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WHOSE WATER? CONCEPTUALISING CHALLENGES OF PROPRIETARY CLAIMS TO GROUNDWATER

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Abstract

The possibility of Māori rights and interests in groundwater has been largely overlooked by lawyers, scholars and the courts in wider conversations about ownership and governance of freshwater. This paper examines how the common law and the Resource Management Act determine rights and interests in water, and whether this can be reconciled with conceptions of water rights and interests in te ao Māori and in accordance with tikanga. It contends the distinct nature of groundwater makes recognition of rights and interests independent of private land ownership too conceptually difficult for resolution by the courts. This is because the doctrine of native title in the New Zealand context lacks the remedial flexibility to confer a bundle of rights to groundwater independent of privately owned land. Instead a new framework for governing freshwater as a whole needs to be developed in partnership between Māori and the Crown despite the inherent challenges for Māori to obtain equal political power.

Keywords: *"Groundwater", "Native title", "Resource Management Act", "Ownership", "Māori water rights"*

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I Introduction

In 2012 the Waitangi Tribunal conducted an urgent inquiry into the Freshwater and Geothermal Resources Claim, in response to the government's decision to sell shares in Mighty River Power, without yet having determined the nature of Māori rights and interests in freshwater.[1] The Tribunal found following an urgent inquiry that "Māori rights in 1840 included rights… akin to the English concept of ownership."[2] Māori interests in freshwater have long been sought, yet following this clear declaration from the Tribunal, no steps have been taken to resolve the nature of these interests, and governments have maintained the position that no one can own water.[3]

While many scholars, courts and the Waitangi Tribunal have asked questions about the nature of legal rights and interests in freshwater, they have overlooked how specifically this body of rules applies to groundwater: subterranean bodies of freshwater. This is necessary if Māori interests in freshwater are to be determined conclusively, rather than concentrating on only surface water bodies.

It is argued there is a conceptual difference between the nature of rights and interests in surface water and groundwater under the current water governance regime, that needs to be better understood as part of any proprietary claim or wider law reforms to water governance and regulation. This is because the notion of ownership at common law is inconsistent with the legal relationship to groundwater, and makes any claim to groundwater conceptually distinct and uncertain compared to native title claims in respect of other resources.

In this paper part II sets out basic geophysical processes affecting the flow of water and different water bodies, and contextualises water use in New Zealand at present.

Part III sets out how the law has determined rights and interests in water both at common law, and under statutory planning regimes that have superseded those earlier rules.

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[1] Waitangi Tribunal *Stage 1 Report on the National Freshwater and Geothermal Resources Claim* (Wai 2358, 2012) at 1.
[2] At 80.
[3] See Ministry for the Environment "Cabinet Paper: Fresh Water Allocation Work Programme" (press release, June 2016); and National Party "Tribunal's water report goes too far" (press release, 29 August 2019).

Part IV looks at the relationship between people and water in *te ao Māori* and the nature of proprietary claims to freshwater.

Part V then goes on to analyse how the distinction between groundwater and fresh water affects the way the law is able to provide a remedial response to a proprietary claim and explores some of the solutions scholars and government have begun to propose.

II Fresh Water Processes and Usage in New Zealand

For a legal framework to be effective in regulating certain behaviour – such as use of freshwater – it is necessary for that framework to reflect "environmental, social, cultural and economic values held by iwi and the community".[4] This section gives an overview of the context of water processes, and usage which such a legal framework has to operate within.

A Water forms and the Hydrological Cycle

The starting point for defining water is the hydrological cycle (the water cycle); a geophysical process through which water is constantly moving and changing form, interconnected with all other bodies of water and affected by the land and environment.[5] Water evaporates from the earth's surface, including vegetation, soil, and open bodies of fresh or saltwater.[6] This water forms clouds, which condense and form precipitation (rain), mainly in the form of rain (but including snow and hail) returning the water to the land, and surface water sources.[7] Precipitation exceeding the amount absorbed by vegetation and surface soil, infiltrates the ground, depending on the characteristics of the soil, and percolating into the ground.[8] Water beyond the rate of infiltration of soil will flow along

[4] Ministry for the Environment and Māori Crown Relations Unit *Shared Interests in Freshwater: A New Approach to the Crown/Māori Relationship for Freshwater* (October 2018) at 5.
[5] Ralph C Heath *Basic Ground-Water Hydrology* (U.S. Geological Survey, Water Supply Paper 2220, 1983) at 5.
[6] At 5.
[7] At 5.
[8] At 5.

the surface, accumulating in streams or lakes.[9] The water which infiltrates the soil, percolating down replenishes bodies of water called aquifers.[10]

The section of the hydrological cycle this paper is directly concerned with is the bodies of water contained in aquifers below the earths surface. The widely accepted definition of an aquifer is "a rock unit that will yield water in a usable quantity to a well or spring".[11] Essentially, an aquifer is any porous body of rock capable of holding water.

Groundwater is defined as "water in the saturated zone that is under a pressure equal to or greater than atmospheric pressure."[12] An aquifer is the rock form capable of supporting water, whereas groundwater is the body of water contained within that aquifer. In that definition, saturated zone refers subsurface rock forms where pores are full of water.[13] That is compared to an unsaturated zone, which sits above a saturated zone, but does not hold water as it is not supported by external pressure.[14] Water in this unsaturated zone is not defined as groundwater, but groundwater sources are recharged through percolation of water from the surface through the unsaturated zone into aquifers.[15]

B Groundwater Usage in New Zealand

The Ministry for the Environment in "Our freshwater 2020" considers than "New Zealand has plenty of freshwater" but much of their report paints a grim picture of the trajectory of water quality, dissatisfaction with usage and allocation, and significant gaps in effective data collection capabilities.[16]

Currently about 24 per cent of New Zealand's water allocation comes from groundwater, yet 80 per cent of the total freshwater 'stock' is groundwater contained in aquifers, though not all of this is extractable. [17] About 73 per cent of all of New Zealand's groundwater is

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[9] At 5.
[10] At 6.
[11] At 6.
[12] At 4.
[13] At 4.
[14] PA White and RR Reeves *The volume of groundwater in New Zealand 1994 to 2001* (Statistics New Zealand, Client Report 2002/79, July 2002) at 2.
[15] Heath, above n 5, at 4.
[16] Ministry for the Environment and Stats NZ *New Zealand's Environmental Reporting Series: Our freshwater 2020* (April 2020) at 54.
[17] White and Reeves, above n 14, at 1.

located in Canterbury,[18] where despite this significant stock of freshwater has experienced significant problems with overallocation. In 2010, 10 of 29 allocation zones were fully allocated, and a further 6 were above 80 percent of the allocation limit.[19]

Irrigation comprises about 74 percent of the national groundwater allocation, making other uses far less significant in terms of quantity.[20] The remaining 26 percent comprises of domestic and industrial usage.[21] Estimates indicate that groundwater irrigation contributes around two billion dollars to the economy, notably at no cost to any user or producer for the quantity of water that is used.[22]

Intensification of commercial water bottling in recent years has received regular media attention, and is indicative of the need for clarification of Māori rights and interests to freshwater. The most recent data indicates that of consented water takes, water bottling for domestic consumption is 0.001 percent of current water allocations, and 0.0002 percent for exported water.[23] These numbers were included in the "Our Freshwater" report, in brief reference to water bottling, but these statistics are misleading without any context about the major concerns with commercial water bottling operations, such as plastic pollution, and water being taken for export at no cost to the operators.[24]

Additionally, a recent 2018 report commissioned by the Ministry for the Environment on the water bottling industry in New Zealand – though identifying the relatively minor use referred to above – made note of the fact that significant investment is being directed to establishing water bottling infrastructure and obtaining resource consents for much larger water bottling operations.[25] The report produced by Deloitte suggests four recently established companies have large capacity for investment, and have obtained resource

[18] Ministry for the Environment and Stats NZ, above n 16, at 54.
[19] At 54.
[20] At 54.
[21] M Moreau and others *Classification of New Zealand hydrogeological systems* (GNS, science report 2018/35, June 2019) at 1.
[22] At 1
[23] Ministry for the Environment and Stats NZ, above n 16, at 59.
[24] *Te Runanga o Ngati Awa v Bay of Plenty Regional Council* [2020] NZEnvC 52 at [39]-[40].
[25] Deloitte *Water Bottling in New Zealand: Industry overview and initial analysis of potential charges* (Ministry for the Environment, January 2018) at 3.

consents which, through these companies alone, if fully utilised, would increase export levels by 400 times its current level.[26]

Commercial water bottling is only one of the purposes for which groundwater is extracted. However, concerns expressed with intensification of commercial water bottling – particularly arguments of the claimants in the recent Environment Court decision in *Te Runanga o Ngati Awa v Bay of Plenty Regional Council* – encapsulate many of the issues with how water is manged in New Zealand: ownership of water, exporting it overseas at no cost, harm to water quality, and how that water is used (in plastic bottles).[27]

III Rights and Interests in Groundwater

Right to freshwater, began at common law by "respond[ing] to the physical characteristics of water and the circumstances of the place where it is located" and were generally incidental to private property rights.[28] The advent of planning legislation refocussed the law from delineating individual rights, to governance based on sustainable management, through regulating designated activities and their impacts on the natural environment.[29] This section explores the origins of these determinants of rights to water, and the ongoing relationship of those sources.

A Inherited Common Law Rules

Historically, the nature of rights and interests in freshwater were determined by a body of common law rules. The three classic cases of *Acton v Blundell*, *Embrey v Owen*, and *Ballard v Tomlinson*, decided during the 1800's set out those rights and interests. In these cases there is a cognisable distinction between rights and obligations in respect of groundwater and surface water because those rules were responses to the contemporary understandings of water flows, and where and how it was used. [30]

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[26] At 3.
[27] *Ngati Awa*, above n 24, at [40].
[28] DE Fisher *Water Law* (LBC, Sydney, 2000) at 64-67.
[29] Grant Hewison "The Resource Management Act 1991" in Peter Salmon and David Grinlinton (eds) *Environmental Law in New Zealand* (Thomson Reuters, Wellington, 2018) 579 at 580.
[30] Fisher, above n 28, at 64.

Tindall CJ's judgment in *Acton* paid attention to the distinct nature of groundwater and surface water, saying that groundwater is "not to be governed by the law which applies to rivers and flowing streams" and instead "that principle, which gives to the owner of the soil all that lies beneath his surface".[31] The reason for this was with a stream "each proprietor of the land has a right to the advantage of the steam flowing in its natural course over his land"[32] whereas with groundwater "no man can tell what changes these underground sources have undergone in the progress of time" and therefore it would be unreasonable to confer such rights and obligations to maintain a reasonable flow between riparian owners to groundwater.[33]

In that case, the defendant had sunk two coal pits on their property which had completely stopped the flow of water to a bore of the plaintiff's. The laws response was to impose different obligations on owners with riparian rights to groundwater compared to owners with riparian rights to a river. This distinction may not seem significant, but it suggests that the courts view was that the rights and obligations of riparian owners with rights to groundwater is less extensive than they would be with a river.

At common law fresh water was treated as common property in accordance with the doctrine of *publici juris* of which the *locus classicus* comes from Parke B's judgment in *Embrey* where he said:[34]

> …flowing water is publici juris… it is public and common in this sense only, that all may reasonably use it who have a right of access to it, that none can have any property in the water itself, except in the particular portion which he may choose to abstract from the stream and take into his possession…

In that case the plaintiff – the operator of a mill – was unsuccessful in a claim against the defendant, for diverting portions of a river into canals for the purpose of irrigation because both were entitled to the flow of the water, and the defendants use did not go beyond *de minimis* or exceed their own right to the flow.[35]

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[31] *Acton v Blundell* (1843) 152 ER 1223 (Exch) at 1235.
[32] At 1233.
[33] At 1233.
[34] *Embrey v Owen* (1851) 155 ER 579 at 580.
[35] At 586.

That principle was expressly applied to groundwater in *Ballard* where the court held "no one has, at any time, any property in water percolating below the surface of the earth even when it is under his own land" and it is merely "a common reservoir or source, in which nobody has any property, but of which everybody had, as far as he can, the right of appropriating the whole."[36]

Cotton LJ stated:[37]

> …[s]uch water, whether in the chalk or other strata, is a natural incident of the land which the man has who owns the surface, unless he has parted with the minerals below.

In that case, the plaintiff was successful in a claim against the defendant for polluting the water with discharge from a printing house, which they had used in a brewery.

At common law, all freshwater is treated as *publici juris* in the sense described by Parke B in *Embrey*: it is "public and common" to all "who have a right of access to it" but "that none can have any property in the water itself".[38]

That qualification – to all with a right of access – creates some ambiguity about the actual extent which water can be understood as common property. A right of access, requires riparian ownership in either the sense that the land abuts a water body or has an accessible source of water flowing beneath it, therefore restricting those rights to private land owners. This is understandable in a system of land ownership based on the English common law doctrines of tenure and estate because no person could legally access water without some right to access the land. However, the application of the same logic to entirely different systems of land ownership and water rights may not necessarily hold true.

Douglas Fisher contrasts the decision in *Embrey* with the Scottish decision in *Linlithgow Magistrates v Elphinstone* where Lord Kames drawing on property doctrines from the Justinian Code, thought "every individual of the nation, especially those who have adjoining land, are entitled to use water for their private purposes."[39] The case still affirmed the position that flowing water could not be the subject of ownership, and Fisher suggests

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[36] *Ballard v Tomlinson and Another* [1881-85] All ER Rep 688 at 691.
[37] At 692.
[38] *Embrey*, above n 34, at 585.
[39] Fisher, above n 28, at 60, citing *Linlithgow Magistrates v Elphinstone* 1768 SCS 331.

"[i]t is mere speculation to distinguish these approaches" since with hindsight we cannot know whether Kames statement would have conferred any greater rights on non-landowners.[40] However, it raises a possible counter-factual as to whether a similar common law system could have responded differently to private land rights and common law rights.

These cases also imply a distinction between rights and interests in groundwater compared to surface water. Tindall CJ in *Acton*, based on the origins of the law, the consequences of treating the bodies of water the same, and authority thought "there is a marked and substantial difference… and that they are not to be governed by the same rule of law."[41]

Landowners with riparian rights to river are said to give implied consent for mutual use of the river, provided they do not diminish the mutual right to receive that the same flow of water transmitted over their land.[42] Whereas with groundwater – more so during the 1800's – there was no clear understanding of the watercourse's flows, thus, it would be unreasonable impose those same obligations to landowners with riparian rights to groundwater.[43] Implicitly, the common law treated rights and obligations in respect of groundwater as being less extensive.

The result in *Ballard* can be understood without resorting to any issues of property rights in water. Understanding at least some connection between wells of the respective parties, the defendant had interfered with the plaintiff's use rights.[44] Although the plaintiff had no property in the water, they had a right to appropriate the water – a right incidental to ownership of the land – that was interfered with by the defendant through their discharge into the well.[45]

The two main points to be drawn from the established common law, imported from England, on rights and interests in freshwater, are firstly, that water is treated as *publici juris* to all with a right of access. Secondly, the law treats the rights and obligations of users of groundwater differently to landowners with riparian rights to surface water. Despite being based on antiquated understanding of the hydrological cycle and water flows, these

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[40] At 67.
[41] *Acton*, above n 31, at 1233.
[42] At 1233.
[43] At 1233.
[44] *Ballard*, above n 36, at 691.
[45] At 691.

cases are useful to understanding how rights and interests in water are conceptualised since they arose in the context of the system of land ownership that was eventually imposed in New Zealand.

B Resource Management Act 1991

The Resource Management Act 1991 (RMA) forms an important background as to why Māori proprietary claims to water have arisen. The RMA creates a comprehensive and integrated approach to resource management, which brings "all environmental domains and a holistic, ecosystemic approach to environmental management" into a single piece of legislation.[46] The purpose of the Act is "to promote the sustainable management of natural and physical resources",[47] which encompasses "safeguarding the life-supporting capacity of air, *water*, soil and ecosystems".[48]

Section 14 governs the use of water, creating a statutory presumption against water use unless that use falls within one of the one of the defined exceptions in s 14(3). These include where allowed by a regional plan, a resource consent, or one of several narrow exceptions for domestic use, firefighting, or use of geothermal resources by *tangata whenua*.[49]

Section 2 gives water a broad definition:[50]

> water—
>
> (a) means water in all its physical forms whether flowing or not and whether over or under the ground:
>
> (b) includes fresh water, coastal water, and geothermal water:
>
> (c) does not include water in any form while in any pipe, tank, or cistern

Additionally "water body" in s 2 is defined to include an aquifer.[51] Together, ss 2 and 14 capture water in all forms as part of the hydrological cycle. Part 6 defines the types of

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[46] Ceri Warnock and Maree Baker-Galloway *Focus on Resource Management Law* (LexisNexis, Wellington, 2014) at 18.
[47] Resource Management Act 1991, s 5(1)
[48] Section 5(2)(b)
[49] Section 14(3).
[50] Section 2.
[51] Section 2.

consents decision makers can issue, including a water permit, defined in s 87 as "a consent to do something that would otherwise contravene s 14."[52]

Part 2 of the Act (ss 5-8) are essential to understanding the Act; it is considered:[53]

> …the touchstone of the Act; some decisions must be subject to it, and other decisions, indirectly, are governed by it through the application of statutory instruments that themselves are subject to it.

Each section includes matters that decision makers under the Act must recognise and provide for, take into account, and have particular regard to, when making a decision under the Act.[54] Section 5 covers matters of national importance, which includes "the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga".[55]

IV The Path to Recognising Māori Rights and Interests in Freshwater

A Why are Māori Seeking Proprietary Rights to Freshwater?

Māori rights and interests in water remain undefined.[56] There are several avenues which Māori have and are exploring to gain recognition of rights and interests in water because historically, and under the current RMA water governance regime, Māori interests have been inadequately provided for.[57]

Outside of the "environmental and cultural values" built into the RMA in Part 2:[58]

> …[t]here is no specific recognition in the Resource Management Act of Māori rights to water, or provision for a Māori water licence of allocation. Māori water relationships have been accounted for as part of planning processes…reflected in

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[52] Section 87.
[53] Warnock and Baker-Galloway, above n 46, at 60.
[54] Sections 5–8.
[55] Section 5(e).
[56] Jacinta Ruru "Māori Legal Rights to Water: Ownership, Management, or Just Consultation" in Trevor Daya-Winterbottom (ed) *Frontiers of Resource Management* (Thomson Reuters, Wellington, 2012) at 461.
[57] See Leigh-Marama McLachlan "Water rights: Māori Council seeks precedent-setting court judgment" (5 March 2020) Radio New Zealand <www.rnz.co.nz>.
[58] Elizabeth Macpherson *Indigenous Water Rights in Law and Regulation: Lessons from Comparative Experience* (Cambridge University Press, Cambridge, 2019) at 109.

> acknowledgements of Māori cultural relationships or values, or involvement in water governance via consultation or co-management arrangements in accordance with the Crown's bottom-line that 'no one can own water'.

As part of the planning process, the Māori relationship with water under Part 2 is only a relevant factor for decisions makers, but the RMA does not require any decision maker engage in consultation,[59] and only requires public notification of applications for consent in prescribed circumstances.[60]

Furthermore, the RMA fails to allow any specific Māori water allocations or reserve allocations for *iwi* or *hapū* land. There is no specific *iwi* allocation available under the RMA, and therefore Māori may be precluded from obtaining any water rights in catchments that are overallocated.[61] Since water rights run with the land,[62] and Māori freehold land consists of only about 5 per cent of New Zealand's total land area, this immediately shows restrictions on the comparative ability of Māori to obtain resource consents to water.[63] The problem is further exacerbated by limited ability for trading of permits under the RMA as is prevalent in overseas jurisdictions,[64] and the RMA's silence on competing applications for consents which the Courts addressed by implementing a first-in-first-served principle to obtaining consents.[65]

Cumulatively, the RMA regime generally works so as to exclude Māori form exercising any kind of political power that would challenge or equal the Crown's sovereignty, and affords no kind of veto power against proposals to use freshwater.[66] Consequently, we are seeing movement towards other avenues for proprietary claims, including under the doctrine of native title.

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[59] Resource Management Act, s 36A.
[60] Sections 95–95C.
[61] Lara Burkhardt *Freshwater Allocation to Iwi: Is it Possible under the Resource Management Act 1991* (2016) Waikato L Rev 81 at 93.
[62] Resource Management Act, s 89 and sch 4.
[63] RP Boast "Māori Land and Land tenure in New Zealand: 150 Years of the Māori Land Court" (2016) NZACL 77 at 78.
[64] Chile is one example a fully operating water market; see Elizabeth Macpherson "Beyond Recognition: Lessons from Chile for Allocating Indigenous Water Rights in Australia" (2017) UNSWJL 1130 at 1132.
[65] *Fleetwing Farms Ltd v Marlborough District Council* [1997] 3 NZLR 257; see also *Central Plains Water Trust v Ngai Tahu Properties Ltd* [2008] NZCA 71, [2008] NZRMA 200.
[66] Andrew Erueti "Māori Rights to Freshwater: The Three Conceptual Models of Indigenous Rights" (2016) 24 Waikato L Rev 58 at 61-62.

B Conceptions of Water in te ao Māori

"According to the Māori worldview, land and water are seen as one holistic entity: *Papatūānuku* (earth mother)."[67] The natural environment came into being with the parting of *Ranginui* and *Papatūānuku*; Māori *whakapapa* (genealogy and the physical decent of everything) stems from this separation creating and intrinsic, ongoing connection between people, and the environment which is the product of the separation of their ancestors, the gods.[68] The Māori *whakatauki*, *ki uta ki tai* (from the mountains to the sea) describes the relationship in *te ao Māori* between people and the environment, which is seen as a unified and indivisible entity.[69] Māori see the natural environment as being a manifestation of the gods and their ancestors, and "the water-body is thus an ancestor itself".[70]

Sir Eddie Durie, former Chief Judge of the Māori Land Court describes the Māori relationship to water as based on *whakapapa* and *wairautanga* (the spiritual connection of everything).[71] Water in all forms, has its own *mauri* (life-force) and *hau* (energy) "which give it a distinct personality or mana".[72] The health and wellbeing of water, could be understood by the presence of *kaitiaki* (guardians) such as birds, fish, and *taniwha* inhabiting the water.[73] The loss of these *kaitiaki* was indicative of the waters *mauri* and *hau* being diminished, which required some kind of response to restore it to its former state.[74]

Annette Sykes, giving evidence to the tribunal during the Stage 1 hearings of the Freshwater and Geothermal Resource Claim said:[75]

> …while there are separate bodies or 'different states of wai', the cyclical, reciprocal relationship of Te Miina and Papatūānuku show their interconnections, 'how they sustain and replenish each other, often through the spiritual protection of taniwha.

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[67] Jacinta Ruru *The Legal Voice of Māori in Freshwater Governance: A Literature Review* (Landcare Research, October 2009) at 81.
[68] Sir Edward Taihākurei Durie and others "Ngā Wai o te Māori: Ngā Tikanga me Ngā Ture Roia" (paper prepared for the New Zealand Māori Council, 23 January 2017) at 9.
[69] Ministry for the Environment, above n 16, at 75.
[70] At 9.
[71] Durie and others, above n 68, at 8.
[72] At 11.
[73] At 11–12.
[74] At 11.
[75] Waitangi Tribunal, above n 1, at 35.

The Tribunal's response was that "that Māori rights and interests have spiritual as well as physical sources, and they embrace a reciprocal relationship with, and mutual obligations of protect towards, the Māori environment".[76] Furthermore:[77]

> That understanding rejects the divisibility of water bodies into beds, banks, water and aquatic lifeforms, and it also rejects the divisibility of particular water bodies from each other and from the sustaining earth and skies.

The defining features of Māori conceptions of water, are the indivisibility of water bodies from the land, and the *whakapapa* connection between people and the natural environment. The sophistication of this understanding of the natural environment is noteworthy. The understanding of the interconnection of the water and water bodies bears much similarity to the complex processes of the water cycle, and the links between groundwater and surface water.

C Mechanisms for Māori Proprietary Claims to Groundwater

Jacinta Ruru identifies three possible avenues via which Māori are able to "pursue rights to water": through RMA mechanisms and litigation, through the Treaty of Waitangi claims process, or through the doctrine of native title.[78] Attempts have been made through the former two options; however, they have not to date resulted in any resolution of Māori proprietary interests in freshwater. Consequently, the New Zealand Māori Council has expressed intention to resort to litigation under the doctrine of native title as another attempt at resolution.[79]

1 Limited Success using RMA Mechanisms

The RMA's failure to adequately provide for Māori rights and interests in freshwater has resulted in the repetitive failure of claimants,[80] despite assertions that the provisions in Part 2 of the RMA provide a strong basis for recognition and assertion of Māori interests.[81] For example, one review of reported cases indicated of 17 appeals against resource consents,

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[76] At 35.
[77] At 35.
[78] Jacinta Ruru "Undefined and Unresolved" Exploring Indigenous Rights in Aotearoa New Zealand's Freshwater Legal Regime" (2010) The Journal of Water Law 236.
[79] McLachlan, above n 65.
[80] Ruru, above n 67, at 49.
[81] *McGuire v Hastings District Council* [2002] 2 NZLR 577 at 594; and Ruru, above n 76, at 238.

the Māori appellants in only 3 of those cases achieved any measure of success.[82] This is because the wording of ss 7 and 8 places a low burden on decision makers to merely, "take into account the principles of the Treaty",[83] and "have particular regard to" matters such as *kaitiakitanga*,[84] which carry less weight than the requirement in s 6 for example "to recognise and provide for" certain factors.[85]

Some scholars have explored the potential for an iwi allocation to be made within the current RMA framework. However, at present any such allocation would be restricted to cultural use, because a broad allocation for iwi, is not contemplated by a consenting authorities jurisdiction to allocate water on the basis of activity type under s 30(4)(e).[86]

2 Slow Responses to Waitangi Tribunal Recommendations

The Waitangi Tribunal has given definitive statements of the nature of Māori rights and interests in freshwater yet no steps have been taken towards providing for those rights in a meaningful way. The Tribunal in the Stage 1 report said:[87]

> …Māori rights in 1840 included rights of authority and control of their *taonga* (water bodies), and rights akin to the English concept of ownership…[and] that the Crown's Treaty duty in 1840 was to devise a form of title that would have conferred on Māori a proprietary interest in the rivers (and other water bodies) that could be practically encapsulated within the legal notion of ownership of the waters…

The Tribunal then in its stage 2 report went into greater detail about the form of proprietary redress within the current regime, as well as necessary reforms. These include a more equitable allocation system than the first-in-first-served principle, specific iwi and hapū allocations, Māori land allocations, and establishment of co-management bodies to explore proprietary redress.[88]

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[82] Ruru, above n 67, at 49.
[83] Resource Management Act 1991, s 8.
[84] Section 7.
[85] Section 6.
[86] Burkhardt, above n 61, at 93.
[87] Waitangi Tribunal, above n 1, at 80.
[88] Waitangi Tribunal *Stage 2 Report on the National Freshwater and Geothermal Resources Claim* (Wai 2358, 2019) at 562–563.

Despite these recommendations, the current government has ruled out addressing unresolved Māori proprietary interests in water before mechanisms for improvement of water quality have been implemented.[89] At what stage water quality issues have been appropriately addressed before any negotiation or discussion of proprietary redress is not entirely certain. Moreover, it is uncertain why the government has chosen to separate issues of water quality and proprietary interest when the two issues are interrelated as Māori consultative bodies on freshwater have highlighted as part of their own work programmes.[90]

As such, although the findings of the Tribunal have provided a promising foundation for addressing Māori proprietary claims, the slow and deflective responses from central government have left claimants and Māori advocates looking for alternative avenues to advance proprietary claims.

3 A Native Title Claim to Freshwater

The New Zealand Māori Council have expressed intention to issue proceedings in the courts for clarification of Māori rights to freshwater; they emphasise previous findings that extant Māori customary title to freshwater has not been extinguished by any Act.[91] The Waitangi Tribunal itself has recommended a test case be taken to determine the extent of rights and interests protected by Article 2 of the Treaty of Waitangi.[92]

During the Freshwater and Geothermal Resources Inquiry, there was some debate amongst the claimants as to whether the claim being advanced was based on the doctrine of native title.[93] Some claimants denied this as being the grounds for a claim, whereas Janet Mason, lawyer for a group of interested parties said her clients do rely on native title.[94]

Originally, considerable authority favoured of the view that common law rights to fresh water were extinguished. David Williams writing early on the Water and Soil Conservation

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[89] Ministry for the Environment and Ministry for Primary Industries "Essential Freshwater: Healthy Water, Fairly Allocated" (October 2018) at 25.
[90] Kāhui Wai Māori "Te Mana o te Wai: The Health of Our Wai, the Health of Our Nation" (April 2019) at 5.
[91] McLachlan, above n 65.
[92] Waitangi Tribunal, above n 88, at 563.
[93] Waitangi Tribunal, above n 1, at 92.
[94] At 92.

Act 1967 (WSCA) was of the view s 21(1) extinguished any common law rights to freshwater, though the issue was lacking much judicial consideration.[95] Section 21 stated:[96]

> Except as expressly authorised by or under this Act… the sole right to… divert or take natural water… is hereby *vested* in the Crown subject to the provisions of this Act…

William's views were supported by the judgment in *Glenmark Homestead v North Canterbury Catchment Board* where, referring to s 21(1), they though "[c]ommon law rights are extinguished and statutory rights where appropriate are to take their place."[97] With the passing of the RMA, and the repeal of the WSCA, s 21 was given continued effect by s 354(1) of the RMA, specifying its repeal:[98]

> …shall not affect any right, interest, or title, to any land or water acquired, accrued, established by, or vested in, the Crown before the date on which this Act comes into force, and every such right, interest and title shall continue after that date as if those enactments had not been repealed.

However, the Waitangi Tribunal, the courts and several scholars have moved towards the changing view that doctrine of native title requires clear and plain intention to extinguish a particular right.[99] On that view, it is doubtful whether s 21 of the WSCA and the succeeding provision in the RMA extinguish any native title rights to freshwater because declaring rights to water as *vested* in the Crown is not a clear expression of intention to obtain full beneficial or ownership.[100] In *Yanner v Eaton* a provision which declared wild animals property of the Crown was insufficiently clear to confer and extinguish any native title rights.[101] Therefore, declaring the right to divert or take water to be vested in the Crown, seems to fall far short of absolute beneficial ownership, and instead indicates a conferral of rights to regulate water usage.[102]

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[95] DAR Williams *Environmental Law* (Butterworths, Wellington, 1980) at 98.
[96] Water and Soil Conservation Act 1967, section 21.
[97] *Glenmark Homestead v North Canterbury Catchment Board* [1978] 1 NZLR 407 at 413 per Woodhouse J.
[98] Resource Management Act 1991, s 354.
[99] *Te Weehi v Regional Fisheries Officer* [1986] 1 NZLR 680 at 691; and *Mabo v State of Queensland (No 2)* (1992) 175 CLR 1 (HCA) at 47.
[100] *Yanner v Eaton* [1999] HCA 53, (1999) 201 CLR 351 at [22]–[24].
[101] At [22]–[24].
[102] Ruru, above n 67, at 84.

The doctrine of title is a way of the common law conceptualising rights and interests of indigenous sovereign nations that exist beyond the common law even after a purported change of sovereignty.[103] The way of understanding those remaining rights and interests is by treating the Crown as having acquired a radical or underlying title to the land (*imperium*) that does not necessarily disturb pre-existing proprietary rights of the indigenous peoples, which never owed their existence to the English common law.[104]

The doctrine of native title was originally used as a tool to facilitate what the colonists saw as lawful extinguishment of extant indigenous rights and interests but eventually it became a device used by the courts to recognise any remaining proprietary rights.[105] The challenge for courts was how to recognise indigenous proprietary rights inconsistent with the common law.

Viscount Haldane LC in *Amodu Tijani v Secretary, Southern Nigeria* gave a definitive statement on such conflicts of law saying:[106]

> … in interpreting the native title to land… [t]here is a tendency, operating at times unconsciously to render that title conceptually in terms which are appropriate only to systems which have grown up under English Law. But this tendency has to be held in check closely… [as] in the various systems of native jurisprudence… there is no such full division between property and possession as English lawyers are familiar with.

This serves as a warning against determining the nature of indigenous rights only to the extent that they are consistent with the capacity of the colonial legal system to recognise those rights, since those rights in no way owe their existence to that legal system. Those rights are constituted by indigenous systems of law.[107]

In New Zealand, the hallmark decision defining the parameters of the doctrine of native title, and its contemporary application came in *Attorney-General v Ngati Apa* where the Court of Appeal found native title rights to the foreshore and seabed were never extinguished and the Māori Land Court had jurisdiction to investigate and award title to

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[103] PG McHugh *Aboriginal title: The Modern Jurisprudence of Tribal Land Rights* (Oxford University Press, Oxford, 2011) at 1.
[104] At 3.
[105] Richard Boast *Foreshore and Seabed* (LexisNexis, Wellington, 2005) at 44.
[106] *Amodu Tijani v Secretary, Southern Nigeria* [1921] 2 AC 399 at 403.
[107] Boast, above n 105, at 51–52.

the foreshore and seabed.[108] Importantly, Elias CJ recognised that native title can be conceptualised as existing on a spectrum, reflecting the nature of the particular right in accordance with the indigenous system of law, that "may extend from usufructory rights to exclusive ownership with incidents equivalent to those recognised by fee simple title."[109] The decision in *Te Weehi* is evidence native title can extend to rights as specific as the right to collect undersized shellfish.[110]

Based on *Ngati Apa*, a court would likely need to address four issues for a successful native title claim to water.[111] Proof that *tikanga* provides for customary interests in freshwater; for those rights not to have been extinguished by state; whether native title can extend to freshwater; and whether native title rights can take priority over any contrary common law doctrine such as *publici juris* of freshwater.[112]

V Challenges to Accommodating Proprietary Rights in Groundwater

Reconciling the way that two different legal systems recognise rights and interests in freshwater may be difficult, however, that provides no justification for failing to do so. Māori have the challenge, as part of a native title claim to freshwater, of conceptualising how any rights can coexist with the current system of water governance. It is argued here that ownership of groundwater independently of surrounding private land is not conceptually feasible and a coherent and equitable framework for allocation and governance of *all* fresh water needs to be developed to provide for Māori rights and interests in water.

A Barriers to a Native Title Claim to Groundwater

It is uncertain whether a court could accept a claim for ownership of groundwater considering each of the main issues a court would need to address, because of the distinct characteristics of groundwater.

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[108] *Attorney-General v Ngati Apa* [2003] 3 NZLR 643.
[109] At 656; see also *Te Runanganui o Te Ika Whenua Inc Society v Attorney-General* [1992] 2 NZLR 20 at 24 per Cooke P.
[110] Ruru, above n 67, at 84.
[111] At 80.
[112] At 80.

Claimants would first have to prove *tikanga* provides for customary interests in groundwater.[113] This poses the first barrier as there is no clear authority supporting Māori rights and interests in groundwater. The claimants during the Freshwater and Geothermal Resources Claim argued that Māori had "rights in groundwater and in aquifers was such that the closest English equivalent in 1840 was proprietary rights – and 'full-blown' ownership at that."[114] But the Tribunal said they "did not receive specific submissions from the claimants as to the nature and extent of rights in aquifers or groundwater" and as a result said "we lack the evidence and legal argument to make a finding about the nature and extent of Māori rights in aquifers and groundwater".[115] They said the claimants "assumed that the 'indicia of ownership' applied to [groundwater and aquifers] in the same manner as to other water resources."[116]

The claimants employed two primary indicia of ownership: certain bodies were the domain of *taniwha*, and groundwater was indivisible from surface and seawater scientifically and in accordance with Māori conceptions of the environment.[117] Without disregarding the strength or legitimacy of this evidence, as summarised by the Tribunal, these arguments did not illustrate the same connection that could be shown to surface water where 12 indicia of ownership could be proven.[118]

This problem may have been one of Annette Sykes' main concerns underling her submission that Māori rights and interests in freshwater need to be interpreted in a *kaupapa* Māori framework, instead of focussing on how those rights translate into ownership as understood at common law.[119] The 19th century cases discussed tell us that the common law does not recognise ownership of freshwater; it is public to all with a right of access.[120] Riparian owners arguably have rights akin to ownership because incidental to land ownership is rights to possess a portion of water, and a right to exclude others from access. However, just because that bundle of rights might be akin to ownership, courts do not

[113] At 80.
[114] Waitangi Tribunal, above n 1, at 80.
[115] At 80–81.
[116] At 80.
[117] At 74–75.
[118] At 80.
[119] At 34.
[120] *Embrey*, above n 34, at 580.

recognise it as ownership. Thus, it is unlikely a court would determine the bundle of rights Māori had in groundwater at 1840 could amount to ownership.

The question is whether Māori have rights and interests in freshwater in accordance with *tikanga*, and there is no shortage of authority to support this. However, it is unhelpful to confine those rights and interests to common law concepts, because the common law never recognised ownership of water. Sir Edward Taihākurei Durie characterises Māori interests best saying:[121]

> When the Prime Minister declared that no one owned water, some Māori implicitly agreed, for in Māori law, land and water are not capable of being owned in the sense of the private ownership of a tradeable commodity…[b]ut what the tribes had was exclusive authority (mana) over the land and waters, subject to regulation by no one, and with the power to exclude access and use by others…[w]hat they effectively had was ownership plus.

This frames the extent of Māori rights as beyond ownership at common law. Even though the Waitangi Tribunal was unable to find that *iwi* and *hapū* had rights akin to ownership, the extent of rights and interests explained by Sir Eddie seem to more than adequately illustrate the relationship between Māori and all water in accordance with *tikanga*. It is unfortunate that the Waitangi Tribunal was unable to give the weight of their opinion on the same issue given the limited evidence before them and the constraints of an urgent hearing at Stage 1.

The next two question for a court to address are: whether common law rights to freshwater have been extinguished by state; and whether the doctrine of native title extends to freshwater.[122] As described at page 20, s 21 of the WSCA and its continuation under the RMA do not equivocally extinguish any common law rights, a view which has the support of the Waitangi Tribunal, and the decision of the High Court of Australia in *Yanner*. Whether the doctrine of native title is capable of extending to water is uncertain and has not been directly addressed by the New Zealand courts. However, courts have moved closer

[121] Sir Edward Taihākurei Durie "Indigenous Law and Responsible Water Governance" in Betsan Martin, Linda Te Aho and Maria Humphries-Kil (eds) *ResponsAbility: Law and Governance for Living Well with the Earth* (Routeledge, Abingdon, 2019) at 140.
[122] Ruru, above n 67, at 80.

to recognition of interests in water. For example in *Paki v Attorney-General (No 2)* the courts recognised the possibility of ownership of riverbeds by displacing the common law *ad medium filum* rule, which presumed the intention of riparian owners to convey rights to the midpoint of a riverbed, which would potentially conflict with the customs of Māori riparian landholders.[123] In Australia the Native Title Act 1992 gives the courts wide jurisdiction to make determination of native title and its scope in relation to both water and land.[124]

The fourth question – whether a court would find the doctrine of native title trumps the doctrine of *publici juris* of freshwater – is uncertain, since is it unclear to what extent both doctrines can coexist in certain freshwater bodies. In *Yarmirr* the High Court of Australia dismissed the appellants claim under the Native Title Act to exclusive control of a section of sea equating to ownership because that would be inconsistent with "public rights of navigation and fishing as well as the right of innocent passage."[125] However, a later High Court decision went further and recognised the possibility of exclusive possession, though the original common law position regarding fishing rights had been modified by statute there.[126]

The native title doctrine in Australia has developed and been provided for quite different to that in New Zealand, but these cases still support the possibility of native title rights being recognised in water. The challenge for a court would be determining the extent of rights of possession and exclusivity.

B The Incoherence of Private Land Ownership and Māori Groundwater Rights

Underlying the problem to be addressed as part of a native title claim, is a contradiction between the English system of private land ownership, and the way rights and interests in water are viewed in *te ao Māori* and determined in accordance with *tikanga*. While a native title claim could be successful, the problem here is reconciling those two systems of law, and conceptualising the remedial outcome of a successful claim.

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[123] See generally *Paki v Attorney-General (No 2)* [2014] NZSC 118, 1 NZLR 67.
[124] Native Title Act 1992 (AU), s 223.
[125] *Commonwealth of Australia v Yarmirr* [2001] HCA 56, (2001) 208 CLR 1 at [98]–[100].
[126] *Northern Territory of Australia & Anor v Arnhem Land Aboriginal Trust & Ors* [2008] HCA 29, (2008) 236 CLR 24.

Rights to groundwater, both at common law and under the current RMA regime, have always been appurtenant to certain pieces of land, despite the doctrine of *publici juris* denying those rights to water could amount to ownership.[127] At common law, the effect of the riparian doctrine meant that riparian land owners had rights to take water.[128] Under the RMA, water permits are always appurtenant to certain pieces of land,[129] though may be transferred in certain circumstances where the allocation comes from the same catchment.[130]

This problem stems in part from the dubious application of property law to water. Douglas Fisher explains:[131]

> Although notions of property and ownership are not particularly helpful in relation to water they are and always have been used in this context. In the English language property is the expression often used to describe the thing owned. It also prescribes… the regime of rights and obligations which relate to the thing owned.

Moreover, "in its unconfined state…water has unique features that make it difficult to assimilate to the world of ordinary commodities"; it's ongoing an largely uncontrollable subjection to the hydrological cycle.[132]

There is an inherent contradiction in ascribing to water the characteristic of being public and common where rights to that water can only be exercised on land subject to ownership rights with incidents of exclusive possession. That problem is most prevalent in relation to groundwater because "who owns – and hence controls – water depends very much upon the part of the water cycle to which it is addressed".[133]

It seems at common law, the rules the courts developed were the only way of restraining private land owners from exercising potentially inexhaustible bodies of water without too severely restricting rights that were traditionally associated with private land ownership.

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[127] *Embrey*, above n 34, at 580.
[128] *Acton*, above n 31, at 1235.
[129] Resource Management Act, s 88 and sch 4.
[130] Section 136(2)(b).
[131] Douglas Fisher *Law and Governance of Water Resources: The Challenge of Sustainability* (Edward Elgar, Cheltenham) at 67.
[132] Thomas W Merrill and Henry E Smith *The Oxford Introductions to US Law: Property* (Oxford University Press, New York, 2010) at 57–58.
[133] Fisher, above n 131, at 67.

With the industrial revolution in England, the long established system of private land ownership combined with new technology and exponential growth in production gave landowners access to invaluable resources with water.[134] The three classic cases cited are all examples of disputes between competing industrial activities in which the courts had to delineate the rights and obligations which riparian owners owed to each other. Resorting to doctrines such as *publici juris*, combined with land torts and property law were the only way judges could restrict water rights without extensive systems of resource management that now dominate environmental law.[135]

Even though systems like the RMA have replaced or superseded those original common law rules, systems of resource management had to develop rules and principles for how water could be used in the context of private land ownership, where individuals had the power to exclusively access and exploit those sources of water. So although the law tells us that water cannot be owned, and it is a public and common resource, in reality that is a carry over from the common law as the only way of preventing private land owners from unconstrained use of such resources.

With the colonisation of New Zealand, that system of determining interests in water was presumed to apply, yet it was entirely inconsistent with Māori conceptions of water until a the system of private land ownership was implemented in accordance with the doctrines of tenure and estates. As Sir Eddie Durie said, land nor water were capable of being privately owned by individuals; *iwi* and *hapū* collectively exercised *mana* and *kaitiakitanga* over the natural environment as a whole which was conceived as an indivisible entity.[136]

As the Waitangi Tribunal have said, Māori have rights in freshwater at 1840 that were akin to ownership, and those rights do not appear to have been extinguished by any statute.[137] It is possible a native title claim to freshwater generally would succeed. The problem is, given the contemporary New Zealand context of private land ownership, and industrial

[134] See Margaret Davies *Property: Meanings, histories, theories* (Routeledge-Cavandish, Abingdon, 2007) at 67–69; See also Fisher, above n 131, at 168–172.
[135] Fisher, above n 131, at 168–172.
[136] Durie, above n 121, at 140.
[137] Waitangi Tribunal, above n 1, at 80.

reliance on water, how to reconcile these two systems of law, and create an equitable system for allocation and governance.

C Conceptualising Remedies and Reforms to Water Rights

When conceptualising how rights and interests in groundwater are recognised, it is no longer as apparent that a distinction should be maintained between groundwater and surface water. At common law there was a distinction based on the obligations of riparian owners because at that time the effect of a take could not be known, but that is no longer necessary with the types of technology for extracting groundwater and the increased knowledge of flows and allocations in defined catchments. Māori did not distinguish between land and water bodies seeing them as one indivisible entity,[138] yet a distinction in how we conceive proprietary rights is still made based on the inability to have the kind of connection to groundwater that would be necessary to advance a claim.[139] This Māori view is in line with scientific understanding of the hydrological cycle that all water bodies are interconnected and constantly flowing.

The RMA makes no distinction between water permits for groundwater or surface water.[140] The practical difference is only relevant to the extent that an allocation is available within a certain catchment based on any minimum flow, recharge and allocation limits as part of the planning document an application is determined under.

While current knowledge of water bodies and the RMA framework renders a distinction between groundwater and surface water somewhat arbitrary, the key problem is adapting the system of property law to accommodate rights and interest in groundwater separately from the surrounding land. It is possible to conceptualise a bundle of rights in respect of surface water being conferred on claimants; it is much more difficult to conceptualise a similar bundle of rights in respect of groundwater especially is one considers the primary indicia of ownership to be possession.[141]

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[138] Ruru, above n 67, at 80.
[139] Waitangi Tribunal, above n 1, at 80.
[140] Resource Management Act, s 87.
[141] AM Honoré "Ownership" in RG Hammond (ed) *Personal Property: Commentary and Materials* (Oxford University Press, Auckland, 1992) at 129.

As discussed already there is precedent for courts to grant – or allow investigation into – a fee simple title in respect of river beds, or recognise qualified exclusive ownership of sections of ocean. Elias CJ in *Ngati Apa* in obiter indicated that qualified exclusive ownership was possible under the doctrine of native title.[142] Furthermore, in *Paki (No 2)* the Supreme Court accepted that the Māori Land Court could investigate title to riverbeds and found the *ad medium filum* presumption could be displaced by the circumstances.[143] The High Court of Australia, originally was of the view that exclusive ownership of water would be inconsistent with common law rights,[144] but in a later judgment changed their view.[145]

Comparatively, it is difficult to conceptualise those rights in respect of a certain body of groundwater. There is no comparable precedent to grant something like a fee simple estate in an aquifer as there is with rivers. This is not impossible to envisage, but doing so creates more questions and uncertainty as to how recognising Māori rights to a body of groundwater would sit with rights of significant numbers of private landowners at the surface. Those questions are for policy makers to investigate, however, the complexity of determining the nature of those rights indicates groundwater needs to be a specific area of focus when conceptualising how water as a whole is governed, and what rights and powers Māori should be given that they lack under the current RMA regime.

Policy makers as part of that exercise also have to consider the purpose of obtaining rights to groundwater when conceptualising remedies. The government focus as part of the Treaty of Waitangi settlement process has been on cultural and limited proprietary redress, without conferring any "self-government, self-determination or *tino rangatiratanga*" in respect of water and restricting any redress to a bundle of rights short of full ownership.[146] Successful claims to proprietary interest, or significant roles in governance have been achieved in respect of customary fishing and resource entitlements, and rights to territorial sea, lakes, rivers, and the foreshore and seabed. Unequivocally, rights and interests in groundwater

[142] *Ngati Apa*, above n 108, at [9]–[10] and [46]–[47].
[143] See generally *Paki (No 2)*, above n 123.
[144] *Yarmirr*, above n 125, at [98]–[100].
[145] See generally *Arnhem*, above n 126.
[146] Andrew Erueti "Māori Rights to Freshwater: The Three Conceptual Models of Indigenous Rights" (2016) Waikato L Rev 58 at 59 and 66.

are highly valuable, however, the traditional connection to groundwater cannot be illustrated in the same way as these other resources.

The avenue to a more coherent framework for governance and determinations of rights and interests in all water, requires a negotiated approach between Māori and the Crown. But that requires the willingness of central government to give Māori and equal voice and power of veto in water governance, which has proved near impossible in most cases.[147] Determination of those rights before the courts benefits from legal certainty, but lacks to ability to translate those rights in to an equitable and coherent governance framework.[148] Either way, this section has shown conceptualising Māori rights and interests in groundwater in the current legal and political context is no easy exercise.

VI Conclusion

Māori irrefutably have unresolved rights and interests in freshwater. The Waitangi Tribunal were of the view those rights and interests in at least some water bodies at 1840, amounted to ownership. However, by virtue of alienation of land and limited opportunities to participate in governance of resources those rights were diminished and never returned. Māori have sought rights by trying to operate within statutory mechanisms, through the Waitangi Tribunal and may attempt to litigate a native title claim. What this paper has shown is that despite the spectrum of rights obtainable under the doctrine of native title, the physical characteristics of groundwater, and the state of our freshwater and land laws makes it conceptually difficult for any interest in groundwater to translate to a remedy including a collection of proprietary rights. Therefore, it is important that certain rights to groundwater and a much more significant role for Māori in water governance are addressed as part of wider reforms to water governance in New Zealand.

[147] At 72.
[148] At 72.

Word count

The text of this paper (excluding table of contents, footnotes, and bibliography) comprises approximately 7938 words.

VII Bibliography

A Cases

1 New Zealand

Attorney-General v Ngati Apa [2003] 3 NZLR 643.

Central Plains Water Trust v Ngai Tahu Properties Ltd [2008] NZCA 71, [2008] NZRMA 200.

Fleetwing Farms Ltd v Marlborough District Council [1997] 3 NZLR 257.

Glenmark Homestead v North Canterbury Catchment Board [1978] 1 NZLR 407.

McGuire v Hastings District Council [2002] 2 NZLR 577.

Paki v Attorney-General (No 2) [2014] NZSC 118, [2015] 1 NZLR 67.

Te Runanganui o Te Ika Whenua Inc Society v Attorney-General [1992] 2 NZLR 20.

Te Runanga o Ngati Awa v Bay of Plenty Regional Council [2020] NZEnvC 52.

Te Weehi v Regional Fisheries Officer [1986] 1 NZLR 680.

2 Australia

Commonwealth of Australia v Yarmirr [2001] HCA 56, (2001) 208 CLR 1.

Northern Territory of Australia & Anor v Arnhem Land Aboriginal Trust & Ors [2008] HCA 29, (2008) 236 CLR 24.

Mabo v State of Queensland (No 2) (1992) 175 CLR 1 (HCA).

Yanner v Eaton [1999] HCA 53, (1999) 201 CLR 351.

3 England and Wales

Acton v Blundell (1843) 152 ER 1223 (Exch).

Amodu Tijani v Secretary, Southern Nigeria [1921] 2 AC 399.

Ballard v Tomlinson and Another [1881-85] All ER Rep 688 (EWCA).

Embrey v Owen (1851) 155 ER 579 (Exch).

4 Scotland

Linlithgow Magistrates v Elphinstone 1768 SCS 331.

B Legislation

1 New Zealand

Resource Management Act 1991.

Water and Soil Conservation Act 1967.

2 Australia

Native Title Act 1993 (AU).

C Books and Chapters in Books

Richard Boast *Foreshore and Seabed* (LexisNexis, Wellington, 2005).

Margaret Davies *Property: Meanings, histories, theories* (Routeledge-Cavandish, Abingdon, 2007).

Sir Edward Taihākurei Durie "Indigenous Law and Responsible Water Governance" in Betsan Martin, Linda Te Aho and Maria Humphries-Kil (eds) *ResponsAbility: Law and Governance for Living Well with the Earth* (Routledge, Abingdon, 2019).

DE Fisher *Water Law* (LBC, Sydney, 2000).

Douglas Fisher *Law and Governance of Water Resources: The Challenge of Sustainability* (Edward Elgar, Cheltenham).

AM Honoré "Ownership" in RG Hammond (ed) *Personal Property: Commentary and Materials* (Oxford University Press, Auckland, 1992).

Grant Hewison "The Resource Management Act 1991" in Peter Salmon and David Grinlinton (eds) *Environmental Law in New Zealand* (Thomson Reuters, Wellington, 2018).

Elizabeth Macpherson *Indigenous Water Rights in Law and Regulation: Lessons from Comparative Experience* (Cambridge University Press, Cambridge, 2019).

PG McHugh *Aboriginal title: The Modern Jurisprudence of Tribal Land Rights* (Oxford University Press, Oxford, 2011).

Thomas W Merrill and Henry E Smith *The Oxford Introductions to US Law: Property* (Oxford University Press, New York, 2010).

Jacinta Ruru "Māori Legal Rights to Water: Ownership, Management, or Just Consultation" in Trevor Daya-Winterbottom (ed) *Frontiers of Resource Management* (Thomson Reuters, Wellington, 2012).

Ceri Warnock and Maree Baker-Galloway *Focus on Resource Management Law* (LexisNexis, Wellington, 2014).

DAR Williams *Environmental Law* (Butterworths, Wellington, 1980).

D Journal Articles

RP Boast "Māori Land and Land tenure in New Zealand: 150 Years of the Māori Land Court" (2016) NZACL 77.

Lara Burkhardt "Freshwater Allocation to Iwi: Is it Possible under the Resource Management Act 1991" (2016) Waikato L Rev 81.

Andrew Erueti "Māori Rights to Freshwater: The Three Conceptual Models of Indigenous Rights" (2016) 24 Waikato L Rev 58.

Elizabeth Macpherson "Beyond Recognition: Lessons from Chile for Allocating Indigenous Water Rights in Australia" (2017) UNSWJL 1130.

Jacinta Ruru "Undefined and Unresolved" Exploring Indigenous Rights in Aotearoa New Zealand's Freshwater Legal Regime" (2010) The Journal of Water Law 236.

E Reports

Deloitte *Water Bottling in New Zealand: Industry overview and initial analysis of potential charges* (Ministry for the Environment, January 2018).

Sir Edward Taihākurei Durie and others *Ngā Wai o te Māori: Ngā Tikanga me Ngā Ture Roia* (paper prepared for the New Zealand Māori Council, 23 January 2017).

Ralph C Heath *Basic Ground-Water Hydrology* (U.S. Geological Survey, Water Supply Paper 2220, 1983).

Kāhui Wai Māori *Te Mana o te Wai: The Health of Our Wai, the Health of Our Nation* (April 2019).

M Moreau and others *Classification of New Zealand hydrogeological systems* (GNS, science report 2018/35, June 2019).

Jacinta Ruru *The Legal Voice of Māori in Freshwater Governance: A Literature Review* (Landcare Research, October 2009).

Waitangi Tribunal *Stage 1 Report on the National Freshwater and Geothermal Resources Claim* (Wai 2358, 2012).

Waitangi Tribunal *Stage 2 Report on the National Freshwater and Geothermal Resources Claim* (Wai 2358, 2019).

PA White and RR Reeves *The volume of groundwater in New Zealand 1994 to 2001* (Statistics New Zealand, Client Report 2002/79, July 2002).

F Government Materials

Ministry for the Environment *Cabinet Paper: Fresh Water Allocation Work Programme* (press release, June 2016).

Ministry for the Environment and Māori Crown Relations Unit *Shared Interests in Freshwater: A New Approach to the Crown/Māori Relationship for Freshwater* (October 2018).

Ministry for the Environment and Ministry for Primary Industries *Essential Freshwater: Healthy Water, Fairly Allocated* (October 2018).

Ministry for the Environment and Stats NZ *New Zealand's Environmental Reporting Series: Our freshwater 2020* (April 2020).

G Internet Materials

National Party "Tribunal's water report goes too far" (press release, 29 August 2019).

Leigh-Marama McLachlan "Water rights: Māori Council seeks precedent-setting court judgment" (5 March 2020) Radio New Zealand <www.rnz.co.nz>.