Submission on economic regulation and consumer protection for three waters services in New Zealand

Your name and organisation

Name	Gillian Blythe, Chief Executive
Organisation (if	
applicable)	Water New Zealand

Responses

Economic regulation					
1	What are your views on whether there is a case for the economic regulation of three waters infrastructure in New Zealand?				
	As noted in the covering letter Water New Zealand (Water NZ) considers that there is a strong case for economic regulation of three waters infrastructure in Aotearoa / New Zealand. The key points are what the underlying principle of the economic regulation is, how this links to the regulation of water services generally and the timing of such regulation. These are covered in the covering letter (principles) and in more detail below (on the timing and substance of the regulatory framework).				
	As noted in the cover letter in setting regulation there needs to be a broad focus on the three waters being required to give effect to Te Mana o te Wai, and that they provide community and public services. This has not been the focus or driver in previous economic regulation.				
2	What are your views on whether the stormwater networks that are currently operated by local authorities should be economically regulated, alongside drinking water and wastewater?				
	Whilst likely to introduce some complexity, stormwater should still be included in the economic regulation of three waters. This is in part due to the structure that is proposed for the sector, but also because there are significant interactions between the management of each of the waters and that they are fundamentally interlinked – Wai is Wai. There is also a need to plan and secure funding to meet consumer levels of service which could otherwise be difficult.				
	In contrast, excluding stormwater from economic regulation could result in significantly decreased quality and delivery compared to the regulated waters. To a certain extent this has already occurred in some parts of the country where the focus has been on improving water supply and wastewater systems to the detriment of stormwater ¹ . Including stormwater within the regulatory framework will support and enhance revenue streams and ensure stormwater is given appropriate and equal focus with drinking water and				

¹ Water NZ's National Performance Review 2019/20 found that participants invested just \$418m on stormwater systems, relative to \$988m on drinking water and \$1.28b on wastewater.

Submission on Economic Regulation and Consumer Protection for Three Waters Services in New Zealand – Water New Zealand – December 2021

wastewater. Water NZ would like to highlight that there are two key aspects of stormwater management – quantity and quality – the proposed regime needs to take account of both.

It is likely that having some parts of water services economically regulated and others unregulated would be problematic and lead to inconsistency across the water services sector as a whole. This consistency is important from a service delivery perspective and necessary to ensure that the requirement to give effect to Te Mana o Te Wai, in particular the collective treatment of one water, can be met. A holistic approach is therefore essential.

However, some clarification on the definition of stormwater will be needed before it is included in the economic regulatory framework.

Currently stormwater is captured under broad and varying definitions across Aotearoa / New Zealand. These are based on how it is currently managed and funded or how different stormwater systems have been created and maintained. For example, there are different levels of service or different levels of risk across local authorities. It is unlikely that, at least in the short to medium term, a one size fits all approach to stormwater is appropriate. The current approach is heavily based on community derived risk preferences with regards to local environmental factors such as flooding, drought, impacts on water quality, contaminants, and responses to climate change, which will need to be understood and accommodated. It may be more appropriate for an equitable transition to economic regulation for stormwater to follow a slightly different path with different timeframes applying to it. As discussed below, there is a critical need for role clarity – without careful role and risk specification frameworks economic regulatory regimes can suffer inefficiencies e.g. the ownership of assets to manage floods.

The definitions identified in paragraph 44 of the Discussion Document will need significantly more work and expansion due to the issues involved (for example: easements, secondary flow paths, green infrastructure, the effect of RCA sump cleaning on flooding, building controls and district plans etc etc). This will have a material impact on the calculation of the Regulatory Asset Base (RAB) with ongoing implications for funding. This implies that the agencies working on the set up of the new Water Service Entities (WSEs) and the economic regulator need to collaborate to ensure there is appropriate coherence and cohesion across the overall regulatory environment for water.

The complexity around stormwater systems, and therefore any regulation of those systems, should not be under-estimated. There is a significant amount of stormwater infrastructure on private land and there will likely be some challenges around asset identification and asset management of stormwater systems. Our own engagement with our members has raised concerns that the knowledge of the location of hard stormwater infrastructure (such as pipes) plus 'soft' infrastructure such as open systems and flow-paths is very limited in some parts of the country. It can also be difficult to measure the benefits of the investment in stormwater infrastructure as many of these are environmental and cultural which are often hard to quantify. This suggests a regime which is framed to be about collaboration/coaching rather than one which is unnecessarily adversarial, too prescriptive and compliance focussed. This point is elaborated on below. It also highlights the opportunity to improve our delivery of this component of the water system.

The impact of economic regulation on the successful delivery of water sensitive urban design schemes was assessed by an independent study in 2020². This review concluded that economic regulation is not in itself a barrier to the successful delivery of stormwater schemes with wider benefits. In line with recommendations elsewhere in this submission,

² Fogarty, J and van Bueren, M (2020). A review of existing funding models, economic regulatory frameworks, policies and mechanisms. Melbourne, Australia: Cooperative Research Centre for Water Sensitive Cities.
Submission on Economic Regulation and Consumer Protection for Three Waters Services in New Zealand – Water New Zealand – December 2021

this review highlights that the architecture of the wider regulatory environment is key to success. This includes clarity of the statutory obligations on WSEs, clear definition of outputs and the ability for responsible agencies to collect revenue from the beneficiaries (namely our communities) of the delivery of any wider public good.

3 What are your views on whether the four statutory Water Services Entities should be economically regulated?

Water NZ considers that the four statutory WSEs should be economically regulated as already noted. In terms of whether the Councils should be regulated in the interim, our members consider that this is not feasible in the timeframes we are all working to. Some members are of the view that if the new WSEs are not created there would be benefits of applying economic regulation to Council run three waters services.

It is also important to note that under the Water Services Act there are now more drinking water suppliers and drinking water supply schemes covered by that regime than was the case under the previous regime. Included within the regime is a large number of "secondary suppliers" who will take water from a WSE (eg. schools, retirement villages, gated communities, industrial parks etc). The owner of the secondary supply will be a consumer from the perspective of the WSE but will not be the end consumer (similar to an embedded network in energy regulation). This will need to be carefully considered in the development of the details of the regulation.

In addition, it is important to note that Taumata Arowai will be able to direct WSEs to take over the operation of drinking water supplies that are not meeting requirements. It is considered that either, for the period these supplies and the relevant WSE are under "direction" from Taumata Arowai they should not be regulated as the funding and resources to do this will not be part of the WSEs "regulatory contract". Alternatively, a regulatory mechanism should be designed to accommodate these changes in operational arrangements.

Further, in terms of timing, we consider that the WSEs need to come into being before they are economically regulated as this will ensure that the focus at the outset is on the structure of the entities to allow for continuity of services to the community.

To summarise, our support of economic regulation is for the following reasons:

- It will ensure that there are efficiency gains by the WSEs;
- It will provide for accountability not only to consumers but to the community as a whole;
- The monopolistic character and size of the 4 entities must be balanced by regulation; and
- There needs to be a high level of transparency as the assets are, after all, public assets and need to be managed in a way that represents this.

The key issue is the approach and style of economic regulation. This is addressed further below.

4 What are your views on whether economic regulation should apply to community schemes, private schemes, or self-suppliers? Please explain the reasons for your views.

Water NZ does not consider that, at least at the outset, economic regulation should apply to community schemes, private schemes or self-suppliers.

As noted above there will be a number of 'new' private supplies fed from WSEs. One example is the approximately 45,000 residents of retirement villages and this is expected to grow. The Commerce Act includes a framework (assessing if the costs outweigh the benefits)

for applying economic regulation. An equivalent framework could be used to determine now or in the future if such schemes should be included (s52I).

We anticipate that requiring these types of schemes to be economically regulated may impose an undue burden as many of them serve a very small number of people. In other words, it is likely that the cost would greatly outweigh the benefit. Additionally, there are already checks and balances in the supply arrangements these entities have in place with their clients/consumers that should, in general, be providing the certainty and security for those who are connected to such schemes. In short there is a clearer line of sight between the owner of the scheme and the user than there may be between WSEs and their users.

5 What are your views on whether the Water Services Entities should be subject to information disclosure regulation?

Water NZ is strongly of the view that the WSEs should be subject to information disclosure regulation. The entities are public sector entities and transparency and openness is essential.

Additionally, openness is fundamental to ensuring community trust, it will enhance the communities' understanding of water management, and ensure the community is fully informed and well connected in relation to decisions around water management. Water NZ knows from various surveys it has done, as well as surveys undertaken by central and local government, that water is a key natural resource that New Zealanders hold to be sacrosanct.

However, in creating any requirements is it is essential that things do not become overcomplicated and over-bureaucratic. There is a tendency to over-regulate and over-prescribe requirements. A 'less is more' approach is desirable with a focus on outcomes rather than process. Also, the process for exchanging information needs to be efficient.

Fundamental to the existing Information Disclosure regime under the Commerce Act is that directors certify that the information provided is correct. Water NZ would like to draw MBIE's attention to the type of information that is available for drinking water, wastewater and stormwater pipe condition, and the level of certainty water service managers have (see Appendix 1 – Data available on pipe condition). These charts are compiled from data made available voluntarily by participant Councils in Water NZ's National Performance Review (NPR) 2019/20. The first chart for each water shows that the percentage of pipelines assessed in poor or very poor condition which is determined by the proportion of pipelines assigned a condition grade 4 and 5. Not all pipelines are assessed using the same condition grading approach which limits the comparability of data. The chart also shows the data confidence ratings assigned to this condition assessment – ranging from highly reliable to highly uncertain. Also, not all pipes have received a condition grading which is shown in the second chart.

The low ratings revealed by these charts suggests that there will need to be a period of transition towards more fulsome and 'certifiable' information disclosure. From a practical perspective data from the 2019/20 NPR indicates the participant Councils manage more than 88,000km of pipe - enough to run up and down the length of New Zealand 55 times. Condition assessments take time, with some Councils being able to assess ~10% of a wastewater network per year. Deciding to undertake more fulsome assessments would need to be prioritised against: improving the variable compliance with drinking water standards across the country (see Appendix 2 – Drinking Water Compliance 2018/19); investing in improving wastewater treatment plant (assessment by GHD – Boffa Miskell, National Stocktake on wastewater treatment plants, found of the 321 WWTPs in the country and operated by Councils, around 73% were operating on expired consents); and managing an

increasing number of significant urban flooding events which with climate change is likely to intensify further³.

Further, we note that there must be adequate transitioning to this regime to ensure the WSEs have the capacity and capability to make the most of this opportunity to be transparent. Other data from the NPR indicates that three water service providers persistently have high employee vacancy levels, with 8% of roles being vacant within the 2019/20 reporting year. This continues a trend that has been occurring since reporting began in 2008.

What are your views on whether Water Services Entities should be subject to price-quality regulation in addition to information disclosure regulation?

6

Water NZ considers this is a once in a generation opportunity to put in place an economic regulatory regime for the three waters which, while leveraging domestic and overseas experience, recognises that:

- Water in Aotearoa / New Zealand is not the same as electricity, gas, telecommunications, and airports in Aotearoa / New Zealand.
- Water in Aotearoa / New Zealand is a taonga, and the broad framework for freshwater management requires the health and well-being of water bodies and freshwater ecosystems to be prioritised ahead of the health needs of people and the ability of people and communities to provide for their social, economic, and cultural wellbeing now and in the future.

Water NZ is aware that there are a range of views within our membership. One school of thought is that the WSEs *should not* be subject to traditional forms of price-quality regulation, whereby the regulator prescribes prices or revenue. This reflects the non-profit construct for the WSEs and therefore requires an alignment in objectives between the entities and the regulator. The other school of thought is that in may be appropriate at some point, in the future, to *transition* from an information disclosure only regime to a price-quality regime.

Whether or not a transition is appropriate in the future it is important to recognise:

- The three waters sector is at the beginning of a period of significant transformation. During this period there will be a need for transparency of processes for trust to be built within our communities, for an increase in water literacy (a general understanding about all things three waters) and, ultimately, for an increase in equity of service delivery across the Aotearoa / New Zealand. This requires clear roles and responsibilities, and cohesion across the entire regulatory regime for water.
- There is a significant infrastructure deficit across the three waters. This must start to be addressed now as the WSEs are being established and the economic regulation and consumer protection regimes are being developed. To ensure investment is realised a collaborative/coaching framework is preferable to a regulatory regime that is unnecessarily adversarial, too prescriptive and compliance focussed.

Water NZ would like to draw the Ethical Governance Regulation framework to MBIE's attention. This is an internationally recognised as an improvement to the traditional economic regulatory model currently used in New Zealand.

³ Refer <u>R Bell NIWA_Pacific Emerging Leaders talk_Mar2010_V3 [Read-Only] [Compatibility Mode]</u>.

Submission on Economic Regulation and Consumer Protection for Three Waters Services in New Zealand – Water New Zealand – December 2021

It is important that the costs of setting up and operating the economic regulatory regime must not exceed the benefits. A clear understanding of the direction of travel for the regulatory regime is important. This is particularly the case, as the WSEs will be investing in new systems as part of the transition from the current 67 Councils.

Implicit in the individual price-quality path regime followed in New Zealand is a more prescriptive approval process for material asset investments. What is material in an Auckland context (e.g. Central Interceptor wastewater project costing \$1.2b) is vastly different to what is a material investment for a smaller Council (<\$1m for a modular drinking water treatment plant). It is critical that the foundation for the review of investments is appropriate – is it about the substance of the investment, the decision-making process, or the cost (or all of them)?

What are your views on the appropriateness of applying individual price-quality regulation to the Water Services Entities?

As indicated in our answer to Q6, Water NZ members have varying views on whether pricequality regulation should be applied at this time or at all.

Nevertheless, assuming a decision has been made to introduce price-quality regulation Water NZ considers that it would be more appropriate to apply individual or bespoke price paths to the WSEs than a default price-quality path. There will be a variety of differences in the four WSEs that need to be accommodated including their size, the maturity with which the water services are managed, their future investment profile, the changing legal requirements across the Water Services Act, the reform of resource management and the need to substantially reduce greenhouse gas emissions. One only has to look at the difference between the Auckland region (where almost everyone is on metered water) to the Wellington region (where very few are on metered water) to demonstrate the need for a bespoke approach.

What is fundamental is that quality standards must not fall. The outcomes of the reform agenda must be at the forefront in all regulation that water services will be subject to.

Water NZ suggests that Ethical Governance Regulation should be considered, particularly as the economic regulator for the three waters in Aotearoa / New Zealand will be dealing with statutory entities that do not have a profit motive i.e., aligned outcomes, incentives and no interest in gaming the regulator.

- A) Do you consider that the economic regulation regime should be implemented gradually from 2024 to 2027, or do you consider that a transitional price-quality path is also required?
- 8

7

B) If you consider a transitional price-quality path is required, do you consider that this should be developed and implemented by an independent economic regulator, or by Government and implemented through a Government Policy Statement?

Water NZ considers that it is essential that economic regulation should be implemented gradually. Our responses to Q5 demonstrate that introducing information disclosure that can be certified by professional directors will take time. Data availability and the consistency of data across the three waters is poor and will require investment to enable comparative benchmarking across a broader range of performance measures than used to date and typically considered essential in an economic regulatory setting.

In considering introducing price-quality regulation there is a need to be realistic. The WSEs will need to undertake a form of due diligence on the assets that are being transferred to

them. This will allow the WSEs to assess the condition of existing assets and to consider investment priorities. Further, the WSEs will need to understand the strategic and business performance expectations of the regional representation group, to understand and respond to the Te Mana o te Wai statements provided by mana whenua, and to engage more broadly with stakeholders. All of this will take time. Engaging in a prescriptive manner with economic regulatory officials is unlikely to deliver improved outcomes, at least in the short to medium term. As already noted, adopting a more collaborative/coaching approach will be far more effective and efficient.

Anecdotally, we know that the process of setting up an economic regulator with appropriate knowledge of water could take a considerable period of time. When Scotland reformed its water services the establishment of WSEs and the economic regulator were at different times some three years apart.

Having said that, there is considerable merit in having a high level understanding of the economic regulation framework as the WSEs are created. This will enable the WSEs to ensure systems, processes and technology are appropriately structured from the outset.

Water NZ considers a three waters specific Government Policy Statement (GPS) which the economic regulator must have regard to is appropriate. Indeed, the GPS itself should provide useful principles the WSEs themselves will need to take account of. For example, the GPS may cover expectations about principles for the structure of prices.

Note, earlier comments in relation to Ethical Governance Regulation are also relevant to this question.

However, should a decision be made to adopt a price-quality regime a transitional pricequality path would be appropriate. In putting a transitional arrangement in place this should not be 'IPP lite' rather a transition that recognises the price-quality path will evolve and improve over successive Regulatory Control Periods (RCP). The risk of a price path being too high will be tempered by the time it will take to bring the 4 WSEs together and scale up i.e. the WSE will not be able to over spend initially. Washups, clawbacks and other mechanisms can be built in to address over or under recovery noting that WSEs will have no incentive to game the regulatory setting.

A) What are your views on whether the Minister of Commerce and Consumer Affairs should be able to reduce or extend the application of regulation on advice from the economic regulator?

9

B) What factors do you consider the economic regulator should include in their advice to the Minister?

Water NZ considers that the Minister of Commerce and Consumer Affairs should be able to reduce or extend the application of regulation on advice from the regulator. Flexibility and agility are crucial to achieving the outcomes for water reform.

Note, our earlier comments about the importance of broader consumer outcomes than traditionally considered under a Commerce Act s52l assessment - public health, environmental, cultural and social context within which three waters sit.

For the factors to consider, the matters set out in paragraph 90 of the Discussion Document are supported. Namely:

• whether a supplier has the ability and incentive to exercise substantial market power in, taking into account the effectiveness of existing regulation and governance

arrangements (including ownership arrangements and consumer voice arrangements)

- whether the benefits of extending or reducing economic regulation materially exceed the costs, and the form(s) of economic regulation that should be extended or reduced
- any material long-term efficiency and distributional considerations associated with recommendations to extend or reduce the application of economic regulation.
- A) What are your views on whether the purpose statement for any economic regulation regime for the water sector should reflect existing purpose statements in the Telecommunications Act and Part 4 of the Commerce Act given their established jurisprudence and stakeholder understanding?
- B) What are your views on whether the sub-purpose of limiting suppliers' ability to extract excessive profits should be modified or removed given that Water Services Entities will not have a profit motive or have the ability to pay dividends?
- *C)* Are there any other considerations you believe should be included in the purpose statement, or as secondary statutory objectives?
- D) What are your views on how Treaty of Waitangi principles, as well as the rights and interests of iwi/Māori, should be factored into the design of an economic regulatory regime for the three waters sector?

In our response to Q6, Water NZ has stated that water in Aotearoa / New Zealand is not the same as electricity, gas, telecommunications, and airports in Aotearoa / New Zealand.

The purpose statement and any secondary statutory objectives for a three waters economic regulator needs to provide far greater focus on outcomes that are important in the context of water. The National Policy Statement on Freshwater Management 2020, which applies to three waters via the Water Services Act, sets out the meaning of the concept of Te Mana o te Wai which establishes a hierarchy, requiring the health and well-being of water bodies and freshwater ecosystems to be prioritised ahead of the health needs of people and the ability of people and communities to provide for their social, economic, and cultural wellbeing now and in the future. This needs to be captured in the purpose statement of any economic regulation.

Further, there needs to be coherence with key local government outcomes (especially those that have a community focus) and the outcomes being sought from the overall reform package, namely:

- safe, reliable drinking water;
- better environmental performance of wastewater and stormwater services;
- efficient, sustainable, resilient and accountable multi-regional water and sewage services; and
- making water affordable for future generations.

Water NZ acknowledges that evolving the purpose statements ,as recommended here, from those contained in the Telecommunications Act and Part 4 of the Commerce Act, will mean that some of the "standard" ways the economic regulator operates in Aotearoa / New Zealand will need to change. This will, therefore, reduce the synergy benefits sought from combining economic regulators. However, Water NZ considers this will be positively offset by ensuring there is coherence and cohesion across the overall regulatory regime for the three waters.

10

Water NZ is aware there are currently discussions happening with regard to whether it is appropriate for the Commerce Commission to consider climate change outcomes when making decisions under Part 4. Water NZ considers that it is fundamentally important that objectives of the WSEs, regarding transitioning to net zero emissions, are considered by the three waters economic regulator. The three waters sector has a role to play in reducing emissions, and Water NZ directs MBIE to the release of "Navigating to Net Zero", a paper prepared by Water NZ's Climate Group which provides guidance to water services operators wanting to reduce operational and capital programme emissions⁴.

Water NZ considers the purpose, sub-purpose or secondary statutory objectives should recognise the no-dividend nature of the WSEs. It is important to recognise that profit is evidence of exceeding expectations and efficiency targets. It may also relate to timing. In a fast growing economy, revenue such as growth charges or development related revenues may be paid early with the costs associated with them due at some point in the future. Early revenue that must be carried forward is not related to exceeding expectations or efficiency. Keeping the profit measurement will enable better international benchmarking and comparisons, but the potential for harm is removed as any profit is reinvested or returned to consumers.

Water NZ considers that it is appropriate that the Treaty of Waitangi principles, and the rights and interests of iwi/Māori, are factored into the design of a three waters economic regulator. This is important to enable coherence across the regulatory framework for the three waters. Water NZ notes Cabinet papers indicate:

- The purpose of the Working group on representation, governance and accountability arrangements for water services entities includes upholding the Crown's commitment to its Treaty partner to protect and promote the rights and interests of iwi/Māori in the three waters service delivery reforms⁵; and
- The establishing legislation for the WSEs may include consideration of entity-specific schedules to recognise unique characteristics and Treaty settlement legislation⁶.

It is important that the three waters economic regulator is independent, as this reduces the potential of political interference. Consideration is, however, required in relation to how the regulator can consider Te Mana o te Wai statements prepared by mana whenua, and strategic and business performance expectations issued by the regional representation group. This in addition to the need to take account quality setting or investment requirements stipulated by other regulators, such as Taumata Arowai.

What are your views on whether a sector specific economic regulation regime is more
appropriate for the New Zealand three waters sector than the generic economic regulation regime provided in Part 4 of the Commerce Act?

Water NZ is aware that members have a range of views regarding who should be the economic regulator. On the one hand setting up of a specific three waters economic regulator and on the other utilising the Commerce Commission. The critical issue is the overall regulatory framework, which must take appropriate account of the broader regulatory framework for water.

As outlined in our response to Q10, Water NZ considers that the purpose statement for this specific regulator should recognise Te Mana o te Wai, be coherent with key local government

⁴ Navigating to Net Zero: Aotearoa's water sector low carbon journey.

 ⁵ Refer 18 October 2021, CAB-21-MIN-0419 Minute: Three Waters Reforms: Further Decisions, paragraph 17.2.
 ⁶ Refer 18 October 2021, Cabinet Paper: Further decisions on the three waters reforms (Paper 5), paragraph 195.

outcomes (especially with regards to the community focus) and, the outcomes being sought from the overall reform package.

The Discussion Document does not appear to be recommending that the tools in the generic regime should be used to assess water services. Water NZ support this. As already noted, there are nuances in water services that do not exist in relation to other networks.

What are your views on whether the length of the regulatory period should be 5 years, unless
the regulator considers that a different period would better meet the purposes of the legislation?

Acknowledging the points already made in relation to the need to increase the capability and capacity of the new WSEs to operate under an economic regulatory regime a shorter initial Regulatory Control Period (RCP) would be appropriate. With this in mind, the initial RCP should be specified as being a collaboration /coaching model with other enforcement options not being put in place until later. A time period of three years would align with the current regulatory framework for three waters investment. Subsequently, the RCP should align with real time business planning time horizons.

- A) What are your views on whether the economic regulator should be required to develop and publish input methodologies that set out the key rules underpinning the application of economic regulation in advance of making determinations that implement economic regulation?
- 13 B) What are your views on whether the economic regulator should be able to minimise price shocks to consumers and suppliers?
 - *C)* What are your views on whether the economic regulator should be required to set a strong efficiency challenge for each regulated supplier? Would a strong 'active' styled efficiency challenge potentially require changes to the proposed statutory purpose statement?

Water NZ is aware that there are a range of views within our membership on the appropriateness of Input Methodologies (IM).

One school of thought is that the specific three waters economic regulator should not prepare and publish IMs (except in relation to Information Disclosure requirements). This reflects the view that the regulator should not follow a prescriptive framework and should not set prices or revenues. In this environment, the regulator would be better placed to focus their energies on providing guidance on criteria for business planning, and on developing the Information Disclosure regime. This would be more consistent with a collaborative/coaching approach to economic regulation.

The other school of thought acknowledges IMs will drive behaviours and ensure consistency across the sector.

Should the determined regime include IMs it is vital that these are developed with the significant input of, and support from, the sector. The water sector is undergoing a transformation globally as it seeks more sustainable solutions. Valuable innovation should not be diminished because of prescriptive methodologies focussing on a specific regulatory purpose control period or attempting to squeeze a square peg into a round hole. Delaying the development of the IMs will create increased uncertainty. Water NZ is aware of the precedent of the Commerce Commission starting to develop Input Methodologies and frameworks for regulation of telecommunications before the enabling Act was passed. Another option is that the merits review of any initial IMs is removed, with the

accompanying regulatory bargain that there will be an earlier IM review to address issues that emerge.

Critical to this is overall clarity of the principles that underpin the economic regulatory regime. This will enable business planning and prioritisation of investments to occur in a timely manner.

The role of the regional representation group in setting business performance expectations needs to be considered in relation to price, and the need to smooth changes in prices as the new WSEs bring together the current multiple three waters providers, or subsequently as large or multiple investments occur. Practically speaking managing price shocks, through smoothing, will involve compensation through extended financing costs.

Efficiency is important and is at the centre of the Government's outcomes being sought for the three waters reforms - "efficient, sustainable, resilient and accountable multi-regional water and sewage services". It is unclear whether there is a problem that needs to be addressed ahead of the entities being established that would require a specific efficiency challenge to be set. As new component in a new regulatory system, an efficiency challenge should not be introduced until the WSEs and the regulator are both sufficiently mature to ensure any unintended consequences are mitigated for.

- A) What do you consider are the relevant policy objectives for the structure of three waters prices? Do you consider there is a case for parliament to directly control or regulate particular aspects in the structure of three waters prices?
- B) Who do you consider should have primary responsibility for determining the structure of three waters prices:
 - a) The Water Services Entity, following engagement with their governance group, communities, and consumers?
 - b) The economic regulator?

14

- c) The Government or Ministers?
- C) If you consider the economic regulator should have a role, what do you think the role of the economic regulator should be? Should they be empowered to develop pricing structure methodologies, or should they be obliged to develop pricing structure methodologies?
- A) The Government Policy Statement should set out the relevant policy objectives for the structure of three waters prices. Traditionally, these would be efficiency (productive, allocative, and dynamic⁷) cost recovery, fairness and simplicity. In light of the Treasury's "Living Standards Framework" it may be appropriate to include other factors, such as specific wellbeing measures, and acknowledge the need to make water affordable for future generations. Water literacy across the country is highly variable, particularly given a lack of meters/smart meters. An important role for the WSEs moving forward is education, particularly considering climate change and water scarcity, to support a better understanding of the true value of water in Aotearoa / New Zealand.
- B) The primary responsibility for determining the structure of the three waters prices should lie with the WSE following adequate engagement with stakeholders, as specified by government. That engagement needs to include the consumer and community voice, iwi/Māori consultation, and industry and land development consideration.

11

⁷ These are important to encourage efficient use of water, in terms of the overall supply of water, Te Mana o te Wai, leakage management, climate change and resilience.

Submission on Economic Regulation and Consumer Protection for Three Waters Services in New Zealand -Water New Zealand – December 2021

C) The role of the regulator should be to challenge the WSE to use a transparent process, to justify the investments underpinning the prices and to explain how the pricing methodology adopted will impact different consumer groups. The role of the economic regulator should be focused on overall economic regulation rather than price methodology regulation. A GPS can then provide guidance on the principles. What are your views on whether merits appeals should be available on the regulators 15 decisions that determine input methodologies and the application of individual price-quality regulation? Water NZ has indicated that members have diverging views on whether Input Methodologies, and the application of individual price-quality regulation is appropriate (refer responses to Q6, 7 & 13). Merits appeals do have their place and should be part of the suite of policy instruments available to WSEs, and other stakeholders. In the first instance, our preference is for the economic regulator and the WSEs to work together to ensure efficient and effective investment is realised through a collaborative/coaching relational framework rather than a regulatory regime that is unnecessarily adversarial, too prescriptive and compliance focussed. To avoid an investment hiatus, workable solutions may need to be implemented quickly and these may not be binary so some discretion may be necessary for the decision maker. Whether this is best achieved through shorter regulatory control periods should be considered. It should be recognised that the no-dividend nature of the WSEs should mean that the WSEs do not have the incentive to game the system in the same way other profit maximising entities may have, as the overall objective of the WSEs is to deliver on the best long-term outcomes for water systems and their communities. Do you broadly agree that with the compliance and enforcement tools? Are any additional 16 tools required? As articulated above Water NZ supports a collaborative/coaching approach to economic regulation which means there should be an emphasis on education and the importance of transparency rather than quick, harsh penalties. As indicated in our response to Q5 time will be required before there is sufficient data for professional directors to be prepared to "certify" Information Disclosure. Transition arrangements may therefore be appropriate. Under the Water Services Act suppliers have 5 years before there is a requirement for authorised persons to undertake certain services. The Water Services Act provides Taumata Arowai with a range of compliance and enforcement tools. It is important that there are not overlapping compliance arrangements, with resulting double jeopardy. This will likely also apply to resource consenting regimes. Members have raised concerns that with a no-dividend, rather than profit maximising model, financial penalties will fall on consumers as a whole rather than shareholders. This suggests that a compliance and enforcement regime which has a greater focus on transparency and reputation may be more appropriate. The information disclosed will be a useful tool to signal how well a WSE is fulfilling its social licence to operate i.e. penalties or actions by regulators (economic regulator, Taumata Arowai, Regional Councils) could be easily shown on a relative basis compared to other WSEs and lead to direct consumer or governance scrutiny.

17 Who do you think is the most suitable body to be the economic regulator for the three waters sector? Please provide reasons for your view.

Water NZ is aware that members have a range of views regarding who should be the economic regulator. On the one hand setting up of a specific three waters economic regulator and on the other the Commerce Commission. Regardless of this the critical issue is what is the overall regulatory framework.

The economic regulator must have an operating philosophy that is consistent with the new entities and of Taumata Arowai. This must incorporate 'giving effect to' Te Mana o te Wai and (eventually) upholding Te Oranga o te Taiao (a resource management regime requirement in the reform of the Resource Management Act). Consistency of primary objectives will also be a key element between the regulator and Taumata Arowai as, in comparison to electricity supply, what is important in regard to water is extremely broad.

Further, Water NZ considers that the purpose statement for the specific three waters economic regulator should recognise Te Mana o te Wai, be coherent with key local government outcomes (especially community focus) and the outcomes being sought from the overall reform package outcomes.

Efficiency and minimisation of cost and complexity should also influence this decision. A clear and consistent approach by the regulator will be paramount for the entities but this will need to be balanced with the transitionary learning approach required in the initial phase. The regulator, WSEs and Taumata Arowai will all be newly established, and the establishment period will take some time.

18 What are your views on whether the costs of implementing an economic regulation regime for the three waters sector should be funded via levies on regulated suppliers?

In principle, the costs of implementing the economic regulatory regime should be recovered via levies on regulated suppliers. Water NZ does note, however, there is a component of public benefit with three water services – for example, everyone benefits from stormwater services, non-leaking wastewater pipes and effective treatment and disposal, secure drinking water supplies etc. That is, there are public health, environmental quality, amenity and cultural values associated with all of these services. Therefore, there may be a role for some funding from general taxation as the consumers of water services are wider than those directly connected to the water networks or contracted with a WSE.

Do you think that the levy regime should:

19

- *A)* Require the regulator to consult on and collect levy funding within the total amount determined by the Minister? OR
- *B)* Require the Ministry to consult on the levy (on behalf of the Minister) and collect levy funding within the total amount determined by the Minister?

Water NZ supports option B. This approach will require the regulator to show that they are an efficient organisation and the oversight of levy funding by the Ministry will assist here.

Consistency across regimes for water services will also be useful considering Taumata Arowai is funded through the Option B model.

20 Are there any other levy design features that should be considered?

Has there been consideration of establishing a Vote Water? Water policy is spread across a number of Government agencies and ensuring there is transparency and coordination across Government would be appropriate.

Consumer protection A) What are your views on whether additional consumer protections are warranted for the three waters sector? B) What are your views on whether the consumer protection regime should contain a 21 bespoke purpose statement that reflects the key elements of the regime, rather than relying on the purpose statements in the Consumer Guarantees Act and Fair Trading Act? If so, do you agree with the proposed limbs of the purpose statement? A: Water NZ supports steps to put in place strong consumer protection arrangements. Examples of additional consumer protections include: A standard contract between the entities and consumers (essentially terms and conditions). A set of minimum standards for service delivery (such as notification of outages). A standard complaints management process (that is easy to understand, avoids unnecessary complexity and has a transparent process for accountability). A set of standard consumer care guidelines. • B: Water NZ supports a bespoke purpose statement. There needs to be simplicity and clarity first to assist with water literacy across the country. For many consumers, water is currently paid for through a rates bill. Moving to a water bill will create uncertainty and, potentially, suspicion. It is critical that the transition period is well managed, that contracts are written in plain English without technical jargon, and there is a high degree of transparency. It is important to note that with many consumers being unmetered moving over time to metered supplies will need support and education. It is important that there are clear roles and responsibilities. For example: Regional Councils and Taumata Arowai will both have an interest in environmental performance of three waters: Regional Councils via resource consents, and Taumata Arowai via environmental performance measures under the Water Services Act. Under c39 of the Water Services Act Taumata Arowai may appoint a person to . provide a dispute resolution process on its behalf. Similarly, Taumata Arowai is responsible for public health aesthetic matters such as taste, appearance and smell. What are your views on whether the consumer protection regulator should be able to issue 22 minimum service level requirements via a mandated code that has been developed with significant input from consumers? Water NZ considers it is important that there is clarity on the role of the consumer in economic regulation, and the pathway for consumers to elevate concerns. Further, it is important that the consumer protection regime takes into account recommendations from the Working Group on Representation, Governance and Accountability of the new Water Services Entities⁸. This working group has been established

⁸ Refer Media Release, <u>Working group to ensure local voice in Three Waters reform | Beehive.govt.nz</u>

Submission on Economic Regulation and Consumer Protection for Three Waters Services in New Zealand – Water New Zealand – December 2021

to ensure the new WSEs have accountability to the communities they serve, and to ensure there is an open and transparent process.

It is appropriate that there is a discussion on what should constitute minimum service level requirements. However, this must be tempered with a discussion about the cost of achieving these requirements. The risk that minimum standards could result in sub-optimal outcomes will also need to be managed, including determining whether certain investments are the best overall spend for the community. A discussion will also be necessary around any transition process and timeframes associated with achieving minimum standards of service. A distinction is perhaps appropriate between competitive industries and non-competitive ones. The WSEs will be set up to enable the best long term outcomes for water systems and their communities. Note, some of the mandatory code arrangements in electricity have been introduced to provide protection against retailers offering low prices without meeting basic essential service requirements.

The interactions between Taumata Arowai, mana whenua groups that prepare Te Mana o te Wai statements, the regional representation groups preparing strategic and business performance expectations, and consumers need to be carefully considered.

At the same time there is a need to improve water literacy across the country. An important role for the WSEs moving forward is education, particularly considering climate change and water scarcity, to support a better understanding of the true value of water.

There will also need to be a discussion around equity of water services, which, in the short term, will likely need to be balanced against an understanding of what the financial investment implications are.

23 What are your views on whether the consumer protection regulator should also be empowered to issue guidance alongside a code?

A separate guidance document will certainly be useful as a consideration for the WSEs. Consideration should also be given to whether this should apply to water suppliers other than the 4 WSEs.

What are your views on whether it is preferable to have provisions that regulate water
 service quality (not regulated by Taumata Arowai) in a single piece of economic regulation and consumer protection legislation?

These service quality standards should be in a single piece of regulation. This will ensure the incentives to achieve the required level of consumer protection are reflected in the framework for economic regulation.

Customers of non-WSE suppliers should rely on generic consumer protection legislation.

25 What are your views on whether minimum service level requirements should be able to vary across different types of consumers?

Minimum service level requirements will likely need to differ between consumers for various reasons. One consideration will be what type of service the consumer requires (such as the difference between an on-demand urban supply and a rural trickle feed service). Another consideration will then be the varied risk between consumers from an insurance and health perspective.

Further, at least in the short term, it is unlikely that minimum service levels will be achieved across the country without significant investment. For example, reticulation will not always

	be sensible for all consumers and alternative supply arrangements need to be considered in some instances.				
26	What are your views on whether the regulatory regime should include a positive obligation to protect vulnerable consumers, and that minimum service level requirements are flexible enough to accommodate a wide range of approaches to protecting vulnerable consumers?				
	The regime should include a positive obligation to protect vulnerable consumers. It is important to note that water is essential for life, so all consumers are "medically dependent" in the context of water.				
27	What are your views on how Treaty of Waitangi principles, as well as the rights and interests of iwi/Māori, should be factored into the design of a consumer protection regime for the three waters sector?				
	The Treaty principles of participation, partnership and protection are important tenets when considering the role of the Crown as Treaty partner, and broadly how consumers have a voice. The rights and interests of iwi/Māori are important under both the Treaty and as consumers.				
	The principles of Te Mana o te Wai and Te Oranga o te Taiao (when enacted as part of the resource management reform) need to be reflected in the consumer protection regime.				
	Consideration will also need to be given to the Whanganui River in particular, which has an identity "with all the corresponding rights, duties and liabilities of a legal person".				
28	A) Do you consider that the consumer protection regime should apply to all water suppliers, water suppliers above a given number of customers, or just Water Services Entities? Could this question be left to the regulator?				
	B) Do you support any other options to manage the regulatory impost on community and private schemes?				
	Whilst a standard regime would be preferable, this may not be suitable for all suppliers, particular the smaller suppliers. These smaller suppliers are still protected under existing generic legislation, but the compliance burden of this regime would not be proportionate in many instances of smaller suppliers.				
	All consumers should be able to use the dispute resolution scheme regardless of their supplier.				
29	Do you broadly agree that with the compliance and enforcement tools proposed? Are any additional tools required?				
	An obligation needs to be assumed that education is preferred in the initial transition process. Part of this will be a focus on proactive tools early on before moving to reactive tools over time.				
	The tools are also designed for the WSEs and may not be appropriate for all suppliers if smaller suppliers are brought on board.				
	The complaints process also requires a high level of transparency, including the publication of complaints. Regular reporting will be necessary as well as comparative reports between the WSEs.				

	These complaints should be brought up to the governance level in the initial transition phase both for an appropriately focused response and as a useful tool operationally to identify problems.					
30	Do you agree with our preliminary view that the Commerce Commission is the most suitable body to be the consumer protection regulator for the three waters sector?					
	The regulatory body that is chosen to be the economic regulator for the three waters should also be the consumer protection regulator.					
	Note, it is important the consumer protection regime takes into account recommendations from the Working Group on Representation, Governance and Accountability of the new WSEs. This working group has been established to ensure the WSEs have accountability to the communities they serve, and to ensure there is an open and transparent process.					
	It is important to recognise that identifying who is the consumer in a three waters context is not necessarily straightforward, and it is important to ensure that roles and responsibilities for consumer protection are clear. For example, wet weather wastewater overflows may be experienced by a group of consumers or a whole community rather than an individual household. Similarly, a stormwater event may flood a property, a subdivision or large part of a community. A drinking water contamination event may have detrimental health effects for a whole community.					
31	What are your views on whether the regulator should be required to incentivise high-quality consumer engagement?					
	It is important that there is high quality consumer engagement between WSEs and communities, and with iwi/Māori.					
	Incentivising high quality engagement could be included within the information disclosure framework. Developing better expertise in generating high quality consumer engagement should also be treated as an opportunity rather than a risk.					
32	What are your views on whether there is a need to create an expert advocacy body that can advocate technical issues on behalf of consumers?					
	The exact purpose and role of the expert advocacy body is not clear.					
	It will be important that any recommendations from the Working Group on Representation, Governance and Accountability of the new WSEs are considered. This working group has been established to ensure the new WSEs have accountability to the communities they serve, and to ensure there is an open and transparent process. It would not be efficient to have duplication of roles.					
	Water sector technical knowledge is important to contribute to the development of the regulatory regime. This is generally beyond the expertise of an individual consumer.					
33	What are your views on whether the expert body should be established via an extension to the scope of the Consumer Advisory Council's jurisdiction?					
	The relationship between the local community, local councils, an expert advocacy body, the regulators and the WSEs needs clarification.					
34	What are your views on whether there is a need for a dedicated three waters consumer disputes resolution scheme?					

Water NZ supports the establishment of a dispute resolution scheme. Note, there is a need for clear roles and responsibilities. Under s39 of the Water Services Act Taumata Arowai may appoint a person to provide a dispute resolution process on its behalf. It will be important to think about this from the perspective of the different services provided by the WSE. For example, for urban stormwater there may be a small neighbourhood group wanting to resolve an issue rather than an individual. The WSEs complaint process (and deadlock complaint process) would need to be able to accommodate complaints from groups not just individuals. What are your views on whether these kinds of disputes should be subject to a dispute 35 resolution schemes? Are there any other kinds of issues that a consumer dispute resolution provider should be able to adjudicate on? Complaints directly relating to matters under the contract between the entities and consumers should be subject to such a dispute resolution process. Complaints at a wider community level need to also have a suitable process, particularly for councils to raise these issues directly with the WSEs at a governance level. Additional issues may also be raised where no contract exists, such as for stormwater or flooding. Clear and appropriate processes will need to be made available for such instances. Urban developers would work with the Council to resolve resource planning and water connection. With these two roles are split across the Council and the WSE there may be a need for a 3-way contract between the private developer, the Council and the WSE unless the matter is addressed as between the WSE and the Council. There will need to be a mechanism available to the developers to address any deadlock? In addition, how are complaints about flooding dealt with? Will this still be via complaints to regional councils? There may also be the need to allow commercial consumers to opt in / out of a dispute scheme. What are your views on whether a mandatory statutory consumer disputes resolution 36 scheme should be established for the water sector? Water NZ supports the establishment of a mandatory statutory dispute resolution scheme. Note, there is a need for clear roles and responsibilities. As noted above, under s39 of the Water Services Act Taumata Arowai may appoint a person to provide a dispute resolution process on its behalf. Do you consider that a new mandatory statutory consumer disputes resolution scheme 37 should be achieved via a new scheme or expanding the jurisdiction of an existing scheme or schemes? Water NZ suggests that MBIE, on behalf of the Minister, request proposals for a disputes scheme, assess any proposals and make a recommendation to the Minister about who should be appointed as the mandatory scheme. Do you consider that the consumer disputes resolution schemes should apply to all water 38 suppliers, water suppliers with 500 or more customers, or just Water Services Entities?

	Water NZ suggests that the consumer disputes resolution scheme applies to the WSEs when established. Over time this could be expanded to include other suppliers if appropriate.				
39	Do you think the consumer dispute resolution scheme should incentivise water suppliers to resolve complaints directly with consumers?				
	Under c39 of the Water Services Act Taumata Arowai may appoint a person to provide a dispute resolution process on its behalf. This stipulates various conditions around action or inaction – this includes whether a complaint is trivial, vexatious or frivolous. Consequently, Water NZ considers that any scheme should ideally only apply to deadlocked complaints by referral after a specified time period and following the internal WSE complaint handling process.				
	One careful consideration needs to be where the cost and incentives of the scheme lies. The process should be free for the consumer raising the complaint. Variable charges based on the number of deadlocked complaints should be paid by the WSEs to incentivise them to improve their internal processes and reduce the number of complaints that end of deadlocked.				
40	Do you consider that there should be special considerations for traditionally under-served or vulnerable communities? If so, how do you think these should be given effect?				
	Special considerations should inherently be available to higher risk, under-served and vulnerable communities to best ensure equity of service.				
	Accessibility is critical for the success of any scheme. Part of that will include providing water literacy education where appropriate. General transparency and advertisement of the scheme to all consumers should also be undertaken by the WSEs and any additional mechanisms to enhance accessibility to the scheme. It must be clear that a complainant does not need to be a technical expert. The pathway for consumers to elevate concerns must be clear.				
41	What are your views on whether the costs of implementing a consumer protection regime for the three waters sector should be funded via levies on regulated suppliers?				
	The costs of implementing a consumer protection regime should be funded via levies on regulated suppliers.				
42	 Do you think that the levy regime should: A) Require the regulator to consult on and collect levy funding within the total amount determined by the Minister? OR B) Require the Ministry to consult on the levy (on behalf of the Minister) and collect levy funding within the total amount determined by the Minister? 				
	Water NZ supports option B. This approach will require the regulator to show that they are an efficient organisation and the oversight of levy funding by the Ministry will assist here.				
	Consistency across regimes for water services will also be useful considering Taumata Arowai is funded through the Option B model.				
43	Are there any other levy design features that should be considered?				

No.

	plementation and		· · · · · · · · · · · · · · · · · · ·
m	nementation and	regulator	/ stewardshin
		- Condition	Jeenaraship

44	Do you consider that regulatory charters and a council of water regulators arrangements will provide effective system governance? Are there other initiatives or arrangements that you consider are required?			
	It will be vital for there to be strong coordination across Government. Clarity of purpose and responsibility for policy, oversight and regulation roles needs be widely understood for economic regulation, consumer protection, consumer advocacy/advice and complaints.			
	Providing an opportunity to hear the local voice of communities will be essential, as well as cognisance of the longer term (30 year) viewpoint.			
	There may need to be some additional collaboration with councils around the interplay between the WSEs and how they operate with regards to district plans, particularly in regard to urban and economic development. Civil defence and lifeline utilities (such for flooding events) will also need collaborative engagement.			
	Water NZ suggests that it is less clear from the consultation paper how consumer outcomes are being driven / achieved and the customer protection framework is least well formed.			
	Regulatory stewardship is about how all the regulators work together. This is critical.			
45	Do you consider it is useful and appropriate for the Government to be able to transmit its policies to the economic and consumer protection regulator(s) for them to have regard to?			
	Policy statements and high-level directives will be essential to ensuring the regulators perform as intended. A clear directive policy strategy from central government also ensures consistency across the WSEs. A Government Policy Statement that the regulators must "have regard to" is absolutely essential.			
	The Scottish context may be useful here where the Parliament sets the broad strategy that Scottish Water is responsible to them for implementing. There is a clear flow-through of the government's expectations. OFWAT is also required to implement what the Minister says. These Ministerial requirements are changing the ways the economic regulator and WSEs are operating.			
	There must be good delineation of accountability for policy versus the agencies undertaking the activity.			
46	What are your views on whether the economic and consumer protection regulator should be able to share information with other regulatory agencies? Are there any restrictions that should apply to the type of information that could be shared, or the agencies that information could be shared with?			
	Whilst collaboration and coordination will be vital to developing a best practice, efficient and effective regulatory system, caution will be needed to protect sensitive and private information. This may require information collected for a certain purpose to be only used for that specific purpose. Absolute transparency in the collection of data and the purpose for that collection should be ensured.			
	Government agencies should be proactive and cohesive in ensuring trade-offs of the cost versus value of information is considered. A standardisation of information requests will also help avoid duplication of information provided. For example, Taumata Arowai is interested			

in financial information from the perspective of risk management while the economic regulator will have additional interest in this data.

Vacuums and silos in government agencies is not a good outcome for consumers.

Other comments

Water NZ has highlighted throughout this submission the importance of cohesion and coherence of the various regulatory regimes facing the three waters sector. To illustrate this, Water NZ has prepared an example framework demonstrating some of the service delivery attributes that require regulatory oversight.

The table illustrates the multiple areas of overlap between regulators/stakeholders e.g. the new economic regulator, Taumata Arowai, Regional Councils and local community advocates. The "1" denotes the regulator who we anticipate will have primary oversight of the attribute, "2" denotes secondary and "l" denotes an interest.

Water NZ is working with Taumata Arowai who will be consulting on their network performance measures early in 2022, and we have been using a similar framework to inform those discussions.

Outcome area	Service attribute	Economic regulator	Taumata Arowai	Regional councils	Consumer advocate
	Connections to drinking water and wastewater networks	2	1		I
Public health and	Sewage overflows	2	1	1	I
the environment is protected	Drinking water quality	2	1		I
protected	Wastewater treatment protects receiving environments	2	2	1	I
	Stormwater quality does not harm receiving environments	2	2	1	I
	Charge affordability	1			2
Services are responsive and	Complaint levels	2	2		1
affordable	Fault response times	2			1
	Fault attendance and resolution times	2			1
	Revenue covers costs	1			I
Services are economically	Asset depreciation is funded	1			I
sustainable	Debt at serviceable levels Actual expenditure aligns with	1			I
	budgeted expenditure	1			1
	System interruptions	2	1		I
Services are reliable	Asset condition	1	2		I
	Water restrictions	2	1		I
	Capacity to accommodate growth	1			1
	Water abstractions within environmental limits	2	2	1	
	Network water losses	1		2	
Resources are used efficiently	Efficient consumer use of water	2		1	
	Alternative water use		1		
	Energy efficiency	1	1		
	Greenhouse gas emissions	1	1		

	Fire-fighting water supplies	1			
	Flooding protection	2	2	1	
Services are resilient	Return to service post natural disaster	2	1	2	
Resilience to electricity/supply chain service disruptions Ability to withstand drought	2	1			
	Ability to withstand drought	2	1		

Appendix 1 – Data available on pipe condition (National Performance Review 2019/20)

1. Drinking water

Percentage of pipelines assessed in poor or very poor condition

Determined by the proportion of water supply pipelines assigned a condition grades 4 and 5. Not all pipelines are assessed using the same condition grading approach, limiting the comparability of data. Not all pipelines have recieved a condition grading. Pipelines that have yet to recieve a condition grading are illustrated in the figure below. Numbers at the top of bars illustrate confidence in data provided.

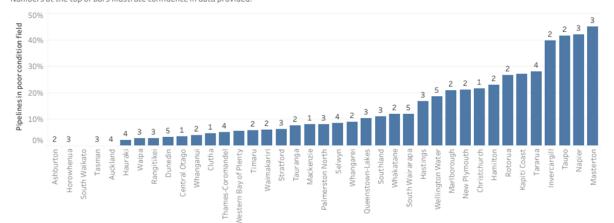
Data confidence ratings

1 = Highly reliable

2 = Reliable 3 = Less reliable

4 = Uncertain

^{5 =} Highly uncertain



Percentage of pipelines that have not recieved a condition grading

Determined by the proportion of the network that has not vet recieved a condition grading. 100% Proportion of network not assessed field 🖻 80% 60% 40% 20% 0% Taupo Tararua Auckland Masterton Napier Selwyn ^palmerston North Kapiti Coast Christchurch Clutha Waipa Gore entral Otago Hastings vercargill arlborough Rangitikei Rotorua outhland auranga Waimakariri Whanganui Hamilton South Wairarapa Whakatane Timaru Queenstown-Lakes Stratford Hauraki New Plymouth Fhames-Coromandel Western Bay of Plenty Whangarei Dunedin Ashburton Manawatu Wellington Water Tasm an Horowhenua

South Waikato

2. Wastewater

Percentage of pipelines assessed in poor or very poor condition

Determined by the proportion of water supply pipelines assigned a condition grades 4 and 5.

Not all pipelines are assessed using the same condition grading approach, limiting the comparability of data. Not all pipelines have recieved a condition grading. Pipelines that have yet to recieve a condition grading are illustrated in the figure below.

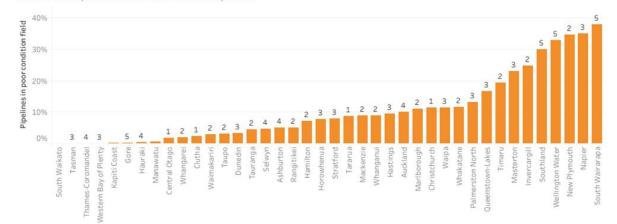
Data confidence ratings

1 = Highly reliable 2 = Reliable

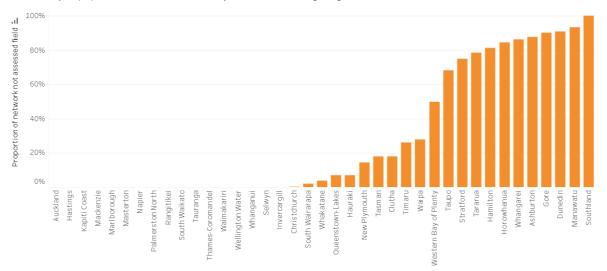
3 = Less reliable

4 = Uncertain 5 = Highly uncertain

Numbers at the top of bars illustrate confidence in data provided.



Percentage of pipelines that have not recieved a condition grading



Determined by the proportion of the network that has not yet recieved a condition grading.

3. Stormwater

Percentage of pipelines assessed in poor or very poor condition

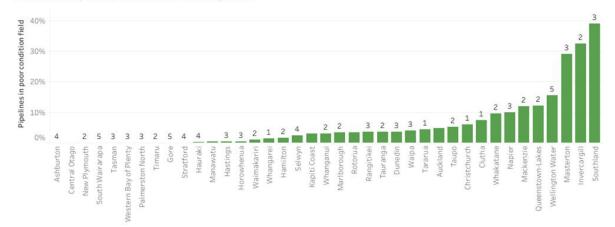
Determined by the proportion of water supply pipelines assigned a condition grades 4 and 5.

Not all pipelines are assessed using the same condition grading approach, limiting the comparability of data. Not all pipelines have recieved a condition grading. Pipelines that have yet to recieve a condition grading are illustrated in the figure below.

Data confidence ratings

- 1 = Highly reliable
- 2 = Reliable
- 3 = Less reliable
- 4 = Uncertain 5 = Highly uncertain

Numbers at the top of bars illustrate confidence in data provided.



Percentage of pipelines that have not recieved a condition grading

1009 al Proportion of network not assessed field 809 60% 40% 20% 0% Auckland Palmerston North Rot or ua Selwyn Christchurch South Waikato Southland Hauraki Clutha Timaru Waipa Taupo Tararua Central Otago Whanganui Invercargill Queenstown-Lakes Manawatu Tasm an Hastings Mackenzie Marlborough Masterton Rangitikei Tauranga Waimakariri Wellington Water Whakatane Whangarei (apiti Coast Gore Dunedin Western Bay of Plenty Hamilton Stratford New Plymouth Ashburton South Wairarapa Napier Horowhenua

Determined by the proportion of the network that has not yet recieved a condition grading.

Appendix 2 – Drinking Water Standards in New Zealand (Source – Beca, using data from Ministry of Health Annual Report of Drinking Water Quality 2018/19)

