction. There were also highly valued hot springs called Pukaahu, between Te Teko and Whakatane, now a commercial bathing complex called Awakeri Springs (Figure 26).

Putauaki (Mount Edgecumbe), one of the mountains who journeyed north from the central North Island after those volcanoes fought, is the sacred mountain of Ngati Awa and Tuwharetoa ki Kawerau in the Eastern Bay of Plenty. Christine Peters told the Waitangi Tribunal a story about the two mountains Putauaki (Edgecumbe) and Ruawahia (Tarawera) who once lived close to each other in the Kawerau district. They fell in love, produced a son called Whatiura, and lived happily together:

Slowly however, the two lovers became more distant. Other mountains surrounded the rohe, some distant, some further away. Ruawahia would gaze at Tongariro. Putauaki noticed that Ruawahia was losing interest in him. She constantly complained and her moods changed. Putauaki was annoyed and decided to leave.

Meanwhile, Whakaari showed an interest in Putauaki and would often gaze in his direction. Putauaki realising that Whakaari was interested in him, and wondered how he could make the journey to the sea. Ruawahia realised that Putauaki was interested in Whakaari and became angry.

In those times it was possible for mountains to move providing the move was done during the night.

One night as Ruawahia slept, Putauaki set off for the coast. He moved slowly, so Ruawahia would not awake. Unbeknown to Putauaki, Whatiura was following. Whatiura made a noise and his father realised that his son was behind.

Putauaki tried to persuade Whatiura to return to Ruawahia. Unfortunately, Whatiura did not return. At daybreak, Putauaki realised he was in Kawerau. Ruawahia noticed that Putauaki had left her side, and Ruawahia roared, shook and burst into tears. The tears filled the hole left by Putauaki, and today it is called Lake Tarawera.

The union between Putauaki [and Whakaari] was never to be. Ruawahia never recovered. That is the reason why the lake fills and flows down the Tarawera Valley. Whakaari sends smoke signals, calling Putauaki to join her (Peters 1995).

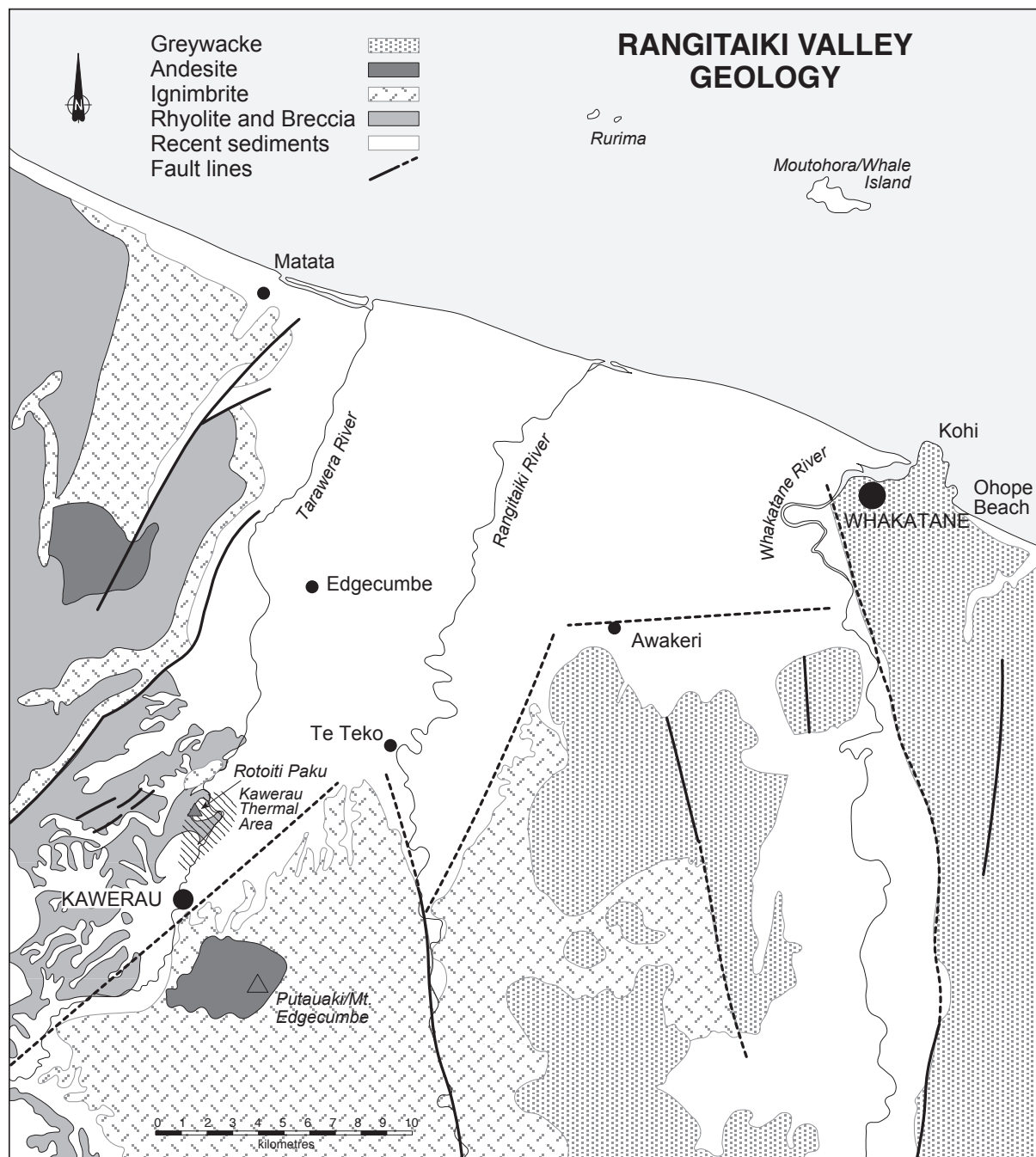


Figure 26: Rangitaiki Valley Geology.

9.1 Tuhua

Tuhua/Mayor Island is a volcanic island with a long history of occupation by Whanau a Tauwhao, a hapu of Ngai Te Rangi, of Mataatua descent. There remain a few small hot springs on the island but its principal significance is that it is a source of obsidian or volcanic glass. Tuhua is the Maori term for obsidian “which was used principally for knives, long flakes being struck off a nucleus or core for that purpose. Such cores or pieces of obsidian were often carried by travellers, who could then flake off a cutting implement when required” (Best 1974, p. 53). Obsidian flakes from Tuhua have been found on archaeological sites all over New Zealand, from Northland to Bluff.

Best quoted an example of “a fine globular core... found on the Otago Peninsula near Dunedin, which shows marks of continual use, and which must have been brought by the Maoris from the Rotorua or Bay of Plenty districts” (ibid). The term mataa was used for obsidian, quartz and flint, though more often the term mataa tuhua was used specifically for obsidian. Best (1974, p. 197) listed four sorts of obsidian: tuhua (black), waiapu (a light colour), paretao (green) and kahurangi (red). Waiapu was sometimes used to refer to obsidian, although in other districts such as the East Coast, it indicated another kind of rock. The term Paretao is preserved as a place name on the island of Tuhua.

It is clear that the term tuhua means obsidian but less clear whether the island provided the name for the rock or vice versa. Best (1974, pp. 200-201) suggested that Tuhua was named after an island south-east of Hawaiki. Tuhua was the ancient name of the island of Me’etia, south-east of Tahiti. The New Zealand island was given this name because of its similarity in appearance. Because obsidian was found there this name was given to the rock which proved so useful for its sharp cutting edge. Another place west of Taupo, where this rock is found, is also called Tuhua.

There are many stories about the origins of this volcanic rock. Most of the stories have a common theme of a struggle between Tuhua (obsidian) and Pounamu or Poutini (nephrite, greenstone). Hovell told one version, passed on to him by his Whanau a Tauwhao relatives:

Long before voyagers first known in archaic Maori tales discovered Te-aotea-roa there dwelt on Mayor Island a race of people known as Tuhua who had emerged from the bowels of the earth. Like the rocks within the crater they were a dark people. Many, many years passed until one wild and stormy night there arose from out the turbulent green waters of the ocean a great host of people named Pounamu. They too wished to make the island their home. The Tuhua took strong exception to this and the outcome was a fierce and bloody battle that lasted for several days.

Eventually the Tuhua were the victors. So many of the Pounamu people were slain that the great depression in the crater was filled with their blood – “the blood of the greenstone” – to this day the green lake is called Te-toto-o-Pounamu. But the Tuhua suffered very few casualties with the result that very little of their blood flowed, as may be seen by the small pool, extremely dark in colour, known as Te-toto-o-Tuhua.

After the defeat of the Pounamu the Tuhua pursued them across the sea to Te-Ika-a-Maui (North Island). On, on, the Tuhua pursued them. Passing by Lake Rotorua the Tuhua drove them to Taupo. Here the Pounamu appealed to the Tuhua to let them stay at Taupo, but the plea was in vain. Again the Pounamu had to flee, on, on, to Terawhiti at the bottom end of the North Island.

Across Cook Strait to Puponga and on down the West Coast of the South Island the Pounamu were forced. At last when Te-Aorangi (Mount Cook) came into view they were finally driven up the Arahura awa (Arahura River) to a mountain side and there left to their fate. On the return journey several of the Tuhua people remained at Taupo, just in case the

Pounamu people tried to come back again. But the Pounamu knew that they were beaten and always remain at Arahura awa.

And this is why Pounamu, the greenstone jade of New Zealand, is only found in the Arahura area of the South Island; and why Tuhua, symbolized by the dark, glassy obsidian rock thrown out from the molten core of a volcano, is found in any great quantity at Taupo and on Mayor Island (Hovell 1967).

Best provided a Ngati Awa version of this story:

Poutini was the personified form of *pounamu* (nephrite); and Hine-tu-a-hoanga, personification of grinding stones or sandstone, together with Mataa (*alias* Waiapu), personified form of flint &c., are the enemies of Poutini. The latter is expelled from Hawaiki by Hine-tu-a-hoanga, who assails him mercilessly.

Poutini (Nephrite) flees from her, and at length arrives at Tuhua Island, in the Bay of Plenty. Here he stays awhile, until forced to fly from his enemy (flint or obsidian?) who has located himself on Tuhua Isle. He escapes and travels, apparently by sea, being a fish, as far as White Island (Whakaari), where he again attempts to land, but is so alarmed by the *Ngawha*, or boiling springs, that he again escapes in terror. Continuing on his way, our nephritic hero wishes to land at the East Cape, but he happens to hear from the shore the sound of grinding – the sound made by an implement being rubbed on a sandstone or grinding-stone. It was caused by the act of one Kanioro, otherwise known as Tangi-kura-i-te-rangi, who was engaged at such work. This personage was the wife of Pou-rangahaua – he who went to Hawaiki in order to obtain the sweet potato – and she became, for some reason a sort of custodian or guardian of the *pounamu*, or nephrite. The alarmed Poutini, or nephrite, now fled far onward, until he eventually found a resting place at Arahura, on the west coast of the South Island. Here it was found in after-time by Ngahue.

But all this time the *iwi pounamu* (greenstone people) ... are being pursued by their enemies. Some versions of the myth state that these enemies were the obsidian folk, others that it was Hine-tu-a-hoanga, the dame of the grinding-stone back, or personified form of sandstone or grinding stones. The pursuers at length overtake the pursued in the South Island, and at once attack them. A fierce combat ensues, in which some of the chiefs of the greenstone folk are slain and captured (Best 1974, pp. 199-200).

Best interpreted these stories as personifications of tuhua and pounamu, and the struggle between them represents the working or fashioning of greenstone with tools of obsidian, sandstone and flint. It is an allegory of the origin, or acquisition, of the art of working nephrite or stone generally. There is also an underlying understanding of the geography and geology of these rocks in these stories. More specific understanding of the volcanic origin of Tuhua is contained in this story published by Colenso in 1845:

This island (Tuhua or Mayor Island) appears to be of volcanic origin and abounds in pumice, obsidian, slag lava, pitchstone, and other vitreous and volcanic substances. I use the word ‘appears’ in consequence of a curious relation which some years ago I received

from an old priest residing at Tauranga, in the Bay of Plenty. I had been inquiring of him the place where and the manner how, they in former days obtained the green jade or axe stone for ornaments and weapons of war. In answer to my inquiry he asserted that this stone was both a fish and a god (*atua*, demon or supernatural thing); that it formerly lived at the Island of Tuhua, whither the skilled men of all the neighbouring tribes went to obtain it, which was done by diving, accompanied with several superstitious ceremonies in order to appease its wrath; and to enable them to seize it without injury to themselves; but that suddenly it made the whole island and the surrounding sea its *cloaca maxima* [great sewer or drain], covering every place thickly with excrementitious substances, which still remain, and swam away to the Middle Island (South Island) of New Zealand, where it has ever since resided, and whence they have been obliged to obtain it. I scarcely need add that those 'excrementitious substances' comprise the different volcanic matter with which the island of Tuhua is now covered (quoted by Best 1974, p. 203).

There are many versions of the flight of Poutini from Tuhua to Arahura among tribes from the Bay of Plenty to Southland. Some stories indicate Poutini was a woman who lived on Tuhua but fled to the South Island after a quarrel over some greenstone. She was pursued by her brother Tama, who was able to follow her route by throwing wooden darts which indicated her direction. Some versions say this Tama was Tama-ahua in pursuit of one of his wives. One version identifies Tama with Tamatea-pokaiwhenua who was among the most widely-travelled of Takitimu ancestors. Some versions say Tama travelled with a slave called Tumuaki whose nickname was Tuhua. Some traditions associate the person of Ngahue specifically with the struggle between Tuhua and Pounamu, and say that Pounamu was the fish of Ngahue who was pursued by Hinetuahoanga to Tuhua (Grey 1855, pp. 132-135). Best (1974, pp. 205-211) interpreted these stories as being based on accounts of expeditions to the Arahura district of the West Coast to obtain pounamu. In the process of telling many variations and allegorical interpretations have been added. The fact that such traditions about Tuhua and Pounamu are so widespread among the tribes of Aotearoa indicates the importance of obsidian and greenstone in traditional Maori culture.

9.2 Whakaari and Moutohora

Whakaari/White Island, about 23 hectares in area, is an active volcano in the Bay of Plenty, which was the first place to which the sisters of Ngatoroirangi brought geothermal heat when he called from the freezing slopes of Tongariro. The highest point on Whakaari is named Ngatoro in commemoration of Ngatoroirangi. The continuous plume of steam from the island provided an important aid to navigation, indicating which way the winds were blowing, seen from afar in the Bay of Plenty. The waiata aroha by Tukehu and Weka from Ngati Maru conveys this (Ngata 1988, vol. I, pp. 268-271):

Takoto ai te marino, horahia i waho ra,
 Hei paki haerenga mo Haohao-tupuni.
 Noku te wareware, te whai ra nge-au
 Te hukanga waihoe nau, e Ahurei!
 Kai tonu ki te rae ki Kohi ra ia,
 off,
 Marama te titiro te puia i whakaari.
 Whakaari.

Becalmed is all about, and 'tis outspread afar,
 It betokens a calm passage for Haohao-tupuni.
 Mine was the forgetfulness I did not follow the
 wake of your paddle stroke, O Ahurei!
 Who art steering directly for the headland at Kohi afar
 off,
 Clear thence the view of the steaming pools of
 Whakaari.

Ahurei was an early nineteenth century leader and Haohao-tupuni was a canoe. Kohi is a headland near Whakatane and, like the plume of steam from Whakaari (White Island), an important landmark for navigation in the Bay of Plenty.

Whakaari can be seen from all parts of the Bay of Plenty coast, and provides the setting for He Waiata Whaiaipo mo Retireti Tapihana (Ngata 1988, vol. 1, pp. 302-303):

'Nei ka noho nga roro wharekura
 I a Hope, whakamau te titiro
 Puia tu mai ki Whakaari;
 E paneneke ana motu-tipua,
 Ko Paepaeaotea...

Here I sit at the porchway of the ornate house,
 Hope, steadfastly gazing at
 The steaming pools of Whakaari;
 Shadowy appears the island of demi-gods,
 Paepaeaotea...

This waiata, a song of infatuation for Retireti Tapihana (Retreat Tapsell), has Ngati Awa origins. Hope is either the name of the house or, more likely, a shortened version of the locality Ohope, from which there is a clear view of Whakaari (White Island) and the nearby islet Te Paepae o Aotea (Volkner Rocks), which was tapu, and part of the same volcanic structure. From these rocks the dead of Ngati Awa make their farewells before their spirits travel to Te Reinga.

Whakaari was not permanently inhabited as its rugged terrain, lack of fresh water, and continuing volcanic activity provided no suitable area for a kainga. However, it was visited regularly for the purpose of obtaining birds, especially gannets and mutton birds, which nested in large numbers on its cliff tops, and for the fishing in surrounding waters. Regular birding expeditions occurred up to the 1950s. Sometimes sulphur was gathered there too.

Moutohora, about 153 hectares, is also of volcanic origin and is connected along a fault line north to Whakaari and south, through an area about 2km from the shore where bubbles are seen coming up in the sea, to Pukaahu or Awakeri Springs and then on to Kawerau. The main geothermal area on the island is related to fault lines in Sulphur Valley which opens on to Brimstone Bay:

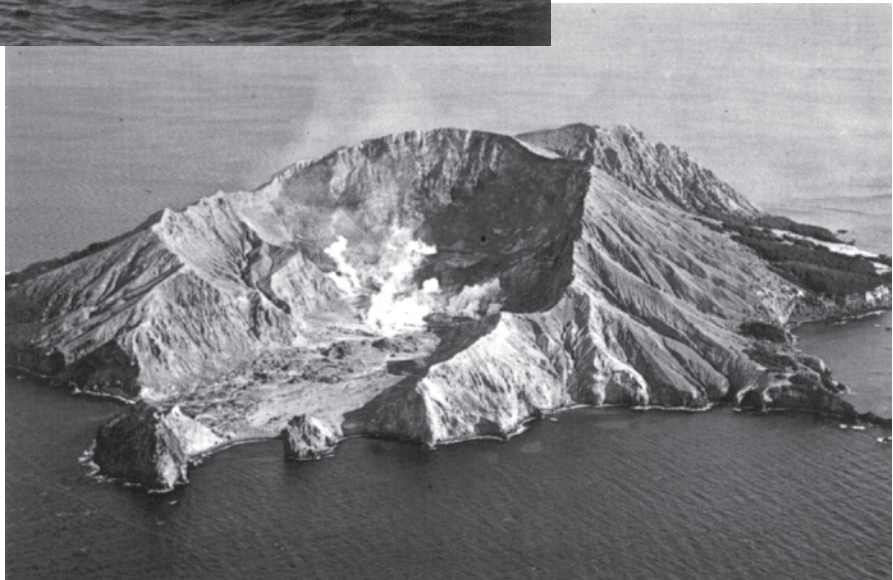
Sinter deposits appear to be restricted to Sulphur Valley. They commence almost at sea-level and extend up the valley for about 15 chains and reach an elevation of 150ft....

Thermal activity in Sulphur Valley seems to have been much stronger in the past, as judged by the thickness of the sinter....

Whakaari / White Island



(A.S. Dinsdale)



(Lyric Studios / Batley Printers)



Drawing by Richard Taylor, 1839 (Alexander Turnbull Library, 50732).

Small dry fumaroles occur here and there on the sinter. With one exception they discharge a sulphurous vapour, and sulphur crystals are deposited in the small vents. The observed temperatures ranged from 96°C to 98°C.

Only one hot spring was noted with a small discharge of water; the temperature here was 98°C. Six inches down in the beach sand south of this tiny hot pool the temperature was 78°C (MacPherson 1944, p. 76).

There is considerable archaeological evidence in the middens, stone walls, terraces and a hilltop pa that the island was occupied over a long period (Hayward et al. 1990). There is a limited supply of fresh water, probably better in the past, before destruction of vegetative cover by introduced sheep and goats in the late nineteenth century. There were also birds nesting on the cliff tops and fishing in surrounding waters. There were sufficient areas for cultivations to support a kainga of up to 40 people. The fumaroles provided heat for cooking and the hot spring was used for bathing for therapeutic purposes. “People suffering from various skin ailments and especially from hakihihi [sores] were able to go to the ngawha (hot springs) at Sulphur Bay (Ngawha) and bathe in the sulphur-laden water” (Ngati Awa Research Unit 1992, p. 8). Henry Hetaraka Hudson, told the Waitangi Tribunal of “the importance of Moutohora as a source of healing and food supply” for Ngati Awa. “Our people suffering from various skin and bone ailments used to go to the Ngawha (Hot springs) and bathe in its sulphur laden waters” (Hudson 1995, p. 3).

Both Whakaari and Moutohora were investigated by the Native Land Court sitting at Maketu in 1867 (Maketu MB1/1-4 and MB1/4-6 and 35-36). For reasons that are not clearly set out in the minute books, both islands were awarded to Retireti Taphana (Tapsell) and Katherine Simpkins, son and daughter of Hans Tapsell, the Pakeha trader at Maketu in the 1830s, and his wife Hineitirama of Te Arawa. It was alleged that Wepiha Apanui and Te Kepa Toihau of Ngati Awa had “sold” the islands to Hans Tapsell. Ngati Awa have contested this:

Ngati Awa claims that Te Kepa Toihau and Apanui gave it [Moutohora] to Hans Tapsell in order to have him trade in their tribal region, and that they put him on the land according to tikanga Maori and certainly not on tikanga ture Pakeha, which they did not understand. In other words they could not have “given” the island in a legal land selling deal, which they could not possibly have understood nor were party to. The land would have been “given” according to Maori custom, ie the usufruct of Moutohora was being “given” and not the mana whenua or sovereignty of the land (Ngati Awa Research Unit 1992, p. 5).

Whakaari was sold in 1874 by George Simpkins, the Pakeha husband of Katherine, also a trader in the Bay of Plenty, who had acquired Retireti’s interests. Although there was an application to the Native Land Court in 1878 for a rehearing of Whakaari (on the grounds it had been sold clandestinely), this had to be declined as the island was already transferred into private ownership and outside the jurisdiction of the Court. There were several subsequent transfers, and several attempts to mine the sulphur (see Parham 1973 and Boast 1993). Whakaari remains in the private

ownership of the Buttle family of Auckland. In 1953 it was gazetted as a private reserve under the Scenery Preservation Amendment Act 1933.

Moutohora was initially leased in 1876 for a sulphur mining venture which failed, and was later sold. There were attempts to farm on the island, and a quarry operated for a while from 1915 on. There were several transfers until it was purchased by the Crown in 1984 as a wildlife refuge. In 1965 the island had been declared a wildlife reserve (*New Zealand Gazette* 1965, p. 1494) and since then there has been a concerted effort to clear the goats, rabbits and rats off the island to protect the native wildlife and restore the vegetation cover.

Even after the island was sold, Ngati Awa maintained their annual expedition to Moutohora to take mutton birds, camping there for about a week in November:

The ngawha were used to render down the ‘hinu’, fat, in which the muttonbirds were later preserved. Food was cooked in camp ovens, by burying them in the hot sands of Waiariki [Sulphur Bay] these were left overnight in the sands, and in the morning, the food was cooked (Maxwell 1991, p. 21).

These expeditions ended in 1962 when a rahui was put in place to conserve bird numbers. Moutohora was also a source of hangi stones for Ngati Awa, the andesitic volcanic rock being the most suitable. Sulphur was also collected and, according to elders who spoke with Paora Maxwell, “was used as a medicine, taken internally when mixed with molasses, and externally applied as an ointment when mixed with fat” (ibid).

Both Whakaari and Moutohora were the subject of submissions to the Waitangi Tribunal in the Ngati Awa claims. Concerning Whakaari, the Tribunal noted:

It was awarded by the Native Land Court to Retireti Tapsell, the son of the early Danish trader Hans Tapsell, to whom it had been gifted in the 1840s by Apanui and Te Kepa Taihau of Ngati Awa. It is doubtful that Apanui and Kepa had sole title in view of the number of hapu of different descent groups that used the island, and it is probable that they intended to give no more than that which they had – a right of user – in accordance with Maori custom. The land was subsequently on sold, though Maori continued to use it. Local hapu contended that no gift was intended in European terms. Other tribes beyond the Ngati Awa group have also claimed an interest, including Te Whanau-a-Te-Ehutu, from around Te Kaha, which petitioned Parliament on the matter in 1884 (Waitangi Tribunal 1999, p. 113).

Because the island remains in private ownership it is outside the jurisdiction of the Tribunal to make any recommendation. Concerning Moutohora which is Crown land, managed by the Department of Conservation, the Tribunal commented: “Once more Maori contest the validity of the original transaction, while Crown researchers contend that there is no evidence that it was less than a sale” (ibid p. 114).

9.3 Awakeri Springs

The Pukaahu hot springs between Te Teko and Whakatane were used by local Ngati Awa as a bathing place that was highly valued for its curative properties. By the early 1900s the increasing number of European settlers in the district were also wanting to use these springs, and the Whakatane County Council began putting pressure on government to acquire the land containing the hot springs for public use. Wohlmann, the Government Balneologist at Rotorua, was asked to investigate and in August 1908 he reported to the general manager of the Department of Tourist and Health Resorts:

Pukaahu Springs are... situated about 150 y[ar]ds from the main road, at the foot of a low hill, and on the edge of a vast swamp, now being drained.

There are one main and two or three smaller springs issuing close together.... The flow is very great, 100,000 gall[on]s per diem or more; colour clear greenish blue, temperature 150 F[ahrenheit]. A considerable amount of gas, probably CH₄, bubbles up from the spring.

The water flows into a natural bath about two chains long and 1 1/4 chains wide, greatly frequented by the people of the district, but without any accommodation whatever in the way of dressing boxes or screening (quoted by Alexander 1995, p. 9).

The Government Balneologist noted that the land was owned by Maori, but the block was “leased to Messrs Cartier & Co of Whakatane”. He recommended Crown acquisition of the springs and some land around them under the Scenery Preservation Act. “It would be a very popular thing locally if something were done by the Government”, that is, popular among local Pakeha settlers. Some “improvements” to provide appropriate facilities were recommended:

These very modest improvements would enable parties of men and women, such as come over from Whakatane, to use the bath without having to wait for one another, and would meet all the requirements of the district for some time to come (quoted by Alexander pp. 9-10).

Nothing further was done, and local Maori continued to use the springs. In May 1911 the Whakatane County Council wrote again to the Department of Tourist and Health Resorts, noting that the springs were “used a great deal by the residents of this district”, and sought government assistance in acquiring title to the land:

As it is open and unprotected and is used by the Natives for washing clothes etc. in, it is desirous that some steps be taken to improve and make a bath or baths as the water is said to have good curative powers.

Under the existing conditions the pool is hardly fit to be used, as occasionally a beast falls into it and gets boiled, as also do dogs (quoted by Alexander p. 10).

The Government Balneologist was again asked to report, and again supported Crown acquisition, suggesting that if Maori owners were not prepared to agree to sale of the whole area containing the springs then the Crown should ask “for the sole right of the springs and say 5 acres of land with a certain area of soil to be reserved as a Maori bath” (quoted by Alexander p. 16).

Procedures were soon started for Crown acquisition, no doubt accelerated by some Pakeha inquiries about purchasing the springs. In due course a plan of the land to be taken by the Crown was notified as available for public inspection at Te Teko Post Office, and objections had to be lodged within 40 days. A petition, dated 24 September 1912, was sent to Parliament by Kereua Te Whatapapa and 11 others which noted that the land containing the springs had been Crown granted to Maori owners in 1867. It was, therefore, one of the lands returned to Maori within the block confiscated from Ngati Awa under the New Zealand Settlements Act 1863 (see Waitangi Tribunal *Ngati Awa Raupatu Report* 1999). The petition also stated in the official translation:

That the said spring is verily our doctor and heals our ailments, and is free alike to suffering Maoris and Europeans.

That we have recently become aware that the said springs were surveyed in July last, and ten acres, containing all the healing waters cut out: and on inquiring of the Europeans we were informed that this land has been taken compulsorily by the Crown, whereat there is great grief, inasmuch as this is the only healing spring owned by Ngatiawa, and this arbitrary act of the Government will cause sorrow in our hearts as we verily believe no European would be treated in like manner.

That we firmly believe in the near future our sick people will be refused admittance to these healing waters unless they pay cash, as is the custom at Rotorua.

That this injustice or injury cannot be compensated by a mere monetary payment, no matter how large an amount. However we know that when the question for assessing the value is taken before the Court, the Crown will be represented by able counsel and supported by numerous Government valuers for the purpose of reducing the compensation to the smallest amount possible.

Wherefore your petitioners fervently pray that these healing waters be restored to the people. This being Crown granted land, or that your Honourable House will grant such other relief as in your wisdom you may deem just and expedient (quoted by Alexander 1995, pp. 26-27).

In providing advice to his minister on this petition the Under Secretary for Lands commented:

... this is the only hot spring in the District. It is at present monopolised by the Maoris, and Europeans and others who visit the spring have no legal right to camp on the land or use it. It is therefore intended to take the land under the provisions of the Scenery Preservation Act ... in order that the land may be made a public reserve, and available for all classes of the community, including Maoris as well as Europeans. When land has been made a public reserve, there is no power – unless the Government specially directs – to

exclude any Maori from using the Spring, and the Maoris need be under no apprehension that any of their rights will be curtailed, except that, for the future, they will no longer have a monopoly over its use (quoted by Alexander 1995, p. 27).

The Native Minister was also asked to comment but he advised the Minister of Lands that it would be better not to proceed with the taking at this stage. The Whakatane County Council continued to press for Crown acquisition, complaining in 1914: “The natives are using the hot springs as a washing ground for their clothes and also bath there, and the Europeans do not care to use the place in consequence, although a great number are very anxious to do so” (quoted by Alexander 1995, p. 28).

The Maori objections were effective for the time being and the government did not proceed with taking the land, although 10 acres had been surveyed as a hot springs reserve, and 1 acre next to this was taken as a quarry reserve in 1914. The balance of the block was leased to a Pakeha by the Waiariki District Maori Land Board in 1916. The following year two Maori owners agreed to sell the 10 acres surveyed for a reserve to two Pakeha, but the Waiariki District Maori Land Board referred the matter to government. The Under Secretary for Lands referred the matter to his Minister, suggesting that Maori objections to sale seemed to have disappeared. The Minister approved Crown acquisition to prevent the springs falling into private ownership, and the Waiariki District Maori Land Board was informed accordingly. In 1918 the 10 acres of hot springs reserve were taken by proclamation under the Public Works Act 1908, and Scenery Preservation Act 1908 (*New Zealand Gazette* 1918, p. 2608; Alexander 1995, pp. 35-45).

The Whakatane County Council urged government to either develop a public pool at the springs or lease the reserve to the Council. There was concern that local Maori were still using the springs to wash clothes, and public bathing facilities were inadequate. In 1921 the Pukaahu Hot Springs Board was appointed by the Minister in charge of scenery preservation, and some improvements in lining the pools and landscaping the grounds were made over the next 10 years. In 1931 control of the reserve was finally vested in Whakatane County Council. After some problems with unacceptable behaviour at the springs, the Council advertised for a lease to a private individual prepared to supervise and provide facilities in the reserve. In 1937, having found a potential lessee, the Council sought an additional 5 acres to provide a frontage on the main road for the reserve and an additional supply of cold water, and possibly underground hot water. After some further negotiations an additional 25 acres were taken in 1939, including the connection to the road and a piece of hill country (*New Zealand Gazette* 1939, p. 2245; Alexander 1995, pp. 50-70). In 1941 this land was formally added to the Pukaahu Hot Springs Domain. A report from a field inspector to the Commissioner of Crown Lands Auckland described the domain in 1943:

It is internal boundary fenced and the internal boundary fences being in good condition, but the road fence along the swamp has been burnt and of little value.

The domain consists of approx 6 acres swamp which is good farming land, at present growing ti tree and flax and is readily drainable. The balance is a low ridge of light land. The slope of this ridge facing the hot pool has been terraced and planted in ornamental trees which are doing well and will considerably beautify the springs in years to come. The domain is mostly used by local residents although it is quite handy to the main road and with a little publicity would be increasingly used by the travelling public. The domain is controlled by the Whakatane County Council, and on the day of my inspection their employees were clearing fern and generally tidying up. Their administration is entirely satisfactory. The pool is fairly large, measuring approx 1000 ft, while the corrugated iron dressing sheds are in good condition (quoted by Alexander 1995, p. 71).

It was not until the early 1950s that Whakatane County Council found a lessee prepared to develop the facilities further and granted a 21-year lease with rights of renewal for two further terms. In 1969 the lease was transferred to Awakeri Hot Springs Limited. In 1974 a renewal of the lease was due and it was agreed with the Department of Lands and Survey that a 33-year perpetually renewable lease be issued. In 1979, this area, which was now a recreation reserve under the Reserves Act 1977, was formally vested in Whakatane County Council to administer the lease. The Pukaahu Hot Springs in recent years have become widely known as Awakeri Springs with public bathing pools and camp ground. Rockel (1986 p. 122) described Awakeri Springs as “one of the success stories of recreational use of a relatively small hot springs area”.

The taking of the Pukaahu Hot Springs is an issue in the Ngati Awa claims before the Waitangi Tribunal which noted that the original Rangitaiki 12 Block (300 acres) was within the raupatu, confiscated area taken under the New Zealand Settlements Act 1863, and “awarded to two ‘loyal’ Ngati Awa persons by the Compensation Court in 1879”. However, the Tribunal in its *Ngati Awa Raupatu Report* did not see this issue as one to be subsumed in the general settlement of Ngati Awa claims and recommended a separate negotiation:

The [Maori] owners object to this relentless acquisition of their land after so little had been left to the Ngati Awa people following the confiscations....

The matter is known to have been the subject of long outstanding complaint....

On the face of the claim it would appear that the takings, except perhaps those for roads, were not the sort of necessary works for pressing national purposes that could justify a departure from the Treaty, even assuming that any departure at all would be contemplated (Waitangi Tribunal 1999, pp. 167-168).

9.4 Kawerau

Okakaru was the name given in traditions associated with Ngatoroirangi and his sisters bringing geothermal heat to the Taupo Volcanic Zone. Okakaru was the name of the hot pools close to the kainga Waitahanui, occupied by Tuwharetoa ki Kawerau. Mike Barns spoke to the Waitangi Tribunal of resources of river, lake, swamp, forest and sea shore that were used by the people who lived in the kainga close by the geothermal area. “The area adjoining the swamp at Waitahanui was settled because of the advantage that geothermal resources offered both for domestic living and health and medical purposes” (Barns 1995). MacPherson identified an area of geothermal activity along the Tarawera River about 9km in length around Onepu Springs in 1944:

Several groups of springs on different fractures [fault lines] may be included in this extensive area, within which occur hot and boiling springs, mud pools and volcanoes, steaming ponds discharging by warm streams, sinter sheets, sulphur-bearing patches, fumaroles, collapse holes empty or filled with milky water, and other phenomena similar to those of other better-known hot springs of the Taupo-Rotorua graben. Indeed, the impression gained is that this Ruruanga-Onepu area is one of the more active of the whole region (MacPherson 1944, p. 70).

Much of the surface geothermal activity in this area has now been significantly modified and destroyed by the exploitation of geothermal steam since the 1950s for the pulp and paper mills at Kawerau (Figure 27). Drilling for geothermal steam by the Ministry of Works began in 1952. By 1957 the quantity of steam from seven wells was considered sufficient for utilisation in the adjacent mills for timber drying, processing pulp and power generation. Through the 1960s and 1970s more wells were drilled, and the processing operations and power generation expanded. The choice of Kawerau as the site for construction of timber, pulp and paper mills was based on the geothermal potential of the area, as the Energy Engineer at Tasman Pulp and Paper explained:

Prior to construction of the Tasman Pulp and Paper Company Limited mill at Kawerau the region was sparsely populated with limited employment opportunities for the local population.

No great “existing use” value could be attributed to the geothermal field as natural surface activity was limited to a few hot springs and small areas of exposed geothermally altered ground. It has only been by the establishment of the pulp and paper mill at Kawerau that the geothermal field has acquired a value. A value that is perhaps greater than that which could be achieved had the field been developed solely for the purposes of satisfying a geothermal power station (Carter 1982, p. 26).

In the 1950s there was little concern about traditional Maori associations with the geothermal resource. Tai Tukiwaho Te Riini described the geothermal area at Kawerau to the Waitangi Tribunal:

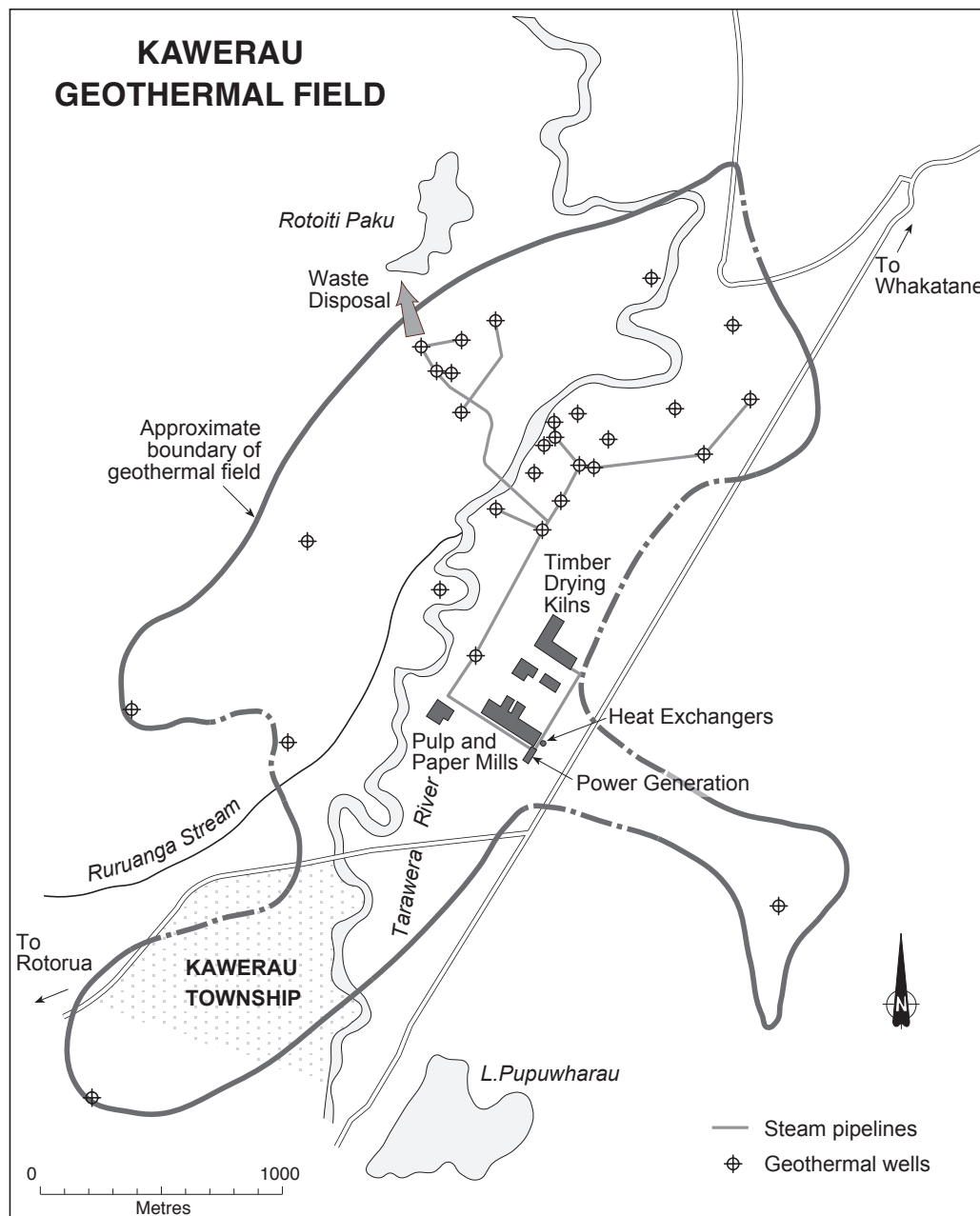


Figure 27. Kawerau Geothermal Field

To begin with I refer to the hill, Otukoiro, on whose peak my grandfather Te Riini lay buried. At the base of this hill was Okakaru, the hot pools where Ngati Tuwharetoa and Ngati Umutahi used to bathe. A little way down from there was the Rotoiti Paku where carp and many kind of eels were plentiful....

Up from the lake is Puketapu an adjoining ridge to Otukoiro that sweeps down to Tarawera River. Atop this ridge is a burial ground. At the lower North [slope] they planted kumara tuber; the warmth of the hot springs, being also on the sunny and lee side of the range helped to produce the superb kumara plant.

South of this lake (Rotoiti Paku) can be located Otakaora. It is here, from the spring, cool water was given to the male child Tuwharetoa. They called it the water that sustained Tuwharetoa. It flowed into Wharikitoetoe, into Rotoiti Paku and out to Tarawera River.

West of Rotoiti Paku was the (pa) village of the Tuwharetoa people which they called Waitahanui (Te Riini 1995).

The local people felt the impact of the pulp and paper mills, not only from exploitation of geothermal energy but also by the creation of a large sludge lake in Rotoiti Paku. It was at Kawerau that the ancestor Tuwharetoa (whose sons later settled in the Taupo region) was raised:

Ngatoroirangi's descendant Mawaketaupo married Haahuru and they had a son, Tuwharetoa, born not far from the mouth of the Waitahanui River that is still running in the area.

The parents saw the steam rising from the land near Rotoitipaku so went there and resettled and made a new Pa that was given the name Waitahanui. This Waitahanui is the hill that is our ancestral urupa on the land now used by Tasman [Pulp and Paper Company]. There was a lake in front of the Pa and a low island called Moturoa that is now under sludge. This island was full of food-trees and as there were hot springs feeding the lake the water was not quite cold and full of eels and other food....

While Tuwharetoa was still a baby his parents had to go away on a short journey and left him with his grandparents. The little boy was still being fed with his mother's milk and got very hungry and was always crying. Nothing his granny gave him seemed any good so the old lady sent her husband away to find something to satisfy the little fellow.

The old man took his taiaha and walked away. It is said that he was angry and that he also prayed and hit the ground with his taiaha. A spring burst forth. He filled his calabash with the water and took it back to the baby boy. The little chap drank it and liked it and went to sleep for a while. This water was just warm and must have made him feel happy and not missing his mother's breast too much. So the spring was named Te Waiu o Tuwharetoa, or the Breast Milk of Tuwharetoa and has kept this name right up to now. It is the spring at the head of the valley where Rotoitipaku was until the sludge covered it....

All this time and until 1970 Rotoitipaku was the source of our existence and our living. This lake was full of eel, big carp and the shellfish Kakahi or fresh water pipi that grew big. There were inanga and in the river there were trout as well and an abundance of watercress. The area was rich in food, birds and eggs. We used to get big runs of whitebait and of little eels. Everything did well because the water was just that little bit warmer than other places. There were paiwai too (giant eel). They came up the lakes and rivers looking for springs to settle down near. They just stay there and grow and grow....

On the side of the lake near the steam bores that are there now were warm ground and hot springs. It was there we used to put in the kumara to sprout early. Just a small area would sprout a thousand shoots in a fortnight. Then we used to take them up and put them in the ground near the houses. Today we have to water the kumara to get them going and manure them, and we can't start them early any more (Te Rire 1983).

Although the construction of timber, pulp and paper mills, and a new town at Kawerau, brought in employment opportunities, the effect on hot springs, use of Rotoitipaku as a sludge disposal area, and pollution of Tarawera River, are a continuing source of grievance for Tuwharetoa ki Kawerau in their claims before the Waitangi Tribunal.



Putauaki (Mount Edgecumbe) the Kawerau pulp and paper mills, and geothermal steam pipelines, 1980.



Putauaki and a geothermal well viewed from the ridge between Tarawera River and Rotoiti Paku.



Rotoiti Paku waste disposal area for Kawerau mills.



Rotoiti Paku "sludge lake"



View from Te Aroha mountain southward along the Kaimai fault line towards Okauia and Okoroire.

10. Waikato – Hauraki

There are a few areas of surface geothermal activity in the Waikato-Hauraki region in the form of hot springs, which are now used to supply commercial bathing complexes. These include Okoroire, Okauia, Miranda (Pukorokoro), Waingaro and Te Aroha. There are numerous smaller springs some on beaches such as Hot Water Beach, south of Whitianga, or on the ocean beach west of Kawhia township, others are little more than warm trickles in peat swamp, bush gully, or bubbles in a river bed. Within Tainui tradition there is no specific explanation, such as that of Ngatoroirangi in the Taupo Volcanic Zone, to account for these hot spring occurrences. Each spring was, however, highly valued by the local people. Unfortunately, there is also a loss of traditions about the springs, because of land losses through confiscation and early land sales, and loss of Maori connections to these areas through resettlement elsewhere.

Within Waikato traditions generally, however, there remains a strong sense of the physical structure of the land, the central feature of the Waikato River, and the comprehension of past changes in the landscape. That the Waikato River has not always flowed in its present course was observed by Maori long before European geologists arrived. In Mataatua tradition, Waikato and Rangitaiki were rivals in their efforts to reach the ocean first. Whangaehu wanted Waikato to travel together southward, so that its bitter water would mingle with the sea. Waikato, with its sweet clear water, challenged Rangitaiki to travel north. They journeyed northward in parallel courses. North of Tauhara mountain, Waikato sent out a messenger, Torepatutahi, and also other messengers who became tributary streams. Rangitaiki reached the ocean first at Te Awa o te Atua, near Matata in the Bay of Plenty. Waikato decided to turn westward, south of the Paeroa range, and after many false turns, eventually reached the ocean much later.

Among Waikato people the story is told of Tongariro and Taupiri who grew up as brother and sister in the Taupo district, in the land of Tuwharetoa. Eventually, Taupiri married a rangatira from Tainui, some say he was called Pirongia. For some years Taupiri lived happily in her new home, although she sometimes felt homesick for Tongariro and her friends and relations in Tuwharetoa lands. She became ill and none of the tohunga could cure her. She asked her husband to send a servant to Tongariro, to bring back some water from a tapu spring. After an arduous journey south the servant and his dog found Tongariro who provided hospitality. Before dawn the next morning, the servant accompanied Tongariro to the spring high up the mountainside. Tongariro stopped at a rock wedged into a crevice. Tongariro began a karakia, and then struck the rock with his tokotoko, his carved stick, and water began to trickle from behind the rock. The sun rose and lit up the rock, and the water turned into a rushing stream.

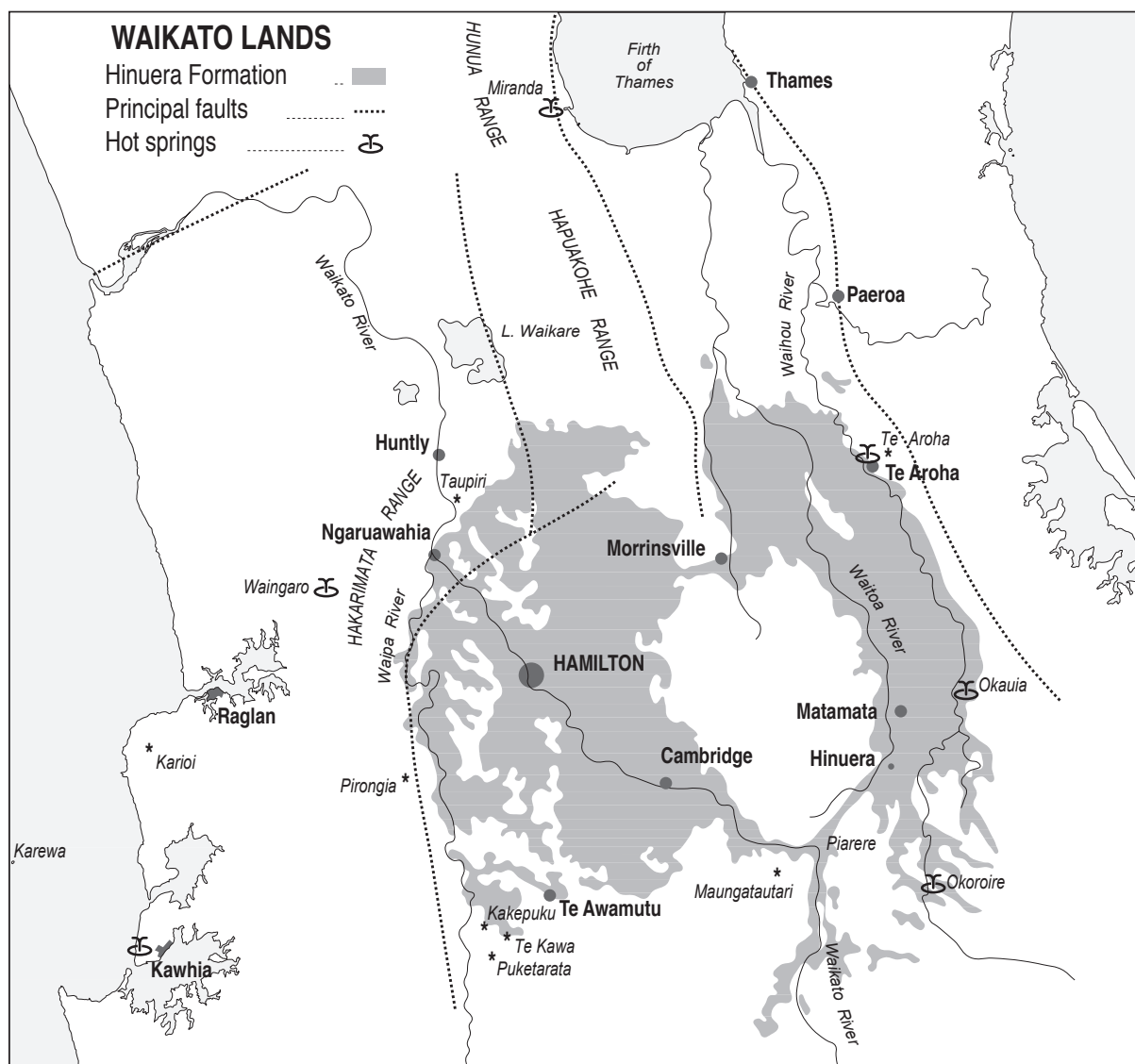
The servant filled his calabashes with the water to take back with him. Tongariro commanded that the stream follow the servant on his journey, so that Taupiri should have a constant supply of the sweet water. The stream flowed into the great crater that is called Taupo-nui a Tia, and

then overflowed northward. The people of Te Arawa tried to entice the river to flow through their land, but the servant's dog dug a ditch to persuade it to turn westward, near Te Ohaaki, and then resume its northward journey. At Piarere, it was diverted again, to flow north through the Hinuera valley. It heard the surf on the beach of the Bay of Plenty, but it was blocked by the Kaimai Range, and so it flowed on out to sea in Hauraki. The servant and his dog were unable to stop the river, so they journeyed on to the home of Taupiri with their calabashes of sweet water from Tongariro.

Taupiri recovered from her illness and the Tainui people planned a return visit to Tongariro. During the preparation for this journey the servant told her of the runaway river Tongariro had sent to her, which had escaped to Hauraki. Taupiri began a karakia and her message was carried southward by the wind. Tongariro heard it and he too began a karakia that summoned Ruaumoko, the maker of earthquakes. He woke in a terrible fury, volcanoes erupted and the land shook and split. The river did not know where to turn, but it heard the familiar sound of the servant's dog barking, and it followed that to the home of Taupiri and eventually reached the sea of the western coast. And so the Waikato River came to flow in its present course and provide sustenance for the Waikato tribes along its lower reaches.

The early geological history of the Lower Waikato included a long period below sea level, when Tertiary beds of limestone, mudstone and sandstone, some containing coal, were laid down on top of older sedimentary rocks, Triassic and Jurassic sandstones, siltstones and conglomerates, usually referred to as greywacke. These beds were finally raised above sea level between 4 and 5 million years ago as part of a widespread period of mountain building in New Zealand called the Kaikoura Orogeny. In the long process of uplift there was extensive folding and faulting of the beds, and some blocks such as the Raglan hill country, the Kaimai Range, and the hills between the Hamilton Basin and Hauraki Plains, were raised higher than others. Associated with this uplift was some volcanic activity which built up the peaks of Karioi, Pirongia and Maungatautari as well as several smaller cones. There are Maori traditions about some of these volcanoes too. Te Kawa was the daughter of Pirongia and Taupiri. Among her admirers were Karewa and Puketarata, and the tall, handsome Kakepuku, who challenged these two. Puketarata did not put up a fight, because he was not a volcano, only a greywacke peak, and he fled across the swamp to the south. Karewa stood and fought, spewed ash and glowed red, but could not withstand Kakepuku, and retreated westward, swimming out to sea where he remains as an island, also known as Gannet Island, an important boundary marker of Tainui. Kakepuku then established himself between Te Kawa and her father Pirongia.

The shifting course of the Waikato River can be read by geologists in the landscape today. Probably about 2 million years ago an ancestral Waipa River flowed north, cutting through a slowly rising Hakarimata block to form Taupiri Gorge. But this evolving pattern of erosion in the Waikato was drastically modified by a series of explosive volcanic eruptions in the Taupo Volcanic



Zone, which spread layers of ignimbrite and pumice many metres thick over the landscape. At this stage, about 1 million years ago, the Waikato followed approximately its present route as far as Piarere, where it continued through the Hinuera valley into the upper reaches of the present Waitoa River. In its course across the Hauraki lowlands to the Firth of Thames/Tikapa Moana, it probably resembled Canterbury rivers today, with a wide bed, braided channels, sandbanks and shingle reaches and quiet lagoons. It probably changed course frequently, depositing silt, sand and gravel. Meanwhile the Hamilton Basin was also being filled up with volcanic debris carried by the ancestral Waipa River. The Waikato River, overloaded with debris from a particularly large eruption, built up its bed at Piarere until it overflowed across a low saddle, into a small stream flowing into the Hamilton Basin. After several changes of route, the Waikato finally settled in its present route. The evidence of its wanderings can be found in the Hinuera Formation (Figure 28) which is made up of the volcanic debris carried downstream and deposited in both the Hauraki lowlands and Hamilton Basin between 1 million and 15,000 years ago.

Waikato is known for its many taniwha and Hauraki too has its share. As in the Taupo Volcanic Zone, taniwha were also associated with explosive volcanic eruptions, for which the evidence could be seen in the landscape. Pitau Williams told “another taniwha story”, in his evidence before the Waitangi Tribunal in the Hauraki claims, which explains not only the formation of the lake Pupuke at Takapuna, but also the mineralisation of the Coromandel ranges:

We call the top of the cliffs at Kirita [south of Manaia Harbour, Coromandel Peninsula], Matariki and this is why. There were two taniwha that lived in the moana out from Kirita. Tawhetorangi was a shallow water taniwha. Matariki was a deep-sea taniwha. One day Matariki decided to kill Tawhetorangi, but Tawhetorangi escaped to Tamaki Makaurau and hid in a hole at Takapuna. Matariki located Tawhetorangi and used his powers to cause the lake [Pupuke] to explode creating a deep crater. However, Tawhetorangi had sensed this and escaped before the lake exploded and headed back to Kirita. Tawhetorangi was not quite in the shallow water when Matariki caught him. A battle ensued. Matariki tried to pull Tawhetorangi into the deep sea, but Tawhetorangi was too strong for him. In the ensuing struggle, Tawhetorangi lay on his back and pushed at Matariki with his strong feet causing Matariki to fly from the water, through the air and crash onto the top of the cliffs on the south side of the Manaia harbour. He was mortally wounded. Matariki’s body now forms the brow of this maunga. We can see the body at low tide. Matariki’s tail lies from Kirita to Katikati. It is said that the remains of the tail are indicated by the presence of mineral deposits between these places.

Tawhetorangi now lives at Amodeo Bay, at the headwaters of the creek there. The name of the awa [river] there confirms this.

The taniwha are still present at Moehau. We know when they are present, because there is silence for a few seconds before the ruru (morepork) let out calls. These kaitiaki let us know that the taniwha are about. The hapu all know their own taniwha or kaitiaki and know their signs (Williams 1999).

Other traditions from the Auckland area suggest that Rangitoto was formed out of Lake Pupuke, but it is not unusual to find regional variations in explanatory stories about landforms. The significant point is that such stories indicate acute field observation of the physical landscape, and provide both a geography and mental map of a region which reinforces Maori identity with place and ancestry.

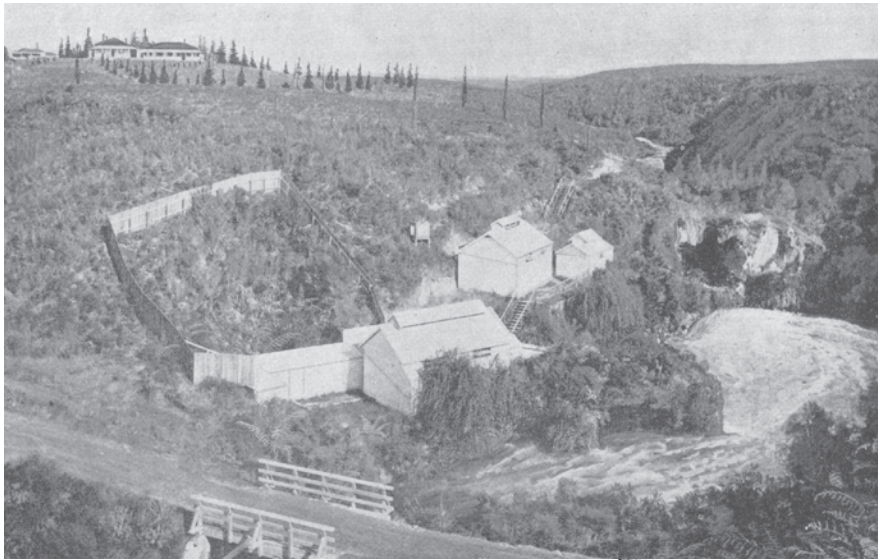
10.1. Okoroire, and other Hot Springs

Okoroire is associated with the birth of Raukawa, the son of Turongo of Waikato and Mahina-a-rangi of Ngati Kahungunu. Turongo, in despair following the loss of his lover Ruaputahanga to his half brother Whatihua, decided to leave his home at Kawhia and travel. He reached the Hawkes Bay area, Heretaunga, and stayed at a kainga called Kahotea, at Te Aute. Here he met Mahina-a-rangi, daughter of the local rangatira, Te Angiangi. He courted her, and with the blessing of both the parents and his father, Tawhao, they married, and Mahina-a-rangi became pregnant. Tawhao visited them and urged Turongo to return to his home region, and Turongo also desired his first child be born there. He went ahead to prepare a place, a kainga on lands given by his father, on the bank of the Mangorongono stream, a tributary of the Waipa River, near Otorohanga. Mahina-a-rangi set out later, with some of her people, and travelled northward, to Wairoa then inland to Waikaremoana and on through the Rotorua district to Waikato (Te Hurinui 1946; Kelly 1949, pp 73-76). The following extract is from a Ngati Maniapoto version of the story compiled by Pei Te Hurinui Jones:

Ka tata te waa whaanau o Maahina-a-rangi, ko te haerenga mai. I ahu mai ma Te Wairoa, ka huri mai ki Waikare-moana, aa, ka tae mai ki Roto-rua. Ki nga koorero, he haere nui taua haere, aa, e whakamanuhiritia ana a Maahina-a-rangi me tana iwi ki nga kaainga i tae ai raatou. Te haerenga mai i Roto-rua, aa, ka tae mai ki koo tata mai o Tirau, ka whakamamae a Maahina-a-rangi. He puia i taua waahi, aa, ka noho a Maahina-a-rangi i reira whanau ai. Te whaanautanga, he taane te tamaiti, ka ta paa e ia te ingoa, ko Raukawa, hei whakamaharatanga ki te hinu raukawa i whakawatia ra e ia ki a ia i a raaua ko Tuurongo e whakawhaiaipo ana. Ko te waiariki i kaukau ai ia i te waahi i whaanau ai ia ka tapaa te ingoa, ko Te Wai Takahanga a Mahina-a-rangi, aa, koiraa anoo te ingoa inaianei.

When Mahina-a-rangi was due to give birth she came by way of Te Wairoa, detouring by way of Waikare-moana and reaching Rotorua. According to the stories it was a large party and they were entertained by the local people wherever they went. After leaving Rotorua, and a little this side of Tirau, Mahina-a-rangi felt her pains. There was a hot spring there, and Mahina-a-rangi remained there to give birth. Her child was a boy, who was named Raukawa in memory of the perfume she used when she and Turongo were courting. The spring she bathed in at the place where she gave birth was called Mahina-a-rangi's Bath (Jones and Biggs 1995, pp 72-73).

Mahina-a-rangi stayed at Okoroire until she had recovered from the birth and then continued westward, crossing the Waikato River at The Narrows, with the child strapped onto her back, a meaning for the name Tamahere given to that place. She was greeted at Turongo's new home and the child was formally named Raukawa, signifying the perfume from the leaves of the shrub called Kawakawa. These events give a special significance to the waiariki at Okoroire because the child Raukawa became the eponymous ancestor of a large tribe, Ngati Raukawa of Tainui waka, who occupied the eastern Waikato region.



Okoroire Hotel and bath houses beside the Waihou river.

Advertisements.

OKOROIRE

Hot Springs & Sanatorium Hotel.

ONE of the most complete establishments and enjoyable health resorts in connection with the Hot Lakes of New Zealand. Newly erected specially for the Tourist Traffic, containing over Forty Rooms.

THE SCENERY CANNOT BE SURPASSED.

OKOROIRE is magnificently situated on the Banks of the Wai-hou River.

FISHING.—This River and the adjacent streams are heavily stocked with Trout, affording splendid Sport in Season at small cost. Licenses can be obtained at the Hotel.

THE OKOROIRE BATHS

Are excelled by none for Curative Properties, and the appointments are first-class. Cold Showers attached to each Bath.

Quoting from the "Government Report of 1893," which says—
 "Apart from the medicinal value which these Springs possess in common with most other alkaline Hot Springs, they are remarkable for the large flow of water, and for their freedom from any unpleasant odour or deposit. This fact should render these Springs specially attractive."

PROFESSOR BROWN'S ANALYSIS.

THE FAIRY, or OPEN AIR BATH.		THE UPPER No. 2 BATH.	
TEMPERATURE, 99°.		TEMPERATURE, 113°.	
Flow of 4,100 Gallons per hour.		Flow of 1,300 Gallons per hour.	
	Grains per gl.		Grains per gl.
Calcium Sulphate	.. 2.42	Calcium Sulphate	.. 2.77
Calcium Carbonate	.. 1.84	Magnesium Chloride	.. 0.69
Magnesium Carbonate	.. 1.03	Sodium Chloride	.. 9.48
Sodium Chloride	.. 4.34	Sodium Carbonate	.. 17.18
Alkaline Carbonate	.. 11.41	Potassium Carbonate	.. 1.42
Iron Oxide	.. 0.70	Iron Oxide	.. 1.10
Silica and Silicates	.. 9.82	Silica and Silicates	.. 9.70
	31.56		42.34

P. C. URQUHART, Proprietor.

Thos. Cook & Son's Coupons accepted.

Allen, 1894

The land containing the springs was sold and in 1888 the Okoroire Hotel was built and the hot springs developed. *Brett's Handy Guide* suggested that Okoroire would make a "half-way home" between Auckland and Rotorua:

There are two baths, the upper and lower bath situated near the river Thames (Waihou), so that the bather can jump out of the hot spring and take a plunge in the river if desired; there are also two natural hot-water falls, which can be taken as douche baths, or simply as an adjunct to the river bath (Bilbrough 1890, p. 59).

In 1894 the railway route between Auckland and Rotorua was completed and fewer people travelled by road. There is still a hotel with hot pools at Okoroire, but it is not on the main



Okoroire Hotel and bath houses c.1895.

Valentine, 1896

highway and mainly serves the local population. The place is still significant in Tainui tradition – the marriage of Turongo and Mahina-a-rangi was a significant link between Tainui and East Coast tribes – but there is little Maori involvement with the hot springs at Okoroire.

Okauia Springs were associated with the fault system on the western side of Kaimai Ranges (Figure 29):

All these springs are obviously connected with a great fault which separates the mountains from the plains. The fault here is a step-fault consisting of three subparallel subsidiary faults, and hot springs occur in connection with each subfault. The most powerful springs are those in the ditch cut in the plain by the Waihou River. They are on the line of the

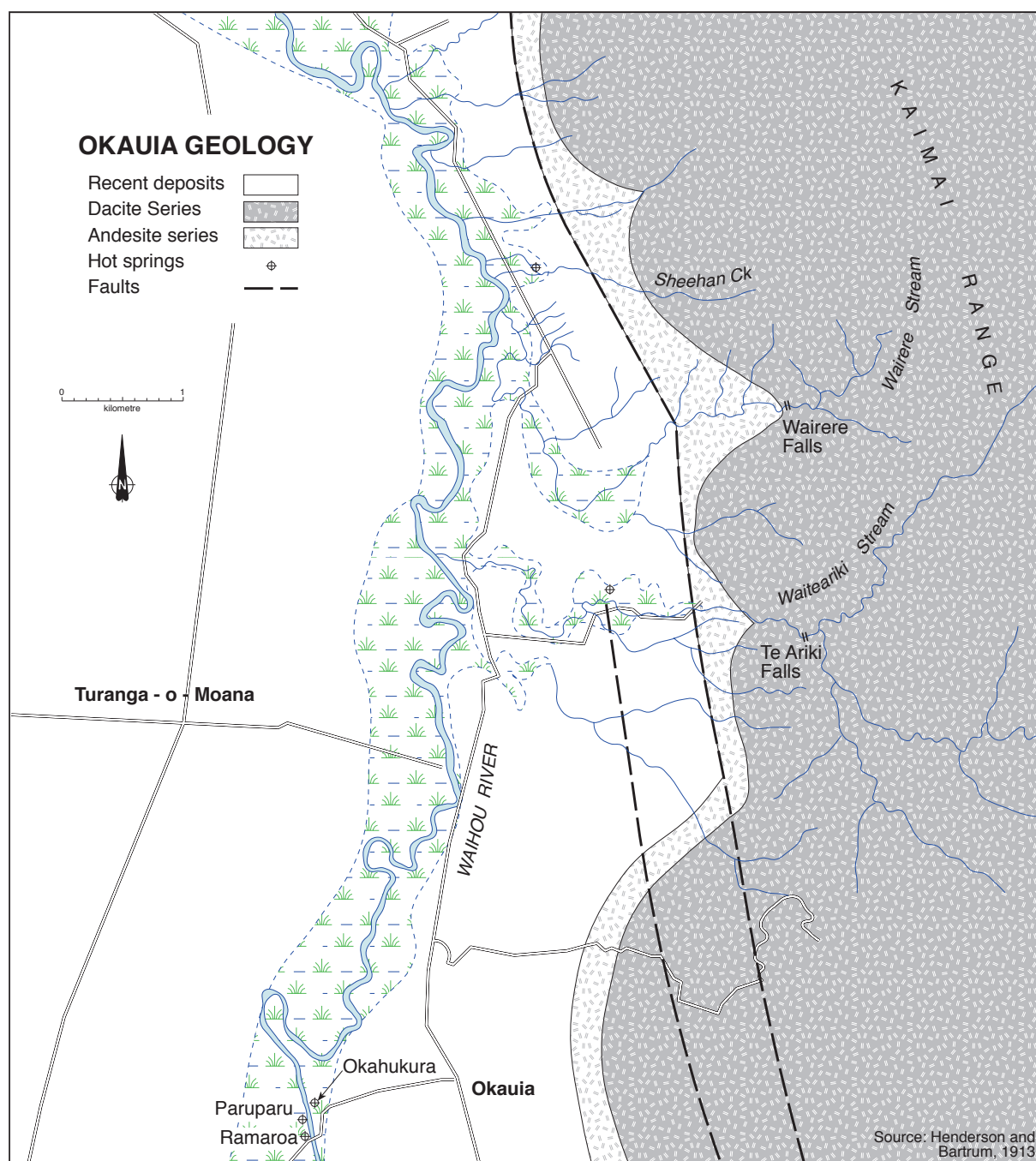


Figure 29. Okauia Geology.

outermost subfault. Three of the springs are known as – Ramaroa, or the Opal Spring; Paruparu, or the Ruby Spring; and Okahukura, which has a temperature of 117 degrees Fahrenheit. Ramaroa is a magnificent spring, with a temperature of 104 degrees Fahrenheit, and a flow of 28,000 gallons per day. This spring is but a few feet above the Waihou River; and the limpid effervescent waters of the spring, welling with opaline tints from a tuff bottom, pleasing by contrast with the sombre gray-green rapid current of the Waihou streaming close at hand. If there were not a plethora of hot springs in this portion of the North Island, doubtless more attention would be bestowed on this and the numerous other springs which rise in the bed and banks of the Waihou in this locality (Henderson and Bartrum 1913, p. 36).

The hot springs were well known to Ngati Haua for medicinal and therapeutic uses. Ramaroa, the largest spring, now called Opal, was on the west bank of the Waihou, and was visited regularly by people from several nearby kainga. Their land came into the possession of J.C. Firth, the Auckland industrialist and land spectacular in the late 1860s and was part of his Matamata Estate. The following description of Ramaroa appeared in *Brett's Almanac* in 1880:

The hot water rises in a rocky oval basin about 20 feet long by 8 feet wide. The water rises round an old tree stump which projects from the bed of the water, which is 2 feet deep with a sandy bottom. On 3 sides of the basin the banks rise abruptly to a height of 30 feet and are profusely covered with verdure of every hue and variety. This hot spring is a charming spot, sheltered from all winds, and after reclining in the hot water, a plunge into the river is an invigorating finale. The spring has for ages been famed among the natives for its healing virtues. In cases of rheumatism it has worked the most surprising cures (quoted by Rockel 1986, p.128).

Firth was not content to leave the spring in its natural state, and by 1886 concrete dressing rooms and a concrete platform with steps into the bath had been constructed:

Mr. Firth has close-boarded the small ravine from which this grand spring rushes. The side facing the river is closed by a high concrete wall. Passing along a concrete platform, on the riverside of which runs a low balustrade, we enter a Gothic doorway (ibid p. 129).

There were plans to develop a spa when the Auckland-Rotorua railway reached Matamata in 1886, but nothing eventuated. The Okoroire Hotel, not far away, provided a more convenient stopping place with hot springs for travellers on the road.

Across the Waihou River, there was another group of springs in a swampy gully that fed a small stream draining into the Waihou. These were named Papapuia, according to Rockel (1986, p.130) and were probably the same group as Okahukura in Henderson and Bartrum's geological map. In the 1880s these springs were known as Diamond Springs by Pakeha settlers. In the early 1900s the springs were developed for bathing and became known as Garland's Hot Springs, the name of the principal member of an Auckland syndicate who acquired ownership. By the 1950s these springs and the associated campground were known as Crystal Springs. As with Okoroire, the Okauia group of springs were on lands sold by the 1880s and developed privately with no Maori involvement.

Two groups of hot springs, Miranda (Pukorokoro) and Waingaro, were within the Waikato confiscated lands taken under the New Zealand Settlements Act 1863. Pukorokoro on the southern west shore of the Firth of Thames contained about 100 hot springs within a 40 ha area and was used by Hauraki tribes. However, it had no road access and was not developed by Pakeha until well into the twentieth century. Waingaro was on the route from Ngaruawahia to Raglan and a hotel was constructed as a half-way house in 1885. A bath was also constructed, and upgraded in the 1890s. Both Miranda and Waingaro have considerable supplies of hot water and large commercial bathing complexes have been developed on both sites with no Maori involvement.

10.2 Te Aroha Hot Springs

The geothermal area at Te Aroha consisted originally of more than 20 hot springs, but now fewer than 10 are active. The total flow of hot water has changed little, but the excavation of a tunnel in 1889 to tap water for the baths, and several drill holes from 1936 on for the same purpose, have affected flows in the smaller springs. In drillhole no. 1, known as Mokena Geyser, there is “geyser-like activity due to release of carbon dioxide gas build up” (Mongillo and Clelland 1984, pp. 78-79). The springs are associated with the old volcanic structures and fault lines of Te Aroha mountain (Figures 30 and 31):

The Te Aroha group of mineral springs is situated at the base of Te Aroha Mountain the steep wooded face of which, rising immediately beside the springs is... a great fault scarp. Through the crushed rock due to this fault-zone arise the springs which occur over an area about 25 chains [580 metres] in length, in the northern portion of which the springs are warm, in the southern cold (Henderson and Bartrum 1913, p. 30).

There is little documentation about these springs before 1850, although the Waihou River nearby was the principal travel route in the region. However, few people then lived in this contentious boundary zone between Ngati Haua to the south and Hauraki tribes to the north. On 12 December 1849, George Cooper, who was travelling with Governor Grey’s party, was taken to one of the springs:

... a spring called Te Korokoro o Hura, which the natives declared to be boiling and of a salt taste, and that it came from the sea on the East Coast by a subterraneous passage. It is situated at the foot of Mount Te Aroha, on the eastern bank of the river. On approaching it, Whakareho who was our guide, instructed me in a Native ceremony for strangers approaching a boiling spring, and my repeating which afterwards afforded much amusement during our stay at Rotomahana. It consists in pulling up some fern or any other weed which may be at hand, and throwing it into the spring, at the same time repeating the words of a karakia of which the following is the translation –

I arrive where an unknown earth is under my feet,
I arrive where a new sky is above me,
I arrive at this land
 A resting place for me,
Oh spirit of the earth the stranger humbly offers his heart as food for thee.

The above ceremony which is called “Tupuna Whenua” is used by persons on their first arrival at a strange place, for the purpose of appeasing the spirit of the earth, who would otherwise be angry at this intrusion (Cooper 1851, p. 40).

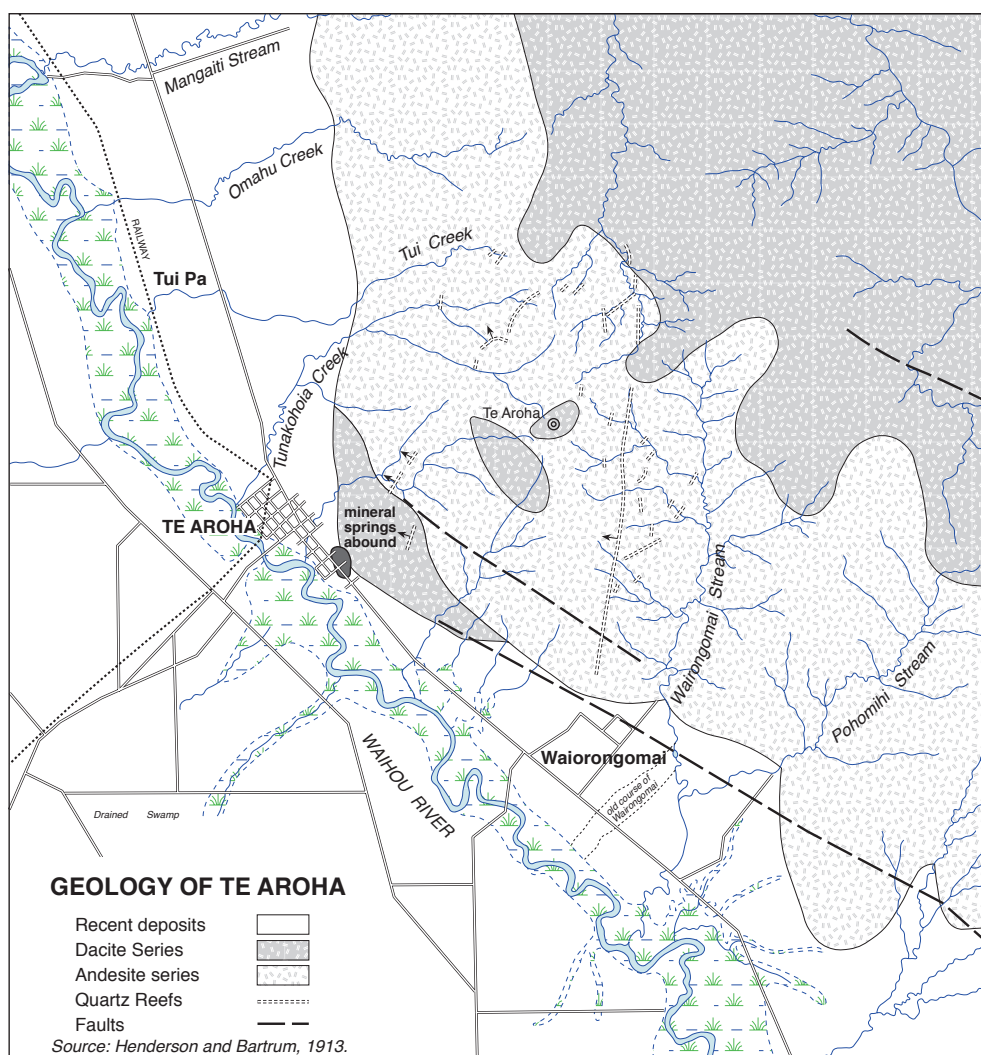


Figure 30. Geology of Te Aroha

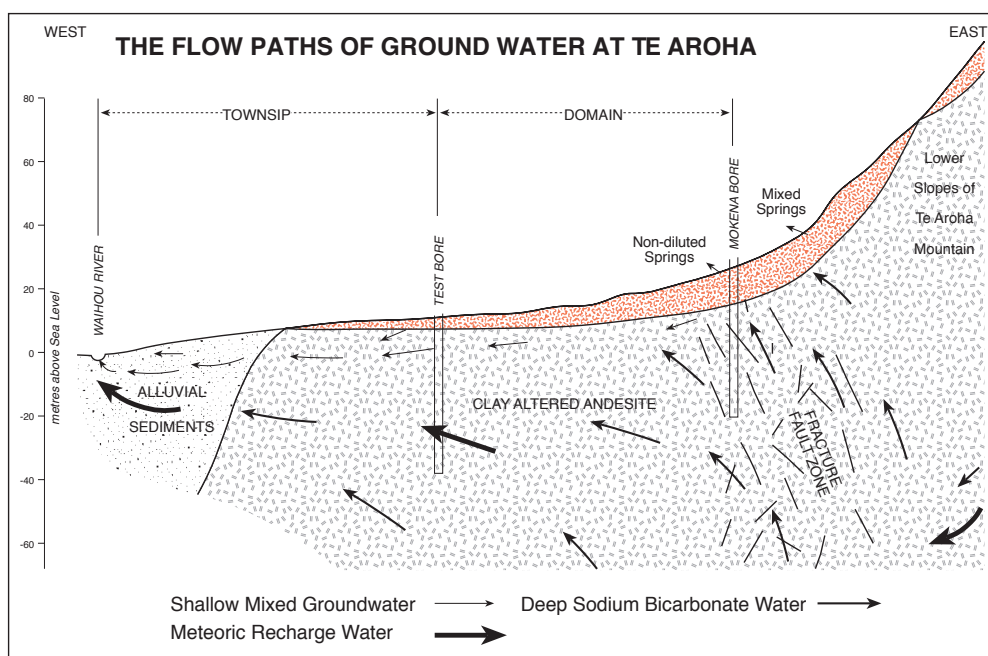


Figure 31. The Flow Paths of Ground Water at Te Aroha.

The Maori version of this karakia was provided, with notes (ibid, p. 41):

Ka u te Matanuku ⁽¹⁾
Ka u te Matarangi ⁽²⁾
Ka u ki tenei whenua
Hei whenua,
Hei kai mau ⁽³⁾ te ate o te tauhou

Notes: (1) Matanuku (synonymous with Nuku, Papa and Papatuanuku) signifies the Earth. It is here used for a place where one arrives for the first time.

(2) Matarangi signifies the Sky, and is used here for the part of the sky which is over the place at which a stranger arrives, who is therefore said to have a new sky above him.

[Hei kai mau] (3) This is a curse according to the old custom, and is applied by the stranger to himself in evidence of his extreme humiliation and perfect submission to the spirit of the place, who could not otherwise be appeased.

Following the karakia, Cooper was able to investigate the spring:

On examining the spring we found that the water was not hot and could hardly be called tepid although it was not quite cold. Neither is it salt at all, but has a strong chalybeate taste, and is highly odiferous of rotten eggs. We found a small quantity of sulphurous deposit in the mud through which the water wells up. The quantity of water emitted is very small, and the place on the whole hardly repays one for the trouble of visiting it, to do which it is necessary to traverse about a quarter of a mile of very broken ground, the greater part of which is a deep quagmire (ibid, p. 42).

It seems that Cooper was shown only one of the smaller springs, and the “quagmire” discouraged him from exploring further. The area did not appear to be occupied by Maori at this time.

The springs at Te Aroha were within the large Te Aroha Block of over 62,000 acres which straddled the Waihou River north and south of Te Aroha mountain (Figure 32). The title was first investigated by the Native Land Court in February 1869. The application of Ngati Haua for title was vigorously opposed by Ngati Rahiri and other Hauraki leaders. Te Mokena Hou identified his hapu as Ngati Tumutumu, Ngati Hue and Ngati Kopirimau, all part of Ngati Rahiri. He also recited a list of 20 hapu of Hauraki in his evidence and stated: “These tribes held this land from ancient days down to the invasion of Ngapuhi – they afterwards used to come backwards and forwards from Hauraki to Te Aroha” (Waikato MB2/216). He listed 16 names, “& others are now living at the base of Te Aroha” mountain, and refuted Ngati Haua claims to any pa on the mountain:

We were driven away by Ngapuhi and took shelter amongst Waikato tribes and then returned to Te Aroha until the time of the war with the Pakeha, we then straggled away and have now returned and are cultivating on the land....

The reason that Ngatihaua lay claim to the land is to take it because their own land is gone (Waikato MB2/217-218).

In the 1820s, following a number of raids by Nga Puhi around the Hauraki Gulf, Marutuahu tribes retreated inland and were allowed to settle within Waikato in the Cambridge- Maungatautari area. However, they were beginning to outstay their welcome, and after a fight in 1830 called Taumatawiwi, on the lower slopes of Maungatautari mountain, Marutuahu tribes moved back to Hauraki. Ngati Haua claimed they had won this battle and not only did they assert their title to Maungatautari lands but also claimed Te Aroha Block, on the grounds of conquest and occupation. This was refuted by Marutuahu witnesses, who conceded that their main settlements were nearer the coast but that they periodically came up the Waihou River to get eels, and snare birds in the forests of Te Aroha mountain or the wild fowl of the swamps nearby. Te Mokena Hou stated that while they were away from Te Aroha he lived at Hikutaia and Puriri:

I was there [Puriri] when the missionaries came there and at the time of the first Governor's coming I went backwards & forwards to the Aroha...

I came on 18 Augt. 1868 & took permanent possession of Te Aroha (Waikato MB2/219).

Rina Mokena stated, "Te Mokena is my husband. I was born at the Aroha, at Pakamako – at the base of the mountain". She claimed Ngati Tumutumu and Ngati Maru had made the eel weirs there. Although she was related to Ngati Haua, and had lived for a time at Matamata and Waitoa, Ngati Haua were not owners. Ngati Tumutumu lived at Te Aroha, even at the time of Taumatawiwi, there were a few who remained as kaitiaki, guardians (Waikato MB2/244-245). Erana Ketu corroborated this statement: "During times of war there were always kaitiaki at the Aroha" (Waikato MB2/248. There were other witnesses too, who described cultivations, and eel weirs, and expeditions from the coast inland up the Waihou River. Curiously, in the many pages of evidence there was no reference in the minute book record to the hot springs.

Te Aroha Block was awarded to Ngati Haua, although it was acknowledged by all parties that until Taumatawiwi the block was within the rohe of Marutuahu tribes. The Native Land Court concluded:

The evidence given on both sides is, as usual in cases of tribal disputes, very contradictory, but the Court will follow the rule which it has laid down in similar cases, that those who are found in undisputed possession of land in this country at the time the English Government took formal possession of the Island shall be considered as the real owners of the soil (Waikato MB2/304).

Marutuahu tribes protested Judge Rogan's decision and a rehearing was granted. In April 1871 Judges Maning and Monro concluded that at no time had Marutuahu tribes relinquished their claim to Te Aroha lands, that any Waikato or Ngati Haua people living there "unmolested on the Aroha lands, were there by permission of the Marutuahu people, but who did not concede to them any right of ownership". Since Taumatawiwi, Marutuahu tribes "made use of the land at will... and as fully and frequently, it would appear, as they chose to do". The Court awarded

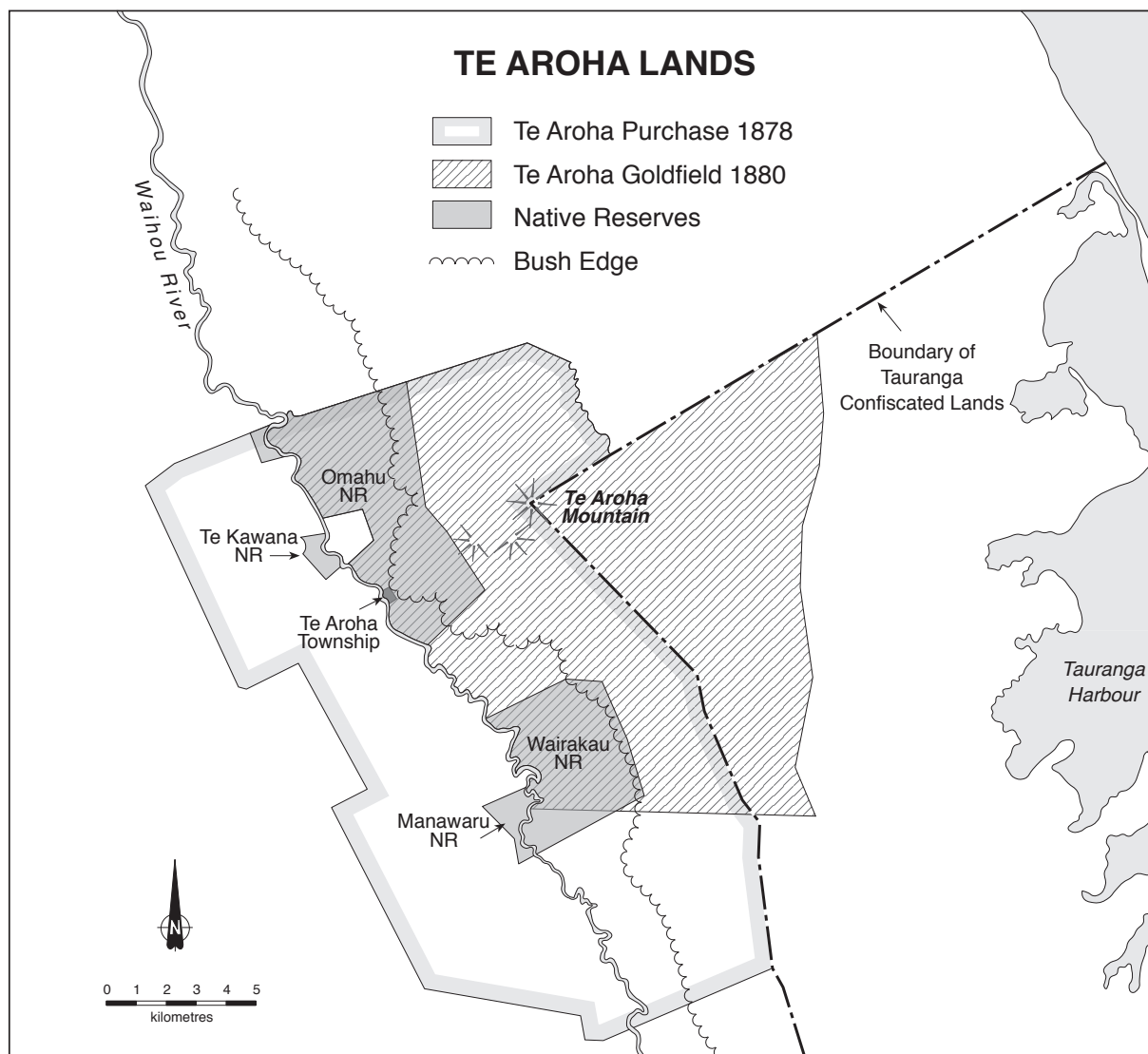


Figure 32. Te Aroha Lands

the block to “the Marutuahu tribes” (Hauraki MB4/257-258; Fenton 1879, pp. 132-133).

Mapuna Turner, in her evidence to the Waitangi Tribunal in the Hauraki claims, quoted oral tradition in Ngati Rahiri Tumutumu:

It is said that when Marutuahu left Hauraki to go and live in Waikato, we refused and chose not to go with the rest. We sought protection from the mountain, the ngahere (bush) and in the swamps. I say protection because we knew the area well (Turner 1999).

Crown Purchase of Te Aroha Block

Early in 1872 James Mackay Jr. began negotiating the purchase of Te Aroha Block for the Crown, and over the next few years a large number of individual interests were acquired. In July 1878 the Native Land Court heard an application by the Crown to have its interests in Te Aroha Block defined. On 23 July 1878, judgment was delivered on Te Aroha Block:

This land was awarded to the Marutuahu in Auckland in March 1871. The evidence now adduced in this case shows clearly that Marutuahu comprising the Ngatipaoa, Ngatitamera, Ngatiwhanaunga and Ngatimaru tribes sold their interest in this block to the Government at the tribal meeting at Pukerahui, also that Ngatitumutumu, afterwards known as Ngatirahiri, a section of the Ngatimaru tribe, comprising the Ngatikopirimaui, Ngatihue and several other hapus mentioned in the evidence objected to the sale, although some of their principal men received certain sums of money from Mr Mackay, the Land Purchase Commissioner, both before and after the Pukerahui meeting. This would imply an acquiescence in the tribal arrangements. These people were the original possessors of a portion of this land, and were afterwards placed there by Marutuahu to guard it against Ngatihaua. They would not have held it unsupported by the confederation; in fact after the battle of Taumatawiwi they lived at Turua and returned to live on the Aroha after the land was awarded to Marutuahu.

The Court is of the opinion that the claims of these people cannot be ignored and after careful consideration of the matter have decided to award them seven thousand five hundred (7500) acres at Omahu where they are residing and have a pa and cultivations, subject to such sums of money as they may have received from time to time from Land Purchase Commissioners duly appointed by the Government (Hauraki MB11/13-14).

On 28 August 1878 the Aroha Block was before the Native Land Court again, to complete the transfer to the Crown, as set out in the judgment:

Mr Mackay applied for an Order of Court vesting the whole of the Aroha Block in the Crown. The Court had awarded 7500 acres to Ngatirahiri hapu – they have come to an arrangement with the Government for relinquishing all claims to the whole Block, on certain conditions which were set forth in a deed which he produced. What he now asked the Court for was that the Order formerly made should be annulled and one substituted in favor of the Crown for the whole Block.

The Ngatirahiri were represented by Aihe Pepene and Keepa Te Wharau. The Court asked if they were satisfied with the arrangement made by Mr Mackay. They assented to it.

The Court said an Order [to] issue in favor of the Government for the whole Block (Hauraki MB11/254).

The Native Land Court Order, dated 28 August 1878, was based on Auckland Deed 1302 which conveyed 53,908 acres to the Crown. A covenant in the deed, signed by James Mackay, Land Purchase Agent, for the Crown stated:

Her Majesty doth hereby covenant and agree with the said vendors that Her said Majesty or Her surveyors will make good and effective Grants or Conveyances to the said vendors the names of whom are set out in the several schedules hereto Numbered effectively from one to four herewith annexed of the several pieces or parcels of land being severally parcels of the block....

Provided that in each of such Grant or Conveyance there shall be inserted a provision or condition that the land to be granted or conveyed as aforesaid shall not be alienated by sale

mortgage or lease or otherwise without the previous consent of the Governor in Council first obtained.

The Schedules to the deed listed names and acreages in four categories:

No. 1	Omahu Reserve	4269	acres
No. 2	Wairakau Reserve	3250	acres
No. 3	West Bank of Waihou	606	acres
No. 4	Special Reserves	490	acres
Total		8625	acres

In the terms of Auckland Deed No 1302 the whole of Aroha Block was conveyed to the Crown, subject to the allocation of reserves for Ngati Rahiri as set out in the Schedules to the deed. However, the reserves had yet to be surveyed on the ground. It seems that the amounts of land to be allocated, as set out in the schedules, had been negotiated by Mackay but no record has been found to explain how these decisions were made. Land purchase officer George Wilkinson was left to complete the task, and he reported in April 1879 that survey had been delayed by disputes among Ngati Rahiri.

In July 1879 Wilkinson reported on the situation in the Omahu and Wairakau Reserves, noting that the outside boundaries of each reserve had been surveyed, and that this would not affect the subsequent proclamation of Crown land east of the Waihou River in Te Aroha Block. However, the details of individual and whanau allocation within the reserves had not been finally settled on the ground. Wilkinson concluded “nothing could then be done with this quarrelsome people” and they were left to think it over.

In January 1881 Wilkinson reported again, noting that the Schedules to Auckland Deed 1302 required that Omahu Reserve “be subdivided into 40 separate blocks or holdings, the total number of owners of which is 155, divided into 40 hapus or families”. Wairakau Reserve was to be “divided into 28 separate blocks, with 103 owners who are represented in 28 different hapu or families” and a separate Crown grant was to be issued for each. The first survey plan prepared was rejected, and Wilkinson’s attempts to negotiate got nowhere. It was only after the goldfield was proclaimed in November 1880 that the question of subdivision became significant: “the Natives found it would be necessary to have their separate blocks clearly defined in order that the gold fields revenue accruing therefrom might be properly distributed amongst them”. Wilkinson called another meeting, taking with him “Mr Purchas, a Government surveyor then at work at Te Aroha”. Although “for some time previous to this it had been pretty well known who were to be the owners of the land commencing from the southern end of the Omahu Reserve” there was not yet agreement on subdivision boundaries:

During the above mentioned meeting, the matter was fully gone into, and a plan was proposed by the Natives which, as it seemed both a fair and feasible one, I at once agreed

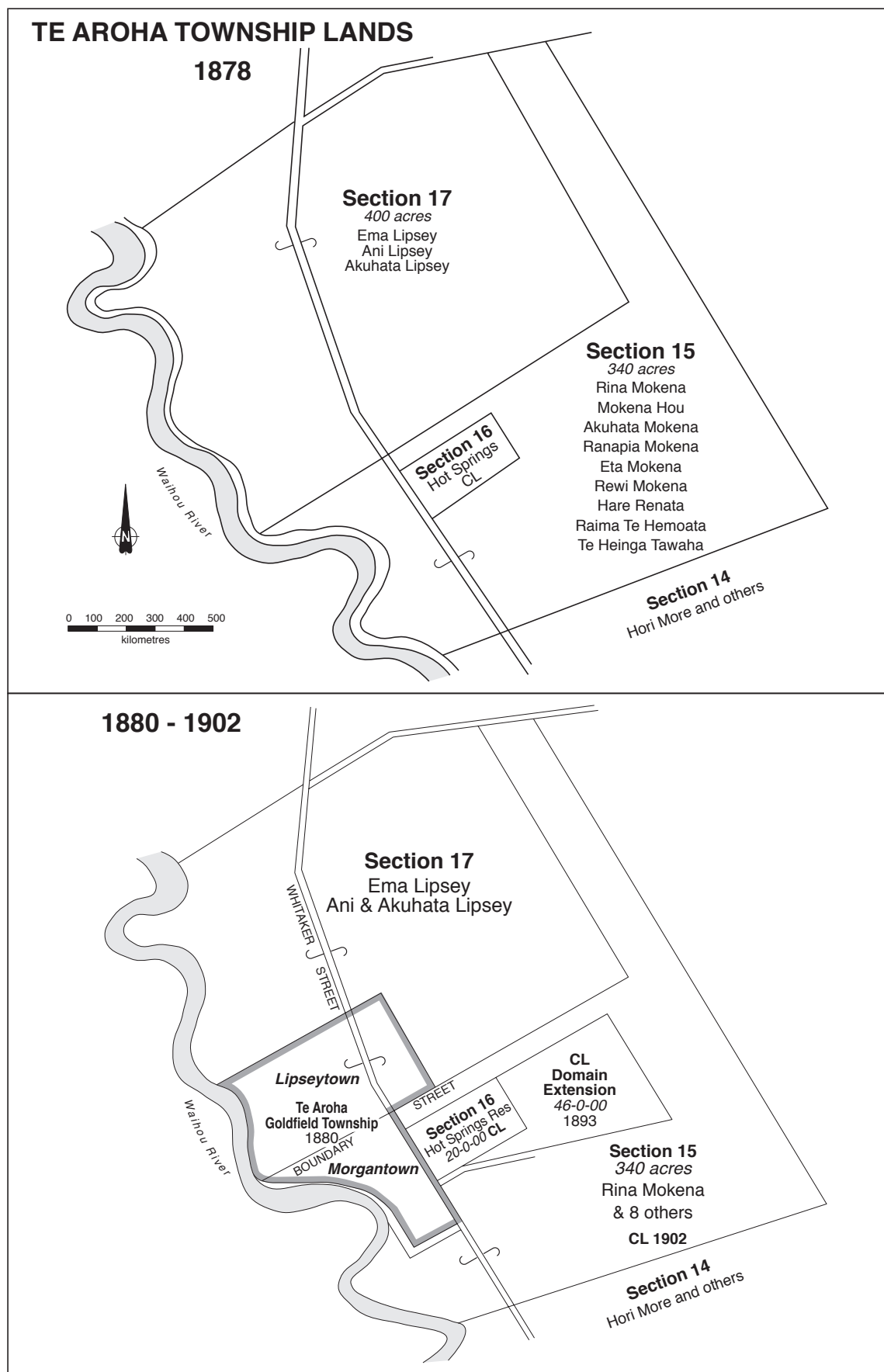


Figure 33. Te Aroha Township Lands

to it, viz, to make every block that contained 100 acres and over to commence from the Waihou River and run right up to the eastern or back boundary line in the hills. The different areas were roughly calculated at once by Mr Purchas, and their position marked on the map in pencil, so that before leaving in the evening I was able to show the natives the position that each of their blocks would take, and told them... that the lines would be cut without delay (quoted by Alexander vol. 8, pt. 3, p. 188).

Unfortunately, Mr Purchas was diverted to surveying sections in the newly-proclaimed Te Aroha Gold Field Township. It was not until May 1881 that Wilkinson could report that the first four subdivisions at the southern end of Omahu Reserve had been surveyed and Crown grants could be issued (Figure 33).

Within Section 15, the land allocated to Rina Mokena and eight others, an area of 20 acres, Section 16, containing the hot springs was retained by the Crown as a “Hot Springs Reserve”. Section 17 was allocated to Ema Mokena, daughter of Mokena Hou and wife of Pakeha settler George Lipsey, and their two children, Ani and Akuhata. All of the Maori lands were “inalienable except with the consent of the Governor, by sale or by mortgage or by lease for a longer period than twenty-one years”. Further subdivisions were finalised by January 1882 and the rest some time later. By July 1882 Wairakau Reserve subdivisions were completed.

Te Aroha Spa

Although gold brought Pakeha settlers to Te Aroha in the 1880s, it was as a spa town that Te Aroha township evolved in the late nineteenth century. The focus of development was the group of springs in the 20-acre Hot Springs Reserve (Section 16), later known as the Te Aroha Hot Springs Domain. Occasional parties of Pakeha visitors came to the springs in the early 1870s, and were received hospitably by the local people. A brief historical review of the development of the springs was provided by the authors of the Te Aroha Domain Management Plan:

After the opening of the Thames goldfield in 1867 Thames became a booming gold mining town with a population between 15,000 and 20,000. Visitors from Thames passed freely up the Waihou or “River Thames” using the area for recreation, duck shooting and picnicking [sic]. Visitors were welcome at Omahu pa in Te Aroha. George Lipsey, who had previously run hotels at Thames and Paeroa, had arrived at Te Aroha in 1874 and married Ema, the daughter of the Te Aroha chief Mokena Hou. By 1878 Lipsey had built the first Hot Springs Hotel for his father-in-law and excursions to this and the hot springs were popular with visitors (Goode and Matthews 1993, p. 16).

The facilities provided were not great, as suggested in a description in the *Thames Advertiser* 16 January 1877:

There are two shanties which are well supplied with grog and worse might be found in many town hotels. No great profit was charged on the grog, but bathers were charged one shilling each for the privilege of immersing themselves in the hot springs (quoted by Goode and Matthews 1993, p. 16).

The potential for development of Te Aroha as a spa was recognised in the 1870s by George Lipsey and Te Mokena Hou. The *Thames Advertiser* commented, “The hotel if well conducted will be a great boon for persons seeking these springs for their health-giving properties” (quoted by Goode and Matthews 1993, p. 18). By 1879 the *Thames Advertiser* recorded three hotels at Te Aroha: “the Hot Springs Hotel kept by Mokena, the Waitoa Hotel at the landing place kept by George S. O’Halloran, and the Te Aroha Hotel kept by Mr Missen” (ibid). By the beginning of 1880 there were regular river boat services from Thames and Paeroa, and a coach service from Hamilton to connect with the train from Auckland.

In November 1880 Te Aroha Gold Field was proclaimed (*New Zealand Gazette* 1880, p. 1669). The population increased rapidly in the boom conditions of a new mining town. In 1882 the Hot Springs Reserve of 20 acres was gazetted under the Public Domains Act 1881 (*New Zealand Gazette* 1882, p. 1860). Some of the pressure on Government to develop the amenities of the Hot Springs Reserve had come from George O’Halloran, who by 1880 had acquired Mokena’s Hot Springs Hotel. A Domain Board of five members was appointed, including George Lipsey. In 1886 negotiations began to purchase from the Mokena family another 46 acres to be added to Te Aroha Hot Springs Domain. George Lipsey was directly involved and by 1891 the Crown had acquired all the interests except that of Rina Mokena, by now deceased. Her interest in the land had been inherited by Ani Lipsey, the young daughter of George and Ema Lipsey, but her parents as trustees had no power of sale. This problem was overcome by a special clause in a statute: Section 8 Maori Real Estate Management Act Amendment Act 1893, which empowered the Lipseys to complete the sale of the Hot Springs Extension to the Crown (Tuuta 1998, pp. 26-27; Alexander 1997, vol. 8, pt. 3, pp. 218-224). The 46 acres were declared Crown land (*New Zealand Gazette* 1894, pp. 209-210) and officially added to Te Aroha Hot Springs Domain four years later (*New Zealand Gazette* 1898, p. 1308).

The Domain was administered by the Hot Springs Domain Board through the 1880s and George Lipsey remained a member until 1892. In 1893 Te Aroha Town Board took over the role of the Domain Board (*New Zealand Gazette* 1893, p. 1297). In 1903 the recently-created Department of Tourist and Health Resorts took over administration (*New Zealand Gazette* 1903, p. 99). In 1978, departmental control was handed over to a joint Piako County Council/Te Aroha Borough Council administration. Since 1989 Te Aroha Domain has been administered by Matamata Piako District Council.

Dr Alfred Wright “Physician to the Thermal Springs Domain” extolled the virtues of Te Aroha, predicting a future as “the sanatorium of the Southern Hemisphere” in a booklet published by the Te Aroha Hot Springs Domain Board in 1887:

Its fame as a watering-place has now quite eclipsed all others including Rotorua. It is true that our district cannot display the awe-inspiring wonders of the Lake Country; still there are many advantages of a much more important character for invalids which render this



Cadman Baths, Domain, Te Aroha, N. Z.

vi.

Advertisements.

TE AROHA HOT SPRINGS.

THE GREAT SANATORIUM OF AUCKLAND.

*T*his charming place is recommended to those desiring pretty country, pleasant climate, and agreeable society, with the advantages of really comfortable and well managed.

NATURAL HOT BATHS.

The Te Aroha Domain, in which the Hot Springs are situate, is a picturesque tract of country on the slopes of Te Aroha. A large portion of the Domain is laid out as a Garden, with Asphalt Tennis Courts, well kept lawns and ample recreation grounds.

Among groups of lovely ferns and beds of beautiful flowers the Bath Pavilions are erected. Of these there are seven, including the

Grand New Swimming Bath, 66ft. x 33ft.

with ample dressing room accommodation, and numerous Private Baths

Te Aroha is accessible by train from Auckland *without change of carriage*, and may also be reached by way of the Thames and Paeroa by those who prefer travelling by Water.

THERE ARE NUMEROUS

FIRST CLASS HOTELS, BOARDING HOUSES, AND COTTAGES FOR HIRE AS PRIVATE LODGINGS.

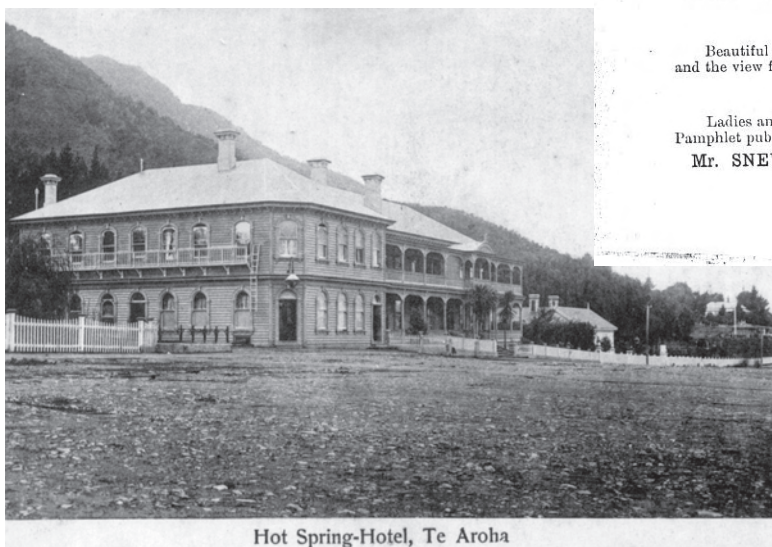
The Domain and the Streets are well lighted at night, and the Baths are open from 6 a.m. to 10 p.m. except from 1 till 2, and 6 till 7 p.m.

THERE ARE A LIBRARY AND FREE READING ROOM IN THE DOMAIN GARDENS.

Beautiful walks, rides, and drives abound in the neighbourhood, and the view from the Mountain, Te Aroha, 3,176 ft above the sea is magnificent.

Ladies and gentlemen desiring further particulars may obtain the Pamphlet published by the Domain Board on application to

Mr. SNEWIN, Clerk to the Te Aroha Domain Board.



Hot Spring-Hotel, Te Aroha

Allen, 1894

place as a resort for those in quest of health far preferable than any other locality. Among them may be named the excellent provisions which are at all times obtainable here. Fresh butter, cream, milk, eggs and every description of farm and dairy produce.... Moreover for those of a nervous temperament, and for sufferers of any form of disease or disturbance of the nervous system, the chief object in the selection of a health resort should be to find one at which perfect serenity and repose are certain of attainment... At Te Aroha there are no subterranean rumblings, tremblings, and other volcanic disturbances of a more or less appalling character, such as are perpetually taking place at Rotorua, and which render that place quite unsuitable as a resort for nervous invalids (Wright 1887, pp. 5-6).

Dr Wright noted that it was “intended to build a sanatorium in close proximity to the Thermal Springs” but in the meantime “arrangements” had been made at “two of the hotels and at one of the best boarding-houses” for patients in his care (ibid).

By 1886 a direct rail connection with Auckland via Hamilton was completed which gave Te Aroha an advantage for several years, until the rail line to Rotorua was completed in 1894. From the mid 1880s and through the 1890s, various tourist and travel guides extolled the virtues of the spa at Te Aroha. *Brett’s Handy Guide* stated:

The chief attraction to Te Aroha, however, is of course the baths, for which Dr Wright claims even greater efficacy than those of Rotorua... No one can doubt, nevertheless, that for both Te Aroha and Rotorua there is a grand future when the great curative properties of the waters achieve the reputation they deserve (Billbrough 1890, pp. 58-59).

Ingram’s 1892 *Guide for Invalids* remarked that “Te Aroha Hot Springs have, within a remarkably short period, gained for themselves, by their wonderful curative powers, a deservedly high reputation among the *sanatoria* of New Zealand, and their fame is every day extending to the sister colonies” (Ingram 1892, p. 3). Much of his description of the springs was derived from Dr Wright’s 1887 booklet.

By the early 1900s Te Aroha was served by a daily train from Auckland, but was now second to Rotorua as a spa:

Few pleasure spots or health resorts are more picturesquely placed. Here there are no boiling cauldrons or feathery geysers, no violent thermal activity. On one side of the township flows the Waihou River, winding and placid, and fringed with weeping willows; on the other abruptly rises the lofty mountain of Te Aroha, forest-clad to its cloudy summit, nearly 3,000 ft. [1000 metres] above the sea. Immediately above the town there are high hills, beautifully wooded, rich in groves of fern trees, and abounding with streams and cascades. The hot mineral bathing-springs and the mineral drinking-waters for which Te Aroha is celebrated well from the mountain-base in the Government Domain between the range and the river. This Domain has been converted into a pretty park, shady with trees, green with well-laid-out tennis courts and bowling greens and grassy parterres. On a central terrace stands a handsome and excellently appointed bathing-pavilion, where the traveller and invalid may enjoy hot baths of delightful softness and powerful curative

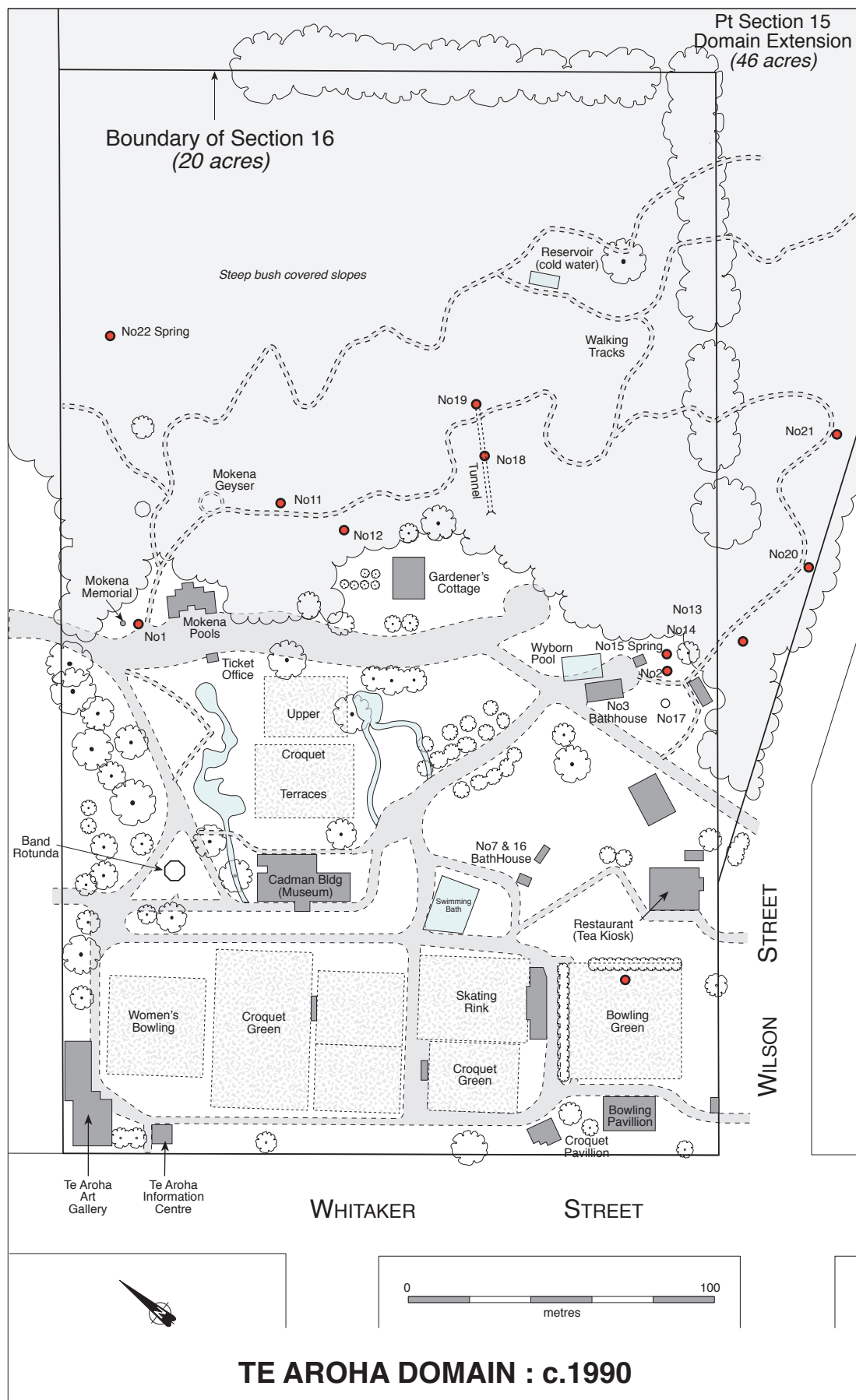


Figure 34. Te Aroha Domain: c.1990.



Cadman Building



Band Rotunda and Cadman Building



*Modern pool and
refurbished No. 3 Bath house*



No. 7 Bath house and Tea Kiosk

Te Aroha Hot Springs Domain, 1999

properties. The waters, according to Dr Wohlmann the Government Balneologist, resemble those of Vichy, in France, but are distinctly stronger. The baths are efficacious in cases of rheumatism, gout, dyspepsia, neuralgia, sciatica, disorders of the kidneys and liver, and various forms of skin-disease.

The New Zealand Tourist Department controls Te Aroha Spa, and there is a Government resident Medical Officer, besides trained attendants (Cowan 1908, p. 153).

The Government Balneologist, A.S. Wohlmann, included Te Aroha in his guide, *The Mineral Waters and Health Resorts of New Zealand* (1907). By this time 22 springs had been identified, including 3 cold ones (Nos. 16, 20 and 21). Many were little more than a trickle, such as Nos. 9, 10, 11 and 12. To augment the flow to the baths a tunnel had been bored into the hillside in 1889 to intercept Spring No. 19. Spring Nos. 1 to 6 were the main bathing waters, supplemented by Spring Nos. 13, 14 and 15. Spring Nos. 8 and 15 were the principal sources of drinking water although waters from the cold springs, Nos. 20 (the Iron Spring) and 21 (the Magnesia Spring) were also used:

The thermal waters may be classed as muriated alkaline... the amount of salts in solution is very considerable, and the waters being free from that fault of so many New Zealand springs, a large excess of silica, are fully equal to, and indeed in many respects surpass, the most celebrated of the alkaline waters of Europe.

In addition to the very large quantities of bicarbonate of sodium, the presence of considerable amounts of the chloride and sulphate gives these waters additional therapeutic properties of considerable value, and brings them into closer relationship with their European prototypes. Indeed, it is curious how many striking points of resemblance there are between the Te Aroha waters and those of a similar class in the Old World (Wohlmann 1907, p. 60).

In his study of New Zealand spas, Rockel put Te Aroha into the context of nineteenth century spa development:

Waiwera was the first spa in New Zealand, Rotorua was, for several reasons, considerably the most important, but Te Aroha was the first geothermal water area to receive many thousands of bathers annually. It was, for several years, ahead of Rotorua.

As with Hanmer, Te Aroha's setting was almost as important as its water resources. The springs emerged from the side of Mount Te Aroha, the highest peak in the district. The Waihou River flowed at the foot of the mountain and the sheltered slope in between was ideal for growing trees and for laying out a town. There was native forest nearby and the scarp face of the Kaimai Range contrasted remarkably with the flatness of the Thames or Piako Valley lowlands.

Unlike Hanmer, Te Aroha has retained its spa appearance. Of all New Zealand's geothermal areas, the Domain at Te Aroha looks most as it did in Edwardian times. Some of the old bath house buildings remain and the formal gardens have been only slightly altered; they are not dotted with barbecue grills, and hydrosleds don't loop their way downhill (Rockel 1986, p. 50).

The modern layout of facilities in Te Aroha Domain is shown in Figure 34. Many of the old bath houses survive, and the buildings have been restored. The Cadman Building houses a museum. There are modern spa baths and a swimming pool complex and two drinking fountains, at No. 8 and No. 15 springs. Although the medical field of balneology or hydropathy has been superseded by other medical procedures, the baths are still very popular, both for recreation and for relief of muscular pain and limbs stiffened by arthritis and rheumatism.

Evidence before the Waitangi Tribunal

In their evidence given to the Waitangi Tribunal during the hearing of Hauraki claims 1998-1999, speakers from Ngati Rahiri Tumutumu emphasised the significance to them of their maunga tapu, Te Aroha mountain, and the hot springs at its base. Mapuna Turner described the mountain:

Ngati Rahiri Tumutumu and the rest of Hauraki consider Mount Te Aroha to be wahi tapu. We have defined Mt Te Aroha to mean from the summit to the river [Waihou]. This includes Te Aroha Town. Te Aroha is the kei [stern] of the waka. The bow is at Moehau... The earliest known name for Te Aroha maunga is Puke Kakariki Kaitahi the place where Kaka parrots flocked to feed. It is symbolic that the mountain supplies an abundance of food and resources (Turner, 1999).

Tane Mokena, a descendant of Te Mokena Hou, spoke of the ancestral connections of Ngati Rahiri Tumutumu with the mountain and springs:

The hot springs lie at the base of Te Aroha Mountain, right beneath Whakapipi or Bald Spur. The springs flow out of the heart of the mountain, so I cannot talk about the significance of the springs without first talking about Te Aroha Mountain.

Te Aroha mountain and the Kaimai Ranges are closely associated with our ancestors. Te Aroha mountain itself is traditionally associated with the ancestor Te Ruinga. On one side, Te Ruinga descended from Raukawa, on another side he came from this area. Twin peaks stand atop Te Aroha mountain. The higher one bears the name Te Aroha-a-uta, and the lower one Te Aroha-a-tai....

Another major reason that Te Aroha mountain was associated with our ancestors lay in the custom of burying the aristocratic dead in mountain caves....

Our ancestor Te Ruinga came from the mountain; he descended from the spirits who inhabit its misty peaks. The Hot Springs at Te Aroha, because they flow out of the heart of the mountain, are also part of the mountain, and also partake of the tapu associations of the mountain. The Hot Springs symbolise the giving, caring nature of the mountain and the ancestors.

The hot springs which lie at the foot of Mount Te Aroha were a very special place to our ancestors. They rise out of the base of the tapu mountain, and right underneath Te Ruinga's pa site at Whakapipi, were considered to be very tapu, and had to be approached with respect and caution....

In more recent times, the custom of naming a natural feature because of their association with tribal members continued. As an example, the favourite hot pool at Te Aroha used by my great-great-great-grandmother was named in her honour. Te Wai-kaukau-o-Kiri-oho. Kirioho lived during the early contact period, and is believed to have died in about 1830. She was the mother of Te Mokena Hou. Te Mokena Hou was born beside that pool. Because they were tapu the Springs were an appropriate place for intensely tapu activities, such as the birth of rangatira children.

Another activity that has been associated with the area is that warriors would come to the springs after a battle to wash off the blood and to remove any detrimental spiritual influences in the healing hot waters. It is also likely that important rituals were carried out there, for instance the tohi or purification rite which served to dedicate high born children for their future roles in leading the tribe. The waters, then as now, were favoured for their healing qualities. People used to come from all of Hauraki and the Coromandel to bathe there (Mokena 1999, Doc. G22).

A kaumatua of Ngati Rahiri Tumutumu, Hutana McCaskill, who had lived most of his life at Tui Pa, Te Aroha, told the Tribunal how he felt about the springs:

In the past our people used the springs for a number of reasons. The cold spring was used for drinking water and the hot springs for bathing and healing. The healing properties of the springs was known throughout Aotearoa.

I believe the springs were gifted to the Crown. However, there were conditions attached to its use as continuing to allow Maori people free access to the springs. I understand, the springs were transferred to the control of the local body and the conditions of the gifting were forgotten.

It saddens me how the spiritual beauty and power of the springs has been destroyed. For example, I believe the tapping of the Mokena Hou geyser has diminished its wairua.

We had many springs, but today lots of them are described as “diminished” or “toxic”

I believe that the Domain was gifted to the Crown by Mokena Hou for the benefit of the people (McCaskill 1999).

Mapuna Turner told the Waitangi Tribunal:

The contributions that have been made to the Te Aroha Township by Maori have been many. You visited the Domain yesterday, everyone remains under the impression that this was a gift by Mokena Hou to the Crown.

Te Aroha Domain was not gifted according to Uncle Keepa. He reiterated always that it was taken. That information was handed down from his father and grandfather.

I will never forget Uncle Keepa talking about the ‘confiscation’ of the Te Aroha Domain (Turner 1999).

Mapuna Turner contrasted oral tradition of the taking of the hot springs with the statement in the Te Aroha Domain Management Plan: “The Government of the day wisely determined that the land in which the hot springs were situated should be made a public reserve, and an area of 20 acres was set apart and brought within the provisions of the Public Domains Act on December 1882” (Goode and Matthews 1993, p.17).

Two historical issues were raised: the nature of Mokena’s “gift” and the “agreement” about Maori use of the hot springs. Both have implications for current management, in the claimants’ view. However, historical evidence presented to the Waitangi Tribunal indicates that although the Hot Springs Reserve, Section 16 (20 acres), was within the area of Section 15, the reserve granted to the Mokena whanau, it had become Crown land by virtue of the Crown purchase of Te Aroha Block:

Within the Omahu Reserve, an area of 20 acres around the hot springs seems not to have been granted back to Ngati Rahiri owners as part of the Omahu Reserve. Instead it seems to have been retained by the Crown, and treated as part of the Te Aroha purchase, with the boundaries of Omahu Reserve adjusted to ensure that Ngati Rahiri received the areas they had been promised. References to the negotiations leading up to this decision have not been located (Alexander vol. 8, pt. 3, p. 211).

Robyn Anderson suggested in her report for Hauraki claimants that the circumstances of this transaction were “not entirely clear”:

Certainly local politicians were concerned that the springs be obtained, the Mayor of Thames requesting Sheehan [Native Minister] to instruct Mackay to reserve the area as public property.... The details of the actual negotiation are unknown but the tradition is that Te Mokena Hou, the head of the whanau, ‘gifted’ the springs to form a ‘recreation reserve’. It was arranged at the same time, that Maori should retain a right of free access to the springs while George Lipsey, son-in-law to Te Mokena Hou, was appointed to the Te Aroha Hot Springs Domain Board (Anderson 1997, vol. 6, pp. 31-32).

In 1886 the Domain Board began negotiations to extend the Hot Springs Reserve. By February 1894 an additional 46 acres were acquired by the Crown and added to Te Aroha Hot Springs Domain in 1898 (*New Zealand Gazette* 1898, p.1308). Through the 1890s government land purchase officers sought to acquire the interests in the balance of Section 15, known locally as Morgantown. By 1902 the last of a series of transactions was completed (see Tuuta 1998). Section 15, which carried a number of goldfields leases, was declared Crown land in August 1902 (*New Zealand Gazette* 1902, pp. 1777-1778). Section 17, the land allocated to George Lipsey’s wife Ema and their children, became known as Lipseytown, and much of this was also sold.

When Section 16 was set aside as a Hot Springs Reserve, it was already Crown land, part of Te Aroha Block purchased by James Mackay for the Crown. The deed of transfer specified that reserves be set aside for Maori but these were not surveyed, nor boundaries decided, when the

deed was signed. As already indicated, because the Hot Springs Reserve was already Crown land, when the various reserves for Maori were allocated, there was legally no need for Te Mokena Hou to “give” the land to the Crown. The additional 46 acres in Section 15 was clearly purchased by the Crown, not given by the Mokena whanau. Another alleged “gift”, the land in Herries Memorial Park, was also purchased as part of the balance area of Section 15 acquired by the Crown in 1902. However, the idea of a gift has had long currency in Te Aroha local history. It is probably not coincidental that when reserves were awarded to the Mokena whanau (Section 15) and Ema Mokena and her children (Section 17), George Lipsey saw an opportunity for township development of what became Morgantown and Lipseytown on these two sections, which make up most of the present town of Te Aroha.

No documentation has been found for a specific agreement between Maori and the Crown, nor any government official’s promise, about Maori use of the hot springs. However, an early local history suggests that both Maori and Pakeha in Te Aroha believed there was one:

Old settlers say that the springs were highly valued by the Maoris. From every part of the [Thames] Valley, and even from far-away Coromandel they came to bathe, and in the comforting pools old warriors, stiffened with age or rheumatism, might be seen soaking themselves all day long. When at length the Springs were handed over to the State, it was specially provided that a certain valued bath should be reserved for the use of the Maoris (Burton 1930, p. 273).

There is documentation, however, that Maori were complaining about loss of free access to the springs soon after the establishment of the Te Aroha Hot Springs Domain. On 12 February 1885 Pepene raised the issue of Te Aroha hot springs with the Native Minister, Hon. John Ballance at a meeting with “Hauraki Natives”, at Parawai, Thames. The minutes recorded:

He [Pepene] complains that they are charged when they go to bathe there. If this regulation is allowed to exist it is really overriding the original agreement that they had with the Government. This statement about admitting them free was only a verbal one. Messrs. Wilkinson and Mackay conducted the arrangement (AJHR 1885, G-1, p. 37).

After hearing a number of other complaints about the operation of the Native Land Court, Ballance responded to Pepene’s complaint:

Then, he [Pepene] referred to the hot springs at Te Aroha, and thinks that the agreement has been broken, on the ground that a small charge is made to the Natives for admission to the springs, but the charge only applies to some of the springs; the others are free to all. Then, in the case where the charge is made, no distinction is made between the Europeans and the Natives. The charge is a very trifling one, and has been put on simply to pay the cost of the improvements which have been made. The springs have been enclosed and made private for those who use and enjoy them. Why should the Natives therefore refuse to pay a small sum when the Europeans are willing? I hope they will look at this matter

in a reasonable light, and see that what has been done is a very reasonable and fair thing. I do not agree with him that the agreement has been broken. They are open for everybody. The charge that has been made is only to recoup the cost which has been incurred in improving the springs which attract people to the district and really enhance the value of the land which belongs to the Natives (ibid, p. 39).

Spring No. 7 had been allocated to Maori use and was described in Dr Wright's guide as "a bath-house a distance from the rest which is set apart for the sole use of natives" (Wright 1887, p. 15). Many of the tourist guides did not mention Spring No. 7 at all, but Ingram's 1892 *Guide for Invalids* stated: "No. 7 is a sulphur bath, and is solely used for persons suffering from cutaneous [skin] complaints" (Ingram 1892, p. 6). There was no mention of Maori use. In the detailed analysis of each spring it was noted that "Spring No. 7 is tepid and not much used" (ibid, p. 9). In the early 1900s the Government Balneologist recorded:

Bath No. 7 is a small wooden building containing somewhat primitive baths, one reserved for the free use of the Maoris, and one for skin cases. The latter is partly supplied by Spring No. 16, a cold saline water containing a certain amount of sulphuretted hydrogen in solution (Wohlmann 1907, p. 65).

Water to fill the baths in Bath-house No. 7 must have all been piped in as Wohlmann (1907, p. 58) noted that "Spring No. 7 no longer exists". The geologists Henderson and Bartrum (1913, p. 32) commented: "Spring No. 7 was at one time connected with a bath which was never popular, and no longer exists".

A bath-house (7 feet 6 inches x 5 feet) was constructed over Spring No. 7 in 1886 for Maori use. The restored building known as No. 7 Bath-house presently on site was erected in 1892, and "contained two bathrooms with timber baths 6'x2'6" deep": the "Sulphur Bath" and the "Maori Bath". In 1905 the timber Sulphur Bath was replaced with a large iron enamel bath. In the 1920s a porcelain bath was installed in the Maori bath. By 1992 when a conservation report was done the building was described as "in poor condition, although a number of original damaged and decayed elements exist". The Sulphur Bath was being used as workshop and storage and the Maori Bath had not been used for many years. The recommendations made in 1992 were:

This building's use historically was exclusively for both Maori people and those suffering from skin disease and is considered offensive amongst local Maori. The proposal to refurbish this building for their continued exclusive use is not now popular.

It is recommended that the building be conserved and refurbished for use as a two roomed bathhouse with baths to accommodate two people. These could be run as part of the thermal pool complex available for 1/2 or 1 hour periods. Reinstating a supply from the No. 16 sulphur spring should be included (Goode and Matthews 1993, Appendix 7, Register Item No. 7).

In 1999 the building had been restored and a new bath installed (the old porcelain bath is now in the museum in the Cadman Building). However, the issue of Maori use of the bath has not been fully resolved.

The early acquisition of Te Aroha Block by the Crown, combined with the complex history of nineteenth century Maori occupation on a contentious border zone, has served to destroy the continuity of tikanga Maori in Te Aroha geothermal area. The old names of springs have gone. Only the name of Te Mokena Hou remains, and that because he and his whanau were awarded this particular piece of land around the Hot Springs Reserve. Other Ngati Rahiri whanau were allocated other pieces of land, most of which were later sold. Ngati Rahiri lost collective control of their traditional resource, through the process of individualisation of title in the Omaha Reserve, and because the Crown chose to retain Section 16, the Hot Springs Reserve, as a public reserve. Because the Mokena whanau were able to acquire title to the surrounding sections 15 and 17, no doubt aided and abetted by George Lipsey, the Pakeha son-in-law of Te Mokena Hou, one whanau stood to benefit most from the location of Te Aroha Township on their lands. In the long run, however, the Mokena whanau, too, lost their lands. There is little direct involvement now by Ngati Rahiri Tumutumu in the management of geothermal resources at Te Aroha.

11. The Northern Hot Springs

There are two main groups of springs north of Auckland. Waiwera and Parakai lie on the same fault line crossing the Northland peninsula. The other group is in the vicinity of Kaikohe. Most of these northern springs are on land that was sold before the end of the nineteenth century and several are now the sites of commercial bathing complexes. Only at Ngawha has there been continuity in Maori traditional use of the surface geothermal activity, and this area is the main focus of this chapter.

11.1 Waiwera

The hot springs at Waiwera, on the eastern coast north of Auckland, are located on a fault line running east west across the peninsula. Geothermal heat feeds two hot spring areas at Waiwera and at Parakai, north of Helensville on the Kaipara Harbour. Both areas now support commercial bathing complexes. Customary Maori use of Waiwera (meaning hot water) was described by a visitor in 1841:

At the mouth of a creek about five miles south of Mahurangi the main spring gushes out from a high cliff, about two feet from its base; and successive jets, apparently from the same source bubble up through the sand, along a line of a surf a hundred yards, from south to north all covered at high water. Approaching the springs, the atmosphere is strongly impregnated with sulphur. The natives have recourse to these springs for the cure of different cutaneous [skin] disorders with which they are commonly affected. The cliff spring is always accessible; the others only at low water. When any person wishes to bathe he digs himself a pool in the sand, sufficiently deep to allow of his lying down, lining it with branches to prevent the sand from refilling it. He may then enjoy a comfortable bath (quoted by Rockel 1986, p13).

In 1842, Robert Graham, a Scottish immigrant, acquired this land having, as Rockel suggested, “been fascinated by the sight of up to 3000 Maoris [sic] assembled on Waiwera Beach and bathing in holes in the sand”. By the late 1840s an accommodation house was available to Pakeha bathers who wished to travel from Auckland to dig their own baths in the sand. By 1875, bath-houses had been constructed and the hotel had been extended. Mineral water was bottled and advertised as “Waiwera Seltzer – a medicinal, invigorating and cooling draught and purifier of the blood”. There was also a “Waiwera Tonic, described as an unequalled stomachic and appetiser” (ibid, pp 13-14).

In his *Guide to the Hot Lakes* Robert Graham referred to “Native Traditions” as evidence of the efficacy of the hot springs:

The extraordinary curative and health-restoring properties of the Waiwera Mineral Springs have been known to the natives from time immemorial, and so much were they appreciated

by the Maoris [sic], that they came from all parts of the island to bathe in them, and in consequence of the great benefits derived, they named the springs “Te Rata” – the doctor. The native model of bathing was to dig a large hole in the sandy beach, and the excavation so made being soon filled with hot water, they would sit and lie in it indiscriminately, and under the soothing influence of the water would talk and smoke for hours, availing themselves in this primitive way of the curative properties of the springs (Graham 1884, p 42).

The term *te rata* meant a seer, but in the nineteenth century acquired a modern meaning of doctor. Graham also quoted an old woman, reputed to have been over 100 years old and who remembered Captain Cook:

This Maori, who was the oldest native woman in New Zealand, witnessed some most marvellous cures effected by the springs, and had been herself in the habit of bathing in the mineral waters during her lifetime. She used to assert that but for the wonderful waters she would not have lived half her age (ibid).

Graham suggested these “marvellous cures” were also effective for Pakeha visitors who stayed at his spa in the 1880s to bathe and drink the waters:

There are two distinct known mineral springs on the property suitable to a great variety of complaints. Commodious bath-houses, dressing and waiting rooms have been erected on the spot, and a large warm mineral plunge-bath has also been constructed and which is supplied from a constantly-flowing spring, so that the water is always hot and fresh. The temperature of the mineral water ranges from 102 to 106 degrees Fahrenheit, a temperature highly approved of by those who have studied therapeutics (ibid pp 42-43).

Waiwera was described by Rockel (1986, p.13) as “The First Spa” in New Zealand. However, the early alienation of their land in 1842, and the development of a modest European-style spa, meant the loss of involvement by Maori in the use of this geothermal resource. Likewise, the Parakai springs were also on a large block sold in the 1870s and local Maori lost control of these springs. This is an issue in the Kaipara claims currently being heard by the Waitangi Tribunal.

11.2 The Ngawha Geothermal Area

The Ngawha geothermal area is contained within the floor of an old lake basin, formed when the valley was dammed by a lava flow. Lake Omapere was similarly formed but still contains water (Figure 35). The Ngawha valley lake has been silted up, but still contains about 10 small remnant ponds probably derived from hydrothermal eruptions associated with geothermal activity, as Bell and Clarke explained (Figure 36):

The largest pond, Waiparaheka, is 17 chains long and 5 chains wide. Strangely enough, its greatest depth – 91ft. 4in. – is at the upper end, where a small stream enters from another pond known as Ngamokaikai. The latter is smaller than Waiparaheka, and slightly shallower, its greatest depth being 74ft. 8in. The water of Waiparaheka is milky with flowers of sulphur, but quite cold....

The water of Ngamokaikai is clear, but gas-vents occur at the outlet of the stream flowing to Waiparaheka.

Waiapawa Pond is almost round, and about 9 chains in diameter. Its bottom is practically flat, with an almost uniform depth of about 14ft. The water is clear and cool but submerged gas-vents occur around the eastern side. Waiapawa, Ngamokaikai, and Waiparaheka are surrounded by fallen kauri-trunks in great number, and some of great size, embedded in peat. Apparently the sites of the ponds were occupied by peat swamps containing kauri timber before they were converted into ponds by explosions of gas and steam.

Tuwhakino is about half the size of Waiapawa. Formerly the pond is said to have been of great depth, but owing to insilting since the opening-up of the mercury-works it is now shallow. The greatest depth being only 17ft. The water is clear and generally cool. Though springs with an average temperature of about 27°C, occurring on a small spit at its south west corner, warm the water in the immediate vicinity....

Waitetera, a small pond only 2 chains wide and long, is very deep for its size, having a maximum depth of 40ft. Like Waiparaheka, the water of the pool is white with flowers of sulphur, and exhibits strong ebullition of gas, especially on the north and west sides.... The pond is bordered in places by peaty material. Just above Waitetera is Little Waitetera, which is a replica of the larger pond except that its water is quite cold. Gas-vents are common around Waitetera, while two small holes, contain water at temperatures of 36°C and 22°C respectively. The temperature of Waitetera is 21°C.

A pool occurring on a branch of Tuwhakino Creek, and three on a branch of the Mangatawai Creek have all been reduced in size by the cutting-back of the streamlet draining them. The upper two originally formed one pond (Bell and Clarke 1909, pp. 34-36).

There are numerous small warm and hot springs, and steam and gas-vents, within the Ngawha lake basin, especially along the valley and tributaries of the Ngawha Stream. In particular, in the area south west of Tuwhakino Pond, there was considerable activity (Figure 36 inset):

On both sides of the small stream which winds across the flat hydrogen-sulphide and other gases bubble up violently, as individual jets in the sand, or from the surface of various pools. On the right side of the creek are numerous pools of warm or hot water, some four or five of which are actually hot-spring vents, while others are artificial excavations which have filled with water and are heated by steam.

In places steam-jets issue from the surface of the ground without any pool. The hottest springs are in this area. One has a temperature of about 81°C, while another averages 62°C, and still another averages 48°C. The rest are much cooler, and average only about 30°C. Steam-vents occur with a temperature of 80°C....

Mining operations have altered considerably the original appearance of No. 5 area, but the flat is seemingly an old explosion crater (ibid, pp. 37-38).

Further up the Tuwhakino Stream, Bell and Clarke described each area of activity:

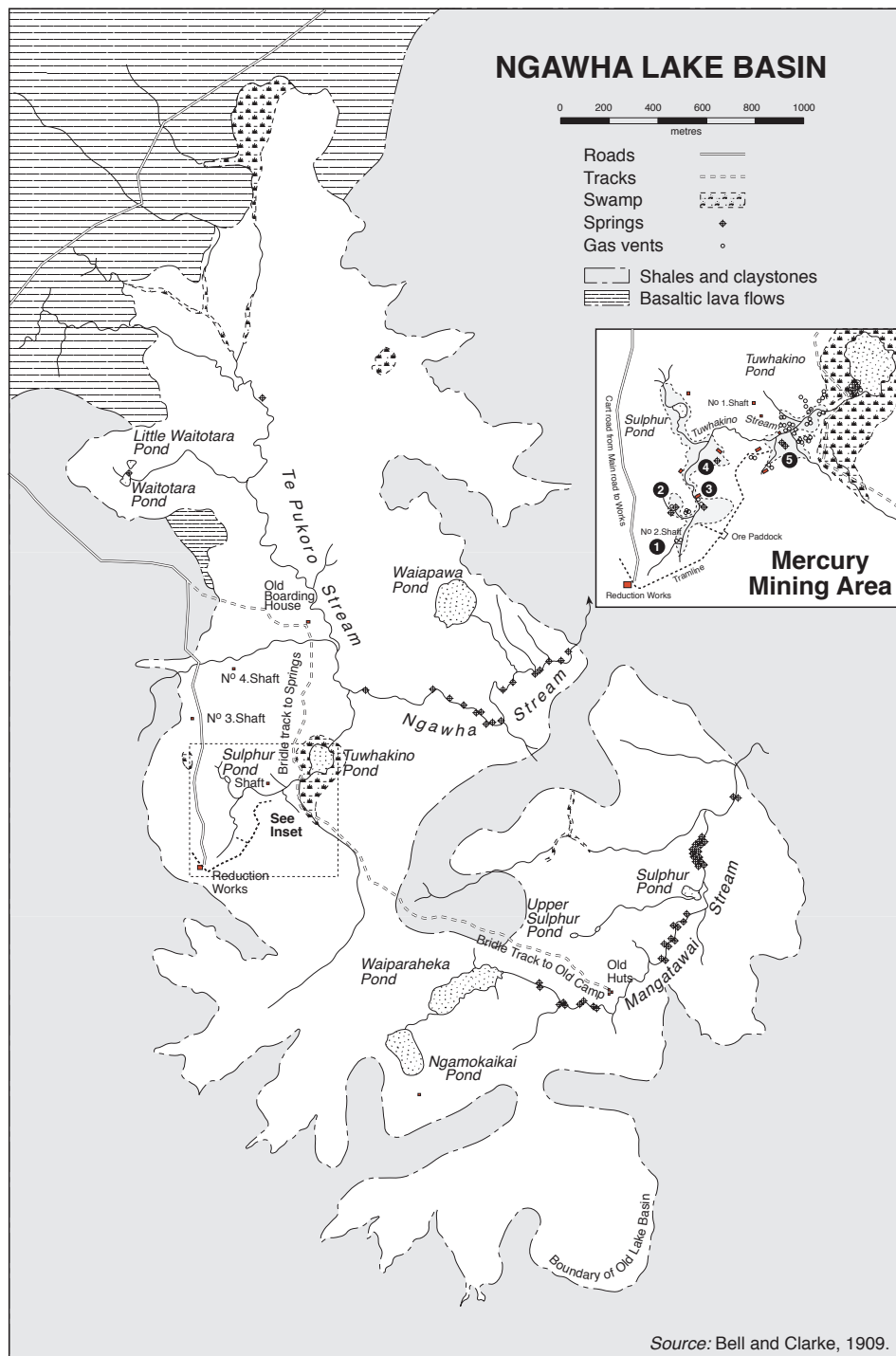


Figure 36 Ngawha Lake Basin

In area No. 2 the most vigorous thermal phenomena... are to be seen. Here in a space of about half an acre are a great number of springs – some hot, some warm, others quite cool – from nearly all of which gases are evolved. At some of these orifices the ebullition is very violent. Steam issues in places, forming “porridge pots” of mud, which is black owing to the large amounts of carbonaceous matter. With two exceptions, all the springs of this area are rich in petroleum. The spring with the highest temperature varies from 60°C to 66°C, while the other warm springs range from 27.5°C to 50°C....

In area No. 1 there are no true warm springs, but the water filling the shaft has a temperature of 23°C. From this water a violent ebullition of gas is constantly taking place.... Like area No. 5, No. 1 has been greatly altered by mining operations (ibid, pp. 38-39).

In their inventory of New Zealand thermal areas Mongillo and Clelland (1984, p. 39) described the “natural features” of the Ngawha geothermal area as “areas of surface hydrothermal alteration; sinter deposits; hot and cold springs, gas-vents; mercury deposits; hydrothermal clay deposits”. There are about 20 hot springs with temperatures in the range of 40-50°C. Although sinter deposits are recorded there is no longer any active deposition of sinter, the result of past mining activities and modification of hot springs to create baths. The hydrothermal clay deposits cover an area of about 5km² and gas-vents are widespread over the area. By the mid 1980s 15 investigation wells had been drilled, up to 130m deep (Figure 37). Since then a geothermal power station has been developed on the Ngawha geothermal field.

Dr D.S. Sheppard provided a scientific explanation of geothermal processes in his evidence before the Waitangi Tribunal in the Ngawha Geothermal Resource Claim:

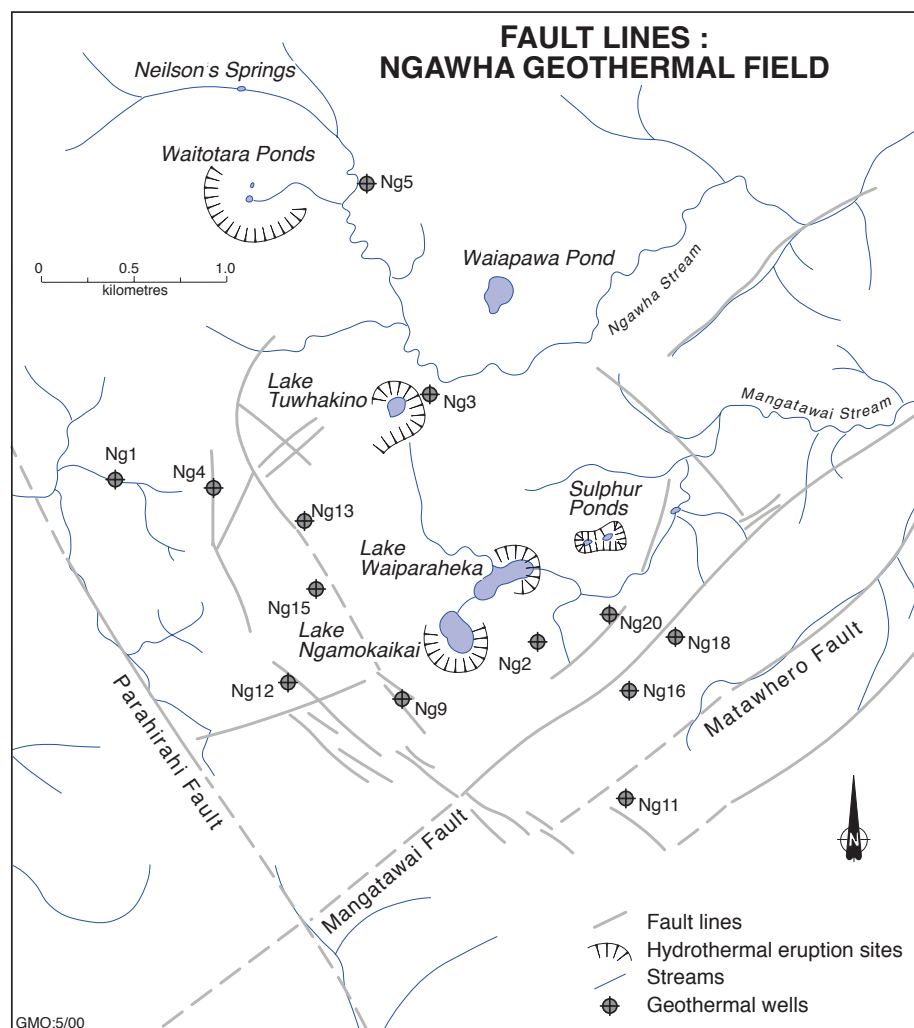


Figure 37. Fault lines Ngawha Geothermal Field.

The Ngawha geothermal system exists in the crust to an undefined depth below the Ngawha Springs area and its environs. It is comprised of physically separate but linked parts, and this structure is caused by the nature of the rocks and formations, and the faulting pattern in the area.

The major units below Ngawha are present as layers, thinning to the east. The top geological formation below Ngawha Springs is composed of lake sediments and basalt lava flows. These have created the surface that we see, which is essentially a basin with overlying ridges of the lava. The springs and gases emerge through the old lake sediments and around the edges of the lava flows. The sandy lake sediments are full of cracks and the fluid seems to flow through these.

Below the shallow layers is a thick layer (about 500m) of sedimentary rocks of a very mixed and confused character, in a matrix of clays and mudstone. This layer to a large extent prevents the flow of water and gas through it from below, except in small quantities, and it is thought that these flows occur in fault zones, where there is much cracking and perhaps movement to keep the cracks open. The alignment of these faults is thought to be northeast-southwest, because of the alignments of springs and gas seeps in this direction.

While this “caprock” limits the quantity of water that can flow upwards through it, it also contains within it water which is essentially a mixture of deeper fluid and groundwaters. Some scientists believe that this water is continuous and very widely spread, extending some distance particularly to the north and east.

Beneath the “caprock” is a great thickness of the rock known as greywacke. The base of the greywacke has not been intercepted by drillholes (one of which was drilled for 3300 m). Somewhere in or underneath the greywacke there is a heat source, probably a hot magma body, which provides the heat for the geothermal system. The greywacke is faulted over large distances, and this is thought to allow water to flow through. The geothermal “resource” targeted by the drilling in the early 1980s is within this greywacke. The water itself is thought by some scientists to come from the northeast, get heated and acquire dissolved components somewhere below the Ngawha area, circulate quite slowly in the cracks and faults in the greywacke, and drain away to the southeast, at some depth (perhaps 1000m or more).

Somehow the water becomes saturated with the gas carbon dioxide, perhaps from the magma, or from the greywacke, or both. As the water rises in the crust, the pressure lessens and the gas comes out of solution, so that the fluid becomes two phase, that is, a liquid and a gas phase are both present. Because the waters in each rock unit has a different chemical composition, we can determine the origins of each water that we sample. We know that some of this gas and water gets through the relatively impermeable caprock because we see the same waters and gases in the springs, diluted and modified to some extent, as we get from the wells which take water from below the caprock.

We can consider there to be four types of water in the Ngawha geothermal system:

- (a) that from within the greywacke, which is characterised by being dominated by borate and chloride as dissolved components;
- (b) that from the caprock, which has more bicarbonate and less of the borate and chloride;
- (c) that from the surface or near surface, especially in pools, which has more sulphate in it than the others;

- (d) rainwater, which soaks into the ground and flows over the surface. It contains little dissolved matter.

Most springs, particularly outside the Ngawha Springs basin, are of type (b) water. One or two, in the early 1980s, were hotter and had more type (a) water. All springs are diluted by rainwater to various extents, depending upon the recent rainfall, and the characteristics of the spring itself.

In addition to the water, gases reach the surface in unusually large quantities. The gas is mostly carbon dioxide, but can contain a few percent of hydrogen sulphide, and traces of other gases. These gases are presumed to come from beneath the caprock with some of the water phase, and percolate through the groundwaters above, chemically altering them as well as heating them, forming the type (b) waters. At the surface, the gases affect ponded waters by depositing sulphur causing the suspended white matter and sulphur muds, and forming sulphate when in contact with air.

The composition of all the pools and springs at and about Ngawha can be explained in terms of these processes. The waters in the surface features are derived from waters, gases and dissolved components from all depths within the system, whether the system be defined broadly or restrictively (Sheppard 1992).

Sheppard also reviewed earlier accounts of geothermal activity, noting there had been changes in temperatures recorded in some springs since the nineteenth century, indicated by a greater silica deposition recorded then. However, no geothermal area is static and changes do occur in the natural course of events:

The region is one of recent volcanic activity; this is apparent from the landscape, with the (geologically) young scoria cones and lava flows. There seems to be no reason to expect that the potential for further activity has ceased. Many of the features within the Ngawha basin themselves attest to violent activity, related more to hydrothermal eruptions than volcanic ones. The local lakes (Waitotara Ponds, Waipawa Pond, Tuwhakino Lake, Lake Waiparaheka, Lake Ngamokaikai, the Sulphur Ponds) all show evidence of being the result of hydrothermal eruptions (which occur when the steam plus gas pressure underground exceeds the strength of the overlying ground). There is likewise no reason to expect that such events will not occur again in the area (*ibid*).

Some changes are the result of human modification of the landscape, but it is not always possible to determine precisely whether changes in the springs are caused by human interference or natural variation, or a combination of both:

The forests that covered the area are largely gone. This must be expected to modify the drainage, and hence the subsurface hydrology of the region. The effects that this would have on the system as a whole are unknown, and the significance of these in the long term have not been assessed, to the best of my knowledge.

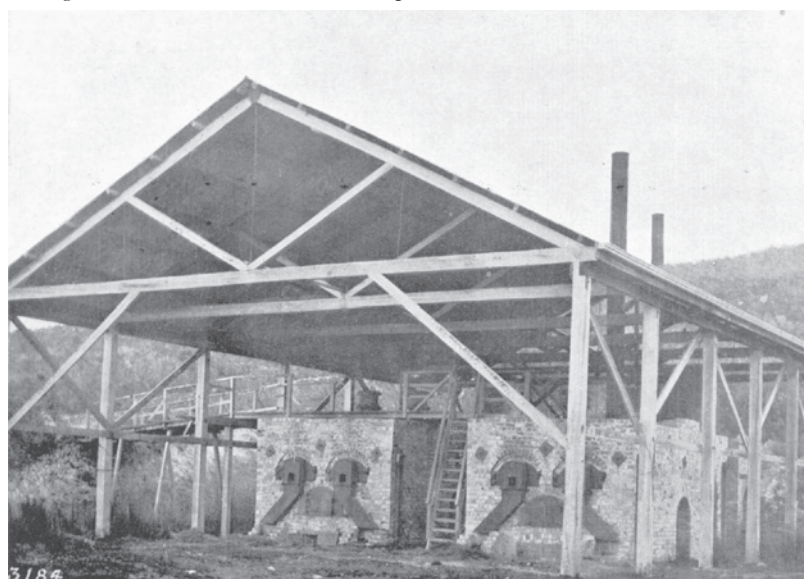
In the area of the springs, prospecting and mining operations have caused considerable changes to the landscape and the springs. Many shallow bores were sunk in order to estimate the size



Hot Pools at Ngawha (Bell and Clarke 1909, p.83)



Mercury Ore stack at Ngawha. (Bell and Clarke 1909, p.92)



Mercury processing works at Ngawha. (Bell and Clarke, 1909, p.92)

of the mercury (quicksilver) resource. Trenches and pits were excavated for the same reason. In one place, there is an apparent correlation between the position of these excavations and present bath complexes, where no activity was reported before (the Ngawha “Spa” baths). Excavation, roading, draglining, spoil dumping and other activities associated with mining not only modified the landscape, but encountered hot waters, excavated spring sites, and denuded whole areas of vegetative cover. This has resulted in subsequent erosion, infilling of ponds, drowning of thermal features, diversion of streams, and flooding (ibid).

The changes that have occurred in surface features are such that the original state of this geothermal area can not be determined. It remains to be seen what further changes may occur as the result of exploitation of the geothermal resource for a geothermal power station at Ngawha.

Nga Puhi Traditions

The discovery of the hot springs at Ngawha is attributed to Kareariki, an important Nga Puhi ancestor. The following account is from Nga Puhi kaumatua, Hemi Whautere, and was taped in the 1950s by Wiremu Ngata. Pat Hohepa prepared an edited transcript and translation, which he included in his evidence before the Waitangi Tribunal at a hearing in 1992 of the Ngawha Geothermal Resource Claim:

Ko te ingoa o taku matua ko Witehira Tauahika, no Mataraua, Kaikohe, rangatira no Ngapuhi. Taku ingoa e tuu nei ko Heemi Whautere no Mataraua, Kaikohe, Ngapuhi... e hiahia ana ahau ki te korero mo eetahi korero tawhito; tetahi taonga nui kei Ngapuhi, ko nga wai kaukau ariki, e rere nei te motu ki aua wai kaukau. I hiahia ai au ki te korero i era wai, he mea kua kitea, ko te taonga nui kei reira kei Niu Tireni, he ora mo nga tangata, e ai ki ta nga kaititiro, Pakeha, Maori, me ahau ano hoki e tu nei.

Ko te kai kite i teenei wai, ko taku hiahia teeraa. Ko te tangata tuatahi naana i kite teenei wai, ko teetahi tupuna Ngaapuhi ko Kareariki. I a ia e noho ana i roto i te ngaherehere – he ngahere te whenua ra i mua, he kauri, he aha, he aha, te raakau – he whenua whai mau – kiore, kiwi, kuukupa. Ka noho ia ki reira, me oona rangatira, whakatupu tamariki.

I a ia e haereere ana i roto i tera wahi ka kitea e ia nga wai e koropupuu ana, katahi ia ka haere (atu), e wera ana. Ko ta te Maori rongoa mo tenei mea mo te wahine whanau, ina whanau te wahine o te Maori, he mea tahu he hangi huri hei rongoa mo nga raruraru o tenei mea o te wahine whanau, e kore ai e pangia e nga mate tuhawiri, e nga mate kino o tenei mea o te wahine mo era mate. Ma taua mea, ka pai.

Te kitenga o te kuia nei i nga mea nei, katahi ia ka pangia e era mate o te wahine, ka haere ia ki reira, hei wai horoi mona, i ona raruraru, ka noho ia, kitea ake e ia he tino rongoa pai. Ka rite tonu ki taua mea e mahia ana e te iwi, he hangi huri mo nga wahine e pangia ana e te mate whanau. Na, ka noho ia, ko tana wai tonu tera.

Ko tana hoa haere he kuri. He pononga ona, o te wahine nei. Kei tetahi roto kei reira. Ka patua ana pononga wahine ki reira, he mea patu, katahi ka whakataniwha tetahi rakau. Kei reira, ko huaina iho, ko nga mokaikai a Kareariki. Ko nga pononga i patua ra, ka

whakataniwha. He kaitiaki i a ia, i ana raruraru, i ana mate, ka patua. Ka whakataniwha te rakau ra. E haere ana. Ki te mate nga rangatira e hangai ana ki te kawai, ka tere te rakau ra. E haere ana i te roto, he rakau, he kauri...

I nga ra o te kuia nei, ka patia te kurii nei, ka tahaetia e etahi iwi hei kai. Tana kuri, tana hoa haere. Katahi ia ka haere ki te whaawhai haere. Ko Kaipahau te ingoa o te kuri nei. Ka karanga ia ki etahi pukepuke kei reira. Ka eke ki runga ka karanga ia, “Mooi! Mooi! Kaipahau! Kei hea koe e Kaipahau, e taku hoa haere ki nga wai kaukau?”

Kitea rawatia ake te kuri ra, ka kitea te patunga. Kei reira te ingoa tae mai ki tenei ra, ko Te Patunga – Te Patunga i taua kuri. Ko te Whare Ngarahu, ko te whare i haangitia ai taua kurii. Ko Te Umu Korau, ko nga umu ko nga korau i topangia huihuitia ai me taua kuri. Ka kitea koia tera.

Te hokinga mai o te kuia nei, tae atu ki tana wai, e rapu haere ana i tana kuri, te taenga mai e tau mai ana. E tau mai ana e kore e kitea atu he wairua ke. Ka rangona i te ao i te poo e tau aa. Koia te ‘bulldog’ [ki te Pakeha]....

My father’s name is Witehira Tauahiku, from Mataraua, Kaikohe, a chief of Ngapuhi. My name as I stand is Hemi Whautere, from Mataraua, Kaikohe, and Ngapuhi...

I want to talk about some old stories, about an important taonga within Ngapuhi, about the chiefly bathing waters, to which the [people of] the land hurry to those bathing waters. The reason I want to talk about those waters is because it has been discovered that the important taonga is there in New Zealand, giving wellbeing and health for the people according to those who witness it, be they Pakeha or Maori, and also to me, standing here.

The one that discovered this water, that is my desire. The first person who discovered this water was an ancestor of Ngapuhi, Kareariki. It was while she was living in the forests – that land was forest in the past, kauri, etc etc were the trees; it was a rich land – rats, kiwi, pigeons. She lived there, with her chiefs [husbands?] bearing children.

While she was wandering in that place she saw some water boiling and she went and tested it and it was hot. The Maori people’s restorative method for women birth, after a Maori woman gives birth, is to set alight a hangi huri [“reversed hangi” or steam sauna] as relief for those post-parturition troubles of women giving birth so that they are not affected by chills and those other serious afflictions which beset women after giving birth. From that thing [hangi huri] they are made healthy.

When that old woman saw these pools and she was afflicted by those ills of women, she went there, and used it as her washing water, to wash away her ills, and she sat in it, and she discovered it had exceptionally good curative and restorative effects. It had the same effect as that thing made by the people, the hangi huri for women experiencing birth after effects. And so she sat there, and that was her water area.

Her travelling companion was a dog. She, this woman [Kareariki], had some servants/slaves. They are in a lake there. She killed her female slaves there, they were killed and a log became a taniwha there, and they were called the minders of Kareariki. Those slaves who were killed became taniwha. They were her nurses during her troubles and sicknesses and they were killed.

That log became a taniwha. It moves around. When chiefs who belong to that [Kareariki's?] lineage die, that log floats about. It travels in the lake, a log, a kauri log....

In the days of this old woman, this dog of hers was enticed, stolen by some people as food. Her dog was her favourite companion during her travels. And she went in search of it. This dog's name was Kaipaha1u. She called out to the hills and ridges there. She climbed up to the summits and called "Here dog! Here dog! Where are you Kaipahau, my companion who goes with me to the bathing pools?".

That dog was finally found, the place where it was killed was found. The name is still there to this day, Te Patunga – "The Killing" of that dog. Te Whare Ngarahu "The House of Cinders", that's the house where that dog was cooked in an earth oven. Te Umu Korau "The Earth Oven with young fernshoots" the ovens, the young fernshoots which were cooked together with that dog. These were discovered and that was the evidence.

When this old woman came back and came to her water, still searching for her dog, when she arrived there it was barking at her. It was barking at her but could not be seen; it was a spirit instead. It is heard barking night and day. That's the "bulldog" [a hot spring] (Hohepa 1992).

Pat Hohepa noted that Hemi Whautere's account described the area around Ngawha as densely forested in the time of Kareariki and her husband Uenukukuare. Regular expeditions were made into the forest for birds, rats, berries and other foods, timber and fibre plants. Pat Hohepa reviewed the story of Kareariki in the context of Nga Puhi traditions and commented:

The traditional record tells of Uenukukuare living with his mother Ahuaiti at Pouerua, an imposing volcanic cone between Pakaraka and Ngawha. It was already a settled sedentary village because four generations before, Tahuhunuiorangi, Ahuaiti's ancestor, had built his meeting house with two upright pillars which resulted in the mountain being called Pouerua – the two posts. Other adjacent peaks had their own villages and surrounding gardens and presumably Kareariki came from one of these. Archaeological evidence and carbon dating supports the traditional record and genealogical dating in placing these events at between 1500-1600 AD. The presence of Kareariki and her relatives and servants in the Ngawha forests would fit in with the established seasonal patterns of forest harvesting, fishing, and gardening (ibid).

In evidence before a Maori Land Court inquiry in 1945 into a petition concerning Crown acquisition of Parahirahi Block, Hirini Taiwhanga Heremia stated:

Kua maha ke atu i tae tekau ma rua o nga whakatupuranga to nohoanga o enei Wai Ariki e matou nga Maori. Na to matou tipunana Kare Ariki i kite enei wai. Ko tana tamahine tonu tetahi i tomo ki roto ki tetahi o nga kopua wai, i te timatanga o tona whakamamae kia ngawari ai te haere mai o tana tamaiti, te ingoa, ko Korohuhu a Maikuku. Kei reira tonu tenei kopua wai, ko ko tona ingoa inaianei ko te Bulldog.

Tokoiwa nga whare me nga huts kei reira inaianei, engari he maha ke nga whanau e noho ana kei roto i etahi o aua whare. Ko ia enei ko nga ingoa o nga hapu tuturu, no ratou ake te kainga nei: Te Uri o Hua, Ngati Rangi, Takotoke [Ngati Wake] Ngati Kura me Te Mata Rahurahu.

These springs have been known for over twelve generations to us the Maori people. From the time of our ancestor Kare Ariki. It was her daughter who entered one of these pools when she was pregnant to ease her birthing pain. The name of that pool is Korohuhu a Maikuku. This pool is still there and it is called the Bulldog. There are nine houses and huts there now but there are a lot of families living in them. These are the names of the hapu who own this kainga: Te Uri o Hua, Ngati Rangi, Takotoke, Ngati Wake, Ngati Kura and Te Mata Rahurahu (Maxwell 1991, p. 110).

In his evidence for the Waitangi Tribunal in 1992, Taoko Wihongi related a tradition about the origin of geothermal heat at Ngawha told him by his father Te Iwingaro Wihongi:

Nga korero o tatou tupuna, tenei mo Te Ngawha,. Nga kuia e rua nei, i mate i te makariri. No Hawaiki ano enei kuia. Kahore to raua roa i runga o Aotearoa nei. Kua taunga ke raua ki nga mahana me nga maunga pahuu o Hawaiki rano. Tahi raua ka karakia ka tangi ka aue ki o raua atua i Hawaiki rano i to raua kaha makariri. Ka rongo mai o raua atua. Tahi ka hangia mai te mahana ma raro te moana. Pupu mai ana i Te Ngawha. Ka mahana nga kuia nei. I te ata, ka tangi ano nga kuia nei te hiahia kia maoa wa raua kai. Ka karanga ki o raua atua. Ka rongo mai ano nga atua o nga kuia nei. Ka hangia mai he wai mahana hei whakamaoa i nga kai.

These are the histories given by our ancestors about Ngawha. These two old ladies were suffering from severe hypothermia. These two old ladies came from Hawaiki. They had not been in Aotearoa very long. They were used to the high temperatures of Hawaiki and also the volcanoes of Hawaiki. So they cried to their gods, to their gods that they knew in Hawaiki. Their gods heard their cry and they began to create hot water and [it] was channelled under the sea bed. And they came up [waters bubbled up] at Ngawha. And the two old ladies were made warm. The following morning these two old ladies cried again to their god that they be able to cook their food. Their god heard their cry. They created more hot water to cook their food in (Wihongi 1992).

Although this story has hints of the tradition of the sisters of Ngatoroirangi and their atua, Taoko Wihongi stated that one of the women was called Kahumoko, and a spring near where he lived was named after her:

A Kahumoko ko tetahi o nga kuia i aue atu ki o raua atua kia hangia mai te mahana ki Te Ngawha.... Tera pea ko Kareariki tana hoa noho tahi i to raua auetanga ki Hawaiki. Kua wareware au ko wai te ingoa tuarua i huaina mai e taku papa ki au

Kahumoko was one of those two old ladies who cried to [their] god to give them the hot water, to send them the hot water, to bathe in and to cook their food.... Perhaps Kareariki was Kahumoko's friend and companion when they cried up to their god. I have forgotten the name of the second person that my father gave me (ibid).

Pat Hohepa noted that many of the Nga Puhi elders mentioned Takauere, the taniwha of the lakes and pools of Ngawha and Omapere, the "mokaikai" (slaves or servants) who were killed by Kareariki and changed to taniwha, and Kaipahau, her dog, who fulfilled a similar role. Hohepa explained the significance of taniwha to Nga Puhi:

Taniwha are difficult to describe or explain. One can begin with a professional conclusion. There are less than six references to the giant bird the moa in traditional Maori literature and poetry and yet we have hundreds of skeletal remains in museums here and overseas, in private hands, and even waiting around for fossickers. There are countless stories of the creation of, the existence of, the actions of, the use of, the sightings of, the underground routes of, the deaths of taniwha but there is not a single skeletal remain. The moa, now extinct, has really no mana among Maori hapu of Ngapuhi. The taniwha have mana and reality and relevance. Like angels or spirits or gods, taniwha are seemingly immortal. Except that Ngapuhi nui tonu have a shared belief in taniwha from Kaipara called Pokopoko who decided to either control or kill off all his opposition in the north but failed with Arai te uru, Niua and Pouahi and presumably the other taniwha of Ngapuhi because Takauere and others are very much alive today.

Taniwha are not monsters, which is the popular and the dictionary definition. Taniwha are “esoteric minders”, the protectors and guides of ancestors, the protectors of important harbours, rivers, lakes, streams, and pools, and focal points in Hawaiki. Places of importance and with immense mana or tapu enhance their mana with the presence of taniwha. The headlands of Hokianga with their guardian taniwha Arai Te Uru and Niua have that enhanced mana. Ngawha by implication also has this enhanced tapu and mana because of Takauere and Kaipahau.

Taniwha create their own routes and also their own forms. Tuputupuwhenua, son of Kupe, who was made a taniwha to be the matapuna of the land, created his own travelling routes underground from Te Puna o te Ao Marama in Hokianga to the Hokianga harbour, and across to Kerikeri and the Bay of Islands. The routes of the taniwha of Maikuku were found by Huatakaroa and enabled him to find her. Takauere can not only travel underground to Omapere, he can also expand so that his head is there and his tail in the lakes.

Taniwha wail, bark, cry, and can materialise as logs, rocks, waves, dolphins, orca, and as whole mountain ranges. Taniwha can also breed. The rivers of the Hokianga harbour have their own taniwha. Araiteuru became pregnant and moved inland to give birth. Wherever she stopped she hollowed out basins into which the water flowed. Her children carved out the beds of the rivers of Hokianga as Araiteuru ploughed the path for the Mangamuka River and she finally transformed herself into a mountain range. That is the origin of Maungataniwha – taniwha mountain, and also how all the rivers were created. Taniwha can therefore be at two or three or four places at the same time.

Only ancestors of exceptional mana can create or summon and control taniwha. Kupe, Nukutawhiti, Tamateamaitawhiti, Ruanui, Toi, all had such powers. That taniwha-creating mana came down to Kareariki and possibly to her daughter Maikuku. Kareariki’s actions are significant. Her dog, Kaipahau, is also significant. He becomes another esoteric minder of the pools. Both Kaipahau and Takauere and nga mokaikai have changed the whole characteristic of the pools in the eyes of Ngapuhi to more than pools of medicinal and personal value to objects of esoteric protection containing both the mana and tapu and wairua of our ancestors and their creations – the taniwha (Hohepa 1992).

The Hot Pools at Ngawha

In their evidence before the Waitangi Tribunal in 1992, a number of tangata whenua witnesses explained how they felt about their geothermal resource. Karewa Marsh had a strong sense of the connectedness of the geothermal system, that interference with one part may affect somewhere else. She told of the mercury extraction carried out in the late 1920s: “we saw a really big change in the waters at Ngawha. The pools cooled down a lot”. More recent drilling for a geothermal power station project also affected the pools: “They cooled down and changed colour during the drilling”. She maintained that “the whole life, the ‘Ha’ of these waters will be lost” if drilling continued:

All of those things are proof to me that our springs and the hot water under the ground that the companies want to exploit now, are one thing. If you touch one you affect the other. Our sacred Ngawha are too tapu to us for us to allow any development. It is a place of healing. It is a place where miracles have been performed. I have seen them.

I know that each of the pools at Ngawha has its own stream underground. Each stream is a different colour. The healing powers of Ngawha come from those underground springs, from way deep in the whenua. It has been said

“Ko te Ngawha te kanohi o te taonga, engari ko tona whatumanawa, ko tona mana hauora, no raro”.

I know in my heart that this is so (Marsh 1992).

Twinnie Padlie described herself as a “surviving twin”, born at Ngawha Springs in 1935:

At birth I was pronounced “stillborn” by a local doctor. My granduncle Piri Paki grabbed me and threw me in the “Bulldog” [spring]....

Ngawha is Mother Nature’s pharmacy. My belief is that those waters are Aroha.

She then described several case histories to illustrate her statement:

Ngawha is good for the treatment of arthritis and rheumatic complaints. Different chemicals work differently on different people....

I knew all these people. I saw their progress (Padlie 1992).

Karewa Marsh also described a case history of a Canadian visitor whose loss of feeling, hearing and sight were cured in 1962 by the healing power of the “Bulldog” pool. Another was a bad case of “hakihihi or sores” and this skin infection was also cured. “I have seen many times the healing powers of our sacred springs of Ngawha” (Marsh 1992).

Waioroaro Pene told the Tribunal:

Ko te waikaukau o Ngawha he taonga na nga tupuna. He wai hauora no nga tangata katoa – Maori, Pakeha, aha atu.

Mai i toku whanautanga mai, kua haere mai au ki roto o nga wai o Ngawha kaukau ia. He

oranga tinana, he oranga wairua. Na taku papa matou i hari mai i te wa e ora ana ia.

I noho au ki Ngawha, i a au e tamariki ana. Ko te take, ko taku papa te Kaitiaki o Ngawha. Nana ena waikaukau i kerī. I a au e tamariki ana ka mate rumatiki au. I tera wa, ka hoki toku mama ki to matou kainga i Te Putahi. Ka mahue ahau ki Ngawha me taku papa, ko te take, he whakaoraora i taku mate rumatiki.

The bathing pools at Ngawha are treasured as sacred possessions handed down by the ancestors. They are healing waters for all people, Maori, European and everyone else.

From the time I was born, I went to the Ngawha springs to bathe, for physical wellbeing as well as spiritual healing. My father used to take us there when he was alive.

I lived at Ngawha when I was a child and because my father was the caretaker of Ngawha. He dug those pools out. When I was a child I suffered from rheumatics. At that time when my mother returned to our home at Te Putahi, I was left at Ngawha with my father because that is where I got my cure from for my rheumatics (Pene 1992).

He also described how his father “would direct the people to go to a particular pool for a particular illness or disease” (ibid).

Hoterene Pine Mau likened the healing powers of the pools at Ngawha to the pool in Jerusalem called Bethesda, where there were five porches:

In these lay a great multitude of impotent folk, of blind, halt, withered, waiting for the moving of the water.

For an angel went down at a certain season into the pool, and troubled the water: whosoever then first after the troubling of the water stepped in was made whole of whatsoever disease he had (John 5:3-4).

Jesus came to this pool and saw a man, long crippled, who was unable to reach the pool in time. “Jesus saith unto him, Rise, take up thy bed and walk” (John 5:8), and the man was healed. Hoterene Pine Mau stated:

This example is similar to Ngawha, many have gathered there and been healed....

Ngawha is a great example of God’s kindness. The “porches” were little places to cater for the people. Like Ngawha, many years ago, there were many tin shacks that people occupied while they were bathing here. Porches were there to cater for the people. A large crowd were lying in the porches. The blind, the lame and the paralysed. A large crowd is like the different tribes who gather together. In those porches are different tribes. Like the Jews, we also like to mingle among ourselves (Pine Mau 1992).

In reviewing the evidence of tangata whenua before the Waitangi Tribunal, Pat Hohepa summed up the significance of this taonga, the geothermal resource of Ngawha, with the following comments:

What is crucial, there has been continuous ownership of the set of springs called Ngawha by the direct descendants of Kareariki, and also the continuous use of those springs for health, for injuries, for selfworth, for wellbeing, for psychological uplift, for cooking, for heating one's body, for the pleasure of companionship or whanaungatanga, and for the spiritual link with one's ancestors. All these have emerged or can be implied in the kau-matua/kuia evidence. The clay, ochre and mud of those springs were used for body and facial decorations as reported by Marsden while the use of mudpacks by present users of the springs is regularly seen. Other springs in the field have a spiritual link with ngawha for they are also used for personal, medical, spiritual or cultural purposes, eg the hot spring in the Waima hills, used for mortuary ceremonies, and also regarded as being connected to ngawha physically and esoterically through intrepid subterranean and oceanic voyagers called taniwha.

The pool use was not passive. From the evidence on Kareariki one can infer that her servants/slaves and whanau had widened and deepened the bubbling pools she found so that it could adequately replace the large hangi huri or steam sauna. The evidence of kau-matua/kuia also demonstrated that this active development of the pools for more efficient use continued in the time of their parents. The active development of the Ngawha Pools continues today. This now includes upgrading of the timber supports, the channelling, piping and drainage of pools, the building of stopbanks for flood prevention and the building of walls as windbreaks (Hohepa 1992).

The continuity of use of the pools, and the use of names to commemorate events, is an ongoing process illustrated by the following description of nine bathing pools in the one-acre Maori reserve at Ngawha:

The Bulldog

One pool was called the "Bulldog" as Waiorooro Pene explained:

And the reason why it was named the Bulldog – it was water bubbling up beside the Bulldog and that was the place where we used to go to boil our eggs until they were cooked. Food used to be cooked from the heat that came out of that hole in the ground. And you could hear the sound coming out of that hole all the time. As you go into Ngawha you could actually hear the sound of the growling of a bulldog boiling out of this place. And this is why the name bulldog was given (Pene 1992).

The traditional name of this pool is Te Korohuhu a Maikuku, the steaming waters of Maikuku, daughter of Kareariki, who eased the pains of childbirth there. The modern name, Bulldog, also has traditional connections, as Willy Tairua, a descendant of Kareariki, explained to Paora Maxwell:

The name Bulldog relates to another story about Kareariki and her dog 'Pahau'. Kareariki was travelling to Whareiti, one of the pa in the district, when her dog disappeared. She looked for it in the bush and when she found hangi stones, she knew that her people had eaten it.

Kareariki cried for her dog near this pool and could hear her dog barking. She said “E mohio ana ahau, ko koe tena Pahau, e mohio ana ahau, kei te ao wairua koe. I know that is you Pahau, I also know that you are in the spirit world”. Kareariki’s dog and also her two slaves were eaten by Waiparaheka and Mokaikai. Mokaikai turned into a taniwha and the last time this taniwha was seen is when an old koroua, Horire Tango died about 100 years ago.

You can still hear the barking sound of Pahau when you sit in the pool, this ancient story has been transferred to a modern idiom, the sound compared to that of a Bulldog barking (Maxwell 1991, pp. 115-116).

Te Pepi or Baby Pool

Twinnie Padlie described one pool called “The Baby” which “used to change three to five colours in the space of twelve hours. People thought we put dyes in the pool” (Padlie 1992). Waiorooro Pene stated:

The baby pool was dug out from the coldest area of the place. My father dug that pool out as well. He kept digging around until he came across a cooler place, so that it would be suitable for babies. That was the reason why it was named the baby pool (Pene 1992).

However, Paora Maxwell reported that Willie Tairua had said that this pool was “original” where “babies have been washed in since the time of Maikuku. This pool in Willy’s time was used for cooking” (Maxwell 1991, p. 116). These statements are not contradictory, as new holes were periodically dug in hot ground in the vicinity of existing hot springs, and used for specific purposes. The long continued use of such a site is conveyed in its association with an important ancestor, Maikuku, whose name is specifically associated with easing her birthing pains in the pool, Te Korohuhu a Maikuku, or the Bulldog, nearby.

The Favourite

This name was given, according to Willy Tairua “because a lot of overseas people came here and called it their favourite because the temperature of the pool can be regulated” (Maxwell 1991, p. 114). Twinnie Padlie (1992) told the Tribunal: “The Favourite is very hot. It is good for loosening up kume [asthma]”.

Te Rata, Takuta, or Doctor

Waiorooro Pene (1992) said this pool was called Takuta, Doctor, after his father’s efforts to bring a man “who had really bad feet” to the pool and make it possible for him to walk again. The former name had been Waenganui. Willy Tairua told Paora Maxwell:

This pool is one of the original pools in the area and its other name is Doctor’s Cure. It was named this because its waters cure everything from eye problems to skin diseases. Rata’s waters are also good to drink in the morning, about $\frac{1}{2}$ a cup is sufficient.

Willy emphasised the curative powers of these pools isn't necessarily how hot they are, but how long you stay in them (Maxwell 1991, pp. 114-115).

Horomona or Solomon

Twinnie Padlie (1992) commented: "The Solomon is good for skin conditions". Waiorooro Pene described how this pool was named, although he was not sure who of several local people had named it:

They had gone there in search of healing pools and they saw the Solomon being built and they said, well, that pool looks just like the one in Solomon Islands. They were there in the war – during the second world war. So that was why the name Solomon was given to that particular pool. Those names are no big deal (Pene 1992).

Paora Maxwell recorded Willy Tairua's version:

This pool as named after the prophet [sic] Solomon from the Bible. This pool is very powerful in its curative properties. Willy remembers as a child, a woman who was severely disfigured from a skin disease, coming to bathe in this pool. At the time, nobody was allowed to use this pool because of the severity of her disease. She stayed for a period of weeks and gradually she was cured.

The night I was there in February of 1991, a local lady was bathing who also had a skin disease. Willy said that she had been coming for some weeks to put the mud on her body and also to bathe in the waters. During this time her skin has progressively improved (Maxwell 1991, p. 114).

Waikato

Waiorooro Pene thought this pool acquired its name because some people from Waikato had dug it. Willy Tairua told Paora Maxwell that this name had greater significance:

This waiariki takes its name from a "tukuwhenua", a gifting of land, to [King] Koroki of Waikato some 60 years ago. It was done to cement the tribal ties between Ngapuhi and Waikato. At the same time one of the streams in the area was named Te Puea, Koroki's cousin, and a great leader of the Waikato people.

This pool is one of the strongest for curing. The water is considered poisonous, but the locals say that the body can resist all these things (Maxwell 1991, p. 113).

Te Kotahitanga

Willy Tairua explained the origin of this name to Paora Maxwell:

This is a new pool that was named in 1988, by a group of local Maori in a work scheme. They renovated the Waiariki in 1988 and Willy asked them to name this new pool. They chose "Kotahitanga" or unity, which apart from the sentiment of the new name was also the name of their work trust (Maxwell 1991, p. 114).

Tanemahuta

Paora Maxwell recorded:

This is another new pool named by the Work Trust, “Te Kotahitanga” in 1988. They named it after the biggest Kauri in the Hokianga called Tanemahuta. The name also had meaning for the work gang itself.

‘Tane’ meaning all men and ‘Mahuta pai te mahi’, meaning, always growing. Therefore Tanemahuta, a work-force growing all the time.

The pool is just a soakhole, done up for the kids to use. The pool also has another name ‘Velvet’ named after an Indian visitor to the baths. He named it Velvet, because of the smoothness of the waters (Maxwell 1991, p. 115).

Kiri

Paora Maxwell commented:

Reflects how the traditions of these pools grow with time. This pool was named in 1989 after Willy Tairua’s mokopuna. The naming of this pool also reflects that within Willy and his wife’s, Ruiha, Taimona, families, all of Ngapuhi is associated with these pools, and that their mokopuna is a recognition of that fact (Maxwell 1991, p. 113).

Pakeha Visitors

There are several accounts by Pakeha visitors which describe the geothermal landscape at Ngawha before it was modified by mining. The earliest was probably that of Samuel Marsden who visited the Ngawha area in October 1819:

After dinner I went to see a hot spring in a wood about four miles distant. The water was warm and very offensive; it sent forth a continual steam. There was a thick scum upon the surface like yellow ochre, with which the natives paint themselves. It has rather a redder cast than common yellow ochre. The water has a strong sulphurous smell... The natives informed me there was another spring about six miles from the village, where the water was white and very offensive; no wild ducks or fowls were ever seen on this water....

Friday, October 22nd – After breakfast I visited the white spring. It is a small lake about half a mile round. At a distance it appears white, like milk, but not quite so white when at the edge of the lake. About a mile before I came to this lake, I fell in with a lake of clear water on which were a number of wild ducks. A quantity of brimstone [sulphur] was lying upon the ground in different directions.... The whole surface of the country for miles appears as if there had been some volcanic eruption – swamps, lakes and barren soil. It appears as if there had been a wood of pines, which is now all burnt, not so much as one tree remaining... The soil is extremely poor, spongy and wet, and of a white nature like pipe clay. The natives told me as we walked along, where there were other springs of a similar nature not far distant (Elder 1932, p. 210).

Marsden did not explore further on this journey but returned in May 1820, on his next visit to the Bay of Islands. He stayed at Taiamai and was escorted to Ngawha by the local chief “Kiterra”:

[Monday 8 May] ... we proceeded to the warm spring. It is situated in a wood on the bank of a small fresh-water stream. There are two main springs opposite each other, one on each bank of the creek, about ten feet above the level of the fresh water, which runs between them. The warm water is offensive and possesses something of a sulphurous taste. They are both running springs, and the surface where the water lodges in small quantities is covered with a brown-yellowish scum which the natives use in painting themselves. The wood through which we passed contained very fine timber, and the land about is very good but stony....

[Tuesday 9 May] The natives informed me that there were several places a few miles distant where the water was very offensive, which we determined to visit. On our arrival at one of these places we found several hot springs, and in some of them the water was boiling hot. As we walked over the ground it shook under us and in some parts it was not able to bear our weight. The volcano was burning underground, and not far away from us the surface of the ground was hot. Some of it had been thrown up in small heaps and sent up a steam like boiling water. We removed some of the tops of these little hillocks and found them to be hollow within, in the cavities of which the sulphur was forming in the most beautiful pyramids, as close together as a honeycomb. When we looked into these cavities the little spires of sulphur shone with the most sparkling lustre that can be imagined. The sulphur was hot, and under the hillock the water was boiling and burst out in several places. There was one spring where the water was almost as thick as batter pudding and nearly as white as flour and water. I went as near as I could to examine it but the ground would not support my weight, but gave way with me when within a few feet, and I sank with both feet about one foot into this thick white batter, and found some difficulty in returning as the ground shook at every step and the surface broke. The whole surface of the neighbouring grounds had the appearance of volcanic eruptions.

There was one spring where the water was boiling hot, and another where the water was cold. The land for some miles is full of springs and swamps, very barren, composed principally of white sand, pipe-clay and peat. Here and there I observed small quantities of sulphur in the roots of trees which had been burnt at some former period, but I saw no appearance of coal, iron or freestone in any part of this district. We visited a small white lake, which I have mentioned in a former account, and then returned to our lodgings with Kiterra. The land at Tiami [Taiamai] is very good, well wooded, and with abundance of fine water. Kiterra is very anxious for some European to reside in his district (Elder 1932, pp. 249-250).

Ngawha is close to the rich district of Taiamai where there were numerous kainga and cultivations described by Marsden. Although he did not record actual bathing and other uses of the hot springs, it was obvious that local people knew the geothermal area well. He did record the use of clay and ochre deposits as a source of pigment.

In a letter written to the Church Missionary Society on 12 January 1833, Rev. A.N. Brown described his visit to Ngawha which he called Waipiro, stinking water. However, Brown was more intent on preaching his version of the Gospel than recording Maori custom:

Went with Mr Clarke to Waipiro. It is a barren dreary place like a valley given to salt, abounding with hot springs and sulphureous lakes, and forms a striking contrast to the beautiful cultivated spots that we had passed over in our journey. We saw at one place at least 40 acres of potatoes. When the Natives shall be constrained by Divine grace to embrace Christianity, to lay aside their warlike habits and cultivate the arts of peace they will possess many resources in this country to render them a happy and contented people. A Native at the lakes told us that the large trees in the neighbourhood which are in great measure buried with their tops downwards, were placed in that position by Maui. He told us also with great gravity that there was no land till Maui fished up New Zealand with a hook – but when we asked him where Maui got his Canoe from if there was no other land, he could not help joining in our laugh at his ridiculous superstition.

The CMS missionary William Wade described the Ngawha district in the 1830s, and speculated on its volcanic origins:

Beyond Taiamai and about seven miles from the Waimate, there are sulphurous lakes, warm near the margin, with adjoining pools of warm or boiling water. These I once visited. They lie in a district remarkable for its volcanic appearance. There is every indication of an enormous crater, divided into, or containing two lesser craters: and we could distinctly trace a broad outline of the history of the spot in the smaller branches, leaves, and catkins of kauri, which were embedded in a sulphur deposit on the edge of one of the lakes. The awful fires of the original volcano must long have been extinct, before the sloping surface of its sides could have been covered with the verdure of a kauri forest; and there must have been subsequently a tremendous re-action, spreading destruction around, and depositing in the place of forest vegetation, the deadly waters of the lakes which now occupy the two craters. The springs at this place are resorted to by diseased natives from the Bay of Islands, who bring baskets of provisions with them, and remain on the spot to use the sulphur warm-bath till a cure is effected (Wade 1842, pp. 161-162).

Dieffenbach visited the district in December 1840. Travelling south from Waimate, he noted a number of volcanic cones “in an extensive depression”, mostly “covered in fern and flax”, with “patches planted in Indian corn and potatoes” amid the scattered basaltic rocks:

After passing a small native settlement, and crossing a ravine, we ascend a ridge of hills, very barren and steep, with a white clay on the surface, and evidently covered in former time with the kauri-pine. We now come to a lake [Waiapawa Pond] about one mile in circumference. On its shores are black and half-burnt stems of kauri, and the soil in the neighbourhood is covered with efflorations of pure sulphur. At a little distance is another lake, called Ko-huta-kino [Tuwhakino], smaller than the former, and near this are the mineral springs. There are several of them, all close to the lake. The first which I examined was strongly aluminous, and of a temperature of 62° Fahrenheit. A few feet from it was a tepid spring, of a milk-white colour and an alkaline taste: its temperature was 124°. A

third was acidulous, with a temperature of 154° Fahrenheit. In another, over which rose strong sulphuretted hydrogen gas, the thermometer stood at 133°...

A small creek discharged itself into the lake through a narrow gulley. The gaseous emanations of sulphuric acid have much altered the argillaceous rock, parts of which have become white and red, while in other portions it has changed into a species of clay, covered with sublimations of pure alum, sulphur, and different sulphates. There are several other springs in the neighbourhood, which mix their waters with the creek, and impart to it an increased temperature.

I found here some native women with their children, living in a temporary shed. The children were affected with cutaneous and scrofulous diseases, especially ringworm and swollen lymphatic glands, and had been brought to this place for the benefit of bathing in the warm sulphurous water, the beneficial effects of which were already visible. The springs are often visited by the natives for this purpose, and, as might be expected, are of very great benefit in many of the disorders most common in these parts (Dieffenbach 1843, Vol. 1, pp. 245-246).

Dieffenbach also commented on “the barren and desolate aspect” of the surrounding landscape, typical of geothermal areas. There was very little vegetation in the hills: “it is only in the ravines that the uniform brown tint of stunted fern is interrupted by the green of some sheltered groves” (ibid p. 246).

Rev. Richard Taylor noted the volcanic nature of the region around Ngawha including a lake which “contains white mud, which bubbles up in all directions; in another the heated gas is emitted from innumerable pores, the highest temperature being 196Fah”. He also described the therapeutic uses of this area of surface geothermal activity:

These parts are resorted to by scrofulous and diseased natives, especially females from the Bay of Islands, for the benefit of vapour baths, to form which they simply scoop out a little hollow in the sand, about a foot deep, lining it with old mats, up on which the patient is placed with a blanket thrown over the person to keep in the heat. The invalids generally remain about a month at the baths, and have little temporary huts erected, which give a singular appearance to this lonely and desolate region (Taylor 1855, pp. 221-222).

Hochstetter described the volcanic activity of the Bay of Islands area as extinct with the exception of the geothermal area at Ngawha:

A few hot springs and solfataras that lie a few miles south of Waimate, in a remarkable crater-like depression in the ground on the shores of two small lakes in the Otaua district, are the last after-effects. Sulphur encrustations and efflorescences of alum and salammoniac here cover the soil, hot steam gushes forth, from the earth at many points, and many warm springs and mud pools of 130° to 168°F surround the shore of Ko-huta-kino [Tuwhakino], the smaller of the two lakes. The natives have made use of these springs with good results for many kinds of illness, and although the nearby surroundings offer no charm at all as landscape, yet perhaps in time to come the healing properties of this Waiariki (as the na-

tives call the warm baths) will bring it a reputation among the European colonists as well (Hochstetter 1959, p. 45).

A report by a Mines Department Official in 1893 also recorded Maori use of the hot springs:

At the time of my visit to this place there were several Natives bathing in the hot pools, which are said to be efficacious for rheumatic complaints, and also for skin diseases; and, judging from the quantity of quick silver mixed amongst the mud as well as the steam and sulphurous vapour coming out of the ground at the cinnabar-lode, a sanatorium would be erected here for certain diseases which could not be surpassed in the world (quoted by Boast 1992, p.10).

The accounts of these Pakeha visitors make it clear that, although not permanently occupied, the Ngawha geothermal area was highly valued by Maori and frequently visited for medicinal and therapeutic purposes. Apart from rheumatic and arthritic complaints the hot pools had a reputation for curing skin complaints, often described as cutaneous infections, such as eczema, sores, scabies and other skin diseases. The reference to “certain diseases” suggests that the mercury in the springs might cure syphilis, use of mercury being a standard treatment in the late nineteenth century. The term scrofulous was often used and referred to what was probably a tubercular condition affecting the lymphatic glands. However, it is difficult to be specific about ailments treated, but it is not difficult to conclude that some significant improvements, and sometimes cures, were effected, and attributed to the healing power of the pools.

Land Transactions and Mining

The mineral potential of the Ngawha area was realised in 1870, in Hutton’s geological report of finding veins of “quicksilver” (metallic mercury), cinnabar (mercury ore) and sulphur deposits. Mining proposals were behind applications to the Native Land Court for investigation of title in the early 1870s. There were further attempts at mining and processing the ore in the late 1920s, but these had little success. The effect of sporadic mining activity has been the considerable modification of the Ngawha geothermal area. The following account of late nineteenth century mining provides a background to the land transactions which reduced the Maori land holding at Ngawha to a one-acre reserve containing several hot springs, Parahirahi C1 Block:

The existence of mercury at Ohaeawai Hot Springs was known as early as 1866. In 1870 Captain Hutton, in a hurried visit to the locality, succeeded in finding mercury on the shores of Tuwhakino Pond, and also apparently in No. 3 area, where it occurred, associated with meta cinnabarite, in two small veins in the sandstones.

About 1873 more extensive prospecting was carried on by Mr. G.F. Dickson. Before long the property was leased by the Maoris to Mr. F. Earl, and a small amount of mercury is said to have been retorted by this gentleman. On the expiry of the lease, the property ultimately passed into the hands of Colonel G.W.S. Patterson, of Auckland. This gentleman instituted further prospecting; ores of mercury were found in several places, and in 1895

gases, and considerable losses of mercury took place at the reduction works, probably owing to incomplete sublimation in the condensers...

In 1897 operations at the Ohaeawai [Ngawha] Hot Springs were suspended, according to the Mines Statement of that year, owing to litigation between the owners (Bell and Clarke 1909, pp. 18-19).

Most of the lands in the Ngawha district were investigated by the Native Land Court in the period 1868-1873. The following summaries of transactions on the two blocks containing the geothermal area have been compiled from Chapter 3 of the Waitangi Tribunal *Ngawha Geothermal Resource Report* (1993) and are also illustrated in Figure 38.

Tuwhakino Block 1086 acres

- 1873: Surveyed and awarded by Native Land Court to Heta te Haara solely.
- 1874: Two leases to William Earl with power to lessee to extract minerals (mercury); leases surrendered.
- 1876: Lease of whole block to William Earl, 21 years.
- 1878: Northern portion 465 acres sold to William Earl, but the memorandum of transfer included provision to reserve to "Heta Te Haara the right to use the waters contained in the two pools or lakes known by the names of Waima and Waipaoa".
- 1884: The reservation to use pools surrendered and Earl issued with unencumbered title: this block was sold by Earl in 1888.

Te Haara leased balance of block 621 acres to Earl for 5 years, including exclusive right of lessee to use of springs.
- 1888: Second lease on same land to Earl, A. Bull and D. Hean giving rights to extract minerals.
- 1892: Lease of 621 acres to George Patterson, 21 years, contains provision for Te Haara to occupy land jointly with lessee, and right of purchase.
- 1894: 621 acres sold to Patterson, no reservation for Maori use of springs.

Parahirahi Block 5097 acres

- 1872: Agreement to lease to John White for purposes of mining mercury, lessors to receive one quarter of proceeds of mining and "bathing holes" reserved for Maori "as a place for their sick to go".
- 1873: Surveyed and awarded by Native Land Court to 10 owners plus a further 17 names in memorial under section 17 Native Lands Act 1867.
- 1874: Rehearing by Native Land Court; title awarded to 10 in original order and 27 more names; of total 37 owners, 36 belonged to Te Uriohua and 1 Ngati Rangi, two hapu of Nga Puhi; restrictions on alienation for more than 21 years.

1885: Partition (following some dissension) agreed:

Parahirahi	A	2546 acres – alienation restricted
“	B	2546 acres – no restrictions
“	C	5 acres – alienation restricted

Each block was vested in 45 owners (the 37 original owners and/or their successors)

1886: Crown begins purchasing individual interests in Parahirahi A, B and C Blocks, proclamation issued preventing private dealing.

1888: Crown application to Native Land Court to ascertain its interests, but deferred.

1894: Crown acquires further interests and revives application to Native Land Court to ascertain interests; non sellers awarded A1 (2 owners) A2 (1 owner) A3 and B1 (7 owners in each) and C1, the Ngawha Reserve of 1 acre (12 owners); Crown awarded Parahirahi D, 4293 acres.

1897: Some kainga included in Crown land in 1894, part of A1 (77 acres) exchanged for part of north west corner of Parahirahi D.

The Waitangi Tribunal reviewed the transactions on Parahirahi Block, and in particular the deeds conveying interests in all three partitions, A, B and C to the Crown:

The tribunal concludes that it has not been established that the owners willingly and knowingly alienated Parahirahi C block or the hot springs taonga located on the block, it not being clearly and unambiguously indicated in the deed of sale that this was intended (Waitangi Tribunal 1993, p. 61).

In the 1920s Maori were still occupying all of C block, but there were moves by the local county council to have the whole area made into a public reserve. In response, the Maori owners applied to the Native Land Court in 1926 to have the hot springs area made an inalienable reserve. They also petitioned Parliament, complaining about Crown acquisition of the 4 acres of Parahirahi C, leaving only 1 in Maori ownership. When the application for a reserve was heard in the Native Land Court Maori owners alleged that they had not sold interests in C when interests in A and B blocks were purchased by the Crown. The reservation of the 1-acre Parahirahi C1 was duly gazetted, but there was no response to the petition. There were two more petitions in 1929 and 1931, but again no response.

In 1934 the 4 acres acquired by the Crown were brought under the Public Reserves, Domains and National Parks Act 1928 and came to be known as Ngawha Hot Springs Domain. The following year, most of the original owners of the Maori 1-acre reserve having died, the question of successors came before the Native Land Court. Instead of formally naming successors, the Court agreed to the election of a committee of management for the reserve. There were further petitions over the 4 acres in the Domain in 1939, 1941, 1942 and 1944. In 1945 Judge Prichard presided over an inquiry into the 1942 petition and concluded that the Crown had properly acquired the land. The Waitangi Tribunal reached a different conclusion. There was another

petition in 1946 but no response, and some Maori families continued living on the Crown land until they were evicted:

In August 1961 the Minister of Lands approved of action being taken to evict those living on the Crown owned domain. In May 1962 summonses issued by the domain board were served on those living there. After various adjournments a lengthy hearing took place in the Magistrates Court at Kaikohe on 28 February 1964. Mr Herd SM upheld the Crown's entitlement to the domain and found the defendants to be trespassers. They were given a month to vacate the premises on the domain (Waitangi Tribunal 1993, pp. 71-72).

After reviewing the transactions on Parahirahi Block, the deeds, the petitions and the evidence in the 1945 inquiry and other relevant material:

... the tribunal has found that the Crown acted in breach of its Treaty duty to protect the owners' interests in Parahirahi C block and that it also acted in breach of article 2 of the Treaty in not ensuring that the owners willingly and knowingly alienated Parahirahi C block and the hot springs taonga located on the block (Waitangi Tribunal 1993, p. 74).

The Tribunal accordingly recommended that the Crown return to Maori ownership the 4 acres of the former domain which then had the status of a recreation reserve under the Reserves Act 1977.

Pakeha Use of Ngawha Hot Springs

The secretary of the Ngawha Springs Domain Board gave evidence to the Maori Land Court at a sitting in Kaikohe, 4 May 1945, in the inquiry into a petition (12/1942) concerning Parahirahi C Block:

I think that the Board is a public amenity. It would be a public calamity, if not preserved. There are springs on Domain. People can, if they desire, camp on domain at little cost. There are shacks there, were there when Domain Board was constituted [1935]. Some Europeans pay ground rents, no Maoris. That is the only revenue, ground rent. We have mettled [sic] the road, that would be the road to native portion, so far as I know. It may be that a spa will be developed by the (Gov't) Crown.

Only attraction there is the springs. Baths can be made by digging in a number of places. If the Government made a spa, they would probably take over the native portion. Pakehas have gone there for 25 years [that] I have been here (Maxwell 1991, Appendix T).

Ngawha was never developed as a spa in the nineteenth century probably because it was isolated from centres of population and the bleak local scenery of low, scrub-covered hills and mine workings did not attract visitors. The springs were not listed in the many tourist guides to thermal areas, and no funding was made available by the Department of Tourist and Health Resorts. The Government Balneologist, at the end of his treatise on medical uses of hot springs and mineral waters, noted the use of certain muds, which he classified as siliceous sulphur mud and mercurial mud:

Such muds are absolutely free from grit, and, as they dry on the skin, have a feeling that can only be described as “sebaceous”. They readily wash off, and leave the skin soft and hyperaemic. Their action in baths is much that of the peat baths of Europe, which also are acid – that is to say they are soothing and pain relieving, and at the same time stimulant to the skin circulation. They may be used diluted in immersion baths, or in full strength in poultice form, and are indicated in arthritic and other painful conditions, whether of rheumatic, gouty or traumatic origin, and perhaps most of all in chronic disease of the skin (Herbert 1921, p. 208).

Such muds could also be found in the Taupo Volcanic Zone, but were a particular feature of the “very remarkable group of springs” at Ngawha:

A number of boiling or nearly boiling springs of sulphuretted, muriated, alkaline, and acid waters arise in the midst of the old workings of a mercury mine, itself desolate in a setting of old gum fields.

The hot water and steam have decomposed the cinnabar ore alongside and mercury is deposited in visible metallic globules in the hot mud. This mud, used by the Maori as a parasiticide, has obvious possibilities for inunction in syphilis, more especially with the hot sulphur baths alongside.

At present these baths are unused, but we can imagine how such a combination would excite the envy of the authorities at Aachen (ibid, pp. 209-210).

By “unused” Herbert meant the baths were not used for Pakeha medical or therapeutic purposes.

In 1944 Government Balneologist Blair reported on Ngawha when a private development was proposed. He was not impressed by the “desolate scenery” of the landscape on the road to it, or “the gloomy and desolate appearance of the surroundings” at the springs. Although there was a range of chemical composition in the springs, the mineral content was less important than:

the action of heat plus moisture applied locally and generally for a prolonged period: the salts in the solution merely adding to the effect... it appears to be of little importance whether these dissolved salts are chlorides, carbonates or sulphates... The major exception to this is the presence of free sulphuric acid, which has a definite effect upon the skin, and the surface circulation (quoted by Rockel 1986, p. 150).

Until the 1950s there was little more than a rough track giving access to the springs. In 1948 Dr Lennane, of the Health Department was not enthusiastic about development of a spa:

In view of the slow flow of water through the baths and the fact that they have a reputation for healing or curing skin diseases, it would seem undesirable for a large number of patients to pass through the bath in one day (quoted by Rockel 1986, p. 150).

Dr Lennane also described the area as “desolate” with “various bubbling mud pools of a most revolting aspect” (ibid). By this time private interests had developed the Spa Hotel on the Tu-

whakino Block, which for some time was known as Cunningham's Curative Hot Springs. A second hotel, Ngawha Springs Hotel, was built opposite the Domain in 1956.

In 1935 the Crown land in Parahirahi C Block came under the administration of the Ngawha Springs Domain Board. Within this area in the 1940s were "8 excavated baths, with boarded sides and sand bottoms known as the Velvet, the Twin, the Jubilee, the Lobster, the Waipiro, the Barnard, the Cinnabar and the Annie". Over the fence on "the Maori side", or "the Maori acre", were pools called Rata (Doctor), Horomona, Waikato, Bulldog and "Peipei" (Baby) administered by the Ngawha Springs Trust (Rockel 1986, p. 151). Ngawha remained a destination for visitors, Maori and Pakeha, mainly from the local region. In July 1965 the Bay of Islands County Council was appointed as the Ngawha Hot Springs Domain Board, and with restructuring in 1989 the Far North District Council took over. The Maori reserve was now administered by the Waiariki Trustees, and in March 1989 they leased the former Domain, which in 1992 became a recreation reserve administered by the Department of Conservation:

At present [1993], the Waiariki baths and the recreation reserve baths are separated only by a wooden fence. They share a common car-park, both have their own changing sheds, and both contain a number of differently coloured hot pools, each believed to have different healing powers. On one side of the fence the baths are Maori-owned and managed by the Waiariki Trustees. On the other side of the fence the baths are Crown-owned and also managed by the Waiariki Trustees (Waitangi Tribunal 1993, pp. 75-76).

12. Tikanga Maori in Geothermal Areas

Areas of surface geothermal activity are highly-prized, inherited resources, regarded by Maori as taonga, and therefore included in the guarantees of tino rangatiratanga in Article Two of the Treaty of Waitangi. This has been recognized in two reports of the Waitangi Tribunal, the *Ngawha Geothermal Resource Report* (1993) and the *Preliminary Report on the Te Arawa Representative Geothermal Resource Claims* (1993). It is not surprising then, that a number of claims concerning geothermal resources have been lodged with the Waitangi Tribunal, which are yet to be heard. In recent decades there has been an expansion of the use of geothermal energy for commercial heating, industrial use and electricity generation purposes. Geothermal areas have been mined for gold, silver, mercury, sulphur and other mineral ores. Much of Orakei Korako and part of the geothermal area at Te Ohaaki have been flooded by a hydro lake, Ohakuri. The geysers at Wairakei and Te Ohaaki have been destroyed by extraction of steam for the power stations. Steam and heat extraction in Rotorua so affected the Whakarewarewa thermal area that restrictive regulations had to be imposed to preserve this tourist attraction and the few remaining geysers. Most of this development has occurred with little concern for Maori attitudes and values, or any perception of how Maori traditionally lived in and used the resources of an area of surface geothermal activity.

The tangata whenua of the Taupo Volcanic Zone and other areas of hot springs are vitally concerned with the use and management of geothermal resources, including areas where the geothermal activity is no longer in Maori ownership. Many of the customary uses are still practised. The perception of geothermal areas as a valued ancestral resource, and related attitudes toward management and conservation of the resources for future generations, are views still widely held.

The following notes are an attempt to sum up the characteristics of Maori customary use of geothermal resources:

- Geothermal heat is a legacy associated with ancestral origins in the separation of Ranginui from Papatuanuku; with Ruaimoko and the ahi komau; with Maui who fished up the North Island, Te Ika a Maui; with Ngatoroirangi and his sisters, Kuiwai and Haungaroa, and their atua Te Pupu and Te Hoata.
- Earth heat (ahi komau) is distinct from the fire that burns wood, or the fire associated with lightning.
- There is a connection between the various surface manifestations of earth heat in earthquakes and volcanic activity, geysers and hot springs, mud pools and hot ground.
- The connections are illustrated in the stories of the journeys of Ngatoroirangi and his sisters which indicate Maori recognition of what geologists now label the Taupo Volcanic Zone.

- Particular taniwha may be associated with specific places and/or events, but the geothermal connections are illustrated in the stories of taniwha who travel.

Within the areas of surface geothermal activity there were distinct and separate areas reserved for particular kinds of activity:

- Wahi tapu: some were burial places; some were associated with a tuahu and a particular tohunga and/or specific purification rites; some were associated with therapeutic uses such as particular sulphurous hot springs or muds which cured skin infections.
- Bathing areas (waiariki): a hot spring was often modified by digging out an area, and introducing cooler water as required to regulate the temperature, to provide a communal bathing and sitting area. While hot water is therapeutic for those suffering arthritic and muscular complaints, pools also had an important social function as a meeting place, especially in the cold winters of the Taupo Volcanic Zone.
- Cooking places: these included boiling springs where food was immersed in a kit; fissures in the ground where hot steam issued and food was laid on top, wrapped in leaves and matting; holes dug down into hot ground or into a bank in which food was put and covered with matting. At Rotomahana slabs of sinter were laid over fumaroles for drying tawa berries. Hot ground was also used for the early sprouting of kumara tubers, to be ready for planting out in spring. Such areas allocated for food preparation were not used for other purposes, such as bathing.
- Kokowai places: geothermally altered clays, often iron oxides, provided the raw material for red ochre which was baked, sometimes on a nearby area of hot ground, and mixed with shark oil to produce a distinctive red pigment. Kokowai was an important item in ceremonial gift exchanges.
- Fibre processing areas: these included areas of black mud, paruparu, which were used for dyeing processed flax, for example the scraped parts that provide the design of a piupiu; other pools were used particularly for steeping a woven cloak or mat in order to soften it for use. Such pools and mud areas were not used for any other purpose.
- Washing places: separate pools were set aside for day-to-day washing of garments.
- Sulphur deposits: these were exploited for medicinal use for skin complaints, either sulphurous muds applied to the skin, or the sulphur burned over a fire and the infected limb put into the smoke. The smoke from burning sulphur was also used to alleviate respiratory difficulties, including asthma.
- Other uses: these include hydrothermally altered clays that were used as soap, or, as reported in the Tokaanu area, and Rotomahana before the Tarawera eruption, were occasionally eaten.

Some modification of tikanga has occurred with Pakeha contact. In some geothermal areas such

as Rotorua, tourism, especially “taking the waters” in the nineteenth century, has led to particular variations of local tikanga, a cultural overlay of tourism, that is now very much an integral part of local customary practices. In other areas Pakeha use of hot springs has displaced Maori customary use and tikanga has been lost. The advent and almost universal use of modern medicines has curtailed some traditional uses of geothermal areas, but for many Maori particular hot pools are still regarded as having significant therapeutic value and are regularly used. The spiritual qualities of the many wahi tapu remain significant, and there is a real sense of loss and grievance that so many have been destroyed or damaged in the process of geothermal energy development. Despite the major modifications of geothermal areas in recent decades, the tangata whenua of such regions still maintain a high level of respect for their ancestral legacy and concern about recognition of tikanga Maori in the use and exploitation of geothermal resources. At Rotokawa and Mokai local Maori trusts have become joint partners in geothermal power development.

While comment has been made in passing on the fate of many geothermal areas, the focus has been on customary uses of geothermal resources, mainly documented from nineteenth century sources. Oral tradition has also been an important source, and many kaumatua in the Taupo Volcanic Zone and Ngawha have reinforced the perceptions identified in the documentary sources. Sadly, in some areas the tangata whenua lost control of their geothermal resources, especially hot springs which Pakeha settlers also valued. This is reflected in the many new names bestowed in geothermal areas, and the loss of Maori names and their significance. With this loss of control, it was inevitable that tikanga would also be forgotten with the passing of the older generations. Finally, in focusing on Maori customary use of a specific resource, it is important to remain aware of the larger context of the relations between Maori people and their environment. For many Maori communities of the Taupo Volcanic Zone and elsewhere, the local geothermal resources were but one element in a holistic view of the physical environment, in which all elements were ascribed both spiritual significance and practical day-to-day uses. Ancestral connotations of specific geothermal features reinforced the identity of people and the places where they lived.



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Note

1. Sources of photographs and maps are acknowledged where appropriate with each item. Photographs carrying no acknowledgement are from the author's personal collection.
2. The following is a summary of ML plans held in the Department of Survey and Land Information, now Land Information New Zealand Hamilton, used to compile the maps of place names in the Taupo district (Figures 13 and 20):

Tauhara Blocks (sketch plan) ML 1365; ML 1545-8; ML 3989

Wairakei Block ML 5167

Rangatira Block ML 5271; ML 7300 A-F

Tahorakuri Block ML 5601

Oruanui Block ML 4755; ML 6664; ML 7489; ML 7522

Pokuru and Hukui Blocks ML 2496-7S; ML 3888L





Appendix

Pat Hohepa: Linguistic Analysis of Ngawha and Waiariki

NGAWHA:

1. Current maps of New Zealand indicate that Ngawha is a placename used only in Northland as Ngawha and Ngawha Springs or Te Ngawha. That does not indicate, however, that the term is peculiar to Northland.
2. Local elders and fluent speakers pronounce the name with long vowels (ie *ngaawhaa*). This is important because the Dictionary Revision Committee of the pre-eminent Maori Dictionary uses macrons to show that the word, when pronounced with long vowels, has the specific meaning of “boiling spring or other volcanic activity”.¹

In other words *Ngawha* is a self explanatory descriptive placename, that is, a place that has boiling springs as well as other volcanic activity.

3. Vowel length distinguishes *ngaawhaa* from *ngawhaa*. The latter word, *ngawhaa* has a number of related meanings – “to burst open”, “to split”, “to bloom” (as a flower) or “to overflow banks (of a river)” and therefore can have a meaning which extends to the eruption, bubbling, bursting and overflowing of volcanic activity. What the two words *ngawhaa* and *ngaawhaa* have in common is *whaa* which has as a meaning “to be revealed, to be disclosed or made known” in Maori, Tahitian, Hawaiian, Samoan and Tongan either alone or linked to other meaningful units or morphemes.²
4. *Nгаа* on its own can mean “to breathe, take breath, breathe heavily, make a hoarse harsh noise”.³ Given such words as *ngaaeke*, *ngaehe*, *ngakeke*, *ngangaa* to indicate various kinds of sounds from breathing to creaking to wailing, the combination of *ngaa* and *whaa* as *Ngaawhaa* adds personified energy and sound as additional information to the descriptive meaning of “boiling springs and volcanic activity”. ie *Ngaawhaa* = geothermal energy.
5. Clearly *ngaawhaa* encompasses what we understand to be “geothermal energy” in its widest sense. *Ngawha* (or *Te Ngawha*) is not merely a placename but also refers to the pools of that place in such word combinations as *Ngawha Pools*, *wai ngawha* (ngawha water), *nga roto ngawha* (the ngaawhaa lakes), *ngawhaariki* (chiefly ngawha, or, ngawha pools), *ngawha kaukau* (ngawha sauna) in either Maori or English sentences.
6. Te Arawa and Tuwharetoa elders prefer to use *waiariki* not only for their hot springs, pools and geysers, but also as a placename. The name *waiariki* has expanded to not only cover (a) a distinct Maori Land Court area and (b) a distinct Maori Council district but it also generally refers to the Bay of Plenty region - at least among Maori people.
7. Given the different locale for *ngawha* (and *ngawhaariki*) versus *waiariki*, can we draw what seems to be an obvious conclusion that these may be dialectal names for the same thing? We cannot because the crucial examples for *ngawha* are not from the Northern area but from Tuwharetoa, where *waiariki* is predominantly used. Williams has as an example for *ngawha*:

“I puta ake ai ko Ngauruhoe, te ngawha e hu ra i te tihi o te maunga”.⁴

(And so Ngauruhoe emerged, the volcanic eruption resounding on the summit of the mountain).

¹ Williams, H.W. 1975, *A Dictionary of the Maori Language* (7th Edition) Government Printer, Wellington: 232.

² Tregear, E. 1891, *The Maori-Polynesian Comparative Dictionary* Lyon & Blair, Wellington: 603-4.

³ Williams 1975: 225.

“Te taenga atu ki te ngawhariki, mate noa iho”.⁵

(On arriving at the boiling springs, he died naturally).

These Williams dictionary examples of *ngawhaariki* are from the Rotorua area and they are from 1846-50.

8. The best method of identifying wider use of terms with cultural content is to word-search literary sources. One of the best sources would be classical sung poetry not only because there are excellent voluminous publications⁶, but also because there is also a published companion name and word index.⁷
9. I found it disconcerting that there were no examples of the use of *ngaawhaa*, *ngaawhaariki*, or *waiariki* in the major song collection referred to. As for *ngawhaa*, there is only one example. Prose collections were more revealing for *waiariki* but again there were no examples for *ngaawhaa* except in the above examples. *Ngaawhaa* remains a one-of-a-kind mystery word.
10. *Ngawha* is not derived from the English word “sulphur” and Elder’s footnote to Marsden’s journal that, “the word *ngawha* means a sulphurous spring hence the name of this place is still Te Ngawha” seems to be based on a false analogy.⁸ There is no other written or dictionary source which corroborates that *Ngawha* has a connection with sulphur. If sulphur was assimilated into Maori (ie Maorified) the Maori form would be “Harawha” since Maori has /h/ as a reflex (equivalent) for English /s/, the long or short vowel length is maintained and consonant clusters of English are usually separated by vowels in Maori. But why coin a word from English when Maori has three alternative names for sulphur, *kuupapapapa*, *pungatara*, *pungawerawera*. If sulphur identification was needed from time immemorial, one of the words would have been used because Maori would not have known the word sulphur before contact with English speakers. In other words this clearly infers that the prime focus was on geothermal or boiling springs and volcanic activity which is the meaning range of *ngawha*.
11. The word *ngawhaariki*, comes from *ngawha* + *ariki*. *Waiariki* which by analogy is from *wai* + *ariki* is given the meaning “hot springs” in Williams Maori dictionary.⁹ Whether this indicates that *ngaawhaariki* and *waiariki* are different in that one boils or bubbles and the other does not raise interesting semantic differences. The addition of *ariki* clearly indicates that these boiling springs and volcanic activity have a cultural connotation – they are *chiefly* hot or boiling springs. Oral and written sources indicate that the addition of *ariki* is deliberate to indicate that geothermal energy as defined was either derived from some chiefly person or events, or it has its own intrinsic chiefly qualities.
12. While the use of *ngawhaariki* is not common in Tai Tokerau, there is the interchangeable

⁴ Williams 1975: 63 & 232.

⁵ Williams 1975 : 232.

⁶ Ngata A.T., 1959, *Nga Moteatea* Part 1. Polynesian Society, Wellington.

Ngata A.T., & P. Te Hurinui, 1961, *Nga Moteatea* Part II. Polynesian Society, Wellington.

....., 1979, *Nga Moteatea* Part III. Polynesian Society, Wellington.

⁷ Harlow, R.B. & A.H.F. Thornton, 1986, *A Name and Word Index for Nga Moteatea*. University of Otago Press.

⁸ Elder, J R *The Letters and Journals of Samuel Marsden*, Calls, Somerville & Wilkie Ltd & A H Reed (1932):210

⁹ Williams, 1975:475

use of *ngaawhaa* or *waiariki* for the bathing springs. The Maori owned springs today has the cover name Waiariki. The whole area is referred to as Te Ngawha or The Ngawha Springs. Ngawha as a name spreads further – to a marae and its surrounding houses about two kms from The Ngawha Springs, to the volcanic slopes and pa sites opposite the marae, continuing around Pukenui almost to Pouerua. A writer did refer to Ngawha (the marae and houses) as “the true and original Ohaeawai”.¹⁰ It seems that the name Ohaeawai later shifted two kilometres or so south to the present township site of Ohaeawai and the name Ngawha took its place. Time precluded research into these shifts; they may have been the result of governmental “housing relocation policies” of last century in an attempt to secure control over the springs.

13. Appealing to the first known sources, such as Marsden’s Journal for some clarification does not help. Marsden does not name Ngawha or Ohaeawai even though he is taken to hot springs, lakes, active volcanic areas with steam and sulphur hillocks all over the geothermal field. The omissions may well be memory lapses on his part, given that his journal entries seem to be written a lot later with an average of none or not more than two placenames per page. He also did not like Maori placenames and studiously replaced them with English names chosen from his own English background whenever he was inclined.
14. Leaving aside these complications, the language evidence clearly identifies *ngaawhaa* as the name for geothermal activity or energy, as we understand it. Every important *taonga* of a *hapu* or *iwi* has a name. It is no accident, nor is it coincidental that *ngaawhaa* as a name expanded to cover the whole area where there have been clear eruptions of geothermal activity.

WAIARIKI:

15. Compared with *ngawha* or *ngawhaariki*, the traditional origins of *waiariki* are well known. Wiremu Maihi Te Rangikaheke was the most prestigious writer of the 1840s-60s. He wrote for Sir George Grey and much of Grey’s *Nga Mahi a Nga Tupuna* was from his manuscripts. In his classical story of *Hinemoa*, [Te Rangikaheke] gives an account of the origins of *waiariki*: (translations are mine).

E kore teenei mea te wai wera e tae mai ki teenei motu, ki Aotearoa nei, i teeraa atu o te rangatira, o te tohunga. Naa Ngaatoroirangi anake i karanga atu ki Hawaiki ka haria mai e oona tuaahine. Koia ka toro haere i teenei motu...

(This thing hot water would not have come to this island, to Aotearoa, unless through a chief or a priest. It was really Ngatoroirangi who called Hawaiki and it was brought here by his sisters.¹¹ That’s why it spreads and burns in this land...)

...ka puaki toona reo ki oona tuupuna, “E kui maa, e!

¹⁰ Lee, Jack, *I Have Named it the Bay of Islands*. Hodder & Stoughton, Auckland, 1983.

Haria mai he ahi mooku. Ka mate au i te maeke.”

Kotahi anoo oona kupu, ko te rua, teenei rawa anoo nga kuia ra te haere mai nei i runga i te kare o te wai. Taa rawa mai te manawa, kei Whakaari. Kei reira e kaa ana te ahi a nga kuia raa. Heoi anoo, ka toro haere ki teenei motu, peenei anoo naa, kua tae atu oona kuia ki a ia, me te mau anoo i te ahi moona.

(...his voice rang out to his ancestors, “My woman elders! Bring some fire for me, I will perish from the cold.” These were his only words, when he repeated them, here indeed were those old women travelling on the ocean currents. By the time they rested they were at Whakaari (White Island). The fires of those *kuia* are burning there. And so it flamed across to this island as it does now, and his old women reached him bringing the fire for him).

Kite rawa ake ia, e puta ake ana i roto i te maunga, ka puia.

(When he saw it, it was emerging from the mountain, erupting)

No konei i meinga ai teenei mea te wai wera he wai-ariki, no te mea naa te tino ariki teenei mea i karanga, i tae mai ai ki teenei motu ngiha ai.

(It was from this that this thing called hot water was called *waiariki*, because it was a paramount chief who called it, resulting in its arrival to this land to flare).

16. The above account and the lament referred to, both refer to this same event resulting in the volcanic activities on Whakaari (White Island), Rotorua, Tongariro, Ngauruhoe and other active geothermal and volcanic areas in the Bay of Plenty or Waiariki region. There are no references to Northland in the various versions of the story nor are their analogies or implications in the *waiata*. In a sense this is to be expected for the canoe traditions of the mid-northern *hapu* do not interact with those of Te Arawa. The origins of Ngawha geothermal is elsewhere.

Note: These notes have been extracted from the evidence of Pat Hohepa before the Waitangi Tribunal in the Ngawha Geothermal Resource Claim (Wai 304, Doc. B25a, pp 29-33).

¹¹ Ngata 1959: *Nga Moteatea* vol. I pp 150-151 has the published version of the *waiata aroha* “Ka eke ki Wairaka” where Te Hoata and Te Pupu are named and my conclusion would be to credit them for the creation of the Bay of Plenty geothermal regions.