

**IN THE MATTER**

of the Resource  
Management Act 1991

**AND**

**IN THE MATTER**

of an application to the  
**BAY OF PLENTY  
REGIONAL COUNCIL** by  
**NGATI TUWHARETOA  
GEOTHERMAL ASSETS  
LIMITED** for a change to  
the conditions of a  
resource consent (67151)  
that authorises the  
discharge of geothermal  
water from the eastbank  
of the Tarawera River

**STATEMENT OF EVIDENCE OF DAVID RICHARD BAKER MILNER**

E rere e rere te wai e  
Pupu ake I te whenua e  
E rere e rere te wai e  
Pipi mai e I te whenua e  
Hei orange mo te tangata e  
E rere e rere te wai ee  
Hai!

Ko Manaia te Maunga  
Ko Whangārei te Renga Paraoa te Moana  
Ko Takahiwai te Whenua  
Ko Takahiwai te Awa  
Ko Rangiora te Whare Tupuna  
Ko Ngātiwai, ko Ngāti Whatua, ko Ngāpuhi, ko Ngāti Porou ngā Iwi,  
Ko Ngāti Manu, ko Patuharakeke, ko Ngāti Rango, ko Ngāti Rangi ki Reporua ngā Hapū  
Ko Dave Milner ahau  
Tēnā koutou katoa!

## 1. INTRODUCTION

- 1.1 My full name is David Richard Baker Milner. I am currently employed by Kāhu Environmental Limited (Kāhu Environmental) as a Kaupapa Taiao Specialist. I have been with Kāhu Environmental for three years, specialising in supporting whānau, Hapū, and Iwi to engage in environmental policy and management.

### **Qualifications and experience**

- 1.2 I hold a Bachelor of Iwi Environmental Management (BIEM) from Te Wānanga o Aotearoa (2007) and have 16 years' experience in Hapū and Iwi environmental management.
- 1.3 Between 2013 and 2018, I was employed by Ngāti Rangi Trust (now known as Ngā Waihua o Paerangi) in Ohakune, based at the foot of Maunga Ruapehu or "Koro" as he is affectionately referred to. During my 5 years with the Ngāti Rangi Trust (NRT) I learnt the importance of Mātauranga Māori research developed alongside western science focused on Wai Māori, wai mana, wai tapu, wai mouri, wai ora, which has been more recently referred to as Te Mana o te Wai.
- 1.4 During the last 16 years, I have been supporting my own Hapū, Patuharakeke, with environmental management issues based on building clear transparent relationships with key industry partners that have a major effect on our Taiao, whānau, Hapū and hapori whānui or community. I am the Patuharakeke Hapū Taiao Unit Co-Lead.
- 1.5 I am the Co-Chair of the Northland Regional Council Tangata Whenua Water Advisory Group that is developing the tangata whenua values and expectations for the NPSFM 2020 regarding giving effect to Te Mana o te Wai. I am also a member of the Tongariro Taupo Conservation Board for Ngāti Rangi.
- 1.6 I am leading the development of the Rangitāne Tamaki-nui-ā-Rua (RoTnaR) Environmental Management Plan.
- 1.7 I am also involved in New Zealand's Biological Heritage Science Challenge – Ngā Rākau Taketake, which seeks to protect our native trees. As part of Ngā Rākau Taketake, I have been responsible for:
- (a) Research and development of Mātauranga Māori bioactive (Rongoa) solutions for kauri dieback and myrtle rust.
  - (b) Developing a He Taiao Cultural Monitoring framework and App.
  - (c) A Te Whakahononga mana whenua engagement plan.

- (d) Waka hourua western science and mātauranga Māori Cultural Authority Agreements.

**Engagement by Ngati Tuwharetoa Geothermal Assets Limited**

- 1.8 I was engaged by Ngati Tuwharetoa Geothermal Assets Limited ("NTGA") to:
- (a) Provide independent cultural advice regarding the differences between NTGA, the Ngati Tuwharetoa (Bay of Plenty) Settlement Trust (NTST), and Te Runanga o Ngāti Awa (TRONA) with respect to the continuation of the discharge of geothermal water from the East Bank of the Tarawera River into the Tarawera River; and
  - (b) Engage with NTGA, NTST, and TRONA with a view to seeking a resolution of those differences.

**Document review**

- 1.9 In preparing for this kaupapa, I have reviewed the following documents:
- (a) The assessment of environmental effects in support of the application.
  - (b) The submission by TRONA on the application.
  - (c) The Cultural Impact Report prepared by TRONA.
  - (d) The Ngati Awa Environmental Management Plan.
  - (e) The Bay of Plenty Regional Council reporting officer's section 42A report on the application and the submission by TRONA.
  - (f) The evidence for NTGA from:
    - (i) Amorangi Graham Kahu Te Rire.
    - (ii) Ms Adlam.
    - (iii) Mr McClintock.
    - (iv) Dr. Hickey.
    - (v) Mr McLean.
  - (g) The Ngati Tuwharetoa (Bay of Plenty) Claims Settlement Act 2005 and the Ngati Awa Claims Settlement Act 2005 (together the "Settlement Acts").

### **Purpose and scope of evidence**

- 1.10 The purpose of my evidence is to outline the engagement to date, the further engagement proposed, and my recommendations regarding potential solutions to address any differences that are not resolved by the further engagement. My evidence is structured as follows:
- (a) NTST and TRONA and the difference between them regarding the application (Section 3).
  - (b) National Policy Statement for Freshwater Management 2020 (Section 4).
  - (c) Whakawhanaungatanga – engagement to date and further engagement (Section 5).
  - (d) Cultural monitoring plans (Section 5).
  - (e) Concluding comments (Section 6).
- 1.11 It is not the intention of this evidence to takahi on the mana of any hapū or iwi. It is to support and acknowledge the connection that multiple hapū and iwi have to the Tarawera Awa and its catchment.

### **Expert Witness Code of Conduct**

- 1.12 I have read the Code of Conduct for Expert Witnesses contained in the Environment Court's Consolidated Practice Note (2014) and I agree to comply with it. I can confirm that the issues addressed in this statement are within my area of expertise and that in preparing my evidence I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

## **2. NTST AND TRONA AND THE DIFFERENCE BETWEEN THEM REGARDING THE CONTINUING DISCHARGE OF GEOTHERMAL FLUID INTO THE AWA**

- 2.1 The NTST<sup>1</sup> and Ngāti Awa<sup>2</sup> Settlement Acts were both given the Royal Assent in 2005.
- 2.2 The Settlement Acts provide both iwi with statutory acknowledgements along with other significant compensation, redress, and apologies for the many wrongs of the Crown in the past.
- 2.3 The historical kōrero provided in the Treaty settlement documents provide an insight into the cultural, spiritual, and physical connection each iwi has to the Tarawera Awa. These

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<sup>1</sup> <https://www.legislation.govt.nz/act/public/2005/0072/1.0/whole.html>

<sup>2</sup> <https://www.legislation.govt.nz/act/public/2005/0028/1.0/whole.html>

iwi, and the hapū they represent, are closely linked by whakapapa and whanaungatanga. This whakapapa highlights the opportunity to come together and whakawhanaungatanga as relations to apply a tikanga based approach for finding resolution to challenging issues such as this application. I return to this matter in Section 3 of my evidence below.

### **Statutory acknowledgements**

- 2.4 Ngati Tuwharetoa and Ngāti Awa both have statutory acknowledgements in their respective settlement legislation in relation to the Tarawera Awa that recognise their cultural, spiritual, and physical whakapapa and connection to the Awa.
- 2.5 Ngati Tuwharetoa also has a statutory acknowledgement in relation to the Kawerau Geothermal System.
- 2.6 I note that Ngāti Rangitihi<sup>3</sup> is currently in the final stages of their Treaty Settlement process. The outcome of that settlement is reflected in the Ngāti Rangitihi Claims Settlement Bill. That Bill has had its first reading in Parliament. The Bill also provides for a statutory acknowledgement to recognise Ngāti Rangitihi's relationship with the Tarawera Awa<sup>4</sup>. Ngāti Rangitihi have provided a submission in support of NTGA's application.
- 2.7 An important outcome of that legislation will be the establishment of a statutory body called the Tarawera Awa Restoration Strategy Group comprising Ngati Tuwharetoa (Bay of Plenty) Settlement Trust, Te Mana o Ngati Rangitihi Trust, TRONA, and Ngati Makino Iwi Authority along with all other statutory agencies with the purpose of developing a restoration strategy for the Tarawera Awa in a document to be entitled Tarawera Awa Restoration Strategy.

### **Difference between NTST and TRONA**

- 2.8 The NTST lodged a submission in support of the NTGA application. TRONA lodged a submission in opposition to the NTGA application.
- 2.9 Having read the Settlement Acts, had discussions with representatives of NTST and TRONA, read the TRONA submission and CIA, and read the evidence of Amorangi Te Rire and Ms Adlam, it is quite clear that the Tarawera Awa is a taonga of great importance to Ngati Tuwharetoa and Ngati Awa and that they are both kaitiaki in relation to it. It is also quite clear from that information that sustaining the mauri of the Tarawera Awa is of paramount importance to Ngati Tuwharetoa and Ngati Awa.

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<sup>3</sup> <https://www.legislation.govt.nz/bill/government/2021/0017/latest/LMS466149.html>

<sup>4</sup> Ngāti Rangitihi Claims Settlement Bill, Subpart 9 Tarawera River

2.10 In relation to Ngati Tuwharetoa, the significance of the Tarawera Awa is addressed in the evidence of Amorangi Te Rire and Ms Adlam and I note that Amorangi Te Rire states the following in concluding his evidence:

- "6.1 *The Awa and the Ngawha are Taonga to Ngati Tuwharetoa and we have a responsibility as kaitiaki to ensure that the Mauri of both is maintained. For Ngati Tuwharetoa, the Ngawha has always influenced the Awa and that geothermal influence is very evident in the Awa and occurs naturally through geothermal seepages in the riverbed and also of its tributaries.*
- 6.2 *Since development of the geothermal field began, geothermal influence on the Awa has declined considerably, with a number of geothermal surface features gone forever.*
- 6.3 *The flow that is received by the Awa on the eastern bank from the NTGA operations is a way of replenishing the Mauri of the Awa by reintroducing geothermal water that has always been an integral part of the Awa. Although the water is sourced from deeper within the system than would naturally flow to the Awa, we view the whole Ngawha as one flow, and to us there is no difference."*

2.11 In relation to Ngati Awa, the submission of TRONA includes the following statements that highlight the significance of the Tarawera Awa to Ngati Awa:

*"The management of water is a significant issue to Ngati Awa from social, cultural, and economic perspectives. As tangata whenua and kaitiaki, Ngati Awa have a responsibility to protect the mauri of ancestral waters, ensuring its life supporting qualities are sustained for future generations.*

...

*Water, and the mauri associated with it, has the capacity to generate, re-generate and maintain life as well as adversely affect the environment. Waterways provide important habitats for a wide variety of indigenous freshwater species, all of which are important to ongoing sustainability of the environment. Safeguarding the mauri of the water is therefore imperative to the sustainable management of the environment."*

2.12 The table attached to the TRONA submission comments on the NTGA application by reference to the Ngati Awa Environmental Management Plan. A key theme arising from the table is that Ngati Awa view the discharge of geothermal water to the Tarawera Awa from the East Bank discharge point as resulting in further degradation of the water quality of the Tarawera Awa and therefore impacting on its mauri. The TRONA submission also refers to a lack of evidence in support of the application.

2.13 In essence, the difference between NTST and TRONA is whether the contaminants discharged in geothermal water by NTGA do or do not have an adverse effect on the mauri of, and the mahinga kai in, the Tarawera Awa.

## **Relevant provisions of the Resource Management Act 1991**

- 2.14 One of the matters of national importance under the Resource Management Act 1991 ("RMA") that must be recognised and provided for pursuant to section 6(e) is:

*"the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:"*

- 2.15 In addition, the Hearing Panel will also be well aware that one of the things to which particular regard must be had pursuant to section 7(a) of the RMA is the exercise of kaitiakitanga.
- 2.16 The principles of Te Tiriti are also relevant as a matter to be taken account of pursuant to section 8 of the RMA.
- 2.17 These matters are addressed in the relevant planning documents that Mr McLean addresses in his evidence, so I will not address them further here.

## **3. NATIONAL POLICY STATEMENT FOR FRESHWATER MANAGEMENT 2020 (NPSFM)**

- 3.1 This section of my evidence assesses the relevance of the NPSFM, as regards the fundamental concept of Te Mana o te Wai set out in part 1.3 of the NPSFM.

- 3.2 The concept of Mana o te Wai encapsulates:

*"the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Mana o te Wai is about restoring and preserving the balance between the water, the wider environment, and the community."*

- 3.3 The concept of Te Mana o te Wai is:

*"relevant to all freshwater management, not just the specific aspects of freshwater management referred to in this National Policy Statement."*

- 3.4 There is a framework in the NPSFM for Te Mana o te Wai that encompasses six principles:

*"Mana whakahaere: the power, authority, and obligations of tangata whenua to make decisions that maintain, protect, and sustain the health and well-being of, and their relationship with, freshwater*

*Kaitiakitanga: the obligation of tangata whenua to preserve, restore, enhance, and sustainably use freshwater for the benefit of present and future generations*

*Manaakitanga: the process by which tangata whenua show respect, generosity, and care for freshwater and for others*

*Governance: the responsibility of those with authority for making decisions about freshwater to do so in a way that prioritises the health and well-being of freshwater now and into the future*

*Stewardship: the obligation of all New Zealanders to manage freshwater in a way that ensures it sustains present and future generations*

*Care and respect: the responsibility of all New Zealanders to care for freshwater in providing for the health of the nation.”*

- 3.5 Policies 1 and 2 of the NPSFM are particularly relevant to Te Mana o te Wai and tangata whenua involvement in freshwater management. They state the following:

***Policy 1:*** *Freshwater is managed in a way that gives effect to Te Mana o te Wai.*

***Policy 2:*** *Tangata whenua are actively involved in freshwater management (including decision-making processes), and Māori freshwater values are identified and provided for.”*

- 3.6 The inclusion in the NPSFM of Te Mana o te Wai has elevated hapū and iwi into regional council policy decision making and also developing the cultural values per each Fresh Water Management Unit (FMU). This will need to be done for the Tarawera Awa.
- 3.7 As part of the current resource consent process, NTST and TRONA have both been giving effect to their respective tikanga in terms of Te Mana o te Wai, even if they do not always refer to the concept of Te Mana o te Wai as set out in the NPSFM. In that regard, they are both seeking to protect the health and wellbeing of the Tarawera Awa to, in turn, protect the mauri of the wai. In terms of the six principles in the framework, the NTST and TRONA are both seeking to exercise mana whakahaere, kaitiakitanga, and manaakitanga with respect to the Tarawera Awa.

#### 4. **WHAKAWHANAUNGATANGA – ENGAGEMENT TO DATE AND FURTHER ENGAGEMENT**

- 4.1 The section 127 (change of conditions) application lodged with the Bay of Plenty Regional Council triggers a formal consent process. This process creates a division and applies a “cold” engagement approach that does not align to a Te Ao Māori worldview or tikanga and values-based approach.
- 4.2 It is challenging for NTST and TRONA to be directed by western policies that do not factor in tikanga and whakawhanaungatanga processes and values.
- 4.3 NTGA, NTST, and TRONA have engaged directly throughout this application process, both formally and through meeting kanohi ki te kanohi (face-to-face meetings).
- 4.4 In undertaking this mahi, I:



- (a) Met NTST/NTGA representatives on 6<sup>th</sup> May 2021; and
  - (b) Met on a without prejudice basis with TRONA representatives on the 13<sup>th</sup> of May 2021.
- 4.5 I have received great support from them as whanau, hapū, iwi reps, staff from each organisation, and trustees from both organisations.
- 4.6 This engagement group is a good cross section of representatives from each iwi and discussions have progressed resulting in a tikanga based hui on the 24<sup>th</sup> of May 2021. While a resolution of the difference between NTST, NTGA, and TRONA was not achieved, this whakawhanaungatanga values and principles hui set a good platform for further discussions.
- 4.7 Another hui is proposed for 8 June 2021 to discuss technical advice and cultural values. Dr Chris Hickey will be attending that hui to discuss the concerns raised by TRONA in its submission with respect to water quality and mahinga kai, including those parts of the submission regarding a lack of evidence / information. Mr Jaime Quinao, an NTGA geothermal specialist, will be attending to discuss any matters arising with respect to reinjection of geothermal water.

### **Relationship Agreements**

- 4.8 Formalising such relationships can be a good way to provide a clear transparent tikanga or guiding rules, values, and principles to base the relationship on, and to maintain a respectful platform of engagement. Memoranda of Understanding were a common “tool” used in the past, however, they lacked “teeth” or mana, and collected dust in the filing cabinet.
- 4.9 Relationship Agreements provide a solid platform when they are co-designed by the parties. These types of agreements need a project or series of activities that the parties want to work together on that will provide a benefit to both organisations or groups. That way the parties can come together regularly, to monitor and provide advice for the projects. In this case, it could be to monitor the development and implementation of a Cultural Monitoring Plan. Ultimately, it is up to Ngati Tuwharetoa and Ngati Awa to decide whether they wish to have a Relationship Agreement, or whether they even need one in light of them being closely linked by whakapapa and the process of engagement that is ongoing.

## **5. CULTURAL MONITORING PLANS**

- 5.1 Many hapū and iwi are already undertaking their own monitoring of their tupuna waterways and have established cultural monitoring frameworks, digital monitoring apps, and are

resourced to undertake this mahi on behalf of councils as they have grown the capability to do both western and cultural monitoring to be able to understand the holistic view of the state of the environment and therefore the health of the mauri in their waterways.

5.2 The following are two (of many) successful models that have been adapted to suit other hapū iwi values, environments, and impacts;

(a) Cultural Health Index Surveys – Gail Tipa and Laurel Teirney.<sup>5</sup>

(b) The Mauri Compass – Ian Ruru and David Wilson.<sup>6</sup>

5.3 There are many other models and frameworks available. A Kaupapa Māori Freshwater Assessments research document was completed in 2019 by Hannah Rainforth and Garth Harmsworth<sup>7</sup> that covers most monitoring tools and frameworks available at that time.

5.4 The Waka Hourua is a concept taken from the Meihana Health Model<sup>8</sup>. It represents an equitable partnership that can be applied to most relationships and projects for groups where a common goal is required. The model has been applied to demonstrate how equitable, strong relationships can be established with hapū and iwi over specific projects such as environmental and cultural monitoring. The purpose of the two hulls is for western science, and crown policy to develop in its hull, while similarly mātauranga Māori develops in its hull. A priority is to protect the mātauranga received from kaumatua and other tohunga by keeping that in the hull and only sharing what is required into the middle of the waka. The model shown in figure 1 is an example only, as these must be developed by the appropriate partners.

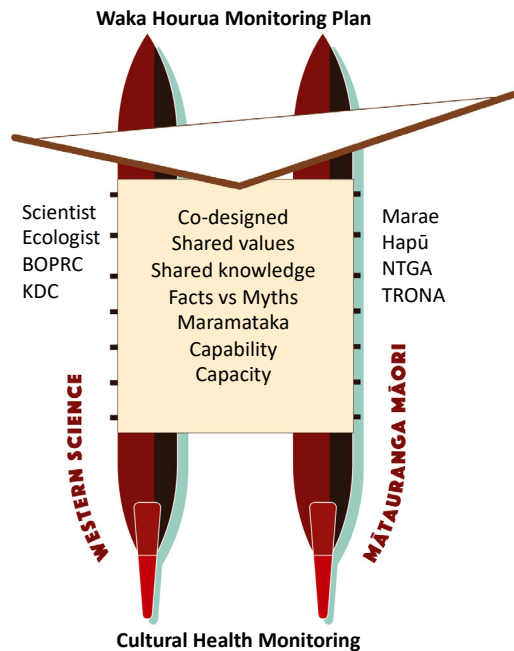
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<sup>5</sup> <https://www.environment.govt.nz/assets/Publications/Files/cultural-health-index-for-streams-and-waterways-tech-report-apr06.pdf>

<sup>6</sup> <https://www.mauricompass.com/>

<sup>7</sup> [https://www.mahaki.com/uploads/1/0/9/7/109751215/kaupapa\\_maori\\_freshwater\\_assessments.pdf](https://www.mahaki.com/uploads/1/0/9/7/109751215/kaupapa_maori_freshwater_assessments.pdf)

<sup>8</sup> Meihana Model: A Clinical Assessment Framework



*Figure 1 Waka Hourua Concept*

5.5 The NTST and TRONA may wish to consider whether a model such as the above is something they wish to explore further and it can be discussed at the next hui if Ngati Tuwharetoa and Ngati Awa wish to discuss it. Prior to that hui, I will provide further information regarding the Waka Hourua model to representatives of the NTST and TRONA.

## 6. CONCLUDING COMMENTS

6.1 Both iwi organisations represent their whānau, marae, hapū, and iwi and also have an automatic benefit to their hapori whānui community. Their kaitiaki responsibilities are similar and go beyond the Ao Tūroa natural environment to include the four well-beings; social, health, environmental and economic.

6.2 Their treaty settlements have provided capability and capacity, and have seen them become prominent leaders in their preferred industries, and communities. As both iwi have a statutory acknowledgement over the Tarawera awa, this highlights the importance of having a solid relationship for working together to take care of the awa. Ngāti Rangitihi is also acknowledging the Tarawera Awa as a culturally significant awa in their Claims Settlement Bill.

6.3 NTST and TRONA acknowledge a concurrent process is progressing. The formal hearing process is set and will take place 1 to 2 July 2021. The tikanga based whakawhanaungatanga engagement is progressing alongside the hearing process. The

opportunity is available to continue discussions to see if a mutual agreement for a solution to the take or issue can be achieved.

- 6.4 If the whakawhanaungatanga process develops opportunities to offer a solution or steps forward towards a solution this can be formalised in a relationship agreement if the NTST and TRoNA consider that appropriate and / or in a Cultural Monitoring Plan.
- 6.5 To address the concerns from TRoNA as stated in their submission and CIA, the whakawhanaungatanga hui has been put in place to determine a way forward.

**David Milner**

**28 May 2021**