



Better Water Reform Options

**Design of a superior reform model for Communities 4
Local Democracy**

JULY 2022

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Definitions

Bill	Water Services Entities Bill
Capex	Capital expenditure
CME	Compliance, monitoring, and enforcement
COO	Council-owned and operated model
CORE	Council-owned regional enterprise model
C4LD	Communities 4 Local Democracy
DIA	Department of Internal Affairs
IFRS	International Financial Reporting Standards
LGFA	Local Government Funding Authority
WFF	Water financing facility
WICS	Water Industry Commission for Scotland
WSE	Water service entity

Executive summary

The government's Water Services Entities Bill (Bill) is being considered by Parliament and has been referred to the Finance and Expenditure Committee. Castalia has been appointed by Communities 4 Local Democracy (C4LD) to provide independent analysis and advice on the Bill. Castalia prepared a report entitled *Flaws in Water Service Entities Bill* that accompanies this report, and which highlights five key flaws in the Bill.

In this report we now set out Castalia's design of a superior reform option for C4LD. The need for some reform in the New Zealand water sector is beyond debate. Regulation must improve, management capability needs to be lifted in many localities, and investment levels need to match consumer demands and minimum service standards.

The C4LD superior reform model is based on setting a clear objective and evaluation criteria. It includes core features of sound regulation, improving accountability to the community and improving financing. In order to implement the model, we provide a five-year timeframe with a combination of "sticks" and "carrots" to drive higher performance by local government and ensure locally and regionally appropriate models are developed in response to incentives. When the end-state institutional structure is evaluated against the evaluation criteria, we find that C4LD's superior model performs much better than the government's mega entity model.

Reform models should be assessed against objectives and success criteria

An overarching objective for water sector reform and key criteria to judge success are necessary. In all policy reforms, it is essential to identify the objectives of the reform and to identify the success criteria with which to judge whether possible options meet the objectives.

As our report *Flaws in Water Service Entities Bill* identifies, the government has failed to set a clear objective and use relevant evaluation criteria. We therefore use an overarching objective and neutral criteria to evaluate the institutional structures that will result from the C4LD reform model.

Provision of safe, resilient, reliable, and customer-responsive water services, at least cost.

Core elements of the C4LD reform model

The C4LD reform has four core elements. These include central government actions and local government actions

Improving the regulatory framework

The regulatory framework is essential to the proper functioning of the water sector. Effective water quality regulation has been absent for six decades but has already significantly improved with Taumata Arowai. Effective economic oversight through regulation is also necessary. Finally, environmental outcome regulation is important (but the settings need improvement in New Zealand)

Separate water service accounts

This is a relatively minor and easy fix, however, councils will need to retain separate financial and operational records for council water services to ensure the regulation can be effective

Ensuring accountability to communities

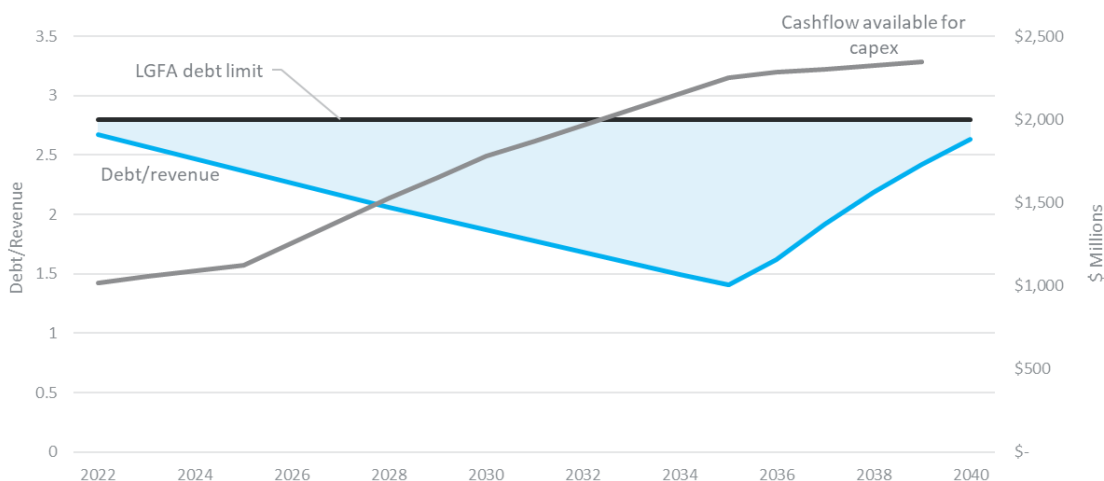
The success of the public ownership model in meeting the public interest depends on how the entity is governed, and the incentives inherent in the governance design. Direct ownership and operation of water services by councils/municipalities provides strong customer and community accountability

Improving the financing conditions where necessary

The government has made affordability and social inclusion in some localities for needed capital expenditure a priority. To improve financing for water capital expenditure, some change is needed.

However, Castalia finds that the government’s modelled \$97 billion capital expenditure under the mega entity reform is financeable for 20 years under the C4LD reform model without increasing water bills or changing council debt caps. Castalia’s modelling matches exactly the WICS mega entity capex programme in terms of timing and amount spent. Of course, a range of financing options are available that would make financing even more accessible. These include revenue bonds, increasing debt caps for the water service provider (for example by achieving balance sheet separation from councils under accounting rules through C4LD’s council-owned regional enterprise model), or under the Infrastructure Funding and Financing Act 2020. For genuine affordability issues, a Water Financing Facility using the untaged \$2.5 billion committed to local councils under these reforms, could be used. There are 20 years to ensure financing models are arrangements are made, without sacrificing any of the capex the government’s modelling predicts is needed. Furthermore, modest increases in water rates under C4LD’s model would make the capex financeable without changing the debt limit.

Figure 0.1: Implementing WICS capex plan under C4LD model



Implementing the C4LD reform model

The steps to implement the C4LD reform model are illustrated in Figure 0.2. A genuine partnership between central and local government is needed where each takes the actions necessary for the model to be successful.

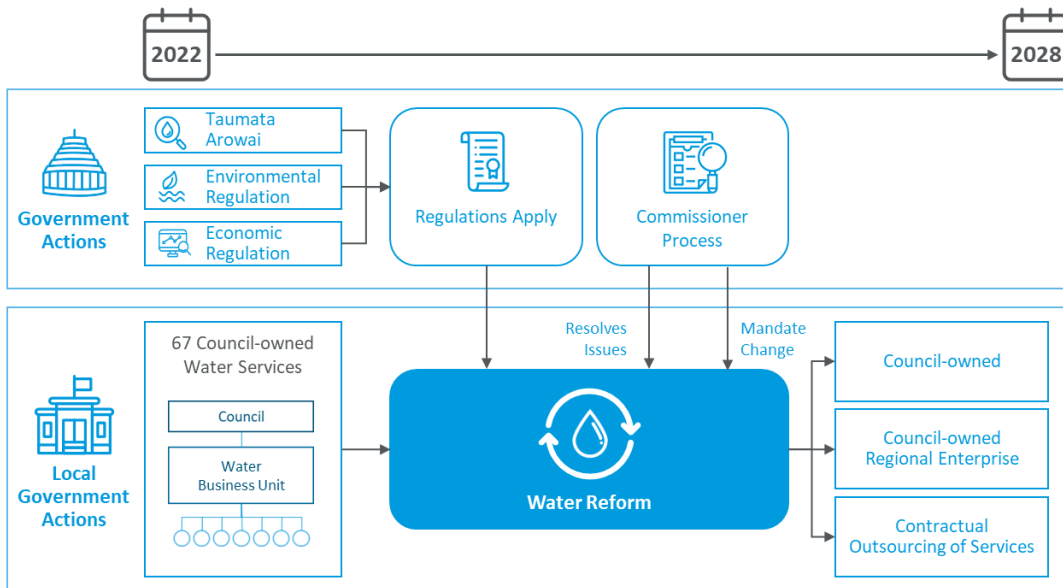
On the central government side, the model requires getting the regulatory settings right (water quality, environmental and economic). Those settings then need to be effectively applied and enforced. Once those are in place, a Commissioner-type role would facilitate reform and mandate changes where councils do not meet regulatory standards by deadlines.

On the local government side, councils will have to comply with the regulations. Water quality standards must be met through changing management techniques, operations and service delivery and making investments in improvements. Environmental outcomes must be assured through operational changes or new investments. Sufficient planned capital expenditure, adequate financing and sustainable rates/charges must be adopted to meet benchmarks set by the economic regulator.

Councils will have a range of options to meet the regulatory standards. In cases where councils meet the standards and model criteria as a standalone, then they can continue. Where regulatory standards will not be met, regional merger or collaboration is possible, as is outsourcing to a specialist water service operator. The Commissioner will also be able to mandate changes in cases of non-compliance.

The C4LD model is also dynamic. It is able to adapt to changes over time, for instance as population pressures grow or ease in different areas. Adjustments in regional groupings could occur or councils could elect to outsource service provision. The model is “horses for courses” and dynamic to local and regional conditions.

Figure 0.2: Timeframe for implementing C4LD model

































Target end-state is better performing council-owned water services

At the conclusion of the five year period, and then into the future, a target end-state will emerge. Councils that are able to comply with the minimum regulatory standards across water quality, environmental outcomes and economic/financial performance. The result is a “horses for courses” reform where local and regional differences are reflected in the institutional structure for water services. Community accountability is retained, management and governance incentives are enhanced, access to finance is improves, scale and scope efficiencies are exploited and the model is flexible for future developments such as climate or demographic change.

Figure 0.3 below illustrates how the C4LD end-state institutional structure compares against the mega entity reform. The mega entity reform is a high-risk model that is likely to deliver inferior outcomes compared to the C4LD alternative.

Figure 0.3: Comparing the end-state of C4LD’s model against mega entity reform

	Council-owned model	Council-owned regional entity	Contractual outsourcing	Mega-entity proposal
 Accountability to customers				
 Incentives of management and governance				
 Management and operational performance				
 Access to financing				
 Scale and scope efficiencies				
 Flexibility for the future				



1 Introduction

The government's Water Services Entities Bill (Bill) is being considered by Parliament and has been referred to the Finance and Expenditure Committee. Castalia has been appointed by Communities 4 Local Democracy (C4LD) to provide independent analysis and advice on the Bill. Castalia prepared a report that accompanies this report highlighting five key flaws in the Bill.

In this report we now set out Castalia's design of a superior reform option for C4LD. The need for some reform in the New Zealand water sector is beyond debate. Regulation must improve, management capability needs to be lifted in many localities, and investment levels need to match consumer demands and minimum service standards.

In section 2, we outline how the C4LD superior reform model is based on setting a clear objective and evaluation criteria. Section 3 describes the core features of sound regulation, improving accountability to the community and improving financing. Implementation of the model is described in section 4. We provide a five-year timeframe with a combination of "sticks" and "carrots" to drive higher performance by local government, and ensure locally and regionally appropriate models are developed in response to incentives. When the end-state institutional structures are evaluated against the evaluation criteria in section 5, we find that C4LD's superior model performs much better than the government's mega entity model.

2 Objectives and success criteria for water reform

In policy reform, following standard policy development processes is important. This ensures that reforms are properly considered, relevant factors weighted and robust evidence used.

The local government sector agrees there is a clear case for change for New Zealand water services. Unfortunately, the government has not properly evaluated the available options. It uses faulty logic and fundamentally flawed evidence to justify its mega entity model.

It is critical that the policy process follows standard processes: It should:

- Define the problems the reform should fix: what is the case for change?
- State the objectives: what outcomes do we want to achieve?
- Identify criteria with which to evaluate reform
- Evaluate reform options with credible and contestable evidence.

Proper evaluation is possible when we properly separate the objectives and success criteria.

2.1 Objectives for water reform

The government has set out its reform objectives. These are to:

- Improve the safety, quality, and environmental performance of three waters services
- Ensure all New Zealanders have access to affordable three waters services
- Move the supply of three waters services to a more financially sustainable footing, and address the affordability and capability challenges that currently exist in the sector

- Improve transparency in, and accountability for, the delivery and costs of three waters services
- Improve the coordination of resources and unlock opportunities to consider New Zealand's water infrastructure needs at a larger scale and alongside wider infrastructure and development needs
- Increase the resilience of three waters services provision to both short- and long-term risks and events, particularly climate change and natural hazards
- Provide mechanisms for enabling iwi/Māori rights and interests.¹

Single overarching objective can improve clarity when assessing options

The Cabinet objectives are useful for setting out the specific things that have motivated the desire for reform (for example, drinking water safety and improving access to lowest-cost finance) or which must not be lost in the reform process (for example, community responsiveness, financial wellbeing of local authorities). However, numerous discrete objectives can lead to confusion. We, therefore, propose a single overarching objective that is consistent with and encompasses the numerous objectives of Cabinet and the local government sector. This overarching objective is:

Provision of safe, resilient, reliable, and customer-responsive water services, at least cost.

2.2 Success criteria

We propose six success criteria to evaluate water service reform options. The government has not separated the criteria from its objective statement. The following success criteria were presented to the Joint Steering Committee in 2020, and no objections to these were received at any stage. Each criterion applies to important aspects of water service delivery. The criteria are:

- Is the water delivery service accountable to customers?
- Does the model improve the competence of management and operations?
- Are incentives aligned with objectives?
- Are providers able to reliably raise the finance needed for investment?
- Does the model achieve economies of scale and scope?
- Will the model be flexible and adapt to change and new information?

Accountability of water delivery services to customers and communities

Accountability to customers and communities is important to ensure the water services are provided at the desired quality and cost level. Institutional structuring options provide varying degrees of accountability. These include municipal democratic control, regulation, corporatisation and direct ownership.

¹ DIA (2022), Transforming the system for delivering three waters services: Summary of proposals

Improvements in competence of management and operations

Competent and sophisticated management and operations are essential to safe and efficient water services. There are various ways of achieving this, including scale, competition, regulation, outsourcing and competition.

Alignment of incentives with objectives

Incentive alignment is important for the short- and long-term. More care is required to align the incentives of management and those charged with governance with the public policy objectives over the long-term. Regulatory and institutional design support incentive alignment to varying degrees.

Reliable access to finance for investment

Water providers need access to adequate finance for investment needs. Various barriers currently exist preventing water services in New Zealand from efficiently financing investment. Overseas institutional models avoid these barriers through revenue financing and stand-alone corporate structures.

Economies of scale and scope

Economies of scale can exist in natural monopolies because unit costs tend to fall as the firm's production increases. However, economies of scale in water services need to be carefully examined. Water networks are often already at efficient scale, because water networks tend to match local geography. Caution is especially warranted when examining evidence of economies of scale in water services to find cost savings as a reason for administrative amalgamation.

Economies of scope are also less clear cut with water services. Economies can exist where water services are provided alongside other services (such as with many council-owned water services currently).

Flexibility and adaptability to change and new information

Water services involve expensive, long-lived assets that require long-term investment and stewardship. Nevertheless, water services need to be flexible and adapt to change and emerging new information, such as changes in customer preferences, society's expectations and growth. Institutional design can help preserve this flexibility.

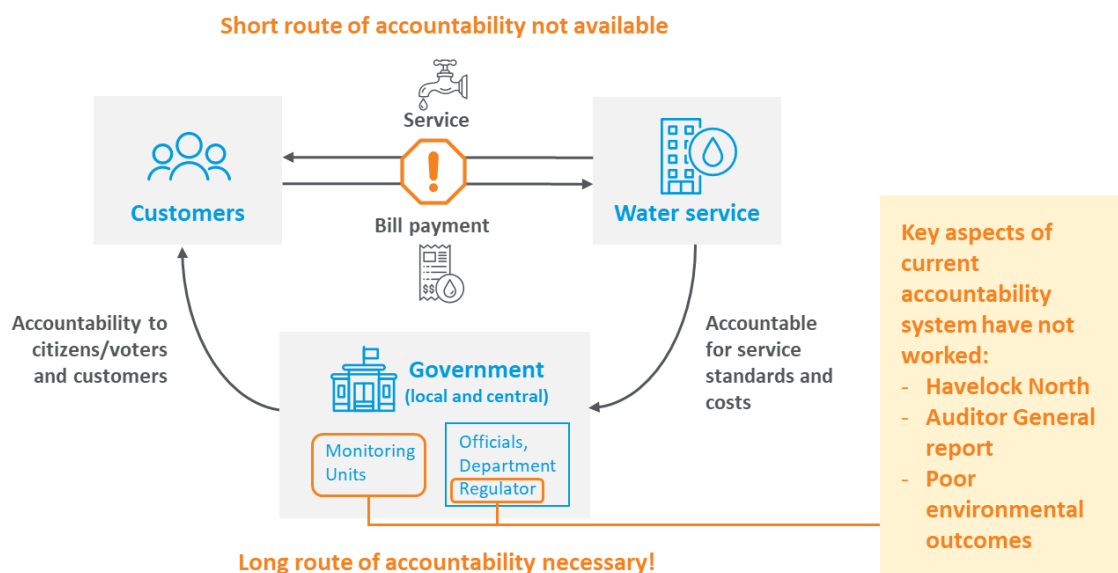
3 Core elements of C4LD reform model

The C4LD reform model has core elements that will drive outcomes. First, like the government, C4LD proposes that the regulatory framework is improved across water quality, environmental and economic regulation. This will bring New Zealand into line with global best practice. Second, C4LD proposes that water services are separated for accounting purposes from all local councils immediately where this has not already been done, to enable proper analysis and evaluation of water service performance separate from other council activities. Third, C4LD proposes that the council retain ownership of all or a proportionate share of water service providers to ensure accountability to local customers and communities of interest. Fourth, financing options are needed to finance the \$97 billion capex that Water Industry Commission for Scotland (WICS) modelling suggests is needed for New Zealand.

3.1 Improving the regulatory framework for water services

A well-performing regulatory system for New Zealand water services is essential. Since water services are natural monopolies, the typical accountability mechanism in competitive markets (accountability to customers through a competitive process) is unavailable. Therefore, the “long-route” of accountability set out in Figure 3.1 is needed.

Figure 3.1: Ensuring accountability in water services



New Zealand has undertaken significant steps to improve the regulatory framework for the water sector. However, more needs to be done to get the basic settings right. New Zealand’s water quality regulatory regime now has a resourced and centralised regulator, which brings New Zealand into line with global peers. However, the economic and environmental regulation are not yet aligned with global norms. Table 3.1 shows the global comparators and New Zealand’s outlier status in terms of economic and environmental regulation.

Table 3.1: Approaches to regulation of water services in selected jurisdictions

Jurisdiction	Level of provision	Drinking water regulation	Environmental regulation	Economic regulation
England and Wales	Regional	Drinking Water Inspectorate	Environment Agency	Water Services Regulation Authority (Ofwat)
Scotland	National	Drinking Water Quality Regulator	Scottish Environment Protection Agency	Water Industry Commission for Scotland
Ireland	National	Environmental Protection Agency	Environment Protection Agency	Commission for Regulation of Utilities

Tasmania	State-level	Tasmanian Department of Health and Human Services	Tasmanian Environment Protection Authority	Office of the Tasmanian Economic Regulator
Victoria	Regional	Victorian Department of Health and Human Services	Victorian Environment Protection Authority	Essential Services Commission
New South Wales	Regional & local	NSW Department of Planning and Environment	NSW Environment Protection Authority	Independent Pricing and Regulatory Tribunal
Florida	Municipal/local	Florida Department of Environmental Protection	Florida Department of Environmental Protection	Florida Public Services Commission
Colombia	Municipal/local	Ministry of Economic Development	Ministry of the Environment and Sustainable Development	Potable Water and Basic Sanitation Regulatory Commission
Philippines	Municipal/local	Department of Health	Department of Environment and Natural Resources	Local government units
New Zealand	Local	Taumata Arowai	16 Unitary and Regional Councils²	Limited regulation (currently DIA/Auditor General)

3.1.1 Water quality regulation with enforced standards

Water quality regulation is essential to ensuring that water service providers are incentivised to provide safe water. Those charged with legal and/or democratic responsibility for water services are incentivised to complete when the water quality regulator enforces minimum quality standards of safety.

The Taumata Arowai-the Water Services Regulator Act 2020 established a new framework for minimum quality standards and created the water quality regulator Taumata Arowai. This is a welcome addition. Taumata Arowai has begun to establish itself as a credible and respected regulator. It will continue to do this through developing proportional standards, enforcing these, and requiring compliance with remedies it imposes. Taumata Arowai is already regulating a large number of public and private water providers. According to its CEO, the vast majority of local authorities are adapting well to the new regulatory regime.³

Taumata Arowai has a range of regulatory tools and approaches and will take a balanced approach to regulation. The compliance, monitoring, and enforcement (CME) strategy will be

² Chatham Islands is also a unitary authority but not counted for these purposes.

³ CEO Bill Bayfield at Water NZ conference May 2022.

published on its website in July. Any regulatory interventions will be proportionate and directed to address the risk and nature of non-compliance.⁴

Enforcement activities will be proportionate to the risk to consumers and the extent to which the supplier has failed to meet its duties. The Water Services Act empowers Taumata Arowai to impose criminal penalties on individuals as well as financial penalties on individuals and body corporates. For serious offences, a convicted individual is liable for up to \$300,000, and a company can be fined up to \$1.5 million. A company can be fined up to \$3 million for failure to take action, and an individual could be imprisoned for up to five years.⁵

Taumata Arowai will have additional powers that allow it to undertake its responsibilities. It can exercise powers of entry and inspection, take and test samples, require the supplier to take action, and issue compliance orders.⁶

3.1.2 Environmental regulation

Unfortunately, New Zealand's environmental regulation in the water sector is currently different to global norms. The regional and unitary councils will remain in charge of interpreting, monitoring and enforcing environmental standards. From 2023, according to the Water Services Act 2021, Taumata Arowai will be responsible for:

- Environmental performance standard setting functions, specific to waste- and stormwater networks (section 138)
- Wastewater risk management planning function (section 139)
- Monitoring and reporting on environmental performance (sections 141, 142, 144)
- Performance measures and targets for networks (section 145)
- Enforcement powers (section 143).

This structure is somewhat unusual. Normally, water quality and environmental regulation skillsets are different and carried out by different institutions. Table 3.2 shows the global approach to environmental regulation in water services. It is a positive step for New Zealand to have a centralised, uniform standard setter of minimum environmental standards relevant for water services. Regulatory functions benefit from standardisation and sufficient scale.

Table 3.2: Environmental regulation in water services globally

Jurisdiction	Level of water provision	Environmental standard-setting	Environmental enforcement
England and Wales	Regional	Environment Agency	Environment Agency
Scotland	National	Scottish Environment Protection Agency	Scottish Environment Protection Agency

⁴ <https://www.taumataarowai.govt.nz/about/what-we-do/>

⁵ Franks Ogilvie – Analysis of Water Services Act 2021. 14 February 2022

⁶ Franks Ogilvie – Analysis of Water Services Act 2021. 14 February 2022

Ireland	National	Environment Protection Agency	Environment Protection Agency
Tasmania	State-level	Tasmanian Environment Protection Authority	Tasmanian Environment Protection Authority
Victoria	Regional	Victorian Environment Protection Authority	Victorian Environment Protection Authority
New South Wales	Regional & local	NSW Environment Protection Authority	NSW Environment Protection Authority
Florida	Municipal/local	Florida Department of Environmental Protection	Florida Department of Environmental Protection
Colombia	Municipal/local	Ministry of the Environment and Sustainable Development	Ministry of the Environment and Sustainable Development
Philippines	Municipal/local	Department of Environment and Natural Resources	Department of Environment and Natural Resources
New Zealand (to 2023)	Local	Minister for the Environment	Environment Protection Authority
		Regional and unitary councils (frontline regulators)	
New Zealand (post 2023)	Local and regional (if C4LD model is implemented)	Taumata Arowai	Taumata Arowai and Regional Councils

3.1.3 Effective economic regulation

Economic regulation in the form of regulatory oversight is necessary for New Zealand water services. Drinking, waste and stormwater networks are natural monopolies and essential for community wellbeing. The typical way customers hold a service provider accountable (by choosing an alternative, reducing consumption, or demanding better service) is not available.

Economic regulation aims to make providers offer services that customers want at reasonable prices. In New Zealand, it is essential that water service providers ensure that asset serviceability remains above specified levels. Economic regulation should mimic the competitive pressures that competition provides in other markets. The core functions of economic regulation include setting, monitoring, enforcing, and charging the maximum water

charges that water providers are allowed to charge and service standards that they are required to provide. Other functions can include controlling water charging structures, setting coverage targets, or ensuring that asset serviceability remains above specified levels.

The economic regulation challenge in New Zealand is uncommon because Water Service Entities (WSE) are not-for-profit. The regulator will be challenged to ensure WSE's set tariffs that are high enough to cover the service cost. This is one of the government's justifications for reform. Without a profit motive, WSE's have no basic incentive to increase tariffs, and the regulator has no viable way to enforce breaches.

Furthermore, without objective asset serviceability targets, councils have faced fewer incentives to maintain capital investment levels. Economic regulation can determine whether water service providers are maintaining assets and investing at adequate levels to continue to maintain service levels into the future.

Economic regulation paired with sound governance is required to deliver desirable outcomes in the public ownership model. Public ownership and sound governance can address the market failure to improve consumer welfare. Regulation should support the public ownership model. It achieves this through information disclosure, benchmarking, and a commitment in statute to promote the long-term benefit of consumers.

3.2 Separating water service business units and accounts from other Council activities

Water service business units need to be ring-fenced from council activities. This will enable the regulatory regime to properly function. Many local authorities already keep accounts for the water services, but this needs to be standardised and uniformly applied to enable comparisons between entities. By separating the water services from remaining council activities, the water-specific expenses, asset values and liabilities can be ascertained.

A key function of the regulatory regime across water quality, economic and environmental matters is to ensure that resources are being used to address identified problems. Without a separate set of accounts and separate business units, the regulatory system cannot be effective.

In practice, a standardised regulatory accounting framework should be developed using regulatory best practice. In particular, this will need to provide guidance on allocating shared costs between the water and non-water activities of a Council. The framework will also need to provide guidance on how to set and roll forward the regulatory asset base against which the reasonableness of tariffs will be assessed.

3.3 Council ownership or control and accountability to the public

The government is committed to public ownership of water service providers. This is valid but not sufficient. The success of the public ownership model in meeting the public interest depends on how the entity is governed, and the incentives inherent in the governance design.

Ownership should remain close to the community of interest and there should be direct accountability to ensure incentives are aligned. This is an effective way of ensuring optimal outcomes and overcoming the monopoly problem in water services.

Ownership or control of WSE's should remain with councils because water services are inherently local

Councils are closer to local conditions and so have a better understanding of the demands on the network. Local councils tend to have a sound understanding of local investment needs and idiosyncrasies of local service delivery. Water networks are designed around natural features—access to water sources for drinking water, and access to suitable locations to treat wastewater and dispose of it. There are dozens of discrete networks in New Zealand with highly idiosyncratic physical, engineering, topographical, environmental, and climatic conditions.

Water service quality can be highly variable, even above safe minima. Water service can even take on luxury good characteristics. Customers in high-income areas may wish to use more water for gardens (and be willing to pay to avoid sprinkler bans). In contrast, customers in low-income areas may be happy with simply safe, available drinking water. Some consumers may value friendly customer service and prompt attention to faults.

Local governments tend to be closer to local conditions so can adapt as conditions change. Adaptability to change and new information is desirable to ensure that service delivery remains optimal over time. Customer quality and price preferences and society's tolerance of environmental outcomes can change. Technology changes leads to improvements in services or major changes in how and at what scale services should be delivered.

Direct ownership and operation of water services by councils/municipalities provides strong customer and community accountability

In the local government model, customers in the community can have a more direct link to the provider and can vote for local government representatives that will ensure price and service levels are met. This ensures those charged with governance of the service are incentivised to ensure the water utility serves the community well, and those that fail to do this may be voted out. In contrast, where there is central government control through national regulation (and governance in the case of a public corporation), direct accountability to consumers is weak, since it is unlikely that national elections will turn on water service matters.

Accountability to iwi, hapū and whānau

Iwi, hapū and whānau place significant cultural value in water and waterways. Overall, a paradigm shift of *Te Mana o te Wai* has been introduced across freshwater and three waters policy at all levels of government. We understand that different iwi, hapū and whānau have common values in water and waterways, but also unique perspectives and relationships with particular water sources, waterways, marine environment and other parts of the land and environment that interact with three waters infrastructure. Accountability of the people responsible for governance, management, and operations in three waters to iwi, hapū and whānau is more likely to be achieved where the water service entity boundaries match the boundaries of local communities of interest. The smaller entity design ensures greater efficiency and accountability of the governance and management to local communities of interest. Therefore, iwi, hapū and whānau within the smaller entity boundaries are more likely to have their diverse needs and interests matched. Indeed, this is acknowledged by the Department of Internal Affairs (DIA) in its March 2021 slide decks presented to local government and mana whenua when DIA was considering number and boundaries of the

mega entities.⁷ On pages 29 and 33-35 DIA makes clear that if a smaller number of mega entities is chosen, this is worse for recognising rohe/takiwa and communities of interest.

The government has made iwi and hapū representation a priority in three waters services. It may ensure better outcomes if this is implemented at the local or regional level (as opposed to mega-regional level). We agree with DIA that the water service institution can better respond to the needs and interests of diverse iwi, hapu and whanau (rohe/takiwa and communities of interest) the closer it is to those communities. In contrast, the four mega entity Regional Representative Groups have to represent 34 (Entity A), 68 (Entity B), 35 (Entity C) and one (Entity D) iwi respectively. At the level of territorial authorities, the number of iwi in each local government area can be as low as one or two, and up to 15 (Rotorua District and Western Bay of Plenty District) or 18 (Auckland Council).⁸

Table 3.3: Ratio of iwi to RRG seats in proposed mega entities

WSE	Northern Water Services Entity (Entity A)	Western-Central Water Services Entity (Entity B)	Eastern-Central Water Services Entity (Entity C)	Southern Water Services Entity (Entity D)
Iwi in entity	27	68	35	1
Ratio of iwi to RRG seats (assuming 12 total RRG seats)	4.5	11.3	5.8	0.2
Ratio of Iwi to RRG seats (assuming 14 total RRG seats)	3.9	9.7	5.0	0.1

Source: Statistics New Zealand classification of iwi and territorial authority boundaries

3.4 Financing the needed investment is possible under C4LD model

The New Zealand water sector needs additional investment that is affordable and financeable. The total amount of capital expenditure needed over the next 30 years is \$97 billion (in 2021 dollars), according to the government's WICS consultants.⁹ The Te Waihanganga/Infrastructure Commission estimates the investment need is \$90 billion.¹⁰ The government also claims the investment needed may present challenges for some communities.

In contrast, the government's financing proposal for the mega entity reform increases fiscal risk and is ultimately backed by the Crown. We discuss this risk in our report dated July 2022

⁷ DIA (March 2021), Slide deck "March 2021 Local Government and Iwi/hapū engagement"

⁸ Analysis is based on Statistics New Zealand statistics of Iwi and local authority boundaries.

⁹ This is the total capital expenditure (in 2021 dollars) that will be made across all four entities, stated in the government's WICS consultant spreadsheets available at <https://www.dia.govt.nz/Three-Waters-Reform-Individual-council-models-and-slidepacks#proposed-entities>.

¹⁰ Te Waihanganga, 2 May 2022, New Zealand Infrastructure Strategy presentation by CE Ross Copland, slide deck, page 3

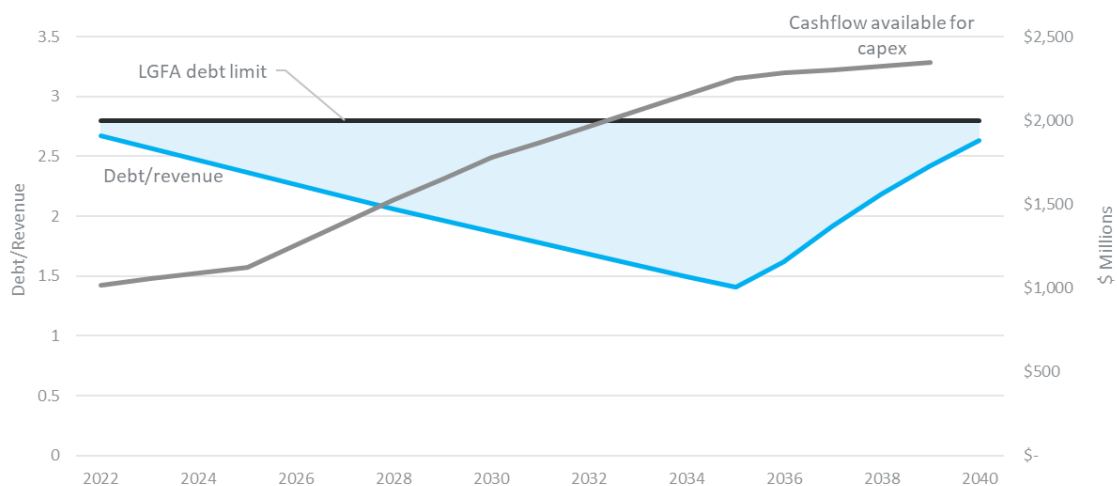
Flaws in the Government’s Reform Proposal. Alternative financing solutions are available that were not considered during the reform policy process. We present one example that could apply in the C4LD model – a **results-based water financing facility (WFF)**. Results-based financing is used around the world successfully, in developed and developing countries. Under Castalia’s example of a WFF, financing will remain principally with local authorities and risk to the Crown will be quarantined.

3.4.1 C4LD model can finance all capital expenditure for 20 years without changing settings

We find that the C4LD model could finance the capital expenditure the government claims are necessary for 20 years without changing any settings. The government’s consultant WICS has modelled that the four mega entities will undertake \$97 billion of capital expenditure over the 30 year period.

Castalia’s simple financing model uses the same capex profile for councils, using the same assumptions as WICS for investment timing, population growth, local government debt cap, interest rates and opex. We assume that a debt cap of 2.8 times council revenue applies for the 30-year period (as it currently does under Local Government Funding Authority covenants). We also assume that the government’s commitment of \$2.5 billion toward councils (so-called “better off funding”) is made available to councils to invest in water investments. This is a better use of scarce public funding for the water sector than the government’s current proposal to permit councils to spend the \$2.5 billion on any matter.

Figure 3.2: Implementing WICS capex plan under C4LD model



The Castalia modelling assumes no changes to water rates/charges. If water rates/charges were increased at a modest 0.6 percent per year, the WICS claimed \$97 billion capex would be financeable under the C4LD model without changing council debt caps for the whole 30 year period.

3.4.2 Future access to finance can be improved

Of course, in reality there are many options available to improve access to finance. The C4LD reform model is flexible and will encourage additional financing mechanisms. Therefore, the C4LD model could be financeable over the full 30 year period without increasing water bills by a combination of the following common measures:

- Relaxing debt caps for the water-related activities of councils. The sector will have vastly improved water quality and economic regulation. This will make lenders more comfortable with higher levels of debt for water services. It may mean more can be borrowed without affecting council credit ratings
- Revenue bonds (as opposed to standard general obligations bonds) that are subordinated and tied to water charge revenues. These are extremely common other developed country jurisdictions and would probably be attractive to investors, especially since the sector would be better regulated and financial sustainability monitored by a credible economic regulator
- Water Financing Facility (discussed below) to solve genuine affordability challenges using the \$2.5 billion of funding already committed by the Crown to the reforms (although this funding currently is not tied to improving water infrastructure)
- Infrastructure Funding and Financing Act 2020 enables the use of an infrastructure levy.

3.4.3 Designing alternative financing facility to incentivise reform

In some cases, some councils or regions cannot afford needed investment because and the Crown may need to support social inclusion in those areas via direct support (similar to how it funds roads based on relative levels of deprivation).

The C4LD reform model could include a new financing facility that will make the needed investment more affordable and financeable. We propose a **results-based water financing facility** (WFF) to improve the affordability of needed investment, and address financing constraints. This will not add significant risk to the Crown. The WFF will not create any additional cross subsidy compared to the mega entity reform. This proposed financing facility is likely to improve incentives for water utilities and the managers to deliver capital projects on time and on budget. It builds on models that Castalia has designed in other countries, and is based on best-practice results-based infrastructure financing.

Results-based financing facility design features

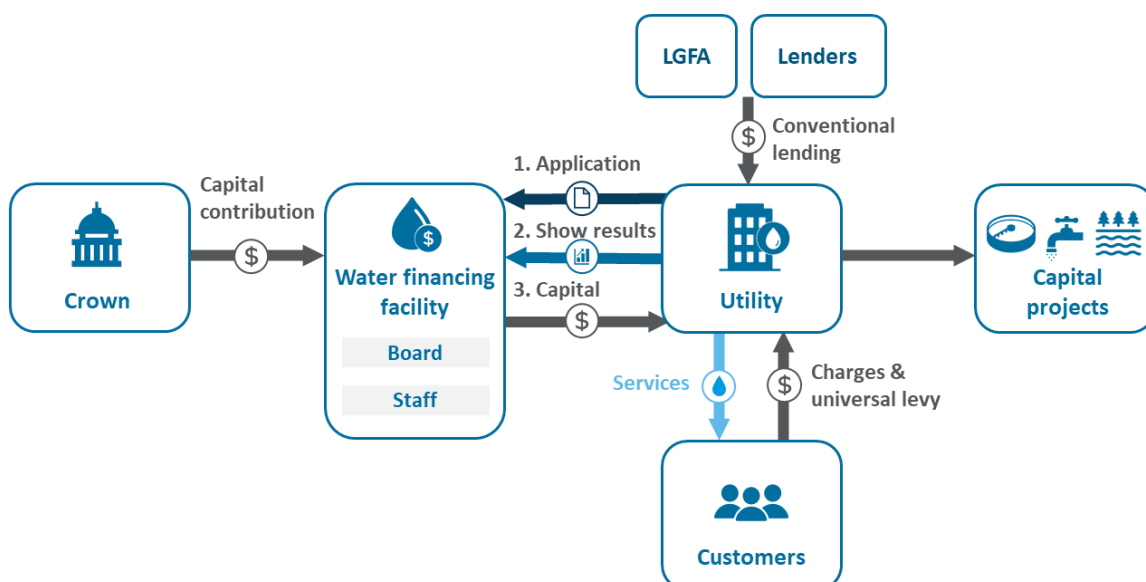
The WFF will be Crown-owned and headed by a professional board and a small number of staff. It could initially be housed within Te Waihangā/Infrastructure Commission. The facility will receive applications from water utilities (council-owned, council-owned regional enterprises or other permitted structures). It will initially be funded by the Crown and will stand ready to finance capital projects planned by water utilities, provided those projects achieve the results intended.

Water utilities will submit applications for financing support for capital projects. These could include an upgraded water supply, modern wastewater treatment plant, nature-based solutions for ecological and culturally appropriate disposal of wastewater. The application must set out the business case for the capital project, budget and expected outcomes. The

utility can then borrow for the project from conventional lenders (for example, LGFA), backed by a promise from the WFF to provide capital if results are achieved.

When the capital project is completed, the results are verified by the WFF, and the WFF pays the promised capital amount. This can then be used to retire the project-related debt, or immediately recycled into another capital project.

Figure 3.3: Proposed water financing facility



Crown funding of the facility is marginally higher than existing commitments

The Crown would provide the initial funding for the WFF. The Crown has already committed \$2.5 billion of taxpayer funding to local authorities to “support transition through the reforms”.¹¹ This funding is not tied to water infrastructure, so local authorities can spend it on any capital or operating expense. Therefore, the WFF will immediately provide a better targeted use of Crown funds to improve water sector outcomes.

The use of Crown funding for the WFF model is entirely consistent with the government’s attempt to make water charges more equitable under the mega entity model. The government’s policy advice and slide decks have presented a benefit of a smaller number of mega entities as being harmonised prices.¹² Under the mega entity model, water charges will be normalised across the mega regions (for example, a uniform water charge will apply to rural Tairāwhiti and urban Wellington city; rural Waimate and urban Christchurch).

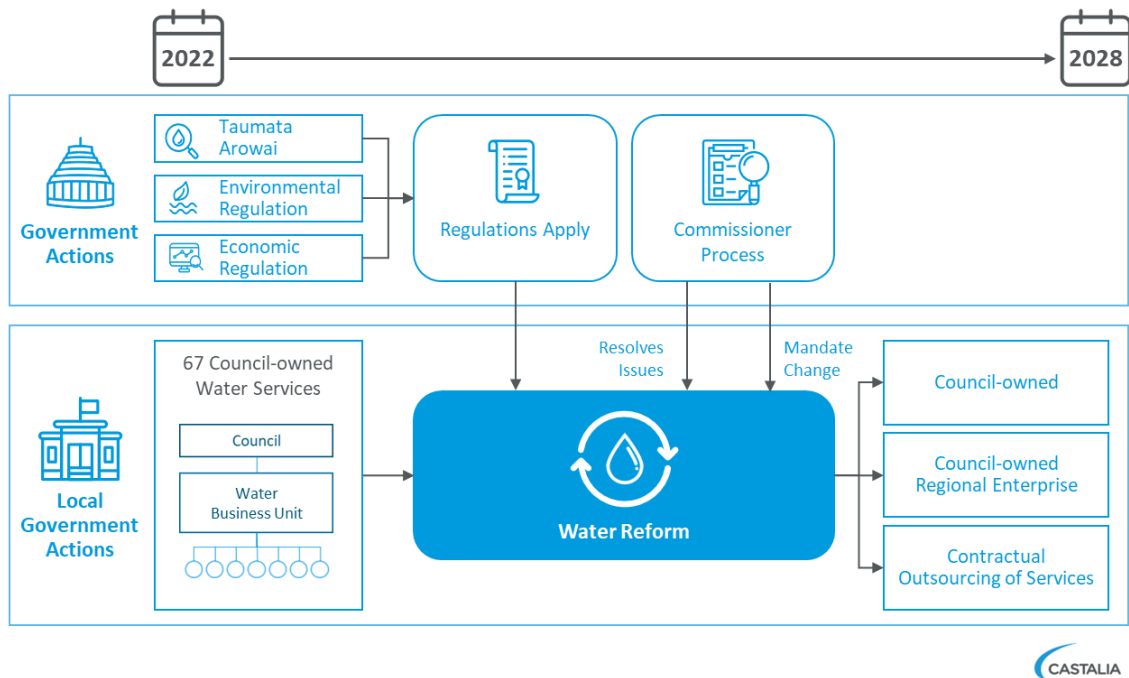
¹¹ Government announcement 15 July 2021, quoting Prime Minister Jacinda Ardern, <https://www.beehive.govt.nz/release/government-provide-support-water-reforms-jobs-and-growth>

¹² For example, DIA (March 2021), Slide deck “March 2021 Local Government and iwi/hapū engagement” at page 30.

4 Implementing the C4LD reform model

The C4LD model can be implemented with a combination of incentive-based policies. The C4LD model will enable \$97 billion of capital investment to be made over 20-30 years by remaining broadly within current institutional and policy settings. To achieve this, we propose a combination of incentives. These combine penalties for failing to comply (“stick”) with financial benefits for meeting minimum standards (“carrot”). The diagram illustrates the government actions (top) and the local government actions (bottom). It shows how high-quality regulation by the central government can incentivise councils to reform into stand-alone, council-owned regional enterprises or enter into contractual arrangements to improve water services at the same level of efficiency as the government’s reform model.

Figure 4.1: Timeframe for implementing C4LD reform model



4.1 Setting and enforcing efficiency and service level standards

The first critical element is to enforce regulatory standards across the three regulatory domains (water quality, environmental and economic). Enforcement of regulation is just as important as the existence of regulation. Without a credible threat that breaches of regulation will be sanctioned, water service providers will face no incentive to meet standards. To achieve the C4LD reform model, regulatory standards should be enforced across:

- Water quality—Taumata Arowai’s water quality standards must be met by all providers
- Environmental outcomes—Regional Council regional plan rules and consent conditions must be met by all providers

- Economic performance—the economic regulator’s role is the newest out of all three forms and needs to ensure standards are understood and set.

In each case, failure to meet efficiency and service level standards set by the regulators will mean that the reform objectives are not being met.

Setting and enforcing water quality regulation

To implement the reform, water service providers need to be incentivised to comply with water quality regulations. It is essential that the regulator drive improved performance through enforcement. Enforcement of water quality standards is expected to increase under Taumata Arowai. Indeed, the lack of any credible enforcement threat was a key reason for the compliance failures under the prior Ministry of Health regime, as the Inquiry into the Havelock North tragedy identified. The ministry managed zero prosecutions in over 60 years under the Public Health Act 1956.¹³ It took the tragic event in Havelock North, resulting in four deaths and thousands of illnesses, to provoke prosecution. This failing has been identified by the Havelock North Inquiry, the Productivity Commission, and several commentators.

Complying with environmental regulation

Similarly, environmental regulation needs to be enforced. From 2023 Taumata Arowai will have monitoring powers. It will keep records of environmental performance specifically related to water service provision. Breaches should be enforced, and fines and infringement penalties imposed to incentivise performance.

Taumata Arowai’s key role will be to report on and benchmark environmental performance. Where a water service provider fails to meet standards, the regulator will have unambiguous records of this. As records are updated, performance can be monitored over time. Water service providers can be ranked. The regulator will determine whether standards are being met and whether credible plans exist to remedy failings.

Complying with economic performance indicators and investment levels

The economic regulator should collect and publish information on the financial and operational performance of all water utilities. Once it has collected information, it can engage in benchmarking and, if appropriate, given the balance of local and regional ownership, consider price-quality regulation.

At a minimum, the regulator should collect the following:

- Templated financial performance disclosures:
 - Asset registers and relevant depreciation schedules and age profiles
 - Operating expenditure (split by amounts spent directly on water assets compared to other assets like vehicles, IT, office furniture and so on)
 - Capital expenditure
 - Revenues by customer and tariff type
 - Depreciation
 - Tax

¹³ Report of the Havelock North Drinking Water Inquiry: Stage 2 Report, pages 86, 92

- Revaluations
- Debt (including key characteristics of each debt instrument used to fund water expenditure)
- Profit
- Return on Investment
- Regulatory asset base and its roll forward for the year
- Related party transactions
- Operational information
 - Kilometres of pipes
 - Water/wastewater throughput
 - Customer numbers by type
 - Supply interruption/breakdowns statistics.

Regulators typically prepare templates (similar to the “Request for Information” templates provided by DIA and WICS to councils in 2021). Templates provide prompts for the key information the regulator needs to collect. In electricity lines business regulation, the Commerce Commission uses templated forms to collect data from the 27 firms it regulates. Professional advisory firms (such as major accounting firms) typically assist in the preparation.¹⁴

4.2 Time-limited compliance requirement

Regulatory enforcement should be supported by time limits on compliance. C4LD is proposing a five-year time limit from the implementation of the regulatory regime for water service providers to demonstrate compliance.¹⁵ If prior to the end of the five year limit, compliance cannot be demonstrated, then the water provider must have a plan that is satisfactory to the government, to meet regulatory standards.

Whether water service providers meet the compliance requirements will be a matter of fact: whether the three regulators agree that the service provider complies with all material requirements.

Councils incentivised to respond to compliance requirements by reorganising or reforming

Within this time limit, councils can organise their water services into structures that will ensure compliance. A range of responses are expected, depending on the problems that are present in different areas:

- Financing sophistication: If corporate treasury skills are lacking and council is too small to manage the finance for a large capex programme

¹⁴ For example, Deloitte assisted to prepare this template response for Main power, the North Canterbury lines company: <https://mainpower.co.nz/assets/documents/electricity-information-disclosure-schedules.pdf>

¹⁵ Five years is enough time for the government to build on the modest progress made on developing the economic regulation framework and council work on improving information. It also provides sufficient time for councils to identify areas for performance improvement and implement the changes to address any deficiencies.

- Coordination of capex programme: To the extent economies of scale in procurement are available, a regional merger may make sense to better coordinate and reduce the cost of water capex programme
- Management and operational staff capacity: If this is lacking (for example, individual councils in a region cannot justify hiring a water scientist), then councils will find shared service arrangements or regional mergers to improve this
- Management and operational merger: To the extent economies of scope and scale are available in management and operations, a regional merger may make sense to reduce costs.

4.3 Resolving disputes and imposing change for non-compliance

There will inevitably be disputes or disagreements between councils, regulators and the central government regarding the implementation of C4LD's proposals. In the case of a merger, disputes may arise over the value of shares in the merged entity. In the case of shared services, different councils may have invested at different rates and will have differing views on the value of assets. Some councils will have newer assets and higher corresponding debt levels, which may lead to disagreement over how to allocate that debt within a council-owned regional enterprise.

Guidance from a centralised Commissioner—backed by regulatory information

The government can appoint a Commissioner, for example sitting in Te Waihanga/Infrastructure Commission supported by technical experts. That Commissioner will guide any council seeking help to inform on the available options. The Commissioner will have full access to all regulatory disclosures and all regulators' assessments.

Facilitated resolution of issues by Commissioner

In the event that water service providers face difficulty meeting the regulatory requirements, or cannot agree on merger, shared services or other mechanisms to improve compliance, facilitated resolution will be needed. In these cases, the Commissioner will have the authority to resolve disputes on the application of any party. Under C4LD's model, a Commissioner will be available to resolve disputes on the application of any council, or at the request of the economic regulator. The Commissioner will use inputs from the economic regulator and other regulators to determine the optimal resolution of issues. Options available will be:

- Require merger of water services among neighbouring councils
- Setting the terms and conditions of water service merger (asset valuations, debt allocation, structure of water charges)
- Require specific performance of particular requirements with penalties for noncompliance.

Mandated reform for non-compliance

Finally, if at the end of the five-year period, councils are not complying with regulatory standards, or likely to comply within a certain timeframe, then the Commissioner can mandate certain outcomes. This will include mandating water service merger or appointment of specialist water service operators.































4.4 Financing facility only available to complying entities

The financing facility—initially funded with the \$2.5 billion Crown capital contribution promised under the proposed government reforms—will only be available for complying water entities. This will provide a financial incentive, that any Crown funding will only be available where water service providers meet all regulatory minimum requirements.

5 Target end-state for C4LD reform model

When the C4LD reform is implemented, the end-state for the sector is likely to be a combination of council-owned water entities for large metropolitan areas or high-performing provincial cities, and council-owned regional entities. Each of the possible end-states outperform the government’s mega entity proposal. Figure 5.1 below shows how on a rating scale of 1 (dark red) to 5 (dark green), the three C4LD reform end-state options perform better on the six performance criteria than the government’s mega entity proposal.

Figure 5.1: Comparing C4LD’s model against Mega Entity Reform

	Council-owned model	Council-owned regional entity	Contractual outsourcing	Mega-entity proposal
 Accountability to customers				
 Incentives of management and governance				
 Management and operational performance				
 Access to financing				
 Scale and scope efficiencies				
 Flexibility for the future				



5.1 Structural reform to match local and regional needs

The three available models are:

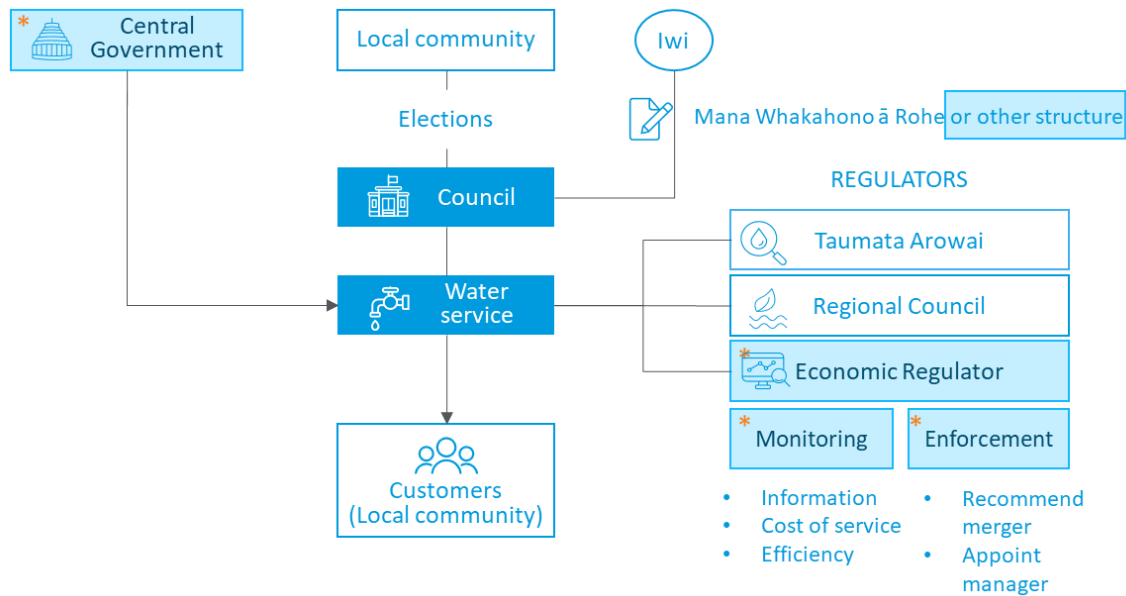
- Council-owned, with enforced, high-quality regulation
- Council-owned regional enterprise, with enforced, high-quality regulation
- Contracting of services to specialist third-party providers, with enforced, high-quality regulation.

In the following, we describe the three structures that are the likely end-state for the C4LD reform model:

5.1.1 Council-owned model

This model would see that water services remained in the ownership and control of an individual council directly. However, the water service provider would have to comply with the regulatory requirements and consistently demonstrate compliance against the threat of the Commissioner intervening and determining a more appropriate ownership and management model.

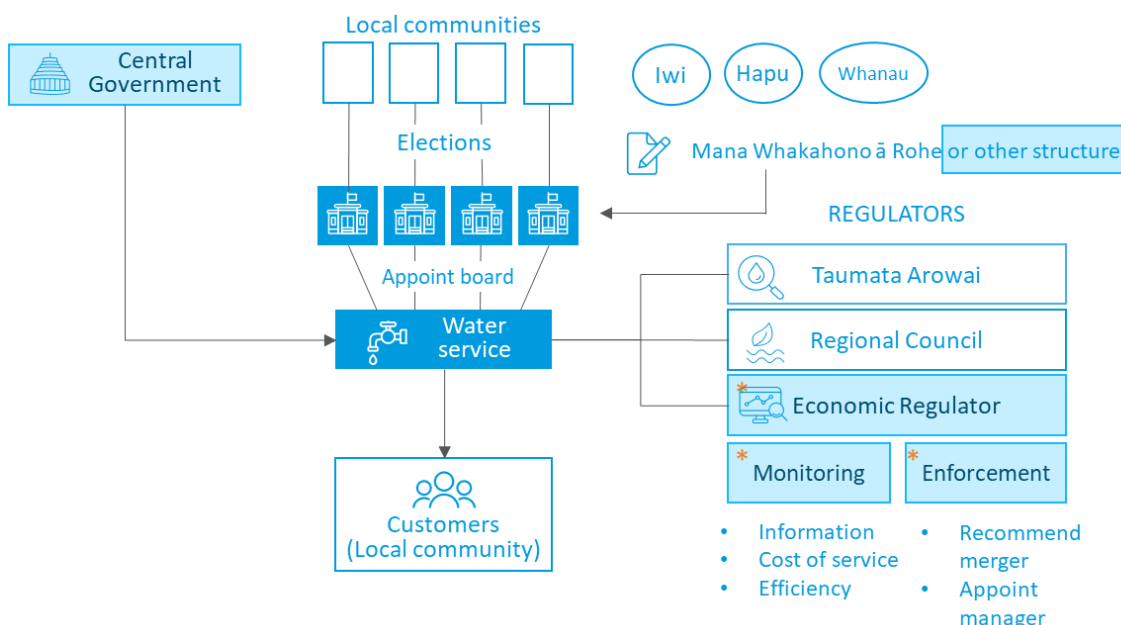
Figure 5.2: Council-owned water services model



5.1.2 Council-owned regional enterprise model

The regional council-owned enterprise (CORE) model would see a regional enterprise co-owned by relevant councils in proportion to assets or number of connections. It would require that no single council would own or control 50 percent or more of the voting rights, or otherwise control the organisation for accounting purposes.

Figure 5.3: Council-owned regional entity model



This model has been proposed in Hawkes Bay (as a result of the efforts of Hastings District Council, Napier City Council, Wairoa District Council and Central Hawkes Bay District Council). Those councils have identified management efficiencies, and social inclusion gains.

Other regional water service merger or service sharing models have been explored for:

- Northland (Whangārei District Council, Kaipara District Council and Far North District Council)
- Central and South Canterbury (Ashburton District Council, Timaru District Council, Mackenzie District Council, Waimate District Council, Waitaki District Council)
- Southland
- West Coast
- Wellington Region (Wellington Mayoral Forum)
- Canterbury Region (Canterbury Mayoral Forum).

The analysis was carried out at various levels of sophistication and using differing quality information. Some regional groupings relied on WICS modelling or none at all. However, under the C4LD reform model, high quality and consistent information will be available from the three branches of regulators to show the extent to which regional groupings can improve services by exploiting any available economies of scale and scope, improving utilisation of management and operational staff, improving staff recruitment and so on. Therefore, regional water service merger investigations will have a better evidence base to proceed.

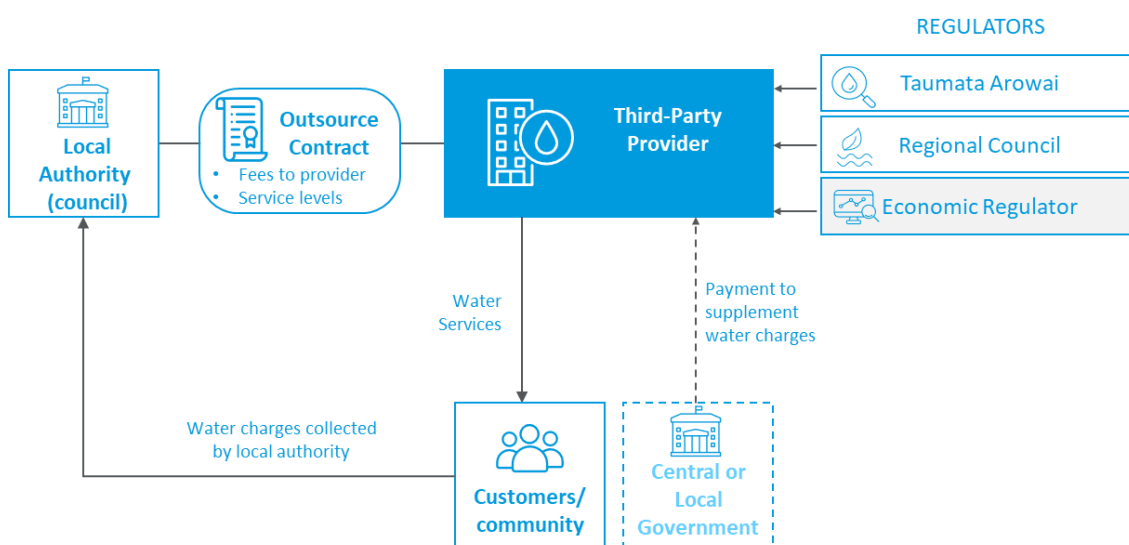
5.1.3 Contractual outsourcing of services model

Delegation of service provision to a third-party provider is a common model for water services around the world and is relevant for New Zealand. Local governments in New Zealand already engage in contractual arrangements to provide public services such as roading, parks and

recreation. A version of the model has been successfully used in Papakura for almost 30 years. Contractual outsourcing of water services has been used for over 200 years in many civil law countries (for instance France) and in some common law countries.

The World Bank finds that the concession contract model in the water sector is associated with performance gains and increased labour productivity when compared to state owned water utilities. The comprehensive study covered all water and sanitation companies that experienced private sector participation. Including 93 cases of water services being provided by concession contracts, between the beginning of the 1990s and 2002.¹⁶

Figure 5.4: Contractual outsourcing of services to specialist provider



5.2 Outcomes of C4LD’s reform model

The outcomes of the C4LD reform model will be positive. The likely end-state models all score highly across the parameters identified (above in section 2.2) as important for water services.

Those parameters are:

- Is the water delivery service accountable to customers?
- Does the model improve competence of management and operations?
- Are incentives aligned with objectives?
- Are providers able to reliably raise the finance needed for investment?
- Does the model achieve economies of scale and scope?
- Will the model be flexible and adapt to change and new information?

In the following, we evaluate the three structural options against these criteria.

¹⁶ World Bank PPIAF - Does Private Sector Participation Improve Performance in Electricity and Water Distribution, 2009.

5.2.1 Council-owned model

The council-owned model, where implemented and provided that the regulatory standards are met, scores highly across all six metrics.

Improved accountability to customers and the public interest

Accountability to customers is generally high with council ownership and responsibility for water services. Elected councillors are responsible for the water service, and therefore can be held to account for poor performance by voters. Local councils also tend to have a sound understanding of local investment needs and idiosyncrasies of local service delivery.

Regulation will enhance the council-owned model. Information disclosure and benchmarking allows voters to evaluate and compare performance across councils. Economic regulation will also be committed to ensuring consumers' long-term interest. Water quality regulation will ensure water service providers have incentives to provide safe water.

Improved management and operational performance

Councils with high-performing asset management systems are likely to opt for this model. Where management and operational performance are constrained by size, councils have the option to amalgamate regionally to attract and retain talent or contractually outsource to access world-class expertise.

Good governance and regulation will enhance asset management performance. With information disclosure regulation and benchmarking, managers will compete on performance. Good governance ensures asset managers are held to account for their performance.

Clarity of policy priority and enforcement of breaches by the water quality regulator will lift management and operational performance.

Alignment of incentives with objectives

Regulation and governance are important to ensure incentive alignment in the council-owned model. Fit-for-purpose regulation can incentivise local government-owned water services' management (and staff) to act in the public interest. Governance bodies that are experienced in monitoring and holding managerial performance to account and carrying out good financial governance play an essential role in ensuring incentives are aligned.

Improved access to financing

Councils at or close to debt limits will continue to be constrained by self-imposed debt limits and a desire to remain within LGFA targets. However, the sector will have vastly improved water quality and economic regulation. This will make lenders more comfortable with higher levels of debt for water services. It may mean more can be borrowed without affecting council credit ratings.

In any case, we find that the \$97 billion capex modelled by the government is financeable under the C4LD model for 20 years without increasing water bills or changing any other existing settings.

Of course, in reality there are many options available to improve access to finance. Therefore, the C4LD model could be financeable over the full 30 year period without increasing water bills by a combination of the following common measures:

- Water Financing Facility to solve genuine affordability challenges using money already committed to the reform

- Relaxing debt caps for the water-related activities of councils. The sector will have vastly improved water quality and economic regulation. This will make lenders more comfortable with higher levels of debt for water services. It may mean more can be borrowed without affecting council credit ratings
- Revenue bonds (as opposed to standard general obligations bonds) that are subordinated and tied to water charge revenues
- Infrastructure Funding and Financing Act 2020 enables the use of an infrastructure levy.

Available scale and scope efficiencies are maximised

Councils that are meeting the regulatory standards and have exhausted available regional scale and scope efficiencies will opt for this model. A competitive outsource service provider market can also provide any productivity improvements or future benefits of scale to council-owned entities. Where scale and scope efficiencies are available, councils will amalgamate regionally but the option to remain council-owned prevents diseconomies.

Flexibility to change

Councils have a range of options to respond to change and new information. They can merge, outsource services, delegate management, and change delivery technology in response to local demands (expressed directly) and with knowledge of local conditions. Councils do not need to get consensus at a national level to try something new.

Information disclosure and benchmarking will enhance flexibility to change. Councils can learn what works in different situations by comparing one local council's water service to another. Greater transparency will also safeguard councils from flexibility to change being prevented by parochial interests.

5.2.2 Council-owned regional entity

Where benefits from water service merger are available, councils will amalgamate to the Council-owned regional entity (CORE) model. Provided regulatory standards are met, the regional entity scores highly across all six metrics.

Improved accountability to customers and the public interest

Accountability to the customer remains high. Elected councillors, accountable to the public, elect the board of the council-owned regional entity.

Fit-for-purpose regulation will enhance performance. Information disclosure and benchmarking allow voters to evaluate and compare performance. The regulator will be more effectively able to benchmark when there are multiple entities. Economic regulation will also be committed to ensuring the long-term interest of consumers.

Alignment of incentives with objectives

The council-owned regional entity provides similar outcomes to the council-owned model. For regional entities, it is even more important that there is sound governance and fit-for-purpose regulation to ensure incentives are aligned.

Governance bodies that are experienced in monitoring and holding managerial performance to account and carrying out good financial governance play an important role in ensuring incentives are aligned. Fit-for-purpose regulation can drive incentives of management (and staff) of local government-owned water services to act in the public interest.

Improved management and operational performance

Asset management maturity varies across councils. Councils that struggle to attract and retain staff will amalgamate. A larger asset base will improve recruitment and retention of staff.

Good governance will improve management and operational efficiency. Regional public companies tend to improve competence in management and operations where those charged with governance can hold management accountable.

Fit-for-purpose regulation will enhance management and operational performance. Asset management performance will increase as breaches of water quality, environmental and financial performance standards are enforced. Information disclosure and benchmarking will raise the level of asset management maturity. Asset managers will compete in performance and be held to account for poor performance.

Improved access to financing

Higher rates of borrowing and easier access to finance for investment is likely to be possible under the CORE model. If no council owns or controls 50 percent, there is no balance sheet consolidation under International Financial Reporting Standards (IFRS) accounting rules.¹⁷ The CORE entity could be financed as an independent company.

The sector will also have vastly improved water quality and economic regulation. This will make lenders more comfortable with higher levels of debt for water services. It may mean more can be borrowed without affecting council credit ratings. Fit for purpose regulation is likely to attract lenders.

As outlined above, the government's modelled \$97 billion capex is financeable under the C4LD model for 20 years without increasing water bills and maintaining the current settings (debt caps). Of course, many other options exist to improve access to finance, which we outline above in section 5.2.1.

Available scale and scope efficiencies are maximised

Councils will amalgamate where the benefit from scale and scope efficiencies are greatest. There are minor scale efficiencies available in procurement, and operating functions and scope efficiencies are possible from integrating regional urban and transport planning.

Flexibility to change

Regional entities have a good understanding of local conditions to adapt. The effectiveness is reduced somewhat by need to reach a regional consensus.

Information disclosure and benchmarking will enhance flexibility. With multiple regional entities, entities can learn what works in different situations by comparing one entity's water service to another. Greater transparency will also safeguard flexibility to change being prevented by parochial interests.

¹⁷ NZ IFRS 10 sets out the prerequisites for an entity to "control" another and therefore requiring consolidated financial statements:
<https://www.xrb.govt.nz/dmsdocument/3407#:~:text=NZ%20IFRS%2010%20is%20based,type%20state%20the%20main%20principles>.

5.2.3 Contractual outsourcing of services

Where the council-owned model does not perform optimally, and regional water service merger is not rational, contractual outsourcing of services can provide for councils to score highly across all six metrics.

Improved accountability to customers and the public interest

Municipal decision-makers still directly accountable to customers. Regulation enhances accountability and promotes the public interest. Responsiveness may be constrained by term and duration of contracts.

Customer accountability is usually provided for in the contract with the operator. Key price and quality metrics (or mechanisms to set these over the life of the contract) are set out in the contract. Customers can lobby the local government in case of complaints or performance issues. Contracts also provide the local government with remedies in case of major breaches.

Contracts can be for as long as 30 years (as is the case with Papakura's provider contract). Disagreements over contract interpretation can be a barrier to realising accountability to customers. Regulation will enhance improved accountability to customers and the public interest.

Improved management and operational performance

Contractual outsourcing accesses world-class management systems, and IP achieves required scale across multiple operations. Outsource providers can attract and retain high quality staff with no limits on pay or incentives and the ability to provide global career prospects.

Operators are normally appointed following competitive tenders. Tenders are won on the basis of the demonstrated competence in management and operations of the operator. Operators tend to be global water service companies with wide ranging experience and expertise. Specialist New Zealand water service providers also operate nationally, including CityCare Water (owned by Christchurch City Council). These firms will usually bring their international or national expertise to bear and improve competence of management and operations.

During the life of the contract (can be up to 30 years), the contractual conditions will set performance standards that incentivise competence in management and operations. This, however, depends on the terms of the contract.

Alignment of incentives with objectives

Under most contracts, the operators are incentivised to provide a high-quality service at least cost. Operators are also 'repeat players' in contract tenders around the world. A track record of poor performance will reduce the chances of appointment in contract tenders. Once the tender is won, there are also various ways of designing contracts to incentivise performance improvements and penalise poor performance.

Improved access to financing

Outsource providers have ready access to commercial debt and equity. Some third-party specialist water providers enter into long-term joint venture agreements with publicly owned investors (for example, government pension or insurance funds like NZSF or ACC). This also provides ready access to long-term equity and debt finance for investment.

Contracts can include provision for the operator to charge tariffs for water directly to customers, or (less common) remuneration from the local government entity. Operators can

usually raise finance from the wider corporate group or directly from investors, secured against the revenues of the contract.

Available scale and scope efficiencies are maximised

Economies of scale in management and specialist services can be exploited where third-party providers can operate over multiple contracts. Procurement of equipment and network assets may also be improved from scale (volume discounts and standardisation of plant and equipment). There is potential for economies of scope where the provider can offer other utility services.

Flexibility to change

The model can be flexible and adaptable with a good contract design. Profit motives can incentivise third-party providers to adapt to change in some cases where cost savings are possible.

If well designed, operators can be incentivised to implement new and innovative ways to deliver services that lower cost. If the contract gets the balance between local government and concessionaire wrong and does not follow global PPP contract standards, then there can even be disincentives to adapt and change.

Operators can also be incentivised to add new customers, since this increases profits. For high-growth places, such as many of New Zealand's cities, these incentives to adapt to change could be positive.



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