Voice, power and legitimacy: the role of the legal person in river management in New Zealand, Chile and Australia

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Biographical notes

Dr Erin O'Donnell is a water law and policy specialist, bringing together skills and experience in aquatic ecology, environmental planning and water governance. She has worked in water resource management since 2002, in both the private and public sectors. Erin's research focus is the legal rights for rivers, which saw four rivers receive the status of legal persons in 2017. Erin is recognized internationally for her research into this groundbreaking new field, and the challenges and opportunities it creates for protecting the multiple social, cultural and natural values of rivers, and is currently working on a book, coming out in December 2018. Her work is informed by comparative analysis across Australia, New Zealand, the USA, India, Colombia, and Chile. Erin's PhD examined the role of environmental water managers in Australia and the USA in delivering efficient, effective and legitimate environmental water outcomes in the context of transferable water rights and water markets. Erin is a teaching fellow at the University of Melbourne Law School, and is working as a consultant for The World Bank, leading a global systematic review of water markets, and their role in water security and sustainable development.

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Conflict of interest

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Abstract

In 2017, rivers in New Zealand, India and Colombia received legal rights and were granted the status of legal persons. The increased legal powers can improve environmental protection and river management, but they can also challenge the legitimacy of laws and regulations that protect the rivers. In this paper, we compare the new legal rights with two long-standing uses of legal personality in river management, to explore the effects of legal personality. We find that it is difficult to get the right balance between giving rivers a voice, and the power to use it, and creating collaborative governance arrangements that strengthen and maintain community support over time.

Key words

Legal personality, river, legitimacy, water resource management

1 Introduction

Legal frameworks that regulate the management and use of water aim to manage water resources efficiently, and protect river health, to maintain water's economic and health qualities, so that humans might continue to benefit from them (UNCED 1992). This anthropocentric approach centres human uses, and human values, of water resources. However, in many parts of the globe, courts and legislatures are beginning to acknowledge value in protecting natural resources as an end in itself (Burdon 2010, Maloney and Burdon 2014). Applying such an 'ecocentric' approach assumes that rivers have an intrinsic right to their own protection and maintenance (O'Riordan 1991).

In 2017, rivers became the recipients of these new and powerful legal rights. The Aotearoa New Zealand Parliament broke new ground internationally by recognising the Whanganui River as a 'legal person', with 'all the rights, powers, duties and liabilities of a legal person' (*Te Awa Tupua (Whanganui River Claims Settlement) Act*, 2017). A similar approach has also been adopted in India and Colombia, although the Indian case has since been appealed (O'Donnell 2018, Macpherson and Ospina 2018). The grant of legal personality is the newest legal tool being used to protect and manage rivers. Recognising rivers as legal persons means that the rivers themselves are the subject of legal rights, and have the necessary standing to sue and be sued, enter into contracts, and hold property in their own name (O'Donnell and Talbot-Jones 2017).

This shift in river governance has been driven largely by indigenous communities, who claim distinct relationships with water based on guardianship, symbiosis and respect (Morris and Ruru 2010). Legal personality may offer opportunities to secure new or different outcomes in environmental law and regulation in situations where the river needs its own voice in order to compete for outcomes with other river interests or users. However, legal personality comes at

a cost. By creating a 'voice' for the river, and enabling the river to compete with other users, legal rights for rivers can challenge the legitimacy of laws and regulations that protect the river (O'Donnell 2017a).

Legitimacy, along with efficacy and efficiency, is one of the core criteria for sustainable water resource management (O'Donnell and Garrick 2017a). But defining exactly what *legitimacy* means is difficult. Legally, legitimacy stems from the power of an individual to make a particular decision or take a certain action. However, legitimacy is broader than legal authority (O'Donnell et al. 2018). Hogl et al. (2012) describe legitimacy in environmental management as:

- *Input legitimacy*, or the *process* by which outcomes are achieved, including transparency, access, and accountability;
- *Output legitimacy*, where legitimacy is linked to the outcomes achieved, and a common understanding of why those outcomes matter.

In the context of water regulation, the OECD describes this element as trust and community support, which must be built, and maintained over time (OECD 2015). Finding the right balance between legal rights that increase the power of the river, and maintaining community support for management of a public resource is difficult. The new legal rights for rivers create an opportunity to improve river ecosystem protection, but we still know far too little about the impacts of these new arrangements.

This paper explores the potential outcomes of legal personality for legitimacy, by using older examples of legal personality in river management, and compares their experiences to the best-developed model of legal personality for rivers (in New Zealand).

2 Legal personality and river management: a comparison of three models

Of the three countries where rivers now have legal rights (New Zealand, Colombia, and India), the new arrangements closest to full implementation in New Zealand, which has a dedicated funding stream, new organisations, appointed river guardians, and a new governance framework (Macpherson and Ospina 2018, O'Donnell and Talbot-Jones 2018). For this reason, the Whanganui River (Te Awa Tupua) has been selected as the key example of legal rights for rivers.

We compare this example with two other legal arrangements for river management, both of which include 'legal persons' but do not explicitly bestow legal personality on the river itself: the Victorian Environmental Water Holder in Australia (which was created to act as a 'voice' for rivers in 2010) and *Juntas de Vigilancia* (Water Monitoring Boards) in Chile (which have been in operation for many years). Each of the models exists within a distinct legal, social and political context, and highlights the challenges and opportunities of the different management approaches.

2.1 Te Awa Tupua (Whanganui River), Aotearoa New Zealand

2.1.1 Water regulation in Aotearoa New Zealand

On average, water quantity is not a major concern for New Zealand, with high average rainfall (Ministry for the Environment (NZ) 2016). However, in many places New Zealand rivers suffer from irregular flow and poor water quality as a result of extensive agricultural and industrial impacts (OECD 2017).

The *Resource Management Act 1991* (RMA) provides a highly integrated natural resource management laws and policies (Warnock and Baker-Galloway 2014), which takes an ecosystem approach underpinned by the concept of 'sustainable management' (RMA s5). Unlike Australia and Chile, the New Zealand approach is still a 'planned' rather than integrated-market water allocation model, with low incidence of water trading (OECD 2017).

Like Australia, under New Zealand common law, water is vested in the Crown on behalf of the New Zealand public. Under the RMA, consent authorities (local municipal councils) make decisions to grant a 'resource consent' to take and use water on a 'first come, first served' basis. These consents are temporary, (up to 35 years), but otherwise have many of the same characteristics as *derechos de aprovecahmiento* in Chile or 'water access entitlements' in Australia (see below).

The RMA expressly requires consent authorities to recognise and provide for 'relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu [sacred sites], and other taonga [treasures]' (s 6), and the concept of 'kaitiakitanga' [guardianship] (s 7). The RMA also allows municipal councils to enter into collaborative governance arrangements with Māori iwi and hapū (tribes and sub-tribes) over natural resources or to devolve decision-making on resource management to Māori groups (ss58L-58U). Such 'co-management' arrangements have been used in the past for rivers, often as a consequence of settlements of Māori claims for redress under the Treaty of Waitangi, including for the Waikato River. Part 9 of the RMA also allows any person to apply to the Minister for the Environment for a 'water conservation order' to protect environmental or cultural water values. Yet despite these protections, in many parts of New Zealand the granting and exercise of resource consents has led to the pollution, eutrophication and over-extraction of rivers, or has impacted the spiritual or physical relationship of Māori with their waters.

2.1.2 Te Awa Tupua (Whanganui River)

In March 2017, Aotearoa New Zealand became the first country to pass legislation recognising a river as a legal person, as part of a political settlement with the Whanganui Iwi[1] who have traditionally used and held relationships with the river concerned (Macpherson and O'Donnell 2018). Rather than treating the river as a resource to be exploited by the people of the Whanganui, in the *Te Awa Tupua Act 2017* (the Whanganui Iwi are positioned as interdependent with and owing responsibilities to the river. Yet despite its ecocentric themes,

[1] In this paper, for simplicity, we refer to the iwi as 'Whanganui River Iwi', although we acknowledge that a number of other iwi (tribes) and hapū (subtribes) have interests in the Whanganui River.

the river's rights under *Te Awa Tupua Act* are intrinsically tied up with the rights of the Whanganui River Iwi and their indigenous cultural 'difference' (Magallanes 2015).

Te Awa Tupua Act is fundamentally a political settlement to one of New Zealand's longest-running disputes over river management and ownership, as a consequence of historical dispossession, environmental degradation and inequitable development (MacPherson 2016). This settlement forms part of a long line of settlements to Maori claims to rivers and lakes over the past 40 years (Ruru 2013), including the Waikato River, which was recognised as a 'living ancestor' in a similar way to Te Awa Tupua, albeit without legal personality. Earlier river settlements have focused on giving Maori rights of 'co-management', or a right to actively participate in the governance and regulation of rivers, together with the Crown, consistent with the Treaty principle of partnership (a relationship typically described by the Māori concept of 'kaitiakitanga', or guardianship).

However, *Te Awa Tupua Act* goes further than previous river settlements, and specifically declares that the river is a 'legal person' (*Te Awa Tupua Act* s14). *Te Awa Tupua Act*recognises the status of the Whanganui River (and its tributaries) as 'an indivisible and living whole, comprising the Whanganui River from the mountains to the sea, incorporating all its physical and meta-physical elements' (*Te Awa Tupua Act* s12). This reflects the tikanga Māori (Maori customary law) of the Whanganui Iwi (Hutchison 2014), and can be contrasted with western, liberal conceptions of natural resources as divisible subjects for propertisation and regulation.

The specific 'rights, powers, duties and liabilities' of a legal person include the rights to sue, be sued, enter into contracts and hold property (Stone 1972). Of course, the river itself cannot appear in court or purchase land, so *Te Awa Tupua Act* creates a representative (a guardian), called 'Te Pou Tupua', to be the human face of the river, and to act and speak for and on behalf of Te Awa Tupua. Te Pou Tupua is a river guardian, comprising one member nominated by the Crown, and another by the Whanganui River Iwi (*Te Awa Tupua Act* ss18-19). The guardian model adopts the ecocentric approach to natural resource management (Stone 2010), as well as the principle of partnership with Māori under the Treaty of Waitangi (Magallanes 2015). Te Pou Tupua gives Māori a stronger role in water governance than previous co-management arrangements, in the form of an equal seat at the governance table.

Although Te Pou Tupua has broad powers, it must act in the interests of the river and in accordance with prescribed values for the river's management. These values (called 'Tupua te Kawa') are described as the 'intrinsic values that represent the essence of Te Awa Tupua' (s13). They recognise the direct link between the health of the river and the health of the people, and reiterate that the river is an indivisible and living whole from the mountains to the sea, incorporating physical and metaphysical elements. Tupua te Kawa are highly significant, as they help to shape the content of the river's rights (Good 2013). A wide range of administrative decision-makers under other legislation must recognise, provide for and have regard to the status of Te Awa Tupua as a legal person and the statutory river values, as a 'relevant consideration' (*Te Awa Tupua Act* s15). However, decisions made under other legislation must still be consistent with the purpose of that legislation, and neither the status

of Te Awa Tupua as a legal person, nor Tupua te Kawa, can be determining factors in administrative decision (s15(5)), which considerably weakens the rights of the river.

Finally, *Te Awa Tupua Act* establishes a complicated, collaborative governance regime for the river between Maori, municipal and central government and private users (Talbot-Jones 2017). A range of entities are created, and a range of perspectives covered, not just those of Te Pou Tupua or the Whanganui River Iwi. The settlement is the culmination of more than a century of indigenous agitation for the right to 'own' the river, always resisted by the Crown on the basis that 'no one can own water'. Under the Act only the Crown-owned parts of the bed of the river is vested in Te Awa Tupua, and the settlement has no impact on public rights of use, fishing or navigation or private consents or permits to use the river, a provision that specifically protects the rights of hydro-electric power generators. Most tellingly, the consent of Te Pou Tupua is *not* required for applications for resource consents to use the river's water under the RMA (although its consent *is* required to use the river bed), although a consent authority may determine that Te Pou Tupua is an 'affected person' (RMA s46(3)).

2.2 Victorian Environmental Water Holder, Australia

2.2.1 Water regulation in Australia

Australia faces extreme variability in water supplies, and has invested heavily in infrastructure to store and deliver water to where and when it is needed (Musgrave 2008). Like Chile, Australia uses water markets as the primary system of water re-allocation between uses, but these markets form part of an integrated system of water regulation, with a large role for government regulation (Garrick, Hernandez-Mora, and O'Donnell 2018). Like New Zealand, Australia's 'water access entitlements', are not treated as rights of 'property', because this would be inconsistent with the vesting of all water in the Crown (Fisher 2010).

Water reform in Australia has historically focused on the Murray-Darling Basin (Hart 2015). In the 1990s, in response to severe algal blooms and rising salinity in the Basin, State and Federal governments agreed to reconsider the Australian approach to water management (COAG 1994). In the early 2000s, a national approach to water regulation saw states agree to cap water rights, improve transparency of water pricing, separate water rights from land titles and establish water trading, in addition to allocating water rights to the environment, in the hope of returning over-allocated systems to environmentally sustainable levels (COAG 2004).

In 2007, the Federal government dramatically increased its responsibility for water resource management within the Murray-Darling Basin (Kildea and Williams 2010). New legislation established a sustainable limit on water extraction in the Murray-Darling Basin, and the Federal government funded significant investment in water recovery for the environment, via water rights purchase programs and investment in water efficiency projects (Australian Government 2010). New organisations now hold and manage substantial volumes of water rights for the environment (O'Donnell and Garrick 2017b).

2.2.2 The Victorian Environmental Water Holder

The state of Victoria in south-eastern Australia has been a leader in environmental water regulation in Australia, with one of the oldest and largest formal environmental water rights, an entitlement to use water in the River Murray to protect and maintain flora and fauna habitat. In 2005, the Victorian *Water Act* was amended to create the 'environmental water reserve', which set aside water entitlements (usually water in storages that can be delivered to environmental sites), minimum river flows, and water remaining 'above cap' for environmental purposes (Foerster 2007). The Victorian government has also invested in recovering water for the environment, and substantial volumes of environmental water are now used to achieve environmental objectives throughout Victoria (Victorian Environmental Water Holder 2016).

In 2010, the Victorian government established the Victorian Environmental Water Holder (VEWH) to efficiently manage Victoria's environmental water entitlements to improve the values and health of Victoria's aquatic ecosystems (Department of Sustainability and Environment (Vic) 2009). This new organisation was intended to enhance the independence, accountability and transparency of environmental water management. The VEWH is free to make decisions on environmental water use (including trade in water rights) without political interference, but still operates within the relevant policy framework (O'Donnell 2012). Each year, the VEWH makes decisions on how to use water (as instream flows, or by pumping it into a wetland), or whether to trade water on the market (O'Donnell 2013).

The VEWH is a statutory corporation and is, therefore, a 'legal person'. The VEWH is a 'body corporate', which can 'sue or be sued in its corporate name… and may do and suffer all acts and things that a body corporate may by law do and suffer' (*Water Act 1989* (Vic), s33DB). This gives the VEWH legal standing in its own right in the event of any dispute, and the power to enter into contracts and deal with real or personal property (O'Donnell 2017b).

As in Chile, although the VEWH has legal personality, the rivers it manages do not. However, unlike Chile, river values enjoy express statutory protection as the objectives of the VEWH require it to 'improve[e] the environmental values and health of water ecosystems, including their biodiversity, ecological functioning and water quality, and other uses that depend on environmental condition' (*Water Act*, s33DC(b)). In addition, the environmental water entitlements held by the VEWH expressly state that the water allocated under these entitlements is to be used to achieve environmental outcomes. This minimises the potential for divergence between the interests of the VEWH and the environmental interests of rivers. In fact, the VEWH was originally intended to provide a single 'voice' for the aquatic environment in Victoria (O'Donnell 2012). In effect, the VEWH acts as a 'guardian' for environmental flows (in the rivers where it holds water rights), working with other environmental water holders and catchment management authorities to determine where, when, and how to use the water for the environment in the state of Victoria (O'Donnell 2017a).

2.3 Water Monitoring Boards, Chile

2.3.1 Water regulation in Chile

Chile's rivers are under increasing demands from agriculture, industry and threat of climate change (OECD 2016). The quality and quantity of water in many Chilean rivers, lakes and wetlands continues to deteriorate (OECD 2016), 72). Water law frameworks in Chile are characterised by an integrated-market approach loosely regulated by the *Water Code 1981*, involving a combination of centralised regulation and market transfers of unbundled *derechos de aprovechamiento* (water use rights). In this model, water is 'national property for public use', but *derechos de aprovechamiento* are constitutionally protected private property rights.

The Chilean Constitution protects the right to live in an environment free from contamination, requires the state to preserve nature, and entitles the state to legislate restrictions on the exercise of rights or liberties to protect the environment (*Constitución Política de la República de Chile,* art 19). However, the General Water Directorate has limited powers to intervene in the management of water to promote aquatic health, once *derechos de aprovechamiento* are allocated (O'Donnell and MacPherson 2014). Environmental protections were not factored into the original design of the *Water Code*, and later amendments in 2005 created new, but relatively weak and ad hoc mechanisms for environmental protection (Guiloff 2012).

Recent governments have attempted, and failed, to substantially reform water law in Chile amongst fierce political debate going to the heart of the water allocation model. An attempt was made to reform the Chilean *Water Code 1981* by the previous Bachelet administration to legislate stronger provision for minimum ecological flows and reserves, but did not provide for robust institutions to enforce its ambitious environmental, health and social outcomes. The reform, widely considered to be unsuccessful, also neglected recovery strategies to address existing problems caused by widespread water over-allocation (Macpherson and O'Donnell 2018).

2.3.2 Water Monitoring Boards

In the absence of strong government regulation of water use in the interests of the environment, the private sector has played an important role in the regulation of water via private organisations of water users. For natural rivers, this role is carried out at basin or semi-basin level by organisations known as *Juntas de Vigilancia* (Water Monitoring Boards).

Water Monitoring Boards are private, not-for-profit corporations of water 'shareholders' in the river basin. Individual or corporate water users in a particular river basin receive a water shareholding, proportional to their respective share of total *derechos de aprovechamiento* in the catchment (*Water Code 1981*, art 268). The *Water Code* allows for the incorporation of Water Management Boards which become 'legal persons' (art 263). Thus, although no rivers have been recognised as legal persons in Chile, the Water Monitoring Boards do themselves benefit from legal personality, as they perform the 'public' function of managing river distribution and health across the whole catchment (Rojas Calderón 2014).

The objective of a Water Monitoring Board is to 'manage and distribute the natural water sources to which its members are entitled, to use and preserve common water infrastructure and to carry out the other purposes prescribed by law' (*Water Code* art 266). Boards have wide powers under the *Water Code* to monitor and manage the rivers within their control, including ensuring efficient water rights distribution, and protective and remedial measures to protect river health. These powers, Vergara Blanco argues, extend beyond simply managing the distribution and exercise of *derechos de aprovechamiento*, to the general governance and conservation of rivers (Vergara Blanco 2014).

There is no express protection of environmental or other river values in the *Water Code*. However, many Water Monitoring Boards now have environmental programmes and claim to act in the interests of water sustainability. The *Junta de Vigilancia Rio Huasco*, for example has as its mission:

> *To manage and distribute the surface and groundwater of the Huasco River basin and its tributaries, according to the rights of each user, protecting resource quantity and quality, representing irrigators before the State and private sectors, supporting the management of water communities and the development of the Huasco River Basin* (Junta de Vigilancia de la Cuenca de Rio Huasco y sus Afluentes, webpage).

3 Legal personality: voice, power, and legitimacy

Each of the river management arrangements uses a different combination of legal powers, river values, and stakeholder engagement (Table 1).By comparing the most well-developed model of legal rights for rivers (Te Awa Tupua) with existing arrangements in Australia and Chile that make use of legal personality (although not directly for the river), it is possible to draw some early lessons. d

<Insert Table 1 near here>

3.1 Output legitimacy: the ability to deliver environmental outcomes

From the perspective of *output* legitimacy, it is the ability of these organisations to deliver sustainable water management that matters most. The Water Monitoring Boards of Chile have the lowest integration of environmental values with legal personality. For instance, the Boards may not incorporate the river's interests, nor the interests of those without formal *derechos de aprovechamiento*, such as indigenous or customary communities, public interest groups and non-government organisations, environmental river outcomes, or even the public interest (Prieto and Bauer 2012).

Te Awa Tupua of New Zealand directly grants legal rights to the river, combined with statutory river values and a clear voice for the river, in the form of the guardians. However, Te Awa Tupua is the only example in which the legal person does not hold rights to use water

in the river. Although Te Awa Tupua has a clear voice, it lacks the power to use it effectively, which limits its ability to achieve environmental outcomes.

The VEWH falls somewhere in the middle: an attempt to give the environment a voice in the allocation and management of rivers in Victoria, but without the explicit grant of legal personality to rivers. This means that the VEWH can only speak on behalf of the rivers in which it holds water rights, which only includes some of the rivers in Victoria (Victorian Environmental Water Holder 2016). However, the VEWH holds large volumes of water rights, giving its voice real power to influence water regulation and policy in Victorian rivers, as both a buyer and a seller of water rights, and by deciding where and when to use that water for the environment (O'Donnell 2017b).

3.2 Input legitimacy: access, transparency, and engagement

When it comes to *input* legitimacy, all three models include governance arrangements that bring together the interests of different stakeholders. The Chilean Water Monitoring Boards provide a forum for irrigators to influence decision-making on water resource management. The 'conflict-resolution' role these organisations play prior to the courts concerns disputes between water users about water allocation and use (Rios Brehm and Quiroz 1995). However, this also leaves them beholden to their shareholders (water users), and although the Water Monitoring Boards have the ability to take legal action in their own name, they are unlikely to do so where this conflicts with the interests of the majority.

Like other Australian environmental water managers, the VEWH has traditionally relied on measures of *output* legitimacy to build community support, showing how much water has been used, and where (O'Donnell et al. 2018). However, recent years have seen a shift in focus to *input* legitimacy, with the VEWH explicitly seeking input from a wider range of stakeholders, including Indigenous people, irrigators, recreational fishers, duck hunters, local government, and local tourism associations on how to use its environmental water rights to deliver multiple outcomes, without compromising on its environmental objectives (Victorian Environmental Water Holder 2016). In particular, over the past five years, the VEWH has been holding regular statewide *Environmental Water Matters* forums, which provide an opportunity for a diverse group of stakeholders to participate in environmental water management (O'Donnell et al, this issue).

4 Legal rights for rivers: legitimacy, collaboration, and power to enforce rights

The Te Awa Tupua model is really an advanced collaborative governance approach, in which the interests of the river are emphasised in its regulation by the government, Māori and other community and business interests. The new management arrangements provide a forum for all stakeholders to engage in decision-making for the Whanganui River, and although the largest bloc of participants are Māori, all interests are represented (O'Donnell and Talbot-Jones 2018). This collaborative approach helps to ensure *input legitimacy*, by providing for transparent, accountable decision-making, and equal access for all participants.

According to the worldview of the Whananui Iwi, the river has rights to which the Iwi belong and not the other way around, exemplified in the Iwi's idiom: 'I am the river, and the river is

me'. However, the Māori claims to the Whanganui River were framed as 'proprietary' and 'territorial' in nature, although still acknowledging the ancestral relationship of Maori to the river (Waitangi Tribunal 1999: 337, 343). From this perspective, the *Te Awa Tupua Act* is a political compromise, allowing no one the right to 'own' the river as a whole (Hardcastle 2014). Avoiding the thorny issue of redistributing use rights, either to the Whanganui River Iwi or the river itself, was one of the reasons for recognizing the river as a legal person.

The New Zealand model of the Whanganui River represents the first of several new management arrangements in which the river has its own legal rights. But the failure to give the river the right to its own water is a real problem for *output* legitimacy, which depends on demonstrating that the new arrangements are delivering desired outcomes. How can Te Awa Tupua be an 'indivisible and living whole from the mountains to the sea incorporating physical and metaphysical elements' and yet carved up into different proprietary regimes for the bed and water? How can the legal rights of the river be given force and effect, when the model has no impact on underlying (and overlapping) legal rights regimes (Hutchison 2014, Margil 2017)?

In the context of the existing regime of public and private use rights to water in the Whanganui River, it is easy to see how the river's interests may become subservient to those of its users. It is possible that Te Awa Tupua may apply for a water conservation order to protect flows in the river, but it is difficult to see how it can do so without affecting other water users, including the hydropower generators whose rights are protected in other legislation which the *Te Awa Tupua* Act has no power to override.

Lasting success for these new arrangements will depend not only on finding a way to give the river's rights force and effect (which may require the courts to resolve disputes, including ongoing proprietary claims maintained by Māori to the water in the river), but also on strong collaborative governance. The strength of the Te Awa Tupua model is that it provides a way to bring diverse interests in the river together, and frames policy debates around consideration of the river as a single interconnected entity. However, this model relies on all parties working together in good faith, and finding consensus-based solutions to future challenges. It may not always be possible to reach agreement, and the guardians of the river have a legal responsibility to act in its best interests. Pursuing legal avenues to uphold the rights of the river may undermine the legitimacy of the co-management arrangements (O'Donnell 2017a).

4.1.1 Key finding

The Te Awa Tupua model brings together both output and input legitimacy. It shows the importance of strong institutions to enforce and uphold the river's rights, which are based on clear, express, statutory values. As the river acts through its guardian, it must be possible to hold the guardian accountable for acting in the river's interests. Crucially, Te Awa Tupua includes a process for collaborative management, and a way to bring diverse interests of multiple stakeholders together. There is clearly a tension between the rights of the river, and the rights of those who use it, and the rivers rights must be legally enforceable. However, such enforcement should be a last resort, as it can be fatal to collaboration between stakeholders (O'Donnell 2017a).

5 Conclusion

Legal rights for rivers may enhance environmental regulation when there is a gap in river protection, because the river's interests are not being effectively provided for by existing laws and institutions. This is usually because the river's interests don't align with the interests of existing regulators or users, or where the interests are too fragmented to provide a holistic approach. In other words, legal personality adds value when a particular river, in its particular circumstances, needs a voice and an ability to be heard in order to compete for outcomes. For this reason, legal personality has been adopted in contexts where rivers are subject to a major threat of degradation and governments have been unable to effectively respond using existing mechanisms (O'Donnell and Talbot-Jones 2018).

However, framing the river as a competitor in these situations may create perverse outcomes. Increased legal powers may undermine the cultural narratives that support environmental protection at all (O'Donnell 2017a). Getting the balance right between increasing legal power, and creating a voice for rivers to protect their own interests, and maintaining the *legitimacy* of a river as the recipient of special legal protections remains a real challenge. The experience of the *Juntas de Vigilancia* in Chile shows that there is the possibility of providing alternative dispute resolution and conflict management forums, but the river needs a strong voice in which to participate. In Australia, environmental water managers with legal personality are members of water services committees, which provide them with an opportunity to engage with other water users in an informal setting (O'Donnell 2017b).

Rivers with legal rights may be able to rely on the courts to enforce their rights if necessary. But this adversarial process weakens collaboration between stakeholders. Building and maintaining support from diverse stakeholders is crucial to maintain legitimacy, and ensure the success of these new arrangements. Rivers with legal personality will continue to exist within the regulatory frameworks of water management, and increasing legal power for rivers does not absolve policy makers and water resource managers from the ongoing task of managing rivers sustainably.

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Table 1 River rights and regulation in Chile, Australia and New Zealand (extended and adapted from Macpherson and O'Donnell, forthcoming; used with permission)

Legal and institutional attributes	**Jurisdiction**		
	River Monitoring Boards (Chile)	**Victorian Environmental Water Holder (Australia)**	**Te Awa Tupua (New Zealand)**
Entity is a legal person	Yes	Yes	Yes
River is a legal person	No	No	Yes
Entity/river holds water rights	Yes (indirectly via shareholders)	Yes	No
River values are explicitly protected in law	No	Yes	Yes
River values include the values of human users	Yes: irrigators	Yes: water users dependent on condition of water ecosystems, including Indigenous Australians	Yes: Maori and other stakeholders in co-management arrangements
Entity provides integrated water management at the basin or catchment scale	Yes	No	Yes (although no existing rights to water are affected)
Specific measures for including other river users in decision-making	Yes	No (although there are ways to influence decisions)	Yes