

OLIVIA KRAKOSKY

**HOW CAN WE TURN THE TIDE ON NEW ZEALAND'S
BROKEN WATER SYSTEM: COULD PRIVATISATION BE
THE ANSWER?**

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Abstract

Many jurisdictions around the world face issues with freshwater management. Some have gone down the route of privatisation. Government and public attention is on the significant flaws in New Zealand's water systems at the moment, but privatisation is not an option that is often proposed to fix it. Privatisation comes with serious downsides and is often not the best economic option. What could be better is a clear national direction and vision, under one body, with various regulators ensuring interests in public health, environmental protection and economic growth are balance. For Aotearoa, Māori involvement will be vital and a co-governance model could be used.

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Subjects and Topics

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Mātauranga Māori

Co-governance

I Introduction

In many jurisdictions, ownership and management of freshwater resources is fragmented, and New Zealand is no different. Freshwater is a fundamental public good and there are many competing interests in freshwater, traversing areas of public health, environmental protection, and economics and industry. With a publicly owned system of different water management organisations, multiple competing policy interests, and no overarching body or policy, New Zealand's freshwater management system is barely staying afloat. There is fragmentation at all levels, local and national, and the Crown largely ignores Māori interests in water. Recent examples in New Zealand cities show the state of the freshwater system: pipes have burst in Wellington, cutting access to water and closing inner city streets for months;¹ thousands of people have been sick from pollution in Havelock North's drinking water;² Canterbury's water has dangerously high nitrate levels;³ and water infrastructure in Auckland is almost at breaking point.⁴

Other parts of the world use full or partial privatisation of freshwater management to resolve these issues, and New Zealand could undertake similar reform to turn the tide on our broken water system. There are clear benefits to privatisation, including increased funding, additional expertise and better allocation of resources. New Zealand has privatised public goods in the past, like electricity and telecommunications. However, there are

¹ Damian George and Joel MacManus "Under pressure: Wellington water woes 'widespread and fundamental'" (20 February 2020) Stuff <<https://www.stuff.co.nz/national/119633866/under-pressure-wellington-water-woeswidespread-and-fundamental>>.

² Laura Wiltshire "Tale of the taps: How Havelock North turned Napier's water brown" (16 March 2019) NZ Herald <https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12202937>.

³ Fish and Game New Zealand "Canterbury water testing raises health concerns" (27 November 2018) <<https://fishandgame.org.nz/news/canterbury-mater-testing-raises-health-concerns/>>.

⁴ Vaimoana Tapaleao "Auckland water shortage: Heavy rain bumps up water in dams, but more still needed" (2 July 2020) NZ Herald <https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12344900>; RNZ "Auckland water situation a matter of 'national significance'" (1 July 2020) <<https://www.rnz.co.nz/news/national/420235/auckland-water-situation-a-matter-of-national-significance>>.

downsides. We will see in this paper evidence that the long-term economic proposition of privatised freshwater management is not great, and the negative public discourse in New Zealand of privatisation of other public goods. We will also see that such a move could breach Te Tiriti o Waitangi (the Treaty of Waitangi), and have negative outcomes for public health and the environment.

This paper details the current freshwater crisis in New Zealand, including how a history of ad hoc freshwater management led to the current situation. It then considers whether a systemic change to privatisation would fix New Zealand's broken water system, or whether the answer lies in something simpler, like a unified national policy direction bringing together the various interests consistently with mātauranga Māori (Māori knowledge).

II Working at cross-purposes: what is happening with New Zealand's freshwater system?

New Zealand's freshwater management system has developed in a piecemeal way, driven by inconsistent freshwater policy. It is now a muddied mess with players pulled in different directions. Tensions, reflective of the different interests in freshwater, filter through the history of water management, including the desire to protect the environment on the one hand and economic drivers such as the desire to protect industry (goldmining in the nineteenth century, to agriculture now) on the other hand.⁵ Public health and ensuring good quality drinking water is another driver. Over time, different governments have tried to strike a balance between these tensions and drivers, but have not been successful.

A History: ad hoc rules

1 1840 – 1989

New Zealand's freshwater management rules have always been ad hoc and most seem to be dictated by immediate needs, especially the immediate needs of industry. The first pieces of legislation that sought to protect specific waterways carved out excluded

⁵ Catherine Knight "A Potted History of Freshwater Management in New Zealand" (2019) 15(3) Policy Quarterly 3 at 3.

industries (such as goldmining), namely the Salmon and Trout Act 1867 and the Fisheries Conservation Act 1884.⁶ In 1876, the Public Works Act deemed rivers a “drain” that could be used for waste from public works.⁷ From the 1840s to 1920s, legislative and regulatory responses that created town sewage and water supply systems demonstrate competing interests.⁸ In the 1890s, human waste collection in Auckland was situated in the residential suburb of Western Springs, rather than further afield where the chance of it leaching into drinking water was minimised.⁹ Additionally, the government established various measures for drainage, flood control and deforestation.¹⁰ From 1941 to 1989, New Zealand industrialised quickly and there was more demand on freshwater due to factories, town sewage and farming.¹¹ On top of an already murky system, further legislation provided disjointed management approaches and rules for new water uses and services. The different systems for accessing water, using water and managing water led to more bureaucracy and red tape for those trying to access the important resource.¹²

2 *The Resource Management Act to the rescue?*

The Resource Management Act 1991 (RMA) sought to address the layers of bureaucracy that had grown around New Zealand's resource management, including freshwater. Today, the RMA dictates most forms of freshwater management. It covers both water use (how water is taken, used, dammed or diverted) and discharge (how pollutants enter the water). For example, the discharge of waste into waterways is prohibited unless a consent under the RMA has been granted.¹³ It sets out the roles and responsibilities of both local and

⁶ At 4.

⁷ At 4.

⁸ New Zealand Institute of Economic Research (NZIER) *Water management in New Zealand: A road map for understanding water value* (Working paper 2014/01, March 2014) at 18.

⁹ At 18.

¹⁰ At 18.

¹¹ At 19.

¹² At 20.

¹³ Knight, above n 5, at 5; Resource Management Act 1991, 15(1).

central governments, including the requirements local councils need to meet, processes they need to follow, and things they need to consider when making decisions.¹⁴ The RMA places responsibility in the hands of regional councils to achieve “integrated management of the natural and physical resource base including the maintenance and enhancement of water quality.”¹⁵ The RMA envisaged national policies and standards for water¹⁶ and it is the responsibility of central government to set that direction through regulations such as national policy statements, national environmental standards and other regulations.¹⁷ However, the RMA has not been implemented as intended. It took 20 years for the government to release a national policy statement on water. It has also been criticised for being inflexible¹⁸ and for being applied inconsistently.¹⁹

B Today: fragmentation and no unified direction

1 Fragmentation at all levels

Despite the RMA seeking to address layers of bureaucracy, freshwater management at both local and national levels remains fragmented and confusing. There are many different players, with different motives, policy drivers and interests, and no unified direction. Through the RMA, the central government essentially devolved responsibility and political risk to regional councils.²⁰ Sixty-seven different organisations are responsible for water

¹⁴ Ministry for the Environment “Laws and regulations governing how freshwater is managed” (28 May 2020) <<https://www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/overview-of-laws-and-regulations>>.

¹⁵ NZIER, above n 8, at 21.

¹⁶ Catherine Knight “Are politics getting in the way of good freshwater governance?” in Mike Joy (ed) *Mountains to Sea: Solving New Zealand's Freshwater Crisis* (eBook ed, Bridget Williams Books, 2018) 115 at 121.

¹⁷ Ministry for the Environment, above n 14.

¹⁸ Knight, above n 16, at 121.

¹⁹ Farah Hancock “Murky waters in council enforcement” (9 October 2020) Newsroom <<https://www.newsroom.co.nz/murky-waters-in-council-enforcement>>.

²⁰ Knight, above n 16, at 123.

management and charged with implementing the RMA. Most of these are councils,²¹ although some have devolved management to corporate organisations. For example, Auckland Council contracts Watercare to provide water and wastewater services in the Auckland region. Watercare operates as a corporation, receiving funding directly from customers, and it does not pay dividends to the Council.²² Another example is Wellington Water. Established in 2014, Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington City Councils, South Wairarapa District Council and Greater Wellington Regional Council. Wellington Water operates as a corporate entity and manages drinking water, wastewater and storm water services for the councils.²³ Further complicating the picture, industry regulatory compliance rests with 11 councils and five unitary councils, and 20 District Health Boards oversee drinking water standards and quality.²⁴ The drinking water supply system is also highly fragmented, with over 900 registered drinking water suppliers including local authorities, community supplies, schools, marae and the defence force.²⁵

At a national level, different government departments are responsible for various elements of freshwater management, policy setting and review. The Ministry for the Environment drives freshwater policy, including oversight of the RMA. While the government passed the RMA in 1991 promising national policy direction, the Ministry for the Environment only released a National Policy Statement for Freshwater Management in 2011 – 20 years later.²⁶ The Ministry of Health have responsibility for drinking water under the Health Act 1956 (via District Health Boards). Statistics NZ are responsible for collecting and reporting

²¹ Alan Titchall “A privatisation model for water” (2018) 203 *Water* (Wellington) 42 at 42.

²² Watercare “Who we are” <<https://www.watercare.co.nz/About-us/Who-we-are>>.

²³ Wellington Water “Our story” <<https://www.wellingtonwater.co.nz/about-us/our-story/>>.

²⁴ Titchall, above n 21, at 42.

²⁵ Cabinet paper “Government Inquiry into Havelock North Drinking Water” (15 June 2018).

²⁶ Ministry for the Environment “History of the National Policy Statement for Freshwater Management” (28 June 2020) <<https://www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/national-policy-statement-freshwater-management/history>>.

on freshwater data,²⁷ but the data collected is often incomplete (as will be mentioned). The Minister of Local Government plays a role; currently overseeing a review of New Zealand's drinking water, storm water and wastewater. Coming out of this review, Ministers announced in 2019 a new standalone Crown entity to regulate drinking water in New Zealand, Taumata Arowai,²⁸ but this body does not include other interests in freshwater, such as economic or environmental interests. The lack of coordination between different parts of the freshwater system, including between environmental, public health and economic objectives means that the benefits of freshwater will continue to become less available to New Zealanders.²⁹

2 *No unified national direction*

A result of the fragmentation described is that there is no unified vision for freshwater in New Zealand. In a report released in February 2020, the Auditor General said that given the importance of freshwater, he expected the government to have national policies, objectives, priorities; coherent work programmes; robust systems; resourcing, planning and risk management that reflects the scale of the issues; and strong engagement models including with Māori.³⁰ Instead, he found a lack of “clear agreement across central and local government about the vision for New Zealand's water resources.”³¹ The Waitangi Tribunal has agreed, highlighting that the Crown has not provided clear national direction

²⁷ Stats NZ “New Zealand's environmental reporting series: Our freshwater 2020” (16 April 2020) <<https://www.stats.govt.nz/information-releases/new-zealands-environmental-reporting-series-our-fresh-water-2020#indicators>>.

²⁸ Hon Nanaia Mahuta and Hon David Parker “Independent regulator to make drinking water safe” (press release, 25 October 2019).

²⁹ Vanessa Hammond “New Zealand freshwater management - a public health perspective” in Mike Joy (ed) *Mountains to Sea: Solving New Zealand's Freshwater Crisis* (eBook ed, Bridget Williams Books, 2018) 54 at 55.

³⁰ Auditor General (John Ryan) *Reflecting on our work about water management* (12 February 2020) at 1.

³¹ At 2.

or sufficient support to councils on management of freshwater.³² They also found the government had not identified or prioritised nationally important values for freshwater.³³

Without a clear, shared vision setting out the strategic objectives and priorities for water management, and a way to monitor progress, public organisations are unable to manage water well. The Auditor General has found that:³⁴

The lack of clarity about what the issues are, how to address them, and who will deliver programmes of work increases the risk that public organisations are not directing their efforts towards the same outcomes. It also means that some organisations might carry out work that conflicts with or duplicates that of other organisations, and that investment and policy decisions are not targeted to address the greatest risks or achieve the greatest benefits.

As well as having duplicate or conflicting water management priorities and work programmes, the Auditor-General found that public organisations often changed policies and standards, creating uncertainty. New and changing standards incur costs and makes planning difficult for those charged with implementation of rules and regulations.³⁵

3 *Māori interests in wai (water) management*

Connected to this, and identified by the Auditor-General, is the lack of strong engagement with Māori in freshwater management. Freshwater resources are central to tribal identity and the spiritual and cultural well-being of iwi and hāpu. They also play a crucial role in the economic life and survival of the tribe. Te Tiriti o Waitangi requires the Crown to guarantee tino rangatiratanga to Māori and the use of partnership mechanisms for the joint

³² Waitangi Tribunal *The Stage 2 Report on the National Freshwater and Geothermal Resources Claims* (Wai 2358, 2019) at 530.

³³ At 530.

³⁴ Auditor General, above n 30, at 2.

³⁵ At 8.

governance and management of freshwater taonga (treasured resources).³⁶ Yet, the Crown has not incorporated Māori interests into freshwater management in Aotearoa.³⁷

In 2019, the Waitangi Tribunal found that the RMA had “significant flaws” and the Crown was not compliant with Te Tiriti because it did not guarantee Māori involvement in freshwater management.³⁸ Specifically, there is no explicit recognition in the RMA of Māori rights to water, or provision for Māori water license or allocation, despite the importance of wai to Te Ao Māori.³⁹ While some provisions have been used to recognise and provide for Māori interests in water, they do not have priority over other considerations⁴⁰ and Māori interests could be “balanced out” in RMA decisions.⁴¹ These inadequacies are exacerbated by the resource consent granting process, where Māori are not expressly required to be consulted.⁴² These failures have meant Māori have been prejudiced when it comes to freshwater⁴³ and this has contributed to the poor management and dissatisfaction in freshwater management in New Zealand.

4 *Unclear picture of freshwater*

To effectively manage freshwater resources, it is vital to have good information that is “relevant, reliable, timely, accessible and, ideally, comprehensive.”⁴⁴ The Auditor General found there is no overall approach to collecting information and data on freshwater quality

³⁶ At 526.

³⁷ Waitangi Tribunal, above n 32, at 526.

³⁸ At 523; Waitangi Tribunal *Ko Aotearoa Tēnei: A Report into Claims Concerning New Zealand Law and policy Affecting Māori Culture and Identity, Te Taumata Tuarua* (Wai 262, 2011) at 705.

³⁹ Elizabeth Macpherson “Water Rights for Māori in Aotearoa New Zealand” in *Indigenous Water Rights in Law and Regulation: Lessons from Comparative Experience* (Cambridge University Press, Christchurch, 2019) 99 at 108.

⁴⁰ At 108.

⁴¹ Waitangi Tribunal, above n 32, at 525.

⁴² Macpherson, above n 39, at 109.

⁴³ Waitangi Tribunal, above n 32, at 525.

⁴⁴ Auditor General, above n 30, at 13.

in New Zealand and therefore there is an incomplete picture about the state of freshwater resources at a national level, including the effects of water pollution on human health and land use on water quality.⁴⁵ They also found that public organisations providing water-related services, often have limited information about the assets they own.⁴⁶ Without good information, it is difficult for management bodies to make well-informed decisions. The Auditor General did acknowledge that there would always be uncertainty in understanding the state of water resources, such as lag times in the data.⁴⁷ However, the importance of comprehensive and accurate data is well recognised.

5 A new regulator to the rescue?

Under the leadership of the Minister of Local Government, the Department of Internal Affairs led an inquiry into drinking water, wastewater and storm water.⁴⁸ The inquiry set out to ensure safe, acceptable and reliable drinking water; better environmental performance from water services; efficient, sustainable, resilient and accountable water services; and to achieve the aims in a way that is affordable for the community.⁴⁹ The challenges they sight include meeting regulatory requirements for water quality, the ability to replace aging infrastructure, water allocation issues, and climate change.⁵⁰

Because of the findings in that inquiry, the government has established a new drinking water regulator, Taumata Arowai.⁵¹ When Taumata Arowai is fully functional, it will oversee and administer an expanded and strengthened drinking water regulatory system,

⁴⁵ At 13.

⁴⁶ At 13.

⁴⁷ At 17.

⁴⁸ Department of Internal Affairs “Three Waters Review” <<https://www.dia.govt.nz/Three-waters-review>>.

⁴⁹ Department of Internal Affairs “Three Waters Review High Level Outline” March 2019.

⁵⁰ Department of Internal Affairs, above n 49.

⁵¹ Department of Internal Affairs “Taumata Arowai Establishment Unit” <<https://www.dia.govt.nz/Taumata-Arowai-Establishment-Unit>>.

including holding suppliers to account. It will also oversee a performance of wastewater and storm water networks, from a national perspective.⁵²

The establishment of Taumata Arowai has been criticised as being part of haphazard reform by the Crown. The inquiry itself and the mandate of Taumata Arowai is limited to drinking water, storm water and wastewater. Neither covers all aspects of the freshwater ecosystem like industry demands for and pollution of water (such as agriculture) or economic impacts or drivers. Some iwi have argued the reform is piecemeal and the regulator is inconsistent with the Treaty of Waitangi as rangatiratanga still do not have appropriately recognised rights in freshwater.⁵³ The establishment of Taumata Arowai is a new development, so it remains to be seen whether it makes a difference.

C Consequences

Ad hoc rules, fragmented management, a lack of involvement of Māori and an incomplete picture of the state of freshwater in New Zealand, all have negative consequences. New Zealand's water systems are old and failing. Rapid urbanisation, industrialisation and intensive agriculture are also significant contributors to pollution. This not only causes environmental damage, but also threatens public health.

1 Old and failing infrastructure

New Zealand's water infrastructure is old, often fails and is expensive to maintain. In Wellington, there are systemic issues across the entire network, due to "chronic underinvestment by successive councils."⁵⁴ Thirty-three percent of wastewater pipes in Wellington are in poor or very poor condition and have an average age of 51 years (some being as old as 100 years). Pipes often burst causing issues for access to water, as well as

⁵² Department of Internal Affairs, above n 51.

⁵³ Te Rūanga o Ngāi Tahu "Full evidence to Water Services Regulator Bill" at 3.

⁵⁴ Tim Worstall "The Advantage of Water Privatisation" (20 February 2020) Continental Telegraph <<https://www.continentaltelegraph.com/2020/02/the-advantage-of-water-privatisation/>>.

disruption to the inner city as streets are closed to fix broken pipes.⁵⁵ There were 16,000 leaks in 2019, up from 10,000 in 2014.⁵⁶ In Auckland, Watercare has been plagued with issues, including a \$44 million budget blow out.⁵⁷ Water leakage is an issue and Watercare has been ill equipped to deal with droughts.⁵⁸ Watercare has not invested enough in infrastructure to keep water prices low for consumers.⁵⁹ While the infrastructure in the Hawkes Bay is relatively young, the bores sit above ground making it easy for contaminants to enter. As a result, the pipes build up with biofilm, turning the water brown.⁶⁰ These are just some of the many issues plaguing water infrastructure in New Zealand.

2 Pollution

New Zealand's waterways are also highly polluted with above natural nutrient levels, primarily in urban, farming and forestry areas.⁶¹ The New Zealand Institute of Economic Research (NZIER) has reported that in New Zealand there is significant variation in water quality caused by the growth of agriculture and urbanisation.⁶² For example, there has been a four-fold increase in dairy production since 1992.⁶³ Rapidly developed intensive farming has resulted in nutrients leaking at a rate beyond natural processes, degrading the

⁵⁵ George and MacManus, above n 1.

⁵⁶ George and MacManus, above n 1.

⁵⁷ Nikki Mandow "Auckland's drought: fate or failure?" (25 August 2020) Newsroom <<https://www.newsroom.co.nz/the-wettest-drought-on-record-a-history>>.

⁵⁸ Mandow, above n 57.

⁵⁹ Mandow, above n 57.

⁶⁰ Wiltshire, above n 2.

⁶¹ Ministry for the Environment "Our freshwater 2020 summary" (16 April 2020) <<https://www.mfe.govt.nz/overview-our-freshwater-2020>>.

⁶² NZIER, above n 8, at i.

⁶³ Mike Joy *Polluted Inheritance: New Zealand's freshwater crisis* (eBook ed, Bridget Williams Books, 2015) at 32.

environment and altering ecosystems in waterways and lakes.⁶⁴ Excess algal and weed growth, caused by the additional nutrients, cause huge swings in oxygen levels in waterways.⁶⁵ Additional sediment from eroding land reduces water quality and feed for fish, as well as blocking sunlight.⁶⁶ The quality of groundwater is also affected, with groundwater in agricultural and urban catchments being degraded at 39% of all sites. A further 21% of groundwater sites are contaminated, with pathogens exceeding drinking standards.⁶⁷

In discussing the RMA's failure to deliver sustainable management of freshwater resources, the Waitangi Tribunal highlighted the environmental issues of polluted and degraded freshwater taonga. They listed waterways that had come to their attention including Lake Ōmāpere, the Taumārere River, the Ōroua River, the Manawatū River, Lake Horowhenua, the Rangitīkei River, the Tukituki River, the Waipaoa River, and the Tarawera River. The Tribunal highlighted that this was due not only to the inability of councils to manage diffuse discharges without Crown intervention, but also the exclusion of Māori from freshwater decision-making.⁶⁸

Pollution has direct public health consequences. Additional nutrients are pushing the water to the limits of what is acceptable for drinking water, especially in Canterbury.⁶⁹ In some areas in Canterbury, pregnant women are encouraged to get their drinking water tested before consuming it.⁷⁰ Scientists are also now linking high levels of nitrogen to colorectal

⁶⁴ At 33-34.

⁶⁵ At 14.

⁶⁶ At 15.

⁶⁷ At 27.

⁶⁸ Waitangi Tribunal, above n 32, at 530.

⁶⁹ NZIER, above n 8, at 14.

⁷⁰ Community and Public Health Te Mana Ora "Working towards safe drinking water for everyone" (21 October 2020) <<https://www.cph.co.nz/your-health/drinking-water/>>.

cancer.⁷¹ As well, freshwater pollution means New Zealanders suffer high rates of waterborne diseases.⁷² There was a widespread outbreak of gastroenteritis from E.coli in the Hawkes Bay drinking water in 2016 where 5,000 people fell ill, with up to four associated deaths.⁷³ A Government Inquiry found the likely cause to be farm run-off.⁷⁴

D Conclusion

The situation is not all bleak. There is investment in water infrastructure and management across the country – Wellington Water is upgrading parts of its network, Watercare is “expanding and upgrading” its water network.⁷⁵ Central government is also looking at national water policies and reviews, including the Ministry for the Environment’s new National Policy Statement for Freshwater Management, which will enter into force in 2020. Additionally, there is the new drinking water regulator, Taumata Arowai.⁷⁶ However, water management bodies, and the new regulator, are competing with different policy drivers and interests. They are implementing different, and sometimes conflicting, policies, and they do not collect and report adequate data and information. There are multiple bodies responsible for different aspects of freshwater management, often with different aims, whether it be public health, environmental protection and economic gain. A coherent approach to Māori involvement in management of freshwater is also a missing part of the puzzle. While not a panacea, privatisation could solve some of these key issues.

⁷¹ Jörg Schullehner and others “Nitrate in drinking water and colorectal cancer risk: A nationwide population-based cohort study” (2018) 143(1) *Int J Cancer* at 73; Community & Public Health Te Mana Ora “Health risks of nitrates in drinking water” (19 October 2017) <<https://www.cph.co.nz/health-risks-of-nitrates-in-drinking-water/>>.

⁷² Joy, above n 63, at 27.

⁷³ Ministry of Health “The Government Inquiry into the Havelock North Drinking-water Outbreak – implemented recommendations” (6 December 2018) <<https://www.health.govt.nz/our-work/environmental-health/drinking-water/government-inquiry-havelock-north-drinking-water-outbreak/government-inquiry-havelock-north-drinking-water-outbreak-implemented-recommendations>>.

⁷⁴ Cabinet paper, above n 25.

⁷⁵ Watercare “Water Asset Strategy” (January 2018).

⁷⁶ Department of Internal Affairs, above n 51.

III Could privatisation be a solution?

Traditionally, governments have provided freshwater services, like other public goods.⁷⁷ However, many have had issues with finding enough investment to ensure freshwater systems are maintained, improved, and safe for people and the environment. Since the 1980s there has been a global trend towards freshwater management through the private sector.⁷⁸ Private sector management is seen as a solution to address perennial problems in freshwater management including poor water quality and infrastructure, poor administration, service inefficiency and ineffectiveness, inability to expand, inefficient water allocation, and heavy financial burdens.⁷⁹ Issues that we have seen challenge the New Zealand freshwater system.

A Approaches to privatisation

There are different approaches to water governance: public, private and mixed ownership models exist including government management, community cooperatives, corporatized utilities, government delegated management and private management.⁸⁰ Most models fit within four main schemes of water allocation: government control, marginal cost pricing where the final user is charged all costs, user-based allocation where water users pool together to attain different objectives, and water markets.⁸¹ There may be a combination of different schemes⁸² and most private models are not entirely private enterprises, but rather maintain some public connection.⁸³ While central and local governments are

⁷⁷ The International Water Association (IWA) “The Impact of Privatisation on the Sustainability of Water Resources” <<https://www.iwapublishing.com/news/impact-privatisation-sustainability-water-resources>>.

⁷⁸ IWA, above n 77.

⁷⁹ IWA, above n 77.

⁸⁰ IWA, above n 77.

⁸¹ Michael Hantke-Domas “Water Markets” in Alistair Rieu-Clarke, Andrew Allan and Sarah Hendry (ed) *Routledge Handbook of Water Law and Policy* (Centre for Water Law, Policy and Science, United Kingdom, 2017) ch 5 at 65.

⁸² At 65.

⁸³ IWA, above n 77.

ultimately responsible for freshwater management in New Zealand, we do have corporate models in Watercare and Wellington Water.

Often models will have rights over different things. In some cases, it is the right to access the water, in others it is the right to water infrastructure and systems. Some jurisdictions have used water markets and water trading to address water allocation issues.⁸⁴

B Benefits of privatisation

Privatisation has a range of benefits, including access to investment and expertise, greater innovation and customer-centric approaches, better allocation of resources, and stronger performance targets. These could potentially be achieved in other ways but they are worth outlining.

1 More investment

Privatisation provides more investment into an often-underfunded area, when governments have multiple pressures on the public purse. In England and Wales, the private sector has pumped £150 billion into water services since the government privatised the services in 1989.⁸⁵ Regional water authorities, owned by the central government, were floated on the stock exchange,⁸⁶ to exploit the efficiency of the private sector and tap into the ability of private companies to finance the large investments needed to repair the water systems.⁸⁷ The additional funding has meant an increased flow of capital spending and better maintenance of water infrastructure.⁸⁸ Privatisation can also ensure greater value for money as the private sector is less likely to be bogged down by bureaucracy.⁸⁹

⁸⁴ Australia and Chile. NZIER, above n 8.

⁸⁵ Titchall, above n 21, at 43.

⁸⁶ IWA, above n 77.

⁸⁷ IWA, above n 77.

⁸⁸ Worstall, above n 54.

⁸⁹ The World Bank “FAQ – World Bank Group Support for Water and Sanitation Solutions” (3 February 2016) <<https://www.worldbank.org/en/topic/water/brief/working-with-public-private-sectors-to-increase-water-sanitation-access>>.

2 *Better expertise*

The private sector often has specific expertise that the public sector can tap into. The World Bank has recognised that governments need specific expertise to improve management while dealing with old water systems and increasing demands for water services. Thus, they claim that private sector water management and service providers can “help [the government] improve the performance and efficacy of service delivery to customers”.⁹⁰ Private companies are also often more likely to embrace change and innovate, coming up with better and more efficient ways of doing things.⁹¹ The private sector can implement a customer-centric approach, delivering higher customer satisfaction ratings, without the competing demands faced by governments.⁹²

3 *Good distribution and flows*

Water markets and water trading arguably allow for better allocation of water resources. A market approach with clear private water rights, combined with treating water as a commodity, should lead to increased economic efficiency, realisation of the full opportunity cost of water, and therefore encouragement of more prudent use and allocation of water resources.⁹³ If markets are perfect, the distribution maximises welfare.⁹⁴ Australia’s current water management makes use of markets and water trading to allocate water to its highest value use.⁹⁵ Water can be traded for short- or long-term uses, and around a quarter of total water in allocation for consumptive use is traded.⁹⁶ However, water markets require the right preconditions and assumptions. Only then will they be an

⁹⁰ The World Bank, above n 89.

⁹¹ Titchall, above n 21, at 44.

⁹² At 44.

⁹³ Rhodante Ahlers “Fixing and Nixing: The Politics of Water Privatization”(2010) 42 *Review of Radical Political Economics* 213 at 219.

⁹⁴ Hantke-Domas, above n 81, at 73.

⁹⁵ NZIER, above n 8, at 24.

⁹⁶ At 24.

efficient way to allocate scarce resources.⁹⁷ They also do not take into account other societal goods such as environmental flows or recognise water as a human right.⁹⁸ In New Zealand, the RMA imposes high transaction costs and limits the ability for water to be traded.⁹⁹

C Oversight and regulation

Advocates of privatisation emphasise that oversight mechanisms and clear frameworks are crucial for effective private sector operation of freshwater systems. Although, governments need to be careful not to create complicated regulatory systems that end up being barriers to an effective market system.¹⁰⁰ The World Bank explains that countries need institutional tools such as legal and regulatory frameworks, pricing, and incentives to better allocate, regulate and conserve water.¹⁰¹ The NZIER recommends “the government facilitate trading by implementing frameworks and national guidance for the development of water markets. The focus should be on maximizing the transparency and minimizing the transaction costs of trade.”¹⁰² The state can set explicit targets, including performance indicators, for private sector companies and enforce them through contract law and regulators.¹⁰³

In England and Wales, there are comprehensive regulatory frameworks to protect the public and public health, which sit alongside privatisation.¹⁰⁴ They have an economic

⁹⁷ Hantke-Domas, above n 81, at 71.

⁹⁸ At 73.

⁹⁹ NZIER, above n 8, at 4.

¹⁰⁰ At 27.

¹⁰¹ The World Bank “Water Resources Management” (20 September 2017) <<https://www.worldbank.org/en/topic/waterresourcesmanagement>>.

¹⁰² NZIER, above n 8, at 46.

¹⁰³ The World Bank, above n 89.

¹⁰⁴ IWA, above n 77.

regulator, environmental regulator, and a drinking water regulator.¹⁰⁵ The Office of Water Services is an independent economic regulator, established to promote efficiency and competition among private water companies. It is accountable to Parliament, but is not a Ministry.¹⁰⁶

D Conclusion

The World Bank and International Monetary Fund have espoused the benefits of privatisation, including making loans to developing countries conditional on private sector participation in water infrastructure development.¹⁰⁷ There are many examples of countries or sub-national public entities using private companies to manage water services, like Australia, Bolivia, Senegal, and South Africa.¹⁰⁸ Others, like here in New Zealand, have some level of corporatisation where publically owned organisations operate like a private business, or contract out services.¹⁰⁹

IV Could privatisation of freshwater management work in New Zealand?

The NZIER argues that privatisation, or water markets and trading, would assist in addressing New Zealand's water woes.¹¹⁰ But, there are significant downsides.

A What could it look like?

From the late 1980s, successive governments worked to corporatise public services in New Zealand, including telecommunications, electricity, and the national airline. This was

¹⁰⁵ IWA, above n 77.

¹⁰⁶ Titchall, above n 21, at 43.

¹⁰⁷ Richardson Dilworth "Privatisation, the World Water Crisis, and the Social Contract" (2007) 40(1) 49 PS Political Science & Politics at 49.

¹⁰⁸ IWA, above n 77.

¹⁰⁹ IWA, above n 77.

¹¹⁰ NZIER, above n 8, at ii.

for economic reasons; the government needed cash.¹¹¹ New Zealand's privatisation regime was "one of the largest implemented programmes in the world" between 1987 and 1992.¹¹² By the end of the privatisation programme in 2001, the proceeds were around US\$7 billion.¹¹³

The corporatisation of electricity generation, supply and transmission is analogous to what could happen with water. In the mid-1980s, electricity generation and transmission were the responsibility of the Ministry of Energy. In 1985, local distribution and supply were the responsibility of electricity supply authorities (ESAs), and were plagued by issues of inefficiency and lack of choice. The government of the time made the decision to reform the electricity industry, first through establishing a State-Owned Enterprise (Electricity Corporation of New Zealand (ECNZ)).¹¹⁴ Assets held by the government were transferred to ECNZ, with the requirement that it operate as a profitable business.¹¹⁵ In 1992, the ESAs were corporatised too.¹¹⁶ This significant shift has required legislation and regulations that need continued updating. Both the Electricity Act 1992 and the Electricity Industry Act 2010, and various regulations, provide the rules for those operating in this industry.

As mentioned earlier, the Auckland and Wellington councils have adopted corporate structures for freshwater management through Watercare and Wellington Water. But beyond the corporate structures is Papkura. In 1997, Watercare awarded the private, globally operating company Veolia, a 30-year franchise contract to undertake the

¹¹¹ Jane Kelsey *Rolling Back the State: Privatisation of Power in Aotearoa/New Zealand* (eBook ed, Bridget Williams Books, 1993) at ch 3.

¹¹² Jarrod Kerr, Mei Qiu and Lawrence C. Rose "Privatisation in New Zealand and Australia: an empirical analysis" (2008) 34(1) *Managerial Finance* 41 at 41.

¹¹³ At 42.

¹¹⁴ Energy & Resources Branch, MBIE *Chronology of New Zealand Electricity Reform* (Ministry of Business, Innovation and Employment (MBIE), August 2015).

¹¹⁵ Kelsey, above n 111, at ch 2.

¹¹⁶ MBIE, above n 114.

maintenance of water and drainage pipes, set tariffs and manage customer billing.¹¹⁷ Watercare was the first local authority to put a water and wastewater operation and maintenance contract in place with a private company.¹¹⁸ Overall, though, ownership of the water services remained public.¹¹⁹ In 1998, the Office of the Auditor General reviewed the franchise agreement and found it met all government expectations, including setting minimum standards, clearly defined legal responsibilities, specific performance measures and price regulation.¹²⁰ The agreement was also deliberately worded to encourage an innovative approach to service delivery.¹²¹ Given the range of benefits, and a lack of reporting of any concerns, this approach could be applied to other areas of New Zealand to improve water management to ensure much-needed investment in infrastructure and to ensure an innovative approach to service delivery.

B Public discourse

Privatisation of state-owned enterprises or public goods as a concept has been the subject of fierce public debate in New Zealand, with many not in favour of the idea. The corporatisation of state assets in the late 1980s and early 1990s were not popular. Following the privatisation of ESAs and as details of the electricity plans became known, public outrage grew and people were angered at the removal of their right as electors to determine who could make decisions regarding electricity.¹²² Jane Kelsey argues “they feared the economic consequences of privatisation and losing control over an essential service into the hands of profit-driven corporations”.¹²³ She adds that as a purely economic value was

¹¹⁷ Veolia “Water Management – Papakura Water” <<https://www.veolia.com/anz/water-management-papakura-water>>.

¹¹⁸ Controller and Auditor General *Papakura District Council: Water and Wastewater Franchise* (April 1998) at 7.

¹¹⁹ At 7.

¹²⁰ At 34.

¹²¹ At 34.

¹²² MBIE, above n 114.

¹²³ Kelsey, above n 111, at ch 3.

placed on the resources, their “social, environmental and cultural functions had been cast aside”.¹²⁴

The concept of privatizing elements of freshwater management in New Zealand is not new but it has never picked up steam. Auckland 2019 mayoral challenger, John Tamihere, outlined a policy to sell 49 percent of Watercare, which was extensively criticised.¹²⁵ At a national level, proposed policies have been criticised as being akin to privatisation, including a proposal in 2010 to extend the maximum length of time private companies can contract water services from councils from 15 to 35 years.¹²⁶

C Economic imperatives

While there is a range of economic benefits of privatisation, there are also significant economic drawbacks. For many, privatisation has led to high levels of subsidies, a lack of competition meaning high unit costs, scarcity of water, and lack of profit for the private companies.¹²⁷ In 2006, the United Nations Development Programme assessed water privatisation in different countries and found that across the world “the conviction that the private sector offers a magic bullet for unleashing equality and efficiency needed to accelerate progress towards water for all has proven to be misplaced.”¹²⁸

For one, there is no guarantee that the private sector would invest in upgrading infrastructure. In England and Wales, an often-used example showing the benefits of privatisation, the economic downsides were not foreseen. Companies initially made profits in excess of predictions, but used that to pay large dividends to shareholders instead of putting the capital back into development and improvement of the water assets. The state

¹²⁴ At ch 3.

¹²⁵ Bernard Orsman “John Tamihere's policies facing criticism from across the political spectrum” (26 August 2019) <https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12262109>.

¹²⁶ Wairarapa Times-Age “Privatisation safeguards on water” (21 June 2010) NZ Herald <https://www.nzherald.co.nz/wairarapa-times-age/news/article.cfm?c_id=1503414&objectid=10997383>.

¹²⁷ IWA, above n 77.

¹²⁸ Kevin Watkins et al *United Nations Development Programme: Human Development Report 2006* (Palgrave Macmillan, New York, 2006).

responded by establishing an economic regulator to look at pricing and consumer interests. Thus, while this issue led to the development of a strong, independent regulator, serious problems remained as inadequate investment led to infrastructure issues and high levels of water losses.¹²⁹

Many examples of privatisation of water services show that it is not a competitive industry,¹³⁰ but rather encourages monopolies.¹³¹ A clear example is in England and Wales, where companies in the water industry organised themselves on a catchment basis. The water treatment and sewage works, and the pipes collecting and then distributing water and disposing of sewage, represent fixed and sunk costs.¹³² Privatisation in this context “opens up the prospect of providing too little capacity, poor services, and excess pricing” due to a lack of competition.¹³³

Perhaps the most prominent economic argument against privatisation is that it leads to higher prices for water. When privatising water was raised in the 2019 Auckland mayoral race, incumbent Phil Goff argued that privatising Watercare would “force up water rates substantially and burden lower income families with high costs” as investors would seek a 7-10 percent return on their investment.¹³⁴ A study in England found water bills increased at a rate of 40 percent above inflation since privatisation in 1989, while shareholder dividends increased.¹³⁵

¹²⁹ At 92.

¹³⁰ Meredydd Barrar “Water should be a service, not a commodity” (13 January 2013) NZ Herald <<https://www.nzherald.co.nz/nz/water-should-be-a-service-not-a-commodity/CEBXFKHY77CDDKWVJFPUZQ6HMY/>>.

¹³¹ Dieter Helm “Thirty years after water privatization – is the English model the envy of the world?” (2020) 36(1) Oxford Review of Economic Policy 69 at 81.

¹³² At 81.

¹³³ At 81.

¹³⁴ Phil Goff “Privatisation Plan would cause soaring water rate bills” (press release, 2 July 2019).

¹³⁵ Sondhya Gupta “England’s running out of water – and privatisation is to blame” (21 March 2019) The Guardian <<https://www.theguardian.com/commentisfree/2019/mar/21/englands-running-out-of-water-and-privatisation-is-to-blame>>; Will Hutton “We can undo privatisation. And it won’t cost us a penny” (9

As well as not being good for the consumer, privatisation is not necessarily beneficial in for private companies. While the water sector may be profitable in the short term, the costs of operation and maintenance eventually exceed potential profit.¹³⁶ There is a high failure rate for private companies in the water sector. It is reported that the World Bank's database for private participation in infrastructure documents a 34 percent failure rate for all private water and sewage contracts between 2000 and 2010. This is compared with the failure rates of 6 percent for energy, 3 percent for telecommunications and 7 percent for transportation over the same period.¹³⁷ There was a similar situation when electricity was privatised in New Zealand in the early 1990s.¹³⁸

D Indigenous rights and Te Tiriti o Waitangi

A comprehensive analysis of the impact of privatisation of water on Māori is worthy of a full paper, but some issues are touched on here. Te Tiriti o Waitangi is a core part of Aotearoa's constitutional make up and any proposal to privatise state assets or public goods must sit alongside Māori interests. For water, this is particularly important, as wai (water) is central to Te Ao Māori.¹³⁹ This sits in the historical context, described above, that Māori have largely been excluded from legal frameworks that allocate rights to manage and use water resources since 1840.¹⁴⁰ For many Māori, the degradation of waterways in Aotearoa "is part of a larger story of colonisation, urban migration and the loss of ancestral

January 2018) The Guardian < <https://www.theguardian.com/commentisfree/2018/jan/09/nationalise-rail-gas-water-privately-owned>>.

¹³⁶ Ahlers, above n 93, at 214.

¹³⁷ Anna Lappe "World Bank wants water privatized, despite risks" (17 April 2014) Aljazeera < <http://america.aljazeera.com/opinions/2014/4/water-managementprivatizationworldbankgroupifc.html>>.

¹³⁸ Kelsey, above n 111, at ch 3.

¹³⁹ Tina Ngata "Wai Māori" in Mike Joy (ed) *Mountains to Sea: Solving New Zealand's Freshwater Crisis* (eBook ed, Bridget Williams Books, 2018) 18 at 18.

¹⁴⁰ Macpherson, above n 39, at 99.

knowledge around care and communication with nature.”¹⁴¹ The well-being of people is strongly connected to the well-being of waterways.¹⁴²

New Zealand’s freshwater management in the RMA has a first-in, first-served approach. This has resulted in the full or over-allocation of catchments. Privatisation, without perfect market conditions, can lead to exacerbated human rights issues like accessibility and allocation of water, enhancing existing inequalities.¹⁴³ Human rights are the responsibility of states who sign up to relevant human rights’ treaties, which do not apply to private, non-state actors.¹⁴⁴ Without enforcement by the state, access to water is not guaranteed. The first in, first served approach particularly disadvantages Māori.¹⁴⁵

Using mātauranga Māori (Māori knowledge) in managing water would be useful. The state has not managed to do this, so perhaps the private sector, including Treaty bodies, could step in. In some cases, Treaty settlement bodies, which are private enterprises, already co-manage waterways with local authorities, such as the Waikato River Settlement and the Te Awa Tupua Settlement for the Whanganui River.¹⁴⁶ Co-management of the Waikato River recognises the importance of three Iwi, including Ngāti Tūwharetoa, in the protection of the River through legislation. The Tūwharetoa Māori Trust Board and the Waikato Regional Council have a Joint Management Agreement setting out how the two parties will work together in relation to the Waikato River. The co-management relationship is guided by principles of tikanga and Te Tiriti.¹⁴⁷ However, in a privatised setting and without strong regulation, it would be up to the market to determine who would manage water

¹⁴¹ Ngata, above n 139, at 23.

¹⁴² At 25.

¹⁴³ Hantke-Domas, above n 81, at 73.

¹⁴⁴ Sandra Liebenberg “The Privatization of Water Services: The Quest for Enhanced Human Rights Accountability” 37(3) Human Rights Quarterly 2015 691 at 699.

¹⁴⁵ Waitangi Tribunal, above n 32, at 550.

¹⁴⁶ Macpherson, above n 39, at 111.

¹⁴⁷ Joint Management Agreement, Tūwharetoa Māori Trust Board – Waikato Regional Council (2018), at [4.1].

resources. As a party to Te Tiriti the Crown has obligations to Māori and must ensure the principles are upheld.¹⁴⁸ They cannot devolve this obligation to the private sector and if they could, there is no guarantee that Māori interests will be maintained.

E What about other drivers?

We know that both public health and environmental considerations are important when it comes to freshwater management. However, privatisation would not guarantee their protection. Given the importance of freshwater, public health needs to be at the forefront of freshwater management. However, in a privatised system, economic drivers, like profit margins, drive private companies' outcomes, unless the state includes strong public health regulations and has the ability to enforce them. New Zealand recently established Taumata Arowai to administer and enforce the new drinking water regulatory system. A regulator like Taumata Arowai could make sure companies were adhering to these regulations, like the Drinking Water Inspectorate in England and Wales.¹⁴⁹ But without strong regulation, there is no guarantee private companies would focus on public health. Strong public health regulation is important for any freshwater management system, whether public or private.

Like public health, freshwater management organisations will only consider environmental impacts if there is strong regulation and enforcement, balanced with other drivers. England company Thames Water's environmental performance was inadequate. In four years, from 1999-2003, it had been convicted of environmental and public health violations 24 times and significantly fined. Regulators found the company was aware of conditions that led to raw sewage discharges and could have prevented the pollution, despite there being a regulator and enforcement.¹⁵⁰ In New Zealand, when electricity was privatised in the early 1990s, the scheme was criticised by the Parliamentary Commissioner for the Environment. The Commissioner found that commercial criteria would have a negative impact on the

¹⁴⁸ Waitangi Tribunal, above n 32.

¹⁴⁹ Drinking Water Inspectorate "Homepage" <<http://www.dwi.gov.uk/>>.

¹⁵⁰ Barrar, above n 130.

environment, as returns based on consumption means there are no incentives to promote energy efficiency or conservation.¹⁵¹ This could be similar with water.

F Conclusion

For Aotearoa's water issues, privatisation might not be the best answer. Economic downsides, indigenous rights implications, and negative effects on public health and the environment without appropriate regulation are set in the context of a negative public view of privatisation of public goods. It would also require a fundamental shift in how the water industry is structured and how water is used. Perhaps the problems plaguing New Zealand's broken water system could be resolved in another way.

V Another approach: clear and unified policy direction

Despite benefits to privatisation, a shift from public management to privatisation has problems, as described. It would also entail a paradigm shift in approaching, managing and analysing freshwater management, as well as organisational and institutional changes. There are simpler ways to turn the tide on New Zealand's broken water system, keeping ownership in the public sector, having greater Māori involvement, and balancing different interests.

In his February 2020 report, the Auditor General found that "a more strategic and integrated approach to water management is needed".¹⁵² He acknowledged this was difficult as roles and responsibilities were spread throughout the public sector, as we have explored in the first half of this paper. He also argued the government should promote collaboration and build consensus on the main issues, as well as develop and implement responses and actions that work towards a common goal.¹⁵³ In doing this, there should be a focus on

¹⁵¹ Kelsey, above n 111, at ch 3.

¹⁵² Auditor General, above n 30, at 5.

¹⁵³ At 5

collecting good information and processes for collaboration with stakeholders, including Māori.¹⁵⁴

A Scottish Water

The Scottish model is interesting to consider in the New Zealand context, as they have a similar population size and similarly need to balance tensions from various competing interests in freshwater. In Scotland, a national body combines various interests and drivers. Scottish Water provides water and wastewater services to over 5 million customers as well as maintaining and improving 245 water treatment works and 1800 wastewater works.¹⁵⁵ The organisation's purpose is to provide continuous high quality water, protect and enhance the environment, and support Scotland's economy.¹⁵⁶

The Scotland Government owns Scottish Water and the organisation is accountable to a Minister. Regulators are a key aspect of this model, and include regulators for economic growth, drinking water quality, environmental protection, and consumer interests.¹⁵⁷ The Water Industry Commission for Scotland is the economic regulator, setting charges and reporting on costs and performance.¹⁵⁸ The Drinking Water Quality Regulator and Scottish Environmental Protection Agency ensure compliance with drinking water regulations and environmental protection respectively.¹⁵⁹ Finally, citizens and consumers have their interests represented by Citizens Advice Scotland and their complaints heard by the Scottish Public Services Ombudsman.¹⁶⁰

¹⁵⁴ At 17, 20, 21.

¹⁵⁵ Ken Hutchinson "International Lessons from Scotland on a national water utility" (2018) 203 *Water* 36 at 37.

¹⁵⁶ At 37.

¹⁵⁷ Scottish Water "The Water Industry in Scotland" <<https://www.scottishwater.co.uk/about-us/what-we-do/the-water-industry-in-scotland>>.

¹⁵⁸ Scottish Water, above n 157.

¹⁵⁹ Scottish Water, above n 157.

¹⁶⁰ Scottish Water, above n 157.

All bodies, including the regulators and Scottish Water, committed to an overall vision for the future of water in Scotland for the first time in 2019. The Vision includes the three main drivers for water policy: public health, environmental protection, and economic imperatives. It outlines that the organisations will support the health and well-being of Scotland, ensure “excellent quality drinking water”, and “enable the economy to prosper”.¹⁶¹ They will “enhance the natural environment” and encourage communities to enjoy and protect it. They will also ensure services are kept affordable through innovating and delivering value.¹⁶²

The rationale for this approach was to address the increasing burden of implementing European Union standards and the desire to implement these standards but there being little enforcement. While there are similarities with the New Zealand situation, there were real push factors for change in Scotland. Now they are able to implement European Union rules through fines for non-compliance, provide economic, environmental and public health regulation, and they have a clear sense of customers’ priorities.

B Flowing in the same direction: the real solution

There is a recognition that New Zealand has a broken water system and there is a real desire in the government and among the public to turn the tide on the failing system. We have seen that with the Three Waters’ Inquiry into drinking water, storm water and wastewater, in evidence to the Waitangi Tribunal,¹⁶³ and in the government setting a National Policy Statement covering environmental protection. The government has also established Taumata Arowai, the drinking water regulator, an indication they recognise there needs to be some level of institutional and organisational change. However, these commitments to reform the system do not bring together the range of disparate interests under one body and with a shared vision, like the Scottish model.

¹⁶¹ Scottish Water “A New Vision for the Future” <<https://www.scottishwater.co.uk/about-us/news-and-views/101019-the-vision>>.

¹⁶² Scottish Water, above n 161.

¹⁶³ Waitangi Tribunal, above n 32, at 532.

A solution for New Zealand could be to establish a national water body encompassing mātauranga Māori and co-governance in a partnership between the Crown and Māori. Like the Scottish model, this could bring together disparate interests and be accountable to the New Zealand Government and Parliament, with a responsible Minister. There would also need to be appropriate regulatory bodies to ensure all interests are balanced effectively. Together these bodies could commit to a shared vision.

In their report into national Freshwater and Geothermal Resources in August 2019, this was something the Waitangi Tribunal recommended. They said that a national freshwater co-governance body be established, with 50/50 Crown-Māori representation, to ensure Treaty principles and Māori values, rights and interests are incorporated in freshwater policy and management.¹⁶⁴ The Auditor-General had a similar view and stated earlier this year that “a more strategic and integrated approach is needed to address New Zealand’s water management challenges”, while noting that this is complex as roles and responsibilities are spread throughout the public sector.¹⁶⁵

A public body, like the Scottish model, would be able to balance disparate interests in freshwater and guarantee Māori principles and involvement, consistent with the Crown’s obligations under Te Tiriti o Waitangi. The body would need to be established in law and could include the following functions, based on recommendations by the Land and Water Forum and included in the Waitangi Tribunal’s 2019 report:¹⁶⁶

- Manage and regulate water, including introducing a ‘Water Act’;
- Recognise the iwi Treaty relationship with the Crown, including providing an avenue for iwi to express their Treaty partner aspirations;
- Determine an allocation system, including ensuring fair allocation of water to Māori for customary and economic purposes;

¹⁶⁴ Waitangi Tribunal, above n 32, at 560; and Auditor General, above n 30, at 4.25.

¹⁶⁵ Auditor General, above n 30, at 8.

¹⁶⁶ Waitangi Tribunal, above n 32, at 553.

- Foster collaborative relationships between the various sectors and interests concerned with water;
- Determine ways to improve the efficiency and effectiveness of the national water management system;
- Develop and oversee the implementation of a national strategy for freshwater;
- Promote and ensure best use and practice in water management;
- Identify degraded waters for priority restoration, stop degradation and reverse past damage;
- Identify opportunities and constraints to water storage and reticulation;
- Ensure adequate funding for improved and maintained water infrastructure;
- Work with other government departments and local authorities to ensure implementation of appropriate freshwater management; and
- Ensure that financial and technical skills are available and used.

Such a body would need to incorporate and operate in the context of Te Mana o te Wai (recognising the intrinsic value of freshwater ecosystems) and consider the freshwater system as a whole.¹⁶⁷

To ensure the different drivers and interests are balanced, it will be important for there to be regulators like those in Scotland, England and Wales: one each to protect public health, to guarantee economic efficiency and consumer protection, and to preserve and improve of the environment. It will be vital to ensure each regulator is given equal weight, to ensure the balance. Arguably, in England and Wales, the economic regulator has been more significant and this has not led to good results. In Aotearoa, we are a third of the way there, with Taumata Arowai, the drinking water regulator. Although, on its own it is not enough. Together the national body, and the regulators, could have a shared vision on how they will balance the different interests in water, like that in Scotland.

¹⁶⁷ Ngāti Whātua Orākei “Full evidence text to Water Services Bill” at 1.

VI Conclusion

Freshwater systems are vital. They provide drinking water, irrigation, sanitation and hygiene, and keep ecosystems alive. New Zealand's freshwater system is broken, with old, damaged and expensive to repair infrastructure, pollution from urban and agricultural activities, high demand and poor water allocation: all caused by fragmented management. New Zealand has a history of ad hoc approaches to freshwater management without a clear nation-wide vision or approach to combining health, economic and environmental imperatives. The promises of the RMA have failed to deliver and governments are unlikely to make tough decisions due to pressure from industry.

Many jurisdictions have privatised, or partially privatised their freshwater management to address these issues, including a council-owned organisation in New Zealand. But, a shift from public management to full privatisation comes with its own problems and would require a paradigm shift in approaching, managing and analysing freshwater management, as well as organisational and institutional changes. There is no one model that suits all.¹⁶⁸ However even with the additional resources, expertise and time of the private sector, there is a simpler way to turn the tide.

A national body, like Scottish Water, could combine New Zealand's various competing interests in water management, bringing balance and a unified vision to this area. Implementing a co-governance partnership model with Māori, like those that already exist in parts of Aotearoa, would ensure Te Tiriti obligations are met and that there is an integrated approach to water management.

The lack of a clear national direction on freshwater management combining the different aims is the biggest failure in freshwater management in New Zealand.¹⁶⁹ The answer does not lie in privatisation, but in clear national policy direction and regulators that can balance

¹⁶⁸ IWA, above n 77.

¹⁶⁹ Knight, above n 5, at 121.

the competing interests and uses of freshwater, including recognition of Māori values in water.

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