





















#### LIMITATIONS AND DISCLAIMER:

#### Purpose of the report

This report aims to provide information to support decision making by councils on whether to develop a joint Water Services Delivery Plan (WSDP), and joint delivery model with other councils in the region.

The report does not represent the position of any of the councils involved in this process. Rather, it outlines a recommended 'best for region', concept-level delivery model for a regional Water Services Council Controlled Organisation (WSCCO) to deliver water services in the region, should councils decide to adopt this approach. It follows the requirements of Government policy and legislation and provides a robust strategic-level analysis of the case for change and investment required. This report is not intended to fulfil the statutory requirements for a WSDP nor be a basis for investment decisions. A full WSDP along with further development and decisions on the proposed delivery model will need to be developed by councils later, based on the confirmed approach and in line with the requirements of legislation. Councils will need to separately consider and evaluate alternative options in relation to the recommended model to inform decision making.

#### Limitations of information and analysis

The analysis set out in this report in relation to the current state of the water services network has been based on best available information and is intended as a strategic and directional-level analysis to inform decision making on an approach to a WSDP, rather than the level required to complete a WSDP or to inform investment decisions. Where possible, the sources and limitations have been noted. As new or more robust information becomes available, this will be used to further inform and refine the analysis. Key assumptions, sources of information and levels of confidence are set out in Appendix C. This includes how information has been verified where possible, including through discussions with council officers and Wellington Water (WWL) staff to ensure accuracy and correct interpretation. There are a number of documents referenced in this report, (such as the draft Entity G Asset Management Plan) that were developed by the Department of Internal Affairs (DIA) but never finalised. These have been relied upon in the absence of other information in order to significantly reduce the time and costs of this process. As noted, reasonable efforts have been made to cross-check such information with other sources.

#### It should be noted that:

- Forecasts almost always turn out incorrect, especially over a 30-year horizon.
- There is great difficulty in estimating investment requirements over the next 30 years, given poor information on asset condition, lack of detailed engineering assessment of what is required to address water quality to match the proposed water quality standards, and uncertain growth investment.
- Choices need to be made over a myriad of modelling approaches, inputs, and assumptions that reasonable minds may disagree with over some decades.
- There is a range of decisions yet to be made and legislation to be enacted to give effect to reform of water services.
- All modelled network economics figures should assume to have a +/-20% accuracy, such as in relation
  to revenue, investment and debt over the 30-year period, which is considered a sufficient level of
  accuracy for strategic decision-making purposes at this stage. Some of these, such as the available
  asset condition metrics, are known to be weak.
- However, based on the analysis of information and cross-checking, there is a relatively high level of confidence that the analysis is directionally correct and sufficiently robust to support the strategic level of analysis in this report and the decision making that it is intended to support.
- As noted, the detail will be subject to ongoing refinement and change as more accurate, specific information is identified and councils complete the required detail in a WSDP.
- This analysis and report structure is aligned with the requirements of the Local Government (Water Services Preliminary Arrangements) Act 2024 in relation to the content of a WSDP as outlined in Appendix A.

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# **Abbreviations**

AOG Advisory Oversight Group

AMP Asset Management Plan

Bill 3 Local Government Water Services Bill (expected to be introduced in

December 2024)

CCO council-controlled organisation

COC council-owned company

DIA Department of Internal Affairs

EoSL end of service life

FDS The Wairarapa-Wellington-Horowhenua Future Development Strategy

2024-2054

FFO funds from operations

FTE full time equivalent

FY financial year

GDP gross domestic product

GWRC Greater Wellington Regional Council

HBA 2023 Wellington Regional Housing and Business Capacity Assessment

LGA Local Government Act 2002

LGFA New Zealand Local Government Funding Agency

LGOIMA Local Government Official Information and Meetings Act 1987

LOS level of service

LTP Long-term Plan

MoU Memorandum of Understanding

NPS-FM National Policy Statement for Freshwater Management

pa per annum

Preliminary The Local Government (Water Services Preliminary Arrangements) Act

Arrangements Act 2024

WICS The Water Industry Commission for Scotland

WSCCO water services council-controlled organisation

WSDP water services delivery plan

WSS water services strategy

WWC Wellington Water Committee

WWL Wellington Water Limited

# **Foreword**

Everyone in the Wellington Region relies on our water services. These are critical to enable the health, well-being and economy of our towns and cities. However, it is also very easy to take water for granted, until something goes wrong.

All of us in the region have directly experienced some of the issues we face with our water services – whether that is an old water pipe bursting on a Wellington street, water shortages meaning you can't water your garden over summer or the impacts of stormwater or sewage on swimming spots.

Our drinking water, wastewater and stormwater services need fixing. We know it will be expensive and will take an ongoing effort. We want to ensure safe, reliable and sustainable water services so the Wellington Region can be more resilient, restore Te Mana o te Wai, enable new homes to be built, and safeguard the well-being of our communities.

The overall state of our water services network is simply not good enough. Water supply services are often unreliable, with old pipes resulting in about half of the water supply for the metropolitan area being lost through leaks.

We know our region has a significant backlog of investment in three waters infrastructure. To address this, enable new housing growth and maintain the network, we estimate for the greater Wellington area, about \$15-\$17 billion needs to be invested in water infrastructure over the next 20-25 years.

If delayed, we risk significant network failure, further deterioration and increased costs for more 'fixes'. We won't be able to build the 99,000 new homes that are needed across the region for a growing population. Our major wastewater treatment plants will continue to fall short of environmental standards and our drinking water supplies may be compromised. And we push this issue on to future generations.

There is no easy fix. The Government is putting in place legislation which will change how we manage water and is changing funding limits so councils can address the issues we face. Councils must make some bold and brave decisions with the backing of our communities. We need to be confident that we are making the best choices to address the critical challenges, that are deliverable and financially sustainable.

There is a need to increase revenue and effective use of borrowing to ensure cost increases are more affordable for households. This will be a significant challenge and will need to be carefully managed working with the water sector to find ways to do this work more efficiently.

While different parts of the region may have different priorities, all of us face issues with water services. This is everyone's problem, and it makes sense for us all to work together to turn the tide.

Taking a broader regional view will give councils confidence to make some hard decisions in the best interests of our region as a whole. This document aims to support this process. Many options have been worked through to find a better pathway forward. I urge both council officers and elected members to carefully consider the recommendations here.

I would like to extend my thanks to members of the Advisory Oversight Group and everyone involved in this report, which has been shaped by many people's expertise and hard work. It is an example of how well we can work together.

"Nāu te rourou, nāku te rourou, ka ora ai te iwi – With your food basket and my food basket, the people will thrive."

Dame Kerry Prendergast

Chair of the Advisory Oversight Group

# **Executive Summary**

### **Troubled waters**

Water services in much of New Zealand, including the Wellington Region, are suffering long-standing and serious challenges, mainly due to a lack of sufficient investment over a long period.

Transformational reform is needed with significant and sustained investment over coming decades to fix the network, which is at risk of critical failure in places. Urgent attention is also needed to enable new housing growth, provide safe drinking water, improve environmental water quality and enhance resilience.

The Government is introducing legislation to address New Zealand's water services, with a requirement that all local councils and Greater Wellington Regional Council (GWRC) must prepare a Water Services Delivery Plan (WSDP) by September 2025. This may include establishing a new organisation to deliver water services.

Councils within the Wellington Region face some stark decisions and challenges in preparing a WSDP and meeting all the requirements and investment needed to improve water services, including drinking water, wastewater, stormwater, infrastructure and storage.

### The purpose and limitations of this report

Under the Local Government (Water Services Preliminary Arrangements) Act 2024 (the Preliminary Arrangements Act), councils need to confirm their approach to a WSDP – whether they want to develop a joint WSDP with other councils and the extent of any joint arrangements; for example, for all or only some water services.

This report aims to provide information to support decision making by councils on whether to develop a joint WSDP, and joint delivery model with other councils in the region.

The report does not represent the position of any of the councils involved in this process but rather outlines a recommended 'best for region', concept-level delivery model for a regional Water Services Council Controlled Organisation (WSCCO) to deliver water services in the region, should councils decide to adopt this approach.

In the course of the decision-making process on the WSDP, councils must assess both their existing service delivery model and the option of establishing, joining or amending a WSCCO or a joint local government arrangement. If they choose, they may also consider other options for delivery of water services. The assessment of (at least two) alternatives needs to be credible with sufficient information to ensure decision-makers can reach a properly informed view.

This report does not deal with the assessment of the status quo delivery model in each district, or potential options for delivering water services other than the recommended model, as these are matters for each council to consider.

The report follows the requirements of Government policy and legislation and provides a robust strategic-level analysis of the case for change and investment required. This report is not intended to fulfil the statutory requirements for a WSDP nor be a basis for investment decisions. A full WSDP will need to be developed by councils later along with further development and decisions on the proposed delivery model, based on the confirmed approach and the requirements of Bill 3 (Local Government Water Services Bill).

### A regional approach

The nine councils within the Wellington regional area, and Horowhenua District Council, signed a Memorandum of Understanding (MoU) in May 2024 to work together on a joint WSDP process. This included GWRC on the basis of its role as bulk water provider to the Wellington metropolitan area.

An Advisory Oversight Group (AOG) was established with elected member representatives and lwi/Māori partners. This is supported by a Chief Executives' steering group, project team, joint budget and an agreed development process. The councils and lwi/Māori partners made a commitment to work together through a collaborative and non-binding process, which does not transfer any formal decision-making responsibilities or delegations from any council. Each council within the Wellington Region still needs to make their own decisions on a WSDP and a preferred model for delivering water services in future.

The AOG has helped to test options and provide direction on a set of key requirements for a possible regional WSDP. They identified an agreed goal to: ensure the delivery of safe, reliable, environmentally and financially sustainable water services so the region can be resilient, restore Te Mana o te Wai, and enable new homes and the well-being of communities.

### **Current state of the network and case for change**

Every day, millions of litres of safe drinking water are delivered to homes across the region and millions of litres of wastewater are safety treated and discharged. This relies on the hard work and dedication of more than 1,000 local people, who work directly on three waters networks for councils, Wellington Water Limited (WWL) and a range of partners, contractors and suppliers. Their day-to-day mahi and commitment to water services on behalf of the people in the region should be recognised and celebrated.

However, the Wellington Region also faces significant failure and deterioration in water infrastructure, with a risk of network fault runaway<sup>1</sup> in parts of the network. There are significant constraints to growth and new housing in many areas, with the need to meet regulatory standards and compliance requirements for water, and to build better seismic, network, and climate resilience. Challenges with current delivery models include lack of scale, workforce skills and capacity, and funding.

While not all councils have the same issues, all councils in the region have major challenges to address. About 45% of all drinking water in the metropolitan area of Wellington is lost to leaks. While the quality of asset condition information is very poor, across the region an average of about 21% of the total three water pipe infrastructure has been assessed as worn out. Wastewater is generally in the worst condition with about 33% of the pipes worn out. Many wastewater treatment plants are failing to meet compliance requirements and need large-scale replacement or investment, with immediate risks of structural failure of some wastewater pipes.

The costs for repairing and strengthening regional water services will be substantial. To address the backlog of investment needed in three waters infrastructure, to enable growth and maintain the network, it is estimated about \$15-\$17 billion of investment in the water network will be required over the next 20-25 years.

While councils are planning significant investment to manage these risks, combined Long-term Plan (LTP) investment over the next ten years is about \$4.82 billion (real), which is approximately \$470 million (or about 10%) less than the estimated investment required based on the recommended investment strategy in this report over the next 10 years and about 30-40% less than what will be required, on average over the next 20-25 years.

<sup>&</sup>lt;sup>1</sup> Network fault runaway occurs when the operational capacity to fix faults is exceeded by the fault rate. The consequences of this include extended periods of water outages, sewage spills, and localised flooding.

The evidence in this report confirms the need for change. The status quo cannot continue and, under the requirements for developing a WSDP, councils will need to make some difficult choices about how to fund and deliver the urgent work needed on the three waters network and demonstrate financial sustainability by 30 June 2028.

### Options and recommendations for a regional delivery model

The process has included working through a range of options and considerations to inform 'best for region' options for a joint WSDP and a concept-level design for a future delivery model. The councils have taken a collaborative approach, facilitated by a joint regional team, based on a series of workshops with the officers, council Chief Executives and the AOG to consider options and alternatives, provide feedback and direction.

This process has included:

- confirming what success looks like through identification of the key requirements for councils and a shared goal,
- consideration of the state of the network, level of investment required and case for change,
- consideration of how financially sustainable delivery of water services will be achieved by 30 June 2028,
- testing a range of possible structures and models for a joint WSCCO, including in-house delivery models; Council Controlled Organisation (CCO); a consumer trust; and a private sector option (which was not supported due to opposition to the privatisation of water), and
- development of governance and oversight arrangements, including design principles and assumptions for a new entity, including the relationship between the proposed WSCCO, councils and other key players.

While the model will need to be fully designed and confirmed in subsequent phases of work in line with Bill 3, the recommended delivery model is for a joint council-owned company, (that is, a full-breadth water utility vested with ownership of all regional water assets, revenues and liabilities). This would have a similar structure to a CCO under the Local Government Act 2002 (LGA) but with reduced council oversight, enabling the company to have greater control and certainty over investment plans and clarity of accountability.

The entity would be within the new class of financially independent water CCOs, which according to Government policy announcements on 8 August 2024, will be provided for in Bill 3 to be introduced into Parliament in December 2024.

The new WSCCO model will operate in a much more regulated environment, providing a strong focus on assurance, quality, delivery and value for money. The primary relationship of a WSCCO will be with its customers, not its shareholders (or owners). Council direction and oversight would therefore be less than under traditional CCO models. The new entity needs the independence and accountability to deliver. A skills-based Board with a clear set of competencies is at the heart of the recommended governance model.

Councils are keen to ensure that any future regional WSCCO will provide a high level of local service delivery, including good compliance, response times and supply. The new WSCCO would provide all services directly to water customers and bill them for water usage and services provided.

### Financial sustainability

A WSDP will need to demonstrate how financially sustainable delivery of water services will be achieved by 30 June 2028. This requires confirmation of:

- 'investment sufficiency' projected investment is sufficient to meet levels of service, regulatory requirements and provide for growth,
- 'revenue sufficiency' sufficient revenue to cover the costs (including servicing debt) of water services delivery, and
- 'financial sufficiency' funding and financing arrangements are sufficient to meet investment requirements.

This document does not provide this level of detail but does provide a strategic level of analysis of these matters to ensure councils to have sufficient understanding of the level of investment required and a potential pathway to financial sustainability including opportunities to use new financing arrangements to help manage cost increases.

The new entity would be able to raise significant long-term debt. The Government recently confirmed that the New Zealand Local Government Funding Agency (LGFA) will:

- provide financing and increased levels of borrowing to support WSCCOs,
- treat borrowing by water organisations as separate from borrowing by parent council or councils, and
- lend to multiple-owned water organisations, that are financially supported by the parent councils. It is important to note that financially supported means either a guarantee or uncalled capital will be required from councils to match the liabilities of the water CCO.

After consideration of a range of investment scenarios, the recommended investment strategy to ensure financial sustainability is based on increased debt and pricing to enable an investment programme that will 'keep up' with network maintenance, 'catch up' on the backlog of worn-out infrastructure, 'build up' network capacity to enable growth and 'clean up' wastewater and stormwater to improve discharge standards by upgrading assets as they are replaced at end-of-life.

To ensure that this strategy is affordable, careful use of long-term financing will be required to smooth and balance cost increases over time. This is expected to result in a more affordable rate of increased costs to water consumers than would otherwise be possible under current local government funding arrangements.

It is estimated that it will take about 20-25 years to replace worn-out parts of the network and ensure substantial environmental compliance. It is also possible to extend the time for this catch-up period, which may result in lower costs but is likely to result in increased risk of network failure and consequential failure and repair costs.

The actual investment and therefore financial strategy and price path will be informed by development of the WSDP and then implemented by a WSCCO. This will be done in the context of a new economic regulator that will have a strong focus on quality and price based on the actual cost to provide sustainable networks and services.

A range of scenarios has been modelled to provide an indication of average potential price increases across the region and do not reflect the actual cost to serve a particular local area, existing prices or an agreed price transition. Under all scenarios modelled, prices will need to increase to address the backlog of investment needed. Price rises will need to be managed through the use of financing tools and effective and efficient targeting of the works required. Based on the scenarios modelled:

• Price rises could be up to 9% per annum on average across the region to address the backlog of investment in the network. This rate of price increase will need to be managed through financing arrangements and/or the level of investment undertaken.

• The average price per connection across the region in 2024 is \$1,711². The amount that this increases could be up to twice current prices or a peak of about \$3,000 to \$4,000. However, it may be possible to reduce this peak price through financing arrangements and a sustainable price is estimated at about \$2,596 when the catch-up phase is completed in about 20 years' time. This sustainable price is about 51% above the level of current charges, meaning that this level of increase could be gradually managed over time.

To manage affordable changes in prices, key assumptions include:

- Economic regulation will include a core principle that water prices must be based on the cost to provide services to the relevant group of customers.
- The WSCCO will need to work with the economic regulator to develop and agree a pricing and revenue strategy that will balance price and quality.
- The WSCCO will use LGFA financing arrangements and additional debt headroom to manage rate of cost increases.
- People across our region currently pay different amounts for water services depending on where they live and whether water use is metered. These existing price differentials will be locked in for a three-year transitional period to help ensure that consumers do not receive a major price shock.

### **Evaluation of the recommended model and benefits**

All councils will need to assess both the WSCCO model and the status quo, and if they choose, other service delivery options during their decision-making process.

This report does not deal with those assessments, but rather evaluates a recommended regional option in relation to the key requirements and other key factors, including the Government's minimum requirements, cost to implement, risks, level of benefits and political acceptability. For each factor, the relevant benefits, risks, challenges and key assumptions have been identified.

This evaluation will help councils to undertake a comparative analysis in relation to the status quo and any other identified options.

Some of the identified benefits of the recommended model include:

- ongoing public ownership through shareholding councils,
- replacement of about 44% of the network over the next 20 years,
- new homes and growth,
- better resilience,
- scale to enable efficiency and continuous improvement,
- focus on affordability through more effective use of funding and financing arrangements than are currently available to local councils,
- better compliance and network performance through more investment,
- customer focus and local delivery,
- clarity of accountability, and
- long-term approach to planning and investment.

<sup>&</sup>lt;sup>2</sup> Based on 2024 costs.

### Implementation considerations

Legislation requires councils to have a WSDP by September 2025. Therefore, decisions on subsequent phases of work to consider a joint WSDP and WSCCO are expected to be made on an in-principle basis by late 2024 to enable this work to be progressed.

Work from late 2024 will need to focus on development and delivery of the WSDP. Councils will need to undertake communications, engagement and formal consultation (on at least the part of the WSDP that outlines the proposed service delivery model) during this time, as well as implementation planning. This will involve some significant decision making in relation to the development and adoption of a WSDP that meets councils' legislative obligations, as well as establishing any joint arrangements for the delivery of water services, with early establishment resources, accountabilities and funding.

The draft regional WSDP will need to be aligned with the legislative requirements and will include asset condition information and a related AMP; funding, financing and revenue requirements; the proposed model for delivering water services, including meeting compliance requirements; and an implementation plan, including timeframes and milestones.

Implementation planning will consider the potential establishment of a large full-service, multi-council-owned WSCCO, which would be entrusted with the stewardship of critical regional assets with a replacement value of about \$19 billion. This will also have a significant impact on councils including future role, operating model, financial arrangements and scale.

Details regarding the structure, accountabilities, decision-making rights and resourcing will need to be finalised. Decisions will need to be made on a high-level operating model and organisational design, a service delivery model, change process and strategy, as well as information systems, legal, procurement, costs, budget and funding. The strategy, processes and principles will also need to be established for debt and asset transfer, pricing, contract transfer, people transition, customer experience and billing. This report gives an indicative timeline and costs, with key transition principles that will need to be followed.

### **Next steps**

The recommended regional model is well aligned with the key requirements set by councils, legislation and recent Government policy announcements.

To meet the legislated deadline, councils need to maintain momentum by:

- considering the recommended regional model and deciding whether to develop a joint WSDP with other councils,
- assessing status quo, an alternative model (may or may not be recommended regional model) and, if they choose, additional reasonably practicable alternatives,
- making in-principle decisions on the proposed model by late 2024 in order for this to be further developed,
- consulting on draft WSDP (at least on proposed delivery model) from late 2024 and into 2025,
- considering the implications for council, including the need to amend the LTP,
- adopting the WSDP (and any LTP amendment), and
- planning for implementation of WSDP in 2025 (especially if the new model is adopted).

Table 1: Summary of recommended regional model

Aspect	Key features		
Councils and ownership	<ul> <li>Public ownership through council-owned organisation.</li> <li>Ownership rights in constitution/shareholder agreement.</li> <li>Full-breadth water utility with ownership of all regional water assets, revenues and liabilities.</li> </ul>		
Governance	<ul> <li>Empowered to operate independently with ability to prioritise investments.</li> <li>Shareholders' panel appoints an independent, skills-based Board (not representative-based Board).</li> <li>Key skills: commercial, asset management, network utilities, Treaty of Waitangi, customer, local government, and local knowledge.</li> </ul>		
lwi/Māori	<ul> <li>Treaty of Waitangi obligations are honoured.</li> <li>Governance role confirmed through constitution.</li> <li>Range of enduring relationships and Memorandum of Understanding.</li> </ul>		
Customer	<ul> <li>Key relationship is with customers including service and billing.</li> <li>Customer interests supported by economic regulator.</li> <li>Local service delivery model backed by capability and scale to deliver efficiency.</li> </ul>		
Strategy	<ul> <li>Shareholders agree Statement of Expectations.</li> <li>WSCCO prepares Statement of Intent, Annual Plan and Water Services Strategy (WSS).</li> </ul>		
Accountability and regulation	<ul> <li>Statutory objectives per Bill 3.</li> <li>Annual reporting and public meetings.</li> <li>Oversight from regulators – Taumata Arowai, Commerce Commission, Regional Council(s).</li> <li>Single point of accountability for service delivery.</li> <li>Financially sustainable and compliant with regulation.</li> </ul>		
Borrowing	<ul> <li>Borrowing initially from LGFA based on debt covenants.</li> <li>Focus on affordability through effective use of funding and financing arrangements.</li> <li>Certainty to plan, fund and invest optimally with confidence that it has committed access to long-term funding at a reasonable cost.</li> </ul>		

# Purpose of this report

# Section summary

The Government is in the process of introducing legislation to address New Zealand's long-standing water infrastructure challenges. This includes a requirement under the Preliminary Arrangements Act that councils must prepare and submit to the Secretary of Local Government a WSDP by September 2025.

This report aims to provide information to support decision making by councils on whether to develop a joint WSDP and joint delivery model with other councils in the region.

It follows the requirements of Government policy and legislation and provides a robust strategic-level analysis of the case for change and investment required. The report does not represent the position of any of the councils involved in this process but rather outlines a recommended 'best for region', concept-level delivery model for a regional WSCCO to deliver water services in the region, should councils decide to adopt this approach.

This report is not intended to fulfil the statutory requirements for a WSDP nor be a basis for investment decisions. A full WSDP will need to be developed by councils later, based on the confirmed approach.

This report outlines a recommended delivery model for a regional WSCCO to deliver water services in the region, should councils decide to adopt this approach.

It is not intended to support other subsequent decisions by councils which may be necessary, such as whether to adopt a WSDP. Such decisions will be supported by further analysis and advice.

# 1. Purpose of this report

This report was commissioned by the nine councils in the Wellington Region and Horowhenua District Council to respond to the direction of the Government's Local Water Done Well<sup>3</sup> policy. This collective approach is discussed in more detail in the Regional Approach section of this report.

Local Water Done Well signalled an expectation that councils would prepare a WSDP within 12 months of legislation providing for the WSDP being enacted and that councils would consider collective approaches to the delivery of financially sustainable water services.

The purpose of this report is to provide information to support decision making by councils on whether to develop a joint WSDP, and joint delivery model with other councils in the region. Councils will need to separately consider and evaluate at least the status quo and may also consider other alternative options in relation to the recommended model to inform decision making.

<sup>&</sup>lt;sup>3</sup> https://www.dia.govt.nz/Water-Services-Policy-and-Legislation.

This report provides a regional analysis of:

- Current state of the network and case for change. This looks at why change is needed and the scale of the problem. This includes analysis of the level of investment required to fix the poor condition of much of the network, maintain the network, enable new housing, and ensure compliance with drinking water and environmental regulation.
- Options and recommendations for a regional delivery model. This includes a range of
  considerations for different types of models, governance and delivery. This section sets
  out a recommended concept model for a new WSCCO and looks at the importance of
  quality local service.
- Financial sustainability of water services. This outlines an investment strategy and
  potential financing arrangements to demonstrate how financially sustainable delivery of
  water services can be achieved by 30 June 2028 including investment, revenue and
  financing sufficiency.
- Evaluation of the recommended regional delivery model. This considers how well the
  recommended model meets key requirements as well as an assessment of key benefits,
  challenges and risks.
- **Implementation considerations.** This includes indicative time and costs, engagement and consultation with the community and looks at 'where to now'.

### **Limitations and disclaimer**

Please refer to the limitations noted on page 2 of this report. In particular, it is noted that this report provides a strategic-level analysis of the case for change, a concept-level design for a recommended delivery model for a regional WSCCO, which councils will be empowered to establish under the Local Government Water Services Bill (Bill 3), and an investment strategy to inform how financially sustainable delivery of water services can be achieved by 30 June 2028 including investment, revenue and financing sufficiency.

This report is **not** intended to fulfil the requirements of a WSDP nor provide the basis for investment decisions or future pricing. Development of a full WSDP will need to be completed by councils during late 2024 and 2025 based on the confirmed approach.

### 2. Legislative requirements

Local Water Done Well is the Government's plan to address New Zealand's long-standing water infrastructure challenges.

It recognises the importance of local decision making and flexibility for communities and councils to determine how their water services will be delivered in the future.

It will do this while ensuring a strong emphasis on meeting economic, environmental and water quality regulatory requirements. Key components of Local Water Done Well include:

- Fit-for-purpose service delivery models and financing tools.
- Ensuring water services are financially sustainable.
- Introducing greater central government oversight, economic and quality regulation<sup>4</sup>.

Local Water Done Well is being implemented in three stages, each with its own piece of legislation.

**Bill 1:** Water Services Acts Repeal Act 2024. This repealed the previous Government's water reforms legislation.

<sup>&</sup>lt;sup>4</sup> https://www.dia.govt.nz/Water-Services-Policy-and-Legislation.

**Bill 2:** The Local Government (Water Services Preliminary Arrangements) Act 2024 establishes the Local Water Done Well framework and the preliminary arrangements for the new water services system. This was enacted on 2 September 2024.

The Preliminary Arrangements Act lays the foundation for a new approach to water services management and financially sustainable delivery models that meet regulatory standards.

Key areas included in the Preliminary Arrangements Act are:

- 1. Requirements for councils to develop WSDPs by 3 September 2025.
- 2. Requirements that WSDPs outline future water services delivery arrangements, and for councils to commit to an implementation plan.
- 3. Requirements for councils to include in their WSDPs baseline information about their water services operations, assets, revenue, expenditure, pricing, and projected capital expenditure, as well as necessary financing arrangements, as a first step towards future economic regulation.
- 4. Streamlined consultation and decision-making processes for setting up future water services delivery arrangements.
- 5. Provisions that enable a new, financially sustainable model for Watercare, including the appointment of a Crown monitor for the interim regulation of Watercare.
- 6. Interim changes to the Water Services Act, which mean the Te Mana o te Wai hierarchy of obligations in the National Policy Statement for Freshwater Management (NPS-FM) will not apply when Taumata Arowai sets wastewater standards.

**Bill 3:** In August 2024 the Government outlined key Local Water Done Well policy decisions, including those that will be reflected in the proposed Local Government Water Services Bill (Bill 3).

The Government will introduce Bill 3 in December 2024 that will establish the enduring settings for the new water services system. This will set out a range of changes to the water services delivery system and to the water services regulatory system. This includes:

- New water services delivery models for councils to choose from, including new water organisations that can be owned by councils and/or consumer trusts,
- Minimum requirements for local government water services providers,
- A new economic regulation regime for local government water services providers, to be implemented by the Commerce Commission,
- Changes to improve the efficiency and effectiveness of the drinking water regulatory regime, and the approach Taumata Arowai takes to regulating the regime,
- Changes in the approach to applying Te Mana o te Wai, affecting drinking water suppliers as well as wastewater and stormwater networks,
- A new approach to managing urban stormwater, including changes to improve the management of overland flow paths and watercourses in urban areas, and
- Changes relating to wastewater environmental performance standards and national engineering design standards.

The announcements in August 2024 included confirmation of financial arrangements that the LGFA will provide financing to support water council-controlled organisations<sup>5</sup> (CCOs and trusts). LGFA will extend its existing lending to new water organisations that are CCOs and are

<sup>&</sup>lt;sup>5</sup> 'Water services provider' is defined as meaning all forms of local government provider and including councils that continue with direct (in-house) delivery as well as new water organisations. The term 'water organisation' refers only to separate organisations that councils may establish to provide water services and does not include councils with direct (in-house) delivery.

financially supported by their parent council or councils. It is important to note that financially supported means either a guarantee or uncalled capital will be required from councils to match the liabilities of the water CCO.

LGFA will support leverage for water CCOs based on an assessment of operating revenues, subject to water CCOs meeting prudent credit criteria. LGFA will treat borrowing by water CCOs as separate from borrowing by their supporting parent council or councils. These same lending arrangements would not apply to in-house delivery models.

### 3. Council decisions

Under the provisions of the Preliminary Arrangements Act, councils need to make a series of decisions. Some of these will be decisions required under the LGA, or the Preliminary Arrangements Act, while others will be non-statutory.

These non-statutory decisions may be tactical decisions to inform the project scope and approach, or strategic decisions (for example, to develop a joint WSDP) that are precursors to formal statutory decisions.

Key decisions councils may need to make include:

1. **Confirming the approach to a WSDP**: Whether to develop a joint WSDP with other councils and the extent of joint arrangements, for example, for all or some water services. (Sections 10 and 11 of the Preliminary Arrangements Act)

#### 2. Consultation:

- a. Whether to consult on the draft WSDP beyond the proposed model for service delivery (which must be consulted on), and when and how to consult.
- b. The timing and approach to decision making, e.g., in relation to CCO establishment and governance, (should council plan to establish a new delivery model).

#### 3. Implementation:

- a. Whether to adopt a WSDP (Section 17 of the Preliminary Arrangements Act).
- b. Whether to establish a new service delivery model.

This report aims to support decision number 1 above, *Confirming the approach to a WSDP*. Ongoing analysis and development of a WSDP will be required to support decisions 2 and 3 and to ensure councils have confidence that they are able to give effect to the WSDP. To enable this, a three-phase programme has been established, with indicative decision points (and potential exit gates) for councils at the end of Phases 1 and 2. See more detail in Section 37 of this report: *Next phases of work*.

# Regional approach

# **Section summary**

Local government is under considerable pressure to address current water service issues as well as the complex and evolving challenges ahead. The nine councils within the Wellington regional area and Horowhenua District signed a Memorandum of Understanding in May 2024 to work together on a joint WSDP process.

A joint elected-member governance group (the Advisory Oversight Group) was established alongside lwi/Māori partners, a Chief Executives' steering group, project team, joint budget and an agreed development process. Our councils and lwi/Māori partners have made a commitment to work together through a collaborative and non-binding process.

The process does not transfer any formal decision-making responsibilities or delegations from any council. Decisions on the WSDP, preferred models or commitments to future change remain with each council. There are points in the process where councils will need to reconfirm their commitment to remaining part of the collective. Any council may choose to leave the collective at any point.

The Advisory Oversight Group (AOG) has helped to progressively test and provide direction on a set of key requirements for a regional WSDP. It also identified an agreed goal to: **ensure the** delivery of safe, reliable, environmentally and financially sustainable water services so the region can be resilient, restore Te Mana o te Wai and enable new homes and the wellbeing of communities.

As well as considering at least the status quo as an alternative to a WSCCO, councils will need to undertake a process of engagement and formal consultation on at least part of the WSDP from late 2024 and into 2025, in line with legislation.

# 4. Wellington Region and the Horowhenua District

The councils working together in the Wellington Region and Horowhenua District include GWRC and nine territorial authorities:

- Horowhenua District Council
- Kāpiti District Council
- Porirua City Council
- Wellington City Council
- Hutt City Council
- Upper Hutt City Council
- South Wairarapa District Council
- Carterton District Council
- Masterton District Council.

Represented by the four lwi/Māori representatives on the AOG (see Table 3 below), the lwi/Māori partners in this regional area include:

- Rangitane o Wairarapa
- Ngāti Kahungunu ki Wairarapa Tamaki Nui-a-Rua Treaty Settlement Trust
- Ngāti Kahungunu ki Wairarapa Rūnanga
- Ngāti Kahungunu ki Wairarapa Tāmaki-Nui-a-Rua PSGE
- Rangitāne Tu Mai Rā Trust PSGE
- Rangitāne o Wairarapa Inc Rūnanga
- Te Atiawa ki Whakarongotai
- Ngā Hapū o Ōtaki
- Ngāti Toa Rangatira/Te Rūnanga o Toa Rangatira
- Muaūpoko Tribal Authority
- Te lwi o Ngāti Tukorehe Trust
- Te Tumatakahuki (rōpū of Raukawa hapū representatives within the Horowhenua)
- Te Runanga o Raukawa.

Figure 1: The nine territorial authorities and Greater Wellington Regional Council



Table 2: Wellington Region population inclusive of Horowhenua<sup>6</sup>

Regional population 2024:	~588,000
Regional population projection 2054:	Up to about 775,000 <sup>7</sup>
Number of households 2024:	~224,000
Number of households 2054:	~323,000
Percentage of households served by connected water networks:	~89-90%
GDP per capita:	Wellington Region data was reported at \$NZ86,805 GDP in 2023 <sup>8</sup>
Land area:	813,500 hectares <sup>9</sup>

The region actively works together through a range of forums, planning processes, partnerships and projects to plan, coordinate and invest in the well-being of our communities. This includes:

- housing and growth,
- · economic development,
- delivery of social and health services,
- transport,
- emergency management and resilience,
- climate change response,
- waste minimisation and management, and
- delivery of water services.

## 5. Challenges and change for local government

There are challenges to working collectively as a region, in part due to the disjointed nature of local government boundaries and different interests and pressures each council must manage. This has been the subject of several reviews and processes to consider council amalgamation at both a regional and provincial level.

Local government is under considerable pressure to address current issues as well as the complex and evolving challenges ahead, including those driven by a range of legislative changes. Proposed legislative change in relation to water services has the potential to fundamentally shift the scale, role and relationship between councils and communities in relation to water services. A significant contributing factor to these challenges is the funding model for local government.

"The financing of local government is a major barrier, local government needs a much-improved system of funding. In addition to an inefficient financing system, the pressures of inflation, increasing cost of living, skills shortages and climate change add to the challenge of funding for growth and delivering community aspirations." – Upper Hutt City Council<sup>10</sup>

 $<sup>^6</sup>$  https://wrlc.org.nz/reports/housing-data estimated 2024 population including Horowhenua.

<sup>&</sup>lt;sup>7</sup> https://wrlc.org.nz/reports/housing-data.

<sup>8</sup> New Zealand GDP per Capita: Wellington | Economic Indicators | CEIC (ceicdata.com). Does not include Horowhenua.

<sup>&</sup>lt;sup>9</sup> <u>Greater Wellington — Your Region | Tō Rohe (gw.govt.nz)</u>. Does not include Horowhenua.

 $<sup>^{\</sup>rm 10}$  Review into the Future for Local Government, He piki tūranga, he piki kotuku, pg 54. June 2023.

# 6. A regional approach to water services delivery planning

In anticipation of legislative requirements for councils to develop a WSDP, the councils in the Wellington Region and Horowhenua District earlier this year agreed to work together to consider a joint approach towards development of a WSDP. This was formalised in May 2024 when the ten councils signed an MoU to work together on a joint regional WSDP process.

The process was deliberately started as early as possible in recognition of the tight timeframe and complexity involved in developing a joint WSDP within the 12-month period signalled under the Local Water Done Well policy and is now required under the Preliminary Arrangements Act.

The councils made a commitment to work together through a collaborative and non-binding process. To provide direction and oversight, the ten councils set up the AOG, made up of an elected member from each council and four lwi/Māori representatives<sup>11</sup>. This process is supported by a Chief Executives' steering group, a joint project team, a joint budget and an agreed project approach.

The approach has included running a series of workshops with the officers, Chief Executives and the AOG to consider options and alternatives, providing feedback and direction to guide the development of this process and this report. The key deliverable from this joint process is intended to eventually be a joint WSDP, including implementation plan for a future delivery model. The AOG is chaired by Dame Kerry Prendergast and members are listed in Table 3 below.

Table 3: Membership of the Advisory Oversight Group

Council/Organisation	Representative		
Chair	Dame Kerry Prendergast		
Greater Wellington Regional Council	Cr Ros Connolly		
Upper Hutt City Council	Mayor Wayne Guppy		
Hutt City Council	Mayor Campbell Barry		
Porirua City Council	Mayor Anita Baker		
Wellington City Council	Mayor Tory Whanau		
South Wairarapa District Council	Cr Colin Olds		
Carterton District Council	Mayor Ron Mark		
Masterton District Council	Cr David Holmes		
Kāpiti Coast District Council	Mayor Janet Holborow		
Horowhenua District Council	Mayor Bernie Wanden		
Iwi/Māori representative Porirua/Kāpiti	Helmut Modlik, Tumu Whakarae – CEO, Te Rūnanga o Ngāti Toa		
lwi/Māori representative Te Awa Kairangi/Poneke	Kara Puketapu-Dentice – Chief Executive of Taranaki Whānui ki te Upoko o Te Ika		
lwi/Māori representative Wairarapa	Jo Hayes – Trustee of Rangitāne Tū Mai Rā Trust		
lwi/Māori representative/Horowhenua	Di Rump – Chief Executive at Muaūpoko Tribal Authority		

The process does not transfer any formal decision-making responsibilities or delegations from any council. Decisions on the WSDP, preferred models or commitments to future change remain with each council. There are points in the process where councils will need to reconfirm their

<sup>&</sup>lt;sup>11</sup> Note, the lwi/Māori representatives were progressively confirmed and joined the AOG during this process.

commitment to remaining part of the collective. Any council may choose to leave this collective at any point.

The AOG has met on five occasions to date to consider options and alternatives, and to provide feedback and direction for guiding the process. Workshops have included:

- Workshop 1: 10 May 2024 MoU, membership, process, key requirements for success.
- Workshop 2: 21 June 2024 network economics, funding and financing.
- Workshop 3: 5 July 2024 governance and structure options.
- Workshop 4: 9 August 2024 concept model, funding and pricing pathways.
- Workshop 5: 10 September 2024 council positions, draft report and transitional issues.

Further meetings for the AOG are planned for the remainder of 2024. Next steps in the process are set out in Section 43 of this report.

### Scale of the WSDP challenge

The issues considered in relation to a WSDP for the region are significant, requiring investment planning for billions of dollars of investment in water assets and operations. Implementation planning will consider the potential establishment of a large full-service, multi-council-owned WSCCO, which would be entrusted with the stewardship of critical regional assets with a replacement value of about \$19.7 billion. This will also have a significant impact on councils including future role, operating model, financial arrangements and scale.

Development of a joint WSDP will be a challenging, complex and highly political process in the context of evolving legislation. Additional challenge will come from the need to work across multiple councils, lwi/Māori partners, and central government, including statutory consultation with the public and input from other stakeholders.

## 7. What is important for our region

Under the MoU, it was agreed that any future model options need to respond to agreed objectives and consider approaches that are workable, affordable, sustainable and meet the needs of communities and the environment.

Critical success factors included that the plan and any future delivery model would:

- be supported by all participating councils and lwi/Māori partners,
- be supported by the Government policy and enabled through legislative change,
- be based on a sustainable funding model, and
- enable councils and Government to commit to subsequent phases of detailed design, delivery and implementation.

Building on these factors, the regional WSDP process has progressively tested and confirmed a goal, and a set of key requirements based on the needs of different interest groups and organisations<sup>12</sup>. These are summarised in Table 4 below and the detailed requirements are provided in Appendix B.

<sup>&</sup>lt;sup>12</sup> It is recognised that the categorisation used here of different organisations and groups is subjective and that some requirements relate to multiple groups (for example, water is a taonga for all, not just for lwi/Māori).

The goal identified by the AOG is to ensure the delivery of safe, reliable, environmentally and financially sustainable water services so the region can be resilient, restore Te Mana o te Wai and enable new homes and the well-being of communities.

Table 4: Requirements for regional WSDP process and WSCCO

Stakeholder	What they need			
Consumers	<ul> <li>Water services must be:</li> <li>in public ownership.</li> <li>affordable with fair, equitable and transparent pricing.</li> <li>high-quality, seamless, environmentally compliant services.</li> <li>customer focused.</li> <li>continuously improved.</li> </ul>			
lwi/Māori	<ul> <li>Water services must: <ul> <li>be treated as a taonga.</li> <li>have an aspirational vision to restore and protect Te Mana o te Wai.</li> </ul> </li> <li>Iwi/Māori should: <ul> <li>have meaningful influence with a skills-based Board where Treaty and cultural awareness are two key skills required.</li> </ul> </li> <li>Iwi/Māori are looking for: <ul> <li>a genuine commitment to local and Māori procurement.</li> <li>a major and fast revival of our waterways, well-being and people.</li> </ul> </li> </ul>			
Councils	<ul> <li>Councils require:         <ul> <li>financially sustainable water services with the debt from water services assessed separately to parent councils' business by the LGFA, subject to a guarantee from owning councils, the WSCCO meeting prudent lending criteria and having the characteristics of an investment-grade utility provider over the medium term<sup>13</sup>.</li> <li>local influence to ensure alignment of outcomes, particularly for supporting housing growth.</li> <li>single point of accountability for service delivery.</li> <li>assurance that the water delivery entity has strong processes, high-quality systems and core data.</li> <li>a long-term planning horizon.</li> <li>economies of scale and integration.</li> <li>residual council financial sustainability (see more below).</li> </ul> </li> </ul>			
Central Government	Water services must  • be financially independent and sustainable.  • be compliant with regulation.  • allow for housing growth.			

<sup>&</sup>lt;sup>13</sup> Note this has been updated in line with Government policy announcements on LGFA lending and was previously: "balance sheet separation – so water services' revenue, costs, asset ownership and debt are recognised on the new water service entity's balance sheet and separated from councils' balance sheets as far as reasonably possible"

# Future water entity

A future water entity needs:

- to be empowered to operate independently with freedom to prioritise investments
- to have an independent professional skills-based Board and an exceptional executive leadership team.
- certainty to plan, fund and invest optimally with confidence that it has committed access to long-term funding at a reasonable cost.
- to be a full-breadth, integrated utility, that owns assets, bills revenue and raises own debt.
- high-quality systems and staff, as the new regulatory environment requires
  a quantum shift in the data collection, analysis and reporting capabilities of
  all water delivery services.

These critical requirements provide the basis for consideration and testing of a joint WSDP and the design of a potential water delivery model. During the process, options were tested regarding entity structure, governance, infrastructure strategy, price and debt funding.

A suite of transition requirements will also need to be met to achieve a smooth and seamless transition, including an equitable allocation of revenue and debt, as well as sound asset and contract transfer rules. These are detailed in Section 42 of this report: *Key Transition Principles*.

## 8. The role of Greater Wellington Regional Council

GWRC has a unique role as a regional council in New Zealand as it is responsible for collecting, treating and distributing safe and healthy drinking water to Wellington, Hutt, Upper Hutt and Porirua City Councils.

This work is carried out for GWRC by WWL. City and district councils are responsible for the distribution of water to households and businesses through their own networks<sup>14</sup>.

This unique role is recognised under legislation through the Wellington Regional Water Board Act 1972. Under this Act, GWRC which has a role in bulk water supply in the Wellington Region, does not need to prepare its own WSDP, but may be involved in developing a joint WSDP. GWRC has committed to this process but also noted that their intent is to focus on their resource management regulatory role and in time may plan to exit from asset ownership and associated accountabilities related to bulk water supply on the understanding that 15:

- they will retain ownership of water catchment land at Kaitoke and Wainuiomata to support broader outcomes including biodiversity, recreation and climate change mitigation and adaption.
- any new entity has the structural and operational factors needed for success.

"We believe that the region can agree on a new model that will provide better water services for Wellingtonians. However, we will require evidence that a new model will provide for better and more sustainable asset management before considering the transfer of our assets." Daran Ponter, Chair GWRC

<sup>&</sup>lt;sup>14</sup> GRWC LTP 2024-2034.

<sup>&</sup>lt;sup>15</sup> Letter from Chair of GWRC Daran Ponter to the Chair of the AOG dated 7 May 2024.

 $<sup>^{\</sup>rm 16}$  Letter from Chair of GWRC Daran Ponter to the Chair of the AOG dated 7 May 2024.

# 9. Engagement and consultation

To date, there has been no formal engagement or consultation on this report with other stakeholders or the public. The views of communities and lwi/Māori have been represented by AOG members and council officers. This report is intended to support a process of engagement and formal consultation from late 2024 and into 2025, as councils consider service delivery options as part of the development of a WSDP in line with the requirements of legislation.

# Current state of the network and case for change

# **Section summary**

Councils in the Wellington Region face stark challenges to meet the investment needed for drinking water, wastewater and stormwater services and infrastructure. It is clear that transformational reform is required in water services for most councils, with significant and sustained investment over the coming decades to fix, maintain and improve the network - which is at risk of critical failure in some areas – as well as to enable growth, provide safe drinking water, improve environmental water quality, and enhance resilience. The issues are urgent and will also take sustained effort to address.

This section analyses the current state of the water services network based on best available information and varies from council to council. Key regional challenges include significant network failure and deterioration, risk of network fault runaway, constraints to growth and housing, more stringent regulatory standards and compliance requirements, as well as building seismic, network and climate resilience. Work is needed on wastewater, stormwater and drinking water supply to meet climate change and population growth. Some of the other system issues are lack of scale, workforce skills and capacity, and funding. There are also concerns regarding low revenue for water relative to actual costs, household affordability, risk management, and insurance.

While not all councils have the same issues, all councils in the region have major challenges to address. About 45% of all drinking water in the metropolitan area of Wellington is lost to leaks. Across the region, about 21% of the total three water pipe infrastructure has been assessed as worn out. Wastewater is in the worst condition with about 33% of the pipes worn out. Meanwhile, many wastewater treatment plants are failing to meet compliance requirements and need large-scale replacement or investment, with immediate risks of structural failure of some wastewater interceptor pipes.

A description of current levels of service and delivery models is set out in this section of the report. There are challenges with current delivery models with compliance issues and growth not being well managed.

While councils are planning significant investment to manage these risks, combined LTP investment over the next ten years is about \$4.82 billion (real), which is approximately \$470 million (or about 10%) less than the estimated investment required based on the recommended investment strategy in this report over the next 10 years and 30-40% less than what will be required, on average over the next 20-25 years.

# 10. An agreed need for change

Much of New Zealand has significantly underinvested in water infrastructure and water services over several decades. Councils around the country and in the Wellington Region now face stark challenges to meet the investment needed for drinking water, wastewater, and stormwater infrastructure.

This is not a new issue. The need to change how water services are funded and delivered has been the subject of several major reviews, policy processes and legislative reform. In 2000, the Parliamentary Commissioner for the Environment concluded the existing model for water services had reached the end of its design life, and this is even more the case in 2024<sup>17</sup>. Two more recent major reviews (the Havelock North Drinking Water Inquiry 2016-2017, and the Three Waters Review 2017-2019), both concluded that councils were struggling to maintain their ageing water infrastructure.

The 2020 Wellington City Council Mayoral Taskforce declared that "tinkering is not going to cut it. Transformational reform is required."

While there may be disagreement on exactly how much investment is required, or how this is best resolved, there is compelling evidence<sup>18</sup> and political alignment that there is a significant infrastructure investment deficit for three waters and change is urgently required.

Significant and sustained investment in water services and infrastructure is required over the coming decades to fix the network – which is at risk of critical failure in places – as well as to enable growth, provide safe drinking water, improve environmental water quality, and enhance resilience to potential future seismic and climate change events.

While some parts of the network are in much better condition currently (in particular in Kāpiti Coast District Council), these will require a significant increase in planned renewals to avoid the risks being faced in older parts of the network. To address these issues, an estimated \$15-\$17 billion of investment in the water network will be required over the next 20-25 years.

This level of investment is not possible for local government under current borrowing settings. In the current context, the steep increase in rates or water charges, will be unaffordable for communities. A sustained investment will also be very challenging in relation to sector capacity. There will be a need to work closely with contractors and suppliers to grow the workforce, explore new delivery models and find new and lower-cost solutions.

<sup>&</sup>lt;sup>17</sup> Water NZ "How councils can steer clear of troubled waters".

<sup>&</sup>lt;sup>18</sup> Water Industry Commission for Scotland, 2021; Beca DIA Three Waters Reform WIS modelling review, 2021.

"The current funding and financing approach is not sustainable in the context of complex wellbeing challenges and increasing community expectations.

Numerous previous reviews of local government funding have highlighted the problems and recommended changes to the system to ensure that councils can more sustainably fund their activities (NZPC 2019). However, central government has failed to enact these recommendations and the issues are compounding.

The Panel recommends some significant changes to the local government funding and finance system that will coincide with the new system of local government. This time, change must happen. Without it, local communities and future generations will be the ones missing out."<sup>19</sup>

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It is accepted that the region's population ultimately needs to be able to sustain the cost of delivering high-quality water services. This issue is urgent and any delay to new solutions will push a bow wave of costs and investment forwards into the future and risk council and communities' ability to ensure clean and safe water.

# 11. Summary of key regional challenges

Every day, millions of litres of safe drinking water are delivered to homes across the region and millions of litres of wastewater are safety treated and discharged. This relies on the hard work and dedication of more than 1,000 local people that work directly on three waters networks for councils, WWL and a range of partners, contractors and suppliers. Their day-to-day mahi and commitment to water services on behalf of the people in the region should be recognised and celebrated.

However, the Wellington Region has a significant backlog of investment needed in three waters infrastructure and an increasing number of faults and network failures. The worn-out state of the network poses significant risk of increasing major service failures.

### **Critical risks include:**

**Significant network failure:** Investment is needed to replace an ageing and failing network, including addressing the impacts of failing asbestos pipes. Currently about 21% of the network is worn out leading to an increased risk of major failure. This includes more than 1,300 kilometres of asbestos concrete pipes<sup>20</sup>. About \$4.2 billion of investment is needed to replace the worn-out parts of the network. This equates to about \$200 million per annum for the next 20–25 years.

**Network deterioration:** In addition to replacing the most worn-out parts of the network, to avoid further deterioration and increased costs of reactive 'fixes', ongoing investment of about \$250 million per annum is needed to maintain the network as an ongoing cost every year.

**Risk of network fault runaway:** This can occur in any network where the fault rate generated by failing assets exceeds the operational capacity to fix them. This issue is starting to be seen across the metropolitan area of Wellington in relation to water leaks. The short-term effect is that there is always a growing backlog of outstanding faults. This typically cannot be remedied

<sup>&</sup>lt;sup>19</sup> He piki tūranga, he piki kōtuku – The future for local government (dia.govt.nz), 2023 page 54.

<sup>&</sup>lt;sup>20</sup> Based on WWL information there are 1,392kms of AC pipes for all three waters (not including KCDC, CDC, MDC, or HDC).

without shutting down and renewing the part of the network affected. The longer-term effect is the diversion of resources and funding away from keeping the rest of the network operational.

Constraints to growth and housing: Funding and capacity for three waters infrastructure is a key constraint for greenfield and brownfield development and is already stopping some development occurring. An estimated additional 200,000 residents will live in the Wellington Region and Horowhenua by 2053, requiring about 99,000 new homes. While growth needs to pay for growth, challenges include current capacity constraints and financing infrastructure ahead of the recovery of costs.

New regulatory standards and compliance requirements: A new, more stringent regulatory environment for water services has been introduced which will require significant investment in plant, equipment, information systems and new, specialist skill sets to ensure clean and safe drinking water and improve environmental impacts of stormwater and wastewater. Currently three of the four major wastewater treatment plants in the metropolitan area are non-compliant and investment is required to ensure sufficient clean and safe drinking water and improve water quality. Further investment will also be required to meet economic regulations and focus on quality and price.

**Seismic resilience:** The entire region is highly sensitive to seismic activity and the 2016 Kaikōura earthquake clearly had a significant impact on the region's buildings and water infrastructure. The earthquake revealed weaknesses in the ageing network and significantly accelerated leaks with an urgent need to replace large areas of the failing water reticulation network. Serious seismic risk exposures remain for all water networks, particularly for the main trunk water supply network to Wellington running the length of the Hutt Valley beside State Highway 2.

**Network resilience and redundancy:** There are critical risks of summer water shortages in the metropolitan area and wastewater pipe failures. The network also has low levels of inherent resilience, particularly in storage, with a high risk of water shortages due to the current layout of water reservoirs and lack of network cross connections. For example, if the drinking water connections from the Hutt Valley to Porirua City fail, the city would only have two to three days of drinking water capacity. WWL estimates that in the event of a strong earthquake in the Wellington Region, some suburbs could be without water for 100 days and possibly longer<sup>21</sup>.

Climate change: The biggest risks driven by climate change are increasing severe weather events and coastal inundation and drainage. This risk is shared across the region but is particularly severe for the western lowlands of Horowhenua, Kāpiti, and coastal areas of Porirua City and Hutt City. Some parts of the region such as Wairarapa are expected to experience drier weather leading to less availability of drinking water. Metropolitan issues are also growing, as both parts of the lower Hutt Valley and Wellington CBD lie close to Wellington Harbour and are slowly subsiding, relative to average tides. In Hutt City, the wastewater treatment plant at Seaview faces the combined effects of sea level rise and flooding risk from the Hutt River. The iron trunk network in the Wellington CBD, which is already past End of Service Life<sup>22</sup> (EoSL), is experiencing accelerated corrosion due to the ingress of saltwater from higher tides.

**Wastewater:** Significant and increasing inflow and infiltration into the network is resulting in more wet weather overflows from the network and treatment facilities in Wellington and the Hutt Valley. Compounded by increasing equipment failures, this reduces the ability to manage increasing loads. Treatment plants in Porirua and South Wairarapa are also reaching capacity and equipment failure risks are growing, limiting their ability to manage bigger flows. Treatment plants in Kāpiti will face challenges in consenting for discharges to meet growth. In some cases worn-out pipes are causing sea water to be ingested into the wastewater system and fed into

<sup>&</sup>lt;sup>21</sup> https://www.wellingtonwater.co.nz/resources/topic/emergency-water-3/.

<sup>&</sup>lt;sup>22</sup> The economic definition for 'End of Service Life' (EoSL) for an asset is when the "expected forward risk cost of asset failure exceeds the replacement cost of the asset". This means that it is more expensive to leave the asset in the network than it is to replace it. It does not necessarily mean that the asset has failed, although typically it means the asset is likely to fail.

wastewater treatment plants. This is exacerbated by the increased production of hydrogen sulfide, which is corrosive to both wastewater pipes and wastewater treatment plants.

**Stormwater:** More frequent and larger flooding events are expected due to climate change and urban densification. As community expectations rise, a significant increase in the need for flood mitigation initiatives is anticipated. Stormwater quality treatment and restoration of our waterbodies is also going to become increasingly important. This is already becoming evident as comprehensive consents in the Wellington Region are lodged. The stormwater system is incomplete within the Wellington Region and in some places has cross connections with the wastewater system. During high rain events, these cross connections can cause the wastewater network to overflow, spilling untreated wastewater into the environment.

**Poor reliability** of water supply services is challenged by worn-out pipe failures, limited storage, and limited water supply availability. This is exacerbated by nearly half of the drinking water supply being lost through leaks in the metropolitan area.

# Other key water network challenges the Wellington Region needs to address include:

**Lack of scale:** The size and disjointed nature of councils constrain opportunities for efficiency, strategic investment and the ability to meet local challenges. It also makes it more challenging to invest in joint solutions, such as for wastewater treatment.

**Workforce, skills and capacity:** The capacity and capability of the water sector will need to be progressively increased to deliver on the investment needed. All councils and WWL advise that it is challenging to recruit and retain high-quality staff into the water services workforce. Reasons include lack of career paths, lack of training programmes, and better conditions in some water consulting firms. The risk is particularly acute for smaller councils that do not have the team depth to provide back-up for key skill sets or ensure cover for emergency events. New and different skills and experience will also be required to respond to economic regulation as this is phased in.

**Funding and financing challenges:** Councils have a diverse mix of funding challenges. Some councils are constrained in how much they can borrow, most are sensitive to affordability and face significant trade-offs with other activities or capital programs that need to be delivered. Funding for the sector is largely provided by the LGFA, at very favourable interest rates. With significant capital programmes the main constraint is in funding headroom (with flow-on challenges in serviceability). This constraint is also influenced strongly by credit ratings. It should be noted that an underpricing of water services and an overreliance on debt funding lies at the root of the funding challenge.

**Low revenue for water relative to cost:** Revenue from water users is significantly below what is required to fix and sustain the network, constraining both investment and borrowing. The average cost per household for three water services in the Wellington Region is about \$140/month<sup>23</sup> relative to about \$250/month for average power costs.

**Household affordability:** Monitoring affordability constraints on households is a key requirement with rising costs of living placing a strain on many households. This constraint will remain, with pressure on households only likely to grow where water revenue is funded by council rates.

 $<sup>^{\</sup>rm 23}$  Note these figures are based on 2024 average rating costs for water at \$1,711/household.

**Risk management and insurance:** Insurance costs and the assumed reinstatement costs have escalated significantly in recent years. This is making it challenging for councils to ensure risks are adequately managed including sufficient insurance of three water assets.

### **Network Failure Case Study: Dixon St Adit Tunnel, Wellington City**

Failures of water infrastructure can be sudden with severe impacts, as seen in the collapse of the Dixon St adit tunnel (wastewater connector) in Wellington in late 2019.

A targeted focus on improving health and safety has led to more costs and difficulties in inspecting large, buried water pipelines and tunnels. This has sometimes led to challenges in adequately understanding the condition of these extensive critical assets, says Wellington City Council Chief Infrastructure Officer Siobhan Procter.

Although earlier inspections of the central city Dixon Street adit tunnel had noted significant deterioration, the problem areas were unable to be readily accessed. Later inspections were less detailed because of the increased difficulties and costs. As a result, the tunnel discharging into the main wastewater interceptor was not identified as being at risk of failure. Without warning, the adit tunnel collapsed in the week before Christmas 2019, leading to a significant cavity in the carriageway, potentially threatening the stability of nearby structures and health and safety in the vicinity of Dixon Street and Willis Street.

Upstream pumping stations were temporarily turned off to divert wastewater away from the collapse, while immediate repair work took place. Emergency actions were also taken to minimise the overflows, which were directed to the stormwater overflow system and then into the harbour. However, approximately 6,500m<sup>3</sup> of untreated wastewater was discharged over about 46 hours.

"Financial consequences of the unexpected failure far exceeded the cost of planned inspections of the adit with any subsequent rehabilitation or upgrade work prior to failure," says Siobhan. Costs included those associated with the cleanup and provision of temporary solutions, investigations and monitoring, communications, delivery of the permanent solution in an urgent reactive manner, as well as third party loss of revenue and the risk of possible legal action. In addition to these financial consequences, there were significant:

- health and safety risks associated with both the untreated wastewater discharges as well as the road collapse,
- third party loss and significant disruption caused from closure, odour and construction activity.
- environmental risks and cultural offence to lwi from discharge of untreated wastewater into the harbour, and
- council reputational damage.

"This incident showed that the huge impacts from unexpected failures dwarf those of planned works," says Siobhan. "Out of sight should not mean out of mind."

## 12. Summary of key issues by council

While not all councils have the same issues, all councils in the region have major challenges to address including debt constraints, network condition, resilience, climate change, compliance and growth. Some councils have immediate challenges; others have challenges to come over the coming decades.

A more detailed outline of the network and key challenges for each council, including network condition, is set out in the council profiles in Appendix  $D^{24}$ .

 $<sup>^{24}</sup>$  At time of writing, no information on key challenges had been received from Carterton District Council.

Table 5: Key challenges for each council

Council	Key issues			
Horowhenua District Council	<ul> <li>Ageing infrastructure such as the Levin Wastewater Treatment Plant.</li> <li>Securing sustainable sources of water supply for growth, especially in Levin.</li> <li>Infrastructure capacity to meet future population growth demand.</li> <li>Increased severe weather events and stormwater impacts on wastewater and stormwater infrastructure.</li> <li>Restoring the mauri of the water at Lake Horowhenua (Punahau) as this is a culturally significant and community asset.</li> </ul>			
Kāpiti Coast District Council	<ul> <li>Infrastructure capacity to meet future population growth demand.</li> <li>Providing water supply network to unserved rural areas.</li> <li>Water supply compliance to meet regulatory requirements.</li> <li>Resource consents for wastewater treatment plants and proposed upgrades to meet future consent requirements.</li> <li>Address flood hazards identified in 30% of urban properties.</li> <li>Stormwater pipe network under capacity (50%) for one in 10-year event.</li> <li>Organisational capacity and systems to meet future regulatory regime demands.</li> </ul>			
Porirua City Council	<ul> <li>Significant and growing renewals backlog in water and wastewater due to age profile of pipe materials.</li> <li>The speed of population growth is ahead of current water infrastructure capacity.</li> <li>High per capita water demand is outstripping supply due to water loss in the network and growth.</li> <li>The condition of reservoirs makes them vulnerable to contamination.</li> <li>The council is reliant on landfills accepting sludge from wastewater treatment plants which constrains ability to minimise waste.</li> <li>Streams, rivers and harbours contain coliforms and other contaminants such as heavy metals and microplastics.</li> </ul>			
Wellington City Council	<ul> <li>Significant and growing renewals backlog in water and wastewater due to age profile of pipes.</li> <li>Infrastructure capacity to meet future population growth demand.</li> <li>High per capita water supply demand is outstripping supply due to water loss in the network and growth.</li> <li>Water reservoirs conditions vulnerable to contamination.</li> <li>Moa Point Wastewater Treatment Plant condition is resulting in ongoing compliance issues.</li> <li>Karori Wastewater Treatment Plant outfall compliance issue.</li> <li>Streams, rivers and harbours contain coliforms.</li> </ul>			
Hutt City Council	<ul> <li>Ageing water infrastructure and pipes that are failing and requiring urgent investment, i.e. 109km of water supply galvanised pipes.</li> <li>Investing in finding and fixing leaks and managing water loss to avoid water shortages.</li> </ul>			

Infrastructure capacity to meet future population growth demand. High per capita water supply demand is outstripping supply due to water loss in the network and growth. Reservoir conditions mean they are vulnerable to contamination. Wastewater investment is well short of what is required to renew ageing parts of the network (estimated only 10% of what is required). Issues with compliance and ageing parts at the Seaview Wastewater Treatment Plant, i.e. sludge dryer. Streams, rivers and harbours contain coliforms. A significant increase in the value of water assets is expected this year resulting in significant increases in depreciation which are currently unfunded. Market capacity issues regionally to undertake the level of renewals required. Upper Hutt City Council Significant and growing renewals backlog in water and wastewater. New environmental quality standards require very high investment to achieve wastewater and stormwater consent compliance. Population growth is ahead of three waters infrastructure provision. Major investment is needed, especially in the wastewater network to enable growth to occur. High per capita water demand is outstripping supply due to water loss in the network and growth. As a bulk water purchaser, Council is a cost and service taker with limited influence over these aspects. Major shared assets need upgrades, including sludge dryer at Seaview Wastewater Treatment Plant nearing end of life. Network infiltration and inflows. Wet weather overflows. Contamination and overflows into waterways. South Wairarapa District An ageing network results in asset failure and requires an increase in Council renewals. The speed of population growth is ahead of current water infrastructure capacity. Emissions from three waters are not reducing. Lack of redundancy in critical systems to provide safe drinking water in accordance with the Water Services Act. Poor condition of assets compromising water system and wastewater resiliency. Inability to comply with resource consents. Treatment plants lack multi-barrier protection and have significant operational and seismic resilience challenges. Streams and rivers contain coliforms. Flooding. No new wastewater connections are available in Martinborough or

Greytown.

Masterton District Council	<ul> <li>Meeting population growth demand.</li> <li>Resource consent renewals.</li> <li>Climate change impacts.</li> <li>Affordability of levels of service.</li> <li>Network capacity.</li> </ul>
	Compliance with new regulatory requirements.
GWRC	<ul> <li>Ageing water network that requires increased investment in renewals.</li> <li>The speed of population growth is ahead of current water infrastructure capacity.</li> <li>High per capita water demand for the metropolitan councils is outstripping supply due to water loss in the network and growth.</li> <li>Current demand is highlighting that GWRC may not be able to meet its duty of care obligations as an asset owner under the Water Services Act in the long term.</li> <li>Seismic resilience of the bulk water assets does not meet the required earthquake resiliency standard.</li> <li>Work is underway, but the system is not yet reliable to meet regulatory requirements for fluoride due to lack of redundant systems and asset reliability.</li> <li>Current demand is placing at risk the existing assets due to lack of headroom to allow major assets to be taken off-line.</li> <li>Significant investment is required for the Pakuratahi lakes in the near future.</li> </ul>

### 13. Current state of the water services network

# **Current condition, lifespan, and value of the water services networks**

Network asset condition (such as for a power or telecommunications network) is usually assessed at quite a granular level and is considered a core requirement for mature essential network management. For water networks, most assets are underground and not easily inspected.

The Wellington Region's asset condition assessment is less mature than it should be. Accordingly, analysis is based on sample condition assessments of network pipes available from the latest AMPs. Key sources of information regarding asset condition, and the relatively low level of confidence in this information, are noted in the appendices.

Based on available information for most parts of the Wellington Region, three waters infrastructure is considered to be in a very poor condition (relative to a sustainable network) due to underinvestment over decades, as well as failure of asbestos pipes and impacts of the Kaikōura earthquake.

#### **Asbestos Concrete Pipes**

The Wellington Region has more than 1,300 kilometres of asbestos concrete pipes. Most of these were laid in the 1950s and 1960s and are now past their EoSL. They are susceptible to sudden collapse because over time, water flow has washed out most of the asbestos fibres<sup>25</sup> which make up the inside lining of the pipe and provides them with much of their strength. The residual concrete outer layer becomes porous, brittle, and liable to collapse due to vibration and earth movement in dry periods. Pipe failures are increasing rapidly and there is a high risk of wastewater pipes that remove waste for multiple streets or parts of suburbs failing.

While there is variability across the region (in particular, the asset condition of Kāpiti Coast District Council and GWRC networks are substantively better than other councils), an estimated 21% of the total three water pipe infrastructure has been assessed as worn out. This is a serious situation. Wastewater is in the worst condition with about 33% of the pipes worn out. This is a very high level for any network.

Key metrics for the three waters network are shown in the table below.

Table 6: Pipe network

	Drinking water	Wastewater	Stormwater	Total/Average
Length of pipe network <sup>26</sup>	3,743km	3,445km	2,165km	9,353km
% in poor or very poor condition <sup>27</sup>	17%	33%	15%	21%
Estimated average life	55 years	70 years	100 years	74 years

Meanwhile most treatment plants need large-scale replacement or investment. In the short term, there are immediate risks of structural failure of some wastewater interceptor pipes.

These worn-out assets (which are past the end of their 'End of Service Life') are generating faults such as water leaks, pipe failures, major road closures, inundation of wastewater with stormwater during rain events, untreated discharges and localised flooding. These events undermine the economic efficiency of the network by placing an additional cost burden on councils and diverting funds and maintenance resources away from productive activities including preventative maintenance and asset replacement.

The only way to address the deteriorating condition of the network assets is to aggressively replace worn-out assets with new ones until the risk of further major failures becomes manageable.

<sup>&</sup>lt;sup>25</sup> Please note that asbestos concrete pipes do not pose a threat to human health. Refer to the background document for development of WHO Guidelines for drinking-water quality: <a href="https://www.who.int/publications/i/item/WHO-HEP-ECH-WSH-2021.4">https://www.who.int/publications/i/item/WHO-HEP-ECH-WSH-2021.4</a> and information is also available on the Wellington Water website: <a href="https://www.wellingtonwater.co.nz/help-desk/water-pipe-networks/">https://www.wellingtonwater.co.nz/help-desk/water-pipe-networks/</a>.

<sup>&</sup>lt;sup>26</sup> AECOM and Tonkin and Taylor, Initial Draft Asset Management Plan, Entity G Wellington Wairarapa Draft version 2.0 December 2023 and updates from individual councils – refer Appendix E.

<sup>&</sup>lt;sup>27</sup> AECOM and Tonkin and Taylor, Initial Draft Asset Management Plan, Entity G Wellington Wairarapa Draft version 2.0 December 2023 and updates from individual councils – refer Appendix E.

Figures 2 and 3 below show an analysis of the problem and the gap that needs to close. The condition of the wastewater network is particularly concerning, which is a key driver for investment.

Figure 2: State of the network<sup>28</sup>

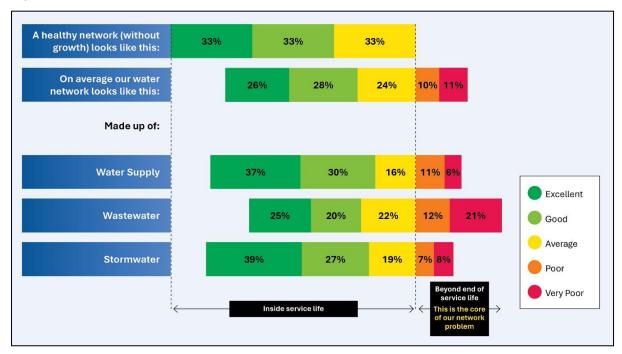
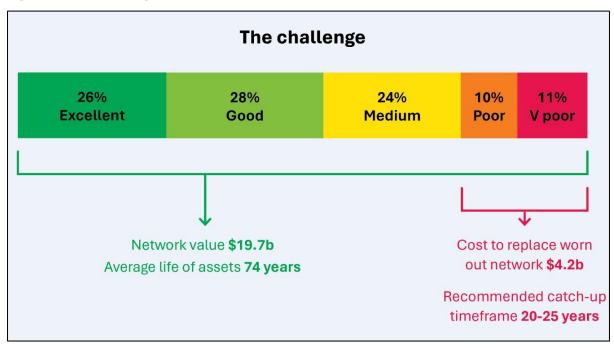


Figure 3: The challenge



<sup>&</sup>lt;sup>28</sup> AECOM and Tonkin and Taylor, Initial Draft Asset Management Plan, Entity G Wellington Wairarapa Draft version 2.0 December 2023.

## A note on network maintenance and renewal (catch up)

It is important to have a correct understanding of the terms 'maintenance' versus 'renewal' when applied to networks.

Once an asset has become worn out, it is often impractical and economically inefficient to continue to spend money maintaining it, if doing so no longer prevents its failure. Instead, it has to be replaced. This process is called 'network renewal' and is usually an ongoing process in large essential networks. Water networks need about 1/74<sup>th</sup> of the network on average replaced every year because the average maximum age of the assets – based on measuring when they wear out – is 74 years.

The key reason that large parts of our water networks are now suffering continual and increasing failures is not necessarily because the network has not been maintained properly, but because the worn-out assets have not been replaced or renewed sufficiently, due to underfunding. This has resulted in a large backlog of worn-out assets, which are now generating high volumes of network failures, including leaks.

This is also exacerbated at points in the 'lifecycle' of a city. For example, the region has a number of suburbs such as Naenae, Avalon and Taita which were developed over a short time period with all of those assets laid at around the same time and now due for renewal creating a large bulge of renewals over a relatively short time period.

These failures cannot be controlled by fixing the leaks themselves, because the underlying assets are worn out and just break again in a different place or way. The only way to fix the network, including getting rid of the leaks, is to replace or renew these assets. Funding both regular renewal (keep up) at the same time as renewing the backlog of worn-out assets (catch up) is what is driving the high cost required to fix our networks.

## Other examples of the poor state of the water network

#### Loss of drinking water and leaks:

- About 45% of all drinking water in the metropolitan area of Wellington is lost to leaks<sup>29</sup>. This equates to approximately 30 Olympic-sized swimming pools every day.
- At 30 June 2024, WWL reported 1,601 open leak jobs and had fixed 10,160 leaks over the previous 12 months<sup>30</sup>. (Note: at time of writing this number has since declined, which is in line with reduced reported leaks during winter and increased council investment in leak repair).

#### **Drinking water restrictions and drought resilience**

- The metropolitan area faces ongoing severe water restrictions over summers or an acute water shortage. This includes low resilience to risk of droughts with current supply capacity only able to meet unrestricted water demand in a one in 13-year drought, as opposed to a target of one in 50 years.
- Changes in climate, water shortages during drought years and rising demand from increases in population will contribute to the network's ability to meet current and future demand.

<sup>&</sup>lt;sup>29</sup> WWL reporting.

<sup>30</sup> WWL report to Wellington Water Committee 26 July 2024.

## **Network Condition Case Study: Hutt Valley**

Hutt City Council has allocated about \$1.6 billion over the next 10 years and is proposing a 16.9% increase to rates to address water issues, as well as increasing debt to \$1 billion. Hutt City Council Strategic Advisor Bruce Hodgins says "that is still far below the estimated \$2.6 billion needed for capital works. If we were to try and fund all that from rates, it would mean they would go up astronomically and unacceptably."

But the challenges cannot go unaddressed. A recent report to Hutt City Council's Audit and Risk Committee listed 23 major risks. These included an 18km sewerage pipe that could cost about \$700 million to replace, unresolved odour issues at the Seaview Treatment Plant, and the possibility of running out of drinking water.

The report noted that wastewater and stormwater network resilience, as well as drinking water network safety, was compromised due to poor condition of assets and underinvestment in maintenance and renewals. "Hutt City Council has invested a lot in water assets already, but significantly more is needed," says Bruce.

"We were told we need to renew 30km of pipe every year for the next 30 years to get on top of the issue. We're doing about half of that at the moment."

Meanwhile the wastewater treatment plant is coming to the end of its working life and requires another \$225 million in investment over the next 10 years. Locals complain about the smell and the GWRC has issued many infringement notices, and an abatement notice in response to breaches of consent conditions.

Although only about 20 years old, many critical components have deteriorated with equipment failures severely limiting the plant's ability to manage any additional flows or to realistically undertake any significant maintenance programmes. Significant renewal investment is underway to avoid further consent breaches, including an odour control upgrade, sludge dryer replacement and the UV system renewal.

"We're talking some big money that needs to be invested and it's going to be difficult," says Bruce.

"There is unanimous support around the council table for investment in water service delivery and the community also understands that assets have aged, and it is part of the life cycle of the city," he says.

"This is not something we can solve in 10 years. It will take 20 years to get to a point where we can deal with all of this under a new model."

## 14. Current levels of service and delivery models

The Wellington Region includes about 224,000 residential properties. Of these, an estimated 89-90% are served by a connected public water network.

Key areas that do not receive three waters services include the rural areas of the region, while some smaller towns do not have a connected piped stormwater network.

This report does not go into detail on current levels of service for water services, which is a requirement of a WSDP, but rather provides an overview of current service delivery models.

Water services are provided through two main delivery models as detailed below.

## In-house service delivery models

Of the five district councils in the region, four operate in-house delivery models while South Wairarapa District Council is part of the WWL model.

Each town in these areas typically has its own, standalone water supply and wastewater networks. There are a few instances where interconnections have been built to provide a

secondary water supply as a backup to the main source of water supply (such as between Greytown and Featherston). Most of the towns are situated on flatter terrain. This makes water supply and wastewater reticulation easier but often presents greater stormwater challenges.

A brief summary of each of the in-house delivery models follows.

#### **Horowhenua District Council**

Over the last seven years, Horowhenua has run its three waters service model through the Horowhenua Alliance Agreement. In 2023, a full review of the agreement was undertaken and in May 2024, the Council approved the three waters service model be returned in house, effective from 6 November 2024.

The current Horowhenua Alliance Model employs 26 staff dedicated to operation and maintenance of reticulation, waste and water treatment plants. The Council has a small three waters team of 12 staff, who oversee asset management, engineering, projects and project planning. Two staff in the finance team perform water billing, budgeting and forecasting roles.

Horowhenua's water services charges are collected primarily from targeted rates, general rates and development contributions. Currently, Horowhenua is rolling out a 24-month project to install water meters throughout the district. This project is due to be completed by December 2025 and is currently approximately 14% completed.

#### **Masterton District Council**

Masterton District Council's water service delivery is a hybrid model of in-house and outsourcing. Revenue is derived from targeted rates, general rates and development contributions. The Council plans to introduce water meter-based charges from 1 July 2025 and is developing the policy framework to support this. The majority of residential and industrial or commercial premises are currently metered. Consumption will not be fully meter-based; there will be a threshold allowance and anything over that will attract charges.

The Council contracts the maintenance of the water, stormwater, water race and wastewater reticulation networks to City Care; the operation of the two water treatment plants and four wastewater treatment plants is carried out by in-house staff. Larger water projects are awarded through a competitive tender process under the Council's procurement policy. A number of projects are managed in-house by a small project team with specialist support.

The Council has customer service staff supporting water services and a team of technical staff managing the water infrastructure. The small team includes seven staff directly operating the treatment plants, and four people responsible for the operation of the reticulation networks, managing the service contract and planning larger water projects. Compliance and asset management functions are supported in-house by staff in the Environmental Health and Asset Management teams.

#### Kāpiti Coast District Council

Kāpiti Coast District Council's water service delivery is currently run in-house. This includes bulk water and wastewater treatment, network maintenance and asset management of all three waters. Water services charges are collected primarily from targeted rates, general rates and development contributions. The council rolled out water metering 10 years ago and all reticulated supplies pay for water via a volumetric charge.

The Council has developed a staged 100-year water supply strategy to ensure the district's future and has implemented an active leakage control programme and volumetric consumer charging. A 2018 Auditor-General report, "Managing the supply of and demand for drinking water", showed that Kāpiti was setting a good example with its future-focused approach to supplying drinking water. Consequentially, Kāpiti has not needed to apply summer water restrictions since the last phase of measures, which included universal metering, was introduced in 2014.

The district has a wide distribution of assets across four main communities serviced by a number of water and wastewater treatment plants. The completion of Transmission Gully and other recent transport network improvements have had a major impact on the rate of growth being experienced across the district.

The Council has a dedicated Project Management Office in-house which manages the larger water capital projects. Operations and maintenance works are carried out by in-house resources, but all large capital works are carried out by external contractors. The current service model runs well and meets water quality standards. However, there are significant future challenges. These are growth-related pressure, potential increased environmental compliance in the future and resourcing, both operationally and in the asset management area.

The Council has 51 FTE staff supporting water billing and customer services, operations and maintenance of water infrastructure and the planning, investment and management of water.

#### **Carterton District Council**

Carterton District Council delivers water services on a hybrid model consisting of an in-house operations team and contractors for delivering major projects and network renewals.

Water services charges are collected primarily from targeted rates and general rates. Almost all water users are on smart water meters which makes billing relatively easy.

The current model delivers a very high level of customer service that meets all regulatory requirements for water supply and wastewater treatment, including making good progress towards a long-term goal of 100% land discharge of treated effluent. All major water service issues are included in the AMP and funded through the LTP. The delivery of the AMP will ensure continued compliance with all regulatory requirements as well as catering for anticipated growth.

The council has a three waters operations and maintenance team of ten staff, two support staff, a project manager and an asset development engineer.

## **Wellington Water Limited model**

WWL was established in September 2014 as a result of a merger between Capacity Infrastructure Services and GWRC's water supply group. WWL became jointly owned by the Hutt City, Porirua City, Upper Hutt City, Wellington City and Greater Wellington Regional Councils in 2015. South Wairarapa District Council joined as a shareholder in 2019.

WWL does not own any water infrastructure, or set policies or user charges, or control rates. These functions sit with the six shareholding councils.

The model primarily services the metropolitan city areas comprising 75% of the region's population. The services rely on integrated water supply, wastewater and stormwater networks. For example:

- Drinking water collected and treated in the Hutt Valley. Bulk water is collected and treated from the Waiwhetu Aquifier and Wainuiomata River in Lower Hutt as well as from the Hutt River in Upper Hutt.
- Wastewater from Upper Hutt is piped to and treated in Seaview (Lower Hutt).
- Wastewater from northern areas of Wellington City is piped to and treated in Titahi Bay (Porirua City).

The WWL councils have a history of working together to address the challenges of local water services. This includes forming WWL as the second largest CCO in the country. WWL currently employs close to 400 staff, although it has a total workforce capacity of about 1,000 people,

which is procured through a combination of supplier arrangements. This includes partnerships with Fulton Hogan, Veolia, and contractor and consultancy providers<sup>31</sup>.

WWL delivered an annual capital programme of \$329.3 million for the year ended 30 June 2024. The WWL model has been successful in many respects and provides invaluable learnings for the region:

- Integrated network management: The collective management of the city councils' integrated three waters network has provided opportunities to benefit from a larger scope and scale.
- **Scale:** The size of the WWL model enables it to employ a depth of water expertise and capability, which would be challenging for most of the owner councils if they operated an in-house model.

The WWL model does however have significant limitations which will constrain shareholding councils to meet the challenges going forward. These include fragmented accountabilities between WWL and its shareholding councils, constrained and uneven funding across the shareholding councils and the limited investment in critical core IT systems.

Other key limitations include:

- Accountability: The dispersement of accountabilities, especially of price, revenue setting and collection, investment planning, asset ownership and borrowing have been the source of many issues. As a result, WWL has to operate more than 20 different sets of accounts, such as an opex and capex account for each council. This is very time-consuming and prevents the design and execution of an investment programme which is optimised for the network as a whole. The fragmentation also inhibits the efficient and optimal operation of many other processes, such as investment planning, governance, customer service and consistency of bylaws.
- Systems: WWL was established on a constrained budget. There was minimal investment in providing the essential core IT systems. More than a decade on, WWL relies on Wellington City Council's financial system, third parties' maintenance management system and has no customer management system. This creates significant operational risk, impairs the ability of WWL to be effective and efficient in its performance, provide high-quality information and implement best practice financial processes.

Key aspects of the WWL model include:

- **Service provision:** WWL is contracted to provide water management, operations, maintenance services, future infrastructure and investment planning, and capital programme delivery services. It operates a mixed in-house and outsourced service model.
- Asset ownership, revenue and debt funding: All the water service assets, revenues (targeted rates, metering charges, development contributions etc) and debt remain with each council. As a result, WWL must agree discrete maintenance, capital works and funding programmes separately with each council. This inhibits WWL's ability to optimise investment across the network as a whole.
- Shareholding: WWL is 100% council owned. The councils' shareholdings approximately reflect their funding commitments (Wellington City 40%, Hutt City 20%, GWRC 15%, Porirua City 12%, Upper Hutt City 8%, South Wairarapa District 5%). Each council has an equal number of voting shares.

<sup>31</sup> Source WWL figures at 30 June 2024.

- **Governance:** The key governance bodies are the (i) Shareholder Committee (Wellington Water Committee); and (ii) Board of Directors.
- Shareholder Committee: This committee comprises a representative from each council and lwi/Māori representatives. Its role includes providing strategic direction, formulating a Letter of Expectations, coordinating feedback on the annual Statement of Intent and monitoring performance.
- **Board of Directors:** The company is governed by an independent Board which is appointed by the Water Committee. The Board appoints the Chief Executive.

WWL has been the subject of several reviews over the past two years, which have highlighted limitations and areas for improvement, including the need for clearer accountabilities and evolution of the model.

WWL is responding to these issues through an 'Organisational Capability Plan<sup>32</sup>'. This includes a range of actions in response to the findings of these reviews including improvements to accountability, assurance, financial controls, responsibility to shareholders, preparation for transition from reforms and embedding organisational values and behaviours.

WWL is also investigating the potential requirements and costs for enhanced IT systems and processes which are likely to require significant investment from shareholding councils and would need to be considered in council annual planning and budgeting processes for the 2025/26 and 2026/27 financial years.

Table 7: Key findings of reviews in relation to Wellington Water Limited

Review	Key findings
Inquiry into the cessation of water fluoridation by Wellington Water, Martin Jenkins, 2022	<ul> <li>Fluoridation was not a priority for WWL.</li> <li>Drinking water has been safe but not optimally fluoridated.</li> <li>Fluoridation was stopped to ensure the safety of the drinking water and operators, with no plan to turn it back on.</li> <li>There were long-standing challenges to providing fluoridation safely.</li> <li>There was good awareness of these issues within the organisation at operational levels, and attempts to address them, albeit slowly.</li> <li>There were organisational barriers to raising and addressing issues.</li> <li>The Board did not have the technical expertise to realise that they needed to be asking questions about fluoride in relation to oral health.</li> <li>Escalation and communication of the decision to stop fluoridation took too long.</li> <li>The complexity of the WWL model makes service delivery challenging.</li> <li>The prospect of reform appears to be challenging for WWL's performance.</li> </ul>
Wellington Water Contract Review, FieldForce4, 2023	<ul> <li>Maintenance costs had increased by 71% over the last three years.         This review also found that the level of reporting from WWL was insufficient for a water utility of its size.     </li> <li>The review suggested that efficiencies could be found if there was more focus on performance measures and cost targets.</li> <li>The report findings included: suboptimal contract management between WWL and its contractors; failure to ensure the performance and financial risk is proportionately shared between Wellington City Council, WWL and contractors; and a finding that the WWL reporting</li> </ul>

<sup>&</sup>lt;sup>32</sup> WWL Committee report 27 September 2024.

to the City Council fails to accurately capture and link network performance to the physical work programme and associated budgets.

This noted the organisation was not as mature as reviewers wo

Wellington Water Limited: capital programme estimating and budget systems, Roy Baker and Kevin Jenkins, 2024

- This noted the organisation was not as mature as reviewers would expect.
- WWL is now 10 years old, but it has not evolved in step with the
  evolution of its functions and as an organisation has not kept pace with
  increased demand.
- Unclear structures and accountabilities, with like functions not being
  grouped with like; a control environment that is loose and not fit for
  purpose; inadequate systems and processes; some missing
  competencies (including strategic leadership); underresourcing in the
  finance and the risk functions; and a mismatch between WWL's values
  and, as described, its culture.
- A culture of not wanting to hear or present bad news. There is a
  tendency to want to manage bad news before informing stakeholders,
  and to try to shape their perceptions and reaction to the problem in
  order to minimise it. Although staff and middle management had
  formed good relationships with the shareholders, reviewers were told
  that WWL comes across as defensive to shareholders.
- Problems from the 2022 fluoride review had not been addressed.
- Issues in this review need to be addressed urgently, otherwise similar errors will happen again. The critical work to be done includes recovering the lost trust and confidence of WWL's shareholder councils. For the senior leadership, it also includes recovering some lost trust and confidence among their own people.

## 15. Enabling growth

This report does not go into detail on the future investment required to enable population growth and development capacity, which is a requirement of a WSDP. It focuses on demand for new housing growth and the extent to which this is currently being constrained due to a lack of capacity in existing infrastructure and little investment for new three waters infrastructure in areas that are set to intensify.

## Planning for growth and housing demand

The Horowhenua-Wellington Region has been experiencing steady growth and development, with the population projected to reach more than 775,000 people by 2054. The Carterton and Masterton Districts' populations are expected to increase by more than 50%. In Wellington City the population may grow to more than 271,000.

The Wairarapa-Wellington-Horowhenua Future Development Strategy 2024–2054 (FDS),<sup>33</sup> sets out how the region plans to deliver well-functioning urban environments in existing and future towns and cities over the next 30 years. It proposes where to prioritise housing and business development, as well as investment in infrastructure to support this development. The strategy guides regional policy development, including Regional and District Plan changes in the future, as well as Land Transport Plans, infrastructure strategies, councils' budgets (LTPs) and other policies.<sup>34</sup>

<sup>&</sup>lt;sup>33</sup> 1404-GWRC-WLRC-Future-Development-STRATEGY-2024-240223-06.pdf (wrlc.org.nz).

https://wrlc.org.nz/future-development-strategy.

The Wairarapa-Wellington-Horowhenua FDS informed by the 2023 Wellington Regional Housing and Business Capacity Assessment (HBA) Update,<sup>35</sup> projects that an additional 200,000 residents will live in the Wellington Region by 2053, requiring 99,000 more homes to be built over that period. These additional homes are expected to be built in both new greenfield locations and redeveloped brownfield locations within existing urban areas.

## **Constraints on growth**

The regional HBA has identified that there is sufficient plan-enabled housing development capacity up until 2053 due to either plan changes, variations, or full District Plan reviews that will enable intensification as required by the National Policy Statement – Urban Development. This is currently being updated to reflect new Government policy and direction.

However, in some cases councils have identified housing capacity which does not have accompanying LTP funding for infrastructure investment to address constraints. An example is in Porirua City for the Northern Growth Area (NGA) which is considered the Wellington Region's most important greenfield housing opportunity<sup>36</sup> with capacity for 5,000-7,000 new homes. Porirua City has not included all the three waters infrastructure costs to enable development in the NGA in the 2024-2034 LTP due to affordability and balance sheet constraints.

Furthermore, in some areas, critical issues exist in allowing new water connections to reservoirs, which in metropolitan areas are nearly all in Levels of Service (LOS) deficit.

Some new wastewater connections are managing LOS by using retention tanks on private property, but the lack of monitoring and compliance could result in significant environmental and health issues as these systems fail and are not maintained.

The implementation plan for the FDS<sup>37</sup> highlights that investment in the required three waters infrastructure is unconfirmed for some key development areas including:

- Te Aro growth corridor, Johnsonville (Wellington City) three waters.
- Trentham priority development area, Upper Hutt strategic public transport corridor (Upper Hutt) potable water, wastewater and stormwater.
- Te Ähuru Mōwai (Western Porirua), Kenepuru, Northern Growth Area potable water, wastewater and stormwater.
- Hutt Central priority development area wastewater pipeline, pump station and emergency storage.
- Featherston priority development area potable water, wastewater and stormwater.
- Carterton new water supply.
- Masterton wastewater treatment upgrade.

#### Other examples of capacity restrictions on growth

Martinborough: Significant performance and compliance issues resulted in GWRC issuing an abatement notice for the Martinborough Wastewater Treatment Plant in August 2022. The plant has also reached its design capacity as population growth and annual connections have far exceeded expectations. Due to these issues, South Wairarapa District Council is no longer issuing building consents that need new wastewater connections<sup>38</sup>.

<sup>35</sup> Regional Housing & Business Development Capacity Assessment 2023 - WRLC.

 $<sup>{\</sup>small ^{36}}\,\underline{Northern\text{-}Growth\text{-}Area\text{-}Selection\text{-}Decision\text{-}Report.pdf}\,(kaing a or a.govt.nz).}$ 

<sup>&</sup>lt;sup>37</sup> GWRC FDS Implementation Strategy June 2024.

<sup>38</sup> https://swdc.govt.nz/martinborough-wwtp/ and https://swdc.govt.nz/greytown-wwtp/.

- Greytown: In June 2024, WWL advised South Wairarapa District Council that there was not enough capacity at the Greytown Wastewater Treatment Plant to allow development of a proposed 200 lot subdivision or sufficient capacity for new connections to the wastewater network in Greytown. The plant was designed to service 2,200 connections and is currently servicing 2,700 connections<sup>39</sup>.
- Growth planning: Porirua City Council, Upper Hutt City Council, Wellington City Council and Hutt City Council are all working with WWL to understand funding and constraints of current and future growth demands.
- Water supply: The region is approaching capacity constraints to meet current water demand in the greater Wellington metropolitan area, leading to the risk of more severe water restrictions and water shortages (see case study below). This has required a comprehensive programme of demand management (education, water restrictions and planning for water meters) and asset development (treatment plant upgrades), and potential additional storage<sup>40</sup>.

#### Housing demand and projected shortfall

- Besides the very significant funding constraints facing councils, sustained growth pressures are affecting the Wellington Region including a current deficit of 9,500 - 12,000 houses and 2,400 families on the social housing register (representing an increase of more than 1,000 families since 2019).
- For the year ended 2023, a total of 2,427 new residential dwelling consents were issued, representing a 33% decrease since the end of 2021<sup>41</sup>. Based on current residential consenting rates for the past 10 years, it is expected there will be a housing supply deficit of 21,000 houses in the next 30 years.

## **Funding for growth**

Along with the advantages of growth for the region comes the difficulty of funding and building sufficient infrastructure and community facilities (such as reserves and community infrastructure) to service a growing community.

Much of the cost of the infrastructure for new growth is covered by developers, particularly within property boundaries or where large-scale, comprehensive greenfield development occurs. This can include local pipe networks, stormwater detention and drinking water reservoirs.

However, development also adds pressure to existing infrastructure and the wider three waters network, which requires upgrades to add capacity. This includes water supply and reservoirs (especially where these serve multiple development areas), stormwater retention and discharge, and wastewater collection and treatment. These capacity upgrades are often very expensive and need to be integrated with other planned renewals work, which can lead to complex investment planning and long lead times.

Typically, councils recover much of the cost of these upgrades through development contributions or financial contributions<sup>42</sup>. These range significantly across the region in terms of costs to developers. There is however often a significant timing gap between the upfront investment to enable development and receipt of revenues. For example, a major wastewater upgrade may be required to enable development which will then repay these costs over the next

<sup>&</sup>lt;sup>39</sup> https://swdc.govt.nz/news/pause-on-new-applications-to-connect-to-greytowns-wastewater-treatment-plant/.

<sup>40</sup> https://www.wellingtonwater.co.nz/our-wai-can-run-dry/.

<sup>&</sup>lt;sup>41</sup> WRLC Housing Data.

<sup>&</sup>lt;sup>42</sup> The purpose underlying development contributions as outlined in s197AA LGA2002 "is to enable territorial authorities to recover from those persons undertaking development a fair, equitable, and proportionate portion of the total cost of capital expenditure necessary to service growth over the long term.

20 years. The gap needs to be bridged by councils using debt and this is a problem for funding-constrained councils. Where infrastructure is not provided in a timely manner this can constrain development, as evidenced by the examples above.

## Case Study: Mitigating the risk of water shortages for metropolitan areas of Wellington

GWRC owns the bulk water supply network for Wellington, Porirua, Lower Hutt and Upper Hutt. This involves large water collection areas, four water treatment plants, 15 pumping stations and more than 180kms of large-diameter pipelines.

#### On a typical day:

- Upper Hutt, Porirua and Wellington's northern suburbs are supplied from Kaitoke.
- Lower Hutt is supplied from Waterloo.
- Wellington's CBD, southern and eastern suburbs are supplied from a combination of Waterloo and Wainuiomata.

An important feature of the bulk water supply system is the interconnection between the two main pipelines (Kaitoke to Karori and Wainuiomata to Wellington) at Ngauranga. This interconnection provides some degree of security of water supply to the cities. This bulk water supply network is managed by WWL.

WWL plans to work with shareholding councils to reduce the rising risk of more severe water restrictions and water shortages and to reduce the impact on communities as much as possible. WWL reports that, based on planned activity and the level of investment councils can afford, removing the risk of Level 3 and 4 water restrictions is not realistic. Instead, WWL is aiming to reduce the risk of entering Level 4 water restrictions for the 2024/25 summer.

WWL's approach to this work is driven by three key outcomes: keeping the water in the pipes, reducing water demand and adding more water supply.

WWL is working on behalf of shareholding councils across a range of activities to mitigate these risks:

- **Fix the network:** continue to increase investment into finding and fixing leaks, managing water loss and replacing old infrastructure.
- Reduce demand: continue to encourage customers to reduce water use.
- Water metering: investigate and plan for water metering. All metropolitan councils have indicated they will support work towards water metering and will progress this on varying timeframes (South Wairarapa District Council already have residential meters).
- Increase supply: in the long term, there is a need to increase the amount of bulk water supplied to the Wellington, Porirua and Hutt and Upper Hutt City Councils by building two more water storage lakes. These lakes will ensure the region has sufficient water supply in the summer to meet demand in Wellington, Porirua and the Hutt Valley. WWL will develop concept designs, and work through consenting. The cost to build the lakes will be high and as a region, there is a need to first reduce the use of water by fixing leaks in the parts of the system owned by the city councils, and by reducing demand. Construction of any new water storage lakes will be subject to community consultation and resource consent approvals.<sup>43</sup>

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<sup>&</sup>lt;sup>43</sup> GWRC LTP 2024-2034.

## 16. Compliance

New Zealand is in the early stages of implementing a system of water regulation. The Taumata Arowai – Water Service Regulator Act 2020 and the Water Services Act 2021 introduced a new regulatory environment for water services.

This is an evolving space and will require all water providers to have the capability, capacity and investment needed to meet regulatory and compliance standards.

Major changes to the compliance framework include:

- Establishment of Taumata Arowai: Taumata Arowai has established new Drinking Water Standards and is establishing Wastewater Discharge Standards. Taumata Arowai has made significant progress in developing and monitoring drinking and wastewater quality since it was established. Government announcements on 8 August 2024 signalled changes to how Taumata Arowai regulates drinking water suppliers. The changes will "...remove barriers to Taumata Arowai taking a proportionate, cost effective and efficient approach in its functions and duties.<sup>44</sup>"
- Tightening of environmental compliance requirements: Direction is set by the Government via its NPS-FM, which is currently under review. GWRC implements this through changes to the Regional Policy Statement and Natural Resources Plan and ensures compliance with environmental standards, including the allocation of water supply (take) from natural sources and for wastewater/stormwater discharge requirements. Government announcements on 8 August 2024 signalled further changes including:
  - It will require Taumata Arowai to take account of the NPS-FM, and any regional plans, prepared under the Resource Management Act, that relate to freshwater, as part of the exercise of its functions, duties and powers.
  - Development of wastewater environmental performance standards that are being developed by Taumata Arowai under the Water Services Act. The legislation will be amended so there will be a single standard, rather than a minimum or maximum.
  - These amendments would be designed to ensure regional councils implement a single standard approach in resource consents and cannot exceed the standard in consenting conditions apart from on an 'exceptions' basis.
- Appointment of the Commerce Commission as the consumer protection and price/quality regulator for water delivery services (with detail and legislation to be confirmed in late 2024). More details of the economic regulatory regime will be announced later this year when Bill 3 is enacted. It is expected that the Commerce Commission will regulate the economic performance of water delivery through regulation of price and delivery service quality. Government announcements on 8 August 2024 confirmed an intent to introduce economic regulation primarily based on information disclosure with additional powers of oversight. The main purpose of this regulation will be to ensure the right level of investment to ensure good quality water services at an affordable level. This is a critical part of the new water regulatory framework and will be necessary to give communities assurance that prices set for water services are fair and reasonable.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model

 $<sup>^{\</sup>rm 44}\,{\rm https://www.dia.govt.nz/Water-Services-Policy-Future-Delivery-System.}$ 

## **Drinking water**

Most water supply treatment plants in the region are compliant for safety and those that are not, have existing remediation plans. There are several exceptions to this where water take and bore reliability will require more detailed and high-priority planning. While water safety requires continued investment, this is at a much lower scale than that required for water supply capacity, both in terms of supply take and storage. A summary of key compliance issues for drinking water is included in Appendix F.

## Water pipes failure and capacity

The impact of water pipe failure will be considered as part of the quality component of water delivery service price/quality regulation and monitored by the Commerce Commission. The absence of sufficient focus on this issue by councils, when compared to water quality and environment regulation, has left this as the highest risk with the largest consequential cost to society from network asset failure.

Pipes represent about 80-90% of the total asset value of the water network, depending on differing locations in the region. As noted above, asset condition information on the pipe networks is currently incomplete. Water pipe condition assessment, identification of existing or imminent pipe failure, and the subsequent replacement of these pipes is considered the highest priority for the network, with the obvious exception of maintaining safe drinking water.

Wastewater pipe capacity is currently seriously impacting growth for many councils in the region including the targeted high-growth rate expected in Porirua and Kāpiti.

Wastewater header and interceptor pipe failures have been the predominant form of major network failure over the last few years and represent one of the highest risks of major network failure.

#### Wastewater

Many of the wastewater treatment plants in the region are not currently compliant. There are also serious capacity risks in both forms of treatment plant which is currently limiting population growth of many cities and districts within the Wellington Region. Because capacity constraints are not regulatory in nature, this is becoming a lower priority issue. It will be necessary to unlock these capacity constraints as a remediation priority for the network. A summary of key compliance issues for the main wastewater treatment plants is set out in Appendix F.

The high proportion of worn-out assets, and limited storage and sourcing capacity of the network is expected to result in significant economic regulatory non-compliance and required improvements as part of regulation by the anticipated economic regulator. The low historical priority given to network fault rates, failures and renewal is likely the consequence of not having economic regulation for water to date.

As noted above, the network has a very high percentage of worn-out assets and these give rise to frequent failures, repair backlogs, and divert remediation and network maintenance funds to fixing leaks and trying to achieve environmental compliance. This also raises the cost of running the network due to the burden of high levels of faults.

In practice, it will not be possible to achieve sustained compliance to wastewater discharge standards with the network failures that are currently occurring and the current design of the stormwater network including cross connections. These will need to be fixed first, as no amount of treatment plant enhancement will be able to cope with these two upstream weak spots in the network.

Priority must be given first to fixing the pipe networks because this will:

- reduce water supply leaks to both lower cost and retain water supply capacity for our summers, and
- allow wastewater treatment plants to operate at known peak load capacity without the significant ingestion of seawater and groundwater.

## 17. Current and required expenditure and funding

All councils (with the exception of South Wairarapa District Council) have recently consulted their communities and confirmed proposed three waters investment (capital and operating expenditure) for 2024-2034 through the LTP process.

While councils are planning significant investment to manage network risks, combined LTP investment over the next 10 years is about \$4.82 billion (real), which is approximately \$470 million (or about 10%) less than the estimated investment required based on the recommended investment strategy in this report over the next 10 years and 30-40% less than what will be required, on average over the next 20-25 years.

Based on the assessment of the condition of the network, as well as investment required to enable growth and meet compliance requirements, the level of funding planned under LTPs is considered below what is needed and this will lead to further network deterioration and increasing risks. This is highlighted starkly in the WWL Statement of Intent 2024 which states that "The likely levels of funding will exacerbate the region's critical risks and create new ones".

## Investment required versus what is affordable – increasing the risks

As part of the LTP process, WWL shareholding councils are advised on required funding by WWL. From the WWL 2024 Statement of Intent<sup>45</sup>:

Wellington Water advised councils that regional capital investment in the order of \$10 billion is required over the next 10 years to deliver on all the region's strategic priorities. This level of investment is unaffordable and currently undeliverable.

Based on delivery to date, Wellington Water recommended that councils (excluding South Wairarapa District Council) invest \$7.6 billion in capital expenditure over the 2024-34 LTP period. This level of funding is the maximum that can be delivered in the region<sup>46</sup>.

Some councils have invested more in water infrastructure than ever before. However, the councils have been clear to Wellington Water that \$7.6 billion is still unaffordable due to council debt headroom constraints and impact on ratepayers.

The capital investment programmes agreed by councils collectively totals \$3.6 billion, around half of what Wellington Water recommended as being deliverable. Funding is particularly constrained in the first three years of the 2024-34 LTP period.

Wellington Water recommended a regional 10-year operating expenditure budget totalling \$1.7 billion (excluding South Wairarapa District Council). Councils have provided a 10-year operating expenditure budget of approximately \$1.5 billion.

The level of funding set by councils for the 2024-34 LTP period means we cannot achieve a balanced programme that delivers on all the region's strategic priorities.

\$2.8 billion baseline programme – based on funding assumptions from councils' 21-31 LTPs, this is the basic level of capital investment to keep the lights on but won't improve the region's water assets to a sustainable and manageable level.

The likely levels of funding will exacerbate the region's critical risks and create new ones. Of particular concern is the ability to supply water to communities in the coming summers and the longer-term costs of deferring this investment now. Based on councils' proposed level of funding, there will be limited work to support population growth, renew infrastructure at a sustainable rate, improve water quality and resilience and reduce carbon emissions.

The risks below are key risks that all our councils across the region face. The likelihood of these risks occurring is dependent on the level of investment each council provides and some, therefore, will vary by council:

- Severe water restrictions or an acute water shortage in future summers.
- Continued risk to drought resilience across the region. In the Wellington metro area, the current supply capacity is only able to meet unrestricted water demand in a 1 in 13-year drought, as opposed to 1 in 50 years.
- Wastewater treatment plants are not reliable and do not comply with consent conditions with limited ability to bring the wastewater treatment plants back to compliance reliably in the next three years.
- Environmental damage and not meeting communities' and mana whenua expectations due to wastewater overflows from network and treatment plants.
- Assets fail more regularly due to lack of investment in proactive activities such as renewing and replacing assets, planned maintenance, leak detection and condition assessments.
- Customers face more disruption and longer waits for repairs on the wastewater and stormwater networks.
- Disruption and repair times on the drinking water network will initially improve but begin to worsen from July 2025.
- Additional population growth puts pressure on the capacity of the network and treatment plants, leading to impacts on customers and the environment.

<sup>&</sup>lt;sup>45</sup> WWL Statement of Intent 2024 https://www.wellingtonwater.co.nz/.

<sup>&</sup>lt;sup>46</sup> This is based on a 30% uplift of work year on year that plateaus at \$1b per year. WWL Statement of Intent 2024.

#### **Planned renewals**

Another example of planned investment relative to required investment is the:

- planned length of pipe replacement (renewals) relative to the length of the network, and
- average service life (how long a pipe is expected to last this is a proxy for actual asset condition information).

This table helps to illustrate how long it would take, at that rate, to replace a pipe network. For 2024/2025, the planned meters of pipe replacement for each council are shown in the table below.

Table 8: Planned pipe replacement for Wellington Water Shareholder Councils 2024/2025 financial year<sup>47</sup>

Council	Planned pipe replacement 2024/25 (km)	Total meters of pipe in network (km)	No. of years to replace pipe network at 2024/25 rate
Hutt City	4.971	1,845	371
Wellington City	0.427	2,728	6,388
Porirua City	0.200	1,065	5,325
Upper Hutt City	2.838	662	233
South Wairarapa District	0.472	209	442
GWRC	0.180	187	1,038
Total	9.088	6,696	736

<sup>&</sup>lt;sup>47</sup> WWL Statement of Intent 2024 <u>https://www.wellingtonwater.co.nz/.</u>

# Options and recommendations for a regional delivery model

## **Section summary**

This section outlines the process followed and key considerations and options for a joint WSDP and high-level design for a future delivery model.

The process focused on the development of 'best for region' options. This section sets out a recommended delivery model which needs to be endorsed and then fully developed in subsequent phases of work as part of the decision making regarding a joint WSDP and potential establishment of a WSCCO. This will require consideration of the provisions in Bill 3 when this is introduced into Parliament (expected to be December 2024).

The councils took a collaborative approach, facilitated by a joint regional team based on a series of workshops with the officers, Chief Executives and the AOG to consider options and alternatives, provide feedback and direction. This process helped confirm the key requirements and case for change.

A range of possible different models and structures for a joint delivery model were considered, informed by current models in the region including in-house delivery models; a joint CCO service delivery only; a joint CCO full-breadth, asset-owning, a joint council-owned company (COC); a consumer trust; and a private sector option, which was not explored.

Based on the analysis of options and direction from workshops, the recommended option is for a **joint council-owned company** (that is, a full breadth water utility, owning all assets, revenues and liabilities). This would have a similar structure to a CCO but with reduced council oversight, enabling the company to have greater control and certainty over investment plans. The recommended option is consistent with the Government's policy announcements on 8 August 2024 relating to a new class of financially independent water CCOs that councils will be empowered to establish under Bill 3.

The new WSCCO model will operate in a much more regulated environment, which will provide a strong focus on assurance, quality, delivery and value for money. The primary relationship of a WSCCO will be with its customers, not its shareholders (or owners). Council direction and oversight would therefore be less than under traditional CCO models. The new entity needs the independence and accountability to deliver. A skills-based Board with a clear set of competencies is at the heart of the recommended governance model.

The new WSCCO would provide all services directly to water customers and bill them for water usage and services provided. Councils are keen to ensure that any future regional WSCCO will provide a high level of local service delivery, including good compliance, response times, and supply. The new model needs to be able to meet these expectations.

## 18. Process to test options for a joint WSDP and joint delivery arrangements

As mentioned, the councils in the Wellington Region have agreed to work together to consider a joint approach to development of a WSDP. Dependent on decision making of councils, the key deliverable from this joint process is intended to eventually be a draft joint WSDP, including implementation plan for a delivery model.

The process for this report focused on the development of 'best for region' options and did not consider alternative council-specific or provincial options – these are being developed and evaluated in parallel to this process by councils to inform their own decision making in relation to the WSDP.

Outlined below is a recommended approach which would need to be confirmed as part of future work relating to the development and decision making of a joint WSDP and the implementation planning and establishment of a WSCCO.

The approach was informed by a series of workshops with the officers, Chief Executives and the AOG to consider options and alternatives, provide feedback and direction to guide the development of this process. The workshops were supported by analysis of information, data, options and alternatives, to support informed discussion and direction.

The key stages of the approach are set out below.

Table 9: Workshops

ı	Workshop 1	Workshop 2	Workshop 3	Workshop 4	Workshop 5
Overall focus	Process Key requirements for success	Network economics, funding and financing	Governance and structure options	Concept model, funding and pricing pathways	Council positions, draft report and transitional issues
Summary of options and direction	Confirmation of process Key requirements Preferred type of model	Approach to network economics and scale of the challenge Level of investment required	Governance design principles and model including role of council owners, Board and Iwi/Māori	Key elements of concept model Risks and benefits of different funding and pricing pathways to achieve financial sustainability Transition principles	Council position updates Draft regional report feedback Key activity in September and October Transitional issues and alignment
Timeline	April/May 2024	June 2024	July 2024	August 2024	September 2024

## 19. Type of model

A WSDP is required to identify the likely form of any joint arrangement, including whether it is anticipated to involve water services being delivered by a joint delivery model and the proposed model or arrangements for delivering water services.

In terms of different types or structures of joint delivery models, a range of options were considered. This assessment was informed by consideration of what does or does not work well in current models across the region, including council-delivered options and through WWL. Key learnings were:

- In-house delivery models can be prone to underfunding, less commercial expertise and potential lack of role clarity.
- WWL Board's power to chart strategic direction is hindered by not owning assets or controlling funding and the WWL model has led to underfunding.
- The WWL model has a practical overlap between Committee and Board.
- Wellington Water Committee (WWC) has a strong focus on operations, relative to performance oversight.
- Shareholder representatives on the WWC can focus on local issues at the expense of a regional and network-wide focus.
- Small shareholding councils of WWL can feel their voices are not heard.
- Consumers have underpaid for the full cost of services under all models and there has been little use of all potential funding and price levers.

## Key options considered and recommended model

More details on the key options can be seen in Appendix G. A range of possible structures for a joint delivery model were considered, informed by current models in the region, including:

- 1. In-house delivery models,
- 2. Joint CCO service delivery only,
- 3. Joint CCO full-breadth, asset-owning,
- 4. Joint COC (which is a slightly modified version of number 3) 48,
- 5. Consumer trust, and
- 6. Private sector option (Note: this was not explored due to strong opposition from councils to the privatisation of water).

#### Recommended delivery model

Based on the analysis of options (summarised in Appendix G) and direction from workshops, the recommended delivery model is for a **joint council-owned company** (that is, a full breadth water utility, owning all assets, revenues and liabilities).

This recommended option was selected as it was the only option that met the key requirements of councils, aligned with Government policy intentions, and the anticipated requirements of the Preliminary Arrangements Act and Bill 3.

The entity would be of the type that councils will be empowered to establish under Bill 3 to be introduced in December 2024. It would have a similar structure to a CCO under the LGA, but with reduced council oversight (as provided for under Bill 3), enabling the company to have greater control and certainty over investment plans. This is one of the features necessary to enable borrowing by the new entity.

A key assumption is that Government will introduce details for a new asset-owning WSCCO through Bill 3 – in line with the announcements on 8 August 2024 – which will provide this type of organisation with the necessary purpose, powers and functions to meet the region's requirements.

The recommended model is well aligned with the guidance on delivery models announced on 8 August 2024. This includes a similar structure to the 'multi-council-owned water organisation'

<sup>&</sup>lt;sup>48</sup> Since the workshops, the government has adopted the term Water Services Council-Controlled Organisation (WSCCO) in legislation to describe the new type of water services entity. This aligns with other regulations. Throughout this report therefore we also use this term as the description of the new proposed entity.

outlined in DIA guidance including a similar governance and accountability framework. The exception to this is in relation to stormwater, as discussed below.

The announcements on 8 August also support the recommended model option in that:

- this delivery model is well aligned with the minimum requirements that will be set out in Bill 3, and
- it would meet the requirements for a 'water organisation' (which refers to separate organisations that councils may establish to provide water services), which will be necessary to ensure lending from the LGFA.

Since AOG workshops on governance arrangements, the Government has provided broad details of the governance and accountability arrangements that will apply to the new class of CCOs that will be enabled under Bill 3. The three accountability documents provided for in these announcements are a Statement of Expectations, WSS and water services annual report. The Statement of Expectations is directly comparable to the Letter of Expectations considered during the council workshops. Similarly, the proposed water services annual report is as envisaged during those workshops. The workshops anticipated a Statement of Intent which is currently the primary accountability document for CCOs established under the LGA, but it seems likely that water CCOs established under Bill 3 will have a WSS in place of a Statement of Intent.

Until Bill 3 is enacted, however, there remains some (albeit a relatively low) risk that this type of WSCCO is not fit for purpose or able to meet the region's identified key requirements. This will require ongoing engagement with the legislative process.

## 20. Design principles and assumptions

Informed by the policy announcements on Bill 3, a number of design principles and assumptions have been identified for the recommended model. This includes the relationship between the proposed WSCCO and the other key "players" who form part of the water service delivery ecosystem.

## **Key relationships**

- Councils (owners): New council-owned WSCCO delivering three waters services across the region directly to customers. This will ensure ongoing public ownership and control. Bill 3 is likely to confirm further protections against privatisation<sup>49</sup>. Councils will have some ability to set purpose and direction including processes to appoint and hold the Board to account through the constitution.
  - Transfer of assets and debt: Councils transfer all their water assets, liabilities and customers to create a full-breadth water utility.

• water infrastructure assets from being used as security for any purpose

<sup>&</sup>lt;sup>49</sup> Protection against privatisation. Government announcements on 8 August confirmed that legislation will likely include the following statutory protections:

<sup>•</sup> Only local authorities and/or consumer trusts will be permitted to own shares in a water organisation.

Provisions that prevent:

divestment of ownership or other interest in a water service except to another local government organisation or water organisation; and

lose control of, sale, or other form of disposal of the significant infrastructure necessary for providing water services in its region or district, unless, in doing so, the local authority or water organisation retains its capacity to meet its obligations

<sup>•</sup> Shares in water organisations cannot give any right, title or interest in the assets, security, debts, or liabilities of the entity, and would not be able to be sold or transferred.

- The existence of strong regulators and an independent Board leaves councils with a relatively light, residual oversight role. The shareholders provide a Statement of Expectations and the WSCCO Board, having considered the Statement of Expectations, prepares and adopts the WSS (after having provided shareholders with an opportunity to comment on a draft) and an annual report. See Section 21: Ownership and Governance.
- Water customers: Water consumers become customers of the WSCCO. The WSCCO provides all services directly to water customers and bills them for their water usage and services provided.
- **Iwi/Māori partners:** Embraced as partners of the WSCCO, as both parties work to achieve an aspirational vision to restore Te Mana o te Wai. See Section 21: Ownership and Governance.
- WSCCO: The WSCCO is 'non-profit making' in that it is not allowed to pay dividends but needs to generate a sufficient and fair surplus. 'Sufficient' means that the surplus revenue is sufficient to fund the renewals to maintain a high-quality water network and to operate the organisation with sufficient investment in people, systems and processes. 'Fair' means that there is good alignment between the generation that funds the cost of infrastructure and the generation that benefits from that investment.
- **Governance Board:** The WSCCO is governed by a professional, independent Board with members selected for their skill sets and experience.
- **Debt funders:** The LGFA is likely to be the WSCCO's main funder at first. Government announcements on 8 August 2024 confirmed that the LGFA would immediately be able to lend to new water organisations<sup>50</sup>. Over the longer term, the WSCCO is likely to develop the financial strength and maturity to be investment grade in its own right.
- Regulators wastewater quality: Taumata Arowai sets the three waters' standards and
  monitors the performance of drinking water. At a local level, the regional council applies
  the standards and ensures compliance for discharges and bulk water takes. Additionally,
  regional councils are environmental regulators under the Resource Management Act.
- **Regulators economic efficiency:** The economic regulator role will be to regulate availability and quality of services, and to protect consumers' interest by ensuring that the WSCCO sets fair prices and drive cost efficiency.

The key operating relationships and design principles are shown in Figures 4 and 5 below.

<sup>&</sup>lt;sup>50</sup> Defines '**water services provider**' means all forms of local government provider and including councils that continue with direct (in-house) delivery as well as new water organisations. The term '**water organisation**' refers only to separate organisations that councils may establish to provide water services and does not include councils with direct (in-house) delivery.

Figure 4: WSCCO operating relationships

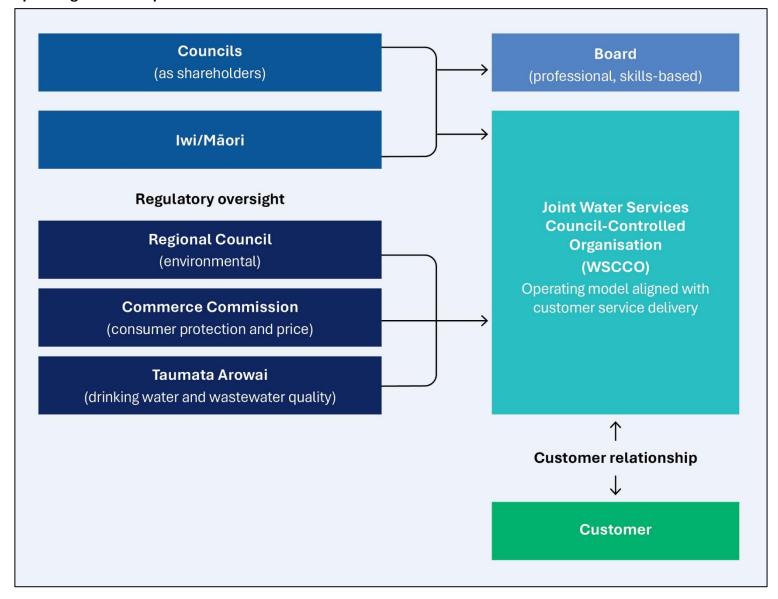


Figure 5: WSCCO key design principles

#### Shareholder

- Role appoint professional board to act as stewards. Council provide oversight through water services strategy
- 2. Influence expectations communicated via annual Statement of Expectations (non binding)
- 3. Accountability primarily discharged by ensuring that there is a top quality board (whilst relying on effective regulators too)
- Spatial planners of location and priority of growth

#### Regulators

- Price and cost (economic) oversight the Commerce Commission holds the primary accountability for overseeing, monitoring and enforcing price and cost efficiency
- 2. Water quality oversight Taumata Arowai and the Regional Council hold the primary accountability for overseeing, monitoring and enforcing water quality standards

#### **Funding**

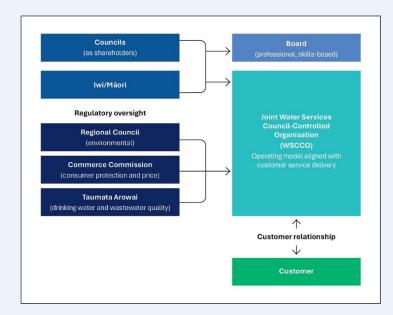
- Funding certainty Boards have confidence that they can access LGFA debt funding, on the proviso they have a credible plan for achieving financial sustainability
- Financial sustainability WSCCO Boards have to provide annual, certified evidence that they are on track to achieving financial sustainability in order to draw down LGFA funding

#### lwi

- Role to be confirmed by constitution. Potential role as part of shareholder forum and appointments of Board
- Influence multiple touch points with WSCCO from governance to operational delivery confirmed through MoUs and other agreements

#### **Board**

- Independent composed of independent Directors. Empowered by constitution to act in the best interests of the company
- Professional selected for skills
- 3. Nomination process run by independent Director search specialist
- Appointment process run by Chair and shareholder representatives



#### Water CCO

- Focus solely on the delivery of 3W services. Enables creation of business model which is optimised for the delivery of 3W services
- Full breadth utility/single point of accountability – owns assets, liabilities (inc debt) and customer base
- 3. Transparent partly culture, partly capabilities (systems to provide visibility of data & high-quality information)
- 4. Empowered granted powers commensurate with accountability eg power to enact bylaws (may require legislative change)
- 5. Financially sustainable recovers sufficient revenue to provide a financially sustainable service (apart from potentially some short term transitional credit support)

#### Consumer

- Services provide high-quality reliable services
- Affordability services are efficient and affordable
- 3. Price basis reflects cost to serve
- Price structure transparent and easy to understand

#### **Public and Community**

Transparent and open – WSCCO understands that its "licence to operate" relies on a trusted relationship with its community

## 21. Ownership and governance

Through the workshops, councils considered a range of options for ownership and governance of a WSCCO. These were guided by the following council requirements relating to governance and have been updated in line with the policy announcements on Bill 3:

- Public ownership no privatisation of water assets or delivery.
- Local (shareholder) influence to ensure alignment and enable broader outcomes.
- Single point of accountability for service delivery and wider clarity of role.
- An independent, professional Board appointed based on skills, with strong commercial discipline.
- Iwi/Māori input must be meaningful.
- Board to be empowered to operate independently and innovate to achieve outcomes.
- Board has certainty to plan, fund and invest (implies limit on shareholder role).
- Board adopts a long-term planning horizon.

#### Other key considerations were:

- The new WSCCO model will operate in a much more regulated environment economic, environmental, quality, so not the same as existing CCO models.
- Regulation provides a strong focus on quality, assurance, delivery and value for money. These also provide channels for customers.
- The need to recognise that the primary relationship of WSCCO will be with its customers, not its shareholders (owners).
- Role of shareholders will be less than under traditional CCO models with direction and oversight through Board appointments, Statement of Expectations and annual plan reporting.
- In this context, there is a need for clarity on the role and influence of shareholders and focus, such as outcomes, alignment with growth and housing.
- The new entity needs independence and accountability to deliver.
- A skills-based Board with a clear set of competencies is at the heart of the proposed governance model.

Options considered focused on the role of the Board of a WSCCO and the role of shareholders.

Table 10: Appointment of the Board of Directors – recommended model and other options

	Recommended option and design principles	Other options considered
Board appointment process	<ul> <li>Shareholder agreement covers appointment rights</li> <li>Appointment process should be apolitical</li> <li>Shareholder appoints member to appointments panel which (with Board Chair) then appoints directors by unanimous vote</li> <li>Appointments panel adds rigour</li> </ul>	<ul> <li>Directors appointed by unanimous shareholder committee resolution (current WWL model)</li> <li>Same as option above but appointment by majority vote</li> <li>Same board for entity establishment and BAU operation</li> </ul>

	•	Small establishment Board can have different focus		
Board skills and membership	•	Experienced professional directors given WSCCO's challenges	•	Constitution could allow or prohibit elected members on Board
	•	Director skills matrix is key to having relevant skill sets and experience on Board	•	lwi/Māori representation on Board
	•	No elected members or specific local representation on Board		
	•	Key skills would include commercial, asset management, network utilities, Treaty of Waitangi, customer, and local government		

Table 11: Role of shareholders – recommended model and other options

	Recommended option and design principles	Other options considered
Shareholder role and influence	<ul> <li>Shareholder forum to agree         Statement of expectations and         comment on draft WSS</li> <li>Panel to appoint/remove directors</li> <li>Objectives in WSS to reflect entity's         statutory purpose and         responsibilities</li> <li>Bill 3 may need to provide more         independence especially around WSS</li> </ul>	<ul> <li>Statement of Expectations only</li> <li>Statement of Expectations and power to modify WSS</li> <li>Individual shareholders produce Statement of Expectations and comment on draft WSS</li> <li>Bill 3 may provide new options to consider</li> </ul>
Performance monitoring	<ul> <li>Annual report only</li> <li>Compliance burden on CCO needs to be managed</li> <li>Annual report should not duplicate plans required by regulators</li> </ul>	<ul> <li>Half yearly/quarterly reports</li> <li>Residual monitoring</li> </ul>
Oversight	<ul> <li>Two meetings in public only, and Parts 1-6 of LGOIMA (availability of information)</li> <li>One additional shareholder meeting (AGM)</li> <li>Regulators, Auditor-General and Ombudsman will provide oversight across all areas of activity</li> </ul>	<ul> <li>All Board meetings in public</li> <li>Additional shareholder meetings</li> <li>Bill 3 will clarify oversight by Commerce Commission and Taumata Arowai.</li> </ul>

#### Other feedback and future considerations

Specific matters will require further consideration in the detailed development of the recommended model, including alignment with the minimum requirements for delivery models under Bill 3<sup>51</sup>. These will need to be worked through as part of any shareholding agreement, constitution and clarification of the roles and process for appointment of the Board. Issues include:

- Details in Bill 3 this is likely to define the purpose of a new WSCCO established under that legislation and may clarify the roles of owners and Board as well as reporting requirements.
- The importance of economic regulation in a new model vital to ensure fair prices and sustainable investment. Economic regulation oversight and price change will need to be phased in over time, to ensure that there is sufficient capability for both the regulator and delivery models.
- Role and oversight from owner councils and lwi/Māori partners:
  - There will be a transitional development of the new entity and significant compliance requirements in the first few years. There is a need to ensure the Board and WSCCO are not overloaded. Council oversight may change as regulators are established.
  - There will need to be some form of shareholder forum to set and agree direction, with a need to clarify membership or role of lwi/Māori on this.
  - Key roles of councils include holding Board to account, alignment with growth, and equity.
  - Foundation documents will need to provide clarification on the role of councils and mana whenua in relation to Board appointments panel – membership, process, decision making; and shareholder forum – such as membership, role, key areas of focus, representation.
  - Councils will need to communicate the changes to their communities, including the shift in relationship from council-customer to WSCCO-customer, with the regulator as 'backup'.

#### Board of WSCCO and entity:

- It is important to have skilled people on the Board and get the setting right to make this attractive. Skills/competencies to be considered would include commercial, asset management, network utilities, Treaty of Waitangi, customer, local government, and local knowledge.
- The Board needs to be professional and skills-based, not representative with appointments by panel. The appointments process will need to work through challenges and options regarding the membership of the appointments panel and decision-making requirements such as consensus or majority, and role of lwi/Māori.
- Unanimous decision making often does not work, and this is a learning from WWL. Particularly when appointing directors to boards, the decisions should not need unanimity.

<sup>&</sup>lt;sup>51</sup> Government announcements on 8 August noted councils can design own arrangements as long as these meet minimum requirements:

<sup>•</sup> Will have to meet clear minimum requirements set out in legislation. This includes meeting regulatory standards, financial sustainability requirements such as ringfencing of water services.

Restrictions against privatisation.

Additional requirements for water organisations to ensure they are operated and governed effectively.

- o There is potential for a transitional Board during the establishment period.
- There is a need to be clear on how to ensure effective day-to-day operations and in relation to a skills-based governance board.
- o The new model must not impact on Treaty settlements.
- Following a concern that smaller councils may not get same priority as bigger councils, there should be a focus on a baseline of level of service and local delivery.

#### Establishment period and rights of entry and exit

A further matter for consideration in the next phase of work and the establishment documents will be rights of entry and exit as shareholders.

During the first 3–5 years of the new WSCCO it may be necessary that there is a 'lock down' period of shareholders.

This is to provide the WSCCO with sufficient certainty of accountabilities, shareholders and investment and to avoid potential significant distraction caused by shareholders joining or leaving the model while the WSCCO is developing capability.

This approach would potentially also allow for a formal review point for the WSCCO that could provide for a review of constitution, governance arrangements and shareholders.

This process would need to recognise the potential cost and resource implications for the WSCCO and shareholders of this review and for joining or leaving.

GWRC has indicated a preference to focus on their resource management regulatory role and in time may plan to exit from asset ownership and associated accountabilities related to bulk water supply.

## 22. Treaty obligations, principles and partnership

Two of the key design principles are to ensure that:

- 1. Iwi/Māori have meaningful influence and
- 2. Treaty of Waitangi obligations are honoured.

The role of Iwi/Māori in relation to the governance of a WSCCO is discussed above and will need to be confirmed through any foundational documents such as the constitution, shareholders' agreement and role of the Board appointment panel. This includes a potential role as part of a shareholder forum and Board appointments. The Board would also need to have suitable competencies and skills in relation to the Treaty of Waitangi.

The new WSCCO will need strong relationships with Iwi/Māori in operations and delivery. There is an opportunity to learn from the Watercare model, which has enduring MoU arrangements that set durable and long-term arrangements which go beyond the transactional.

This will need to be confirmed through the development of the WSDP to ensure that the organisational design has clear, designated roles to partner with Iwi and to give effect to any Treaty settlement obligations which transfer across from the councils.

## Watercare model and partnership with Iwi/Māori

Watercare is the CCO, 100% owned by Auckland Council, that provides water supply and wastewater services in Auckland. As well as being a CCO, Watercare is an "Auckland Water Organisation (AWO)" as defined in the Local Government (Auckland Council) Act 2009 (LGACA), and as an AWO is given various rights and obligations under Part 5 of that Act.

The LGACA does not require that the Watercare Board has any particular level of mana whenua representation on it. Instead, Auckland Council appoints the directors of the Watercare Board in the normal way, and subject to ordinary LGA requirements.

These include section 57(3) of the LGA, which states that when identifying the skills, knowledge and experience required of directors of a CCO, the local authority must consider whether knowledge of tikanga Māori may be relevant to the governance of that CCO.

Auckland Council has an Appointments and Remuneration Policy for Board members of Council Organisations. One of the core competencies the Council requires on the boards of its substantive CCOs, including Watercare, is: uphold the principles of the Treaty of Waitangi, readiness to promote improved outcomes for Māori and knowledge of Te Ao Māori and established Māori networks.

In 2012, Watercare established the Mana Whenua Kaitiaki Forum (the Forum) to encourage discussion and guidance, and to share views on the management of water and wastewater. The Forum's focus has widened to all Watercare matters affecting the strategic interests of mana whenua across the Auckland Region. There are 19 tribal authorities represented on the Forum.

The Kaitiaki Schedule is regularly sent to the 19 tribal authorities on the Forum. It sets out Watercare's planned work programme, most of which requires resource consent. Representatives are invited to express interest in projects.

Watercare has also entered into relationship agreements with various lwi and hapu in Tāmaki Makaurau (Auckland) and beyond. These include kawenata with Waikato Tainui and other 'river lwi' that acknowledge the parties' respective interests, desired outcomes, and sets out how the parties will work together. Watercare also from time to time enters into agreements with lwi/Māori entities relating to specific projects.

Watercare's Board is supported by the Executive Leadership Team at Watercare, including the Tumuaki Rautaki ā-lwi me ngā Hononga (Chief, Māori Strategy and Relationships.) This officer is responsible for ensuring Watercare has the structures and resources to meet its obligations under Te Tiriti o Waitangi.

## 23. Joint arrangements and stormwater management

A WSDP must confirm the extent of any joint arrangements, including whether the joint arrangement will deliver all water services for all the territorial authorities that are parties to the joint arrangement, or other arrangements.

Through the workshops, councils considered the extent of joint arrangements and whether this would cover two or three waters. Councils have confirmed a preference for the recommended model to include all three water services. This would also mean the transfer of these assets and any relevant liabilities.

A three waters delivery model aligns with the current WWL service model for shareholding councils, and it would be challenging for councils to build or retain sufficient internal capacity for stormwater outside a separate WSCCO.

The identified exceptions to these recommended joint arrangements are:

- Non-piped stormwater networks in urban areas would remain under council ownership.
   It is likely that councils would enter into service level agreements to confirm management for these areas as part of an integrated approach to stormwater.
- GWRC intends to retain ownership of drinking water catchment areas in Kaitoke and Wainuiomata to support broader outcomes including ecosystems, recreation and climate change.
- Wairarapa councils intend to retain water races that service agriculture.

This recommended model may not fully align with the Government announcements on 8 August 2024 in relation to stormwater management and expected content of Bill 3. The announcements<sup>52</sup> set out that:

Councils will retain legal responsibilities for the management of stormwater services, but they can choose to:

- continue to deliver stormwater services in-house and contract aspects of stormwater service delivery to a new water organisation,
- transfer aspects of stormwater service delivery (this might include stormwater network assets) to a water organisation, and
- contract aspects of stormwater service delivery to a third-party provider, via long-term contract or public-private partnership.

Councils can determine the levels of service and performance targets for the delivery of stormwater management services. Water service organisations identify the costs of delivering stormwater management services that meet the expected levels of service and meet performance targets.

Councils will continue to collect revenue through rates from residents and businesses for stormwater management services. Revenue for the delivery of stormwater management services is identified separately within council's accounts (ring fenced). Depending on the stormwater management services that are contracted or transferred, the revenue collected through rates may be allocated between councils and water service delivery vehicles to deliver stormwater service outcomes.

The key potential issue here is for conflict of accountabilities and funding under a model where councils choose to transfer delivery and assets to a WSCCO but are legally required to collect revenue (ring-fenced) and have legal responsibility for stormwater. This is particularly challenging where there are cross connections in the network between wastewater and stormwater.

The approach to stormwater is an issue that councils will need to further consider in Phase 2 of this process and may need to submit on in relation to Bill 3 including further engagement with DIA.

Separation of stormwater and clarification of optimal arrangements for the region may be complex and key aspects to work through will be:

- legislative requirements,
- network condition and investment required to deliver outcomes including improved discharge quality,
- achieving financial sustainability, including council financial positions, pricing and financing,

 $<sup>^{52}\,</sup>https://www.dia.govt.nz/Water-Services-Policy-Future-Delivery-System.$ 

- asset ownership, debt transfer, revenue transfer,
- asset and network types and interconnections including between piped networks, overland flow paths, roading and other parts of the stormwater system,
- accountabilities and potential service delivery and resourcing options, and
- interrelationship with flood management, risks and accountabilities.

## 24. Customer model and local service delivery

The new WSCCO would provide all services directly to water customers and bill them for water usage and services provided. Councils are keen to ensure that any future regional WSCCO will provide a high level of local service delivery, including good compliance, response times, and supply. The new model needs to be able to meet these expectations.

Under the recommended model, water consumers would become customers of the WSCCO. The WSCCO would provide all services directly to water customers and bill them for water usage and services provided. This would require the WSCCO to have the ability to:

- proactively communicate to customers,
- receive and respond to service requests, and advice regarding leaks on private property,
- · transparently bill customers based on an agreed price basis, and
- ensure service levels are met.

As reflected in the key requirements, councils have expressed a strong view that any future regional WSCCO would need to provide a high level of local service delivery and not result in a loss of service levels for communities. Typical levels of services and performance measures include:

#### Compliance and quality:

- compliance for drinking water supply with Taumata Arowai drinking water quality assurance rules,
- providing an efficient and effective stormwater system to minimise the impact of heavy rainfall,
- delivering stormwater services in a manner that is acceptable, safe and, where possible, enhances the environment, such as water quality at beaches,
- number of flooding events due to stormwater overflows,
- number of complaints received about water clarity, taste, odour, pressure, flow, and continuity of supply, and
- compliance with resource consents.

#### Response times:

- response times to a fault or unplanned interruption to the water network,
- resident satisfaction with the water supply service they receive,
- resolution of urgent callouts,
- attendance for non-urgent callouts, and
- resolution of non-urgent callouts.

#### Supply:

• average drinking water consumption per resident per day,

- percentage of real water loss from networked reticulation system, and
- kilometres of renewals for three waters infrastructure.

It will be important that the organisational design and operating model for a regional WSCCO is set up to meet these expectations for local service delivery. This may draw upon the benefits of scale which provides additional capacity and capability with a local focus to ensure effective customer services, including website, channels, and call centre and quality local service delivery; including local depots for service delivery to ensure local knowledge and efficient response to service requests.

Based on the Government announcements on 8 August, it is expected a WSCCO would be required to develop and implement a WSS which will likely include elements to:

- state publicly the activities and intentions of the water services provider, and the objectives and outcomes to which those activities will contribute,
- provide transparency about the regulatory requirements and other expectations that apply to the provider (including financial sustainability), how it proposes to meet those requirements and expectations, and the associated costs and levels of investment needed, and
- provide a basis for the accountability of the provider for its performance.

## 25. Capability and capacity development

The intended reforms represent a significant opportunity for the water industry and for local employment, and there will be a need for a national focus on capability and capacity development. Working with wider sector partners, a new WSCCO would need to have a significant focus on capability and capacity development to be able to deliver the scale of investment required, meet new regulatory requirements, service customer needs and drive efficiency gains.

While it is assumed that many of the people working in the water sector will continue to do so, this new model will also require new and different skills that are not currently part of the WWL or in-house council delivery models.

This will require a focus on:

- IT systems and processes: significant investment will be required to ensure that the WSCCO has the full end-to-end digital capability to undertake its functions effectively.
- Quality and completeness of asset data including asset condition information: greater focus on asset data, condition inspections and the management and use of this information to support effective investment decision making.
- Planning: long-term strategic network planning and investment to support financial sustainability and meet the requirements of the regulators.
- Regulation: new and enhanced capability to meet regulatory requirements, in particular for economic regulation.
- Supply chain and procurement: working with the wider sector to identify opportunities to drive efficiency and support private sector investment in new capability and capacity building.
- Training and development partnerships: working with a range of partners and stakeholders to identify and provide training and career pathways. Leveraging existing local providers where possible.
- Technology and innovation: new ways to do work more effectively, especially for pipe condition assessment and replacement work as this represents the greatest challenge.

•	Customer focus and billing processes: to transparent and effective service delivery.	ensure good	quality service	provision, and
	transparent and enective service delivery.			

# Financial sustainability of water services

## Section summary

A WSDP will need to demonstrate how financially sustainable delivery of water services will be achieved by 30 June 2028. This document does not provide this level of detail but does provide a strategic level of analysis of these matters to ensure councils to have sufficient understanding of the level of investment required and a potential pathway to financial sustainability, including opportunities to use financing arrangements to help manage cost increases.

Informed by modelling of a range of investment scenarios, the recommended investment strategy to ensure financial sustainability is based on increased debt and pricing to enable an investment programme that will 'keep up' with network maintenance, 'catch up' on the backlog of worn-out infrastructure, 'build up' network capacity to enable growth and 'clean up' wastewater and stormwater to improve discharge standards by upgrading assets as they are replaced at end-of-life.

To ensure that this strategy is affordable, careful use of long-term financing will be required to smooth and balance cost increases over time.

It is estimated that it will take about 20-25 years to replace worn-out parts of the network and ensure substantial environmental compliance. It is also possible to extend the time for this catch-up period, which may result in lower costs but is likely to result in increased risk of network failure and consequential failure and repair costs.

The actual investment and therefore financial strategy and price path will be informed by development of the WSDP and then implemented by a WSCCO. This will be done in the context of a new economic regulator that will have a strong focus on quality and price based on the actual cost to provide sustainable networks and services.

A range of scenarios has been modelled to indicate average potential price increases across the region and do not reflect the actual cost to serve a particular local area, existing prices or an agreed price transition. Under all scenarios modelled, prices will need to increase to address the backlog of investment needed. Price rises will need to be managed through the use of financing tools and effective and efficient targeting of works required. This is expected to result in a more affordable rate of increased costs to water consumers than would otherwise be possible under current local government funding arrangements.

#### Based on the scenarios modelled:

 Price rises could be up to 9% per annum on average across the region to address the backlog of investment in the network. This rate of price increase will need to be managed through financing arrangements and/or the level of investment undertaken. • The average price per connection across the region in 2024 is \$1,711<sup>53</sup>. The amount that this rises to could be up to twice current prices or a peak of about \$3,000 to \$4,000. However, it may be possible to reduce this peak price through financing arrangements and a sustainable price is estimated at about \$2,596 when the catch-up phase is completed in about 20 years' time. This sustainable price is about 51% above the level of current charges, meaning that this level of increase could be gradually managed over time.

To manage affordable changes in prices, key assumptions include:

- Economic regulation will include a core principle that water prices must be based on the cost to provide services to the relevant group of customers.
- The WSCCO will need to develop and agree a pricing and revenue strategy working with the economic regulator that will balance price and quality.
- The WSCCO will use LGFA financing arrangements and additional debt headroom to manage the rate of cost increases.
- People across our region currently pay different amounts for water services depending on where they live and whether water use is metered. These existing price differentials will be locked in for a three-year transitional period to help ensure that consumers do not receive a major price shock.

## 26. Financial sustainability

A WSDP will need to demonstrate how financially sustainable delivery of water services will be achieved by 30 June 2028. This requires confirmation of:

- Investment sufficiency the projected level of investment is sufficient to meet levels of service, regulatory requirements and provide for growth;
- Revenue sufficiency there is sufficient revenue to cover the costs (including servicing debt) of water services delivery; and
- Financing sufficiency funding and financing arrangements are sufficient to meet investment requirements.

Further guidance has recently been provided by the DIA on how financial sustainability should be demonstrated within a WSDP<sup>54</sup>.

This document does not provide this level of detail but does provide a strategic level of analysis of these matters to ensure councils have sufficient understanding of the level of investment required and a potential pathway to financial sustainability, including opportunities to use financing arrangements to help manage cost increases. This has been informed by a network economics approach (see Appendix H).

Further work will be undertaken to demonstrate financial sustainability in line with legislative requirements, departmental guidance and associated templates as investment scenarios are refined and the WSDP is developed. In particular, this will need to focus on financing arrangements to manage affordability and rate of cost increases. This work is expected to result in a more affordable rate of increased costs to water consumers than would otherwise be possible under current local government funding arrangements.

<sup>53</sup> Based on 2024 costs.

 $<sup>^{54}\,\</sup>text{https://www.dia.govt.nz/Water-Services-Policy-Water-Services-Delivery-Plans.}$ 

**Limitations:** It is important to note that this report is intended as a strategic level of analysis and investment strategy to support this phase of council decision making. This modelling is indicative only and the actual WSDP will need to demonstrate financial sustainability by 30 June 2028. The financing, pricing and investment strategy will be developed as part of the WSS by the Board of a WSCCO over some decades, with oversight from the economic and quality regulators to ensure a balance of compliance, quality and affordability.

## 27. Approach to modelling

This report has been informed by network economic and financial modelling to support strategic options assessment and initial consideration of financial sustainability requirements. The methodology followed is based on established best practice network economics for regulated networks (see Appendix H).

The network economic and financial modelling is multi-dimensional and can be used to test a wide range of alternative investment, price, debt and risk scenarios. These scenarios are not intended to represent planned investment or financial arrangements, but to help understand tradeoffs and potential options.

Apart from the rate of catch-up investment, the total investment required was taken as an assumed fixed quantum on the basis that it is the essential investment required to turn the network around and to meet growth and compliance standards. It is noted that this is an estimate only of the level of investment required and will require significant further refinement through the development of the WSDP. These estimates will continue to be reviewed and refined as part of a WSDP based on more robust bottom up analysis of the investment needed.

The variables to trade off then become a scale of capital programme (which informs the network remediation period) and the funding sources, being price and debt. In assessing financial sustainability and arriving at a recommended investment strategy, several key considerations need to be balanced including:

- addressing the critical network challenges through increased revenue from price and borrowing. The WSCCO will also need to ensure that the level of borrowing is sustainable and within covenants agreed with the LGFA,
- rates of price increase and ensuring cost increases are affordable for households. All scenarios modelled require price increases over time. Without price increases, it will not be possible to catch up and the region will face ongoing risks of significant network failure,
- balancing the risk and costs of network failures with affordability of price increases and
  with the level of debt that is sustainable. Taking a longer time to fix worn-out pipes will
  mean increased risk of critical network failures as well as carrying the faults cost burden
  for longer,
- financing arrangements, including how the WSCCO can utilise and structure borrowing
  to manage and smooth the rate of cost increases (note, only limited focus has been
  undertaken to date on financing opportunities and this will need to be fully explored in
  subsequent phases of work) and
- being deliverable based on sector capacity.

## 28. Scenarios

The considerations outlined above inform a two-stage logic to modelling scenario options for network remediation, price and debt. The modelled scenarios have been based on the information, assumptions and limitations as noted in Appendix C, are intended to inform strategic trade-offs only and are not the basis for investment decisions or price pathways.

The scenarios are all modelled based on FY24 real numbers (not inflated) and all scenarios assume pricing for Years 1-3 are based on LTP investment levels and rates increases.

#### Consideration one - scale of capital programme and network remediation period

The amount of network to be remediated is fixed (this is estimated at ~\$4.2 billion based on 21% of the network being worn out with a total replacement value of \$19.7 billion). Remediation of the network can be practically achieved over about 20-30 years based on sector capacity.

The slower this occurs, the lower the annual capital spend required because it spreads the \$4.2 billion catch-up cost over a longer period. This means that fixing the network over a longer period may result in lower costs overall because the lower capital spend means that less borrowing is required while prices are being raised until Funds from Operations (FFO)<sup>55</sup> cover capital requirements.

However, the slower the network is fixed, the more investment will be required to fix faults. Also, this will lead to higher risks of both critical network failure and network fault runaway increasing, due to leaving worn-out assets in the network for longer.

These risks are assessed as already having high likelihood of occurrence with corresponding serious consequences and potentially very high associated costs which are not currently factored into the modelling. These include consequential costs from sustained or regular occurrences of lack of water supply delivery, lack of wastewater delivery and localised flooding from stormwater. Once these are factored into modelling, these may outweigh additional interest costs from lower borrowings.

#### Consideration two - price rise rate and debt

Until the FFO exceed capital expenditure, the balance must be borrowed in some form of debt. Use and structure of debt will be an effective way to efficiently and equitably invest in the network over time, and deliver network improvements faster.

Raising prices more quickly lowers the total debt required and reduces the overall cost to the consumer over the longer term.

Raising prices slowly is more affordable to consumers but may also raise the overall cost during network remediation due to the increased overall debt and associated interest cost burden.

#### **Modelled scenarios**

Based on the considerations above, the range of scenarios modelled include testing of the following variables (see Appendix I):

- lower and higher rates of price increases,
- slower and faster rates of network remediation,
- higher and lower construction costs,
- higher faults costs,
- · higher debt, and
- investment based on LTP investment levels.

<sup>&</sup>lt;sup>55</sup> Funds from operations (FFO) is the actual amount of net cash flow generated from a company's business operations. FFO Formula = Net Income + Depreciation + Amortization +/- Gains or Losses on Property Sales.

# 29. Investment sufficiency - Level of investment required

**Requirement:** the projected level of investment is sufficient to meet levels of service, regulatory requirements and provide for growth.

Informed by consideration of a range of scenarios, the recommended investment strategy to ensure investment sufficiency is to 'keep up' with network maintenance, 'catch up' on the backlog of worn-out infrastructure, 'build up' network capacity to enable growth and 'clean up' wastewater and stormwater to improve discharge standards by upgrading assets as they are replaced at end-of-life, and as much as possible separate the stormwater system from the wastewater system (so that the latter can be made discharge compliant).

It is estimated that it will take about 20-25 years to replace worn-out parts of the network and ensure substantial environmental compliance. It is also possible to extend the time for this catch-up period to around 30 years, which may result in lower costs but is likely to result in increased risk of network failure and consequential failure and repair costs.

Even with an optimised investment strategy, the costs will be substantial. It will rely on a combination of price and debt. Over the next 20-25 years, the total network investment required is estimated at about \$15-\$17 billion at an average of approximately \$700-\$750 million per annum (note this will require a gradual increase in investment to ensure market capacity to deliver).

This is based on investment sufficiency to:

- 1. Keep up by investing an average \$250 million per year in sustaining investment. This is the investment required to simply maintain the network in its current state. The \$250 million is the average annual sustaining investment required for a \$19.7 billion network with an average 74-year maximum asset life and a 1.3% per annum population growth over an initial 10 years.
- 2. Catch up by investing an average of \$200 million per year to redress the renewal backlog over 21 years.

Based on the \$19.7 billion replacement cost, a \$4.2 billion investment is required to replace the 21% of assets which are in poor or very poor condition. The rationale for selecting a 21-year recovery period is explained below.

- 3. Build up capacity by investing \$150 million per year in growth.
  - This is the annual growth investment required to expand the capacity of the network to support the forecast population growth of 1.3% per annum. This figure has been matched to current annual capital growth costs for the region net of development contributions.
- 4. Clean up by investing \$90 million per year to meet drinking and wastewater quality standards.

There is huge uncertainty regarding the cost and timeframe for achieving water quality standards, particularly around wastewater. In the absence of a solid fact base, it has been assumed partial compliance can be achieved by upgrading assets when they are replaced at the end of their lives. The \$90 million per annum is a placeholder calculated at 5% of the replacement cost of the assets replaced each year. Once the network has been fixed, the remainder of the \$2 billion allocation to compliance will be spent on remaining wastewater pipes that have not yet been replaced during the catch-up period, and on treatment plant compliance.

#### 5. Faults

The annual cost of fixing faults (including leaks) is currently estimated at more than \$41 million per annum (based on the WWL Annual Report). This cost is driven largely from the fault repair cost associated with worn-out assets in the network and will reduce over time as parts of the network are fixed resulting in an average assumed cost of \$25 million per annum over a 20-year period. If fault rates continue to increase (due to non-replacement of worn-out assets) then this cost burden will also increase. There is low confidence in this figure of \$41 million due to leaks only being classed as faults when reported by the public (in the absence of metering), increasing fault backlogs (which do not create an accounting cost until they are repaired), and underground leaks (which are often not visible), so on review this figure may need to become much larger. Nearly all faults (particularly leaks) represent capital inefficiency in the network because they occur only at low levels when the network is functioning properly.

**Figure 6: Infrastructure investment strategy** (figures are indicative and subject to ongoing review and validation)

# Infrastructure investment strategy The recommended network investment strategy to fix the network and deliver compliance over a 20-25 year period will require \$15-\$17 billion at an average of about \$700-\$750 million per year, based on: Keep up with sustaining investment \$250m pa

Catch up to clear the renewal backlog \$200m pa

Build up to enable growth of 1.3% pa \$150m pa

Clean up to address compliance with wastewater and stormwater \$90m pa

Faults \$25m pa

This strategy renews 44% of the network, significantly reduces risk, and provides both growth capacity and compliance enhancements in the most efficient way.

#### **Basis for catch-up timeframe**

The current condition of the network, and the high risk and cost of major failures, highlight the need for early and significant network intervention, mainly in the form of asset renewals for pipes and plants.

However, the 'low' price being charged for water by councils does not currently allow the network to be sustained in its current state, let alone remediate a large portion of worn-out assets.

The recommended investment strategy is to complete the catch-up investment over about 20-25 years. This balances the cost of faults versus the cost of interest. It also results in the replacement of about 44% of network assets over this time, due to both sustainable asset renewal and catch-up renewal.

Through increased use of financing tools and debt, an alternative investment strategy would be to target a 12-15-year catch-up period. This would significantly lower the risk of network failure but is unlikely to be deliverable based on sector capacity. The alternative to this is to spread the costs over 30 years but would also have higher risk of network faults due to the extended period the network continues to be held in its current poor condition.

#### The cost of a failing asset

The cost of a failing asset depends on its position in the network because this impacts the consequential cost of its failure. An asset which is centrally located (upstream) in the water supply network (and downstream in wastewater and stormwater networks) is typically replaced earlier in its degradation process because its failure causes a larger impact on the delivery edge (downstream) of the network.

A typical example would be a low-cost rubber seal in a pump that supplies water to a reservoir. A failure of this seal causes a failure of the pump, which prevents the filling of the reservoir that may then run out of water for all the downstream connections. For highly critical network components, assets are replaced earlier in their degradation cycle. Conversely, even seriously failing assets on the edge of the network that impact only a few customers are often intentionally run to failure because this is still cheaper than replacing the asset earlier.

# 30. Revenue sufficiency - Revenue required and affordability

**Requirement:** there is sufficient revenue to cover the costs (including servicing debt) of water services delivery.

As noted above, the actual investment and therefore financial strategy and price path to deliver the investment strategy will be informed by development of the WSDP and then implemented by a WSCCO with oversight from the economic regulator. The revenue and price analysis below is intended to help illustrate how much could be funded based on a range of scenarios and is not intended as an accurate estimate of actual price increases or an investment strategy.

To understand potential trade-offs to deliver on the 'investment sufficiency' and also ensure affordability, a range of scenarios has been modelled. Further analysis of these will be required informed by financing arrangements (see Section 31: Financing sufficiency) to smooth and balance cost increases over time.

Delivering affordable water is a major challenge, not just in New Zealand but in most developed economies. A recent World Bank Study determined that the percentage of GDP spent on water

infrastructure by developed economies is currently 2% and needs to rise to 4%. This is consistent with the economic analysis in this report and is a material change.

Councils are keen to ensure that any future regional WSCCO will provide a high level of local service delivery, including good compliance, quality, response times, and supply while also ensuring that these services remain affordable.

The new WSCCO would provide all services directly to water customers and bill them for water usage and services provided.

Currently the full costs of delivering water services are not fully funded by the water portion of council rates, and current council LTPs do not make an allowance for full funding of water services into the coming years.

A new water company will be required by the economic regulator to fully fund the costs of water services. Because of this, the WSCCO will need to effectively use debt and households are also going to have to pay more for water than they have been.

The scenarios have been modelled to provide an indication of average potential price increases across the region. These do not reflect the actual cost to serve a particular local area, existing prices or an agreed price transition. Under all scenarios modelled, prices will need to increase to address the backlog of investment needed. Price rises will need to be managed through use of financing tools and effective and efficient targeting of the works required. Based on the scenarios modelled:

- Price rises could be up to 9% per annum on average across the region to address the backlog of investment in the network. This rate of price increase will need to be managed through financing arrangements and/or the level of investment undertaken.
- The average price per connection across the region in 2024 is \$1,711<sup>56</sup>. The amount that this rises to could be up to twice current prices or a peak of about \$3,000 to \$4,000. However, it may be possible to reduce this peak price through financing arrangements and a sustainable price is estimated at about \$2,596 when the catch-up phase is completed in about 20 years' time. This sustainable price is about 51% above the level of current charges, meaning that this level of increase could be gradually managed over time.

Key assumptions in relation to pricing and ensuring a focus on affordability include:

#### **Economic regulation:**

- Legislation will confirm the Commerce Commission as the economic regulator. They will have a key role in customer protection and ensuring a focus on both price and quality.
- In particular, the Government has stated that the economic regulations will include a core principle that water prices must be based on the cost to serve the relevant group of customers.

#### Financing, pricing and revenue strategy:

- The WSCCO will use LGFA financing arrangements and additional debt headroom to manage the rate of cost increases.
- Actual price increases from about 2027 will be based on the actual investment required and an agreed pricing and revenue strategy that the WSCCO develops with the economic regulator.

#### Harmonisation of pricing structures, over time:

 People across our region currently pay different prices for water. This varies a lot depending on where they live and whether their water use is metered.

<sup>&</sup>lt;sup>56</sup> Based on 2024 costs.

- The WSCCO will inherit a diverse suite of revenue sources and pricing structures from across the region. Given this, revenue and pricing will be very complex. For example, there are very diverse charging structures for non-residential services such as development contributions, although there is scope for these to be set (and continue to be set, even by a regional or sub-regional entity) on a local 'catchment' (as opposed to 'district' or 'service-area') basis. Charging structures are likely to require simplification and alignment over time, to avoid overcomplicating the new entity's systems on day one and to avoid early price shocks for consumers.
- The WSCCO will have a significant challenge to transition these into a simple set of services with fair and transparent prices. This will be a key task for the first three years of operation, which will be supported by the proposed economic regulation framework.

#### Transitional period:

- Until a WSCCO is fully up and running (about 2027), water prices are likely to be based on
  existing council rates with increases based on what councils have set through their LTPs.
  These levels of increase will vary from council to council.
- A key assumption is that there will be a three-year price differential lock in period to help ensure that consumers do not receive a major price shock on transition. This could be applied evenly to residential charges across the region, thereby maintaining existing residential price differentials. (Note: This is subject to existing revenues being sufficient to cover the full costs of water service provision, i.e. the council having set the existing revenue at a sufficient level to fully fund the costs of water service provision per the water services Financial Impact Statement).

#### Ability to charge customers

Based on the Government announcements on 8 August 2024, it is assumed that legislation will include provisions to enable boards of water organisations to:

- assess, set and collect water services charges, including charges for any or all of the following:
  - o water supply, wastewater, and stormwater (where applicable),
  - o the initial connection to one or more of the above services,
  - o contributions to the capital costs of infrastructure needed to service additional demand on the network, and
  - meeting the costs that the water organisation incurs in performing and exercising its functions.
- determine how charges are assessed and invoiced, when they are due, and how they will be paid or collected.

#### 31. Financing sufficiency - Financing and borrowing

**Requirement:** funding and financing arrangements are sufficient to meet investment requirements.

Actual debt required will depend on the selected investment strategy and will need to balance efficient financing of long-term assets to ensure equity. The WSCCO will need to carefully use increased levels of debt to manage the rate of price increases, balanced with the costs of servicing debt and therefore the longer-term total cost to consumers.

The Government announcements on 8 August 2024 and subsequent information from the LGFA confirmed some of the financing arrangements that will be available to support WSCCOs.

- The LGFA will support leverage for water organisations up to a level equivalent to 500% of operating revenues (around twice that of existing councils), subject to water organisations meeting prudent credit criteria.
- The LGFA has subsequently indicated that this will be based on FFO. Basing the criteria on FFO is likely to result in the WSCCO being able to borrow less than the indicated 5x revenue limit. This would be negotiated between the LGFA and WSCCO.
- LGFA will treat borrowing by water organisations as separate from borrowing by parent council or councils.
- A parent council(s) guarantee or uncalled capital (proportionate amongst shareholders) will be required.
- The additional debt funding from the LGFA is only available to water CCOs ('water organisations')57 who must meet prudent lending criteria and have the characteristics of an investment-grade utility provider over the medium term (within 10 years).

Key points to note based on the in relation to financing and borrowing:

- 1. **Opening debt:** It has been assumed that the WSCCO will inherit about \$2.3 billion of debt in 2027 from the councils. This is because when water assets transfer, so would the associated revenue collection powers and associated debt. The opening debt at 1 July 2027 is currently a placeholder and subject to ongoing review will need to be confirmed as part of Phase 2 and 3.
- 2. **Source of funds:** It is assumed that as a water organisation, the entity will rely on the LGFA as its lender. The LGFA is currently working on the covenant framework that will apply to WSCCOs. LGFA has indicated it will align with the covenants used by the WSCCO international peers. The primary metric being the ratio of Funds from Operation to Net Debt, where a ratio of >9% is the minimum standard setting required to maintain an investment grade rating.
- 3. The **long-term funding** objective is to reach a sustainable position, whereby operations and infrastructure are funded by the generation(s) that benefit. The long-term strategy for achieving this objective is to:
  - ensure today's revenues are sufficient to fund the delivery, operation and maintenance of fully compliant services/infrastructure for today's generation58 (sustaining + catch up + growth + compliance), and
  - use debt to fund capacity growth for the benefit of future generations.
- 4. **Transitional funding:** For about 10 years, revenue is likely to be insufficient to cover the full delivery and investment costs of the current network and services, resulting in a potential funding shortfall. Therefore, the transitional funding strategy is to:
  - phase in the price increases necessary to correct the revenue shortfall at a rate which is acceptable to consumers,

<sup>&</sup>lt;sup>57</sup> 'Water services provider' means all forms of local government provider and including councils that continue with direct (inhouse) delivery as well as new water organisations. The term 'water organisation' refers only to separate organisations that councils may establish to provide water services and does not include councils with direct (in-house) delivery.

<sup>&</sup>lt;sup>58</sup> A utility operating at a financially sustainable level would typically have an optimal gearing ratio of about 40%. Once the optimal gearing level is reached, and depending on the level of debt used to fund growth, equilibrium can likely be maintained by ensuring operating cash flows are sufficient to cover renewals expenditure and using debt to fund growth expenditure.

- spread catch-up remediation over a 20–25-year period. This is still relatively fast and would help to stabilise and prevent further deterioration of the network, and
- gear up the balance sheet to a fiscally prudent level to manage the rate of price increases and ensure efficient and equitable use of debt.

The accompanying financial projections are set out in Appendix J.

#### 32. Potential for efficiency gains and economies of scale

Efficiency can be defined as: the act of spending less and receiving the same outcome, or of receiving a better outcome for the same level of spending. This does not mean less jobs. On the contrary, this report assumes that significantly more people will be employed in the water sector.

The scenarios modelled have not made any assumptions or allowance for efficiency gains.

It is considered that it will be challenging to deliver efficiency at a meaningful scale during the early establishment years of a WSCCO as the organisation sets in place the required capability and capacity to deliver. As the organisation then grows in maturity there will, however, be some significant opportunities for efficiency gains over time which can lead to overall lower costs for consumers and better outcomes for the community and the environment.

Key opportunities to deliver efficiency include<sup>59 60</sup>:

**Preconditions:** Efficiency is dependent on the set-up of the organisation and the broader water services system including governance and regulation, and:

- the entities need to have effective governance arrangements and be able to attract and retain appropriately skilled management,
- regulatory compliance and enforcement with water quality and other matters is effective,
- effective economic regulation is established, and
- the entities have access to the necessary resources to fund the amalgamation and reform processes and over time make the required investment.

**Economy of scale:** Efficiency can be achieved through economies of scale, focused on shared consumer use of networks. This includes:

- standardisation of materials and plant and consumables,
- fit for purpose procurement and supplier management processes,
- power cost savings,
- improved systems and use of technology,
- focused design principles for network design to provide for reliability, capacity, redundancy, and growth in all planning<sup>61</sup>,
- ensuring that the assets in the network are maintained and replaced appropriately to avoid the additional cost burden from failing assets such as leaks,
- certainty of workflow which allows the supply chain both to invest and reduce unit costs,
- a genuine commitment to benefit sharing and sharing the risks of innovative approaches,
   and

<sup>&</sup>lt;sup>59</sup> Water Industry for Scotland, Economic analysis of water services aggregation, May 2021.

<sup>&</sup>lt;sup>60</sup> Three waters reform, review of methodology and assumptions underpinning economic analysis of aggregation. May 2021, farrierswier.

<sup>&</sup>lt;sup>61</sup> Cost estimate for Phase 2 and 3 is indicative only and subject to a range of risks and assumptions including the passage of legislation.

both capital and operational savings achieved through asset rationalisation.

Capability: Scottish Water managed to retain and reward the high-quality staff, attracting talented senior management and building the required capabilities (for example, on strategic asset management and water modelling). This has, in turn, allowed it to achieve additional capital investment efficiencies through improved asset planning and strategic asset management.

**Network efficiency:** Optimal network efficiency requires intensive designing and planning, with focus on the in-house skills required to do this. It is a lot cheaper to change a design before it is implemented rather than after. It makes sense to make sure it is right before building it as the network will need to last for many decades. This includes:

- building for long life this is the only way to get efficiency from capital reworking networks destroys this,
- maintaining the network well the network is at its most efficient when it is not 'going wrong', all forms of which create a cost burden, and
- ensuring a mechanism for continuously piloting innovation.

**Compliance costs:** Planning for and investing to make resilient networks, rather than continually undertaking reactive maintenance leads to lower compliance costs. Besides the highest priority being on safety (drinking water, wastewater containment, flooding management etc), the main focus of compliance should be on network and plant reliability and immediate capacity constraints.

# Evaluation of the recommended regional delivery model

#### **Section summary**

Under the Preliminary Arrangements Act, councils need to confirm their approach to a WSDP – whether they want to develop a joint WSDP with other councils and the extent of any joint arrangements; for example, for all or only some water services.

Councils must assess in the course of the decision-making process on the WSDP, both their existing service delivery model and the option of establishing, joining or amending a WSCCO or a joint local government arrangement. If they choose, they may also consider other options for delivery of water services. The assessment of (at least two) alternatives needs to be credible with sufficient information to ensure decision-makers can reach a properly informed view.

This report does not deal with the assessment of the status quo delivery model in each district, or potential options for delivering water services other than the recommended model, as these are matters for each council to consider. However, to support councils to undertake this assessment, the recommended regional option has been evaluated here in relation to the key requirements and other key factors including cost to implement, risk, level of benefits and political acceptability.

The evaluation will help councils to undertake a comparative analysis of service delivery options, as well as the scope and approach to ongoing development of a joint WSDP and WSCCO.

#### 33. Assessment of options

Under the provisions of the Preliminary Arrangements Act, councils need to **confirm their approach to a WSDP**: Whether to develop a joint WSDP with other councils (section 10) and the extent of joint arrangements (section 11), for example, for all or some water services.

Each council's assessment of service delivery options (at least 2 as noted above, one of which is the status quo) needs to be credible. The analysis can identify a preferred option but must also ensure that decision-makers have sufficient information to reach a properly informed view and make their own assessment of advantages and disadvantages of the different options, including by reference to the matters set out Part 3 of the Act.

Making this decision should enable the council to commit to the development of a joint WSDP, or to take another approach. This will then inform the scope, approach and timeline for this work.

#### 34. Evaluation of recommended model

The recommended model is for a full-breadth water utility vested with ownership of all regional water assets, revenues and liabilities; with a similar structure to a CCO but with reduced council oversight, to ensure sufficient financial and decision-making separation from council owners.

An *initial* evaluation of the recommended model has been undertaken in relation to the key requirements and other key factors, including the ability to meet new regulatory requirements, alignment with Government announcements on 8 August 2024 (including minimum requirements), cost to implement, risk, level of benefits, and political acceptability.

For each factor, the relevant benefits, risks and challenges and key assumptions have been identified. This evaluation is subjective and has been informed by the current state case for change as outlined above.

The evaluation is intended to help support and inform:

- councils to undertake a comparative analysis of the recommended model and the status quo, and
- the scope and approach to ongoing development of a joint WSDP and WSCCO.

Table 13: Evaluation of recommended regional model - benefits, risks and challenges, assumptions

Key requirements identified by councils	Alignment with council requirements	Benefits	Risks and challenges	Assumptions and details to work through
Water consumers	Good alignment	<ul> <li>Council ownership ensures ongoing public ownership and protection from privatisation.</li> <li>More affordable and transparent pathway for water services than may be possible under current local government funding constraints.</li> <li>Customer focus and local delivery model part of design.</li> <li>Compliant services through increased investment and capability.</li> <li>Scale of organisation enables continuous improvement.</li> <li>Higher rates of investment deliver better network outcomes and levels of service.</li> </ul>	all scenarios.	<ul> <li>Establishment of the economic regulator to support consumer protections.</li> <li>Role of Taumata Arowai and GWRC as environmental regulators.</li> <li>Organisational design and operating model for a regional WSCCO is set up to meet these expectations for local service delivery.</li> <li>Overall impact of change (increased and separate water services charges, impacts on rates) to be understood.</li> </ul>
Councils	Good alignment	<ul> <li>Financial separation from councils will result in improved council financial metrics including revenue to debt for most councils.</li> <li>Council governance role enables alignment of investment and outcomes.</li> <li>Clarity of accountability between WSCCO and councils.</li> <li>Long-term approach to planning and investment.</li> <li>Scale to enable efficiency and capability.</li> <li>Three waters model.</li> </ul>	<ul> <li>Financial impacts on councils post reform to be confirmed.</li> <li>Confidence of alignment on outcomes given financial pressure on WSCCO.</li> </ul>	<ul> <li>Confirmation of principles and process for transfer of debt, revenue and liabilities.</li> <li>Assessment of alternative options.</li> <li>Public acceptability of need for change and preferred model.</li> <li>Approach to stormwater in relation to Bill 3.</li> </ul>
lwi/Māori	Good alignment	<ul> <li>Meaningful role and influence through governance and operations.</li> <li>WSCCO to embrace Te Mana o te Wai.</li> <li>Improvement to water quality.</li> </ul>	Time to address water quality issues.	<ul> <li>Confirmation of role and influence through foundational documents.</li> <li>Establishment of meaningful operational relationships and structures.</li> </ul>

Future water entity	Excellent alignment	<ul> <li>Empowered to operate independently.</li> <li>Skills-based Board.</li> <li>Long-term planning and investment.</li> <li>Full service and good quality systems.</li> <li>Depth and breadth of people.</li> </ul>	<ul> <li>Time to establish and reach full organisational maturity.</li> <li>High consumer expectations with high price rises.</li> <li>Establishment costs.</li> </ul>	<ul> <li>Sufficient investment to 'set up right'.</li> <li>Establishment process and timeframes.</li> <li>Ability to retain and grow capability and capacity.</li> </ul>
Central Government	Good alignment	<ul> <li>Alignment with minimum requirements for delivery models.</li> <li>Financially sustainable model by 30 June 2028.</li> <li>Scale to deliver.</li> <li>Increased compliance with regulation and ability to comply with economic regulation.</li> <li>Enables housing growth.</li> </ul>	Alignment on stormwater policy settings.	Public acceptability of need for change and preferred model.
Transition	Reasonable alignment	<ul> <li>Equitable and fair process for transfer.</li> <li>A focus on people with clear pathways.</li> <li>Seamless change.</li> </ul>	<ul> <li>Time and cost to agree preferred model and implementation.</li> <li>Costs to establish.</li> <li>Risks of disruption during establishment phase – delivery, people, networks.</li> <li>Lack of certainty of which councils are part of a future WSCCO / WSDP</li> </ul>	<ul> <li>Confirmation of principles and process for transfer of debt, revenue and liabilities.</li> <li>Confirmation of principles for transfer of people.</li> <li>Alignment with requirements of Bill 3.</li> <li>Sufficient resourcing to plan and deliver change process.</li> </ul>

Table 14: Other key factors

Other key factors	Alignment with other key factors	Comment	
Ability to meet new regulatory requirements	Good alignment	<ul> <li>Scale and level of investment, capacity and capability of the WSCCO will enable alignment with compliance including economic regulation and improved water quality.</li> <li>Will be some ongoing challenges to deliver full compliance in the shorter term with environmental compliance due to costs and level of investment required.</li> </ul>	
Alignment with Government announcements 8 August 2024	Good alignment	<ul> <li>Recommended model aligns very well with Government announcements on 8 August 2024 including minimum requirements for delivery models. This includes protection against privatisation and a similar structure to the 'multi-council owner water organisation' outlined in DIA guidance including similar governance and accountability framework.</li> <li>Recommended model well aligned with the proposed funding arrangements from the LGFA including meeting requirements for a 'water organisation'. It is important to note that LGFA will only lend to WSCCOs that are financial supported by their parent council(s). This means that either a guarantee or uncalled capital will be required from councils to match the liabilities of the water CCO.</li> <li>Potential area of misalignment is in relation to urban stormwater and policy requirement that councils retain legal responsibility for stormwater including revenue, even if service delivery and assets are transferred to a water organisation. This will require further consideration. It appears workable but may pose challenges in relation to ensuring sufficient revenue for stormwater and alignment of broader investment by a WSCCO.</li> </ul>	
Cost to implement	Some challenges	<ul> <li>Costs to complete detailed work required to complete a joint WSDP and an implementation plan will be high and are not currently budgeted for by councils.</li> <li>Implementation costs for a full service WSCCO are expected to be high, in part driven be the need for fit for purpose IT processes and systems. This will need to be funded by way of an establishment fund against the balance sheet of the new WSCCO.</li> </ul>	
Risk	Some challenges	<ul> <li>Shorter term: Coordination of planning and delivery of a joint WSDP and joint WSCCO will be challenging with multiple risks of time, cost and scope. See list of risks and assumptions below.</li> <li>Longer term: The scale of a joint WSCCO will have significant ability to manage network and investment risks due to scale, capacity and capability.</li> </ul>	
Level of benefits	Excellent alignment	Investment in water is critical to the health, well-being and economic sustainability of our region and will enable significant regional benefits. A large, full-service, asset-owning WSCCO is considered to provide opportunity to deliver on a range of benefits based on effective leadership, depth of expertise, influence with government, easier integration with regional spatial planning, digital capability and financial scale to tackle network challenges.  Key potential benefits include:  New homes: The investment will better enable planned growth and new housing of both greenfield and brownfield for the region.	

		More jobs: The investment will require growing the capability and capacity of the water industry to deliver the required works.
		<ul> <li>Resilience: Over the next 20 years, an estimated 44% of the network could be replaced, building significant resilience for future events. Investment will also address the region's critical water shortage challenges through meters, increased water storage and fixing leaks.</li> </ul>
		<ul> <li>Scale and efficiency: Addressing these issues at scale and coordinating efforts across council boundaries offers significant opportunities for efficiency and reduced long-term costs.</li> </ul>
		<ul> <li>Focus on affordability: Household costs for water services will increase. Under the proposed regional model, there is an opportunity to ensure that affordability remains a key focus for delivery with lower total costs in the long run through effective use of funding and financing arrangements than are currently available to councils.</li> </ul>
		<ul> <li>Potential efficiency gains over time through strategic investment decisions, supply chain management and reduction in duplication of roles.</li> </ul>
		More expertise and capacity.
		Better able to respond to regulators.
Political acceptability	Good alignment	Recommended model aligned with expected direction in Bill 3 for asset-owning WSCCO as outlined by Government announcements on 8 August 2024.
		The level of political acceptability across multiple councils is still to be confirmed through council decision-making processes.
Position of councils	Good alignment	The recommended regional model was developed with considerable input from councils from the AOG, Chief Executives and officers through workshops and feedback.
		• At time of writing and based on feedback from councils on the draft version of this report, no significant issues with the recommended model have identified and the model is considered to be the 'best for region'. This is not the same as 'best for council' and each council will need to undertake its own evaluation and decision-making process in line with the requirements of legislation.

#### 35. Other key assumptions

Other relevant assumptions include:

- Bill 3 policy parameters as expressed in the 8 August 2024 announcements, are given effect in the Bill introduced in December 2024.
- Bill 3 is introduced into the House in December 2024 and will introduce details for a new asset-owning WSCCO, that will provide this type of organisation with the necessary purpose, powers and functions to meet the region's requirements.
- Councils have sufficient information to confirm a preferred approach to water services delivery by the end of October 2024 in order that detailed development of a WSDP can get underway from November 2024.
- Councils are able to undertake stakeholder and community engagement as required by legislation. Councils have sufficient information to undertake annual plan reviews and amend their LTPs as required.

#### 36. Other key risks and challenges

Other relevant key risks and challenges include:

#### Mandate and support

- o political support, including due to timing of local government elections,
- o lack of alignment on decision making by councils,
- o lack of support or loss of confidence in the process by councils,
- o lack of support from Government, including required legislative changes,
- o lack of buy-in or understanding from community, and
- o lack of support or loss of confidence in the process by Iwi/Māori partners.
- Decision making process and requirements for council decision making is unclear or not understood resulting in rework and/or challenges to decision making (such as judicial review).
- Model future models are not financially viable.
- **Resourcing** lack of effective resourcing for the process by councils, including capacity of senior staff, or funding for future phases.
- Scope balancing expectations of detail vs progress.
- Quality analysis and outputs do not support effective decision making.

#### Timing

- o ability to be agile and respond to changing needs,
- o ability of councils to make decisions on a timely basis,
- o alignment of process and consultation to LTP amendment process, and
- o ability of councils to make decisions ahead of local government elections in 2025.
- **Legislation** misalignment with legislation or legislation does not enable the preferred model.
- **Engagement** lack of clarity on engagement and consultation requirements of new legislation or these are unworkable.

- Impacts on existing delivery models and productivity due to uncertainty of the potential change process.
- Impact on councils' ability to enable and deliver on growth. The decisions, priorities and capacity of a water services organisation will have significant impact on a range of council activities. It will be challenging to ensure close coordination between councils and the water organisation to ensure councils are able to drive and deliver on directions without an added layer of complexity or being at the mercy of another organisation's priorities. This is especially important for housing growth where the water organisation will be a growth plan taker rather than a plan maker.

### Implementation considerations

#### Section summary

Decisions on subsequent phases of work to consider a joint WSDP and WSCCO are expected to be made on an in-principle basis by late 2024 in order that these can be further developed.

Phase 2 will need to include development and delivery of the WSDP. This will support councils to make decisions in relation to the development and adoption of a regional WSDP that meets councils' legislative obligations, as well as establishing joint arrangements for the delivery of water services and preparing for the subsequent implementation of the preferred approach in Phase 3.

Phase 2 includes the need to undertake consultation and engagement on at least part of the WSDP relating to the proposed service delivery model, and the implementation planning required for Phase 3. This will involve significant decision making in relation to early establishment resources, accountabilities and funding.

The draft regional WSDP will need to be aligned with requirements of Part 2 of the Preliminary Arrangements Act including:

- asset condition information and a related AMP,
- funding, financing and revenue requirements to achieve financial sustainability,
- the anticipated or proposed model or arrangements for delivering water services, including how these will meet compliance requirements, and
- an implementation plan for the WSDP including timeframes and milestones, and how a future delivery model would be established in Phase 3.

Implementation planning will consider the potential establishment of a large, full-service, multi-council-owned WSCCO.

Details regarding the structure, accountabilities, decision-making rights and resourcing will need to be finalised. Decisions will need to be made on a high-level operating model and organisational design, with a service delivery model, change process and strategy, entry and exit rights, as well as requirements for information systems, legal, procurement, and costs, budget and funding.

The strategy, processes and principles will also need to be established for debt and asset transfer, pricing, contract transfer, people transition, customer experience and billing.

Councils will need to undertake communications, engagement and formal consultation during Phase 2. It is assumed that councils will confirm a regionally coordinated approach to this with the process still based on individual decision making by each council.

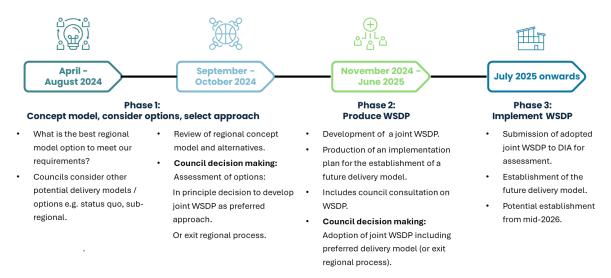
An indicative timeline and costs are shown below. Key transition principles will need to be followed to complete the transition in a fair and equitable manner.

#### 37. Next phases of work

Subsequent phases of work to consider a joint WSDP and WSCCO will be informed by the decisions councils make in relation to a joint WSDP and joint arrangements. It is expected that

these will be made on an in-principle basis by late 2024. This is on the assumption that some or all councils commit to an ongoing process to develop a joint WSDP.

Figure 10: Phases of work



Phase 2 will include development and delivery of the WSDP. This will support councils to make decisions in relation to:

- the development and adoption of a regional WSDP that meets councils' legislative obligations, and
- establishing joint arrangements for the delivery of water services as described in the WSDP and preparing for the subsequent implementation of the preferred approach in Phase 3.

Phase 2 includes the need to undertake consultation and engagement on at least part of the WSDP relating to the delivery model and the implementation planning required for Phase 3. This will involve some significant decision making in relation to early establishment resources, accountabilities and funding.

The two key outputs from Phase 2 are:

- a draft regional WSDP, and
- an implementation plan for the establishment of the selected future delivery model.

#### Scope of a regional WSDP

The draft regional WSDP will need to be aligned with requirements of Part 2 of the Preliminary Arrangements Act. Guidance and templates provided by the DIA in September 2024 have helped to clarify requirements but, in general, the WSDP can be conceived as having four parts:

- asset condition information and a related AMP,
- funding, financing and revenue requirements to achieve financial sustainability,
- the anticipated or proposed model or arrangements for delivering water services, including how these will meet compliance requirements, and
- an implementation plan for the WSDP including timeframes and milestones.

#### 38. Implementation plan

The implementation plan is also to be aligned with the requirements of Part 2 of the Preliminary Arrangements Act and will need to comprise the plan for how a future delivery model would be established in Phase 3. The detail of the plan will be driven by the delivery model selected by councils. Initial planning will need to be on the assumption that the selected model will be a WSCCO as outlined in DIA guidance in August 2024. The details of what this entails, its powers and funding arrangements will not be known until the Bill 3 is released in late 2024. Pending this, it is expected that the implementation plan will include:

- The preconditions that need to be met before the establishment of the entity can commence.
- Governance arrangements during both the establishment period and steady state, including arrangements for establishing an appointments panel, the role of lwi/Māori, a Board constitution, shareholder agreements, and clear timelines and decision points for the establishment and transfer of decision-making rights to the establishment Board and Chief Executive.
- Entry and exit rights of shareholders and the timing and process for this including potential review point after 3-5 years.
- The structure, accountabilities, decision-making rights and resourcing for an establishment entity (potentially comprising a Chief Executive, selected functional leads and specialist support). This would include clear handover points between the project team and the establishment entity.
- The strategy, processes and principles for:
  - o debt and asset transfer
  - financing for new WSCCO
  - o pricing
  - o contract transfer
  - o people transition
  - customer experience and billing.
- A high-level operating model and organisational design.
- Service delivery model and local service locations.
- Change process and strategy.
- Information systems requirements.
- Legal requirements, including merger and acquisition, incorporation, banking and tax.
- Costs, budget and funding.
- Procurement strategy.

#### 39. Engagement and consultation

To meet legislative requirements, and understand the position of partners, stakeholders and the community, it is assumed that councils will undertake communications, engagement and formal consultation on at least part of the WSDP (relating to the proposed service delivery model) during Phase 2.

Further details on required public consultation are set out in the Preliminary Arrangements Act, including a simplified consultation and decision-making process. It is assumed that councils will

confirm a regionally coordinated approach to consultation and engagement and a key question for Phase 2 is the optimal timing for consultation. Any consultation process will still be based on individual decision making by each council.

The scope and approach of this will be confirmed as part of the establishment of Phase 2 based on the legislative requirements of the LGA and the Preliminary Arrangements Act.

This process is likely to include:

- early engagement with key partners and stakeholders from September 2024,
- confirmation of consultation approach and alignment with LTP amendment processes by March 2024, and
- formal consultation process on the WSDP and WSCCO linked to consultation on an amendment to the LTP April/May 2024.

#### 40. Indicative time and cost for Phase 2

The issues considered during Phase 2 are significant, relating to investment planning for billions of dollars of investment in water assets and operations. Implementation planning will consider the potential establishment of a large, full-service, multi-council-owned WSCCO. This will have a significant impact on councils, including future role, operating model, financial arrangements and scale.

This is a challenging, complex and highly political process in the context of evolving legislation and is made more challenging due to the need to work across multiple councils, Iwi/Māori partners, central government, statutory consultation with the public and input from other stakeholders.

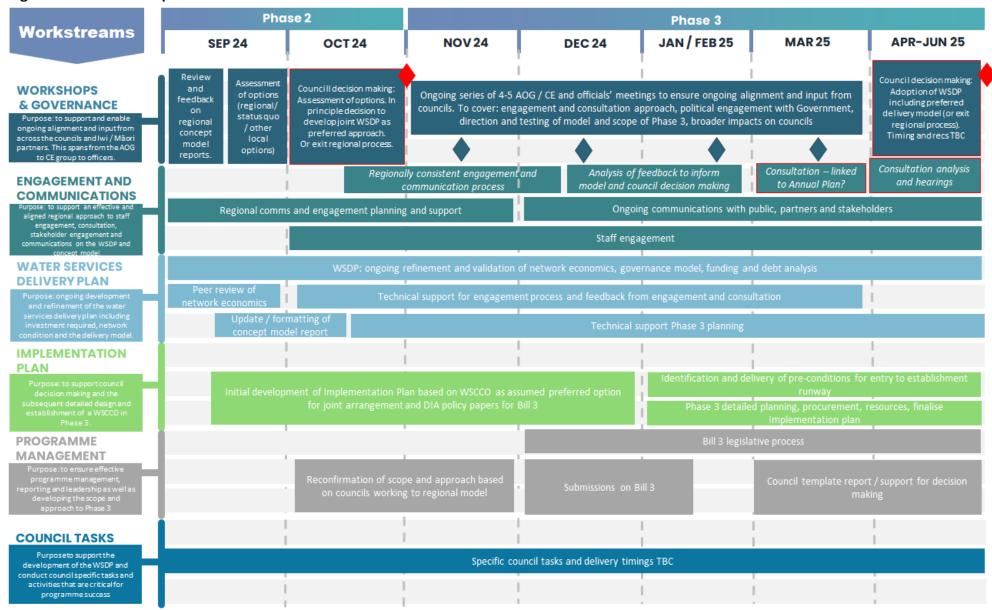
This will be challenging to complete in the 12-month period required by Bill 3 and is highly contingent upon the timing of Bill 3 and ability of councils to align consultation processes with LTP amendments.

Indicative costs to complete this work will depend on a range of factors including number of councils, timeline, consultation requirements, and guidelines from DIA. At this point the indicative cost range to complete Phase 2 for all ten councils on the timeline above is in the order of \$2-\$3 million<sup>62</sup>. This cost would need to be split across participating councils on an agreed basis.

The indicative timeline and key workstreams to enable delivery of a joint WSDP by September 2025 is shown below. This is a work in progress and will continue to be refined and confirmed by late 2024 informed by decisions by councils on whether to remain part of the regional WSDP process.

 $<sup>^{62}</sup>$ This is an indicative cost estimate and will be further refined and confirmed by the end of October 2024.

Figure 11: Workstream phases



# 41. Indicative timeline and cost for Phase 3 – establishment of a WSCCO

Implementation costs and timeline will be developed during Phase 2 and are highly contingent on the model, scale, and day one requirements of a WSCCO.

It is assumed at this point that the best-case scenario for time required to fully establish a WSCCO once councils adopt a WSDP is 12 months. This is based on the modelling and timeline developed by DIA to establish the proposed 10-entity structure. A tentative 'go live' date for a new WSCCO is therefore assumed to be by early 2026 with some ongoing transitional handover from councils to the WSCCO through to 2027. This may include a staged process to manage resourcing and risks.

Phase 3 costs are expected to increase markedly, as this phase involves establishment of a new entity, including set up of systems and processes. This will require a larger and more dedicated team and budget.

During Phase 2, the potential option of an early drawdown on the new WSCCO funding facilities to cover the costs of Phase 3 will be explored. It is anticipated that the entity's funding facilities would be provided by the LGFA with any early drawdown guaranteed by the owner councils.

Phase 3 establishment of a large regional WSCCO entity is estimated to cost somewhere in the order of \$75 million to more than \$125 million. The wide range is due to the costs for establishment of a new delivery model depending on many factors (scale, timing, resourcing model etc). These costs would need to be staged over time and in large part are driven by the costs of fit for purpose IT systems and processes.

#### 42. Key transition principles

The transition process from existing delivery models to a new delivery model will be very challenging. Through the key requirements, councils have identified some issues that will need to be successfully navigated during the transition phase. These will help complete the transition in a fair and equitable manner and have been captured as key transitional principles. These will need to be reviewed and reconfirmed as part of the next phase of work to develop a WSDP and implementation plan.

#### **People**

- People are at the heart: The region has a team of highly committed people with
  irreplaceable expertise who deliver the region's water services and who have remained
  dedicated through an extended period of uncertainty within the water sector. The region
  has a values-based duty to water service teams and people to resolve the uncertainty,
  establish a high-quality future entity and make the staff transition as smooth and
  seamless as possible.
- From an operational perspective, the region cannot deliver high-quality water services
  without the support of these teams and people. The water sector currently has a
  significant skills deficit, and the region can ill-afford to lose valuable staff due to a
  poorly executed transition.
- Job guarantee and pathway: An intention to provide water services staff with certainty as quickly as possible. Accordingly, the new WSCCO would need to consider putting in place a job guarantee and pathway for all water staff from Level 3 down (Level 1 and 2 being Chief Executive and senior executive levels respectively).

• Clear communication and dialogue: There is a need to open clear communications and dialogue channels with all affected employees as soon as there is a way forward.

#### Financial transition principles

- Equitable debt transfer: The amount of debt that each council transfers to the new water entity will have a major bearing on the financial health of both the water service entity and each council. Agreeing a fair and equitable debt figure with each council will be a complex exercise.
- **Independent expert:** The standard practice for this type of 'merger transaction' is to appoint an independent financial expert to establish the accounting principles for preparing the settlement accounts, including the debt figure.
- Review of accounts: The external financial expert reviews each party's settlement accounts to ensure that they have been prepared in accordance with the specified principles. If the expert deems that the accounting principles have not been equitably and consistently applied, then they are empowered to issue a determination as to the final figures to appear in the settlement accounts. This approach provides all parties with confidence that the debt figures will be determined on a fair, consistent and equitable basis.
- Equitable asset transfer: A number of councils have experienced very large changes in their water asset valuations in recent years (for example, Wellington City Council saw an 88% uplift in 2022 and Hutt City Council approximately 300% in 2024). The valuation of assets is likely to be less contentious than debt, but accounting standards require a consistent and current valuation at the date of transfer. Accordingly, an independent valuer will be retained to provide a consistent and up-to-date valuation at the date of transfer.
- **Primary purpose:** Assets whose primary purpose is to enable the provision of water services will transfer to the new entity. During the transition phase, a principle-based framework will be designed and applied to determine the treatment of shared assets.
- **GWRC:** It is noted that GWRC has stated that the Hutt and Wainuiomata conservation/catchment land will not be transferring, and that the new entity will be granted the necessary rights to continue using and accessing the catchments and land identified for future storage, for water supply purposes.
- Share allocation: The shareholdings will be allocated between councils. A potential approach is based on pro rata of the value of net assets transferred. This would ensure that the value of shares received by a council matches the net asset value of the water services balance sheet it transfers. As a result, the transfer should have a neutral impact on a council's P&L account (i.e. it should not generate a profit or loss for the transferring council).

#### **Consumer transition principles**

• Three-year price differential lock in period: A common concern raised by councils in workshops was the need to ensure that ratepayers did not receive a major price shock on joining a regional entity, as a result of price harmonisation or price rises to cross subsidization of adjacent regions. To alleviate this concern, during the first three years, the potential price rises outlined in the section above on local delivery, customer service and price will be applied evenly to residential charges across the region, thereby maintaining existing residential price differentials. (Note: This is subject to existing revenues being sufficient to cover the full costs of water service provision, i.e. the council

- having set the existing revenue at a sufficient level to fully fund the costs of water service provision per the water services Financial Impact Statement).
- Revenue and pricing will be a very complex area given the diverse pricing structures that
  exist across the region. For example, there are very diverse charging structures for nonresidential services such as developer contributions. These are likely to require
  simplification and alignment to avoid over complicating the new entity's systems on day
  one. This is the reason for applying the "differential lock in" principle to residential
  charges only.

#### **Contract and relationship transition principles**

- Contract transfer: To smooth the transition and continuity of service provision, the
  baseline principle will be to roll over existing contracts and relationship agreements, by
  way of novation or assignment to the new entity. A clear detailed framework and rules for
  shared contracts or unusual contracts will be developed during the detailed design
  phase.
- **Te Tiriti obligations:** The transition will pay particular care to ensure that any Te Tiriti undertakings are not only legally transferred, but that lwi/Māori have a clearly identified relationship structure to work with the new entity. The aim is to ensure that both the legal agreement and personal relationships are seamlessly transitioned (noting that it will take time to nurture new relationships and trust).

#### 43. Next steps

Based on the requirements of legislation, councils will each need to make decisions on whether to develop a joint WSDP with other councils in the region with joint delivery arrangements, for example, across drinking water, wastewater and stormwater services; and whether to establish a joint delivery model.

It is expected that councils will make this in-principle decision by late 2024 in order that work can be progressed. Councils may choose to continue to develop other options in parallel.

The evidence in this report confirms the need for change. The status quo cannot continue and, under the requirements for developing a WSDP, councils will need to make some difficult choices about how to fund and deliver the urgent work needed on the three waters network.

The recommended regional model is considered well aligned with the key requirements set by councils and the emerging legislative framework that gives effect to Local Water Done Well. This recommended model will need to be assessed in relation to the status quo and any alternative arrangements that councils might choose to identify and assess.

Significant aspects of the recommended model will require further development and decision making in line with the requirements of Bill 3. This will require ongoing input and discussions with DIA to ensure that there is alignment.

Completion and decision making in relation to a joint WSDP and WSCCO in the 12 months required by the Preliminary Arrangements Act across multiple councils will be challenging. This will be a complex process in the context of evolving legislation working across multiple councils, lwi/Māori partners, central government, statutory consultation with the public and input from other stakeholders. It will therefore be imperative that councils work effectively together and with the Government to maintain momentum and ensure analysis and further phases of work support effective decision making.

#### Councils can maintain momentum by:

- considering the recommended regional model and deciding to whether to develop a joint WSDP with other councils and the extent of any joint arrangements,
- assessing the status quo, alternative CCO model (may or may not be the recommended model) and, if they choose, other service delivery options,
- making in-principle decisions on the proposed model by late 2024 in order that this can be further developed,
- consulting on the draft WSDP (at least the part containing the proposed model) from late 2024 and into 2025,
- considering the implications for council, including the need to amend the LTP,
- adopting the WSDP (and any LTP amendment that may be required), and
- planning for implementation of the WSDP in 2025 (especially if a new model is to be adopted).

## **Appendices**

#### Note: A separate document containing detailed appendices is available, including:

Appendix A: Clarification of the alignment with the requirements of a WSDP

Appendix B: Detailed key requirements

Appendix C: Key assumptions, sources of information and levels of confidence

Appendix D: Council profile summaries (separate document)

Appendix E: Network condition information

Appendix F: Key compliance issues

Appendix G: Types of entity model options Appendix H: Network economics approach

Appendix I: Investment, price and debt scenarios

Appendix J: Financial projections